



Wireless Router

User Guide

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Preface

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

Conventions

This user guide is applicable to the following routers. F6 is used for illustrations here unless otherwise specified. The contained images and UI screenshots are subject to the actual products.

| Product model | Description |
|---------------|---------------------------------|
| F6 | Wireless N300 Home Router |
| N301 | Wireless N300 Easy Setup Router |

Typographical conventions in this User Guide:

| Item | Presentation | Example |
|---------------------|--------------|--|
| Cascading Menus | > | Click Status > Device Status |
| Parameter and value | Bold | Set User Name to Tom . |
| UI control | Bold | On the Policy page, click the OK button. |
| Variable | Italic | Format: <i>XX:XX:XX:XX:XX:XX</i> |
| Message | “ ” | The “Success” message appears. |

Symbols in this User Guide:

| Item | Meaning |
|---|--|
|  | 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. |
|  | This format is used to highlight a procedure that will save time or resources. |

Acronyms and Abbreviations

| Acronym or Abbreviation | Full Spelling |
|-------------------------|-------------------------------------|
| DDNS | Dynamic Domain Name System |
| DHCP | Dynamic Host Configuration Protocol |
| DMZ | Demilitarized Zone |
| DNS | Domain Name Server |
| IPTV | Internet Protocol Television |
| ISP | Internet Service Provider |

| Acronym or Abbreviation | Full Spelling |
|-------------------------|-----------------------------------|
| PPP | Point To Point Protocol |
| PPTP | Point to Point Tunneling Protocol |
| SSID | Service Set Identifier |

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

(China Time Zone)

United States: 1-800-570-5892

(Toll Free: Daily-9am to 6pm PST)

Canada: 1-888-998-8966

(Toll Free: Mon - Fri 9 am - 6 pm PST)

Hong Kong: 00852-81931998



Website

www.tendacn.com



Email

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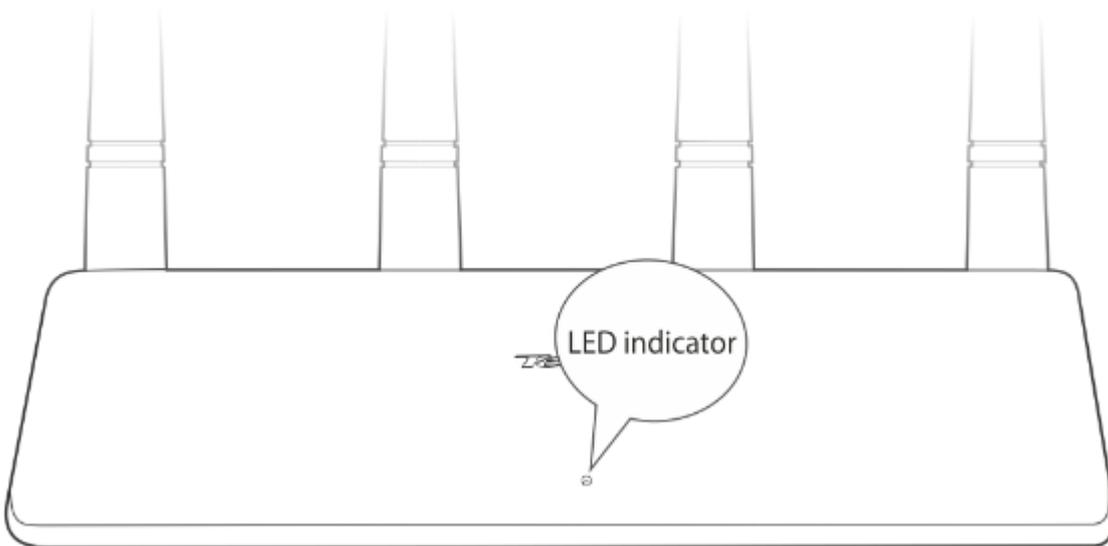
1 At a glance

1.1 Overview

Tenda wireless N300 home router is an eco-friendly wireless router dedicated for small and medium apartments. With 4 external 5 dBi antennas and built-in Qualcomm WiFi chip, it works perfectly with popular mobile phones, blanks your home with reliable and stable internet connection. The WISP mode allows you to extend your existing WiFi network with one single step. In addition, the WiFi schedule function helps save power consumption by setting your router to turn on and off the WiFi network regularly.

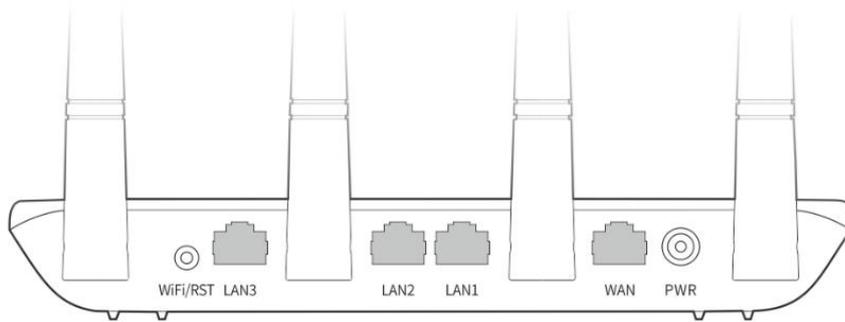
1.2 Apperance

1.2.1 LED indicators



| LED indicator | Status | Description |
|---------------|-----------------------------|---|
| LED indicator | Solid on | The router is starting or connected to the internet successfully. |
| LAN1/2/3 | Slow blinking | The router fails to connect to the internet. |
| WAN | Fast blinking for 3 seconds | A wired device is connected or disconnected to the router. |

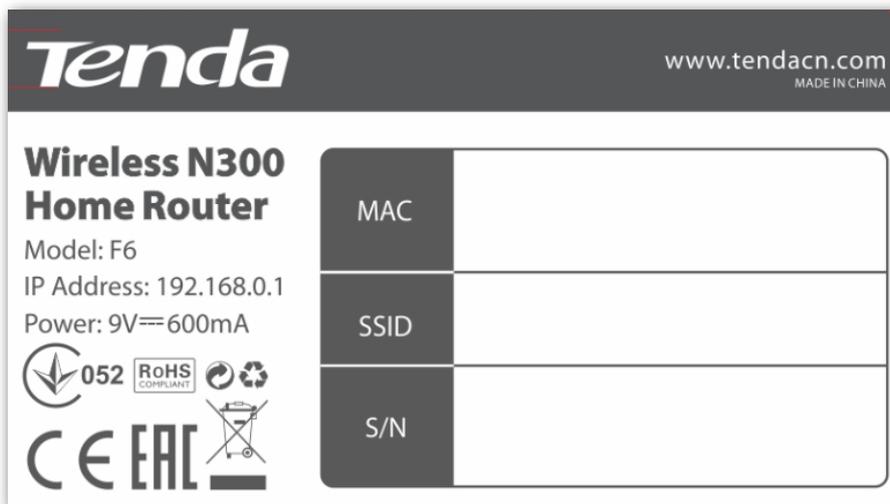
1.2.2 Ports and buttons



| Button/Port | Description |
|-------------|---|
| WiFi/RST | WiFi on/off button and reset button. <ul style="list-style-type: none">• Hold the button down for 1~3 seconds to turn on or off the WiFi network of the router.• Hold the button down for about 8 second, then release when the LED indicator blinks fast. The router is reset successfully. |
| LAN1/2/3 | Used to connect to the wired devices such as computers or switches. |
| WAN | Used to connect this router to the internet. |
| PWR | Used to connect to the included power adapter. |

1.2.3 Label

The bottom label shows the SSID, login IP address, serial number and MAC address of the router. See the following figures:



IP Address: It is the default address used to log in to the web UI of the router.

MAC: It specifies the MAC address of the router.

SSID: It specifies the default WiFi name of the router.

S/N: If there goes something wrong with your device and you need to send it to our technical staff for repair, you will need this sequence number.

2 Quick setup

This chapter introduces how to set up the router quickly to access the internet for the first time.

Step 1 Connect your router.

1. Power on the router using the power adapter included in the package.
2. Use an Ethernet cable to connect an Ethernet jack or a LAN port of your modem to the WAN port of the router.
3. Either connect your computer to a LAN port of the router, or connect your WiFi-enabled device, such as a smart phone, to the default WiFi name (SSID) of the router.



The default SSID is on the bottom [label](#) of the router.

Step 2 Set up the router. (Here we use a computer to set up the router)

1. Start a web browser on the computer that has connected to the router, and visit **tendawifi.com** or **192.168.0.1**.



2. The router detects your connection type automatically. Set the parameters based on the detection result, PPPoE is used for instructions.
 - **User Name:** Enter the user name provided by your ISP.
 - **Password:** Enter the password provided by your ISP.
3. Customize the **WiFi Name** and **WiFi Password**, and click **OK**.

You can access the internet after completing settings on this page.

As detected, your connection type is: **PPPoE**



Internet

Connection Type PPPoE Dynamic IP Address Static IP Address

This type is applicable if you have a user name and password for setting up a broadband dial-up connection. You can [import them from your original router](#).

User Name

Password



Wireless

WiFi Name

WiFi Password

OK

---End

It displays as the following figure, and it will be redirected to the home page in 3 seconds.

You can access the internet after completing settings on this page.



Saved!

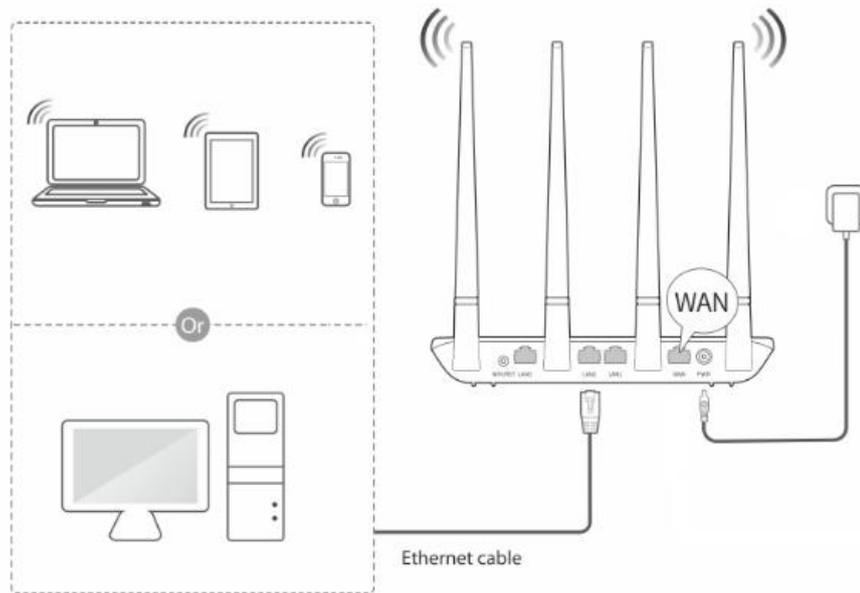
You will be redirected to the user interface after 3 seconds.

To access the internet, connect wireless devices to the WiFi network of the router again using the WiFi name and password you set, and connect your wired devices to port LAN1/2/3.

3 Web UI

3.1 Logging in to the web UI

Step 1 Connect your smartphone to the wireless network, or connect your computer to ports LAN1/2/3 of the router.

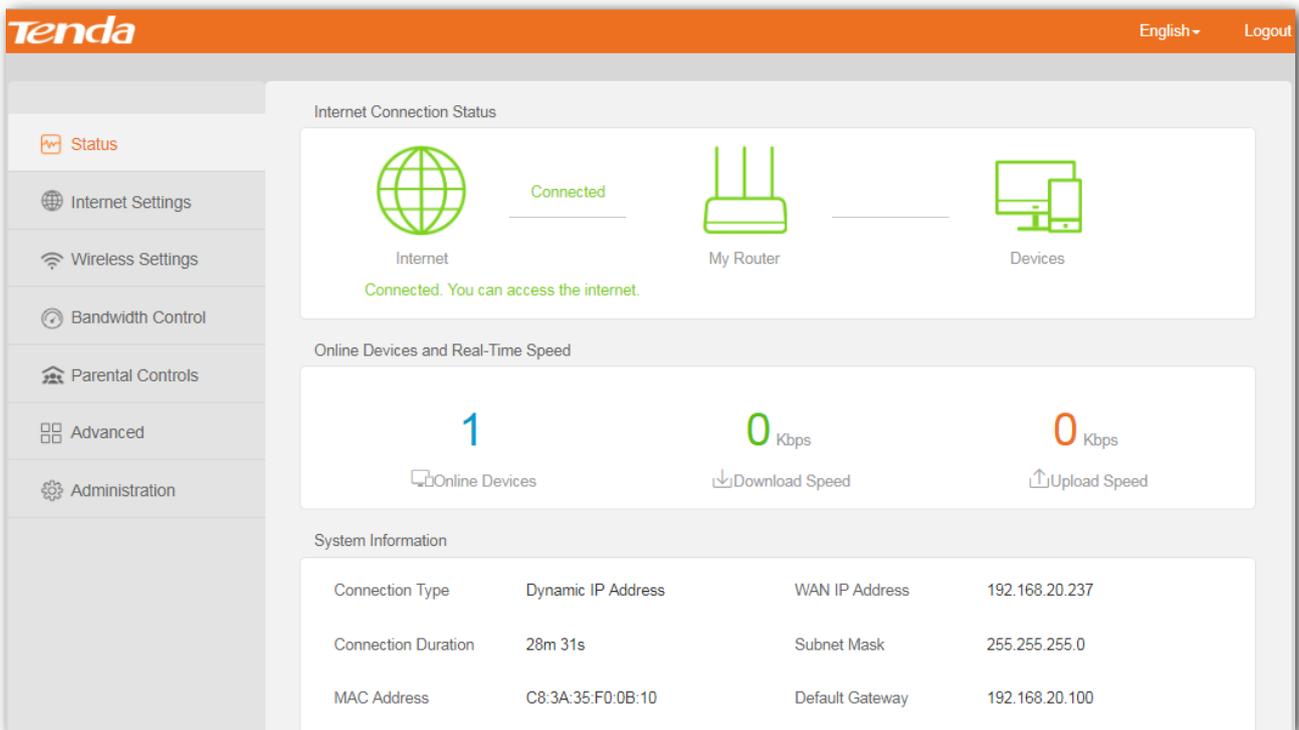


Step 2 Start a web browser on the device connected to the router, visit **tendawifi.com** or 192.168.0.1.



---End

The following page appears.



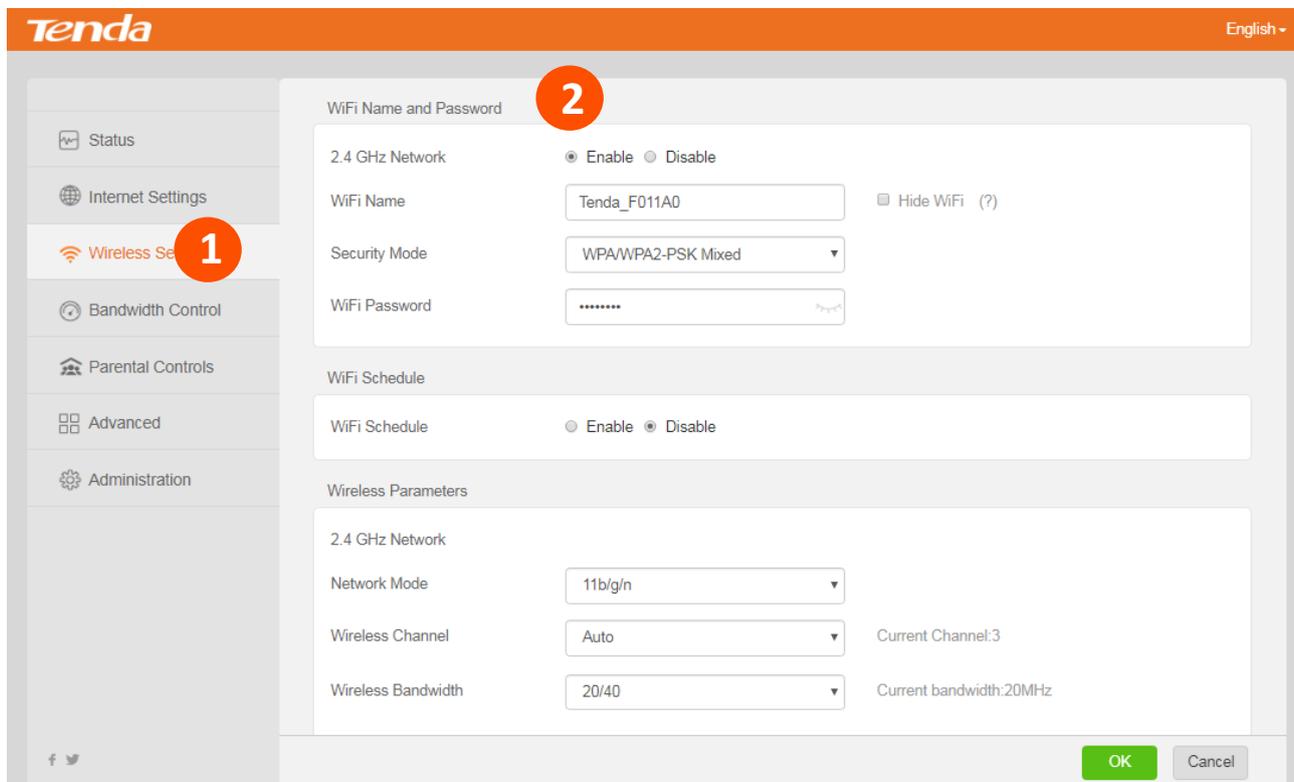
If the above page doesn't appear, verify the computer is obtaining an IP address automatically, refer to [appendix A configuring the computer to obtain an IP address automatically](#).

3.2 Logging out of the web UI

If you log in to the web UI of the router and perform no operation within 5 minutes, the router logs you out automatically. You can log out by clicking **Logout** on the upper right corner of the web UI as well.

