Wireless Router
Model: N301
User Guide

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Preface

Thank you for choosing Tenda! Please read this user guide before you start with AC18.

Conventions

The typographical elements that may be found in this document are defined as follows.

Item	Presentation	Example
Cascading menus	>	**System** > **Live Users**
Parameter and value	Bold	Set **User Name** to **Tom**.
Variable	Italic	Format: *XX:XX:XX:XX:XX:XX*
UI control	Bold	On the **Policy** page, click the **OK** button.
Message	" "	The "Success" message appears.

The symbols that may be found in this document are defined as follows.

Symbol	Meaning
⚠ 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.

Acronyms and Abbreviations

Acronym or Abbreviation	Full Spelling
ISP	Internet Service Provider
VPN	Virtual Private Network
WPS	WiFi Protected Setup
IPTV	Internet Protocol Television
PPPoE	Point-to-Point Protocol over Ethernet
DHCP	Dynamic Host Configuration Protocol
ISP	Internet Service Provider
DNS	Domain Name System
AP	Access Point
WISP	Wireless Internet Service Provider

DLNA	Digital Living Network Alliance
PPTP	Point to Point Tunneling Protocol
L2TP	Layer 2 Tunneling Protocol
MPPE	Microsoft Point-to-Point Encryption
PPP	Point To Point Protocol
URL	Uniform Resource Locator
DDNS	Dynamic Domain Name System
DMZ	Demilitarized Zone
STB	Set Top Box
VLAN	Virtual Local Area Network

Additional Information

For more information, search this product model on our website at http://www.tendacn.com.

Technical Support

If you need more help, contact us by any of the following means. We will be glad to assist you as soon as possible.

Hotline	Global: (86) 755-27657180	Email	support@tenda.com.cn
	United States: 1-800-570-5892		
	Canada: 1-888-998-8966		
	Hong Kong: 00852-81931998		
	Australia: 1300787922		
	New Zealand: 800787922		
Website	http://www.tendacn.com	Skype	tendasz

Contents

1 Get to Know Your Router

1.1 Overview

N301 is a smart router that helps you quickly set up wired and wireless internet connections at home. It complies with IEEE802.11n, and wireless speed is up to 300 Mbps for ultimate internet surfing experience. User-friendly web UI allows you to easily configure the router.

1.2 Packing List

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

1.3 Appearance

1.3.1 LED Indicators

States of LED indicators of the router that is powered on

| LED Indicator	LED Indicator Description	State	State Description
SYS	System indicator	Blinking	The system is working properly.
WLAN	Wireless signal indicator	Solid on	The WiFi function is enabled.
		Blinking	The router is transmitting or receiving data over the WiFi network.
		Off	The WiFi function is disabled.
1/2/3	LAN port indicator	Solid on	The port is properly connected using an Ethernet cable.
		Blinking	A LAN port is connected.
		Off	The port is not connected or the connection is faulty.
WAN	WAN port indicator	Solid on	The port is properly connected using an Ethernet cable.
		Blinking	The port is transmitting of receiving data.
		Off	The port is not connected or the connection is faulty.

1.3.2 Button & Ports

Description of buttons and ports

Button/Port	Description
PWR	It is the power port to be connected to the power adapter included in the package.
WAN	It is used to connect to an Ethernet cable with Internet connectivity.
1, 2, and 3	They are LAN ports that can be connected to devices using Ethernet cables, such as computers, laptops, and switches.
WPS/RST	It is a compounded button used to perform WPS pairing between the router and another device while pressing it for about 1 second, and to restore the factory settings of the router while pressing it for about 8 seconds.

1.3.3 Label on the Bottom
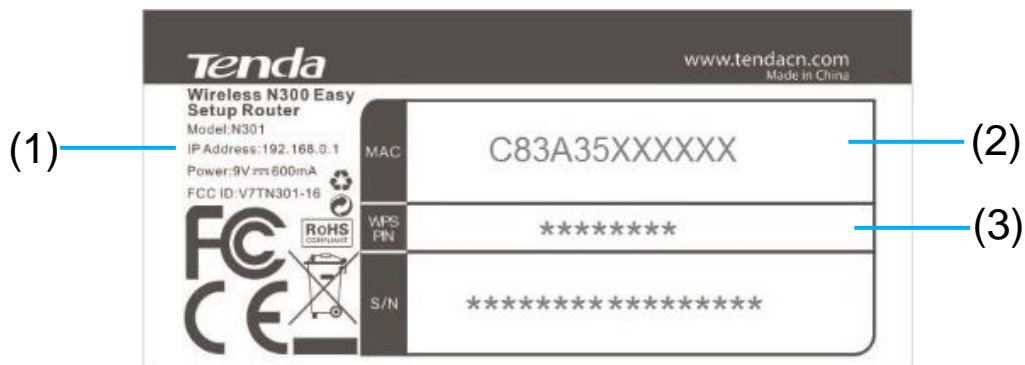
(1) Default IP address of the router. You can use the IP address to access the router web UI.

(2) MAC address of the router. Each router has a unique MAC address and the default WiFi name (Tenda_*XXXXXX*) consists of "Tenda_" and the last six characters of the MAC address.

(3) WPS PIN code of the router. The PIN code may be required by a wireless client, such as a smart phone, when the client is connected to the router using the WPS function.
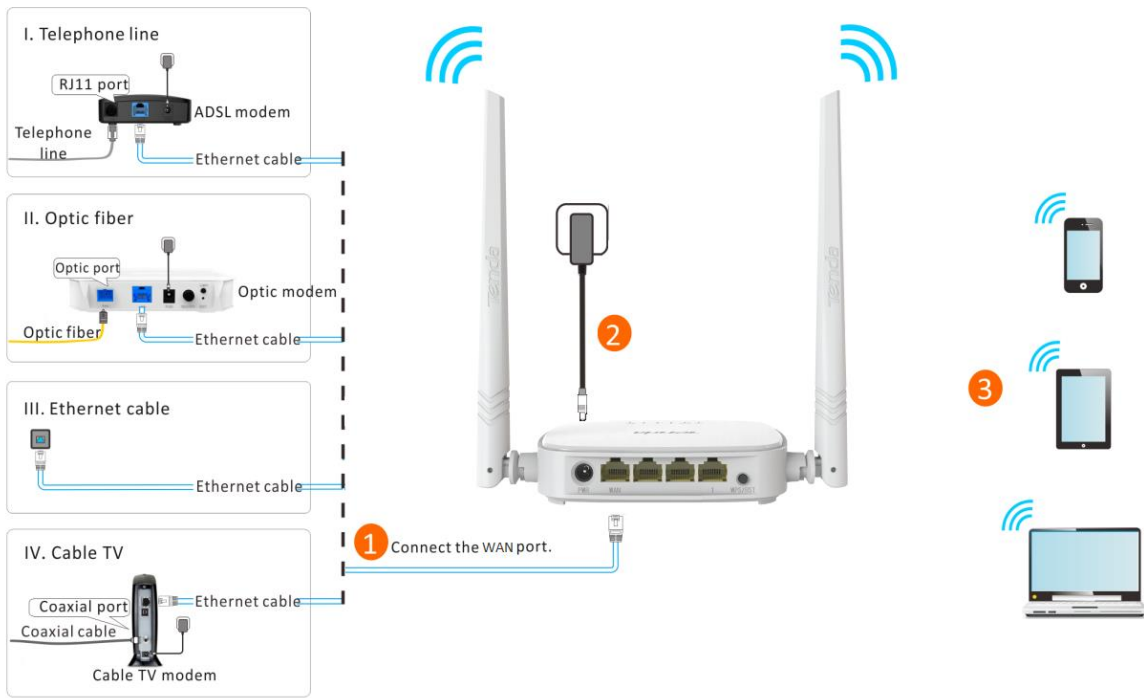
2 Quick Setup

2.1 Connecting to Your Router

2.1.1 Connecting to Your Router Through WiFi

Perform the following procedure:

Step 1 Connect the WAN port using any of the methods shown in the following figure depending on your internet connection means.

Step 2 Use the power adapter to connect the router to a power supply.

Step 3 Use a wireless device, such as a smart phone or tablet, to search for the WiFi network by the WiFi name of the router and connect the wireless devices to the WiFi network. The default WiFi name is Tenda_*XXXXXX*, *XXXXXX* indicates the last six characters in the MAC address of the router which is shown on the bottom label, and there is no WiFi password by default. For details about how to connect to the WiFi network, refer to the appendix.

After the wireless device is connected to the router, log in to the router web UI on the wireless device and configure an internet connection. For details, refer to Setting up an Internet Connection. After changing the WiFi name or password, you need to reconnect the wireless device to the router.

---End

2.1.2 Connecting to Your Router Using an Ethernet Cable

Perform the following procedure:

Step 1 Connect the internet port using any of the methods shown in the following figure depending on your internet connection means.

Step 2 Use the power adapter to connect the router to a power supply.

Step 3 Connect your computer to port 1, 2 or 3 of the router using an Ethernet cable.

After the computer is connected to the router, log in to the router web UI on the computer and configure an internet connection. For details, refer to <u>Setting up an Internet Connection</u>.
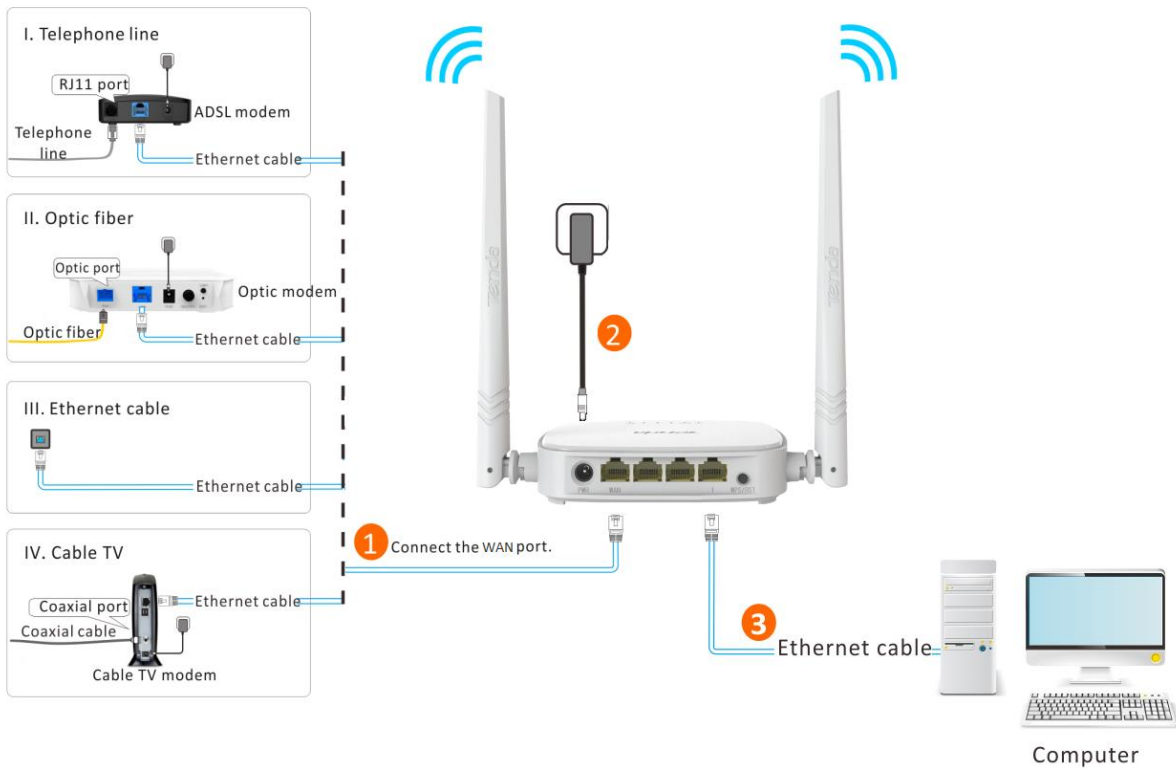
---End

2.2 Setting up an Internet Connection

Step 1 Start a web browser, type **tendawifi.com** or **192.168.0.1** in the address bar, and press **Enter**.

Step 2 The router detects your connection type.

Step 3 According to the detection result, configure related settings. For details about the connection-type-specific configuration procedures, refer to Setting up an Internet Connection with PPPoE, Setting up an Internet Connection with a Dynamic IP Address, and Setting up an Internet Connection with a Static IP Address.

---End

2.2.1 Setting up an Internet Connection with PPPoE

Step 1 Select **PPPoE**, and enter your PPPoE user name and password provided by your internet service provider.

Step 2 Set a WiFi name and password, and click **OK**.

The WiFi password indicates the password for connecting to the WiFi network of the router. Ensure that your password meets the complexity requirement.

After the preceding procedure, the **Status** page appears. If "You can surf the Internet" is displayed at **Connection Status**, the internet is accessible.

⚠ NOTE

If you connect to your router through WiFi, you need to connect to your router again after setting up the WiFi name or password.

2.2.2 Setting up an Internet Connection with a Dynamic IP Address

Step 1 Select **Dynamic IP**.

Step 2 Set a WiFi name and password, and click **OK**.

As detected, your connection type is: Dynamic IP

Internet Settings

Connection Type   ○ PPPoE   ● Dynamic IP   ○ Static IP

Select Dynamic IP if your Internet can be auto-connected with no account or static IP info set.

Wireless Settings

WiFi Name   Tenda_1E5FE0

WiFi Password   WiFi Password

OK

----End

💡 TIP

The WiFi password indicates the password for connecting to the WiFi network of the router. Ensure that your password meets the complexity requirement.

After the preceding procedure, the **Status** page appears. If "You can surf the Internet" is displayed at **Connection Status**, the internet is accessible.

🔒 Status	
🌐 Internet Settings	
📶 Wireless Settings	
〽 Bandwidth Control	
📡 Wireless Repeating	
👫 Parental Controls	
⚒ Advanced	
⚙ Administration	

Internet Connection Status

Devices —— Router —— Internet

Connection Status: You can surf the Internet

Attached Devices and Real-time Statistics

1   0.0 KB/s   0.0 KB/s
Attached Devices   Download Speed   Upload Speed

System Info

Connection Type	Dynamic IP	WAN IP	192.168.20.181
Connection Duration	40m 25s	Subnet Mask	255.255.255.0
WAN MAC	C8:3A:35:1E:5F:E0	Default Gateway	192.168.20.100
LAN IP	192.168.0.1	Preferred DNS Server	192.168.20.100

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2.2.3 Setting up an Internet Connection with a Static IP Address

Step 1 Select **Static IP**, enter your static IP address, subnet mask, default gateway, preferred DNS, and alternative DNS provided by your internet service provider.

Step 2 Set a WiFi name and password, and click **OK**.

----End

After the preceding procedure, the **Status** page appears. If "You can surf the Internet" is displayed at **Connection Status**, the internet is accessible.

Internet Connection Status

Devices — Router — Internet

Connection Status: You can surf the Internet

Attached Devices and Real-time Statistics

1	0.0 KB/s	0.0 KB/s
Attached Devices	Download Speed	Upload Speed

System Info

Connection Type	Static IP	WAN IP	192.168.20.181
Connection Duration	40m 25s	Subnet Mask	255.255.255.0
WAN MAC	C8:3A:35:1E:5F:E0	Default Gateway	192.168.20.100
LAN IP	192.168.0.1	Preferred DNS Server	192.168.20.100

Sidebar: Status, Internet Settings, Wireless Settings, Bandwidth Control, Wireless Repeating, Parental Controls, Advanced, Administration

⚠ **NOTE**

If you connect to your router through WiFi, you need to connect to your router again after setting up the WiFi name or password.

To enable the router to provide more stable WiFi signals and cover a wider area, position your router as follows:
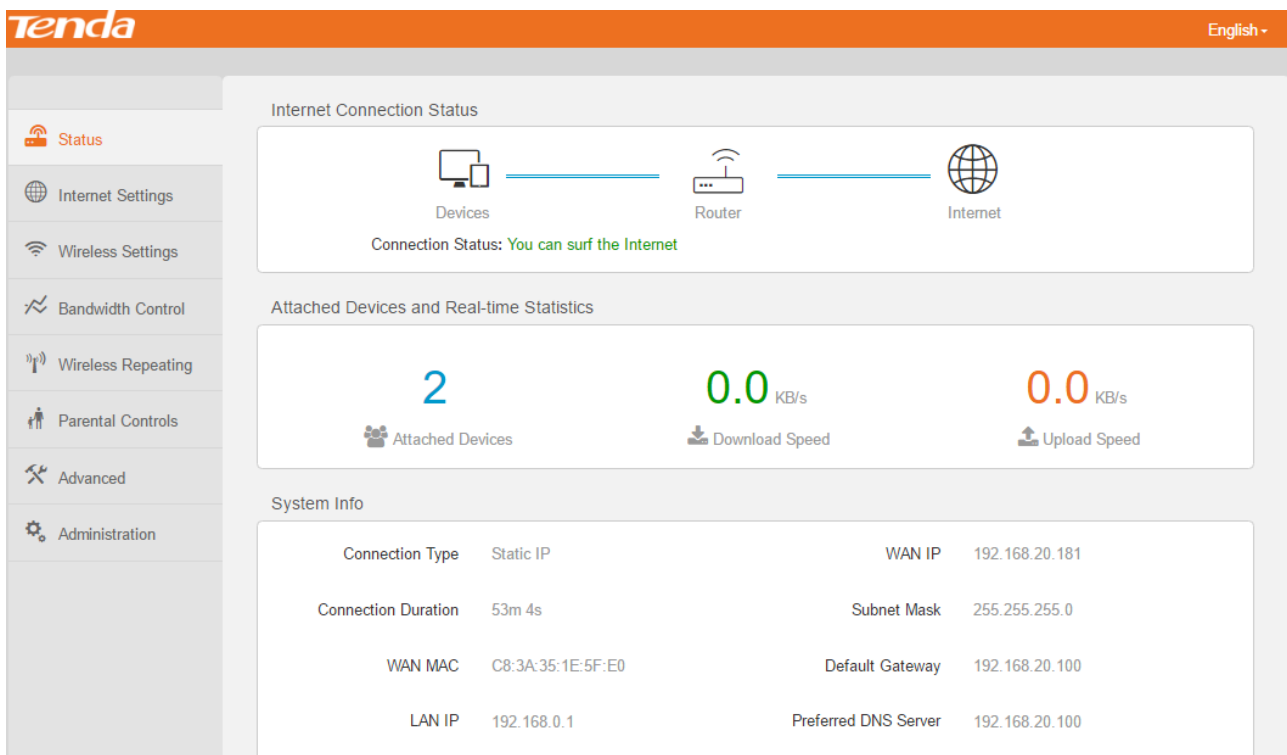
- Put it on a high place at the center of your house.
  Keep it close to your wireless devices, such as mobile phones and laptops.

