



# Archer C5400

## User Guide

AC5400 Wireless Tri-band MU-MIMO Gigabit Router

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# About This Guide

This guide provides details of each function and shows how to configure the router appropriate to your needs. In addition to this guide, a Quick Installation Guide is also released with each TP-LINK router, you are suggested to configure your router for quick Internet setup by following the published Quick Installation Guide before you get started with a further configuration.

## Conventions

In this guide the following conventions are used:

| Convention                                                                                       | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| router                                                                                           | Stands for AC5400 Wireless Tri-Band MU-MIMO Gigabit Router without any explanation.                                                                                                                                                                                                                                                                                                                                                                             |
| parameters                                                                                       | Parameters provided in the screenshots are just references for setting up the device, which may differ from the actual situation. You can set the parameters according to your demand.                                                                                                                                                                                                                                                                          |
| screenshots                                                                                      | The demonstrated screenshots may look a little different from the actual web page of your device due to the various firmware versions. Please just configure your product based on the actual web page.                                                                                                                                                                                                                                                         |
| <i>Blue Italic</i>                                                                               | Hyperlinks are in blue italic. You can click to redirect to a website or a specific section.                                                                                                                                                                                                                                                                                                                                                                    |
| Blue                                                                                             | Contents to be emphasized and texts on the web page are in blue, including the menus, items, buttons, etc.                                                                                                                                                                                                                                                                                                                                                      |
| >                                                                                                | The menu structures to show the path to load the corresponding page. For example, <a href="#">Advanced</a> > <a href="#">Wireless</a> > <a href="#">MAC Filtering</a> means the MAC Filtering function page is under the Wireless menu that is located in the Advanced tab.                                                                                                                                                                                     |
|  <b>Note:</b> | Ignoring this type of note might result in a malfunction or damage to the device.                                                                                                                                                                                                                                                                                                                                                                               |
|  <b>Tips:</b> | Indicates important information that helps you make better use of your device.                                                                                                                                                                                                                                                                                                                                                                                  |
| symbols on the web page                                                                          | <ul style="list-style-type: none"><li> click to edit the corresponding entry.</li><li> click to delete the corresponding entry.</li><li> click to enable or disable the corresponding entry.</li></ul> |

## Chapter 1

---

# Get to Know About Your Router

---

This chapter introduces what the router can do and shows its main features and appearance.

This chapter contains the following sections:

- [\*Product Overview\*](#)
- [\*Main Features\*](#)
- [\*Panel Layout\*](#)

## 1.1. Product Overview

### What This Product Does

TP-LINK's Archer C5400 integrates 4-port Switch, Firewall, NAT-router and Wireless AP. Powered by Multi-User MIMO technology, the Archer C5400 delivers exceptional range and speed, which can fully meet the need of Small Office/Home Office (SOHO) networks and the users demanding higher networking performance. Your wireless connections are radio band selectable to avoid interference in your area, and the four built-in Gigabit ports supply high-speed connection to your wired devices.

### 802.11ac - The Next Generation of Wi-Fi

TP-LINK's Archer C5400 comes with the next generation Wi-Fi standard – 802.11ac, backward compatible with 802.11n and 3 times faster than wireless N speeds. With higher power efficiency and robust security, 802.11ac is the perfect way to accelerate a home multimedia network and solve congestion that multiple devices may cause.

### 3166Mbps Concurrent Trinal Band - More Bandwidth, Less Interference

With 2166Mbps wireless speeds over the crystal clear 5GHz band and 1000Mbps over the 2.4GHz band, Archer C5400 offers you the flexibility of three dedicated networks and ensures amazing wireless performance. Simple tasks such as sending e-mails or web browsing can be handled by the 2.4GHz band while bandwidth intensive tasks like online gaming or HD video streaming can be processed by the 5GHz band – all at the same time.

### Multifunctional USB Port – Easy Storage and Sharing

Using the Archer C5400's multi-functional USB 3.0 port, you can share a printer with multiple computers and devices on your network and can also share files & media at home or via the FTP server while away from home.

### Guest Network

Guest Network Access provides secure Wi-Fi access for guests sharing your home or office network in a controlled manner without exposing private Wi-Fi access codes or other personal data.

### IPv6 Supported

Archer C5400 supports IPv6, which is the foundation of the next generation of the Internet and enables a range of new services and improved user experience.

### Parental Control

Parental Controls allow parents or administrators to deploy restricted access for children or staff. With URL blocking, you can easily set up a black or white list to limit the level of web access.

## Tether APP

TP-LINK Tether provides the easiest way to access and manage your router with your wireless devices.

### 1.2. Main Features

- Supports 802.11ac Multi-User MIMO
- Supports 802.11ac - The next generation of Wi-Fi, compatible with 802.11n
- Simultaneous 2.4GHz 1000Mbps and 5GHz 2166Mbps connections for 3166Mbps of total available bandwidth
- 8 dual band fixed external antennas and high power amplifiers provide stable signals and optimal wireless coverage
- Provides WPA/WPA2, WPA-PSK/WPA2-PSK authentication, TKIP/AES encryption security
- Supporting Dynamic IP/Static IP/PPPoE/PPTP/L2TP Internet access
- Supports USB Storage Sharing, Print Server, FTP Server, Media Server. Shares a printer locally and files & media with networked devices or remotely via FTP server
- Built-in NAT and DHCP server supporting static IP address distributing
- Guest Network access provides secure Wi-Fi access for guests sharing your home or office network
- Parental Controls allow parents or administrators to establish restricted access policies for children or staff
- Quality of Service (QoS) makes it easier for you to manage the bandwidth of devices connected to the router
- Supports IP/MAC filter and URL filter, Access Control list
- SPI and NAT firewall protects end-user devices from potential attacks from the Internet
- Easy one-touch WPA wireless security encryption with the WPS button
- Wi-Fi On/Off Button allows users to turn their wireless radio on or off
- Supports firmware upgrade and Web management
- Supports Virtual Server, DMZ host and Port Triggering
- Supports Dynamic DNS, UPnP and Static Routing
- Provides Automatic-connection and Scheduled Connection on certain time to the Internet
- Supports system log and Traffic Statistics
- Supports IPv6

## 1.3. Panel Layout

### 1.3.1. Top View



The router's LEDs (view from top to bottom) are located on the front. You can check the router's working status by following the LED Explanation table.

#### LED Explanation

| Name                                                                                                   | Status   | Indication                                                                                          |
|--------------------------------------------------------------------------------------------------------|----------|-----------------------------------------------------------------------------------------------------|
|  (Power)            | On       | System initialization completes.                                                                    |
|                                                                                                        | Flashing | System initialization or firmware upgrade is in process. Do not disconnect or power off the router. |
|                                                                                                        | Off      | Power is off.                                                                                       |
|  (2.4GHz Wireless)  | On       | The 2.4GHz wireless band is working properly.                                                       |
|                                                                                                        | Off      | The 2.4 GHz wireless band is disabled.                                                              |
|  ( 5GHz-1 Wireless) | On       | The 5GHz-1 wireless band is working properly.                                                       |
|                                                                                                        | Off      | The 5GHz-1 wireless band is disabled.                                                               |
|  ( 5GHz-2 Wireless) | On       | The 5GHz-2 wireless band is working properly.                                                       |
|                                                                                                        | Off      | The 5GHz-1 wireless band is disabled.                                                               |
|  (Ethernet)         | On       | At least one Ethernet port is connected.                                                            |
|                                                                                                        | Off      | No Ethernet port is connected.                                                                      |

## LED Explanation

| Name                                                                                         | Status    | Indication                                                                                                            |
|----------------------------------------------------------------------------------------------|-----------|-----------------------------------------------------------------------------------------------------------------------|
|  (Internet) | Orange On | The physical connection is ok, but the Internet is still not available.                                               |
|                                                                                              | Blue On   | Internet is available.                                                                                                |
|                                                                                              | Off       | No Internet connection.                                                                                               |
|  (WPS)      | On/Off    | Turns On when a WPS synchronization is established and automatically turns Off about five minutes later.              |
|                                                                                              | Flashing  | A wireless device is trying to connect to the network via WPS. This process may take up to 2 minutes.                 |
|  (USB)      | On        | The USB device is identified and ready to use.                                                                        |
|                                                                                              | Flashing  | The USB device is being identified.                                                                                   |
|                                                                                              | Off       | No USB device is plugged into the USB port or the USB device is not identified or USB device has been safely ejected. |

The following buttons (view from left to right) are also located on the front panel.

## Button Description

| Buttons                                                                                            | Description                                                                                                                                                                                                                                                                     |
|----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  (Wi-Fi Button) | Press this Wi-Fi button for about 1 second to turn on or off the wireless function of your router.                                                                                                                                                                              |
|  (WPS Button)   | Press this WPS button, and immediately press the WPS button on your client device. The WPS LED  of the router should change from flashing to solid on, indicating successful WPS connection. |
|  (LED Button)   | Press the LED button for about 2 seconds to turn on or off the LEDs of your router.                                                                                                                                                                                             |

### 1.3.2. The Back Panel



The following parts (view from left to right) are located on the rear panel.

| Item                     | Description                                                                          |
|--------------------------|--------------------------------------------------------------------------------------|
| Reset Button             | Press this button for about 7 seconds to reset the router.                           |
| USB 2.0 Port             | Connect your USB 2.0 storage device or USB 2.0 printer to this port.                 |
| Internet Port            | This port is where you'll connect to the DSL/Cable modem, or Ethernet.               |
| Ethernet Ports (1/2/3/4) | Connect your Ethernet devices, like PCs, to these ports.                             |
| USB 3.0 Port             | Connect your USB 3.0 storage device or USB 3.0 printer to this port.                 |
| Power On/Off Button      | Press this button to power on or off the router.                                     |
| Power Port               | This port is where you will connect the power socket via the provided power adapter. |

## Chapter 2

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# Connect the Hardware

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This chapter contains the following sections:

- *Position Your Router*
- *Connect Your Router*

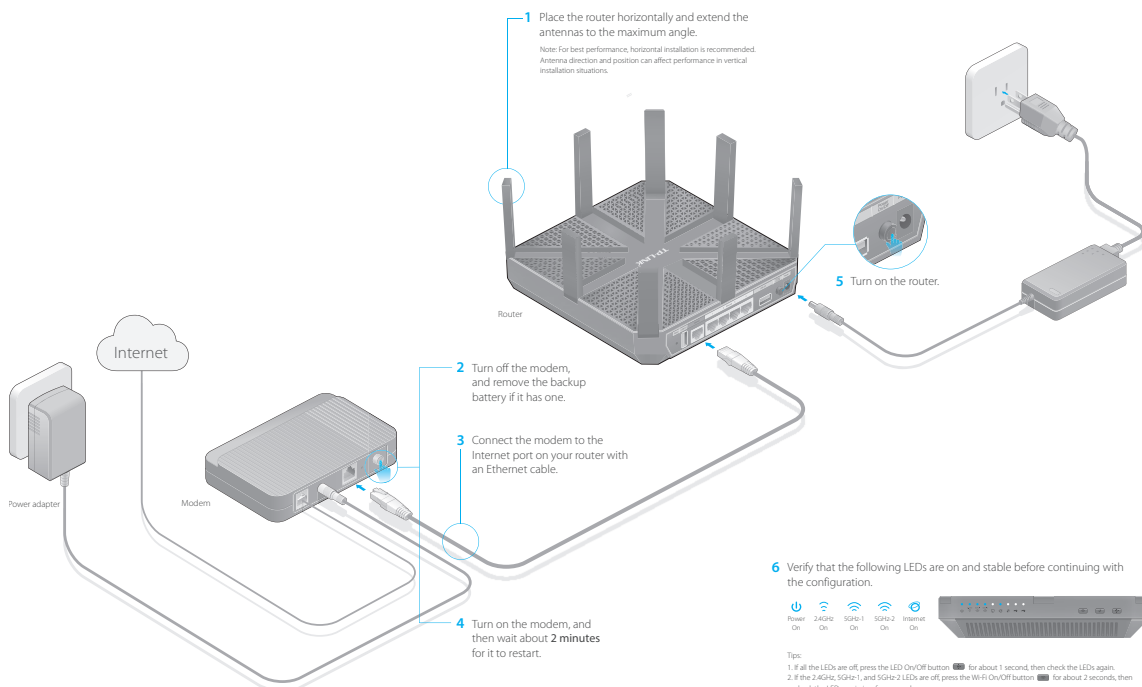
## 2.1. Position Your Router

- The Product should not be located where it will be exposed to moisture or excessive heat.
- Place the router in a location where it can be connected to the various devices as well as to a power source.
- Make sure the cables and power cord are safely placed out of the way so they do not create a tripping hazard.
- The router can be placed on a shelf or desktop.
- Keep away from the strong electromagnetic radiation and the device of electromagnetic sensitive.