3.3 Web UI layout

The web UI of the router consists of two sections, including the navigation bar and the configuration area. See the following figure:



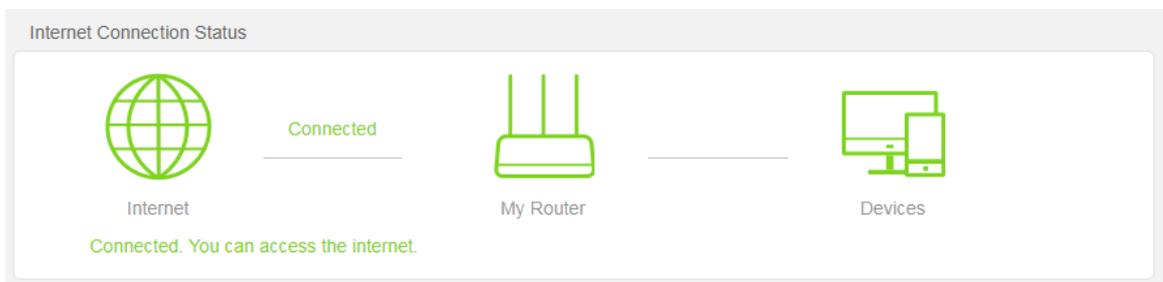
| SN | Name | Description |
|----|--------------------|---|
| 1 | Navigation bar | Used to display the function menu of the router. Users can select functions in the navigation bars and the configuration appears in the configuration area. |
| 2 | Configuration area | Used to modify or view your configuration. |

4 Status

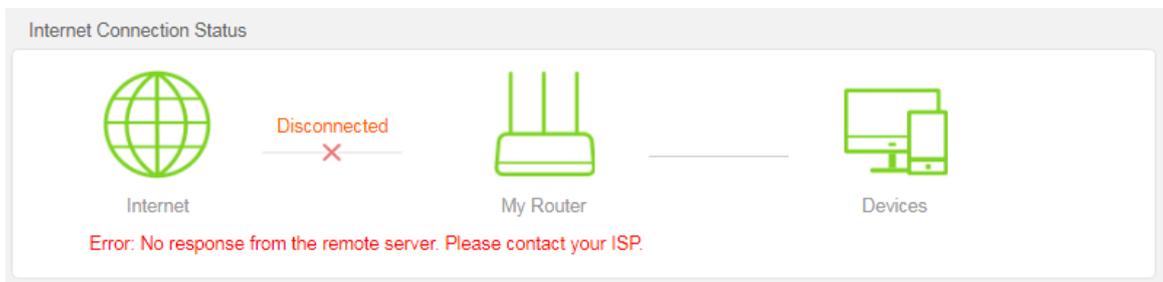
Log in to the web UI of the router and choose **Status** to enter the page. On this page, you can view the internet connection status of the router, online devices information and system information of the router.

4.1 Internet connection status

- When “connected. You can access the internet” message shows on the page, which means you can access the internet through the router.



- When a red cross **✗** appears, the router cannot access the internet. Please follow the onscreen instruction to resolve the issue.



4.2 Online devices and real-time speed

This section displays the number of online devices, and the real-time upload/download speed.

Online Devices and Real-Time Speed

1
Online Devices

0.0 KB/s
Download Speed

0.0 KB/s
Upload Speed

To control the bandwidth of online devices, click [Online Devices](#) to enter the configuration page.

- Status
- Internet Settings
- Wireless Settings
- Bandwidth Control**
- Parental Controls
- Sleeping Mode

Online Devices(1)

| Device Name | Download Speed | Upload Speed | Download Limit | Upload Limit | Internet Access |
|--------------------------------|----------------|--------------|----------------|--------------|-----------------|
| MININT-K1N... 192.168.0.100 | ↓ 0KB/s | ↑ 0KB/s | No limit | No limit | Local |

Blacklisted Devices

| Device Name | MAC Address | Unlimit |
|-------------|-------------|---------|
| No device | | |

4.3 System information

This section displays the basic information of the router, including connection type, connection duration, WAN IP and so on.

| System Information | | | |
|---------------------|--------------------|----------------------|----------------|
| Connection Type | Dynamic IP Address | WAN IP Address | 192.168.20.162 |
| Connection Duration | 13m 10s | Subnet Mask | 255.255.255.0 |
| WAN MAC Address | C8:3A:35:84:28:30 | Default Gateway | 192.168.20.100 |
| LAN IP Address | 192.168.0.1 | Preferred DNS Server | 192.168.20.100 |
| Firmware Version | V02.03.01.22_cn | Alternate DNS Server | 0.0.0.0 |

Parameter Description:

| Parameter | Description |
|----------------------|---|
| Connection Type | It displays the current connection type of the router. |
| Connection Duration | It specifies the time that has elapsed since the router connects to the internet successfully. |
| WAN MAC Address | It specifies the MAC address of the WAN port of the router. |
| LAN IP Address | It specifies the IP address of the LAN port for the router. |
| Firmware Version | It specifies the current version number of the router's firmware. |
| WAN IP Address | It specifies the IP address of the WAN port. |
| Subnet Mask | It specifies the subnet mask of the WAN port. |
| Default Gateway | It specifies the default gateway of the WAN port. |
| Preferred DNS Server | It displays the preferred DNS server address of the WAN port. |
| Alternate DNS Server | It displays the Alternate DNS server address of the WAN port. If you do not set this parameter, it shows 0.0.0.0 . |

5 Internet settings

If you do not complete the internet settings by the quick setup wizard, or want to change the internet settings, you can configure it on this page. The router supports Router, WISP, Universal Repeater and AP mode. By default, the router works in router mode.

5.1 Router mode

In router mode, this router can connect to the internet through the WAN port, and provides both wired and wireless network for clients. It applies to the scenario showing as below:



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 can access the internet only after setting static IP address and other related information on your computer, your connection type is static IP address. |

5.1.1 Setting up an internet connection with PPPoE

- Step 1** Choose **Internet Settings** to access the page.
- Step 2** Set **Operating Mode** to **Router**.
- Step 3** Set **Connection Type** to **PPPoE**.
- Step 4** Enter **User Name** and **Password** provided by your ISP.
- Step 5** Click **OK** at the bottom of the page.

Operating Mode

Router WISP Universal Repeater AP

In this mode, the router connects to an ISP in a wired manner and meanwhile provides WiFi signals, enabling clients to wirelessly access the internet.

Internet Connection

Connection Type PPPoE Dynamic IP Address Static IP Address

This type is applicable if you have a user name and password for setting up a broadband dial-up connection.

User Name

Password

---End

After the settings take effect, check the connection status, if **“Connected. You can access the internet.”** is displayed, the router is connected to the internet successfully.

Operating Mode

Router
 WISP
 Universal Repeater
 AP

In this mode, the router connects to an ISP in a wired manner and meanwhile provides WiFi signals, enabling clients to wirelessly access the internet.

Internet Connection

Connection Type
 PPPoE
 Dynamic IP Address
 Static IP Address

This type is applicable if you have a user name and password for setting up a broadband dial-up connection.

User Name

Password

Connection Status Connected. You can access the internet.

5.1.2 Setting up an internet connection with dynamic IP

- Step 1** Choose **Internet Settings** to access the configuration page.
- Step 2** Set **Operating Mode** to **Router**.
- Step 3** Set Connection Type to **Dynamic IP Address**.
- Step 4** Click **OK** at the bottom of the page.

Operating Mode

Router
 WISP
 Universal Repeater
 AP

In this mode, the router connects to an ISP in a wired manner and meanwhile provides WiFi signals, enabling clients to wirelessly access the internet.

Internet Connection

Connection Type
 PPPoE
 Dynamic IP Address
 Static IP Address

This type is applicable if no account or static IP address is required for setting up an internet connection.

---End

After the settings take effect, you can check the connection status, if **“Connected. You can access the internet.”** is displayed, the router is connected to the internet successfully.

Internet Connection

Connection Type
 PPPoE
 Dynamic IP Address
 Static IP Address

This type is applicable if no account or static IP address is required for setting up an internet connection.

Connection Status Connected. You can access the internet.

5.1.3 Setting up an internet connection with static IP

Step 1 Choose **Internet Settings** to access the configuration page.

Step 2 Set **Operating Mode** to **Router**.

Step 3 Set **Connection Type** to **Static IP Address**.

Step 4 Set the required parameters provided by your ISP.

Step 5 Click **OK** at the bottom of the page.

Internet Connection

Connection Type PPPoE Dynamic IP Address Static IP Address

This type is applicable if a static IP address is required for setting up an internet connection.

IP Address . . .

Subnet Mask . . .

Default Gateway . . .

Preferred DNS . . .

Alternate DNS . . . (Optional)

OK Cancel

---End

After the settings take effect, you can check the connection status, if **“Connected. You can access the internet.”** is displayed, the router is connected to the internet successfully.

Internet Connection

Connection Type PPPoE Dynamic IP Address Static IP Address

This type is applicable if a static IP address is required for setting up an internet connection.

IP Address 192 . 168 . 20 . 155

Subnet Mask 255 . 255 . 255 . 0

Default Gateway 192 . 168 . 20 . 100

Preferred DNS 192 . 168 . 20 . 100

Alternate DNS . . . (Optional)

Connection Status **Connected. You can access the internet.**

5.2 WISP mode

In WISP mode, this router can connect to a WiFi hotspot provided by ISP in wireless manner, and provide both wireless and wired network for clients to access internet access.

Choose **Internet Settings** to access the configuration page.

Operating Mode

Router WISP Universal Repeater AP

In this mode, the router connects to an ISP in a wired manner and meanwhile provides WiFi signals, enabling clients to wirelessly access the internet.

Configuration procedure:

- Step 1** Choose **Internet Settings** to access the configuration page.
- Step 2** Set **Operating Mode** as **WISP**.
- Step 3** Select the **Connection Type** of your WiFi hotspot and enter the related parameters as required.
- Step 4** Select the WiFi name to connect.

Operating Mode

Router WISP Universal Repeater AP

In this mode, the router extends the WiFi signals of ISPs like CMCC, China Unicom, and ChinaNet.

Internet Connection

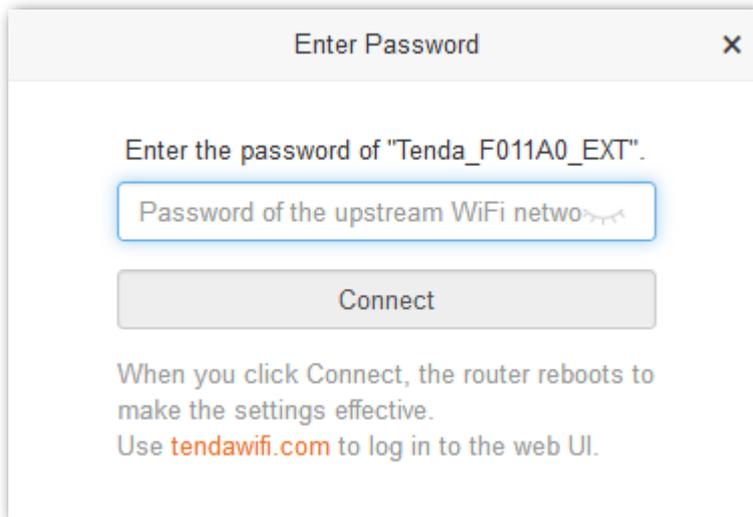
Connection Type PPPoE Dynamic IP Address Static IP Address

This type is applicable if no account or static IP address is required for setting up an internet connection.

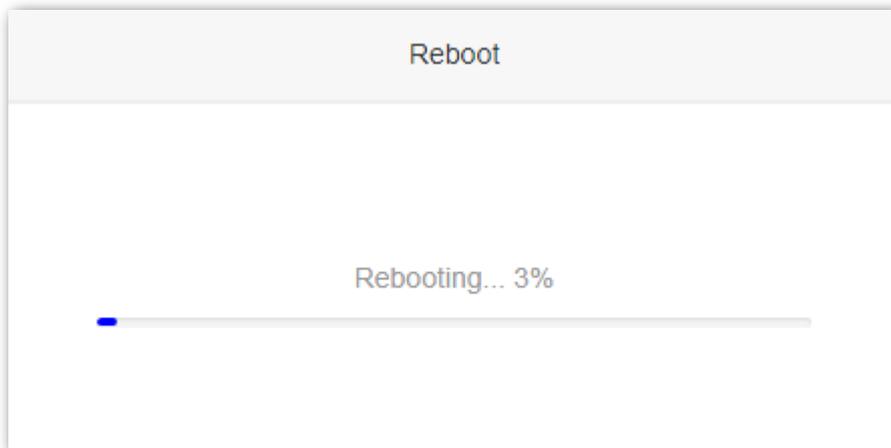
Select WiFi Network 

| Select | WiFi Name | MAC Address | Channel | Security Mode | Strength |
|----------------------------------|------------------|-------------------|---------|---------------|----------|
| <input type="radio"/> | 000-cyl-ac9 | d8:32:14:4c:cb:71 | 1 | WPAWPA2/AES | 📶 96% |
| <input checked="" type="radio"/> | Tenda_F011A0_EXT | c8:3a:35:db:40:e4 | 2 | WPAWPA2/AES | 📶 92% |
| <input type="radio"/> | AAAAAaaa | c8:3a:35:f5:86:71 | 4 | None | 📶 90% |

- Step 5** If the wireless network of the upstream device is encrypted, enter the password of the upstream WiFi network.



Step 6 Click **Connect** and wait for the router to reboot.



---End

Wait until the progress bar is complete. Log in to the web UI of the router again. Choose **Status > Internet Connection Status** to check the connection status.

An example of configuring WISP mode

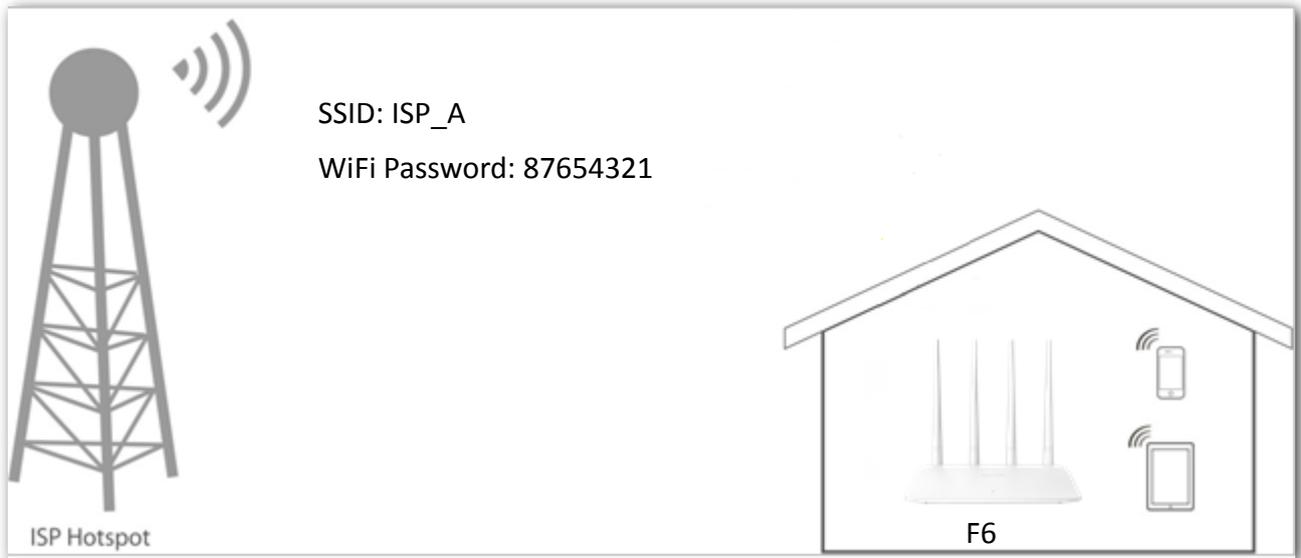
Application scenario

Tom lives in countryside, and it is not convenient for him to connect the nearest ISP base station using Ethernet cables. He uses a router F6 to extend wireless signal in his apartment. And the WISP mode of the router can meet the requirement.

Tom's ISP provides a hotspot for internet with the information below:

- SSID: ISP_A
- WiFi password: 87654321
- PPPoE user name: Tom
- PPPoE password: Tom123

Network topology



Configuration procedure:

- Step 1** Choose **Internet Settings** to access the page.
- Step 2** Set **Operating Mode** to **WISP**.
- Step 3** Select the **Connection Type** of your ISP hotspot, which is **PPPoE** in this example. Enter the PPPoE user name and password provided by your ISP, which is **Tom/Tom123** in this example.
- Step 4** Choose the ISP hotspot, which is **ISP_A** in this example.

Operating Mode

Router WISP Universal Repeater AP

In this mode, the router extends the WiFi signals of ISPs like CMCC, China Unicom, and ChinaNet.

Internet Connection

Connection Type PPPoE Dynamic IP Address Static IP Address

This type is applicable if you have a user name and password for setting up a broadband dial-up connection.

User Name

Password

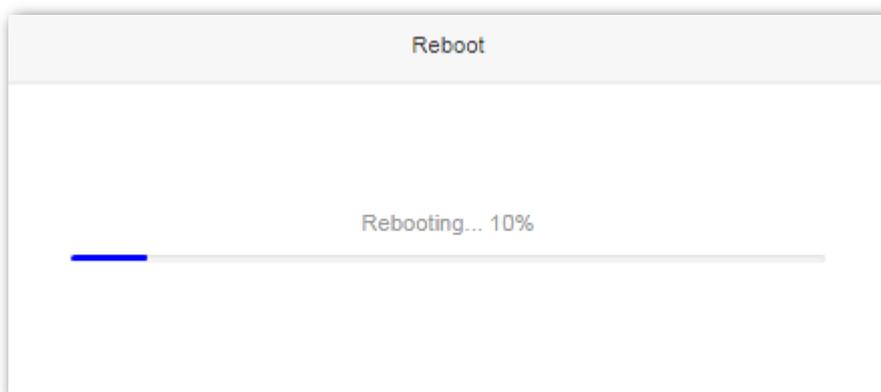
Select WiFi Network

| Select | WiFi Name | MAC Address | Channel | Security Mode | Strength |
|----------------------------------|-----------|-------------------|---------|---------------|----------|
| <input type="radio"/> | 1.2-2.4 | d8:38:0d:7f:80:12 | 8 | None | 📶 90% |
| <input type="radio"/> | 1-2.4 | d8:38:0d:7f:80:11 | 8 | None | 📶 90% |
| <input checked="" type="radio"/> | ISP_A | c8:3a:35:db:40:e4 | 11 | WPAWPA2/AES | 📶 88% |

- Step 5** Enter the password of the WiFi network **ISP_A**, which is **87654321** in this example.

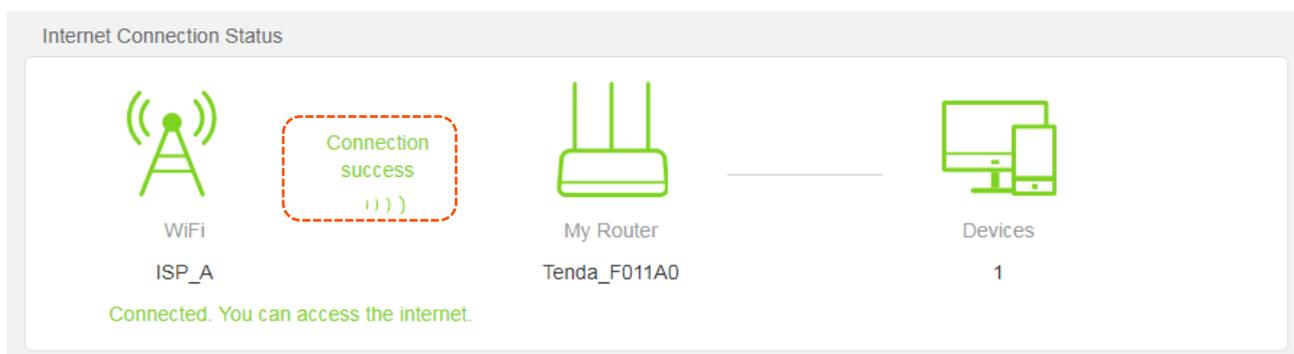


Step 6 Click **Connect**.