- Put it at a place with good ventilation. Unfold its antennas by 45 °. Do not put it in an enclosure, such as a wire distribution box, shoes cabinet, or metal box.

- Keep it away from electrical devices, such as ceiling fans and microwave ovens.

- Keep it away from metal surfaces, such as metal doors or aluminum nails.

- Keep it away from other materials that may affect your wireless signals, such as glass, mirrors, and fish tanks.

3 Functions

3.1 Status

Log in to the router web UI and access the **Status** page. On this page, you can view the network status of the router, attached devices, add blacklisted devices, and so on.

3.1.1 Internet Connection Status

This part displays connection status. If "You can surf the Internet" is displayed, you can access the internet through the router. If another message is displayed, follow the onscreen instruction to resolve the issue.

Internet Connection Status

Devices ——— Router ——— Internet

Connection Status: You can surf the Internet
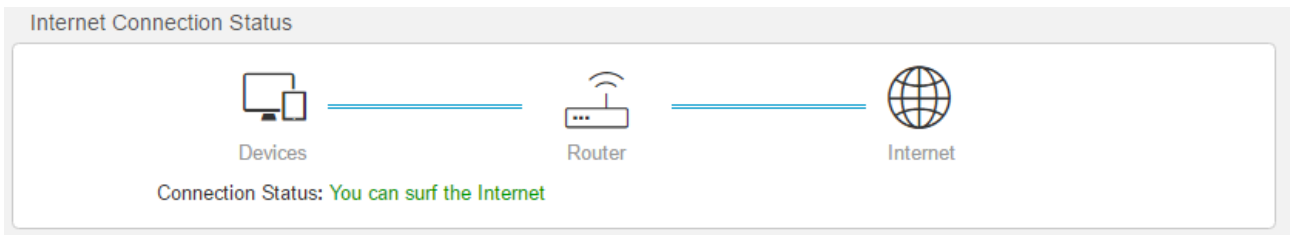
3.1.2 Attached Devices and Real-time Statistics

This part displays the number of devices connected to your router, and the total download speed and upload speed. You can click this field to go to the bandwidth control page. For the detailed configuration procedure, refer to Bandwidth Control.

Attached Devices and Real-time Statistics

2 Attached Devices   **0.0** KB/s Download Speed   **31.0** KB/s Upload Speed

Attached Devices(2)						
Device Name	Download Speed	Upload Speed	Download Limit	Upload Limit	Internet Access	
DESKTOP-M5MSVIJ ✏️ 192.168.1.100(Native Device)	↓ 0KB/s	↑ 0KB/s	No Limit	No Limit	Native Device	
Dudu ✏️ 192.168.1.101	↓ 0KB/s	↑ 28KB/s	No Limit	No Limit	🔘	

Status
Internet Settings
Wireless Settings
Bandwidth Control
Wireless Repeating
Parental Controls
Advanced
Administration

Blocked Devices(0)		
Device Name	MAC Address	Action
No device		

OK   Cancel

3.1.3 System Info

This function enables you to learn about the basic system information of the router. You can check this

information to determine whether settings have taken effect.

System Info

Connection Type	Dynamic IP	WAN IP	192.168.0.146
Connection Duration	1m 3s	Subnet Mask	255.255.255.0
WAN MAC	C8:3A:35:1E:5F:E0	Default Gateway	192.168.0.50
LAN IP	192.168.1.1	Preferred DNS Server	192.168.0.50
Firmware Version	V12.01.01.27_multi	Alternative DNS Server	-

3.2 Internet Settings

This module enables you to configure internet settings and view internet connection status.

When you use the router for the first time or after you reset the router, the router automatically detects your internet connection type. You are recommended to select the detected type and follow the instructions of the quick setup wizard to configure internet settings. If you do not configure internet settings using the quick setup wizard, you can configure them on the **Internet Settings** page.

The following table may help you understand your internet connection type. If you are still uncertain about your internet connection type, consult your ISP.

Parameter	Description
PPPoE	If you directly connect an Ethernet cable with internet connectivity to your computer, you can access the internet only after setting up a dial-up connection on the computer using a user name and password provided by your ISP.
Dynamic IP	If you directly connect an Ethernet cable with internet connectivity to your computer, you can access the internet without configuring your computer.
Static IP Address	If you directly connect an Ethernet cable with internet connectivity to your computer, you can access the internet only after setting a static IP address and other related information on your computer.

3.2.1 Set up an Internet Connection with PPPoE

Step 1 Select **PPPoE**, enter your PPPoE user name and password provided by your internet service provider.

Step 2 Set a WiFi name and password, and click **OK**.

The WiFi password indicates the password for connecting to the WiFi network of the router. Ensure that your password meets the complexity requirement.

After finishing the configuration above, the **Status** page appears. If "You can surf the Internet" is displayed at **Connection Status**, the internet is accessible.

If you connect to your router through WiFi, you need to connect to your router again after setting up the WiFi name or password.

----End

3.2.2 Set up an Internet Connection with Dynamic IP

Step 1 Select **Dynamic IP**.

Step 2 Set a WiFi name and password, and click **OK**.

As detected, your connection type is:Dynamic IP

	Connection Type	○ PPPoE ● Dynamic IP ○ Static IP

Internet Settings

Select Dynamic IP if your Internet can be auto-connected with no account or static IP info set.

Wireless Settings

WiFi Name: Tenda_1E5FE0

WiFi Password: WiFi Password

OK

💡 TIP

The WiFi password indicates the password for connecting to the WiFi network of the router. Ensure that your password meets the complexity requirement.

After finishing the configuration above, the **Status** page appears. If "You can surf the Internet" is displayed at **Connection Status**, the internet is accessible.

Internet Connection Status				

Connection Status: You can surf the Internet

Attached Devices and Real-time Statistics

1	0.0 KB/s	0.0 KB/s
Attached Devices	Download Speed	Upload Speed

System Info

Connection Type	Dynamic IP	WAN IP	192.168.20.181
Connection Duration	40m 25s	Subnet Mask	255.255.255.0
WAN MAC	C8:3A:35:1E:5F:E0	Default Gateway	192.168.20.100
LAN IP	192.168.0.1	Preferred DNS Server	192.168.20.100

⚠ NOTE

If you connect to your router through WiFi, you need to connect to your router again after setting up the WiFi name or password.

----End

3.2.3 Set up an Internet Connection with a Static IP Address

Step 1   Select **Static IP**, enter your static IP address, subnet mask, default gateway, preferred DNS, and alternative DNS provided by your internet service provider.

Step 2   Set a WiFi name and password, and click **OK**.

As detected, your connection type is: Static IP

Internet Settings	Connection Type	○ PPPoE ○ Dynamic IP ● Static IP
		Select Static IP if your Internet connection asks for static IP info.
	IP Address	IP
	Subnet Mask	Subnet Mask
	Default Gateway	Default Gateway
	Preferred DNS	Preferred DNS Server
	Alternative DNS	Alternative DNS Server
Wireless Settings	WiFi Name	Tenda_1E5FE0
	WiFi Password	WiFi Password

OK

💡 TIP

The WiFi password indicates the password for connecting to the WiFi network of the router. Ensure that your password meets the complexity requirement.

After finishing the configuration above, the **Status** page appears. If "You can surf the Internet" is displayed at **Connection Status**, the internet is accessible.

Internet Connection Status

Devices ———— Router ———— Internet

Connection Status: You can surf the Internet

Attached Devices and Real-time Statistics

1
Attached Devices

0.0 KB/s
Download Speed

0.0 KB/s
Upload Speed

System Info

Connection Type	Static IP	WAN IP	192.168.20.181
Connection Duration	40m 25s	Subnet Mask	255.255.255.0
WAN MAC	C8:3A:35:1E:5F:E0	Default Gateway	192.168.20.100
LAN IP	192.168.0.1	Preferred DNS Server	192.168.20.100

⚠ **NOTE**

If you connect to your router through WiFi, you need to connect to your router again after setting up the WiFi name or password.

----End

3.3 Wireless Settings

This module enables you to configure the WiFi function of the router.

WiFi ON/OFF ⬤

WiFi Name and Password

WiFi Name   Tenda_XXXXXX   ☐ Hide WiFi (?)

Security Mode   WPA/WPA2-PSK Mixed(Recommend ▼

WiFi Password   ********

WiFi Schedule

WiFi Schedule   ○ Enable ● Disable

WPS

WPS   ○ Enable ● Disable

3.3.1 WiFi ON/OFF Button

This button specifies whether to enable the WiFi function. By default, the WiFi function is enabled.

You can click this button to change it to the state , and click **OK** button on the bottom of the page to disable the WiFi function. When the WiFi function is disabled, your wireless clients, such as smart phones and tablets, cannot access the internet through your router.

3.3.2 WiFi Name and Password

This function enables you to configure a name, security mode, and password for your wireless network. The following figure shows a configuration example.

The following table describes the parameters.

Parameter	Description
WiFi Name	It specifies the name of a wireless network.
Security Mode	It specifies the encryption modes supported by the router, including: • **None**: It indicates that a wireless network is not encrypted and any clients can access the network. This option is not recommended as it leads to low network security. • **WPA-PSK**: It indicates that WPA-PSK is adopted to authenticate users. • **WPA2-PSK**: It indicates that WPA2-PSK is adopted to authenticate users. • **WPA/WPA2-PSK Mixed (Recommended)**: It indicates that WPA-PSK and WPA2-PSK are adopted to authenticate users.
Password	It specifies the password required when a client accesses the wireless network of the router.

Parameter	Description
Hide WiFi	It specifies whether to prevent a WiFi name from being detected by wireless devices. If this function is enabled, the WiFi name is not broadcast. Therefore, the WiFi name is not displayed on the available WiFi networks list of a wireless device. To connect a wireless device such as a smart phone to the WiFi network, you need to manually enter the WiFi name and password of the network on the device.

3.3.3 WiFi Schedule

It specifies whether to enable the WiFi function schedule, which allows you to specify the downtime of the function. By default, the schedule is disabled. For the configuration procedure, refer to the following example.
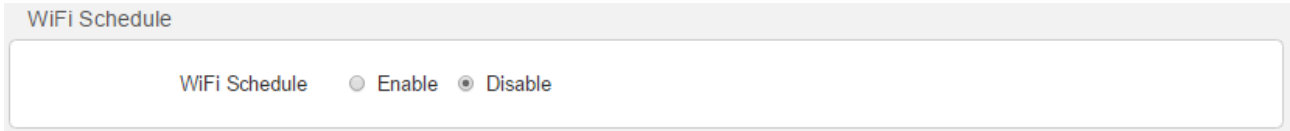
Application Scenario

You want to disable the WiFi function during 23:00 to 7:00 every day for a healthier sleep environment.
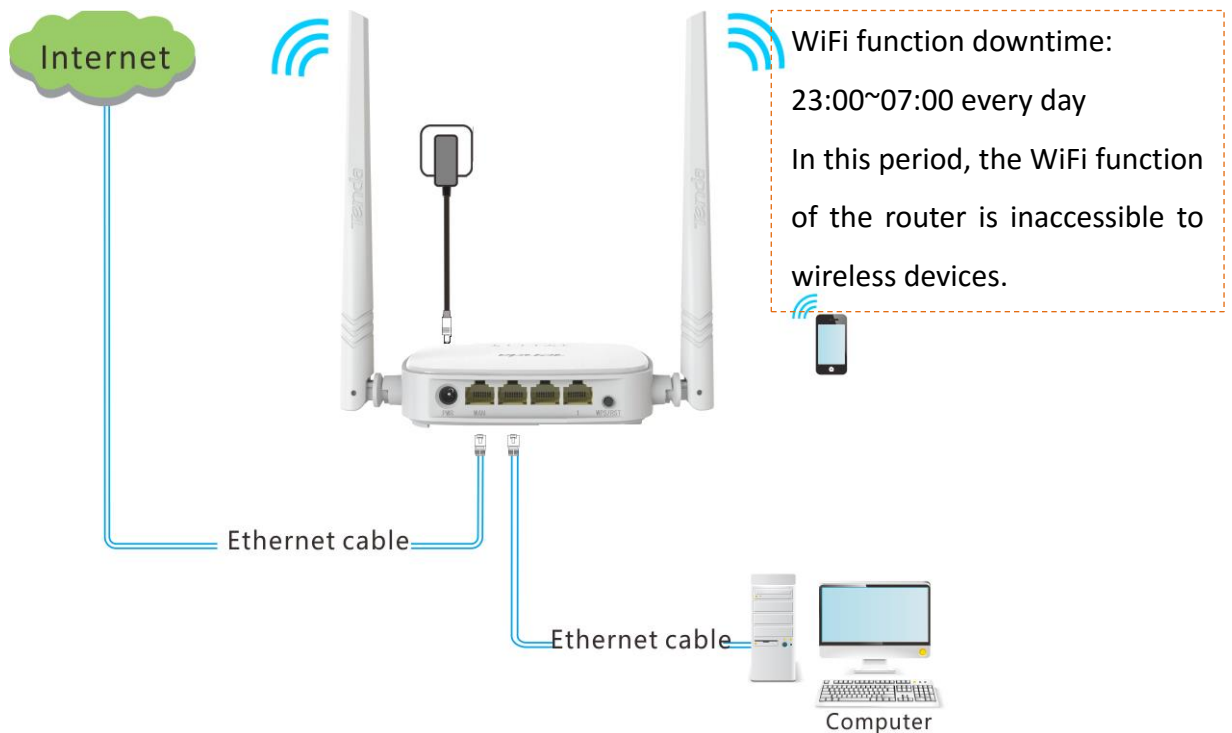
Procedure

Ensure that the router is connected to the internet and the system time of the router is synchronized with the local internet time.

Step 1 Choose **Wireless Settings** > **WiFi Schedule**.

Step 2 Select the **Enable** option. The WiFi schedule settings appears.
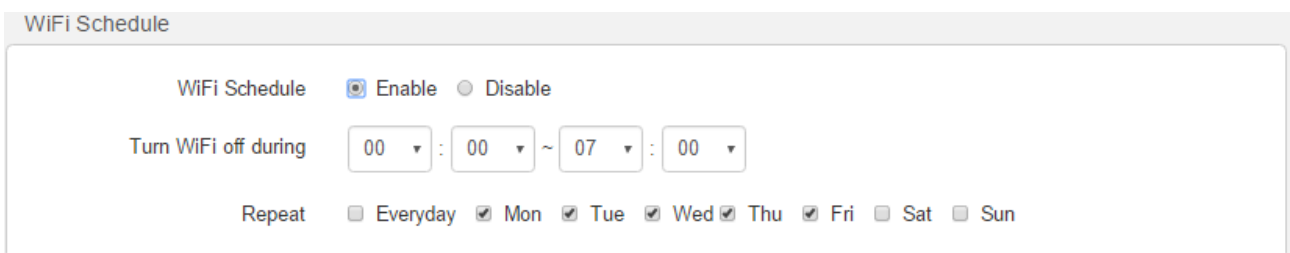
Step 3 Set **Turn off WiFi during** to the downtime. In this example, the downtime is 23:00~07:00.

Step 4 Set **Repeat** to the days to which the downtime is applied. In this example, select **Everyday**.

Step 5 Click **OK** to save and activate your settings.

        ---End

Verification

Verify that the WiFi network is inaccessible during 23:00 to 07:00 every day but accessible during the rest of the time.

> ⚠ **NOTE**
>
> To enable the WiFi function during the downtime, disable the WiFi schedule function on the WiFi Schedule page.

3.3.4 WPS

The WPS function enables wireless devices to quickly connect to an encrypted WiFi network of the router. This function is disabled by default.

Enabling the WPS function via web UI

To connect a wireless device to the router using the WPS function, select the **Enable**, and follow the onscreen instruction.

Enabling WPS function via WPS button

Hold on the WPS/RST button on the rear panel of the router for about 1 second and then release it to enable the WPS function.

3.3.5 Wireless Parameters

It is recommended that you retain the default wireless parameters settings. Change the settings only when it is necessary.

The following table describes the parameters.

Parameter	Description
Network Option	It specifies a protocol adopted for wireless transmission. The default setting is recommended. • **11b/g/n**: It indicates that clients compliant with the 802.11b, 802.11g, or 802.11n protocol can connect to the router. • **11b/g**: It indicates that clients compliant with the 802.11b or 802.11g protocol can connect to the router. • **11g**: It indicates that clients compliant with 802.11g can connect to the router. • **11b**: It indicates that clients compliant with 802.11b can connect to the router.
Wireless Channel	It specifies the operating channel of the WiFi network. A channel different from nearby channels are recommended for less interference and better wireless transmission efficiency. You can use a third-party tool to identify the channels different from nearby channels.
Channel Width	It specifies the bandwidth of the operating channel of the WiFi network. Change the default setting only when necessary. • **Auto:** It specifies that a router can switch its channel bandwidth between 20 MHz and 40 MHz based on the ambient environment. • **20MHz**: It indicates that the channel bandwidth of a router is 20MHz. • **40MHz**: It indicates that the channel bandwidth of a router is 40MHz.

3.4 Bandwidth Control

If multiple devices access the internet through the router, bandwidth control is recommended, so that high-speed file download by a device does not reduce the internet access speed of the other devices.

To implement bandwidth control, and choose **Bandwidth Control**.

The following table describes the parameters.