## 2.2. Connect Your Router

1. Follow the steps below to connect your router.

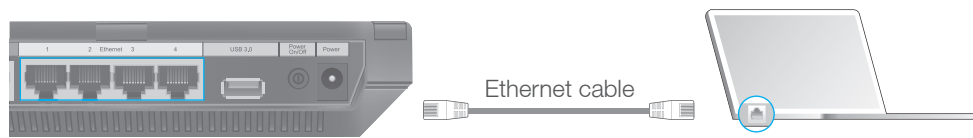
If your Internet connection is through an Ethernet cable from the wall instead of through a DSL / Cable / Satellite modem, connect the Ethernet cable directly to the router's Internet port, then follow steps 5 and 6 to complete the hardware connection.



2. Connect your computer to the router.

### • Method 1: Wired

Turn off the Wi-Fi on your computer and connect the devices as shown below.



- **Method 2: Wirelessly**

Connect wirelessly by using the SSID (Network Name) and Wireless Password/PIN printed on the product label at the bottom of the router.

- **Method 3: Use the WPS button**

Wireless devices that support WPS, including Android phones, tablets, most USB network cards, can be connected to your router through this method. (WPS is not supported by IOS devices.)

**Note:**

The WPS function cannot be configured if the wireless function of the router is disabled. Also, the WPS function will be disabled if your wireless encryption is WEP. Please make sure the wireless function is enabled and is configured with the appropriate encryption before configuring the WPS.

1. Tap the WPS icon on the device's screen.
2. Immediately press the WPS button on your router.



## Chapter 3

---

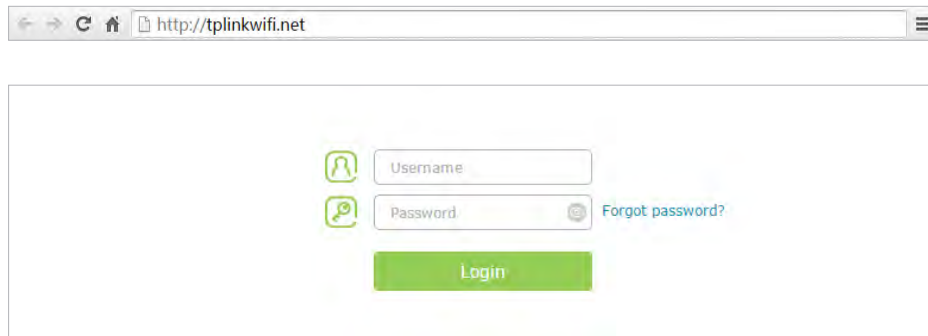
# Log into Your Router

---

With a Web-based utility, it is easy to configure and manage the router. The Web-based utility can be used on any Windows, Macintosh or UNIX OS with a Web browser, such as Microsoft Internet Explorer, Mozilla Firefox or Apple Safari.

Follow the steps below to log into your router.

1. Set up the TCP/IP Protocol in [Obtain an IP address automatically](#) mode on your computer.
2. Visit <http://tplinkwifi.net>, and log in with the username and password you've set for the router. The default one is [admin](#) for both username and password.



**Note:**

If the login window does not appear, please refer to [FAQ](#).

## Chapter 4

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# Set Up Internet Connections

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This chapter introduces how to connect your router to the Internet. The router is equipped with a web-based Quick Setup wizard. It has many ISP information built in, automates many of the steps and verifies that those steps have been successfully completed. Furthermore, you can also set up an IPv6 connection if your ISP provided IPv6 service.

This chapter contains the following sections:

- [\*Quick Setup\*](#)
- [\*Manually Configure Your Internet Connection Settings\*](#)
- [\*Setting Up an IPv6 Internet Connection\*](#)

## 4.1. Quick Setup

The Quick Setup Wizard will guide you through the process to set up your router to access the Internet.

**Tips:**

If you need the IPv6 Internet connection, please refer to the section of [4.3. Setting Up an IPv6 Internet Connection](#).

Follow the steps below to set up your router to access the Internet.

1. Visit <http://tplinkwifi.net>, and log in with the username and password you've set for the router.
2. Click [Quick Setup](#) on the top of the page.
3. Select your Region and Time Zone from the drop-down list and click [Next](#).

The screenshot shows the 'Region and Time Zone' step of the Quick Setup Wizard. At the top, a progress bar indicates the sequence: Internet Connection Type, Wireless Settings, Test Internet Connection, and Summary. The current step, 'Region and Time Zone', is highlighted with a green dot. Below the progress bar, there are two dropdown menus: 'Region:' and 'Time Zone:'. Both dropdowns currently display '-Please Select-'. At the bottom right, there are two buttons: a green 'Exit' button and a grey 'Next' button.

**Note:**

Per FCC regulations, all Wi-Fi products marketed in the U.S. are fixed to the U.S. region.

This screenshot shows the 'Region and Time Zone' step with selections made. The 'Region:' dropdown now shows 'United States' and the 'Time Zone:' dropdown shows '(GMT-08:00) Pacific Time'. The 'Exit' and 'Next' buttons remain at the bottom right.

4. Click [Auto Detect](#) and the router will detect your connection type automatically.

**Note:**

You can also choose the connection type manually. Contact your ISP if you are not sure about the Internet connection information.

- If you use DSL line and you are only provided an account name and a password by your ISP, choose PPPoE.
- If you use cable TV or fiber cable, choose Dynamic IP.
- If you are provided more information such as IP address, Subnet Mask and Default Gateway, choose Static IP.

Internet Connection Type      Wireless Settings      Test Internet Connection

Region and Time Zone      Summary

Auto Detect 4%

☒ Dynamic IP

☐ Static IP

☐ PPPoE

☐ L2TP

☐ PPTP

Back Next

5. In this case, the router automatically detects Dynamic IP as the connection type. Click [Next](#).

Internet Connection Type      Wireless Settings      Test Internet Connection

Region and Time Zone      Summary

Auto Detect Dynamic IP

☒ Dynamic IP

☐ Static IP

☐ PPPoE

☐ L2TP

☐ PPTP

Back Next

6. Follow the instructions on the page to decide whether to clone MAC Address. Click [Next](#).

Internet Connection Type      Wireless Settings      Test Internet Connection

Region and Time Zone      Summary

If your ISP only allows Internet access to a specific MAC address, you need to clone the MAC address of the primary computer. If you are not sure, select Do NOT clone MAC Address.

☒ Do NOT Clone MAC Address

☐ Clone Current Computer MAC Address

**Note:** If you select Clone MAC Address, you need to clone the original computer's MAC address that is registered with your ISP.

Back Next

7. Configure your wireless settings and click [Next](#).

Internet Connection Type      Wireless Settings      Test Internet Connection

Region and Time Zone      Summary

2.4GHz Wireless: ☒ Enable Wireless Radio

Network Name (SSID): TP-LINK\_E4B8 ☐ Hide SSID

Password: 56501254

5GHz-1 Wireless: ☒ Enable Wireless Radio

Network Name (SSID): TP-LINK\_E4B8\_5G\_1 ☐ Hide SSID

Password: 56501254

5GHz-2 Wireless: ☒ Enable Wireless Radio

Network Name (SSID): TP-LINK\_E4B8\_5G\_2 ☐ Hide SSID

Password: 56501254

**Note:** The 5GHz network is unavailable due to restrictions in your region/country.

Back Next

**Note:**

1. You may customize your 2.4GHz/5GHz-1/5GHz-2 SSID and password. Once done, the wireless connection will disconnect automatically, and you must then use the new SSID/password to regain access to the Internet.
2. Tick [Hide SSID](#) if you want to hide this wireless network name.

8. Confirm the information and click [Save](#).

Internet Connection Type      Wireless Settings      Test Internet Connection

Region and Time Zone      Summary

Region: China

Time Zone: (GMT+08:00) Beijing, Hong Kong, Perth, Singapore

Internet Connection Type: Dynamic IP

**2.4GHz Wireless**

Network Name (SSID): TP-LINK\_E4B8

Password: 56501254

**5GHz-1 Wireless**

Network Name (SSID): TP-LINK\_E4B8\_5G\_1

Password: 56501254

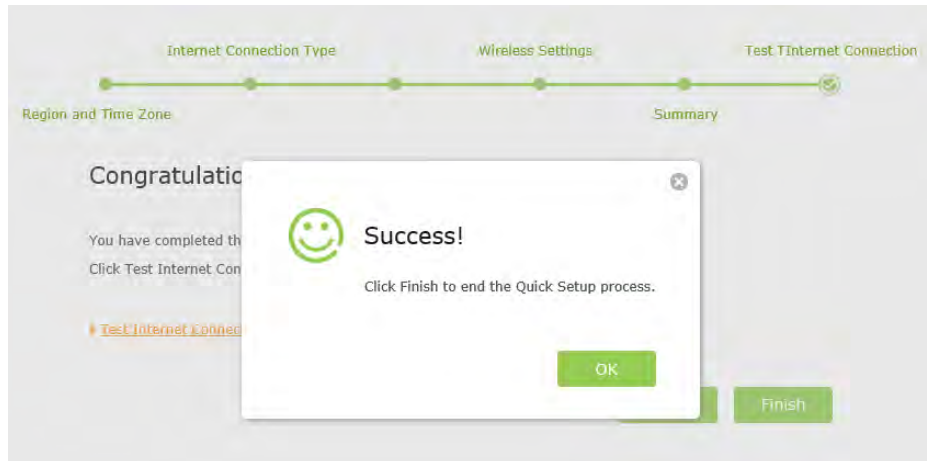
**5GHz-2 Wireless**

Network Name (SSID): TP-LINK\_E4B8\_5G\_2

Password: 56501254

Back Save

9. Click [Test Internet Connection](#). If you successfully connect to the Internet, the screen will display as follows.



10. Now your computer and Wi-Fi devices can connect to the Internet!

**Tips:**

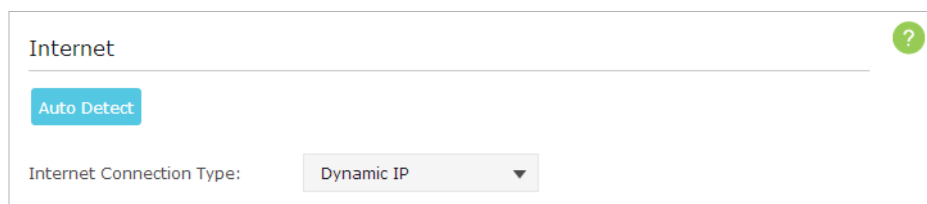
You can connect your computer to the router's Ethernet port using an Ethernet cable to join the local area network. You can also find and select the wireless network name on your Wi-Fi device to join the Wi-Fi network.

## 4.2. Manually Configure Your Internet Connection Settings

In this part, you can check your current Internet connection settings. You can also modify the settings according to the service information provided by your ISP.

Follow the steps below to check or modify your Internet connection settings.

1. Visit <http://tplinkwifi.net>, and log in with the username and password you've set for the router.
2. Go to **Basic > Internet**.
3. Select your Internet connection type from the drop-down list.