---End

Wait until the progress bar is complete. Log in to the web UI of the router again with the domain name **tendawifi.com**. Choose **Status > Internet Connection Status** to check the connection status.

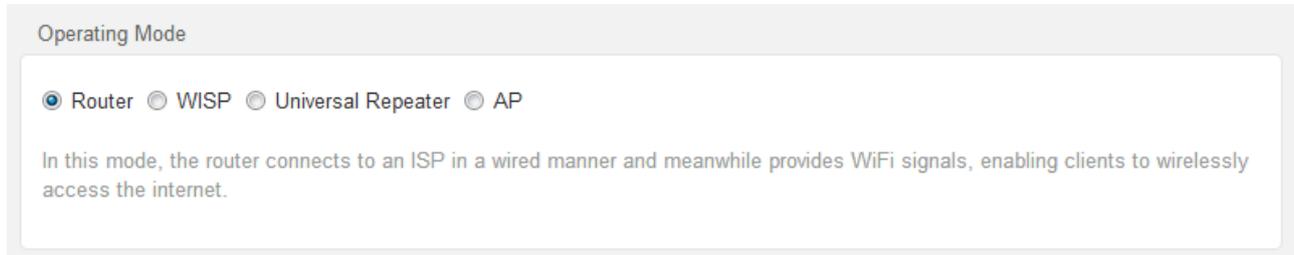


You can check the SSIDs for this router and the upstream device, if you need to change the router's SSID and password, please go to the [Wireless Settings](#) page to do settings.

5.3 Universal repeater mode

In universal repeater mode, the router can bridge the upstream wireless signals and expand your wireless network coverage.

Choose **Internet Settings** to access the configuration page.



Operating Mode

Router WISP Universal Repeater AP

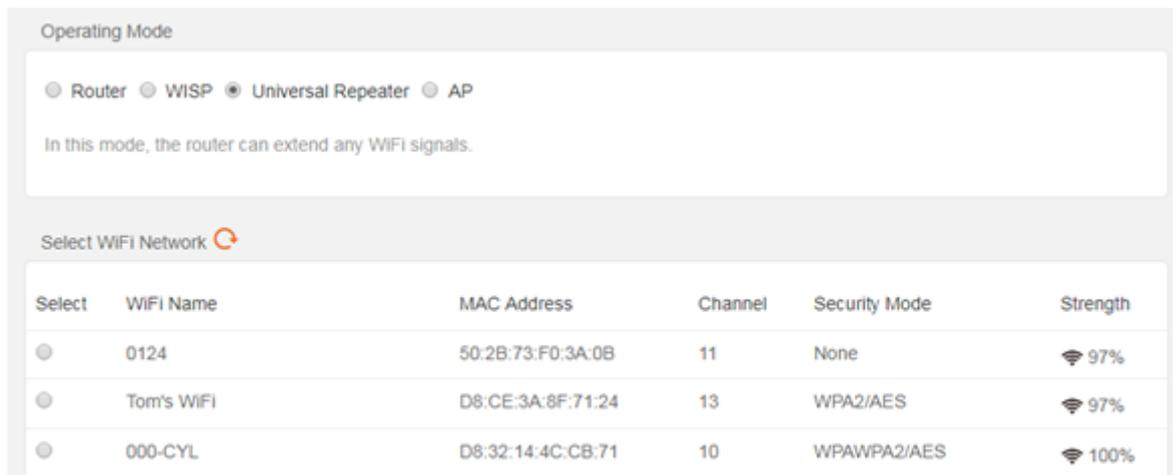
In this mode, the router connects to an ISP in a wired manner and meanwhile provides WiFi signals, enabling clients to wirelessly access the internet.

Configuration procedure

Step 1 Choose **Internet Settings** to access the configuration page.

Step 2 Set **Operating Mode** as **Universal Repeater**.

Step 3 Select the WiFi name to be extended.



Operating Mode

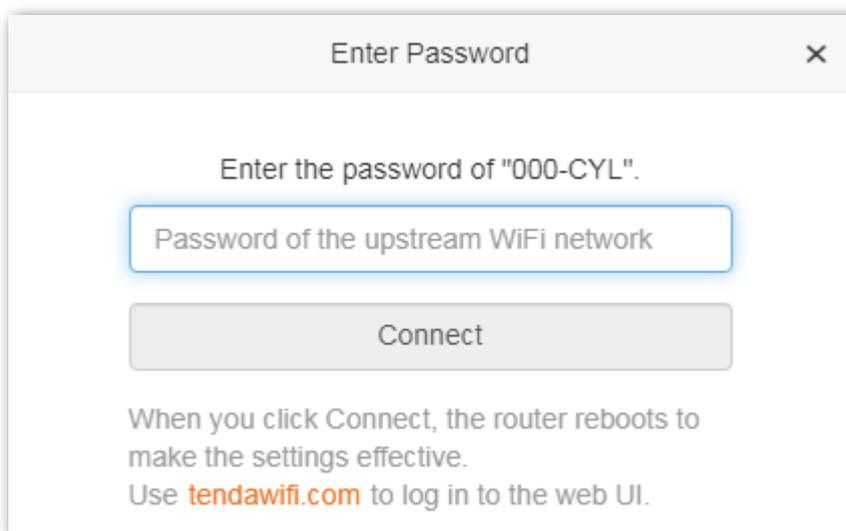
Router WISP Universal Repeater AP

In this mode, the router can extend any WiFi signals.

Select WiFi Network 

| Select | WiFi Name | MAC Address | Channel | Security Mode | Strength |
|-----------------------|------------|-------------------|---------|---------------|----------|
| <input type="radio"/> | 0124 | 50:2B:73:F0:3A:0B | 11 | None | 📶 97% |
| <input type="radio"/> | Tom's WiFi | D8:CE:3A:8F:71:24 | 13 | WPA2/AES | 📶 97% |
| <input type="radio"/> | 000-CYL | D8:32:14:4C:CB:71 | 10 | WPAWPA2/AES | 📶 100% |

Step 4 If the wireless network of the upstream device is encrypted, set the password of the upstream WiFi network.

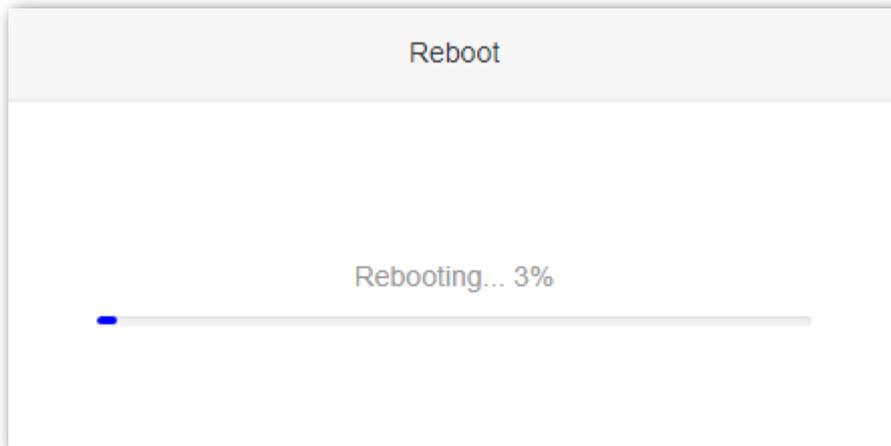


Enter Password 

Enter the password of "000-CYL".

When you click Connect, the router reboots to make the settings effective.
Use tendawifi.com to log in to the web UI.

Step 5 Click **Connect** and wait for the router to reboot.



---End

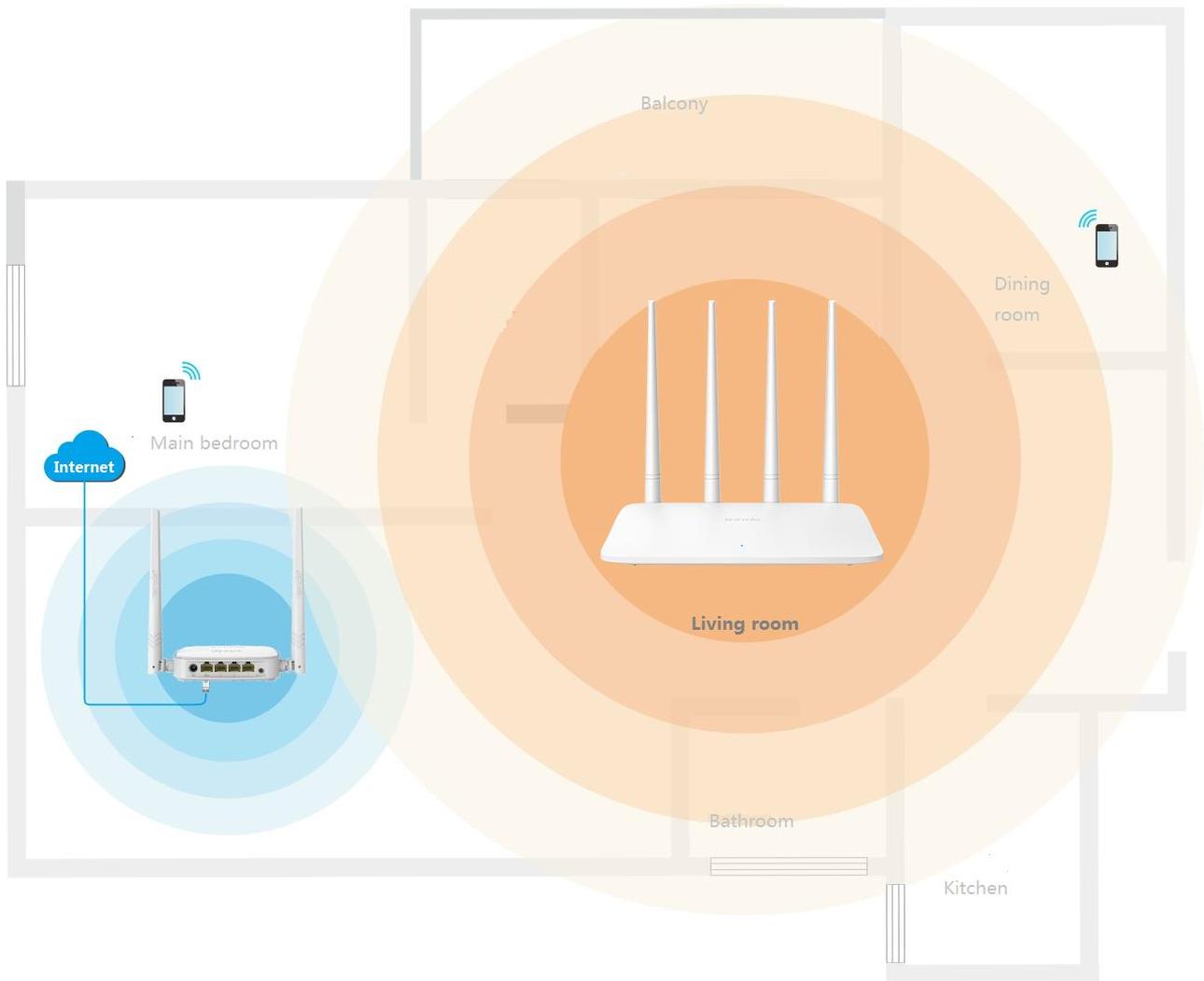
Wait until the progress bar is complete. Log in to the web UI of the router again. Choose **Status > Internet Connection Status** to check the connection status.

An example of configuring universal repeater mode

Application scenario

Tom uses a wireless router (main router) for internet access in his apartment. The router is placed in the main bedroom. The WiFi signal is strong in the main bedroom, but too poor in dining room and balcony to access the internet. For better connection, Tom uses a Tenda F6 router placed in the living room to extend the WiFi network coverage.

The universal repeater mode of F6 can meet the requirement.



Asumption

- SSID of the main router: Tom's WiFi
- WiFi password of the main router: 12345678
- WiFi security mode of the main router: WPA/WPA2-PSK Mixed

Configuration procedure

Step 1 Choose **Internet Settings** to access configuration the page.

Step 2 Set **Operating Mode** to **Universal Repeater**.

Step 3 Select the WiFi name to be extended, which is **Tom's WiFi** in this example.

Operating Mode

Router
 WISP
 Universal Repeater
 AP

In this mode, the router can extend any WiFi signals.

Select WiFi Network 

| Select | WiFi Name | MAC Address | Channel | Security Mode | Strength |
|----------------------------------|------------|-------------------|---------|---------------|---|
| <input checked="" type="radio"/> | Tom's WiFi | 00:90:4c:88:88:89 | 7 | WPAWPA2/AES |  94% |

Step 4 Enter the password of the selected WiFi network, which is **12345678** in this example.

Enter Password ×

Enter the password of "Tom's WiFi".

When you click Connect, the router reboots to make the settings effective.
Use tendawifi.com to log in to the web UI.

Step 5 Click **Connect**.

Reboot

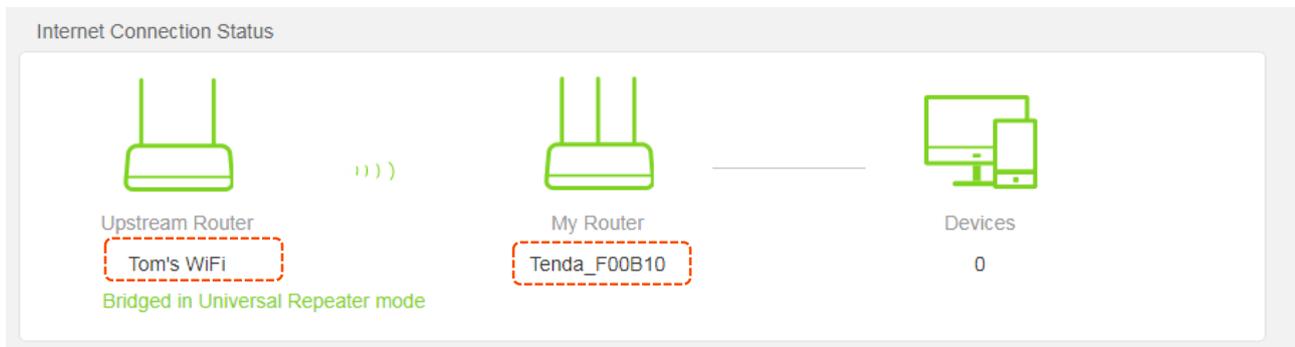
Rebooting... 3%



---End

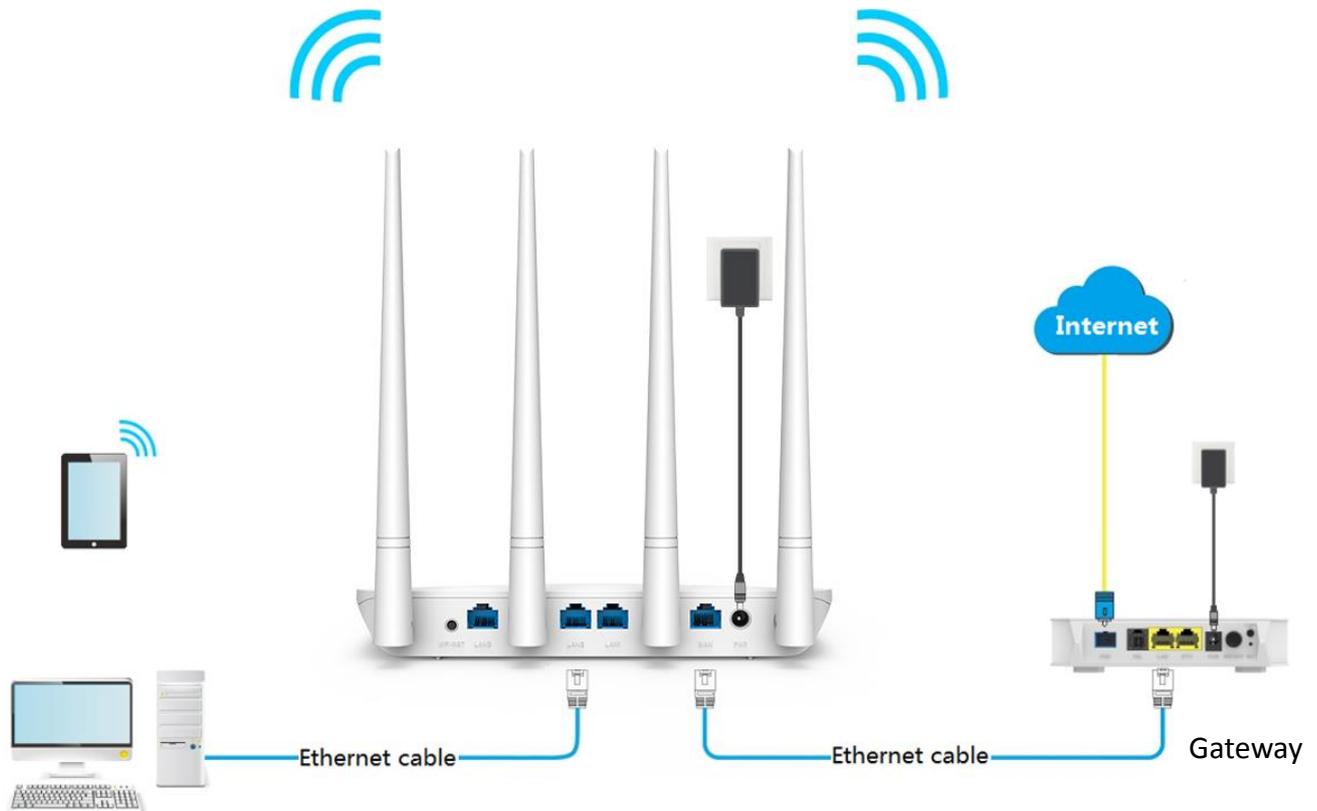
Wait until the progress bar is complete. Log in to the web UI of the router again with the domain name **tendawifi.com**. Choose **Status > Internet Connection Status** to check the connection status and the SSIDs for this router and the upstream device.

To change the router's SSID and password, please go to the [Wireless Settings](#) page to do settings.