Parameter	Description
Device Name	It specifies the name of a device. To change the device name, click ✎ , and enter the new name into the text box.
⊞ 192.168.1.100	It specifies that the device is connected to the router using an Ethernet cable, and the device has obtained the IP address 192.168.1.100
(Native Device)	It specifies the current device that logging in to the web UI.
🛜 192.168.1.101	It specifies that the device is connected to the router wirelessly, and the obtained IP address is 192.168.1.101
Download/Upload Speed	It specifies the current upload and download speeds of the corresponding device.
Upload Limit and Download Limit	• **Upload Limit** specifies the maximum upload speed at Mbps of the corresponding device. • **Download Limit** specifies the maximum download speed (in Mbps) of the corresponding device.
Internet Access	The button under **Internet Access** allows you to prevent the corresponding device from accessing the internet and to move the device to the blocked devices list.

Application Scenario 1

You have an 8 Mbps (1024KB/s) broadband connection at your apartment. Multiple devices sharing the connection often compete for bandwidth. To ensure that every device can access the internet properly, you want to specify the maximum bandwidth for every device. For example, you want to limit the

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download speed of every device to 2 Mbps (256KB/s). The following figure shows the application scenario.

Procedure

Step 1 Choose **Bandwidth Control**.

Step 2 Select **256KB/s (SD Videos)** from the **Download Limit** drop-down list box corresponding to each device.

Step 3 Click **OK**.

---End

Verification

Verify that the download speed of each device does not exceed 2 Mbps (256KB/s).

Device Name	Download Speed	Upload Speed	Download Limit	Upload Limit	Internet Access
DESKTOP-M5MSVIJ 🖉 ⊹ 192.168.1.100(Native Device)	↓ 0KB/s	↑ 0KB/s	256KB/s ▾	No Limit ▾	Native Device
Dudu 🖉 📶 192.168.1.101	↓ 0KB/s	↑ 0KB/s	256KB/s ▾	No Limit ▾	🔘

Application Scenario 2

You check the device name list and find that there is an unknown device. You do not want to share your bandwidth with it. Then you can add it to **Blocked Devices** list.

	Attached Devices(2)					
🔒 Status	Device Name	Download Speed	Upload Speed	Download Limit	Upload Limit	Internet Access
🌐 Internet Settings	DESKTOP-M5MSVIJ 🖉 ⊹ 192.168.1.100(Native Device)	↓ 0KB/s	↑ 0KB/s	No Limit ▾	No Limit ▾	Native Device
📶 Wireless Settings	Unknown device 🖉 📶 192.168.1.101	↓ 0KB/s	↑ 0KB/s	No Limit ▾	No Limit ▾	🔘
〽 Bandwidth Control						
📡 Wireless Repeating	Blocked Devices(0)					
👫 Parental Controls	Device Name		MAC Address		Action	
🛠 Advanced	No device					
⚙ Administration						

Procedure

Step 1   Click the corresponding button under **Internet Access** to ⊝ state.

Attached Devices(2)					
Device Name	Download Speed	Upload Speed	Download Limit	Upload Limit	Internet Access
DESKTOP-M5MSVIJ 🖉 ⊹ 192.168.1.100(Native Device)	↓ 0KB/s	↑ 0KB/s	No Limit ▾	No Limit ▾	Native Device
Unknown device 🖉 📶 192.168.1.101	↓ 0KB/s	↑ 0KB/s	No Limit ▾	No Limit ▾	⊝

Step 2   Click **OK**.

---End

Verification

Verify that the unknown device is added to **Blocked Devices** list.

Blocked Devices(1)		
Device Name	MAC Address	Action
Unknown device	1C:5C:F2:B4:40:08	Remove

The device in **Blocked Devices** list cannot be connected to the router.

To remove the device from the **Blocked Devices** list, click the **Remove** button and click **OK**.

3.5 Wireless Repeating

The wireless repeating function enables a wireless router to function as a wireless repeater or an AP to extend wireless network coverage. At least two wireless routers are required for implementing this function. You can use this router to extend wireless network coverage in WISP, Universal Repeater or AP mode.

> ⚠ NOTE
>
> If wireless repeating is enabled, some functions of the router are not available. For details, refer to the message on web UI after enabling these modes.

Application Scenario

User A subscribes to an 8 Mbps broadband service and purchases a wireless router for setting up an LAN with internet connectivity in his apartment, which has three bedrooms, one dining room, one living room, two restrooms, and one kitchen. The router is placed in the living room. The WiFi signals are strong in the living room and master bedroom, but very weak in the other bedrooms and the restrooms.

Solution

To improve internet connectivity, the user can add a Tenda N301 router and configure the wireless repeating function of the router to extend the WiFi network coverage. That will eliminate blind areas in the apartment, enabling the user to access the internet anywhere in the apartment.
The following figure shows the application scenario.

Before configuring the new router:

- Ensure that the **WAN** port of the new router is not connected.

- Ensure that the original router can access the internet.

- Record the WiFi name and password of the original router, which are **Tenda_2** and **12345678** in this example.

3.5.1 Enabling the WISP Mode

Log in to the web UI of the new router, and choose **Wireless Repeating**.

Assume that the router connections shown in the following figure are set up.

WiFi name:
Tenda_XXXXXX

WiFi name:
Tenda_2

Internet

New router

Original router

Ethernet cable
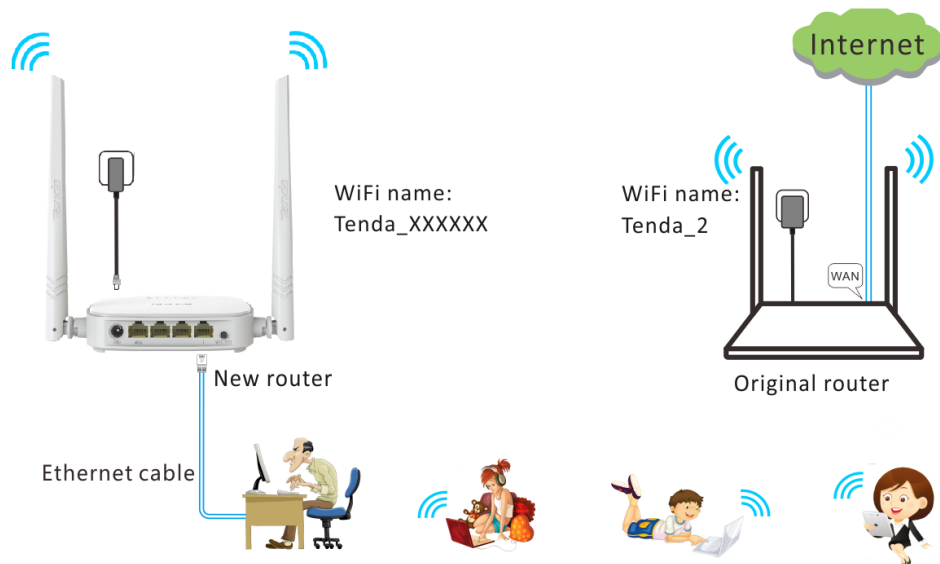
Procedure

Step 1 Select the **WISP** mode.

Step 2 Select the WiFi name of the original router from the **WiFi Name** list. In this example, select **Tenda_2**.

Step 3 (If the password is not set on the original router, go to step 4 directly.) Enter the WiFi password of the original router in the **WiFi Password** text box. In this example, enter **12345678**.

Step 4 Click **OK**.

Select	WiFi Name	MAC Address	Channel	Security Mode	Signal Strength
○	Tenda_07A050	C8:3A:35:07:A0:51	1	None	📶 100%
○	IP-COM_1E6180	00:B0:C6:1E:61:81	1	None	📶 100%
●	Tenda_2	C8:3A:35:13:05:08	13	WPAWPA2/AES	📶 100%

Step 5 Click **OK** on the dialog box that appears.

The router restarts automatically, and the settings take effect after the router restarts.

---End

Verification

After the "Connected! You can surf the Internet." message appears on the **Status** page, you can access the internet through the WiFi network of the new router.

> ⚠️ **NOTE**
>
> - If the LAN IP address of the new router is in the same network segment as that of the original router, an IP conflict occurs. In this case, the new router replaces its LAN IP address with another that belongs to another network segment. You can log in to the web UI of the new router directly at **tendawifi.com**.
>
> - If the upstream router enables the DHCP function, the new router obtains network connection settings from the upstream router. In this case, verify that the internet connection of new router is set to **Dynamic IP**. If the upstream router disables the DHCP function, you need to configure the connection settings manually on the **Internet Settings** page of the new router. Verify that the internet connection of new router is set to **Static IP**. If the upstream router enables PPPoE function, you need to know its PPPoE username and password, and configure the connection settings manually on the **Internet Settings** page of the new router. Verify that the internet connection of new router is set to **PPPoE**.
>
> - In WISP mode, the new router can be connected wirelessly to a hotspot using dynamic IP or a static IP address and access the internet through the hotspot.

3.5.2 Enabling the Universal Repeater Mode

Log in to the web UI of the new router, and choose **Wireless Repeating**.

Assume that the router connections shown in the following figure are set up.
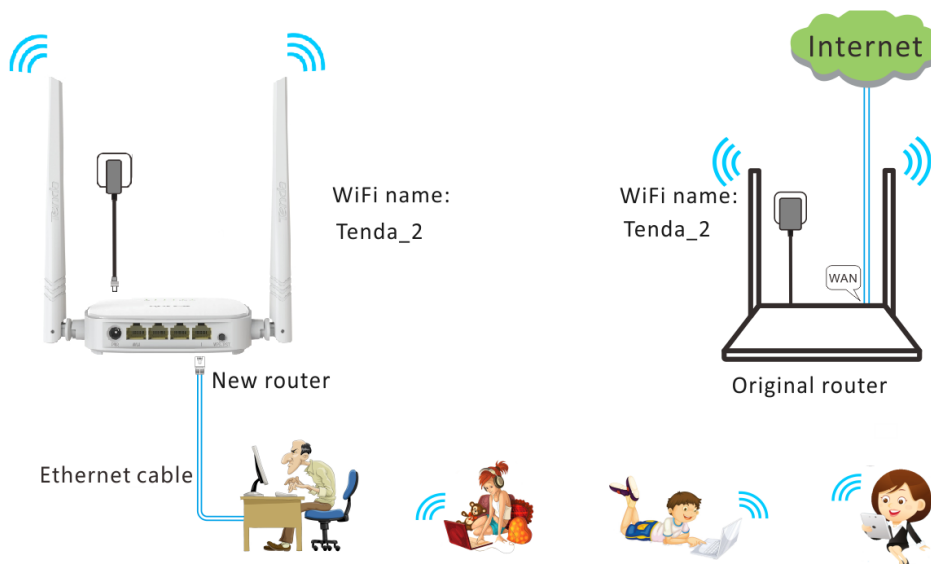
Procedure

Step 1 Select the **Universal Repeater** mode.

Step 2 Select the WiFi name of the original router from the **WiFi Name** list. In this example, select **Tenda_2**.

Step 3 (If the password is not set on the original router, go to step 4 directly.) Enter the WiFi password of the original router in the **WiFi Password** text box. In this example, enter **12345678**.

Step 4 Click **OK**.

Step 5 Click **OK** on the dialog box that appears.

The router restarts automatically, and the settings take effect after the router restarts.

---End

Verification

After the "Bridged successfully in Universal Repeater mode." message appears on the **Status** page, you can access the internet through the WiFi network of the new router.

> ⚠ NOTE
>
> - If the LAN IP address of the new router is the same as that of the original router, you can only log in to the web UI of the new router at **tendawifi.com**. If the LAN IP address of the new router is in the different network segment from the original router, it will be changed to an IP that is in the same network segment as but different from that of the original router. In this case, you can log in to the web UI of the new router at **tendawifi.com**.
> - In **Universal Repeater** mode, the DHCP server of the upstream router must be enabled.

3.5.3 Enabling the AP Mode

Log in to the web UI of the new router, and choose **Wireless Repeating**.

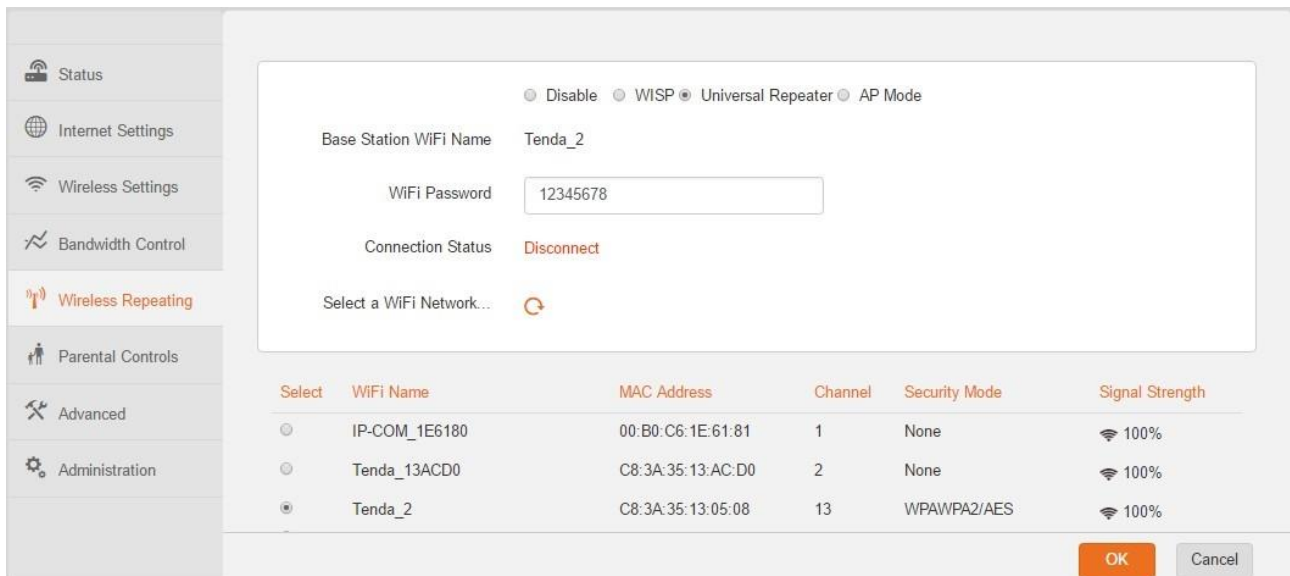Assume that the router connections shown in the following figure are set up.
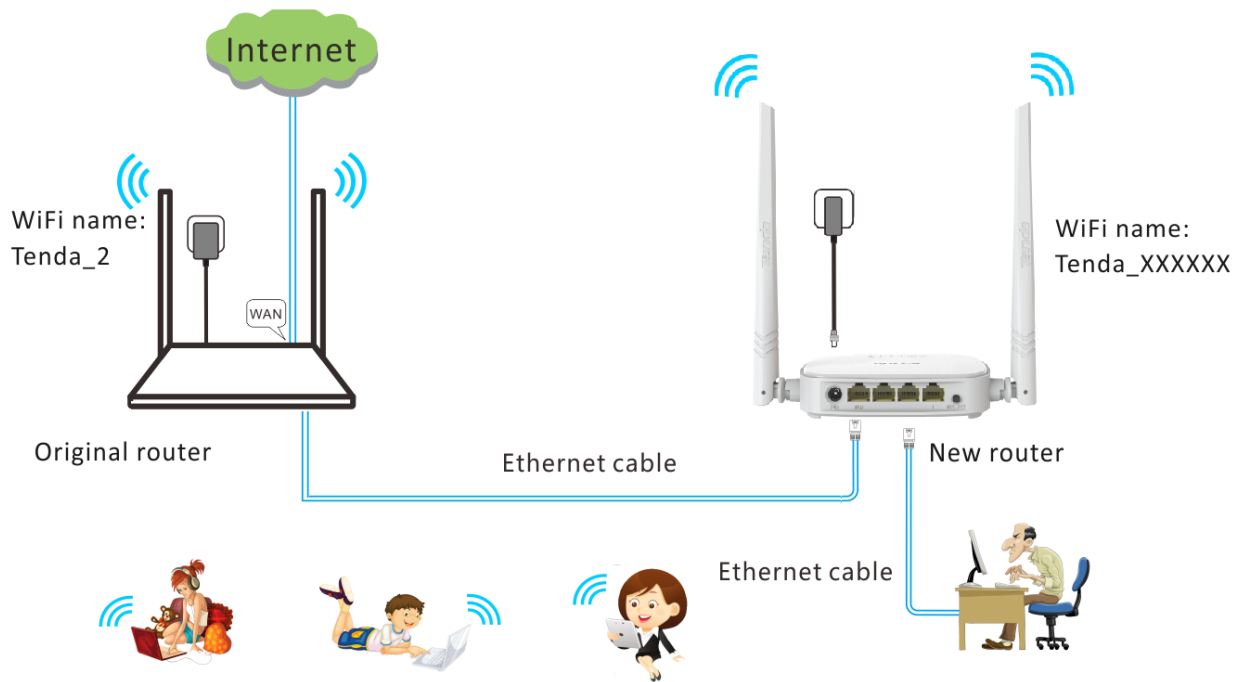
Procedure

Step 1 Select the **AP Mode** mode.

Step 2 Click **OK**.
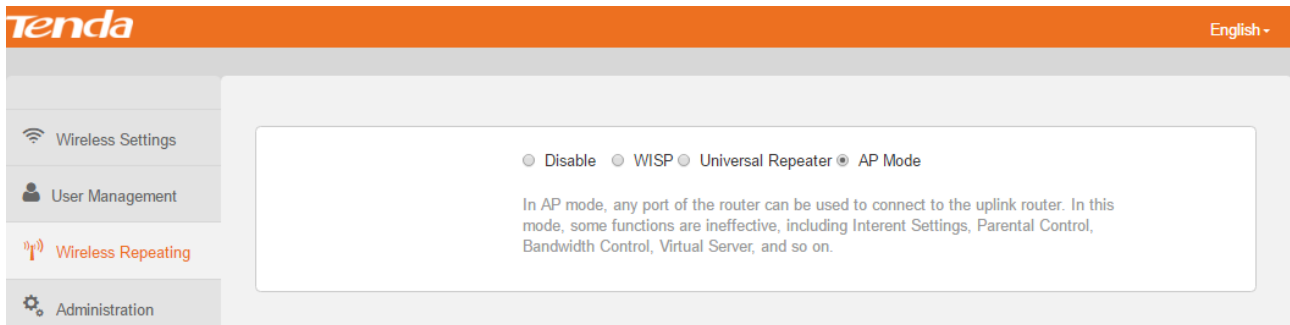
Step 3 Click **OK** on the dialog box that appears.