**Note:**

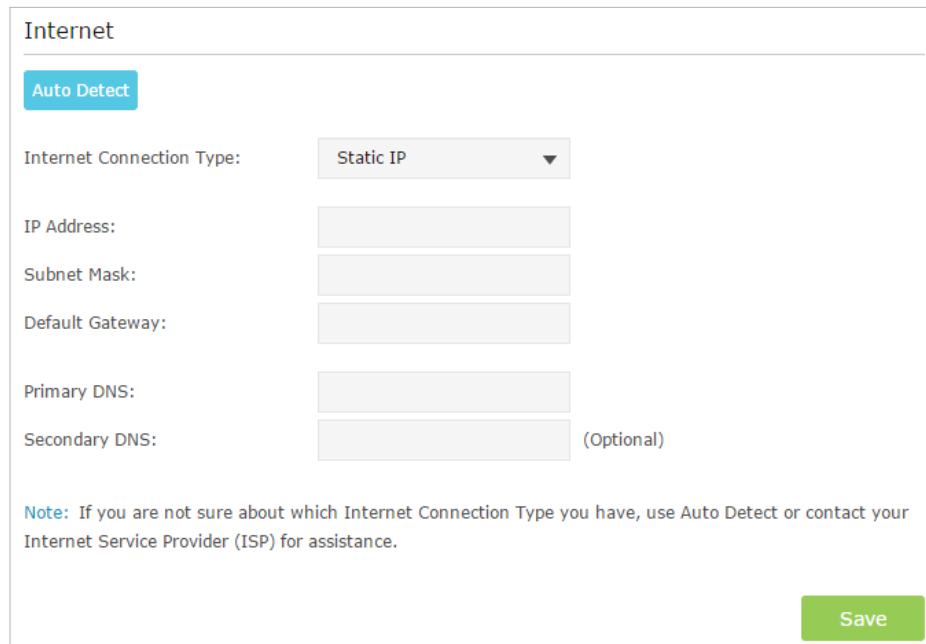
If you are unsure what your connection type is, click **Auto Detect**. Since different connection types need different cables and connection information, you can also refer to the demonstrations in Step 4 to judge your connection type.

4. Follow the instructions on the page to continue the configuration. Parameters on the figures are just used for demonstration.
  - 1) If you choose **Dynamic IP**, you need to select whether to clone the MAC address or not. Dynamic IP users are usually equipped with cable TV or fiber cable.



The screenshot shows the 'Internet' configuration window. At the top is a blue 'Auto Detect' button. Below it, the 'Internet Connection Type:' dropdown menu is set to 'Dynamic IP'. There are two radio button options: 'Do NOT Clone MAC Address' (which is selected) and 'Clone Current Computer MAC Address'. A blue note states: 'Note: If you are not sure about which Internet Connection Type you have, use Auto Detect or contact your Internet Service Provider (ISP) for assistance.' A green 'Save' button is located at the bottom right.

- 2) If you choose **Static IP**, enter the information provided by your ISP in the corresponding fields.



The screenshot shows the 'Internet' configuration window with the 'Internet Connection Type:' dropdown menu set to 'Static IP'. Below this, there are six input fields: 'IP Address:', 'Subnet Mask:', 'Default Gateway:', 'Primary DNS:', and 'Secondary DNS:'. The 'Secondary DNS' field has '(Optional)' written next to it. A blue note at the bottom states: 'Note: If you are not sure about which Internet Connection Type you have, use Auto Detect or contact your Internet Service Provider (ISP) for assistance.' A green 'Save' button is at the bottom right.

- 3) If you choose **PPPoE**, enter the **username** and **password** provided by your ISP. PPPoE users usually have DSL cable.

### Internet

Auto Detect

Internet Connection Type: PPPoE ▼

Username:

Password:

**Note:** If you are not sure about which Internet Connection Type you have, use Auto Detect or contact your Internet Service Provider (ISP) for assistance.

Save

- 4) If you choose **L2TP**, enter the **username** and **password** and choose the **Secondary Connection** provided by your ISP. Different parameters are needed according to the Secondary Connection.

### Internet

Auto Detect

Internet Connection Type: L2TP ▼

Username:

Password:

Secondary Connection: ☒ Dynamic IP ☐ Static IP

VPN Server IP/Domain Name:

**Note:** If you are not sure about which Internet Connection Type you have, use Auto Detect or contact your Internet Service Provider (ISP) for assistance.

Save

- 5) If you choose **PPTP**, enter the **username**, **password** and choose the **Secondary Connection** provided by your ISP. Different parameters are needed according to the Secondary Connection.

### Internet

Auto Detect

Internet Connection Type: PPTP

Username:

Password:

Secondary Connection: ☒ Dynamic IP ☐ Static IP

VPN Server IP/Domain Name:

**Note:** If you are not sure about which Internet Connection Type you have, use Auto Detect or contact your Internet Service Provider (ISP) for assistance.

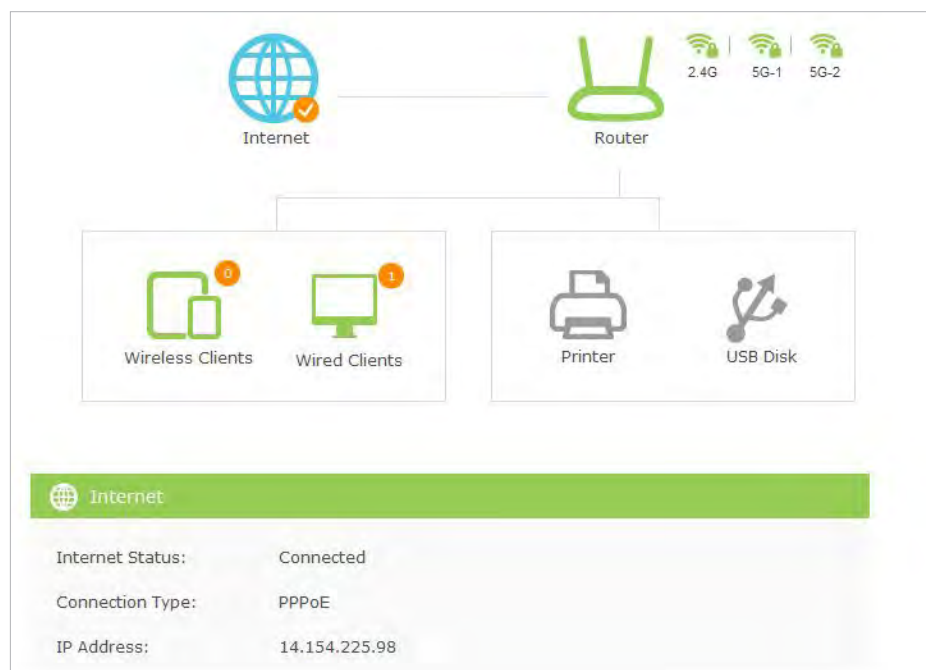
Save

- Click [Save](#) to make the settings take effect. To check your Internet connection, click [Network Map](#) on the left of the page.

**Note:**

It may take 1-2 minutes to make the settings valid.

- After the connection succeed, the screen will display as follows. Here we take PPPoE as an example.



**Tips:**

- If your Internet connection type is [BigPond Cable](#), please go to [Advanced > Network > Internet](#).
- If you use [Dynamic IP](#) and [PPPoE](#) and you are provided any other parameters that are not required on the page, please go to [Advanced > Network > Internet](#) to complete the configuration.
- If you still cannot connect to the Internet, refer to [FAQ](#) for further instructions.

### 4.3. Setting Up an IPv6 Internet Connection

Your ISP provides information about one of the following Internet connection types: PPPoE, Dynamic IP(SLAAC/DHCPv6), Static IP, 6to4 tunnel, Pass-Through (Bridge).

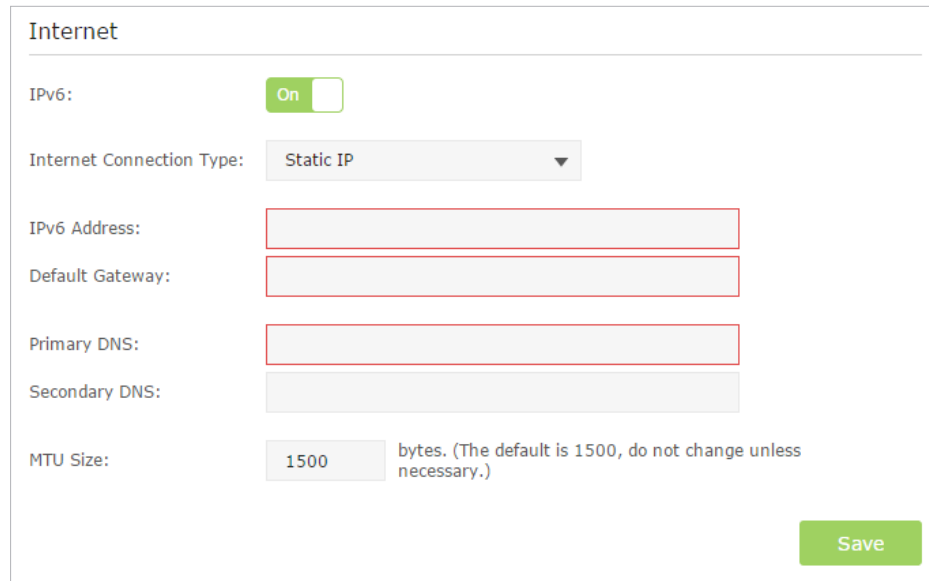
1. Visit <http://tplinkwifi.net>, then log in with the username and password you set for the router.
2. Go to [Advanced](#) > [IPv6](#).

3. Select the Internet connection type provided by ISP.

**Tips:**

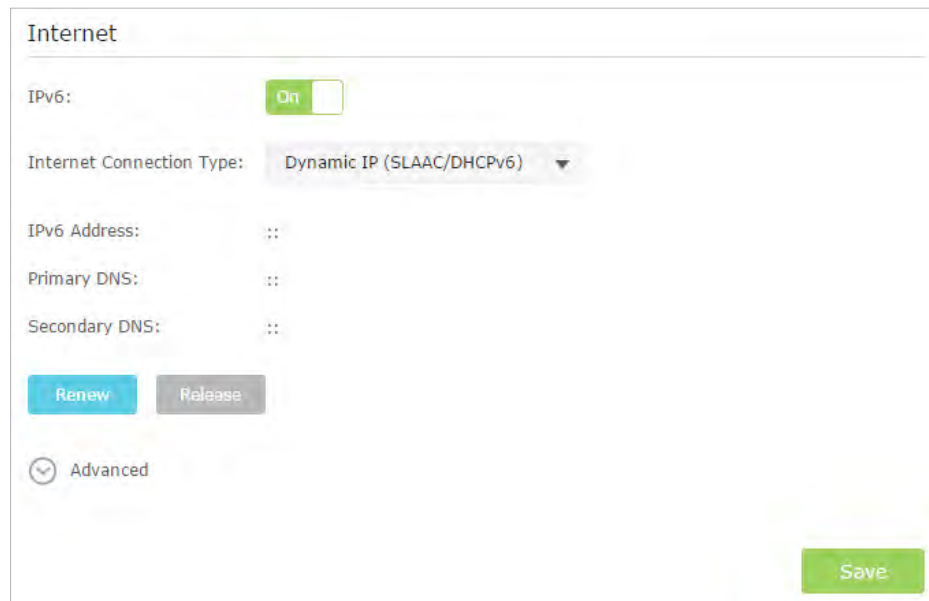
If you do not know what your Internet connection type is, contact your ISP or judge according to already known information provided by your ISP.

4. Fill in information as required by different connection type. (Red blanks must be filled.)
  - 1 ) [Static IP](#): Fill in blanks and click [Save](#).