5.4 AP mode

In AP mode, the router connects to the internet using an Ethernet cable and converts wired network into wireless network to provide wireless network coverage. In AP mode, the WAN port also serves as a LAN port. It applies to the scenario showing as below:



Choose **Internet Settings** to access the configuration page.

Operating Mode

Router WISP Universal Repeater AP

In this mode, the router connects to an ISP in a wired manner and meanwhile provides WiFi signals, enabling clients to wirelessly access the internet.

Configuration procedure

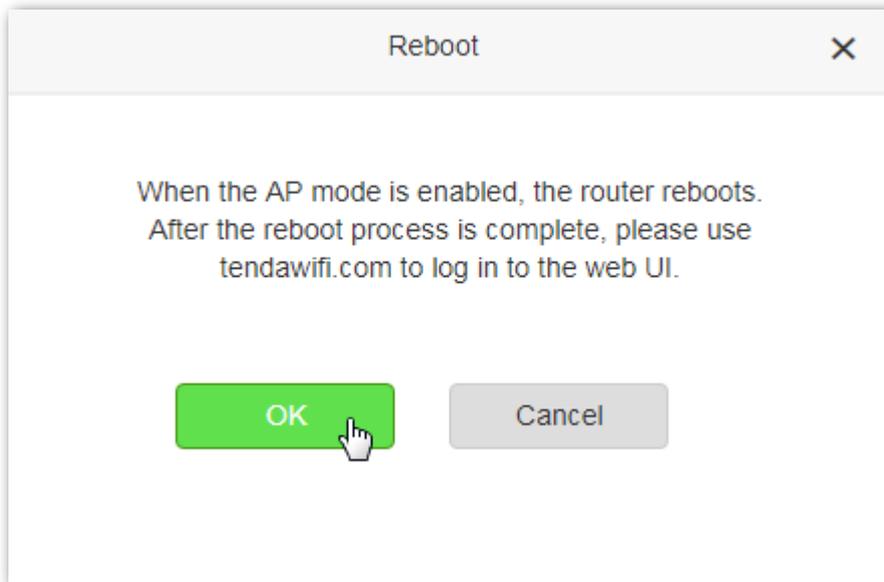
- Step 1** Connect a LAN port of the router to a LAN port of the upstream device which is connected to the internet successfully.
- Step 2** Choose **Internet Settings** to access the configuration page.
- Step 3** Set **Operating Mode** as **AP**, and click **OK** at the bottom of the page.

Operating Mode

Router WISP Universal Repeater AP

In this mode, the router functions as an AP, which is often used for wireless network coverage in hotels and SMEs.

- Step 4** Click **OK** in the popup window.



---End

When the router completes rebooting, the computer connected to the router by an Ethernet cable can access the internet, and wireless device such as smart phones can connect to the WiFi network of the router to access the internet.



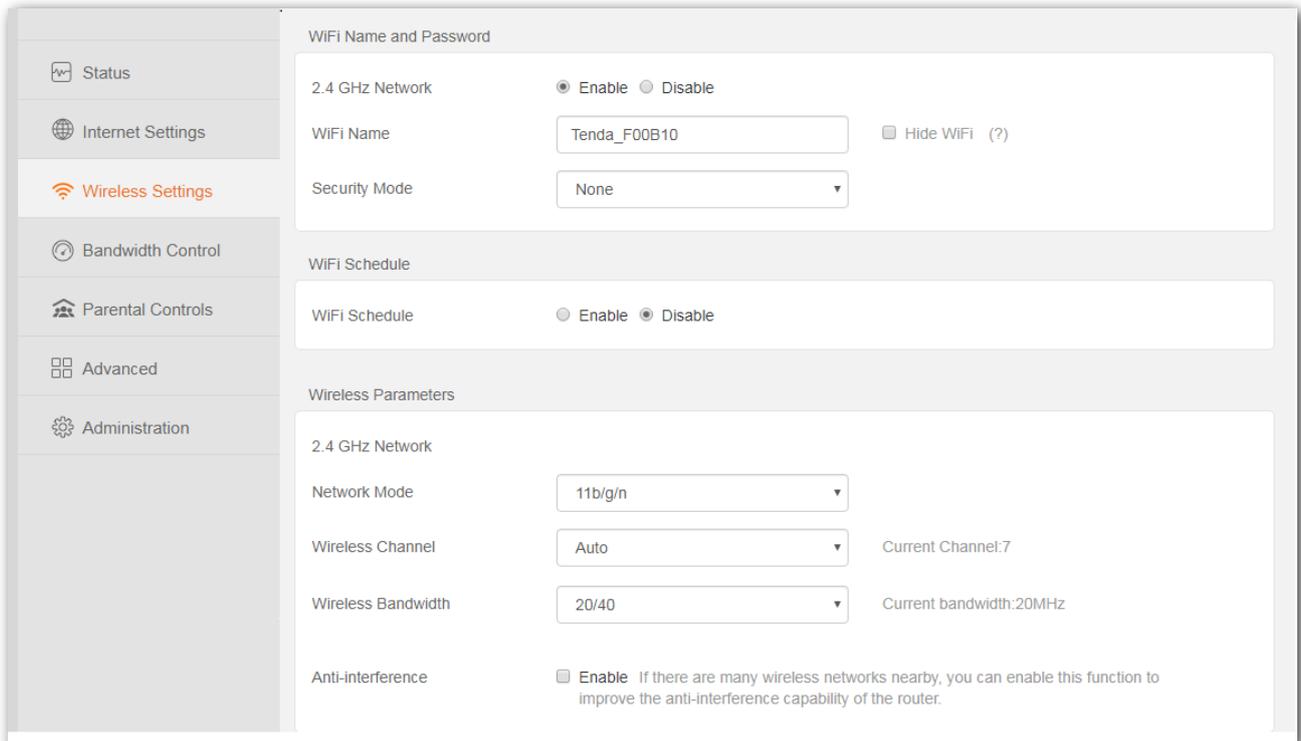
- In AP mode, the router's network settings, VPN, parental controls, bandwidth control, virtual server and other functions will be available.
 - In AP mode, the router's LAN IP address changes automatically to be in the same segment of the upstream device. You can log in to the web UI of the router with **tendawifi.com** instead of **192.168.0.1**.
-

6

Wireless settings

This module enables you to customize a WiFi name and password, hide your WiFi network so that the wireless clients cannot detect the WiFi name, set up a WiFi schedule to turn on/off your WiFi network regularly, and modify wireless parameters.

Click **Wireless Settings** to enter the configuration page.



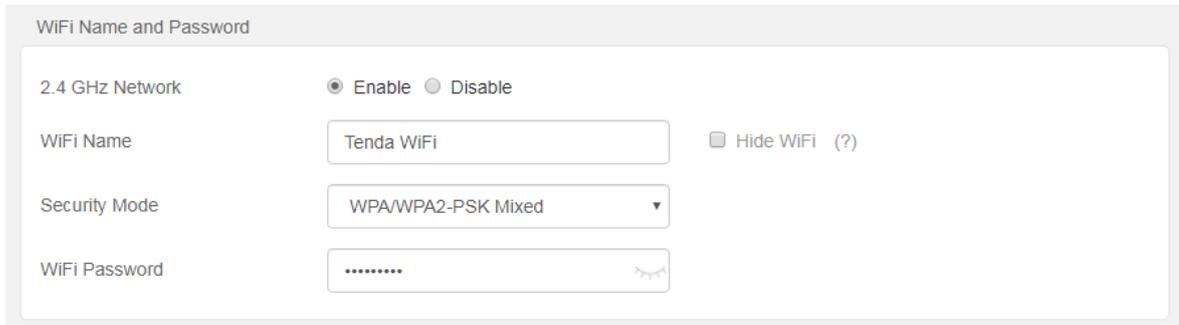
Parameter description

| Parameter | Description |
|------------------------|---|
| 2.4 GHz Network | Used to enable/disable the wireless network of the router. |
| WiFi Name | It specifies the wireless network name (SSID) of the WiFi network. |
| WiFi Name and Password | It specifies the encryption modes supported by the router, including: <ul style="list-style-type: none"> • None: It indicates that a wireless network is not encrypted and any clients can access the network without a password. 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. |
| Security Mode | |

| Parameter | Description |
|--------------------|---|
| | <ul style="list-style-type: none"> • WPA/WPA2-PSK Mixed: It indicates that WPA-PSK and WPA2-PSK are adopted to authenticate users. |
| WiFi Password | <p>Password used for wireless network connection. You are recommended to use the combination of digits, letters and special characters for higher security.</p> <p>Selecting None indicates that wireless clients can connect to the wireless network without entering a password. Select this option only when necessary since it leads to weak network security.</p> |
| Hide WiFi | <p>With this function enabled, wireless clients cannot detect the SSID, and you need to manually enter the SSID on the wireless client to access the wireless network. By default, this function is disabled.</p> |
| WiFi Schedule | <p>Used to enable/disable the WiFi schedule function of the router.</p> |
| Turn WiFi Off At | <p>It specifies the time period to turn off WiFi. 00:00~00:00 indicates a whole day.</p> |
| Turn WiFi Off On | <p>It specifies the date to turn off WiFi.</p> |
| Network Mode | <p>Used to select a network mode of 2.4 GHz WiFi network.</p> <ul style="list-style-type: none"> • 11b: It enables the wireless clients supporting 802.11b to connect to the WiFi network. • 11g: It enables the wireless clients supporting 802.11g to connect to the WiFi network. • 11b/g: It enables the wireless clients supporting 802.11b or 802.11g to connect to the WiFi network. • 11b/g/n: It enables the wireless clients supporting 802.11b, 802.11g or 802.11n to connect to the WiFi network. |
| Wireless Channel | <p>It specifies the channel in which the router operates. Select one idle channel in the ambient environment to reduce interference.</p> <p>Auto indicates that this device automatically changes to a channel rarely used in the ambient environment to reduce interference.</p> |
| Wireless Bandwidth | <p>Select the wireless bandwidth.</p> <ul style="list-style-type: none"> • 20: 20MHz channel bandwidth. • 40: 40MHz channel bandwidth. • 20/40: It specifies that a router can switch its channel bandwidth between 20 MHz and 40 MHz based on the ambient environment. |
| Anti-interference | <p>It specifies whether to enable the anti- interference function.</p> <p>You can enable this function to improve the anti-interference capability of the router if there are many wireless networks nearby.</p> |

6.1 Customizing your WiFi name and password

- Step 1** Click **Wireless Settings** to enter the page, and locate to **WiFi Name and Password** module.
- Step 2** Customize your WiFi name, such as **Tenda WiFi**.
- Step 3** Set **Security Mode** to **WPA/WPA2-PSK Mixed** for better security and compatibility.
- Step 4** Specify your WiFi Password, such as **123456789**.
- Step 5** Click **OK** at the bottom of the page.



The screenshot shows the 'WiFi Name and Password' configuration page. It includes the following fields and options:

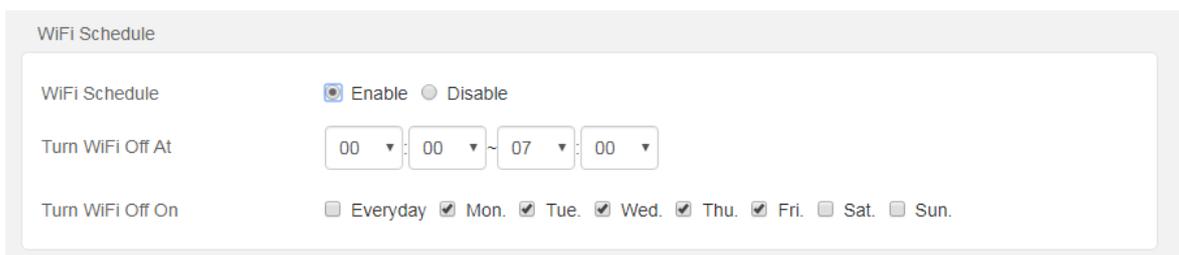
- 2.4 GHz Network:** Radio buttons for 'Enable' (selected) and 'Disable'.
- WiFi Name:** Text input field containing 'Tenda WiFi'.
- Hide WiFi (?):** A checkbox that is currently unchecked.
- Security Mode:** A dropdown menu set to 'WPA/WPA2-PSK Mixed'.
- WiFi Password:** A password input field with masked characters (dots) and a visibility toggle icon.

---End

When the configuration is completed, you need to re-connect to the new WiFi network with your wireless devices using the new password.

6.2 Setting up WiFi schedule

- Step 1** Choose **Wireless Settings** to enter the page, and move to **WiFi Schedule** module.
- Step 2** Set **WiFi Schedule** to **Enable**.
- Step 3** Specify a time period to turn off WiFi network.
- Step 4** Choose the specified date to turn off WiFi network.
- Step 5** Click **OK** at the bottom of the page.



The screenshot shows the 'WiFi Schedule' configuration page. It includes the following fields and options:

- WiFi Schedule:** Radio buttons for 'Enable' (selected) and 'Disable'.
- Turn WiFi Off At:** Time selection fields set to 00:00 ~ 07:00.
- Turn WiFi Off On:** A row of checkboxes for days of the week: Everyday (unchecked), Mon. (checked), Tue. (checked), Wed. (checked), Thu. (checked), Fri. (checked), Sat. (unchecked), Sun. (unchecked).

---End

7

Bandwidth control

In this section, you are allowed to view on-line device(s), block unknown device(s), and set maximum download/upload speed for online devices.

Click **Bandwidth Control** to enter the configuration page.

Parameter Description:

| Parameter | Description |
|---------------------|--|
| Online Devices | Device Name It displays the information of the online device, including device name, IP address and MAC address. You can click  to customize the device name for convenient management. |
| | Download/Upload Speed It specifies the current upload and download speeds of the corresponding device. |
| | Upload/Download Limit It allows you to specify a maximum upload/download speed for the corresponding device. |
| | Internet Access It allows you to allow/disallow the corresponding device to access the internet through the router. The current management computer cannot be controlled.  : It indicates that the device is able to access the internet.  : It indicates the device is unable to access the internet. |
| Blacklisted Devices | Device Name It specifies the device name of a blocked device. |
| | MAC Address It specifies the MAC address of a blocked device. |
| | Unlimit Used to remove a blocked device from the blacklist. After being removed from the blacklist, the device can reconnect to the router for internet access. |

7.1 Configuring bandwidth control

Step 1 Click **Bandwidth Control** to enter the configuration page.

Step 2 Specify **Download/Upload Limit** as required.

Step 3 Click **OK** at the bottom of the page.

---End

7.2 Blocking a device

Step 1 Click **Bandwidth Control** to enter the configuration page.

Step 2 Click  corresponded to the device to be blocked to change the status to .

| Online Devices(2) | | | | | |
|---|----------------|--------------|----------------|--------------|---|
| Device Name | Download Speed | Upload Speed | Download Limit | Upload Limit | Internet Access |
|  MININT-K1N...  192.168.0.100 74:27:ea:69:80:04 | ↓ 0Kbps | ↑ 0Kbps | No limit ▾ | No limit ▾ | Local |
|  MI8  192.168.0.101 d8:ce:3a:8f:71:24 | ↓ 0Kbps | ↑ 0Kbps | No limit ▾ | No limit ▾ |  |

Step 3 Click **OK** at the bottom of the page.

---End

The blocked device is displayed automatically in the blacklist.

| Blacklisted Devices | | |
|---------------------|-------------------|---|
| Device Name | MAC Address | Unlimit |
| MI8 | D8:CE:3A:8F:71:24 |  |

8

Parental controls

8.1 Overview

The parental controls function allows you to block inappropriate and malicious websites, and control online devices to access what websites at what time.

Choose **Parental Controls** to enter the configuration page.

| Device Name | IP Address | Online Duration | Manage |
|----------------|---------------|-----------------|--------------------------|
| MININT-K1N741G | 192.168.1.100 | 5m 39s | <input type="checkbox"/> |

Access Restrictions

Settings below will be applied to all managed devices

Allow access during: 19:00 - 21:00

Repeat: Everyday Mon. Tue. Wed. Thu. Fri. Sat. Sun.

Website Restrictions: Disable

Parameter Description:

| Parameter | Description |
|---------------------|--|
| Online Devices | Device Name It specifies the name of the online device. You can click to customize the device name for convenient management. |
| | IP Address It specifies the IP address of the online device. |
| | Online Duration It specifies the time that has elapsed since the device connects to the router successfully. |
| | Manage It specifies the status of a rule. You can enable/disable the rule by switching the button. |
| Access Restrictions | Allow access during It specifies the time period for the clients to access the internet. |
| | Repeat It specifies the date for the clients to access the internet. |
| | Website Restrictions It specifies the mode of website restrictions. <ul style="list-style-type: none">• Disable: It specifies all websites are accessible.• Only Permit: If this option is selected, only the websites listed in Unblocked Websites are accessible.• Only Forbid: If this option is selected, only the websites listed in Blocked Websites are inaccessible. |

8.2 Setting up a parental controls rule

Configuration procedure:



A parental controls rule takes effect based on the IP address. Thus, to ensure that the rule takes effect correctly, you had better use the IP-MAC binding function to bind an IP address to the device you want to control. Refer to [IP-MAC binding](#) for details.

- Step 1** Choose **Parental Controls** to enter the configuration page.
- Step 2** Set the button  to  state.
- Step 3** Set the period at which the rule takes effect.
- Step 4** Set the date on which the rule takes effect.
- Step 5** Select a **Website Restrictions** mode, and set the websites allowed or disallowed to visit.

Online Devices

| Device Name | IP Address | Online Duration | Manage |
|--|---------------|-----------------|---|
| MININT-K1N741G  | 192.168.0.100 | 3h 43m 3s |  |

Access Restrictions

Settings below will be applied to all managed devices

Allow access during: 19:00 ~ 21:00

Repeat: Everyday Mon. Tue. Wed. Thu. Fri. Sat. Sun.

Website Restrictions: Only Permit

Unblocked Websites: 

---End

8.3 Example of configuring parental control

Tom uses F6 to set up a network in his apartment. He wants his daughter Sindy to focus on her homework from 20:00 to 22:00 instead of YouTube video on weekdays.

The parental controls function can meet this requirement.

Configuration procedure:

Step 1 Choose **Parental Controls** to enter the configuration page.

Step 2 Click  to the state  corresponding to **Sindy's phone**.

| Online Devices | | | | |
|----------------|---|---------------|-----------------|---|
| Device Name | | IP Address | Online Duration | Manage |
| MININT-K1N741G |  | 192.168.1.100 | 1h 13m 19s |  |
| Sindy's phone |  | 192.168.1.101 | 2m 16s |  |

Step 3 Set **Allow access during** to the period when the device is allowed to access video websites, which is **20:00-22:00** in this example.

Step 4 Set the date on which the rule takes effect, which is Monday to Friday in this example.