The router restarts automatically, and the settings take effect after the router restarts.

---End

Verification

Connect to the new router wirelessly, and try accessing the internet.

> ⚠ **NOTE**
>
> Verify that one of the new routers' ports (any port) is connected to a LAN port of the original router which can access the internet.

3.6 Parental Control

This function enables you to control internet connectivity availability and content accessibility for devices connected to the router, ensuring healthy internet usage.

To implement parental control, perform the following procedure:
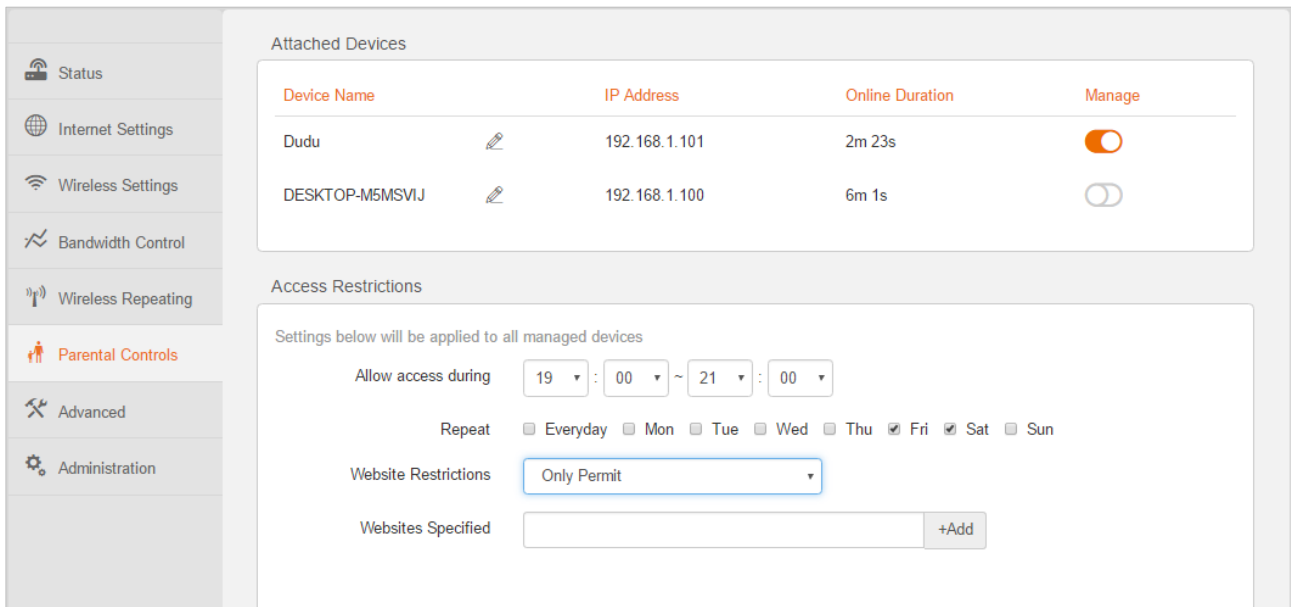
Step 1 Choose **Parental Controls**.

Step 2 All the devices connected to the router are listed.

Step 3 Click ⬭ to change it to the 🔘 state corresponding to the device to which parental control must be applied.

Step 4 Set the parameters to specify the time when the internet is accessible to the device.

Step 5 Set the websites accessible or inaccessible to the device.

   ---End

The following table describes the parameters.

Parameter	Description
Device Name	It specifies the name of a device. Click ✎ to change the device name.
IP Address	It specifies the IP address assigned to a device.
Online Duration	It specifies the duration that a device has been connected to the router.
Manage	It allows you to enable/disable parental control for a device. 🔘
Disable	It specifies that the website restriction function is disabled.
Only Permit	It specifies that only the websites listed below the **Websites Specified** text box can

Parameter	Description
	be visited during the specified time.
Only Forbid	It specifies that only the websites listed below the **Websites Specified** text box cannot be visited during the specified time.

Application Scenario

You have an 8 Mbps broadband connection at your apartment and have purchased a wireless router for setting up a network in your apartment. Your kids often watch videos over the internet at home. In Monday to Friday, you want to allow them to access video websites such as YouTube only during 20:00 to 22:00.

Procedure

Step 1 Choose **Parental Controls**.

Step 2 Click ⬭ to the state ⬮ corresponding to your kids' devices.

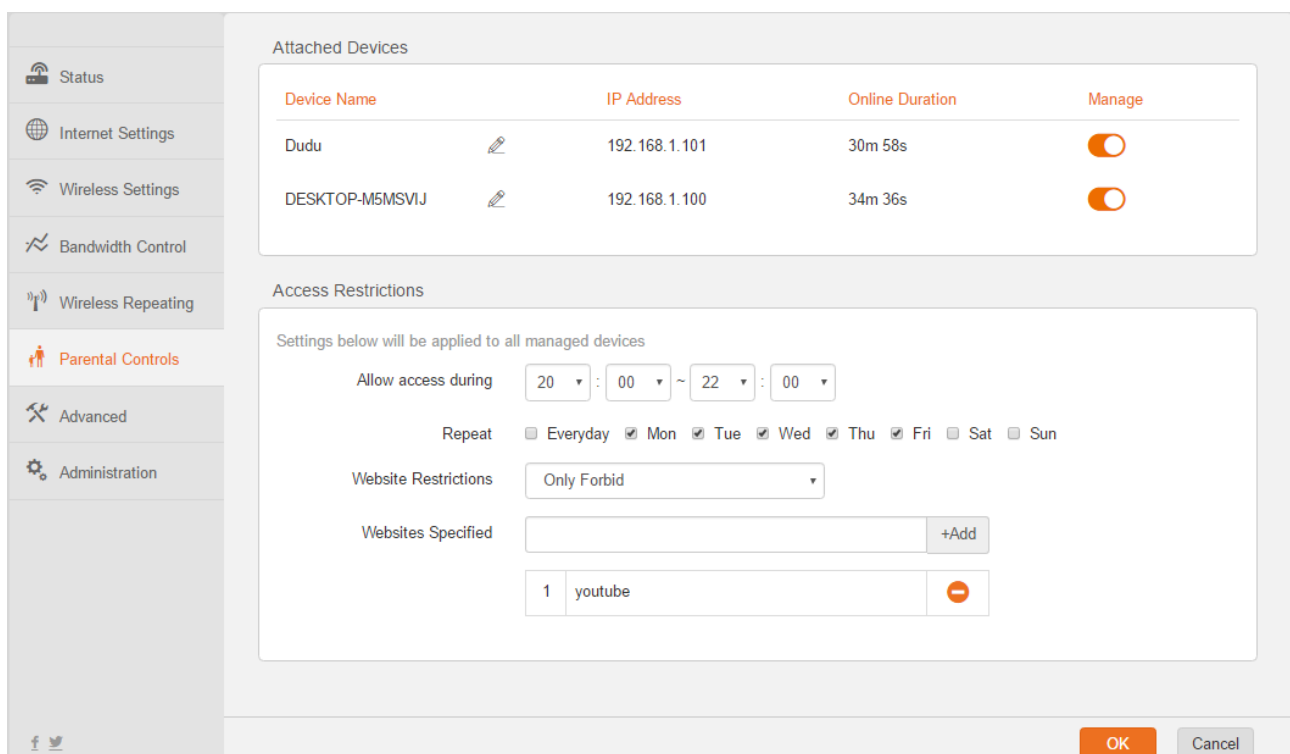**Step 3** Set **Allow access during** and **Repeat** to the period when the device is allowed to access video websites.

Step 4 Set **Website Restrictions** to **Only Forbid**.

Step 5 Set **Website Specified** to **youtube**, and click **+Add**.

Step 6 Click **OK**.

3.7 Advanced Functions

The router provides advanced functions to address tailored requirements.

3.7.1 DHCP Reservation

Generally, IP addresses assigned by the router to devices are changeable. Some functions, such as the DMZ host and virtual server functions, require static device IP addresses. In this case, you can use the DHCP reservation function to bind fixed IP addresses with the devices involved in the functions.

To configure the DHCP reservation function, choose **Advanced** > **Static IP** (DHCP Reservation).

Procedure

Step 1 Set **IP Address** to an IP address between **Start IP** and **End IP** of the router's DHCP server. (Check this range on **Administration** > **LAN Parameters** page.)

Step 2 Set **MAC Address** to the MAC address of the device that requires a fixed IP address.

Step 3 (Optional) Enter a name for the device for easy recognition.

Step 4 Click⊕, and click **OK**.

Static IP			
IP Address	MAC Address	Remark	Action
192.168.1.118	1C:5C:F2:B4:40:08	Dudu	⊕
192.168.1.118	1C:5C:F2:B4:40:08	Dudu	⊖

---End

Verification

Verify that the same IP address is assigned to the device each time when it connects to the router. To unbind the device from the IP address, click⊖corresponding to the device, and click OK.

3.7.2 Port Forwarding

If computers are connected to the router to form a LAN and access the internet through the router, internet users cannot access the servers built on the hosts on the LAN, such as web servers, email servers, and FTP servers. To enable internet users to access a LAN server, enable the port forwarding function of the router, and map one service port to the IP address of the LAN server. This enables the

router to forward the requests arriving at the port from the internet to the LAN server.

To configure the virtual server function, choose **Advanced** > **Port Forwarding**.

Port Forwarding				
Internal IP	Internal Port	External Port	Protocol	Action
	21 ▾	21	Both ▾	➕

The following table describes the parameters.

Parameter	Description
Internal IP	It specifies the IP address of a server that resides on the LAN of the router.
Internal Port	It specifies the service port number of a server that resides on the LAN of the router.
External Port	It specifies a router port accessible to internet users.
Protocol	It specifies the protocol of a service provided through the router for internet users. If you are uncertain about which service protocol is used, TCP/UDP is recommended.
Action	It allows you to manually add LAN servers and rules.

Application Scenario

A N301 is used to set up a LAN and a web server on the LAN must be accessible to internet users. This requirement can be addressed using the port forwarding function. The following figure shows the application scenario.

WAN IP address of the router:

102.33.66.88

IP address of the web server:

192.168.1.100
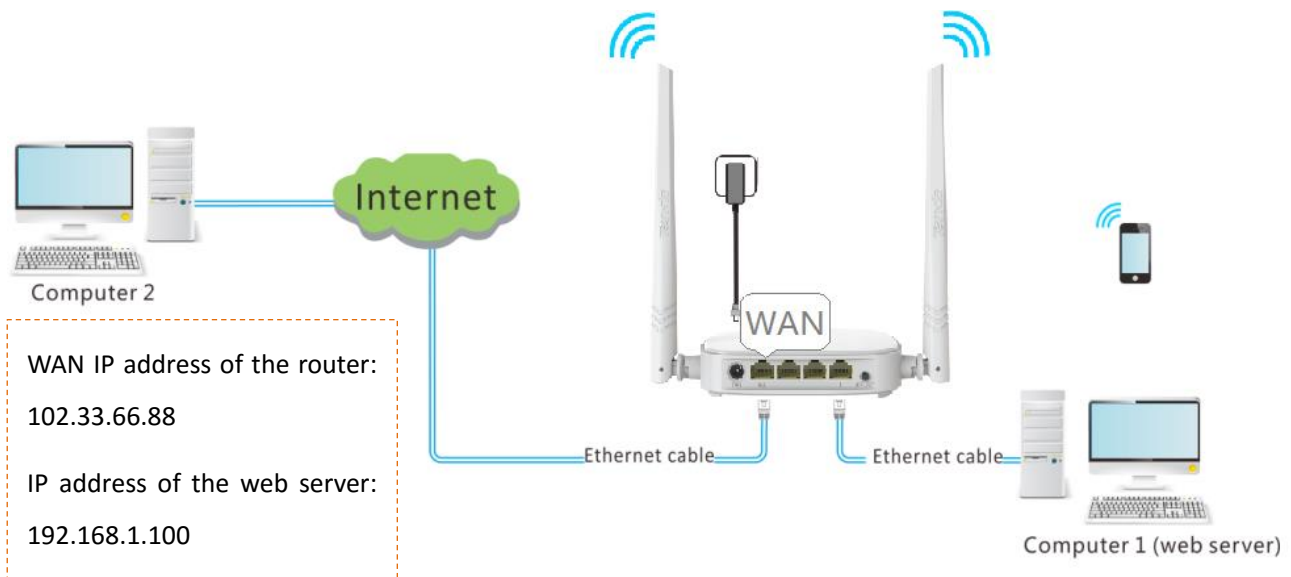
Prerequisites

- The WAN port of the router is assigned a public IP address.

- Computer 1 is assigned a static IP address (Refer to DHCP Reservation function). The default gateway IP address is the LAN IP address of the router.
- All the firewall and antivirus software that may deny internet users' access to LAN servers is disabled when port forwarding function is used.

Procedure

Step 1 Choose **Advanced** > **Port Forwarding**.

Step 2 Set **Internal IP** to the IP address of a LAN server. In this example, enter the IP address of computer 1, which is a web server. In this example, it is 192.168.1.100

Step 3 Set **Internal Port** to the port number of the web service, which is 80 in this example. **External Port** is set automatically.

Step 4 Set **Protocol** to the protocol of the web service. **Both** is recommended.

Step 5 Click⊕, and then **OK**.

Port Forwarding				
Internal IP	Internal Port	External Port	Protocol	Action
192.168.1.100	80	80	Both	⊕
192.168.1.100	80	80	Both	⊖

---End

Remote Access

Enter *Protocol name://WAN port IP address*:*External port* in the address bar of a web browser on a computer over the internet to access the resources on the LAN server. In this example, enter http://102.33.66.88:80.

New Tab   ×

← → C   http://102.33.66.88:80   ≡
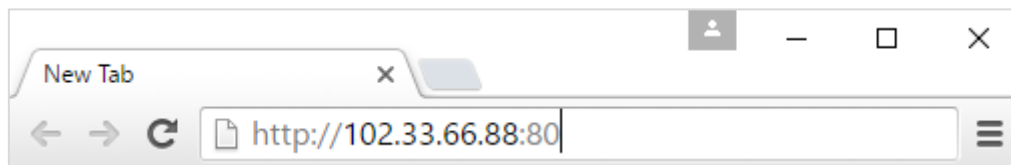
⚠ NOTE

If you are uncertain about the WAN IP address of the router, you can use the DDNS function to map the WAN IP address to a domain name, and then you can access the LAN server with the domain name instead of the WAN IP address.

3.7.3 DDNS

DDNS maps the WAN IP address (public IP address) of the router to a domain name for dynamic domain

name resolution. This ensures proper operation of functions that involve the WAN IP address of the router, such as the port forwarding function.

To enable the DDNS function, choose **Advanced**. By default, it is disabled. Select the **Enable** to enable this function.


The following table describes the parameters.

Parameter	Description
DDNS	It specifies whether to enable the DDNS function.
Service Provider	It specifies a DDNS service provider. The supported service providers include dyndns.com, oray.org and noip.com.
DDNS Username	It specifies the user name registered on a DDNS service provider's website for logging in to the DDNS service.
DDNS Password	It specifies the password registered on a DDNS service provider's website for logging in to the DDNS service.
Domain Name	It specifies the DDNS domain name register on a DDNS service provider's website.
Connection Status	It indicates the current status of the DDNS service.

Application Scenario

A N301 is used to set up a LAN and a web server on the LAN must be accessible to internet users. This requirement can be addressed using the DDNS and port forwarding functions. Assume that the registered domain name is tenda.dyndns.com, the username is Tenda, and the password is 1234578.

The following figure shows the application scenario.
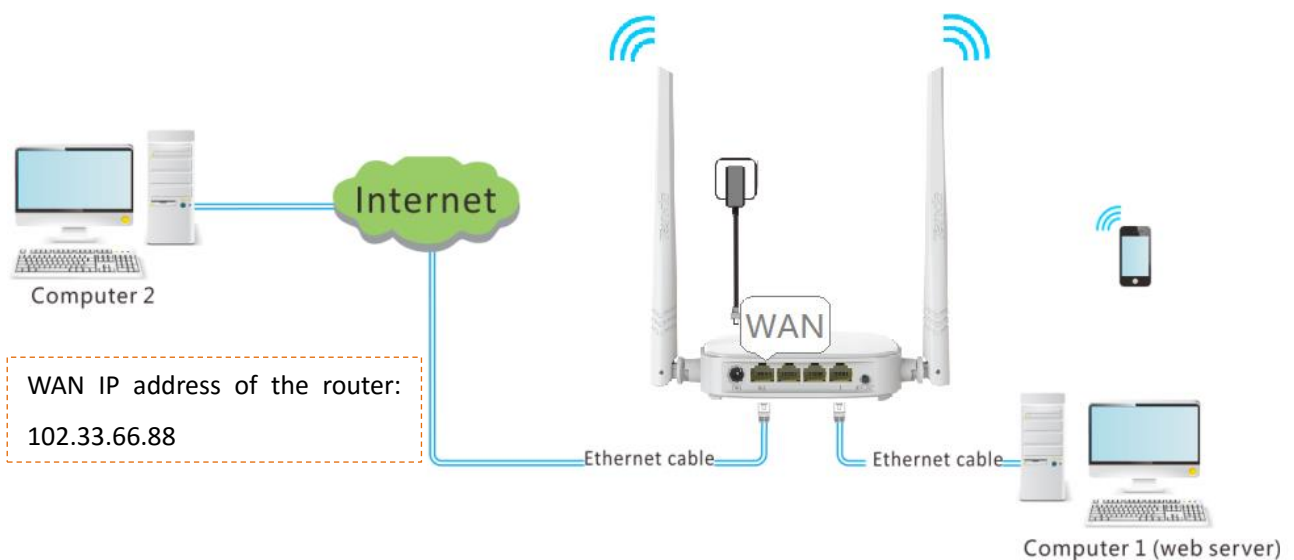
Procedure

Step 1 Check the **Enable** option of DDNS function.

Step 2 Set **Service Provider** to **dyndns.com**.