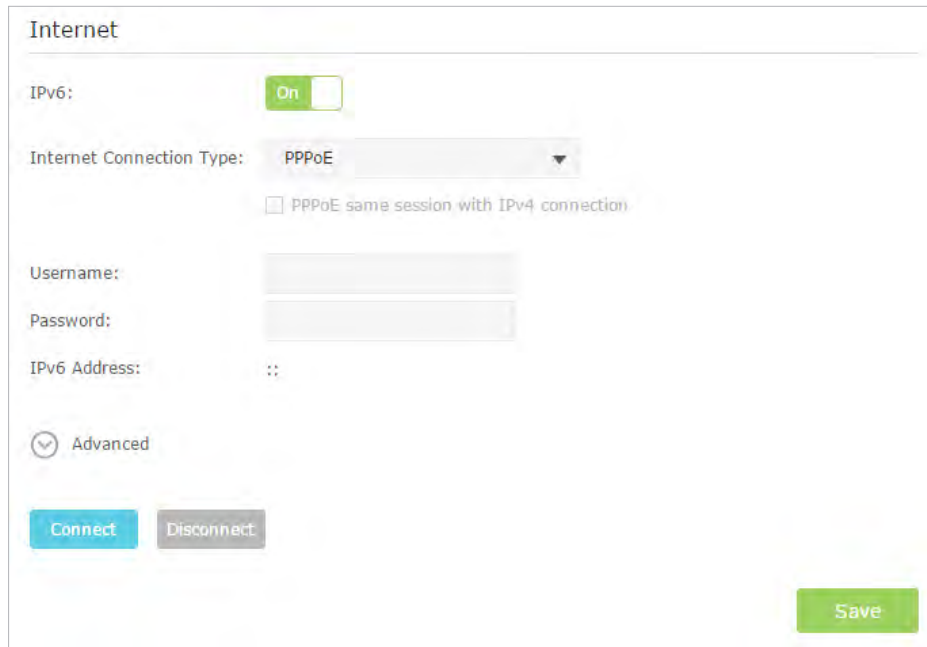
The screenshot shows the 'Internet' configuration window. At the top, the title 'Internet' is displayed. Below it, the 'IPv6' toggle is set to 'On'. The 'Internet Connection Type' is set to 'Static IP'. There are input fields for 'IPv6 Address:', 'Default Gateway:', 'Primary DNS:', and 'Secondary DNS:'. The 'MTU Size' is set to '1500' bytes, with a note: '(The default is 1500, do not change unless necessary.)'. A green 'Save' button is located at the bottom right.

- 2) **Dynamic IP(SLAAC/DHCPv6):** Click [Advanced](#) to have more configuration if ISP requires. Click [Save](#) to save the settings and then click [Renew](#) to finish the configuration.



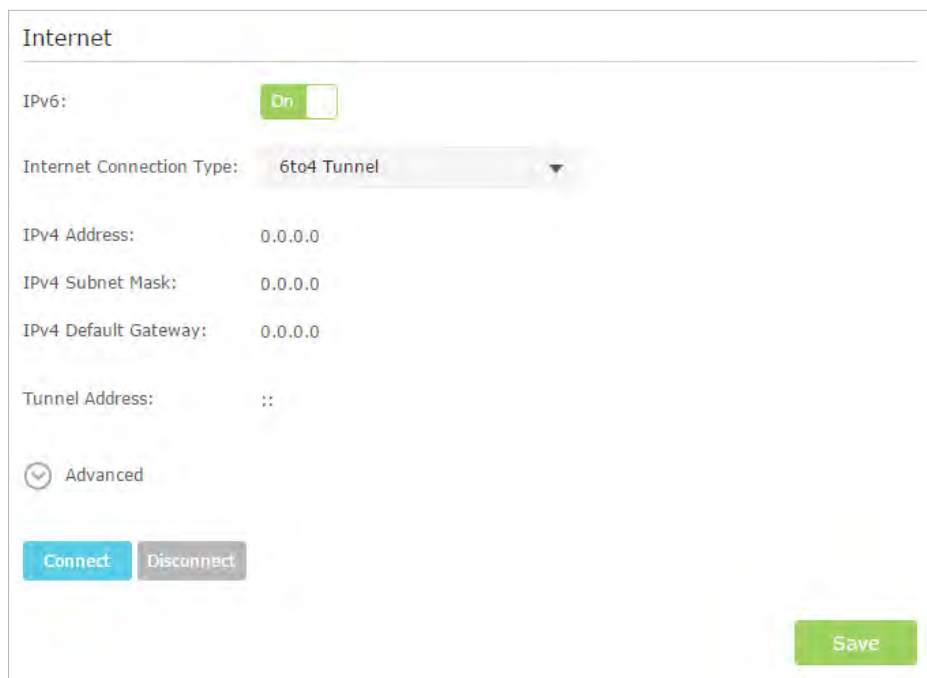
The screenshot shows the 'Internet' configuration window. At the top, the title 'Internet' is displayed. Below it, the 'IPv6' toggle is set to 'On'. The 'Internet Connection Type' is set to 'Dynamic IP (SLAAC/DHCPv6)'. There are input fields for 'IPv6 Address:', 'Primary DNS:', and 'Secondary DNS:', all showing '::'. Below these fields are 'Renew' and 'Release' buttons. At the bottom left, there is a checkbox labeled 'Advanced' which is checked. A green 'Save' button is located at the bottom right.

- 3) **PPPoE:** Fill in the Username and Password. Click [Advanced](#) to have more configuration if ISP requires. Click [Save](#) to save the settings and then click [Connect](#) to finish the configuration.



The screenshot shows the 'Internet' configuration window. At the top, the title 'Internet' is displayed. Below it, the 'IPv6' toggle is set to 'On'. The 'Internet Connection Type' dropdown menu is set to 'PPPoE'. Below this, there is a checkbox labeled 'PPPoE same session with IPv4 connection' which is currently unchecked. There are input fields for 'Username:' and 'Password:'. The 'IPv6 Address' field is set to '::'. Below these fields, there is a section labeled 'Advanced' with a downward arrow icon. At the bottom left, there are two buttons: 'Connect' (in blue) and 'Disconnect' (in grey). At the bottom right, there is a green 'Save' button.

- 4) **6to4 Tunnel:** An IPv4 Internet connection type is a prerequisite for this connection type. (4. 2) Click **Advanced** to have more configuration if ISP requires. Click **Save** to save the settings and then click **Connect** to finish the configuration.



The screenshot shows the 'Internet' configuration window with the 'Internet Connection Type' dropdown menu set to '6to4 Tunnel'. The 'IPv6' toggle remains 'On'. Below the dropdown, there are input fields for 'IPv4 Address:', 'IPv4 Subnet Mask:', and 'IPv4 Default Gateway:', all of which are set to '0.0.0.0'. The 'Tunnel Address' field is set to '::'. The 'Advanced' section is still collapsed. The 'Connect', 'Disconnect', and 'Save' buttons are present at the bottom.

- 5) **Pass-Through (Bridge):** Click **Save** and skip to step 6.

Internet

IPv6: 

On

Internet Connection Type: 

Pass-Through (Bridge)

Save

5. Configure LAN ports. Windows users are recommended to choose from the first two types. Fill in [Address Prefix](#) provided by ISP, and click [Save](#) to save the settings.

**Tips:**  
Find [Help](#) on the management interface to know more about items.

LAN

Assigned Type: 

DHCPv6

SLAAC+ Stateless DHCP

SLAAC+ RDNSS

Address Prefix:  /64

Address: FE80::20A:EBFF:FEAC:881B/64

Save

6. Click [Status](#) to check whether you succeed or not. The following figure is an example of a successful PPPoE configuration.

|                  |                           |
|------------------|---------------------------|
| Internet         | IPv4   IPv6               |
| MAC Address:     | 00-0A-EB-16-E4-B9         |
| IP Address:      | 2001:c68:202:2111::120/64 |
| Subnet Mask:     | 255.255.255.0             |
| Default Gateway: | fe80::edd0:80d2:7f5e:6be7 |
| Primary DNS:     | 2001:c68:202:2111::1      |
| Secondary DNS:   | 2001:c68:202:2111::2      |
| Connection Type: | PPPoE                     |

**Tips:**  
Visit [FAQ](#) if there is no Internet connection.

## Chapter 5

---

# Guest Network

---

This function allows you to provide Wi-Fi access for guests without disclosing your main network. When you have guests in your house, apartment, or workplace, you can create a guest network for them. In addition, you can limit the network authorities for guests to ensure network security and privacy.

This chapter contains the following sections:

- [\*Create Guest Network\*](#)
- [\*Customize Guest Network Options\*](#)

## 5.1. Create Guest Network

1. Visit <http://tplinkwifi.net>, and log in with the username and password you've set for the router.
2. Go to [Advanced](#) > [Guest Network](#).
3. Create a 2.4GHz, 5GHz-1 and/or 5GHz-2 guest network according to your needs.
  - 1) Enable [Guest Network](#) of [2.4GHz Wireless](#), [5GHz-1 Wireless](#) and/or [5GHz-2 Wireless](#).
  - 2) Set an easy-to-identify SSID. Don't select [Hide SSID](#) unless you want your guests and other people to manually input this SSID for Wi-Fi access.
  - 3) Set [Security](#) to [WPA/WPA2 Personal](#), keep the default [Version](#) and [Encryption](#) values, and set an easy-to-remember [Password](#).

**Wireless**

2.4GHz Wireless: ☒ Enable Guest Network

Network Name (SSID):  ☐ Hide SSID

5GHz-1 Wireless: ☒ Enable Guest Network

Network Name (SSID):  ☐ Hide SSID

5GHz-2 Wireless: ☒ Enable Guest Network

Network Name (SSID):  ☐ Hide SSID

Security: ☐ No Security ☒ WPA/WPA2-Personal

Version: ☒ Auto ☐ WPA-PSK ☐ WPA2-PSK

Encryption: ☒ Auto ☐ TKIP ☐ AES

Password:

[Save](#)

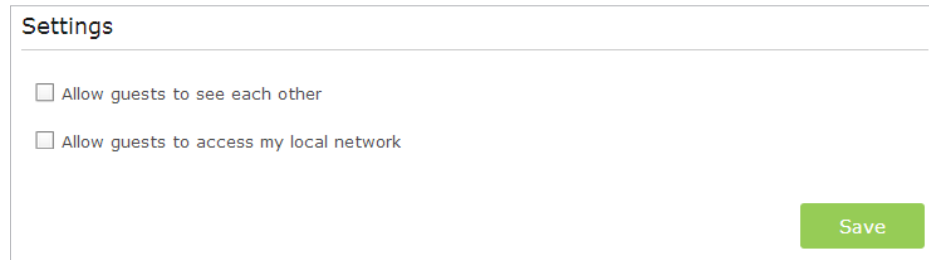
4. Click [Save](#). Now your guests can access your guest network using the SSID and password you've set!

**Tips:**

To view guest network information, go to [Advanced](#) > [Status](#) and find the [Guest Network](#) section.

## 5.2. Customize Guest Network Options

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Advanced](#) > [Guest Network](#).
3. Customize guest network options according to your needs.



Settings

☐ Allow guests to see each other

☐ Allow guests to access my local network

Save

- [Allow guests to see each other](#)

Tick this checkbox to allow the clients in your guest network to access each other.

- [Allow guests to access my local network](#)

Tick this checkbox to allow the clients in your guest network to access your local network, not just Internet access.

4. Click [Save](#). Now users in your guest network can enjoy only the network authorities you've assigned!

 **Tips:**

To view guest network information, go to [Advanced](#) > [Status](#) and find the [Guest Network](#) section.

## Chapter 6

---

# USB Application

---

This chapter describes how to share and access USB devices connected to the router among different clients.

The router only supports USB external flash drives, hard drives, USB printers and USB 3G/4G modems.

This chapter contains the following sections:

- *Local Storage Sharing*
- *Remote Access via FTP Server*
- *Media Sharing*
- *Printer Sharing*
- *3G/4G Networking Sharing*

## 6.1. Local Storage Sharing

Share your USB storage devices with different users on the network.

### 6.1.1. Access the USB Disk

#### 1. Connect Your USB Disk

Insert your USB storage device into the router's USB port directly or using a USB cable. Wait several seconds until the USB LED becomes solid on.

 **Tips:**

- If you use USB hubs, make sure no more than 4 devices are connected to the router.
- If the USB storage device requires using bundled external power, make sure the external power has been connected.
- If you use a USB hard drive, make sure its file system is FAT32 or NTFS.
- Before you physically disconnect a USB device from the router, safely remove it to avoid data damage: Go to [Advanced](#) > [USB Settings](#) > [Device Settings](#) and click  [Safely Remove](#).