Step 5 Set **Website Restrictions** to **Only Forbid**.

Step 6 Set **Blocked Websites** to **www.youtube.com**, and click .

| Access Restrictions | |
|---|--|
| Settings below will be applied to all managed devices | |
| Allow access during | 20 : 00 ~ 22 : 00 |
| Repeat | <input type="checkbox"/> Everyday <input checked="" type="checkbox"/> Mon. <input checked="" type="checkbox"/> Tue. <input checked="" type="checkbox"/> Wed. <input checked="" type="checkbox"/> Thu. <input checked="" type="checkbox"/> Fri. <input type="checkbox"/> Sat. <input type="checkbox"/> Sun. |
| Website Restrictions | Only Forbid |
| Blocked Websites | Enter website  |
| 1 | www.youtube.com  |

Step 7 Click **OK** at the bottom of the page.

---End

After the settings take effect, Sindy's smart phone cannot access YouTube from 20:00 to 22:00 on weekdays.

9

Advanced

9.1 MAC address filter

9.1.1 Overview

This function allows you to set a MAC address whitelist or a MAC address blacklist to enable or disable users to access the internet through the router.

Choose **Advance** and move to **MAC Address Filter** module to access the configuration page.

Parameter Description:

| Parameter | Description |
|-------------------------------------|---|
| Filter Mode | <ul style="list-style-type: none">• Blacklist: The users with listed MAC addresses are not allowed to access the internet.• Whitelist: The users with listed MAC addresses are allowed to access the internet. |
| Blacklisted/Whitelisted MAC Address | It specifies the MAC addresses to which a rule applies. |
| Remark | It specifies the description of a rule. This parameter is optional. |
| Operation | <ul style="list-style-type: none">⊕: Click it to add a device into blacklist/whitelist.⊖: Click it to delete a device from the blacklist/whitelist. |

9.1.2 Setting MAC address filter rules

Adding a rule

Step 1 Choose **Advanced** to enter the configuration page, and move to **MAC Address Filter** module.

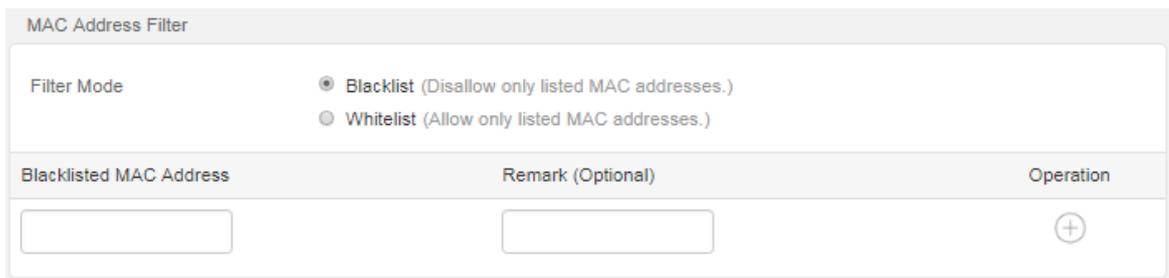
Step 2 Select a **Filter Mode**.

Step 3 Enter MAC address to which the rule applies.

Step 4 Enter remark information, which is optional.

Step 5 Click .

Step 6 Click **OK** on the bottom of the page.



| Blacklisted MAC Address | Remark (Optional) | Operation |
|-------------------------|----------------------|---|
| <input type="text"/> | <input type="text"/> |  |

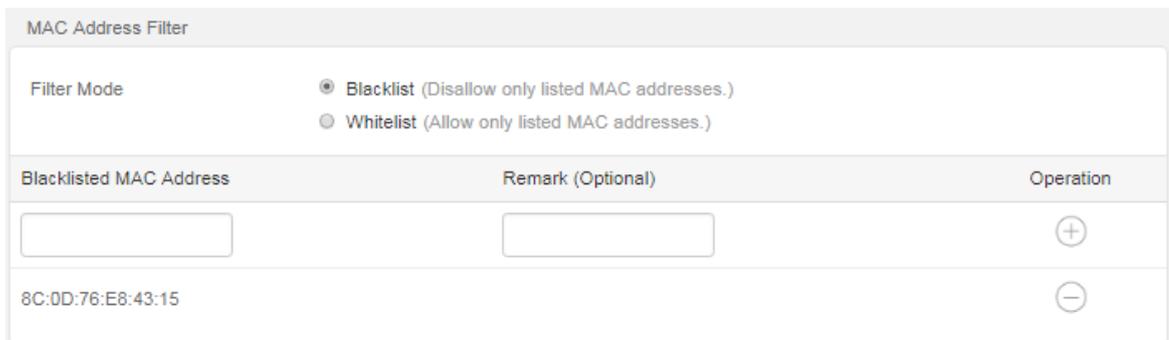
---End

Delete a rule

Step 1 Click **Advanced** to enter the configuration page, and move to **MAC Address Filter** module.

Step 2 Click  corresponding to the MAC address filtering rule to be deleted.

Step 3 Click **OK**.



| Blacklisted MAC Address | Remark (Optional) | Operation |
|-------------------------|----------------------|---|
| <input type="text"/> | <input type="text"/> |  |
| 8C:0D:76:E8:43:15 | |  |

---End

9.1.3 Example of setting a MAC address filter rule

A family uses F6 to access the internet. Recently an unknown device is found in the **Online Device** list. Then the MAC address filter function can be used to disallow the unknown device to connect to the WiFi network of the router for internet access.

Assume that the MAC addresses of the unknown device is D8:CE:3A:8F:71:24.

Configuration procedure:

Step 1 Choose **Advanced > MAC Address Filter**.

Step 2 Set **Filter Mode** to **Blacklist**.

Step 3 Enter the MAC address to be disallowed to access the internet, which is **D8:CE:3A:8F:71:24** in this example.

Step 4 Enter the remark information of the device, which is **Unknown device** in this example.

Step 5 Click .

Step 6 Click **OK** at the bottom of the page.

MAC Address Filter

Filter Mode

- Blacklist (Disallow only listed MAC addresses.)
- Whitelist (Allow only listed MAC addresses.)

| Blacklisted MAC Address | Remark (Optional) | Operation |
|-------------------------|----------------------|-----------|
| <input type="text"/> | <input type="text"/> | + |
| D8:CE:3A:8F:71:24 | Unknown device | - |

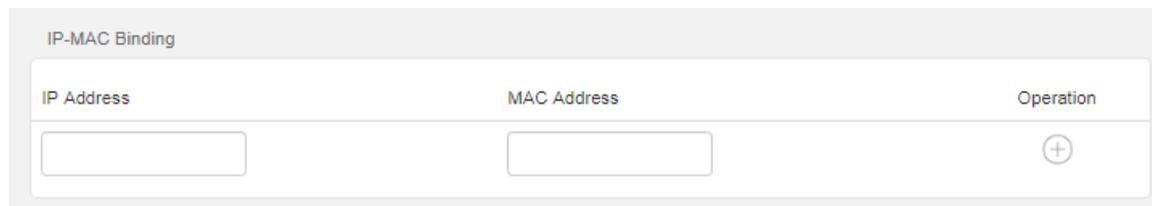
---End

After you complete the settings, the unknown device cannot connect to the WiFi network to access the internet.

9.2 IP-MAC binding

The IP-MAC Binding function enables clients to obtain a fixed IP address, to ensure that the IP address-based functions, such as port forwarding, DMZ host and other functions of the router can take effect properly. This function is only effective when the DHCP server of the router is enabled.

Choose **Advanced**, and move to **IP-MAC Binding** module to access the configuration page.



The screenshot shows the 'IP-MAC Binding' configuration interface. It features a table with three columns: 'IP Address', 'MAC Address', and 'Operation'. The 'IP Address' and 'MAC Address' columns contain empty text input boxes. The 'Operation' column contains a plus sign icon (+).

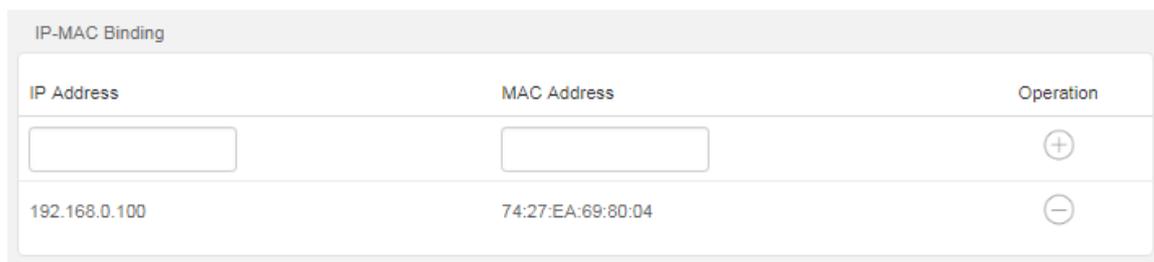
Parameter Description:

| Parameter | Description |
|-------------|--|
| IP Address | It specifies the IP address to be reserved for the client with the specified MAC address. It should belong to the DHCP address pool. |
| MAC Address | It specifies the MAC address of the client that needs a fixed IP address. |
| Operation |  : It is used to add an IP-MAC binding rule.  : It is used to delete an IP-MAC binding rule. |

9.2.1 Configuring an IP-MAC binding rule

Adding a rule

- Step 1** Choose **Advanced** to enter the configuration page, and move to **IP-MAC Binding** module.
- Step 2** Enter an IP address included in the DHCP address pool.
- Step 3** Enter the MAC address of the client which needs a fixed IP address.
- Step 4** Click .
- Step 5** Click **OK** on the bottom of the page.



The screenshot shows the 'IP-MAC Binding' configuration interface after a rule has been added. The table now contains two rows. The first row has empty input boxes for 'IP Address' and 'MAC Address', and a plus sign in the 'Operation' column. The second row contains the values '192.168.0.100' for 'IP Address', '74:27:EA:69:80:04' for 'MAC Address', and a minus sign in the 'Operation' column.

---End

Deleting a rule

Step 1 Choose **Advanced** to enter the configuration page, and move to **IP-MAC Binding** module.

Step 2 Click  corresponded to an entry to be deleted.

Step 3 Click **OK** on the bottom of the page.

---End

9.3 Port forwarding

By default, internet users cannot access any service on any of your local hosts. If you want to enable internet users to access a particular service on a local host, enable this function and specify the IP address and service port of the local host. This can also prevent local network from being attacked when the internal server is opened to the internet users.

Click **Advanced**, and move to **Port Forwarding** module to access the configuration page.

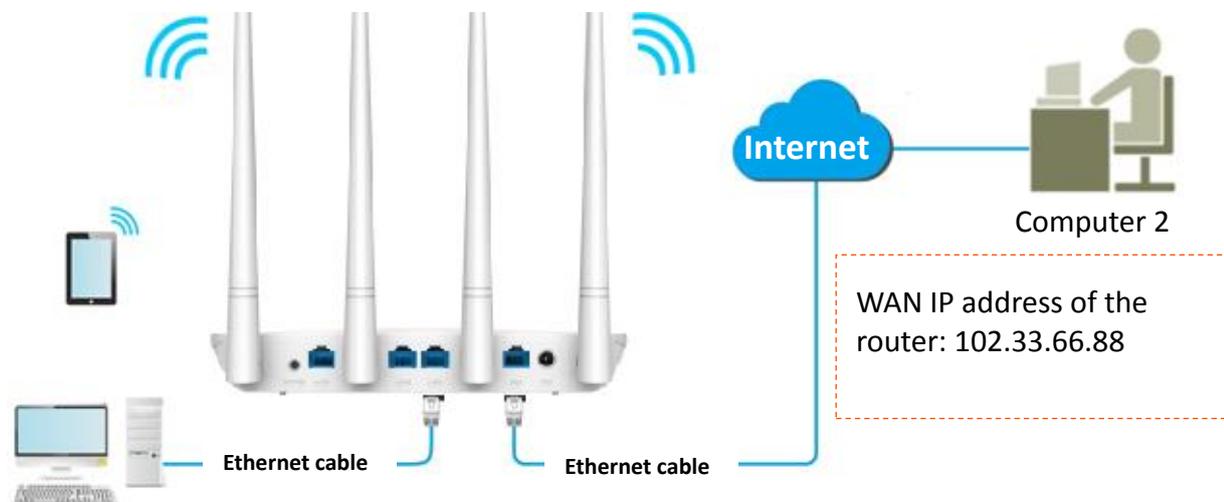
| Internal IP Address | Internal Port | External Port | Protocol | Operation |
|----------------------|---------------|---------------|----------|---|
| <input type="text"/> | 21 | 21 | Both |  |

Parameter Description:

| Parameter | Description |
|---------------------|---|
| Internal IP Address | It specifies the IP address of a server that resides on the LAN. |
| Internal Port | It specifies the service port number of the internal server. |
| External Port | It specifies a service port number for internet users to access a specified service. |
| Protocol | It specifies the protocol that specified service uses. Both indicates that both TCP and UDP are used. If you are uncertain about it, Both is recommended. |
| Operation | It allows you to manually add and delete a port forwarding rule. |

Example of configuring a port forwarding rule

Tom uses a F6 to set up home network, and establishes a web server in LAN. Now he wants internet users to access the resources on the server. The port forwarding function can be enabled to fulfill the requirement.



Computer 1 (web server)

IP address: 192.168.0.100

Prerequisites

- The WAN IP address of the router is a public IP address, which is 102.33.66.88.
- Computer 1 is assigned a fixed IP address, which is 192.168.0.100 (Refer to [IP-MAC binding](#) function).
- The internal port of the web server is 1555. And the external port number to access the web server is also 1555.

Configuration procedure:

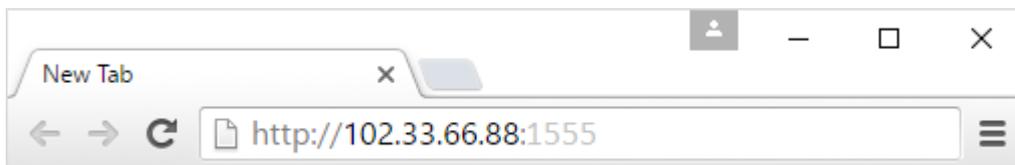
- Step 1** Choose **Advanced**, and move to **Port Forwarding** to enter the configuration page.
- Step 2** Enter **Internal IP** to the IP address of the web server, which is the IP address of computer 1, **192.168.0.100**.
- Step 3** Enter **Internal Port** to the port number of the web service, which is **1555** in this example.
- Step 4** Enter **External Port**, which is **1555** in this example.
- Step 5** Set **Protocol** to **Both**.
- Step 6** Click **+**, and then **OK** at the bottom of the page.

| Port Forwarding | | | | |
|----------------------|---------------|-----------------------------------|----------|----------------------------------|
| Internal IP Address | Internal Port | External Port | Protocol | Operation |
| <input type="text"/> | 1555 | <input type="text" value="1555"/> | Both | <input type="button" value="+"/> |
| 192.168.0.100 | 1555 | 1555 | Both | <input type="button" value="-"/> |

----End

Verification

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 web server. In this example, enter `http://102.33.66.88:1555`.



NOTE

To make the port forwarding function always effective, you can use both the port forwarding and DDNS functions to allow internet users to access the LAN server using a domain name.

9.4 DDNS

9.4.1 Overview

DDNS is short for Dynamic Domain Name Server. When the service runs, the DDNS client on the router send its current WAN port IP address to the DDNS server, and then the server updates the mapping relationship between the domain name and the IP address in the database to achieve dynamic domain name resolution. You can enable this function to map the router's dynamically changing WAN Port IP address (public network IP address) to a fixed domain name.

DDNS normally interworks with port forwarding, DMZ host and remote web-based management, so that the internet users can access the internal server or the router's web UI with a domain name.

Choose **Advanced**, and move to **DDNS** module to access the configuration page. By default, it is disabled. Select **Enable**, and the following page appears.

DDNS

DDNS Enable Disable

Service Provider [Register Now](#)

DDNS User Name

DDNS Password

Connection Status **Disconnected**

Parameter description:

| Parameter | Description |
|-------------------|--|
| DDNS | It specifies whether to enable the DDNS function. |
| Service Provider | It specifies a DDNS service provider. The router supports oray.org and 88ip.cn. |
| DDNS User Name | 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. |
| Connection Status | It specifies the current connection status of the DDNS service. |

9.4.2 An example of configuring DDNS

Winnie uses F6 to set up network, and establishes a web server on LAN. She wants internet users to access the resources on the server with a domain name. The port forwarding and DDNS function can be enabled to fulfill the requirement.

Assumption

DDNS service provider: oray.com

Domain name: tenda-winnie.imwork.net

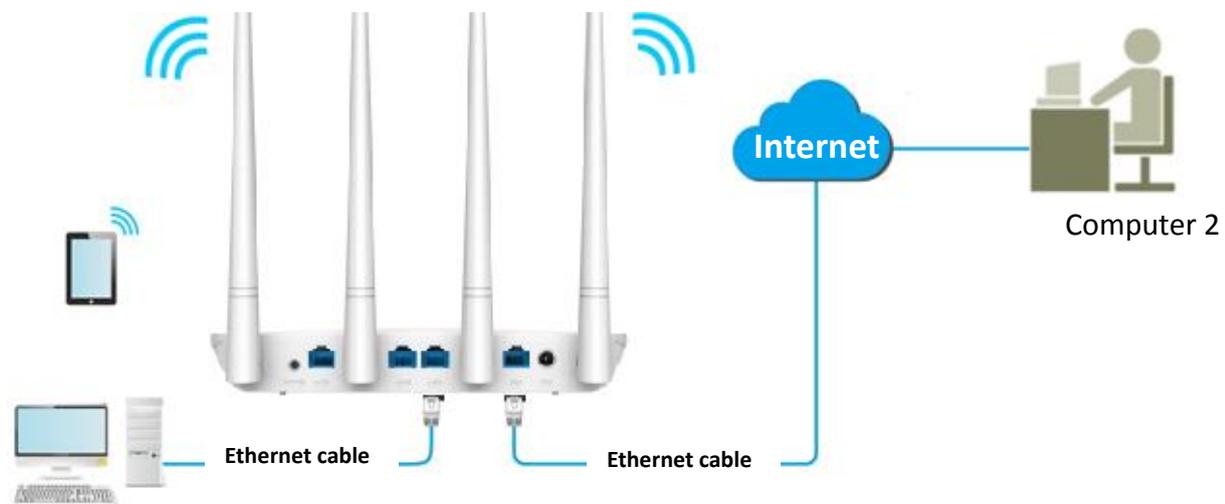
Username: tenda-winnie

Password: a1234578

Web server IP address: 192.168.0.110

Internal port number of the web server and the external port number to access the web server:
8080

Network topology



Computer 1 (web server)

Configure procedure

Step 1 Refer to [Port forwarding](#) to configure port forwarding function.

| Port Forwarding | | | | |
|----------------------|---------------|---------------|----------|-----------|
| Internal IP Address | Internal Port | External Port | Protocol | Operation |
| <input type="text"/> | 8080 | 8080 | Both | + |
| 192.168.0.110 | 8080 | 8080 | Both | - |

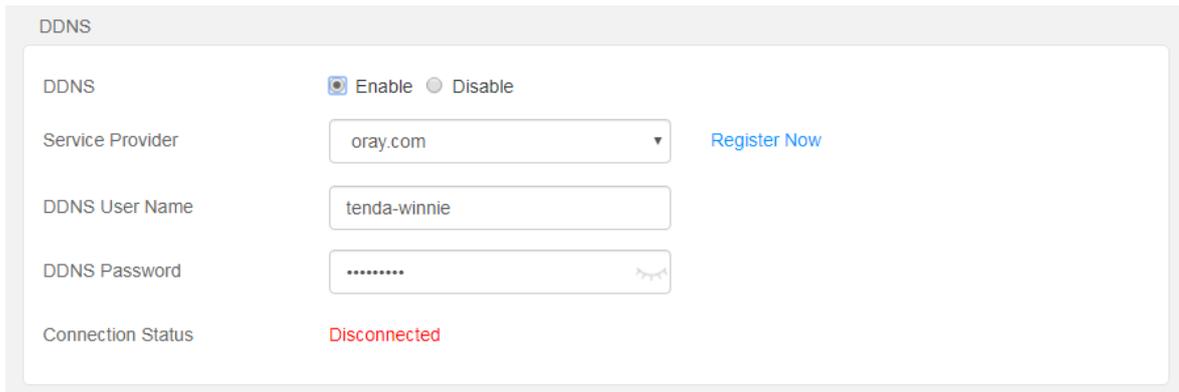
Step 2 Configure DDNS function.