If you do not have a DDNS account, select a service provider and click Register Now to go to the service provider's website. Register a DDNS account and memorize your user name, password, and domain name of the account.

Step 3 Set **DDNS Username** to your user name for logging in to your DDNS service, which is *Tenda* in this example.

Step 4 Set **DDNS Password** to the password for logging in to your DDNS service, which is *12345678* in this example.

Step 5 Set **DDNS Host Name** to the domain name registered on the website of your DDNS service provider, which is *tenda.dyndns.com* in this example.

Step 6 Click **OK**.
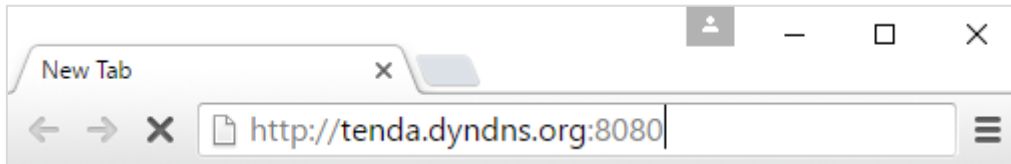
Refer to port forwarding to configure the port forwarding function.

Remote Access

Enter *http://tenda.dyndns.com:8080* in the address bar of a web browser on a computer that needs to access the resources on the LAN server over the internet.

---End

3.7.4 DMZ Host

A DMZ host on a LAN can communicate with the internet without limit. You can set a computer that require higher internet connection throughput, such as a computer used for video conferencing or online gaming, as a DMZ host for better user experience.

⚠️ NOTE

- A DMZ host is not protected by the firewall of the router. A hacker may leverage the DMZ host to attack your LAN. Therefore, enable the DMZ function only when necessary.
- Manually set the IP address of the LAN computer that functions as a DMZ host (refer to DHCP Reservation function), to prevent IP address changes, which lead to DMZ function failures.
- Security software, antivirus software, and the built-in OS firewall of the computer may cause DMZ function failures. Disable them when using the DMZ function. If the DMZ function is not required, it is recommended that you disable it and enable your firewall, security, and antivirus software.
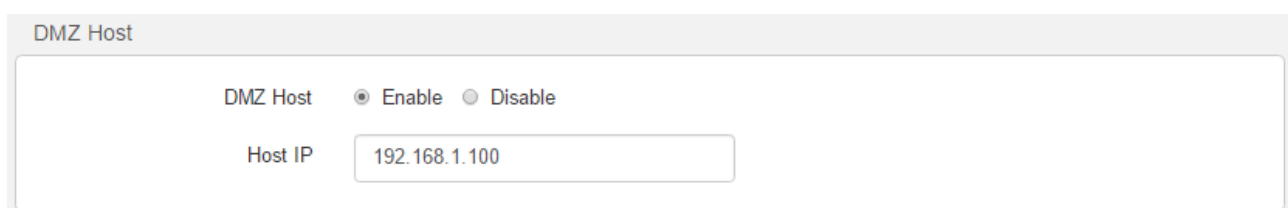
Procedure

Log in to the web UI of the router, choose **Advanced** > **DMZ Host** function.

Step 1 Check the **Enable** option of DMZ Host function.

Step 2 Set **DMZ Host IP** to the IP address of the DMZ host.
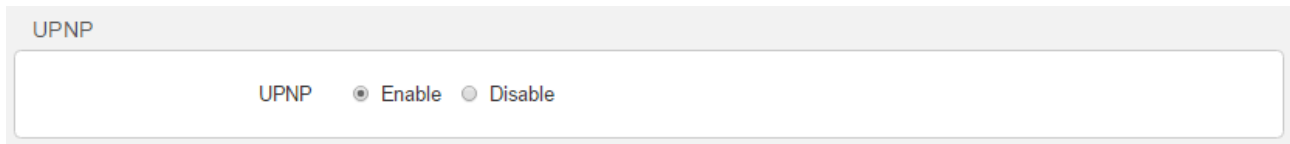
Step 3 Click **OK**.

---End

3.7.5 UPNP

This function enables the router to map ports. It can enhance user experience especially during online gaming and P2P download.

3.8 Administration

This section describes how to administer and maintain your router and home network.
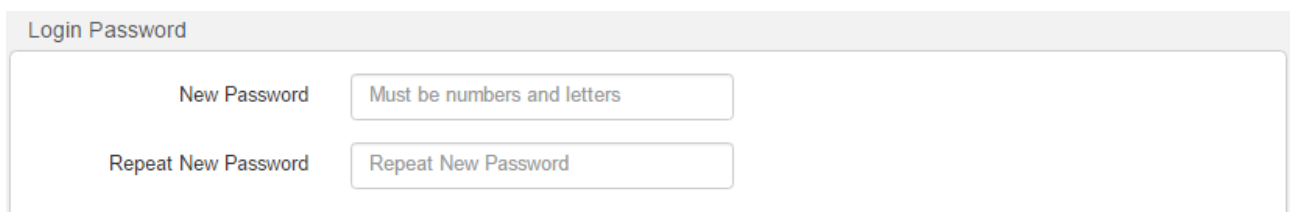
3.8.1 Login Password

To ensure network security, a complex login password is recommended. A login password consisting of more types of character, such as uppercase letters, lowercase letters, and special characters, has better security.

Procedure

Step 1 Choose **Administration** > **Login Password**.

Step 2 Set **New Password** to a new password (5-32characters), and **Repeat New Password** to the new password.

Step 3 Click **OK**.

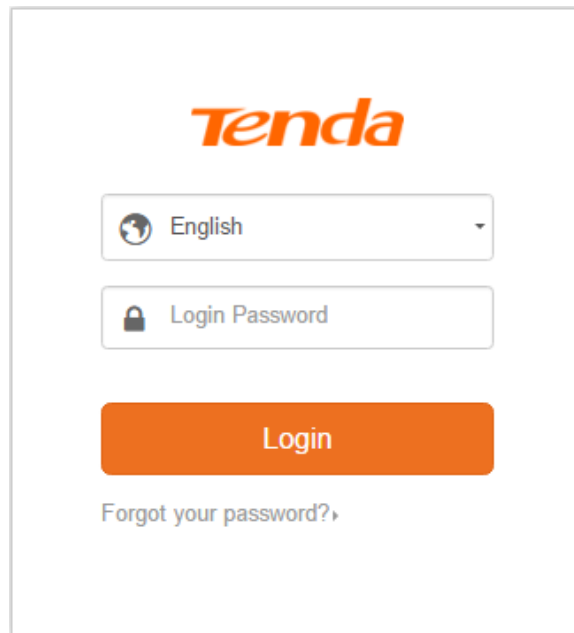**---End**

Verification

Verify that you can log in to the router web UI only after entering the new password on the login page.

3.8.2 WAN Parameters

To change WAN parameters, choose **Administration** > **WAN Parameters**.

MTU

MTU specifies the maximum size of a packet that the router can transmit. MTU varies across connection types. The default setting is recommended.

You can try changing the MTU when:

- You cannot access some websites or encrypted websites (such as online banking or Paypal websites).

- You cannot access an FTP server or a POP server.
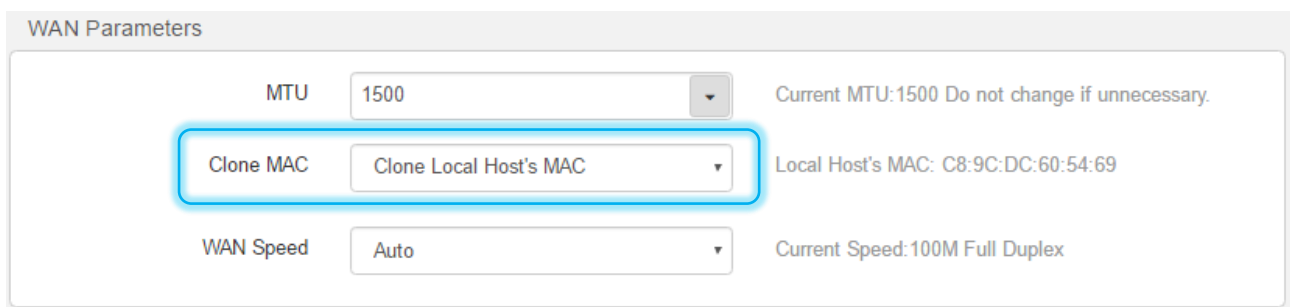
For details, refer to Q8 in FAQ.

Clone MAC

It specifies the MAC address of the router. If the router cannot access the internet after you configure its internet settings, your ISP may have bound your account with the MAC address of your computer that was used to verify internet connectivity after you subscribed to the internet service. Therefore, only the computer can access the internet with the account.

In this case, you can try either of the following methods to address the issue.

Method 1:

Procedure

Step 1 Connect the computer to the router.

Step 2 Log in to the router web UI.

Step 3 Choose **Administration** > **WAN Parameters**.

Step 4 Set **Clone MAC** to **Clone Local Host's MAC**.
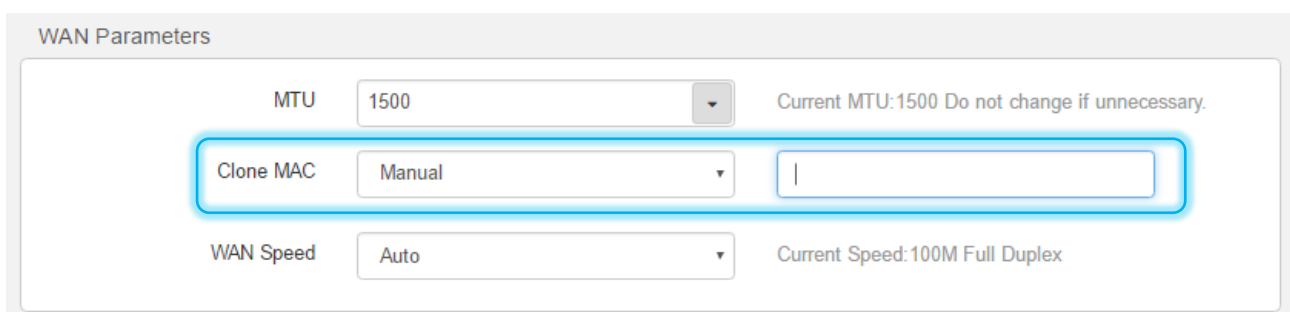
Step 5 Click **OK**.

      ---End

Method 2:

Procedure

Step 1 Connect another device (such as a smart phone or tablet) to the router.

Step 2 Log in to the router web UI.

Step 3 Choose **Administration** > **WAN Parameters**.

Step 4 Set **MAC Address** to **Manual**.

Step 5 Enter the MAC address of the computer that can access the internet in the format of *xx:xx:xx:xx:xx:xx*.
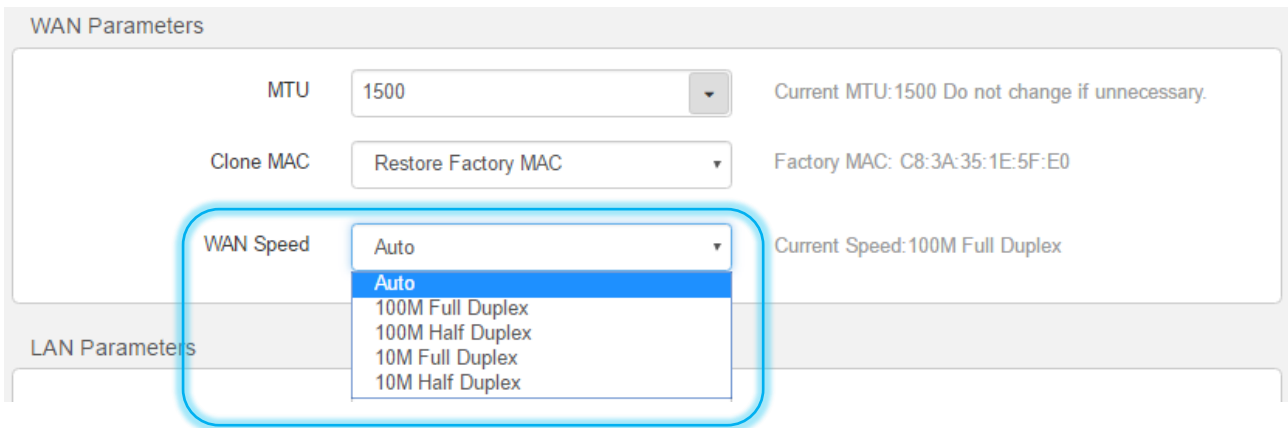
Step 6 Click **OK**.

The **Restore Factory MAC** is the default MAC address of the router. If you do not need to use the **Clone MAC** function, keep the default settings.

WAN Speed

It specifies the throughput of the WAN port. By default, the throughput of the WAN port is set to 100M Full Duplex. Change the setting only when it is necessary.
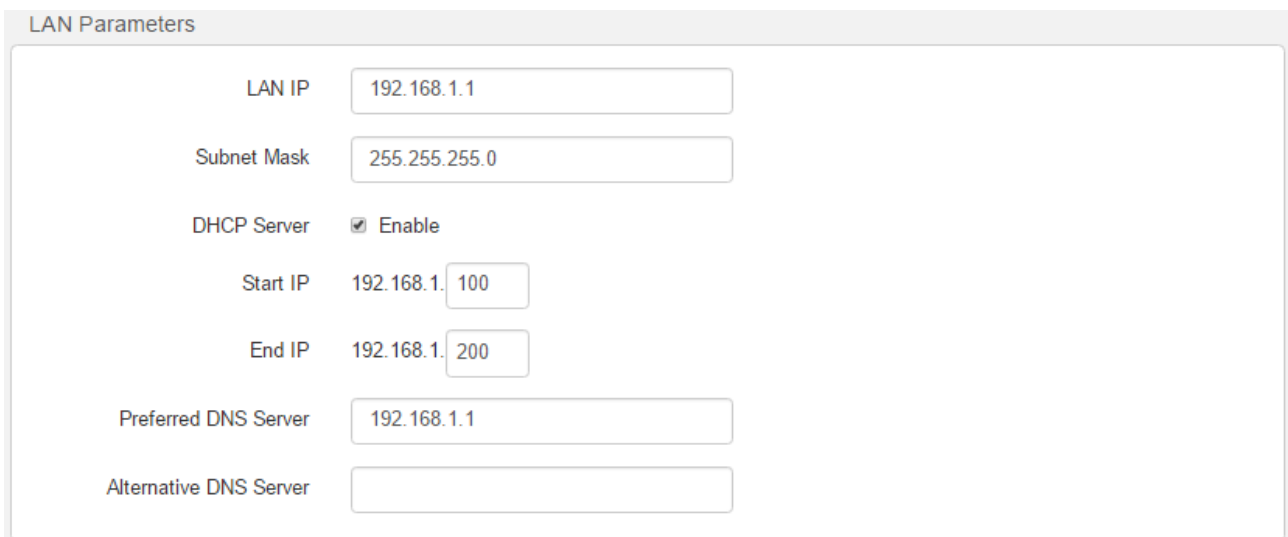
3.8.3 LAN Parameters

This function enables you to set the LAN IP address, preferred DNS server, alternative DNS server and DHCP server of the router.

To change LAN parameters, choose **Administration** > **LAN Parameters**.

Modifying the LAN IP Address

If you use multiple routers or other network devices (such as switches and APs) at the same time, IP address conflicts may occur. If the router is involved in an IP address conflict, change the LAN IP address of the router.

Procedure

Step 1 Choose **Administration** > **LAN parameters**.

Step 2 Set LAN IP Address to an IP address that is not in use, such as 192.168.5.1.

Step 3 Click **OK**.

    ---End
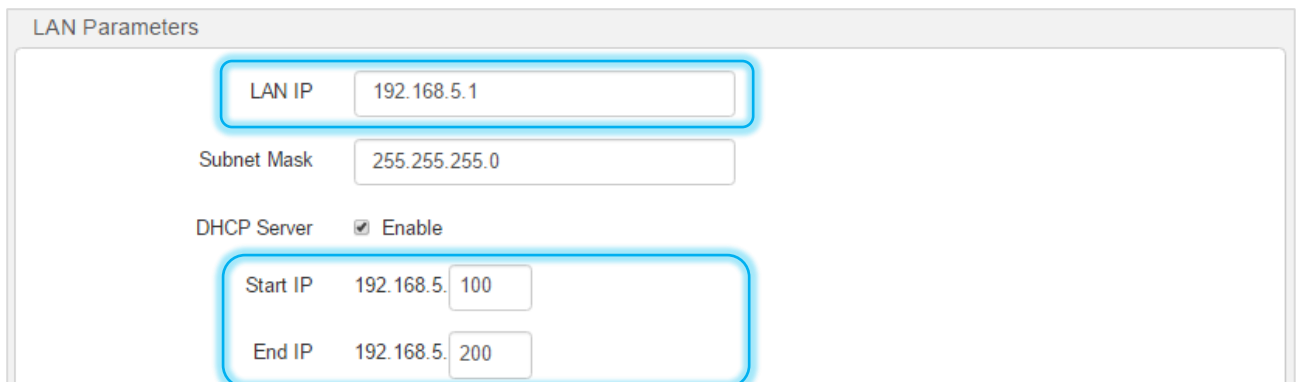
Verification

Verify that you can access the router web UI at 192.168.5.1 or tendawifi.com.
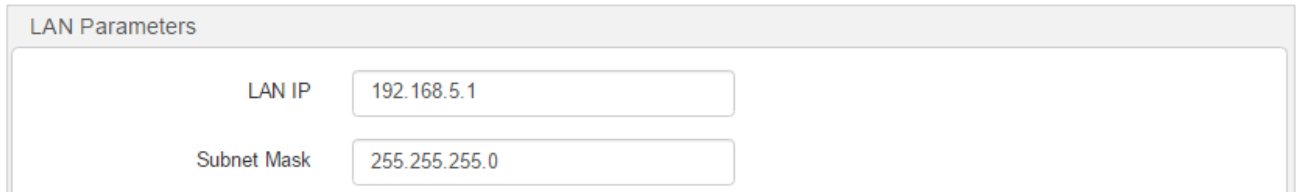
After the settings take effect, the system displays the login page at the new LAN IP address. After you log in to the router web UI, the system displays the updated LAN IP address range of the router on the LAN Parameters page. See the following figure. The LAN IP address is changed to 192.168.5.1 and the IP address range is changed to 192.168.5.100~200. That is, the router assigns only the IP addresses within this range to devices connected to the router.