#### 2. Access Your USB Disk

By default, all the network clients can access all folders on your USB disk. Refer to the following table for access instructions. You can also customize your sharing content and set a sharing account by referring to [Customize Your Settings](#).

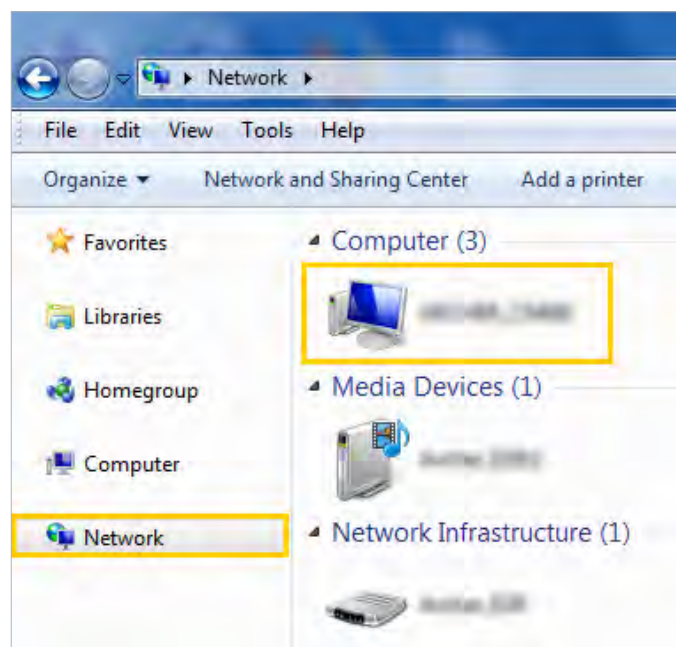
#### Windows computer

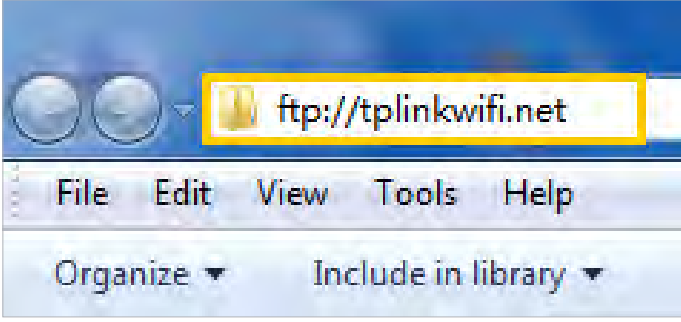
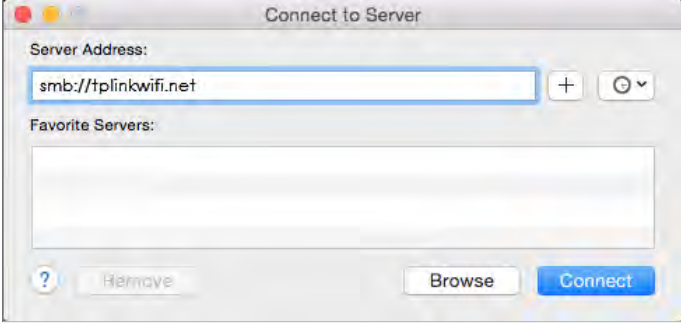
##### ➤ Method 1:

Go to [Computer](#) > [Network](#), then click the Network Server Name (C5400\_share by default) in the [Computer](#) section.

 **Note:**

Operations in different systems are similar. Here we take Windows 7 as an example.



|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Windows computer</b> | <p>➤ <b>Method 2:</b></p> <p>Open the <a href="#">Windows Explorer</a> (or go to <a href="#">Computer</a>) and type the server address <a href="#">\\tplinkwifi.net</a> or <a href="#">ftp://tplinkwifi.net</a> in the address bar, then press [<a href="#">Enter</a>].</p>                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Mac</b>              | <ol style="list-style-type: none"> <li>1) Select <a href="#">Go</a> &gt; <a href="#">Connect to Server</a></li> <li>2) Type the server address <a href="#">smb://tplinkwifi.net</a></li> <li>3) Click <a href="#">Connect</a>.</li> </ol>  <ol style="list-style-type: none"> <li>4) When prompted, select the <a href="#">Guest</a> radio box. (If you have set up a username and a password to deny anonymous access to the USB disks, you should select the <a href="#">Registered User</a> radio box. To learn how to set up an account for the access, refer to <a href="#">To Set up Authentication for Data Security</a>.)</li> </ol> |
| <b>Pad</b>              | <p>Use a third-party app for network files management.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

🔗 **Tips:**

You can also access your USB disk by using your Network/Media Server Name as the server address. Refer to [To Customize the Address of the USB Disk](#) to learn more.

## 6.1.2. Customize Your Settings

### ➤ To Only Share Specific Content

By default, [Share All](#) is enabled so all content on the USB disk is shared. If you want to only share specific folders, follow the steps below:

1. Visit <http://tplinkwifi.net>, then log in with the username and password you've set for the router.
2. Go to [Basic](#) > [USB Settings](#) > [Sharing Access](#). Focus on the [Folder Sharing](#) section.
3. Click the button to disable [Share All](#), then click [Add](#) to add a new sharing folder.

**Folder Sharing**

Share All: ☐ Off Toggle On to share all files and folders or keep it Off to only share the specified folders.

[+ Add](#) [- Delete](#)

| <input type="checkbox"/> | ID | Folder Name | Folder Path | Media Sharing | Volume Name | Status | Modify |
|--------------------------|----|-------------|-------------|---------------|-------------|--------|--------|
| --                       | -- | --          | --          | --            | --          | --     | --     |

Volume Name:

Folder Path:  [Browse](#)

Folder Name:

☒ Allow Guest Network Access

☐ Enable Authentication

☒ Enable Write Access

☒ Enable Media Sharing

[Cancel](#) [OK](#)

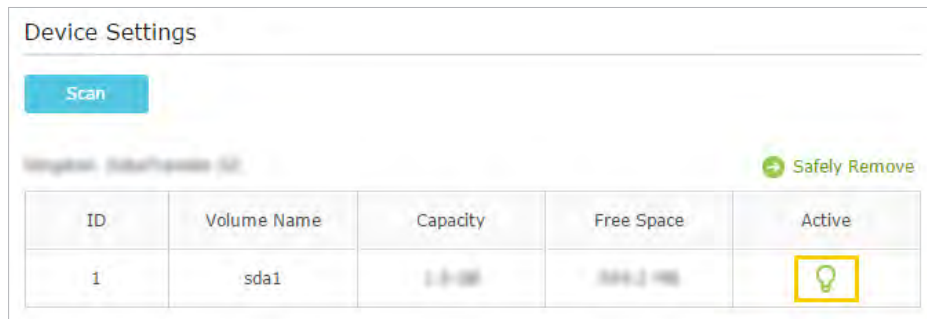
4. Select the [Volume Name](#) and [Folder Path](#), then enter a [Folder Name](#) as you like.
5. Decide the way you share the folder:
  - [Allow Guest Network Access](#): If you tick this check box, guest network users can access this folder.
  - [Enable Authentication](#): If you tick this check box, you will be required to use a username and password to access the folder. Refer to [To Set up Authentication for Data Security](#) to learn more.
  - [Enable Write Access](#): If you tick this check box, network clients can modify the folder.

- **Enable Media Sharing:** If you tick this check box, you can view photos, play music and watch movies in the folder directly from DLNA-supported devices. Refer to [Media Sharing](#) to learn more.

6. Click **OK**.

**Tips:**

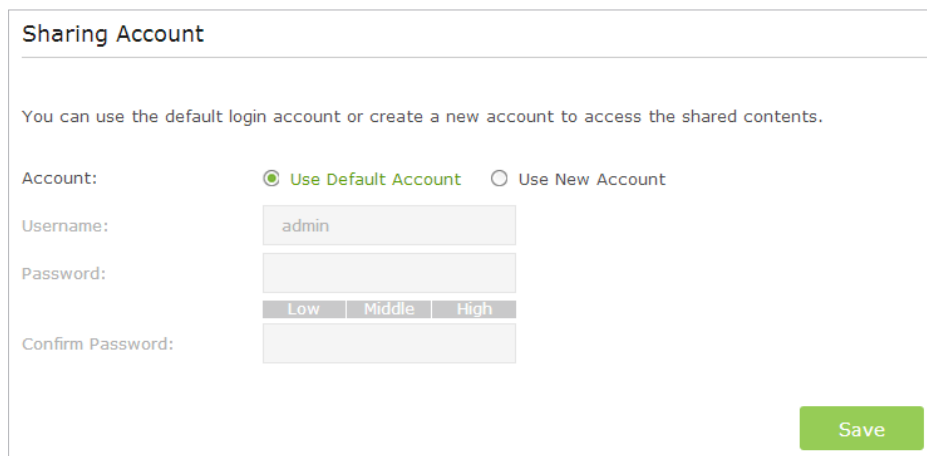
The router can share 32 volumes at most. You can click  on the page to detach the corresponding volume you do not need to share.



### ➤ To Set up Authentication for Data Security

If you enable Authentication, network clients will be required to enter the username and password you set when accessing the USB disk.

1. Visit <http://tplinkwifi.net>, then log in with the username and password you've set for the router.
2. Go to **Advanced > USB Settings > Sharing Access**. Focus on the **Sharing Account** section.



The screenshot shows the 'Sharing Account' configuration page. It includes a heading 'Sharing Account' and a sub-heading 'You can use the default login account or create a new account to access the shared contents.' Below this, there are two radio buttons: 'Use Default Account' (selected) and 'Use New Account'. Under 'Use Default Account', there are fields for 'Username' (containing 'admin') and 'Password' (with a strength indicator showing 'Low', 'Middle', and 'High'). There is also a 'Confirm Password' field. A green 'Save' button is at the bottom right.

3. Choose **Use Default Account** (admin) or **Use New Account** and click **Save**.
4. Enable Authentication to apply the account you just set.
  - If you leave **Share All** enabled, click the button to enable Authentication for all folders.

Folder Sharing

Share All: ☒ On

Toggle On to share all files and folders or keep it Off to only share the specified folders.

Enable Authentication: ☒ On

- If **Share All** is disabled, enable Authentication for specific folders.

Folder Sharing

Share All: ☐ Off

Toggle On to share all files and folders or keep it Off to only share the specified folders.

+ Add - Delete

| <input type="checkbox"/> | ID | Folder Name | Folder Path | Media Sharing | Volume Name | Status | Modify |
|--------------------------|----|-------------|-------------|---------------|-------------|--------|--------|
| <input type="checkbox"/> | -- | --          | --          | --            | --          | --     | --     |

Volume Name:

Folder Path:

Browse

Folder Name:

☐ Allow Guest Network Access

☒ Enable Authentication

☐ Enable Write Access

☐ Enable Media Sharing

Cancel

OK

**Note:**

Due to Windows credential mechanism, you might be unable to access the USB disk after changing Authentication settings. Please log out from Windows and try to access again. For more details, please refer to [FAQ](#).

➤ **To Customize the Address of the USB Disk**

You can customize the server name and use the name to access your USB disk.

1. Visit <http://tplinkwifi.net>, then log in with the username and password you've set for the router.
2. Go to **Advanced > USB Settings > Sharing Access**. Focus on the **Sharing Settings** section
3. Make sure **Network Neighborhood** is ticked, and enter a Network/Media Server Name as you like, such as **My-Share**, then click **Save**.

### Sharing Settings

Network/Media Server Name:

| Enable                              | Access Method        | Link                                  | Port                            |
|-------------------------------------|----------------------|---------------------------------------|---------------------------------|
| <input checked="" type="checkbox"/> | Network Neighborhood | \\My-Share                            | ---                             |
| <input checked="" type="checkbox"/> | FTP                  | ftp://192.168.0.1:21                  | 21                              |
| <input type="checkbox"/>            | FTP (Via Internet)   | ftp://0.0.0.0:21 <a href="#">Edit</a> | <input type="text" value="21"/> |

[Save](#)

- Now you can access the USB disk by visiting [\\MyShare](#) (for Windows) or [smb://MyShare](#) (for Mac).