1. Choose **Advanced**, and move to **DDNS** to enter the configuration page.
2. Set **DDNS** to **Enable**.
3. Set **Service Provider** to **oray.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.

4. Enter your DDNS user name, which is **tenda-winnie** in this example.
5. Enter your DDNS password, which is **a12345678** in this example.

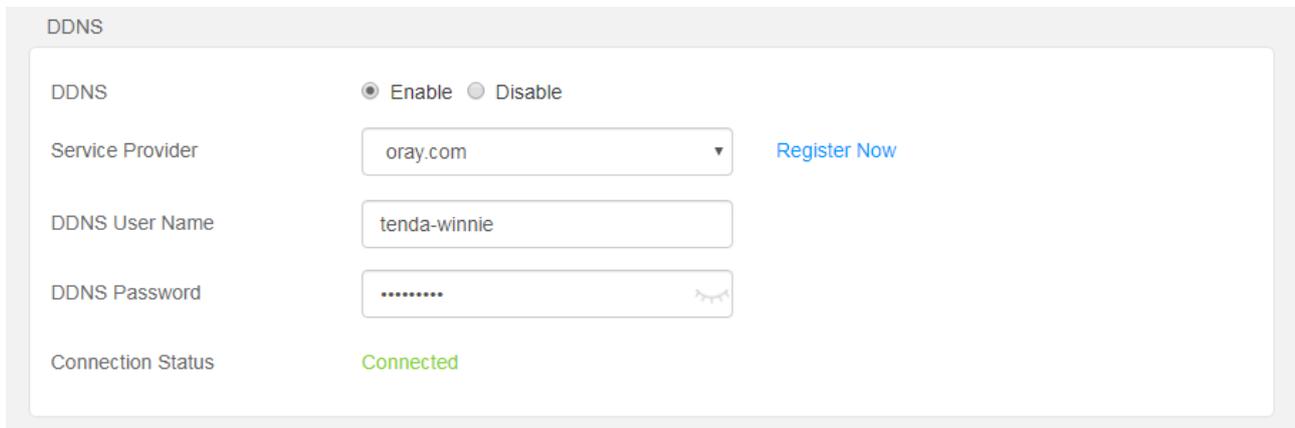


The screenshot shows a web interface for DDNS configuration. At the top, there is a section titled "DDNS" with a sub-section "DDNS" containing two radio buttons: "Enable" (selected) and "Disable". Below this, there are four input fields: "Service Provider" (a dropdown menu showing "oray.com" and a "Register Now" link), "DDNS User Name" (text input with "tenda-winnie"), "DDNS Password" (password input with "*****" and a visibility icon), and "Connection Status" (text label showing "Disconnected" in red).

6. Click **OK** at the bottom of the page.

---End

Wait a moment, and refresh the page. When the **Connection Status** shows **Connected**, the configuration is saved successfully.



The screenshot shows the same DDNS configuration page as above, but the "Connection Status" is now "Connected" in green. The other fields remain the same: "Enable" is selected, "Service Provider" is "oray.com", "DDNS User Name" is "tenda-winnie", and "DDNS Password" is "*****".

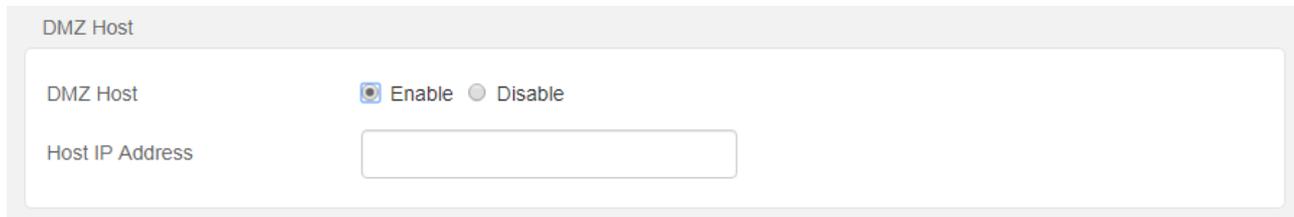
Verification

Internet users can use <http://tenda-winnie.imwork.net:8080> to access the web server.

9.5 DMZ host

A DMZ host on a LAN can be accessed by the internet users without limit. It is especially used for video conferences and online games. You can set a computer with these requirements as a DMZ host for better user experience.

Choose **Advanced**, and move to **DMZ Host** module to access the configuration page. By default, it is disabled. It shows as the following figure when you enable it.



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 [IP-MAC binding](#) function), as a changeable IP address may result in 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, you are recommended to disable it and enable your firewall, security, and antivirus software.

Configuration procedure

Step 1 Choose **Advanced**, and move to **DMZ Host** module to enter the configuration page.

Step 2 Set **Host IP Address** to the IP address of a computer that you want to set as the DMZ host.

Step 3 Click **OK** at the bottom of the page.



----End

9.6 UPnP

UPnP is short for Universal Plug and Play. This function enables the router to implement automatic port forwarding by automatically detecting UPnP-based application programs and enabling ports on the router for the applications. It is generally used for P2P programs, such as BitComet and AnyChat, and helps to increase the download speed.

Choose **Advanced**, and move to **UPnP** module to enter the configuration page. It is enabled by default, see the following figure.



9.7 PING WAN

It enables you to ping the WAN port IP address over the internet to check the connectivity between the router and the internet. It is enabled by default.

Choose **Advance**, and move to **PING WAN** module to enter the configuration page. It is enabled by default, see the following figure.



10

Administration

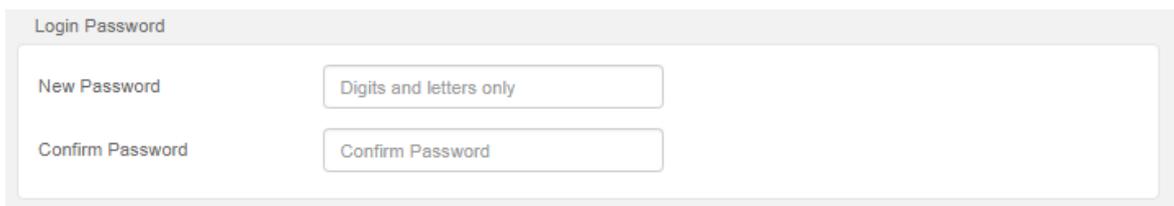
This module describes how to manage and maintain your router and home network.

10.1 Login password

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

Configuration procedure:

- Step 1** Choose **Administration**, and move to **Login Password** module to enter the page.
- Step 2** Set **New Password** to a new password (5-32 characters).
- Step 3** Set **Confirm Password** to the new password.
- Step 4** Click **OK** at the bottom of the page.



The screenshot shows a web interface for setting a login password. At the top, it says "Login Password". Below that, there are two rows of input fields. The first row is for the "New Password" and includes a dropdown menu currently set to "Digits and letters only". The second row is for the "Confirm Password" and includes a dropdown menu currently set to "Confirm Password".

---End

The page will redirect to the login page, you need to use the new password to login again.

10.2 WAN parameters

It allows you to check and modify MTU value, clone MAC address and modify WAN speed.

Choose **Administration** and move to **WAN Parameters** module to enter the configuration page.

WAN Parameters

| | | |
|-------------------|---------------------|---|
| MTU | 1500 | Do not change if unnecessary. |
| Clone MAC Address | Restore Default MAC | Default MAC Address: C8:3A:35:F0:0B:10 |
| WAN Speed | Auto-negotiation | Current speed: 100 Mbps full duplex |

MTU

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

You can try to change the MTU when:

- You cannot access some specific websites or encrypted websites (such as E-banking or Paypal websites).
- You cannot access a FTP or POP server.

You can try reducing the value of MTU gradually from 1500 until the problem is resolved. (The recommended range is 1400 to 1500.)

| MTU | Application |
|------------|--|
| 1500 | It is commonly used for ADSL and non-VPN dial-up connections. |
| 1492, 1480 | 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. |

Clone MAC Address

If your ISP binds your account with MAC Address of your computer that used to verify internet connectivity after you subscribed to the internet service. Then only this computer can access the internet with the account. In this case, you can use the Clone MAC Address function to clone the MAC address of this computer to the WAN port of the router to achieve network sharing.

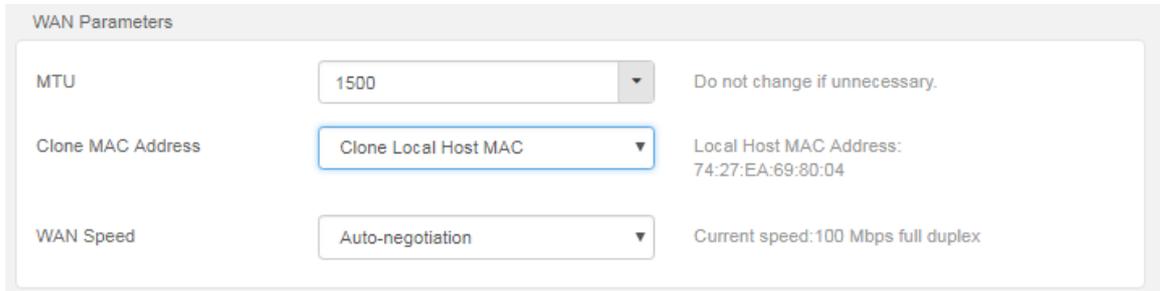
Click **Restore Default MAC** to restore the MAC address of WAN port to the factory settings.

Here are two scenarios to clone MAC address.

Scenario 1: the computer used to manage the router is the computer that used to access the internet.

Configuration procedure:

- Step 1** Choose **Administration**, and move to **WAN Parameters** module to enter the configuration page.
- Step 2** Set **Clone MAC Address** to **Clone Local Host MAC**.
- Step 3** Click **OK** at the bottom of the page.



The screenshot shows the WAN Parameters configuration page. It contains three rows of settings:

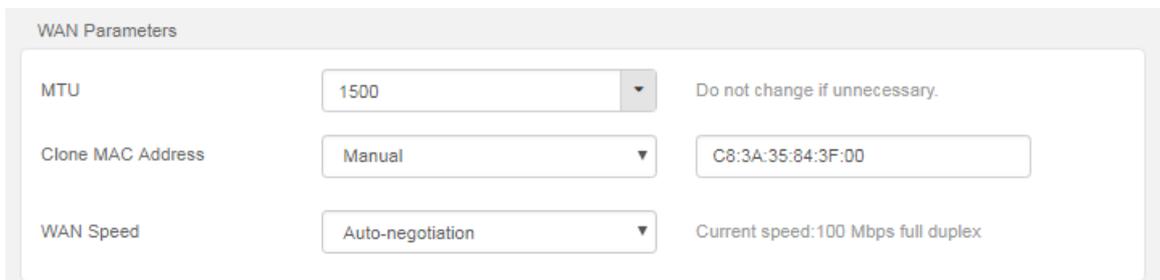
| Parameter | Value | Notes |
|-------------------|----------------------|---|
| MTU | 1500 | Do not change if unnecessary. |
| Clone MAC Address | Clone Local Host MAC | Local Host MAC Address: 74:27:EA:69:80:04 |
| WAN Speed | Auto-negotiation | Current speed: 100 Mbps full duplex |

---End

Scenario 2: The computer used to manage the router is not the computer that used to access the internet. And you need to get the MAC address of the computer that can access the internet.

Configuration procedure:

- Step 1** Choose **Administration**, and move to **WAN Parameters** module to enter the configuration page.
- Step 2** Set **Clone MAC Address** to **Manual**.
- Step 3** Enter the MAC address of the computer that can access the internet in the format of `XX:XX:XX:XX:XX:XX`.



The screenshot shows the WAN Parameters configuration page. It contains three rows of settings:

| Parameter | Value | Notes |
|-------------------|------------------|-------------------------------------|
| MTU | 1500 | Do not change if unnecessary. |
| Clone MAC Address | Manual | C8:3A:35:84:3F:00 |
| WAN Speed | Auto-negotiation | Current speed: 100 Mbps full duplex |

- Step 4** Click **OK** at the bottom of the page.

---End

WAN Speed

It specifies the speed of the WAN port. By default, the speed mode of the WAN port is Auto-negotiation. Change the setting only when necessary. If the router cannot access the internet after you set up it correctly with a 10 Mbps upstream device, you can change **WAN speed** to **10 Mbps auto-negotiation** to achieve negotiation.

10.3 LAN parameters

It allows you to view and modify the LAN IP address and DHCP server parameters of the router.

The DHCP server can automatically assign IP addresses, subnet masks, gateways and other related parameters to the clients of the router.

Choose **Administrator**, and move to **LAN Parameters** module to enter the configuration page.

LAN Parameters

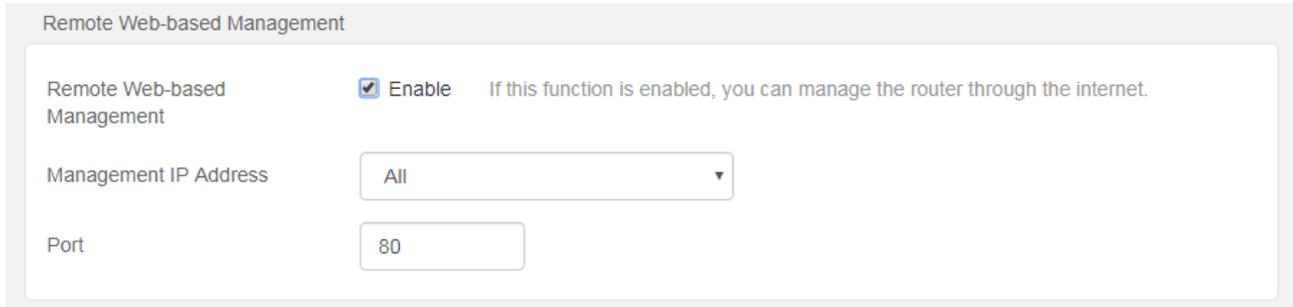
| | |
|----------------------|---|
| LAN IP Address | <input type="text" value="192.168.0.1"/> |
| Subnet Mask | <input type="text" value="255.255.255.0"/> |
| DHCP Server | <input checked="" type="checkbox"/> Enable <small>If this function is disabled, the router stops assigning IP addresses to clients.</small> |
| Start IP Address | 192.168.0. <input type="text" value="100"/> |
| End IP Address | 192.168.0. <input type="text" value="200"/> |
| Preferred DNS Server | <input type="text" value="192.168.0.1"/> |
| Alternate DNS Server | <input type="text"/> |

Parameter Description:

| Parameter | Description |
|---------------------------------|--|
| LAN IP Address | It specifies the LAN IP address of the router, which is also the management IP address, for logging in to the router web UI. |
| Subnet Mask | It specifies the subnet mask of the LAN port, used to identify the IP address range of the local area network. |
| DHCP Server | It specifies whether to enable DHCP server. |
| Start IP Address/End IP Address | It specifies the range of IP addresses that can be assigned to devices connected to the router. |
| Preferred DNS Server | It specifies the preferred DNS address of the router used to assign to the devices connected to the router. It is the LAN IP address of the router by default. You can change it if necessary. |
| Alternate DNS Server | It specifies the alternate DNS address of the router used to assign to the devices connected to the router. It is an optional field and it is left blank by default. |

10.4 Remote web-based management

Generally, the web UI of the router can only be accessed on devices that are connecting to the router by a LAN port or wireless connection. When you encounter network faulty, you can ask technician far away to diagnose and fix your problems, improving efficiency and reducing costs and efforts. By default, it is disabled. When you enable it, it displays as the following figure.



Remote Web-based Management

Remote Web-based Management Enable If this function is enabled, you can manage the router through the internet.

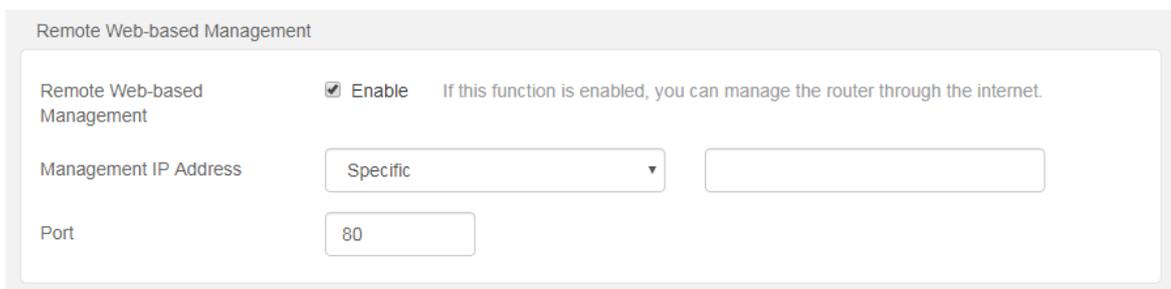
Management IP Address

Port

Configuring remote web-based management

Configuration procedure:

- Step 1** Choose **Administration**, and move to **Remote Web-based Management** module to enter the configuration page.
- Step 2** Select the **Enable** option.
- Step 3** Set **Management IP Address** to **Specific**, and enter a specified IP address.
- Step 4** Enter a port number used to access the router remotely.
- Step 5** Click **OK** at the bottom of the page.