Enabling or Disabling the DHCP Server

The default setting is recommended. If you need to change the settings, refer to the parameter description in the following table.

> ⚠ **NOTE**
>
> - By default, the DHCP server of the router is enabled. It is recommended that you retain the default settings. If you disable the DHCP server, you need to set IP address information on each device connected to the router, which will probably cause IP address conflicts.
>
> - It is recommended that you retain the default DHCP server settings to ensure internet connectivity.

The following table describes the parameters.

Parameter	Description
LAN IP Address	It specifies the LAN IP address of the router, that is, the login address of the router web UI.
DHCP Server	• If the **Enable** is selected, the server assigns one IP address within a specified IP address range to each device connected to the router. • If the **Enable** is deselected, no IP address is assigned to the devices connected to the router (such as laptops and mobile phones). These devices can access the internet only after IP addresses are manually set on them. Manual IP address setting is complicated and may easily cause IP conflicts. Generally, it is recommended that you enable the DHCP server.
Start IP/End IP	It specifies the range of IP addresses that can be assigned to devices connected to the router.
Preferred/Alternative DNS Server	It specifies the preferred and alternative DNS servers of devices connected to the router.

Setting DNS Server Addresses

This function enables you to set DNS server addresses for devices connected to the router. If you do not configure DNS settings, the DHCP server of the router assigns the default DNS server address (LAN IP address of the router) to the devices.

3.8.4 Remote Web Management

This function enables you to remotely log in to the web UI of the router over the internet.

To configure the function, choose Administration, and move to Remote Web Management. By default, the function is disabled. Select the **Enable** to enable the function.

Application Scenario

A N301 is used to set up a LAN at an apartment and the router must be logged in and managed over the internet. Assume the public IP address of the router is *102.33.66.88* and the public IP address of the computer for remote login is *218.88.93.33*.

The following figure shows the application scenario.

WAN IP address of the router: 102.33.66.88

IP address of computer 2: 218.88.93.33
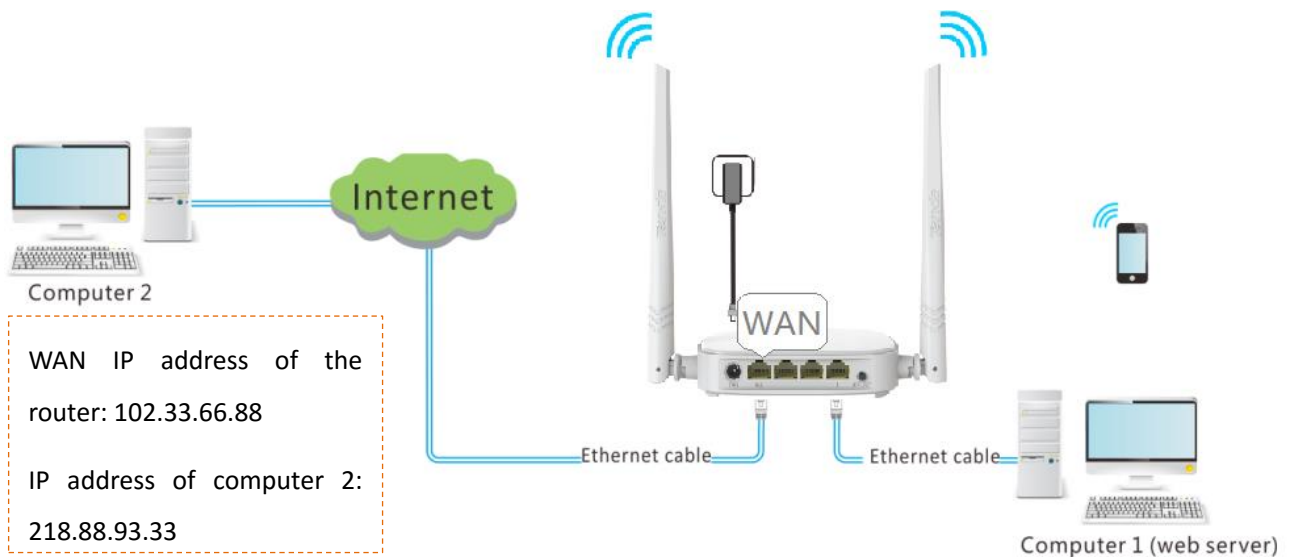
> ⚠ NOTE
>
> The computer used to remotely log in to the router web UI must be assigned a public IP address. If it is assigned a private IP address, use the public IP address of the router to which the computer connects for remote login. Private IP addresses are not applicable to remote management.

Procedure

Step 1 Choose **Administration** > **Remote Web Management**.

Step 2 Select the **Enable**.

Step 3 Select **Custom** from the **Allow Interent User(s)** drop-down list, and enter the WAN IP address (public IP address) of the computer where remote management is to be performed. In this example, set it to the WAN IP address of computer 2, which is *218.88.93.33*. If you are uncertain about the IP address of the computer, select **Anyone** (default value) from the **Allow Interent User(s)** drop-down list. In this case, all computers can log in to the router web UI over the internet.

Step 4 Set Port to the port number of the web service, which is generally 8080. You can also select a port number from 1024~65535, but the port number must not be the same as that for port forwarding.

Step 5 Click **OK**.

    ---End

Remote Access

Enter http://*102.33.66.88:8080* in the address bar of a web browser of computer 2 and log in to the router web UI to perform remote management.

> ⚠️ NOTE
>
> The public IP address of the router may change. Therefore, you need to confirm the IP address each time you want to remotely log in to the router web UI, which is troublesome. To address this issue, you can use the DDNS function to bind the public IP address with a fixed domain name, so that you can use the domain name to log in to the router web UI. To implement this measure, configure the DDNS function and then the remote management function of the router.
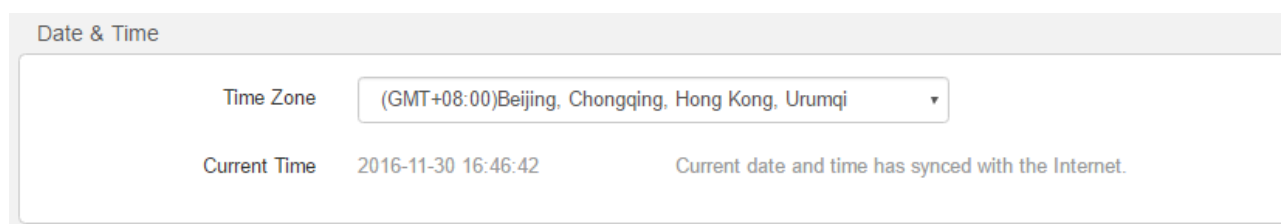
3.8.5 Date & Time

If the system time of the router is incorrect, all the router functions depending on the system time are affected, including the WiFi schedule, parental control and automatic system maintenance functions. Upon completion of configuration with the Quick Setup Wizard, the router synchronizes its system time with the computer used to configure the router. You can change the setting manually.

Procedure

Step 1 Choose **Administration** > **Date & Time**.

Step 2 Select your time zone from the **Time Zone** drop-down list box.

Step 3 Click **OK**.

Date & Time		
Time Zone	(GMT+08:00)Beijing, Chongqing, Hong Kong, Urumqi ▾	
Current Time	2016-11-30 16:46:42	Current date and time has synced with the Internet.

--End

3.8.6 Device Management

This section helps you maintain your router to improve the performance of your router and extend the durability of your router.

Reboot Router

If a setting fails to take effect or the router fails to work properly, you can try rebooting the router. To reboot the router, choose **Administration** > **Device Management**, and click **Reboot**.

Click **OK** in the dialog box that appears.
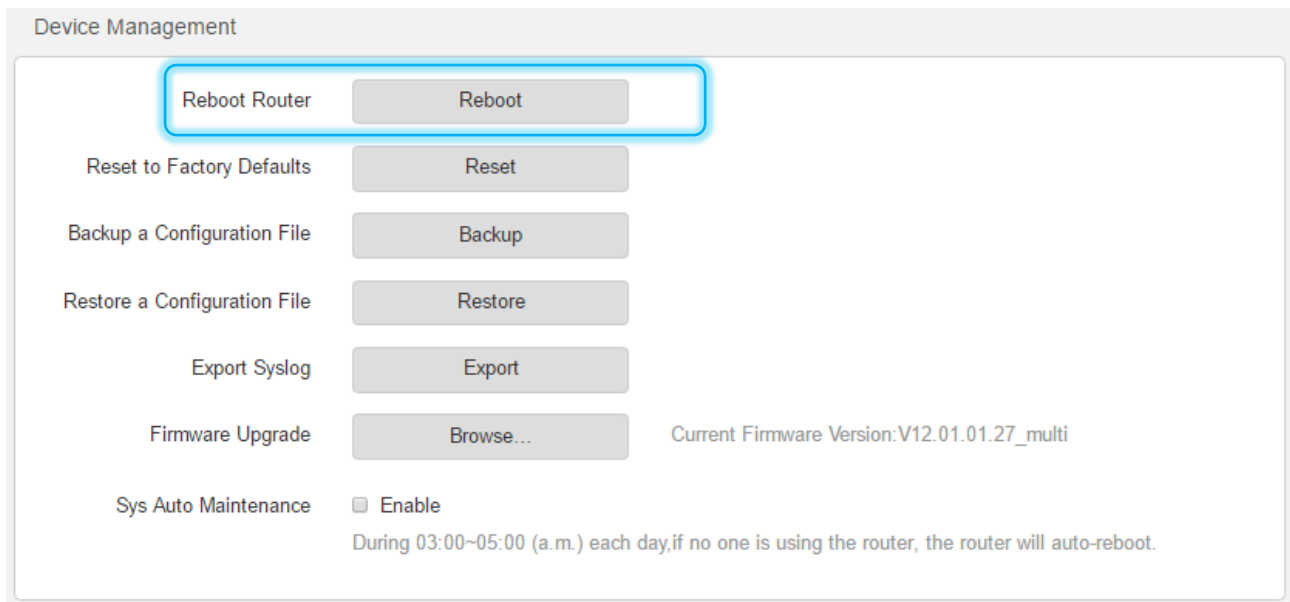
Reset to Factory Settings

If you are uncertain about why the internet is inaccessible through the router or forget the login password of the router, you can reset the router to restore the factory settings.

The router can be reset on the web UI or using the Reset button.

Reset the Router on the Web UI

Choose **Administration** > **Device Management** and click **Reset**.

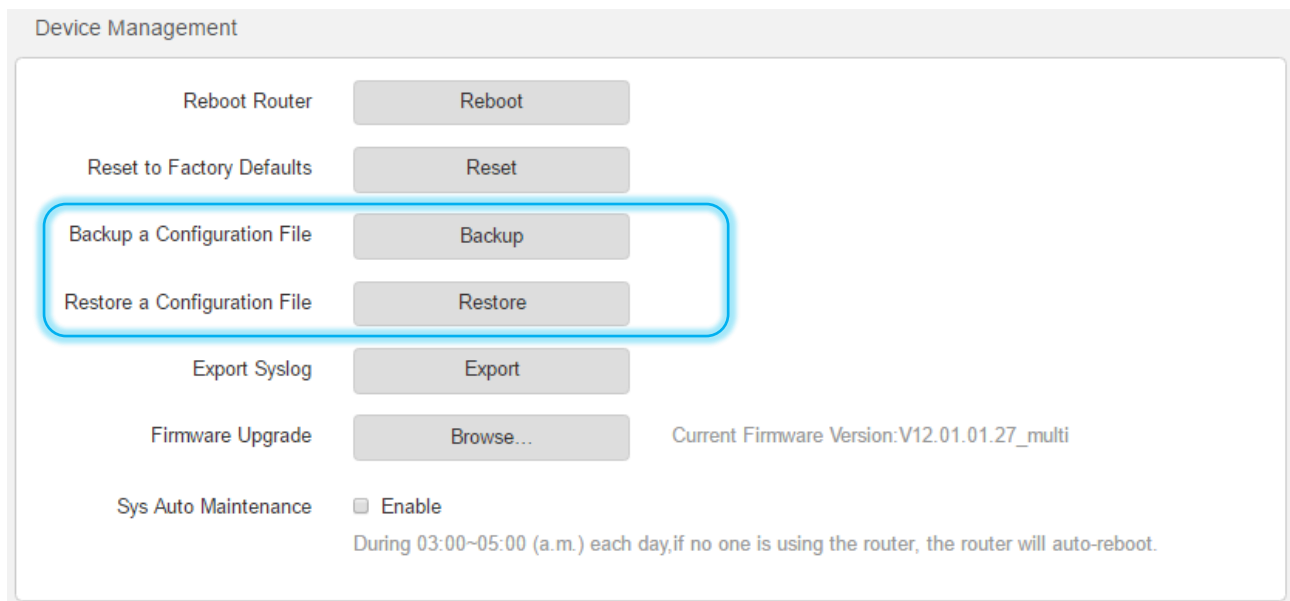Click **OK** on the dialog box that appears.
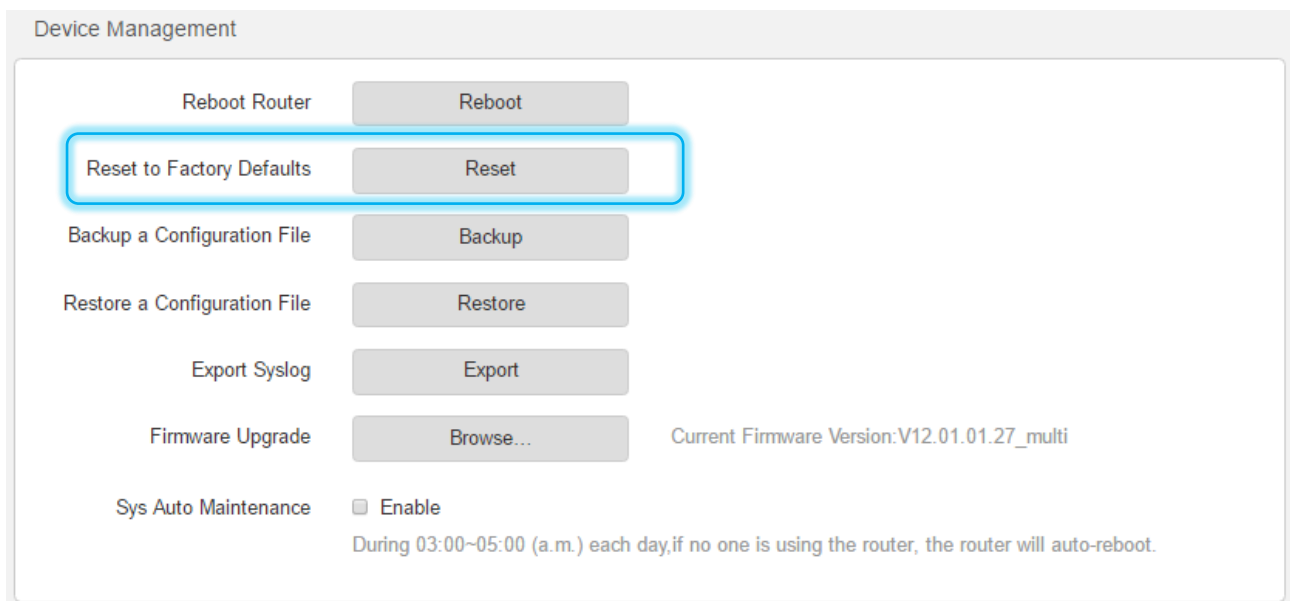
Reset the Router Using the Reset Button

Hold on the WPS/RST button of the router for about 8 seconds and release the button when all the LED indicators blink once.

Backup/Restore a Configuration File

This function enables you to back up the current configuration of the router to your computer. After the configuration is changed, you can use the backup file to restore the configuration of router. This saves router configuration time.

To back up or restore the configuration of your router, choose **Administration** > **Device Management** and perform either of the following procedures.

- To back up the current configuration, click **Backup**.

- To restore a configuration:

Step 1 Click **Restore** and select the file of the configuration to the restored.

Step 2 Click **Open**.

Step 3 Click **OK** on the dialog box that appears.

---End

Export Syslog

This function logs all key events that occur after the router is started. You can export the logs.

To export the logs:

Choose **Administration** > **Device Management** and click **Export**.
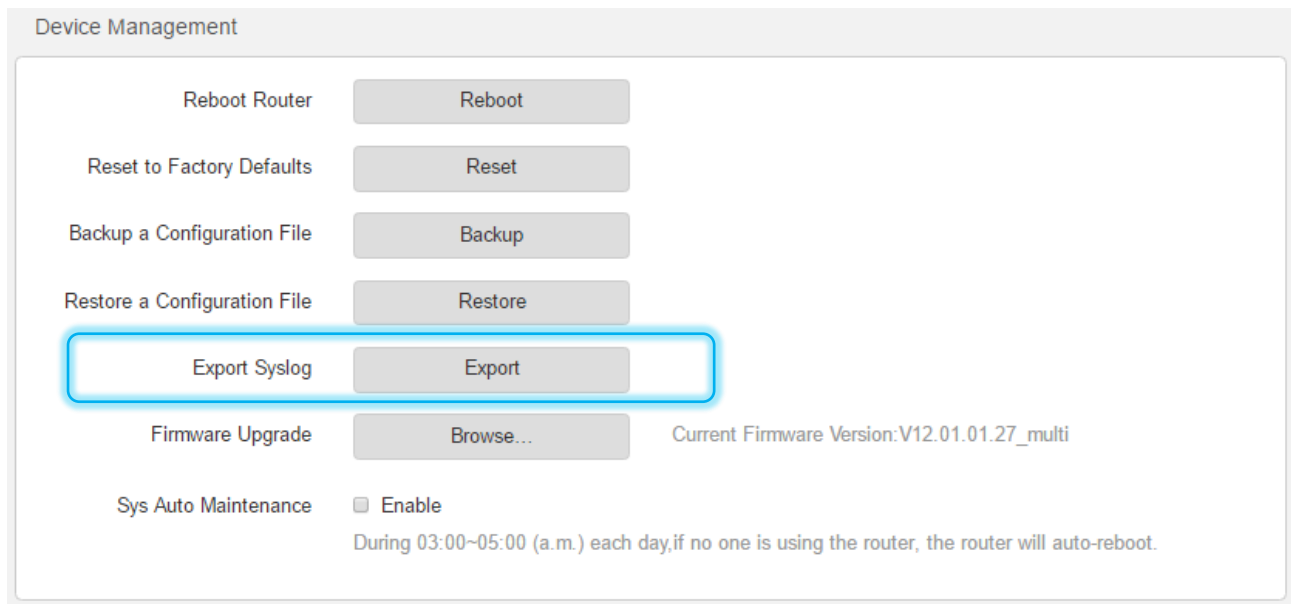
Firmware Upgrade

The latest firmware version for the router is available at Tenda's official website (http://www.tendacn.com/). You can download the latest version to upgrade your router.