## 6.2. Remote Access via FTP Server

You can access your USB disk outside the local area network.

For example:

- Share photos and other large files with your friends without logging in to (and paying for) a photo-sharing site or email system.
- Get a safe backup for the materials for a presentation.
- Remove the files on your camera's memory card from time to time during the journey.

### Note:

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

### 6.2.1. Access the USB Disk

#### 1. Connect Your USB Disk

Insert your USB storage device into the router's USB port directly or using a USB cable. Wait several seconds until the USB LED becomes solid on.

#### Tips:

- If you use USB hubs, make sure no more than 4 devices are connected to the router.
- If the USB storage device requires using bundled external power, make sure the external power has been connected.
- If you use a USB hard drive, make sure its file system is FAT32 or NTFS.
- Before you physically disconnect a USB device from the router, safely remove it to avoid data damage: Select [Advanced](#) > [USB Settings](#) > [Device Settings](#) and click [➔ Safely Remove](#).

#### 2. Enable Authentication for Data Security

It is strongly recommended that you set and apply a sharing account for data security.

- 1) Visit <http://tplinkwifi.net>, then log in with the username and password you've set for the router.
- 2) Go to [Advanced](#) > [USB Settings](#) > [Sharing Access](#). Focus on the [Sharing Account](#) section.
- 3) Choose to [Use default Account](#) (admin) or [Use New Account](#) and click [Save](#).

### Sharing Account

You can use the default login account or create a new account to access the shared contents.

Account: ☒ Use Default Account ☐ Use New Account

Username:

Password:

Confirm Password:

- 4) Enable [Authentication](#) to apply the sharing account.
  - If you leave [Share All](#) enabled, click the button to enable [Authentication](#) for all folders.

### Folder Sharing

Share All: ☒ On ☐ Off Toggle On to share all files and folders or keep it Off to only share the specified folders.

Enable Authentication: ☒ On ☐ Off

- If [Share All](#) is disabled, enable [Authentication](#) for specific folders.

Folder Sharing

Share All:

☐ Off

Toggle On to share all files and folders or keep it Off to only share the specified folders.

+ Add

− Delete

| <input type="checkbox"/> | ID | Folder Name | Folder Path | Media Sharing | Volume Name | Status | Modify |
|--------------------------|----|-------------|-------------|---------------|-------------|--------|--------|
| <input type="checkbox"/> | -- | --          | --          | --            | --          | --     | --     |

Volume Name:

Folder Path:

Browse

Folder Name:

☐ Allow Guest Network Access

☒ Enable Authentication

☐ Enable Write Access

☐ Enable Media Sharing

Cancel

OK

3. Enable the FTP (via Internet)

Select the check box to enable [FTP \(via Internet\)](#), then click [Save](#).

Sharing Settings

Network/Media Server Name:

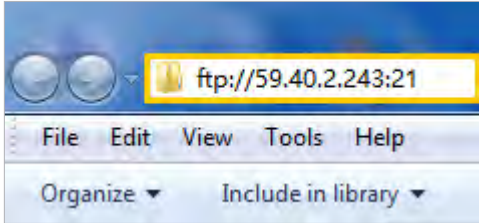
My-Share

| Enable                              | Access Method        | Link                                  | Port |
|-------------------------------------|----------------------|---------------------------------------|------|
| <input checked="" type="checkbox"/> | Network Neighborhood | \\My-Share                            | ---  |
| <input checked="" type="checkbox"/> | FTP                  | ftp://192.168.0.1:21                  | 21   |
| <input checked="" type="checkbox"/> | FTP (Via Internet)   | ftp://0.0.0.0:21 <a href="#">Edit</a> | 21   |

Save

4. Access Your USB Disk via Internet

Now different clients with Internet connection can access the USB disk:

|          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Computer | <ol style="list-style-type: none"> <li>1) Open the <a href="#">Windows Explorer</a> (or go to <a href="#">Computer</a>, only for Windows users) or open a web browser.</li> <li>2) Type the server address in the address bar:<br/>Type in <a href="#">ftp://&lt;WAN IP address of the router&gt;:&lt;port number&gt;</a> (such as <a href="#">ftp://59.40.2.243:21</a>). If you have specified the domain name of the router, you can also type in <a href="#">ftp://&lt;domain name&gt;:&lt;port number&gt;</a> (such as <a href="#">ftp://MyDomainName:21</a>)</li> </ol>  <p>The Address Bar of the Windows Explorer (Windows 7)</p> <ol style="list-style-type: none"> <li>3) Press [<a href="#">Enter</a>] on the keyboard.</li> <li>4) Access with the username and password you've set in <a href="#">Step 2 Enable Authentication for Data Security</a>.</li> </ol> <p><b>Tips:</b><br/>You can also access the USB disk via a third-party app for network files management, which can resume broken file transfers.</p> |
| Pad      | Use a third-party app for network files management.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

**Tips:**

Refer to [Set Up a Dynamic DNS Service Account](#) to learn how to set up a domain name for you router.

## 6.2.2. Customize Your Settings

### ➤ To Only Share Specific Content

By default, [Share All](#) is enabled so all content on the USB disk is shared. If you want to only share specific folders, follow the steps below:

1. Visit <http://tplinkwifi.net>, then log in with the username and password you've set for the router.
2. Go to [Basic](#) > [USB Settings](#) > [Sharing Access](#). Focus on the section of [Folder Sharing](#). Click the button to disable [Share All](#), then click [Add](#) to add a new sharing folder.
3. Select the [Volume Name](#) and [Folder Path](#), then specify the [Folder Name](#) as you like.
4. Tick [Enable Authentication](#). If you allow network clients to modify this folder, Tick [Enable Write Access](#).

Folder Sharing

Share All:

☐ Off

Toggle On to share all files and folders or keep it Off to only share the specified folders.

+ Add

- Delete

| <input type="checkbox"/> | ID | Folder Name | Folder Path | Media Sharing | Volume Name | Status | Modify |
|--------------------------|----|-------------|-------------|---------------|-------------|--------|--------|
| <input type="checkbox"/> | -- | --          | --          | --            | --          | --     | --     |

Volume Name:

Folder Path:

Browse

Folder Name:

☐ Allow Guest Network Access

☒ Enable Authentication

☒ Enable Write Access

☐ Enable Media Sharing

Cancel

OK

5. Click [OK](#).

**Tips:**

The router can share 32 volumes at most. You can click on the page to detach the corresponding volume you do not need to share.

Device Settings

Scan

Safely Remove

| ID | Volume Name | Capacity | Free Space | Active      |
|----|-------------|----------|------------|-------------|
| 1  | sda1        | 1.8 TB   | 1.8 TB     | <div></div> |

### 6.3. Media Sharing

The feature of [Media Sharing](#) allows you to view photos, play music and watch movies stored on the USB disk directly from DLNA-supported devices, such as your computer, pad and PS2/3/4.

#### 6.3.1. Access the USB Disk

##### 1. Connect Your USB Disk

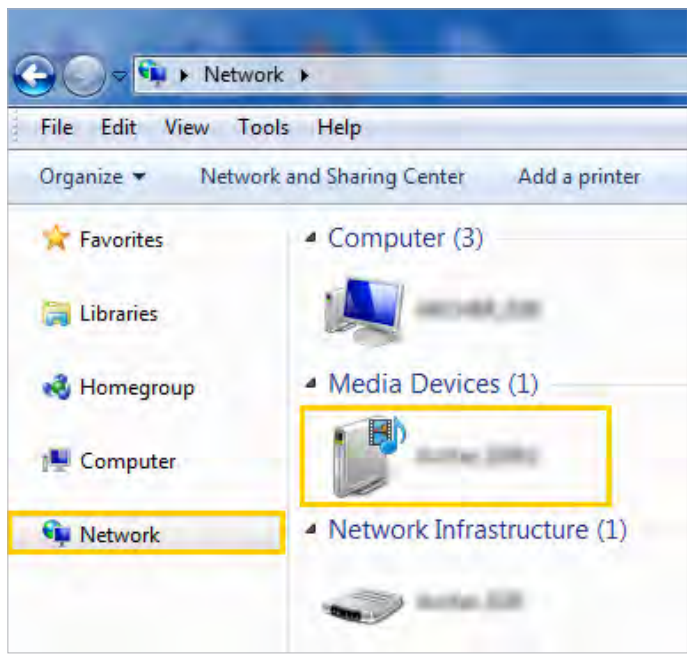
Insert your USB storage device into the router's USB port directly or using a USB cable. Wait several seconds until the USB LED becomes solid on.

**Tips:**

- If you use USB hubs, make sure no more than 4 devices are connected to the router.
- If the USB storage device requires using bundled external power, make sure the external power has been connected.
- If you use a USB hard drive, make sure its file system is FAT32 or NTFS.
- Before you physically disconnect a USB device from the router, safely remove it to avoid data damage: Go to [Advanced](#) > [USB Settings](#) > [Device Settings](#) and click [Safely Remove](#).

## 2. Play the Media on Your USB Disk

Now the DLNA-supported devices (such as your computer and pad) connected to the router can detect and play the media files on the USB disks.

|                                |                                                                                                                                                                                                                                                                                                                                          |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>Windows computer</b></p> | <p>Go to <a href="#">Computer</a> &gt; <a href="#">Network</a>, then click the Media Server Name (<a href="#">C5400_share</a> by default) in the <a href="#">Media Devices</a> section.</p> <p><b>Note:</b><br/>Here we take Windows 7 as an example.</p>                                                                                |
|                                |  <p>The screenshot shows the Windows 7 Network window. The 'Network' link in the left sidebar is highlighted with a yellow box. In the main pane, under the 'Media Devices (1)' section, the 'C5400_share' icon is highlighted with a yellow box.</p> |
| <p><b>Pad</b></p>              | <p>Use a third-party DLNA-supported player.</p>                                                                                                                                                                                                                                                                                          |

### 6.3.2. Customize Your Settings

#### ➤ To Only Share Specific Content

By default, [Share All](#) is enabled so all content on the USB disk is shared. If you want to only share specific folders, follow the steps below:

1. Visit <http://tplinkwifi.net>, then log in with the username and password you've set for the router.
2. Go to **Basic > USB Settings > Sharing Access**. Focus on the **Folder Sharing** section.
3. Click the button to disable **Share All**, then click **Add** to add a new sharing folder.
4. Select the **Volume Name** and **Folder Path**, then enter a **Folder Name** as you like.
5. Tick **Enable Media Sharing** and click **OK**.

### Folder Sharing

Share All: ☐ Off Toggle On to share all files and folders or keep it Off to only share the specified folders.

+ Add - Delete

| <input type="checkbox"/> | ID | Folder Name | Folder Path | Media Sharing | Volume Name | Status | Modify |
|--------------------------|----|-------------|-------------|---------------|-------------|--------|--------|
| <input type="checkbox"/> | -- | --          | --          | --            | --          | --     | --     |

Volume Name:

Folder Path:  Browse

Folder Name:

☐ Allow Guest Network Access

☐ Enable Authentication

☐ Enable Write Access

☒ Enable Media Sharing

Cancel OK

**Tips:**

The router can share 32 volumes at most. You can click  on the page to detach the corresponding volume you do not need to share.

### Device Settings

Scan

Safely Remove

| ID | Volume Name | Capacity | Free Space | Active                                                                                |
|----|-------------|----------|------------|---------------------------------------------------------------------------------------|
| 1  | sda1        | 1.8 TB   | 1.8 TB     |  |

## 6.4. Printer Sharing

The **Printer Sharing** feature helps you share a printer with different computers connected to the router.

**Note:**

Printers unlisted on this page may be incompatible with the router:

<http://www.tp-link.com/common/compatible/print-server/>.

## 1. Install the Driver of the Printer

Make sure you have installed the driver of the printer on each computer that needs printer service.

If you do not have the driver, contact the printer manufacturer.

## 2. Connect the Printer

Cable a printer to the USB port with the USB cable. Wait several seconds until the USB LED becomes solid on.