Remote Web-based Management

Remote Web-based Management Enable If this function is enabled, you can manage the router through the internet.

Management IP Address

Port

---End

Parameter Description:

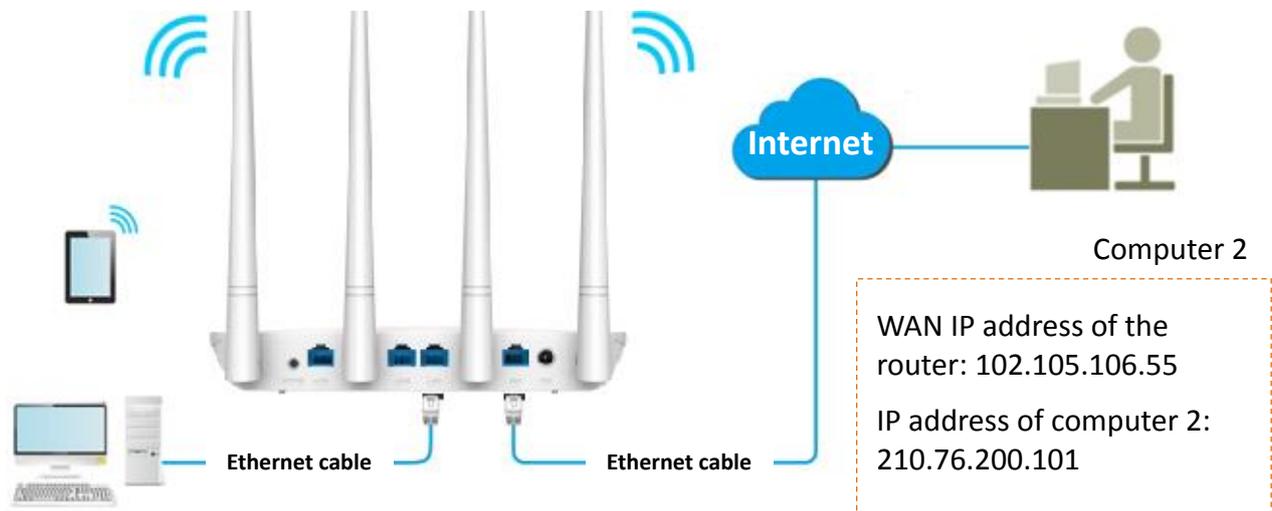
| Parameter | Description |
|-----------------------------|--|
| Remote Web-based Management | To enable/disable Remote Web-based Management function. It is disabled by default. |
| Management IP Address | <p>It specifies the IP address to manage the router remotely.</p> <ul style="list-style-type: none">• All: It indicates that all internet users can access the web UI of the router. It is not recommended to select this option for network security.• Specific: It indicates that only the host with the specified public IP address is allowed to access the web UI of router remotely. If the host for remote access is in an intranet, enter the public IP address of the computer's gateway here. |

| Parameter | Description |
|-----------|--|
| | The port number to access the router remotely. It is 80 by default, can be modified if necessary. |
| |  TIP |
| Port | Port 1 to 1024 are occupied by well-known services. It is recommended to modify the port to be in the range from 1025 to 65535. To access the web UI of the router by the URL: http://WAN IP address:port number . If DDNS is enabled on the router, you can access the web UI by http://WAN domain name:port number . |

An example of configuring remote web-based management

An F6 is used to set up a network to in an apartment, and needs to be logged in and managed over the internet. Assume the public IP address of the router is 102.105.106.55 and the public IP address of the computer for remotely management is 210.76.200.101.

The following figure shows the application scenario.



Computer 1 (web server)



The computer used to remotely log in to the web UI of the router 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.

Configuration procedure:

- Step 1** Choose **Administration**, and move to **Remote Web-based Management** module to enter the configuration page.
- Step 2** Check the **Enable** option.
- Step 3** Set **Management IP Address** to **Specific**, and enter **210.76.200.101**.
- Step 4** Click **OK**.

Remote Web-based Management

Remote Web-based Management **Enable** If this function is enabled, you can manage the router through the internet.

Management IP Address

Port

---End

After the configuration is saved, use [http:// 102.105.106.55:80](http://102.105.106.55:80) to access the web UI of the router on the computer 2.

10.5 Date & Time

If the system time of the router is incorrect, time-based functions of the router cannot take effect correctly, including the WiFi schedule, parental controls and Automatic 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.

Choose **Administration**, and move to **Date & Time** module to enter the configuration page.

Date & Time

| | | |
|--------------|--|---|
| Time Zone | (GMT+08:00)Beijing, Chongqing, Hong Kong, Urumqi | ▼ |
| Current Time | 2019-06-18 11:13:22 | Current date and time has synced with the Internet. |

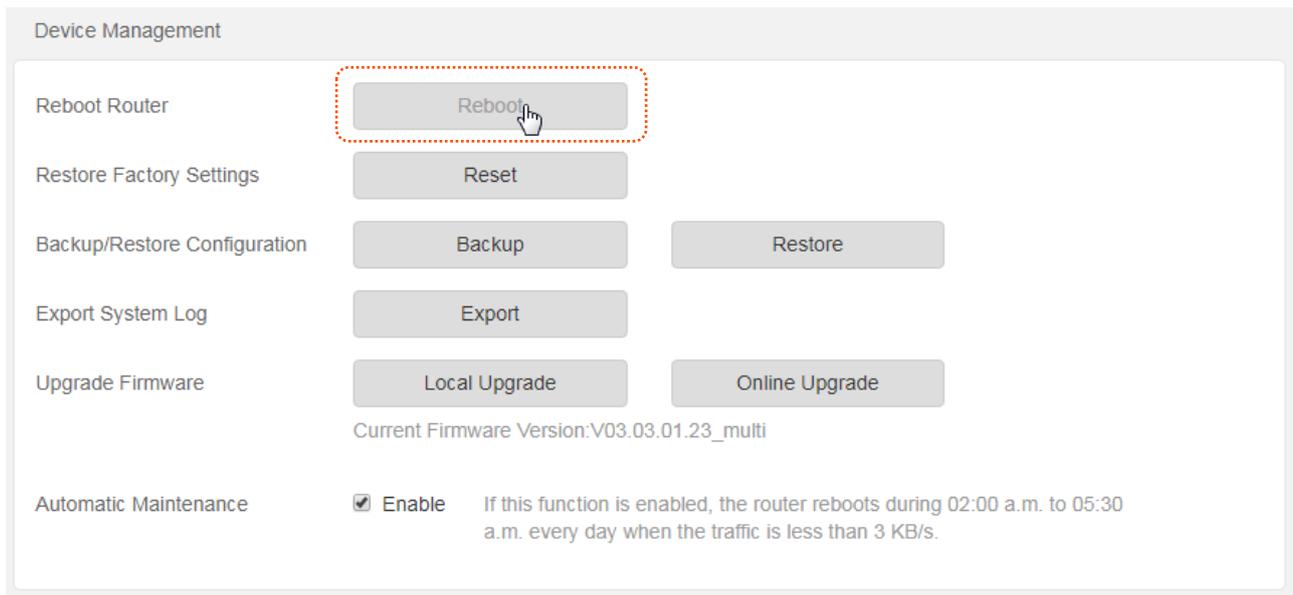
10.6 Device management

This module describes how to reboot, reset, and upgrade the router, how to back up your current configuration and restore the router to previous configuration, how to view the system logs and functions that are enabled or disabled.

Reboot router

If a setting fails to take effect or the router fails to work properly, you can try rebooting the router.

Choose **Administration**, and move to **Device Management** module to enter the configuration page. Click **Reboot**, and confirm it, the router will restart. When the progress bar completes, it indicates the router completes restart.



Rebooting the router will disconnect all the connections. Please reboot the router when the network is relatively idle.

Restore 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 **WiFi/RST** button.



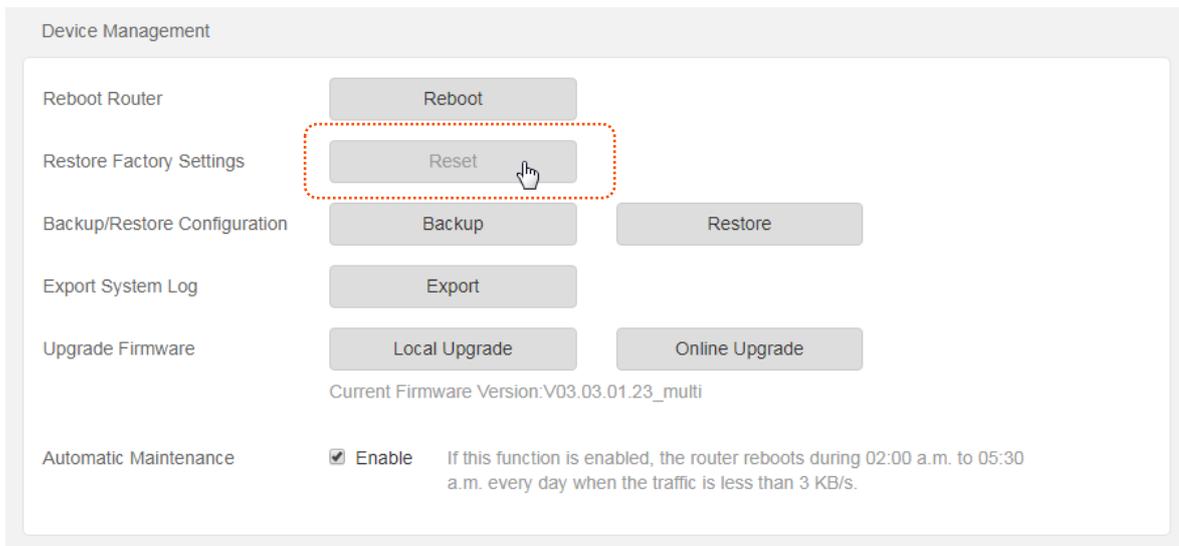
- It is recommended that you do not reset the router, unless you forget your login password or Tenda technical support asks you to do so. You can access the internet only after reconfiguring the router.
- Ensure that the power supply of the router is normal when the router is reset.
- The default login IP address is 192.168.0.1, and login password is admin after resetting.

Resetting the Router on the Web UI

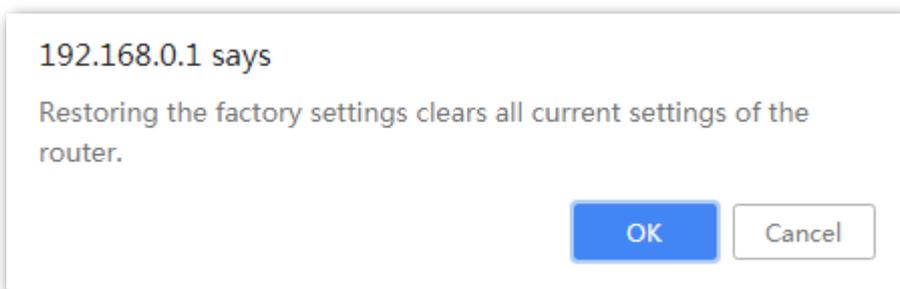
Step 1 Choose **Administration**, and move to **Device Management** module to enter the

configuration page.

Step 2 Click **Reset**.



Step 3 Click **OK** on the popup window.



---End

Wait for the progress bar to complete.

Resetting the Router Using the Reset Button

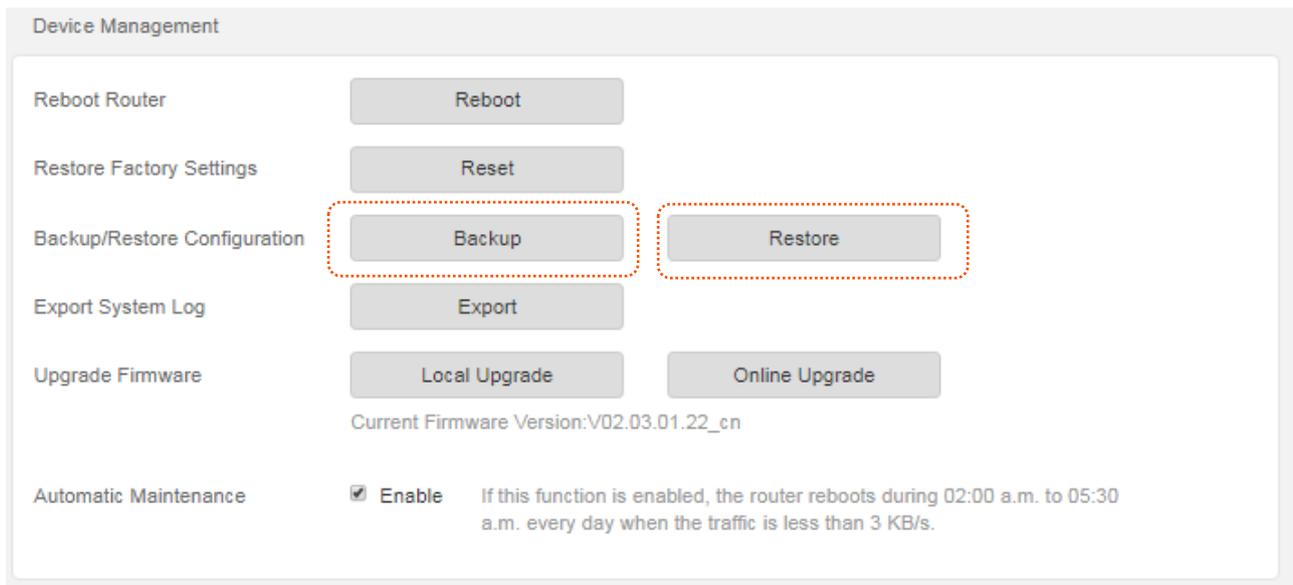
Hold down the **WiFi/RST** button of the router for about 8 seconds and release it when the LED indicator blinks fast. The router is reset successfully when the LED indicator lights up.

Backup/Restore configuration

It allows you to back up the current configuration of the router to your computer. You are recommended to back up the configuration after the settings of the router are significantly changed, or the router works in a good condition.

After you restore the router to factory settings or upgrade it, you can use this function to restore a configuration that has been backed up.

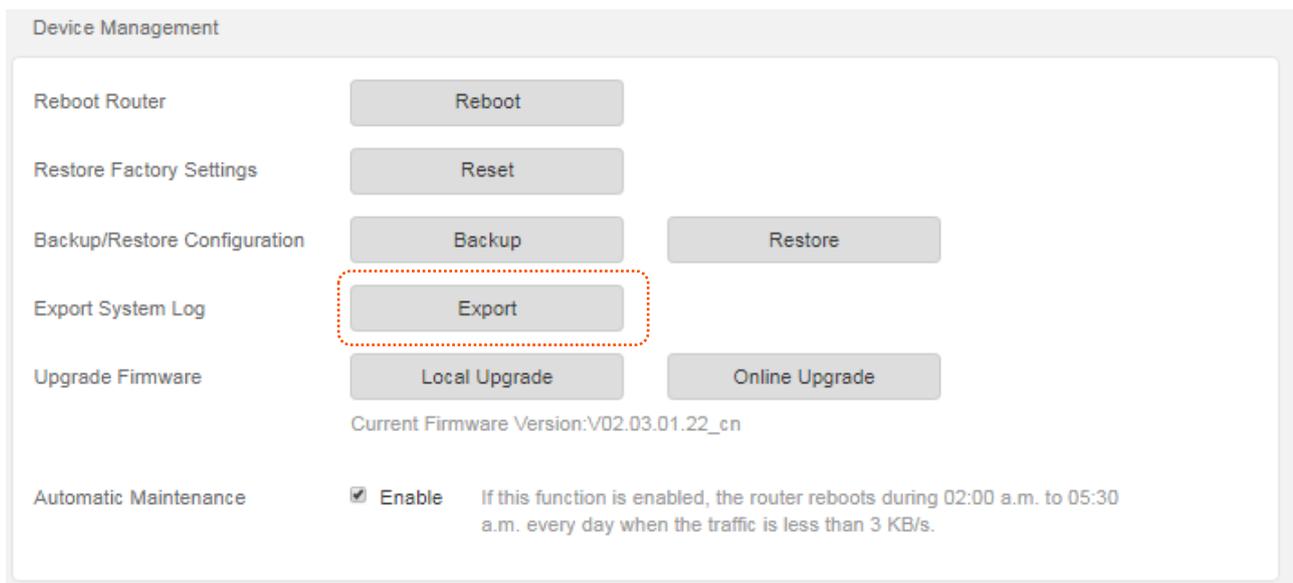
To back up or restore the configuration of your router, choose **Administration**, move to **Device Management** module and perform the backup or restoring procedures.



Export system log

This function logs all key events that occur after the router is started. If you encounter a network fault, the system logs are helpful for rectifying the fault. A maximum of 150 records can be kept by the router.

Choose **Administration**, move to **Device Management** module to access the configuration page.



Click **Export** to save system logs to your local computer.

Upgrade firmware

This function enables the router to obtain the latest functions and more stable performance. The router supports local firmware upgrade and online firmware upgrade.

Local upgrade

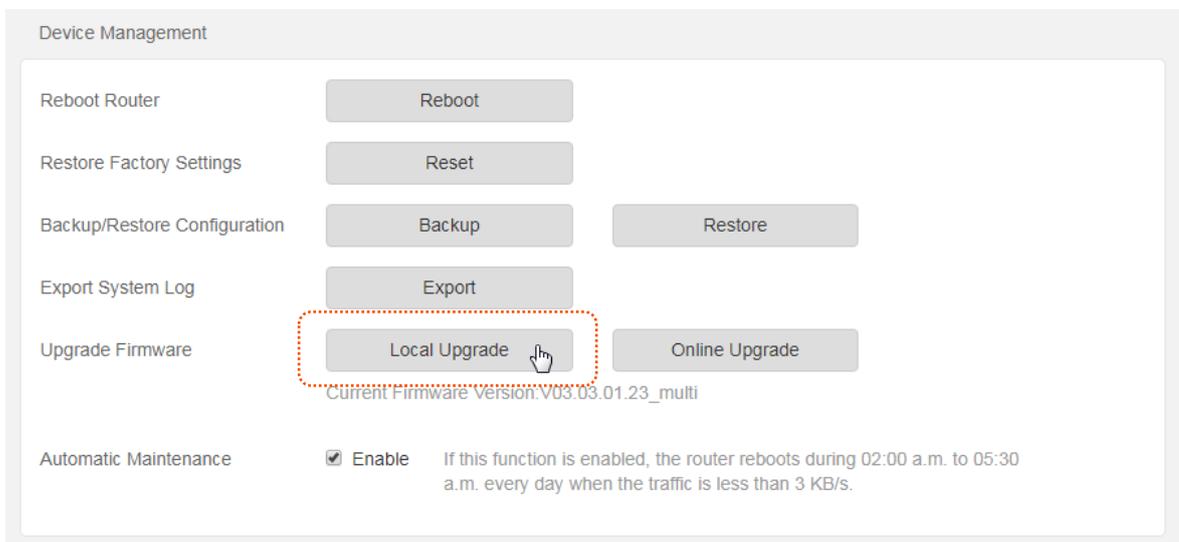


- To enable your router is upgraded successfully, ensure that the firmware used to upgrade the firmware is applicable to the router.
- When you are upgrading a firmware, do not power off the router.