To upgrade your router, choose **Administration** > **Device Management** and perform the following procedure.

Procedure

Step 1 Click **Browse…**

Step 2 Select the file for upgrading the router and click **Open**.
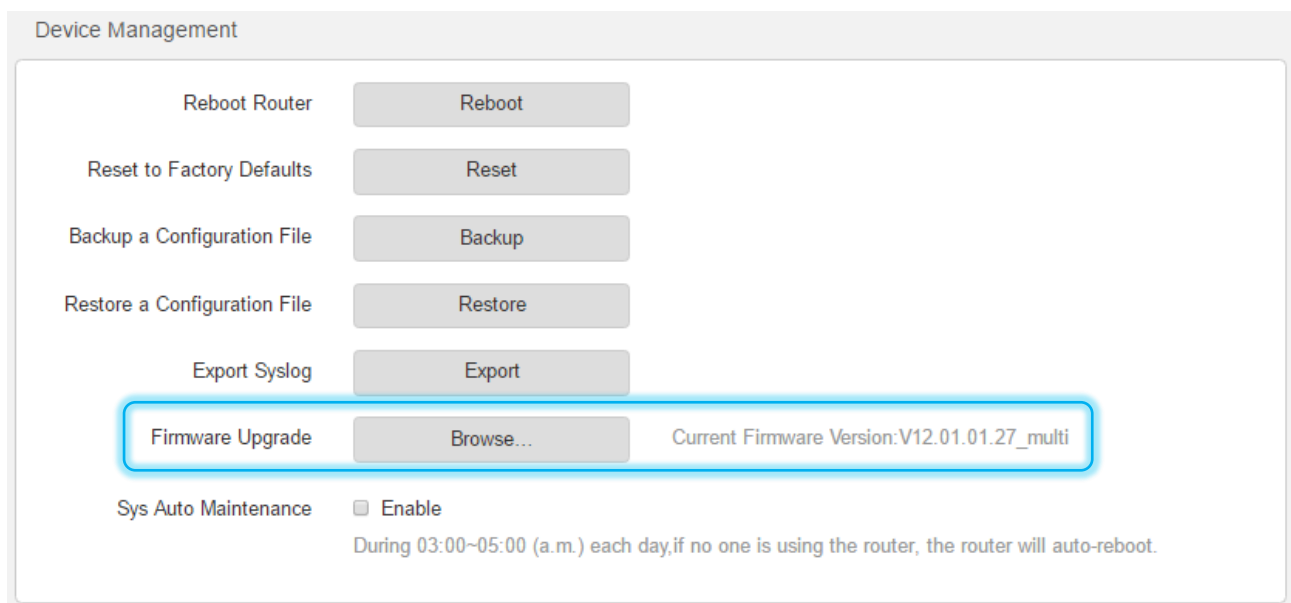
Step 3 Click **OK** on the dialog box that appears.

---End

Sys Auto Maintenance

To configure the automatic maintenance function, choose Administration, and move to Device Management. By default, this function is disabled. If this function is enabled, the router reboots during 03:00~05:00 a.m. every day when the traffic is lighter than 3 KB/s, so as to improve the system stability and router service life.

Device Management

Reboot Router	Reboot
Reset to Factory Defaults	Reset
Backup a Configuration File	Backup
Restore a Configuration File	Restore
Export Syslog	Export
Firmware Upgrade	Browse... Current Firmware Version:V12.01.01.27_multi

Sys Auto Maintenance   ☐ Enable

During 03:00~05:00 (a.m.) each day,if no one is using the router, the router will auto-reboot.

Appendixes

A.1 Join Your WiFi

A computer can connect to the WiFi network of the router only if it has a wireless network adapter. This part instructs you how to connect to your wireless network via your notebook or other wireless devices. We take Windows 8, Windows 7, and Windows XP as examples here.

A.1.1 Windows 8

Step 1 Right-click in the lower-right corner of the desktop.

Step 2 Select the WiFi network of the router from the network list that appears.

Step 3 Enter the WiFi password (network security key) of the WiFi network.

Step 4 Click **Next**.

---End

 NOTE

- If you cannot find the icon, move the cursor to the upper-right corner of the desktop, choose **Settings** > **Control Panel** > **Network and Internet** > **Network and Sharing Center**, click **Change adapter settings**, right-click **WiFi**, and choose **Disable**. Then, right-click **WiFi**, and choose **Enable**.

- If the WiFi network is not detected, check whether the Airplane mode is enabled.

A.1.2 Windows 7

Step 1 Right-click in the lower-right corner of the desktop.

Step 2 Select the WiFi network of the router from the network list that appears.

Step 3 Enter the WiFi password (network security key) of the WiFi network.

Step 4 Click **OK**.

---End
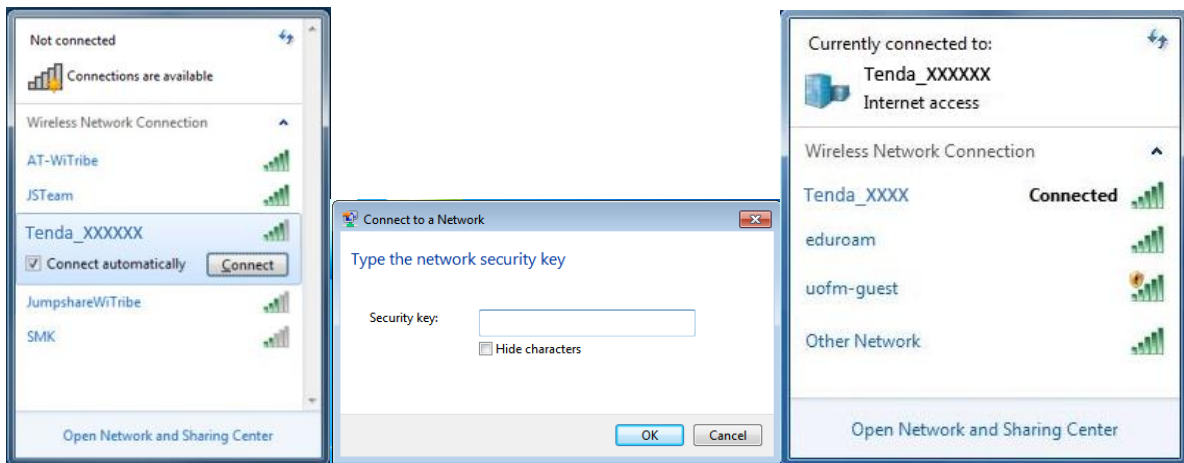
⚠ NOTE

- If you cannot find the [icon] icon, choose **Start > Control Panel > Network and Internet > Network and Sharing Center**, click **Change adapter settings**, right-click **Wireless Network Connection**, and choose **Disable**. Then, right-click **Wireless Network Connection**, and choose **Enable**.

- If the wireless network is not detected, click [icon] in the upper-right corner to refresh the list of wireless networks.

A.1.3 Windows XP

Step 1 Click [icon] in the lower-right corner of the desktop.

Step 2 Select the WiFi network from the list that appears.

Step 3 Enter the WiFi password (network security key) of the WiFi network.

Step 4 Click **Connect**.
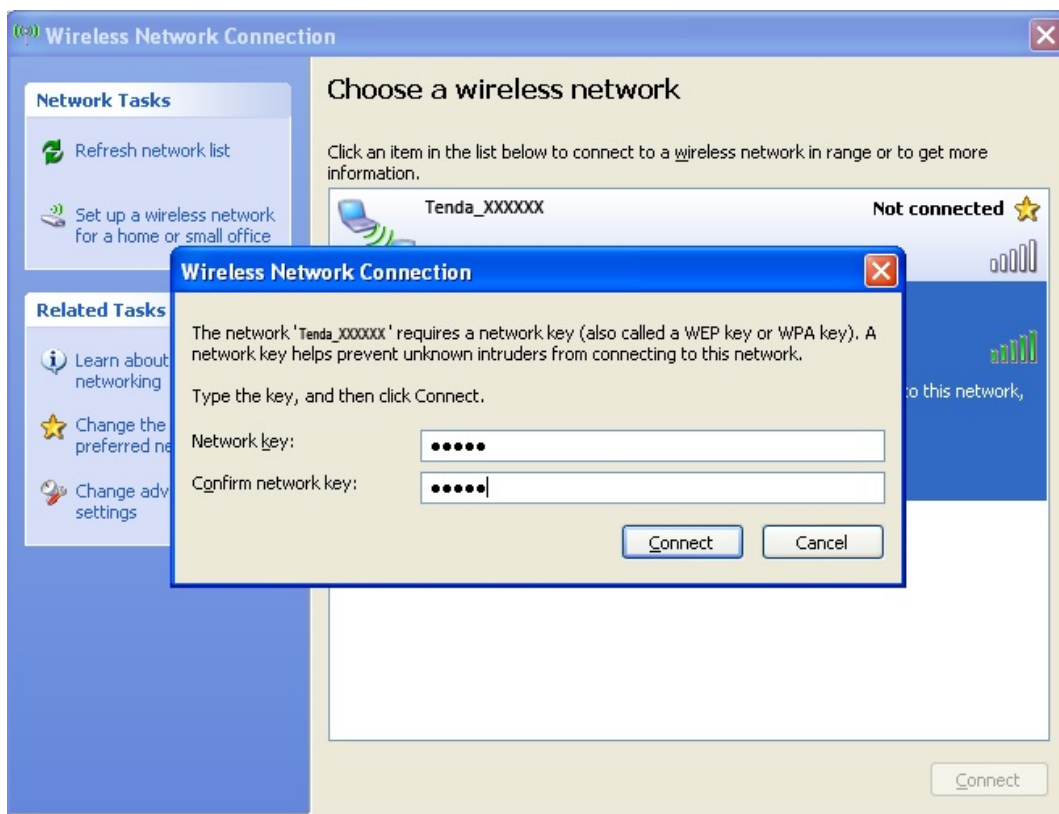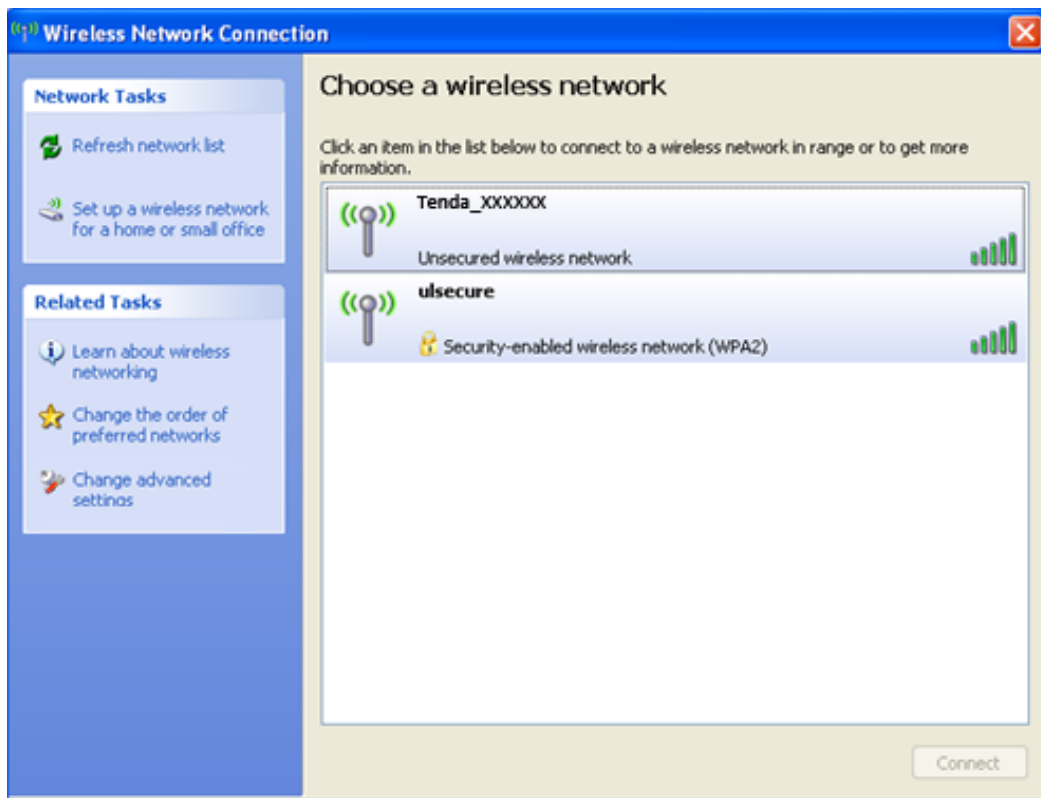
---End

If the computer is connected to the network, Connected appears.

A.2 Configure Your Computer

Perform the configuration procedure corresponding to Windows 8, Windows 7, or Windows XP, depending on your OS. A computer installed with a wired network adapter is used as an example to describe the procedures. The procedures for configuring computers installed with a wireless network adapter are similar to these procedures.

A.2.1 Windows 8

Step 1 Right-click ![icon] in the lower-right corner of the desktop and choose **Open Network and Sharing Center**.
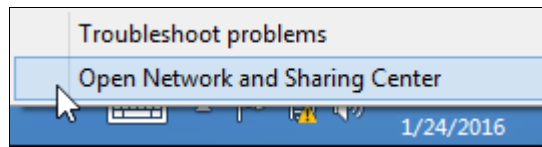
Step 2 Click **Ethernet** and then **Properties**.
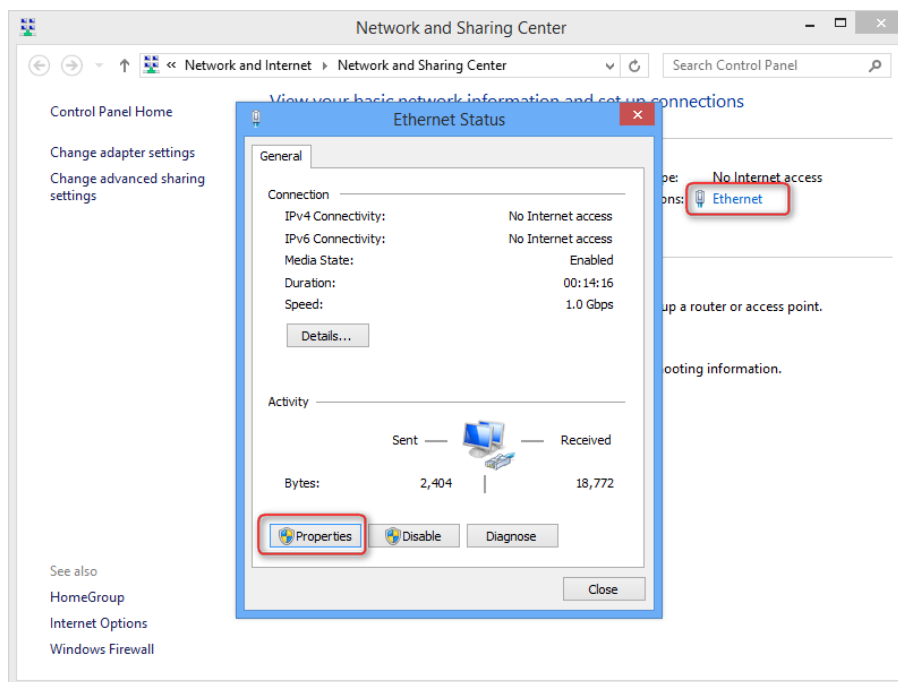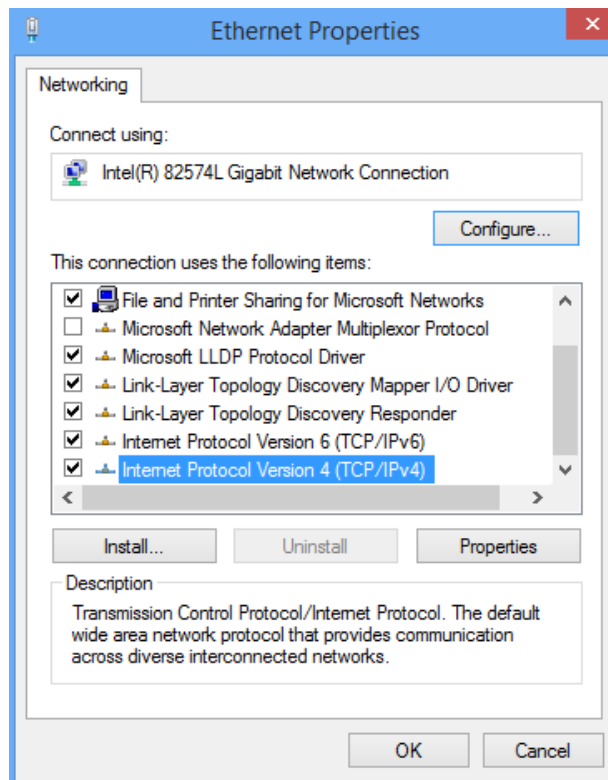
Step 3 Double-click **Internet Protocol Version 4 (TCP/IPv4)**.