### 3. Install the TP-LINK USB Printer Controller Utility

TP-LINK USB Printer Controller Utility helps you access the shared printer. Download and install the utility on each computer that needs printer service.

- 1) Visit <http://www.tp-link.com/app/usb/>.
- 2) Click **PC Utility** (for Windows users) or **Mac Utility** to download the installation file and uncompress it.



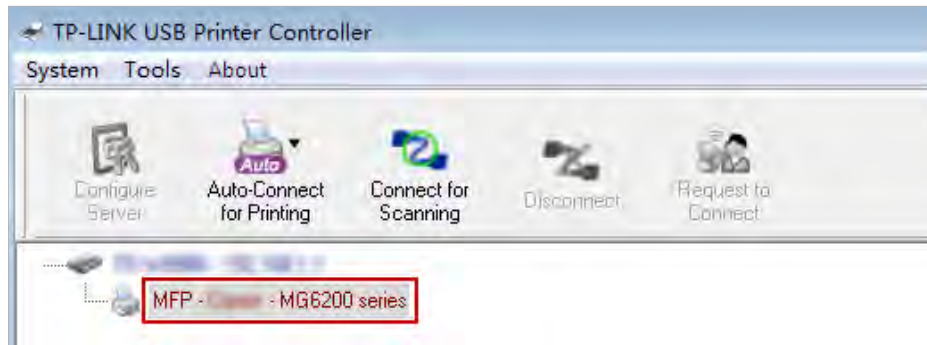
- 3) Open the uncompressed folder, then click [TP-LINK USB Printer Controller Setup](#) (for Windows users) or [TP-Link UDS Printer Controller Installer](#) (for Mac users) to install the utility.

#### 4. Access the Printer

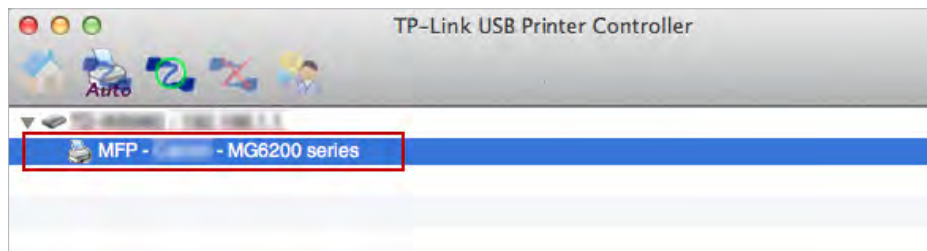
You should set the shared printer as **Auto-Connect Printer** on every computer that needs printer service.



- 1) Double-click the icon  on your desktop to launch the USB Printer Controller.
- 2) Highlight the printer you share.

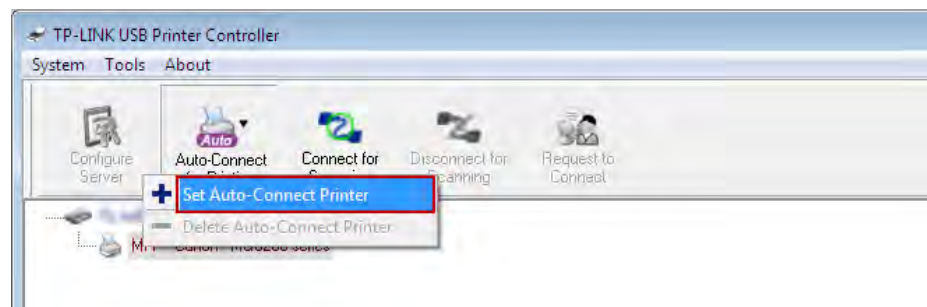


Windows

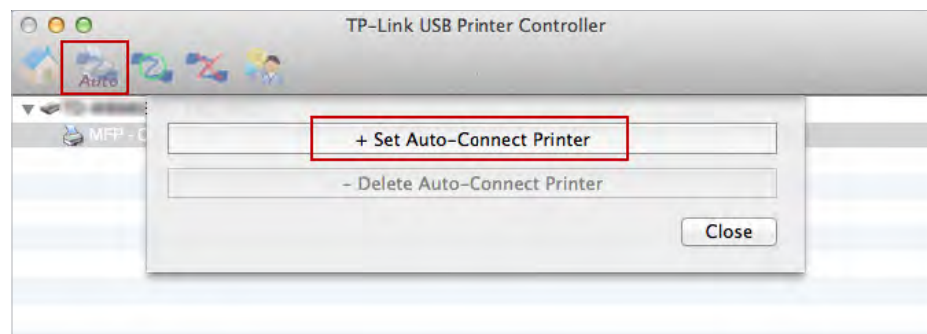


Mac

- 3) Click the [Auto-Connect for printing](#) tab to pull down a list, then select [Set Auto-Connect Printer](#).

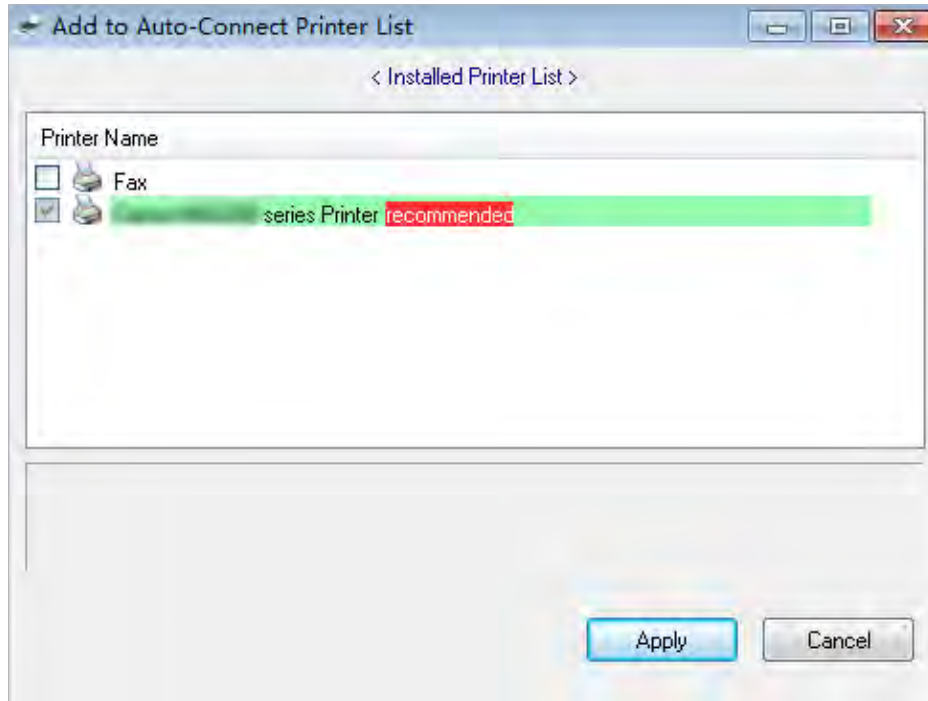


Windows

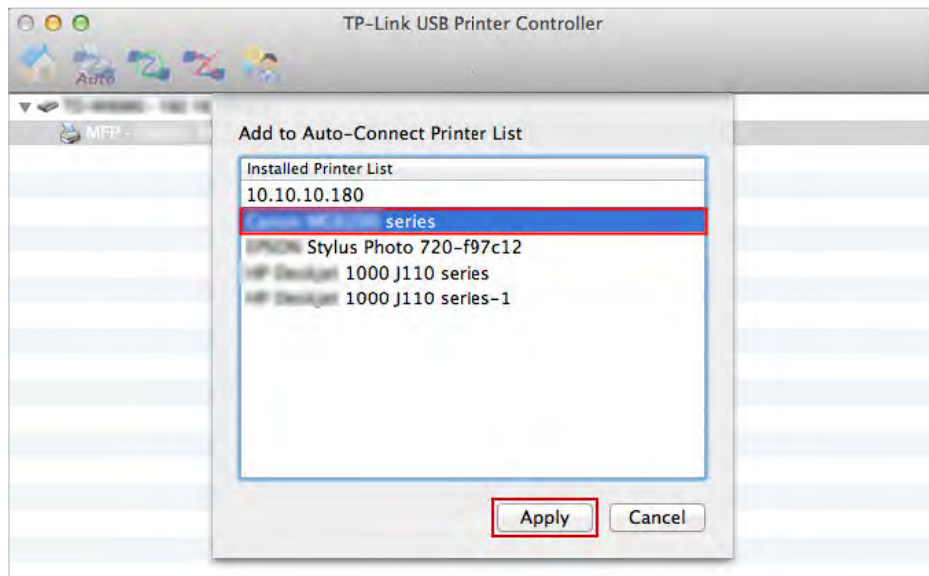


Mac

4) Select the printer you share, then click [Apply](#).

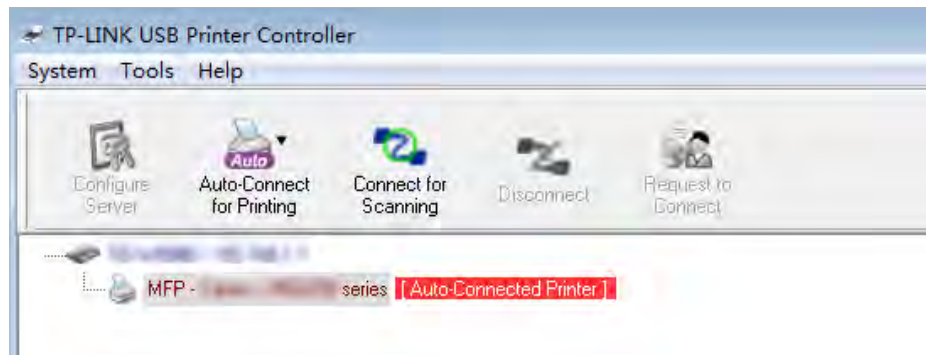


Windows

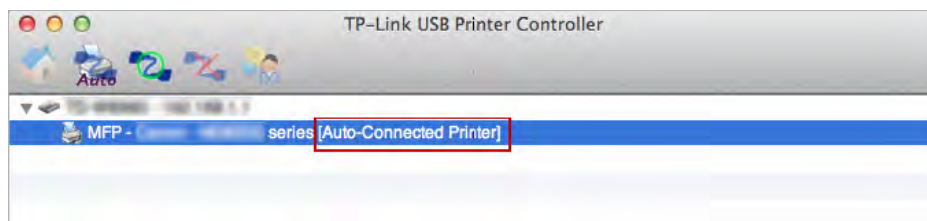


Mac

- 5) You will see the printer marked as **Auto-Connect Printer**. Now you can print with this printer.



Windows



Mac

**Tips:**

The Print Server also allows different clients to share the scan feature of MFPs (Multi-Function Printers). To scan with **TP-LINK USB Printer Controller**, right-click the printer and select **Network Scanner**. Then, a scanning window will pop up. Finish the scanning process by following the on-screen instructions.

## 6.5. 3G/4G Networking Sharing

If you have a 3G/4G USB modem, the router can be used as a 3G/4G wireless router to share the 3G/4G network to local users. When the original network service fails, your router will be directly connected to the 3G/4G network.

Follow the steps below to set your 3G/4G network:

1. Plug your USB modem into the USB port of your router.
2. Visit <http://tplinkwifi.net>, then log in with the username and password you've set for the router.
3. Go to **Advanced > USB Settings > 3G/4G**.

### 3G/4G

3G/4G USB Modem: Successfully identified

Region: China

Mobile ISP: China Mobile

☐ Set the Dial Number, APN, Username and Password manually.

Dial Number: \*98\*1#

APN: cmnet

Username:  (Optional)

Password:  (Optional)

Connection Mode: ☐ Connect on Demand ☒ Connect Automatically ☐ Connect Manually

Max Idle Time: 15 minutes. (0 means the connection is always-on.)

Authentication Type: ☒ Auto ☐ PAP ☐ CHAP

The default is Auto. Do not change unless necessary.

MTU Size (in bytes): 1480 The default is 1480. Do not change unless necessary.