Step 1 Go to www.tendacn.com, download a firmware version of the router to your computer and unzip it.

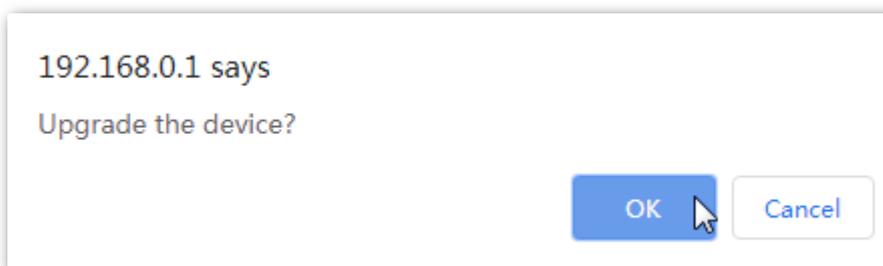
Step 2 Choose **Administration**, move to **Device Management** module to access the configuration page.

Step 3 Click **Local Upgrade**.



Step 4 Select the corresponding firmware version. click **Open**.

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



---End

Wait until the progress bar is complete. Log in to the web UI of the router again. Choose **Status > System Information** and check whether the upgrade is successful based on **Firmware Version**.



For better performance of the new firmware, when the upgrading completes, you are recommended to reset the router to factory default settings and re-configure the router.

Online upgrade

When the router is connected to the internet, system will detect whether there is a new firmware

automatically and displays the detected information on the page. You can choose whether to upgrade the latest firmware. If you want to upgrade the firmware, click **Upgrade** and the router upgrades the firmware automatically.

Configuration procedure:

Step 1 Choose **Administration > Device Management** on the router web UI.

Step 2 Click **Online Upgrade**.

---End

Wait until the progress bar is complete. Log in to the web UI of the router again. Choose **Status > System Information** and check whether the upgrade is successful based on **Firmware Version**.



TIP
For better performance of the new firmware of the router, after the upgrading completes, you are recommended to reset the router to factory default settings and re-configure the router.

Automatic Maintenance

Automatic maintenance enables you to make the router restart regularly. It helps to improve the stability and the service life of the router.

To configure the automatic maintenance function, choose **Administration**, and move to **Device Management**. 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. By default, this function is enabled.

The screenshot shows the 'Device Management' section of a router's web interface. It contains several rows of actions, each with a corresponding button: 'Reboot Router' with a 'Reboot' button; 'Restore Factory Settings' with a 'Reset' button; 'Backup/Restore Configuration' with 'Backup' and 'Restore' buttons; 'Export System Log' with an 'Export' button; and 'Upgrade Firmware' with 'Local Upgrade' and 'Online Upgrade' buttons. Below these is the text 'Current Firmware Version:V03.03.01.23_multi'. At the bottom, the 'Automatic Maintenance' option is highlighted with a red dashed box. It is currently checked and set to 'Enable', with a description: 'If this function is enabled, the router reboots during 02:00 a.m. to 05:30 a.m. every day when the traffic is less than 3 KB/s.'

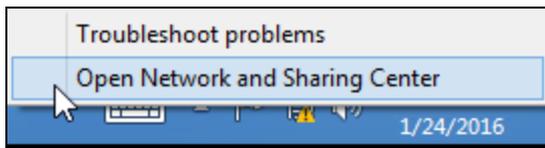
Appendix

A.1 Configuring the computer to obtain an IP address automatically

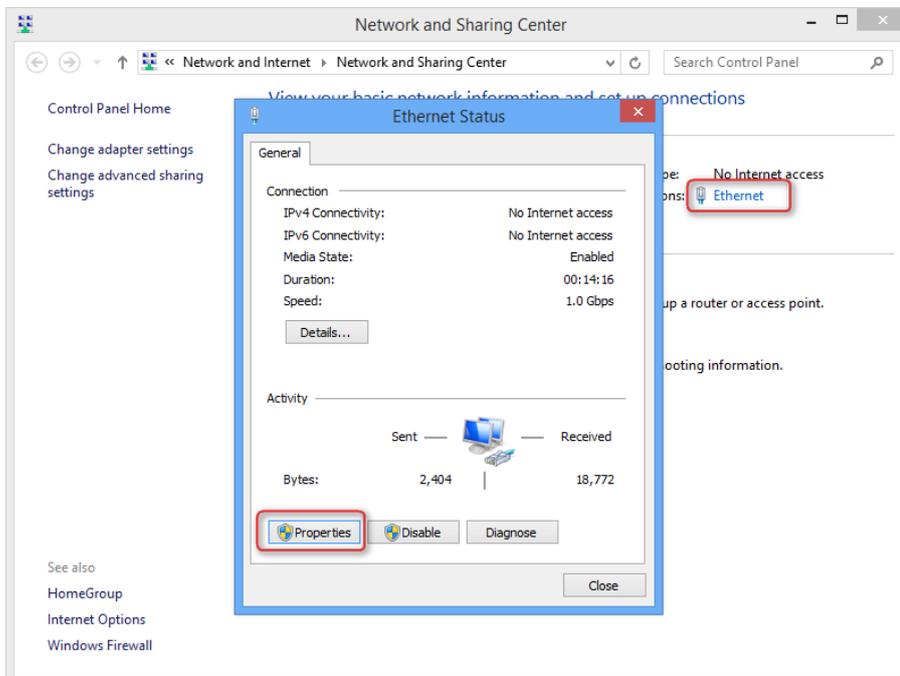
Perform the configuration procedure corresponding to [Windows 8](#), [Windows 7](#), or [Windows XP](#), depending on your OS. A computer installed with a wired network adapter is used as an example to describe the procedures. The procedures for configuring computers installed with a wireless network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

A.1.1 Windows 8

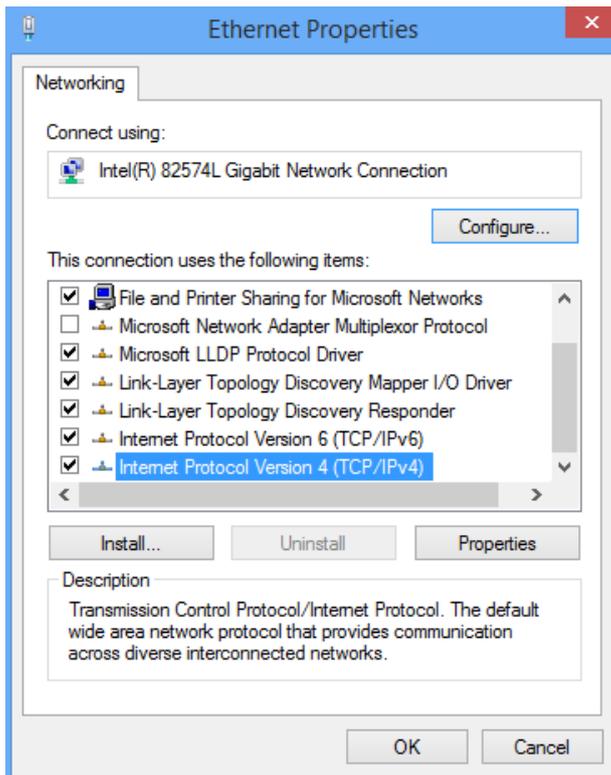
Step 1 Right-click  in the lower-right corner of the desktop and choose **Open Network and Sharing Center**.



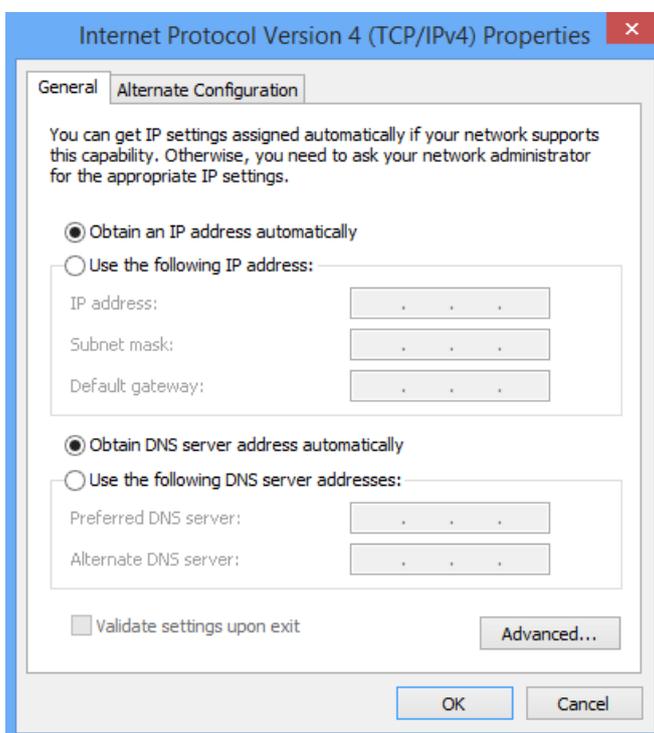
Step 2 Click Ethernet and then Properties.



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**.

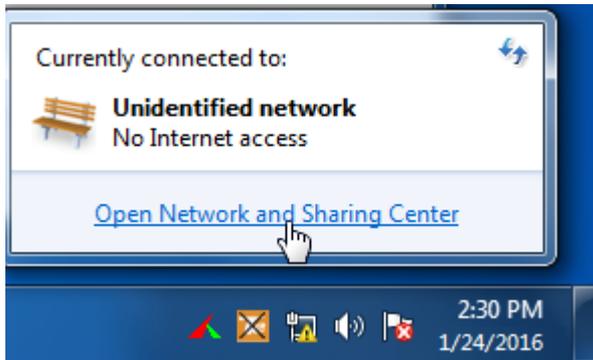


Step 5 Click **OK** in the **Ethernet Properties** window.

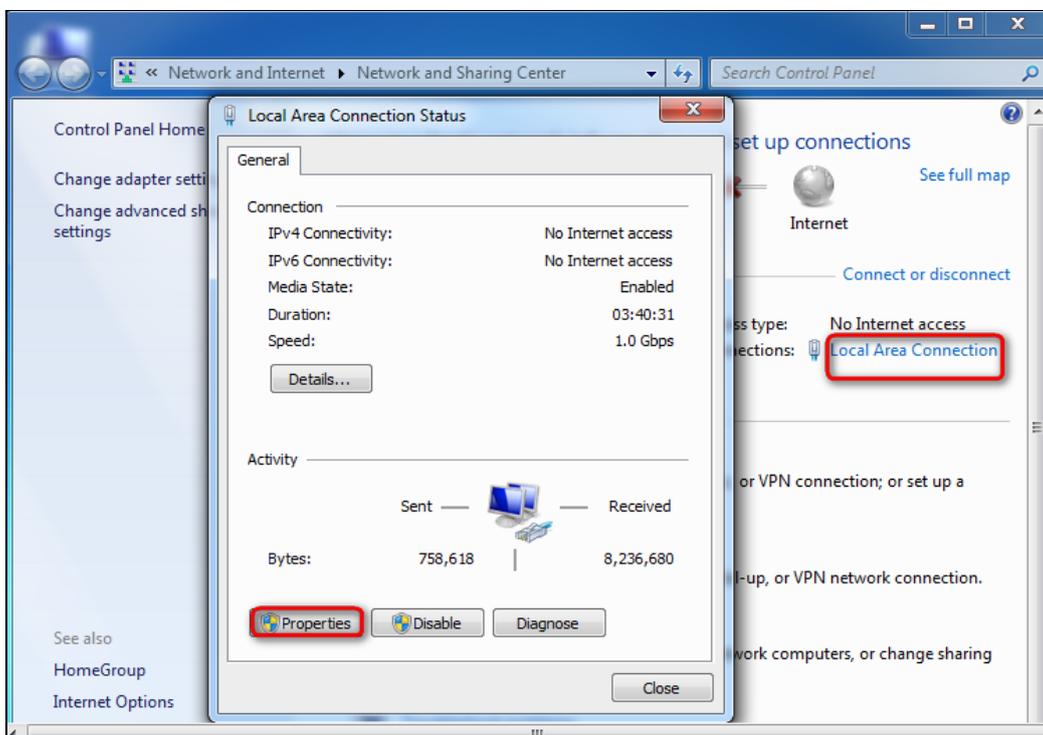
----End

A.1.2 Windows 7

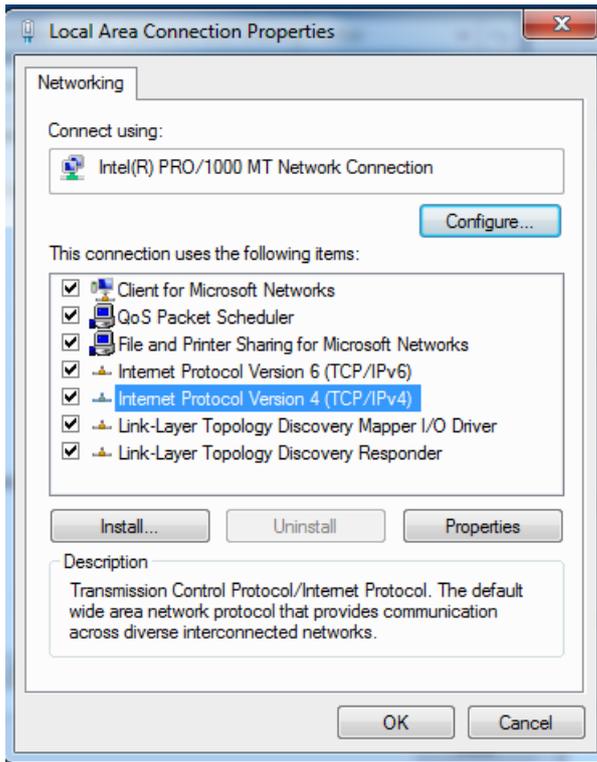
Step 1 Click  in the lower-right corner of the desktop and choose **Open Network and Sharing Center**.



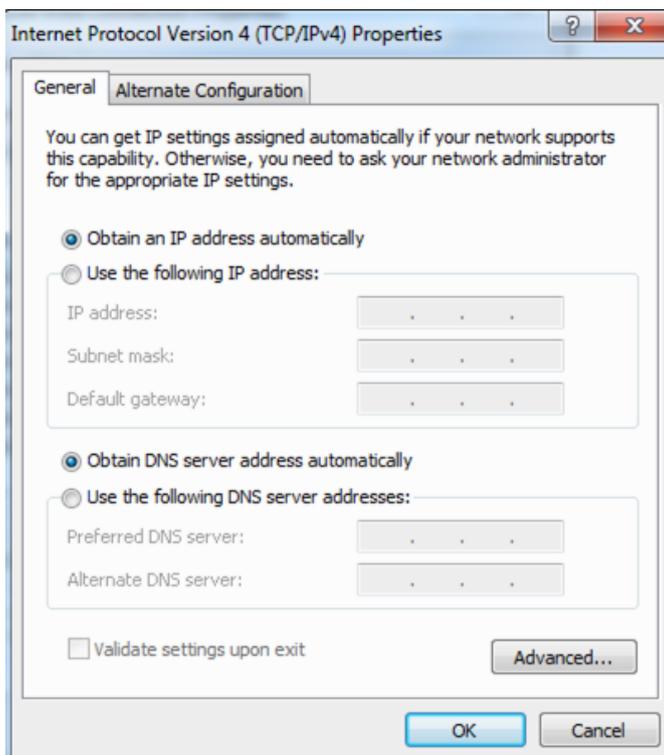
Step 2 Click **Local Area Connection** and then **Properties**.



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.

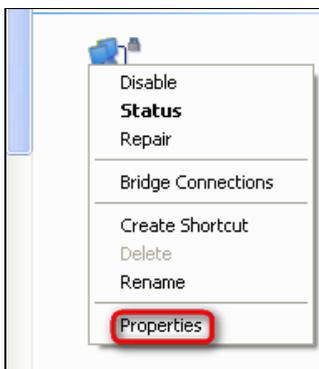
----End

A.1.3 Windows XP

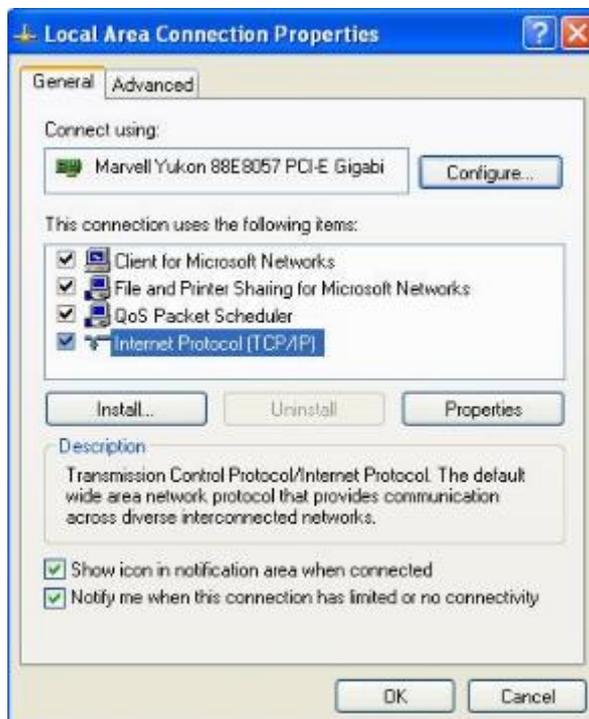
Step 1 Right-click **My Network Places** on the desktop and choose **Properties**.



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.2 Default parameters

| Parameter | | F6 | N301 |
|-------------------|----------------------|---|------|
| LAN Parameters | IP Address | 192.168.0.1 | |
| | Subnet Mask | 255.255.255.0 | |
| DHCP Server | DHCP Server | Enabled | |
| | Start IP Address | 192.168.0.100 | |
| | End IP Address | 192.168.0.200 | |
| | Preferred DNS Server | 192.168.0.1 | |
| Operating Mode | | Router mode | |
| Wireless Settings | WiFi Name | Tenda_XXXXXX. XXXXXX indicates the last 6 characters of the MAC address of the router. | |
| | WiFi Password | None | |
| | WiFi Schedule | Disabled | |