Step 4 Select **Obtain an IP address automatically** and **Obtain DNS server address automatically**, and click **OK**.
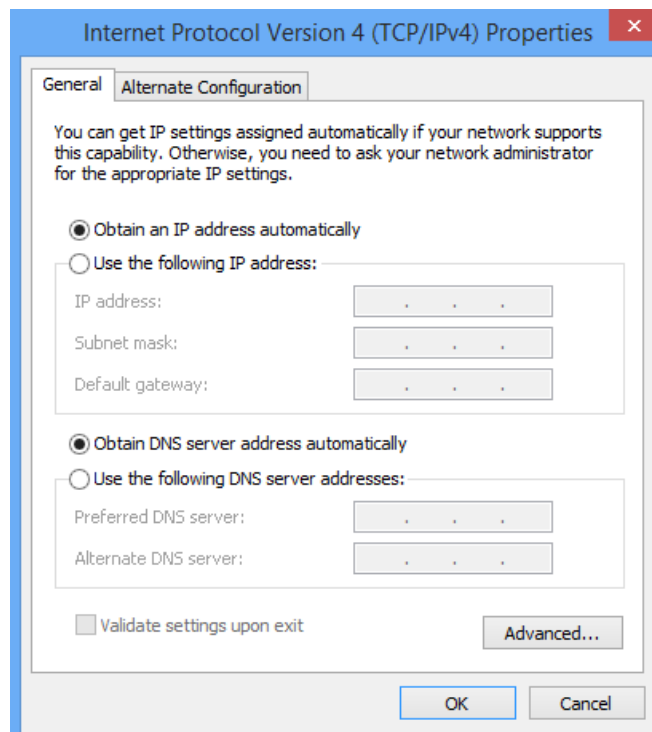
Step 5 Click **OK** in the **Ethernet Properties** window.

---End

A.2.2 Windows 7

Step 1 Click ![icon] in the lower-right corner of the desktop and choose **Open Network and Sharing Center**.
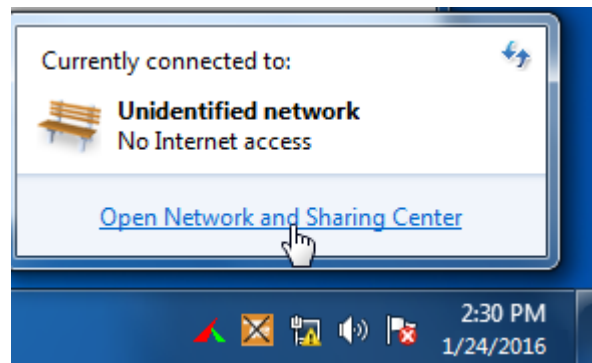
Step 2 Click **Local Area Connection** and then **Properties**.
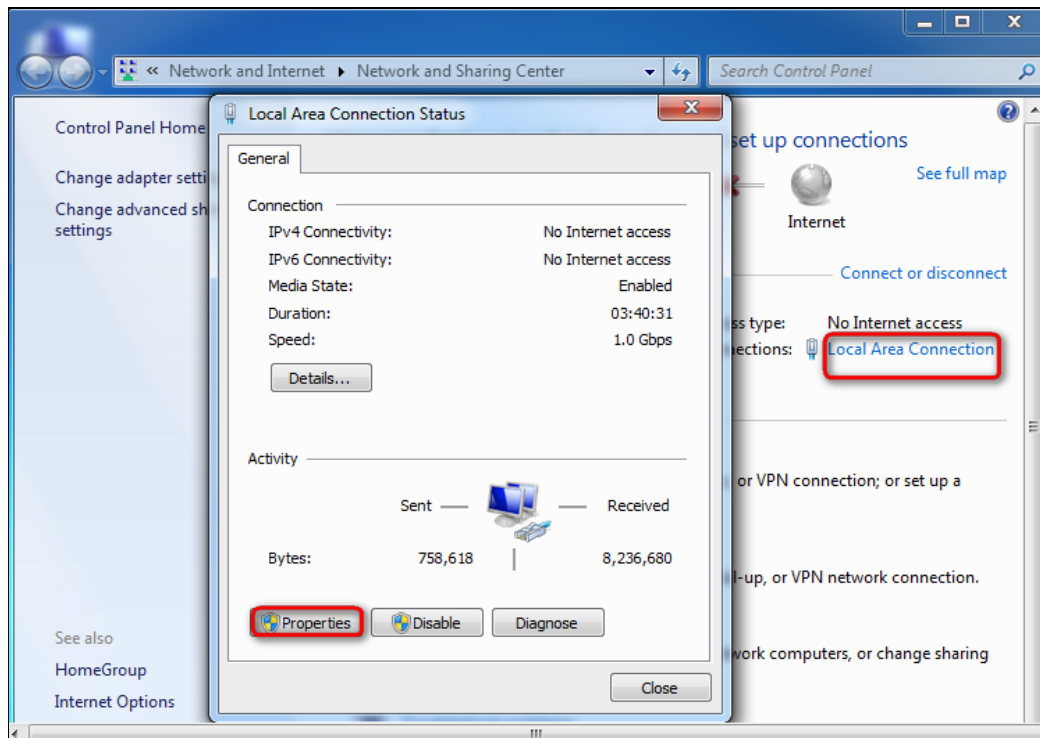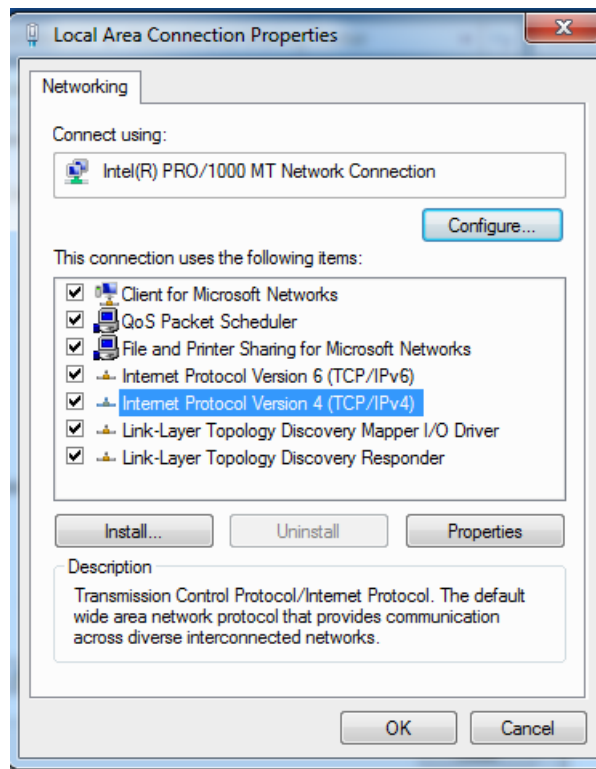
Step 3 Double-click **Internet Protocol Version 4 (TCP/IPv4)**.

Step 4 Select **Obtain an IP address automatically** and **Obtain DNS server address automatically**, and click **OK**.
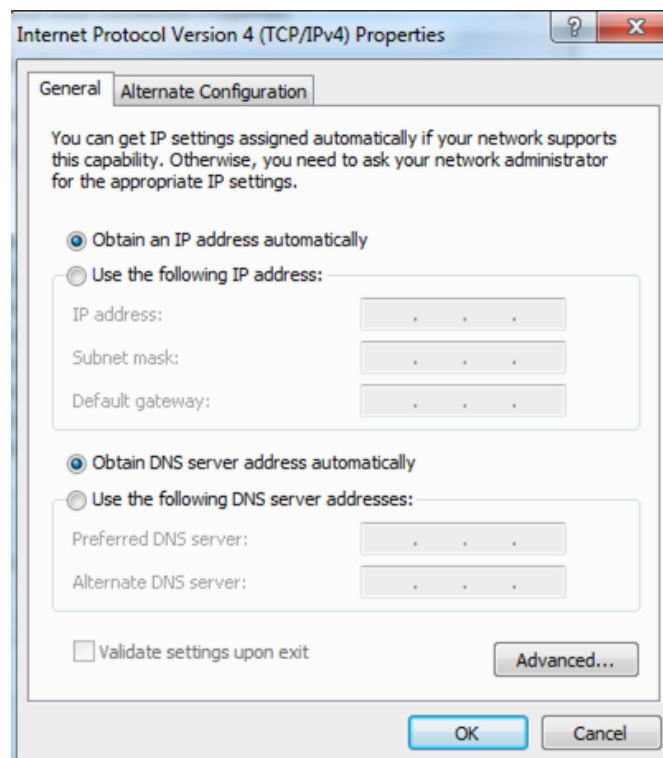
Step 5 Click **OK** in the **Local Area Connection Properties** window.

---End

A.2.3 Windows XP

Step 1 Right-click **My Network Places** on the desktop and choose **Properties**.

Step 2 Right-click **Local Area Connection** and choose **Properties**.
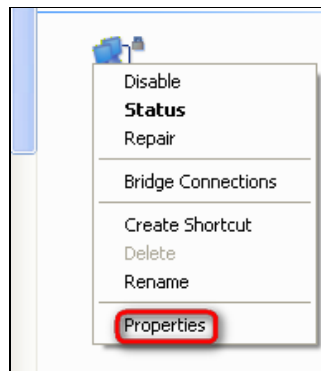
Step 3 Double-click **Internet Protocol (TCP/IP)**.
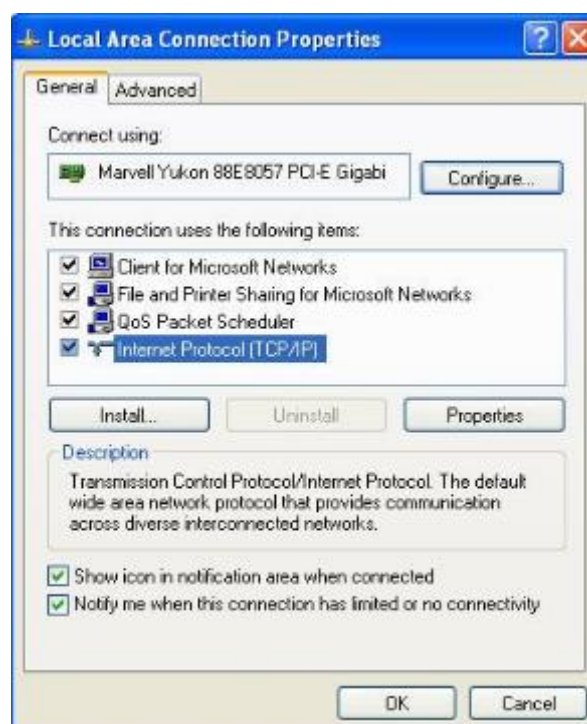
Step 4 Select **Obtain an IP address automatically** and **Obtain DNS server address automatically**, and click **OK**.
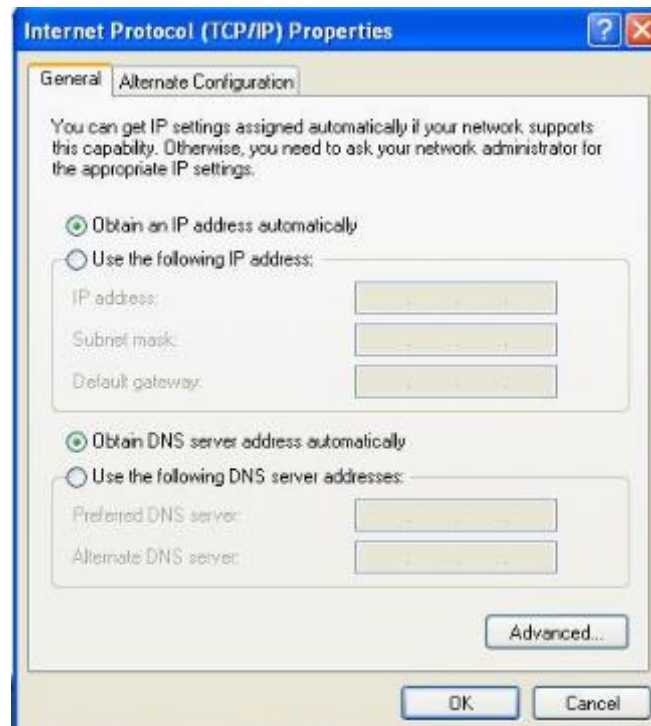
Step 5 Click **OK** in the **Local Area Connection Properties** window.

---End

A.3 FAQ

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

Q1: Where should I place my wireless router for wider WiFi coverage?
A1: To enable the router to provide more stable WiFi signals and cover a wider area, position your router as follows:

- Place it high up at the center of your apartment and ensure that there are least walls and ceilings between the router and your wireless devices, such as mobile phones and laptops.

- Put it at a place with good ventilation. Unfold its antennas. Do not put it in an enclosure, such as a wire distribution box.

- Keep it far away from electrical appliances such as microwave ovens and ceiling-mounted fans.

- Keep it far away from metal surfaces, such as medal doors and aluminum nails.

- Keep it far away from special materials, such as glass, mirrors, and fish tanks.

Q2: What should I do if I cannot access the router login page at tendawifi.com?

A2: Use the following method to troubleshoot the fault and then try accessing the page again.

- Ensure that the connection between the router and your computer is correct. If you connect to the router wirelessly, ensure that the connected WiFi network belongs to the router.

- Perform the procedure in A.2 to enable the computer to obtain an IP address automatically.

- Clear the cache of your web browser. (Internet Explorer is used as an example to describe the procedure.)
  Choose **Tools** > **Internet Options**, click **Delete**, select **Temporary Internet files** and **Cookies**, and click **Delete**.

- If the web browser displays a dial-up connection or proxy server dialog box, perform the following procedure. (Internet Explorer is used as an example to describe the procedure.)
  - Procedure for disabling dial-up connection: Start the Internet Explorer, choose **Tools** > **Internet Options**, click **Connections**, select **Never dial a connection**, and click **OK**.
  - Procedure for disabling the proxy: Start the Internet Explorer, choose **Tools** > **Internet Options**, click **Connections**, click **LAN Settings**, deselect all the three options, and click **OK**.

- Use another web browser or computer to try again.

- If the Internet Explorer displays a message indicating that it is working in offline mode, choose **Tools** and deselect **Work Offline**.

- Reset the router: Power on the router, hold down the **Reset** button for about 8 seconds until all the LED indicators blink once, and release it.

Q3: Which connection type should I choose?

A3: Choose a connection type based on the description in the following table or based on the connection type detection result provided by the router. You can also consult your ISP on your connection type.

Connection Type	Internet Connection Means	Description
PPPoE	Telephone line/Ethernet cable	You need to double-click and enter a user name and password to set up a dial-up connection.
Dynamic IP	Cable TV connection/Ethernet cable	You can access the internet after connecting to an upstream router or a cable TV service.
Static IP Address	Ethernet cable/Optical fiber	You are assigned a static IP address, a subnet mask, a default gateway address, and DNS server addresses for accessing the internet.

Q4: What should I do if I cannot access the internet after configuring internet settings?

A4: Try the following methods:

- Verify that the router is connected properly. If you use a mobile phone to access the internet through the router, verify that your mobile phone is connected to the WiFi network properly.

- Perform the procedure in A.2 to enable the computer to obtain an IP address automatically.

- Use an Ethernet cable to connect your computer to the router, log in to the router web UI, change the WiFi name and password of the router, and reconnect to the WiFi network.

- Clone the MAC address of your computer to your router. Verify that the settings configured on the **Internet Settings** page are correct and that the connection status is **Connected**.

- Ask your ISP for help.

Q5: How can I prevent others from accessing my WiFi network?

A5: Try the following methods:

- Encrypt your WiFi signals. To encrypt WiFi signals, choose Wireless Settings, click **WiFi Name and Password**, set a password, and click **OK**.

- Choose **Bandwidth Control**, click to change it to the state to add the unknown devices to the Blocked Device list.

Q6: What should I do if an IP address conflict message appears after a computer connected to the router starts?

A6: Try the following methods:

- Verify that there is no other DHCP server on your LAN or the other DHCP server is disabled.

- Verify that the IP address of the computer is not used by another device on your LAN. The default IP address of the router is 192.168.0.1.

- Verify that the static IP addresses assigned to computers on your LAN are not used by other devices.

Q7: What should I do if I forget the login password of the router?

A7: You can reset the router and set the login password again (There is no login password by default). To reset the router, power on the router, hold down the Reset button for about 8 seconds until all the LED

indicators blink once, and release it.

Q8: What should I do if the email function does not work properly and some websites are inaccessible?
A8: This problem is mainly encountered by users who access the internet using dial-up connections or dynamic IP addresses. You can adjust the MTU value of the router to address the problem. For details, refer to MTU.

If you cannot access some websites or encrypted websites (such as online banking and Paypal websites), cannot send or receive emails, or cannot access FTP or POP servers, try reducing the value of MTU gradually from 1500 until the problem is resolved. (The recommended range is 1400~1500.)

MTU	Usage
1500	It is commonly used for ADSL and non-VPN dial-up connections.
1492	It is used for ADSL dial-up connections.
1472	It is the maximum value for the ping command. (A packet with a larger size is fragmented.)
1468	It is used for DHCP connections.
1436	It is used for VPN or PPTP connections.

A.4 Safety and Emission Statement

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 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.

Declaration of Conformity

Hereby, SHENZHEN TENDA TECHNOLOGY CO. LTD. declares that the radio equipment type N301 is in compliance with Directive 2014/53/EU.

The full text of the EU declaration of conformity is available at the following internet address: http://www.tendacn.com/en/service/page/ce.html

Operate Frequency: 2412-2472MHz

EIRP Power (Max.): 18.5dBm

Caution：

Adapter Model: TEA09U-09060

Manufacture: SHENZHEN HEWEISHUN NETWORK TECHNOLOGY CO., LTD.

Input: 100-240V~ 50/60Hz 0.3A

Output: 9V 0.6A

===: DC Voltage

RECYCLING

This product bears the selective sorting symbol for Waste electrical and electronic equipment (WEEE). This means that this product must be handled pursuant to European directive 2012/19/EU in order to be recycled or dismantled to minimize its impact on the environment.

User has the choice to give his product to a competent recycling organization or to the retailer when he buys a new electrical or electronic equipment.

FCC Statement

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

— Reorient or relocate the receiving antenna.

— Increase the separation between the equipment and receiver.

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

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

All other devices shall bear the following statement in a conspicuous location on the device:

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.

Radiation Exposure Statement

This device complies with FCC radiation exposure limits set forth for an uncontrolled environment and it also complies with Part 15 of the FCC RF Rules.

This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

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.

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.