☐ Use the Following DNS Servers

Primary DNS:

Secondary DNS:  (Optional)

Connect Disconnect ✓ Connected

Save

4. Verify that your [USB 3G/4G modem](#) is successfully identified.
5. Verify that the router has correctly recognized your [Region](#) and [Mobile ISP](#). If so, you have successfully set the 3G/4G network. Otherwise, select the [Region](#) and [Mobile ISP](#) manually, or select the box of [Set the Dial Number, APN, Username and Password](#) manually and enter the information provided by your 3G/4G network service provider.
6. Select the [Connection Mode](#) if needed. The default mode is [Connect Automatically](#). You can choose [Connect on Demand](#) or [Connect Manually](#).

- If you choose [Connect Manually](#), you need to click the [Connect](#) or [Disconnect](#) button to manually turn on or off the 3G/4G Internet. The network will automatically turn off when there is no Internet request in [Max Idle Time](#).
- If you choose [Connect on Demand](#), the network will automatically turn off when there is no Internet request in [Max Idle Time](#), and turn on again when you attempt to access the Internet.

7. Click [Save](#) to make the settings effective.

■ **Note:**

Do not change the [Authentication Type](#), [MTU Size](#) and [DNS Servers](#) unless necessary.

## Chapter 7

---

# Parental Controls

---

This function allows you to block inappropriate, explicit and malicious websites, and controls access to specified websites at specified time.

**I want to:**

Control what types of websites my children or other home network users can visit and even the times of day they are allowed to access the Internet.

For example, I want to allow my children's devices (e.g. a computer or a tablet) to access only [www.tp-link.com](http://www.tp-link.com) and [Wikipedia.org](http://Wikipedia.org) from 18:00 (6PM) to 22:00 (10PM) at the weekend and not other times.

**How can I do that?**

1. Visit <http://tplinkwifi.net>, and log in with the username and password you've set for the router.
2. Go to [Advanced](#) > [Parental Controls](#) and enable [Parental Controls](#).

3. Click [Add](#). And then Click [View Existing Devices](#), and select the access device. Or, input the [Device Name](#) and [MAC Address](#) manually.

4. Click the  icon to set the Internet Access Time. Drag the cursor over the appropriate cell(s) and click [OK](#).

System Time: Tue, 6th Jan, 2015 03:07:56 GMT-08:00

|       | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday |
|-------|--------|---------|-----------|----------|--------|----------|--------|
| 00:00 |        |         |           |          |        |          |        |
| 01:00 |        |         |           |          |        |          |        |
| 02:00 |        |         |           |          |        |          |        |
| 03:00 |        |         |           |          |        |          |        |
| 04:00 |        |         |           |          |        |          |        |
| 05:00 |        |         |           |          |        |          |        |
| 06:00 |        |         |           |          |        |          |        |
| 07:00 |        |         |           |          |        |          |        |
| 08:00 |        |         |           |          |        |          |        |
| 09:00 |        |         |           |          |        |          |        |
| 10:00 |        |         |           |          |        |          |        |
| 11:00 |        |         |           |          |        |          |        |
| 12:00 |        |         |           |          |        |          |        |
| 13:00 |        |         |           |          |        |          |        |
| 14:00 |        |         |           |          |        |          |        |
| 15:00 |        |         |           |          |        |          |        |
| 16:00 |        |         |           |          |        |          |        |
| 17:00 |        |         |           |          |        |          |        |
| 18:00 |        |         |           |          |        |          |        |
| 19:00 |        |         |           |          |        |          |        |
| 20:00 |        |         |           |          |        |          |        |
| 21:00 |        |         |           |          |        |          |        |
| 22:00 |        |         |           |          |        |          |        |
| 23:00 |        |         |           |          |        |          |        |
| 24:00 |        |         |           |          |        |          |        |

Internet Access Time

Cancel Reset OK

5. Enter a [Description](#) for the entry. Keep the [Enable This Entry](#) checkbox available. Click [OK](#).
6. Select the restriction policy.

Content Restriction

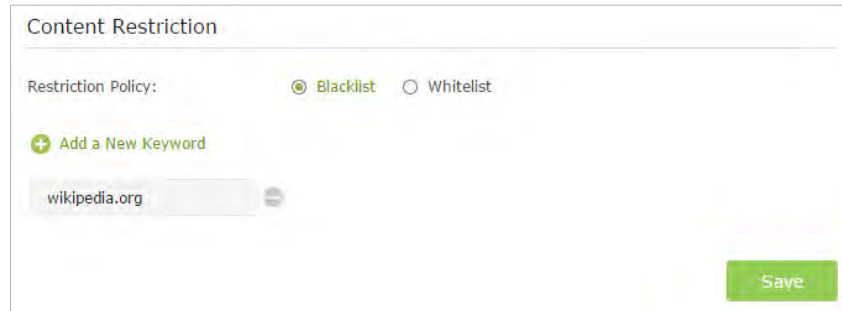
Restriction Policy: ☒ Blacklist ☐ Whitelist

- In [Blacklist](#) mode, the controlled devices cannot access any websites containing the specified keywords during the Internet Access Time period.
  - In [Whitelist](#) mode, the controlled devices can only access websites containing the specified keywords during the Internet Access Time period.
7. Click [+ Add a New Keyword](#). Enter a keyword or a website and click [Save](#).

You can add up to 32 keywords for either Blacklist or Whitelist. Below are some sample entries to allow access.

- Enter a web address (e.g. wikipedia.org) or a web address keyword (e.g. wikipedia) to only allow or block access to the websites containing that keyword.
- Specify the domain suffix (eg. .edu or .org) to allow access only to the websites with that suffix.

- If you wish to block all Internet browsing access, do not add any keyword to the [Whitelist](#).



The screenshot shows a web interface titled "Content Restriction". Under the heading "Restriction Policy:", there are two radio buttons: "Blacklist" (which is selected) and "Whitelist". Below this, there is a green plus icon followed by the text "Add a New Keyword". Underneath, there is a text input field containing "wikipedia.org" and a minus icon to its right. In the bottom right corner of the interface is a green button labeled "Save".

**Done!**

Now you can control your children's Internet access according to your needs.

## Chapter 8

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# QoS (Quality of Service)

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This chapter introduces how to create a QoS rule to specify prioritization of traffic and minimize the impact caused when the connection is under heavy load.

This chapter contains the following sections:

- *Prioritize Internet Traffic with Quality of Service*
- *Update the Database*

## 8. 1. Prioritize Internet Traffic with QoS

QoS (Quality of Service), is designed to ensure the efficient operation of the network when the network overload or congestion.

### I want to:

Specify priority levels for some devices or applications.

**For example,** I have several devices that are connected to my wireless network. I would like to:

- Set my ftp server with faster surfing speed;
- Set my phone an intermediate speed on the Internet.

### How can I do that?

#### 1. Enable QoS and set bandwidth allocation.

- 1) Visit <http://tplinkwifi.net>, and log in with the username and password you've set for the router.
- 2) Go to **Advanced** > **QoS** > **Settings**.
- 3) Select the **Enable QoS** checkbox.
- 4) Input the maximum upload and download bandwidth provided by your service provider. 1Mbps is equal to 1000Kbps.
- 5) Click **Advanced** and drag the scroll bar to set the bandwidth priority percentage.

#### Note:

Add each priority up no more than 100%. High priority is greater than Middle priority, and middle priority is greater than Low priority.

#### 6) Click **Save**.

The screenshot shows the 'QoS' configuration page. At the top, 'QoS:' is followed by a checked 'Enable QoS' checkbox. Below this, 'Upload Bandwidth:' is set to '100' with a unit dropdown set to 'Mbps'. Similarly, 'Download Bandwidth:' is set to '100' with a unit dropdown set to 'Mbps'. A tab labeled 'Advanced' is selected. Under the 'Advanced' tab, there are three horizontal sliders for priority levels: 'High Priority:' is set to 60%, 'Middle Priority:' is set to 30%, and 'Low Priority:' is set to 10%. A green 'Save' button is located at the bottom right of the configuration area.

#### 2. Add QoS Rules.

QoS Rule List

| High Priority:60%   | Middle Priority:30% | Low Priority:10%    |
|---------------------|---------------------|---------------------|
|                     |                     |                     |
| <a href="#">Add</a> | <a href="#">Add</a> | <a href="#">Add</a> |

- 1 ) Set a high priority rule for the ftp server.
  - a . Click [Add](#) in the [High Priority](#) section.
  - b . Select [By Application](#) and then select [ftp](#) in the list. Scroll down and click [OK](#).

QoS Rule

Type: ☐ By Device ☒ [By Application](#)

Application

|                                 |                                   |                                                         |
|---------------------------------|-----------------------------------|---------------------------------------------------------|
| <input type="checkbox"/> SSH    | <input type="checkbox"/> BT       | <input type="checkbox"/> SMTP                           |
| <input type="checkbox"/> Telnet | <input type="checkbox"/> Emule    | <input type="checkbox"/> POP3                           |
| <input type="checkbox"/> VPN    | <input type="checkbox"/> Facebook | <input checked="" type="checkbox"/> <a href="#">FTP</a> |
| <input type="checkbox"/> WWW    | <input type="checkbox"/> Vonage   | <input type="checkbox"/> PPTP                           |
| <input type="checkbox"/> DNS    | <input type="checkbox"/> netTalk  | <input type="checkbox"/> L2TP                           |
| —                               | —                                 | —                                                       |

**Tips:**

If your application isn't listed on the screen, scroll down and click [Custom Application](#) to add application manually.

Custom Application

Name:

Protocol:

Port:  (XX or XX-XX, 1-65535, at most 5 pairs)

- **Name:** Enter a name for your applicaiton.
- **Protocol:** Select the protocol for your application, if your are not sure, select ALL.
- **Port:** Enter the destination port for your application, usually each application has a fixed port, please ensure you enter the correct the port. In this case, the destination port for ftp is 21.

- 2 ) Set a middle priority rule for the phone.
  - a . Click [Add](#) in the [Middle Priority](#) section.

b . Select **By Device** and then click **View Existing Devices**.

QoS Rule

Type: ☒ By Device ☐ By Application

Device Name:  [View Existing Devices](#)

MAC Address:

[Cancel](#) [OK](#)

c . Choose the respective device from the list.

Access Devices List

| ID | Device Name   | IP Address    | MAC Address       | Operation              |
|----|---------------|---------------|-------------------|------------------------|
| 1  | 192.168.0.64  | 192.168.0.64  | 00-0A-EB-00-13-01 | <a href="#">Choose</a> |
| 2  | 192.168.0.200 | 192.168.0.200 | 50-E5-49-1E-06-80 | <a href="#">Choose</a> |
| 3  | 192.168.0.4   | 192.168.0.4   | 00-0A-EB-13-01-02 | <a href="#">Choose</a> |
| 4  | 192.168.0.20  | 192.168.0.20  | 40-16-9F-BF-51-0C | <a href="#">Choose</a> |

d . Click **OK**.

**Tips:**

If you want to delete a QoS rule, click to remove the responding rule from the list.

**Done!**

Now QoS is implemented to Prioritize Internet Traffic.

## 8.2. Update the Database

This function can help to add or update the applications of the router supports. If the applications you need are not listed in the Application list, you can try to download the new version and upgrade. New database versions are posted at [www.tp-link.com](http://www.tp-link.com) and can be downloaded for free.

1. Download the latest QoS database from our website ([www.tp-link.com](http://www.tp-link.com)).
2. Go to **Advanced > QoS > Database**. Click **Browse** to select the database upgrade file, then click **Upgrade**. Wait until the upgrade is completed and do not operate during the process.

### Database Upgrade

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New Database File:  [Browse](#)

Database Version: Qos database 1.5.0

[Upgrade](#)

## Chapter 9

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# Network Security

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This chapter guides you on how to protect your home network from cyber attacks and unauthorized users by implementing these three network security functions. You can protect your home network against DoS (Denial of Service) attacks from flooding your network with server requests using DoS Protection, block or allow specific client devices to access your network using Access Control, or you can prevent ARP spoofing and ARP attacks using IP & MAC Binding function.

This chapter contains the following sections:

- *Protect the Network from Cyber Attacks*
- *Access Control*
- *IP & MAC Binding*

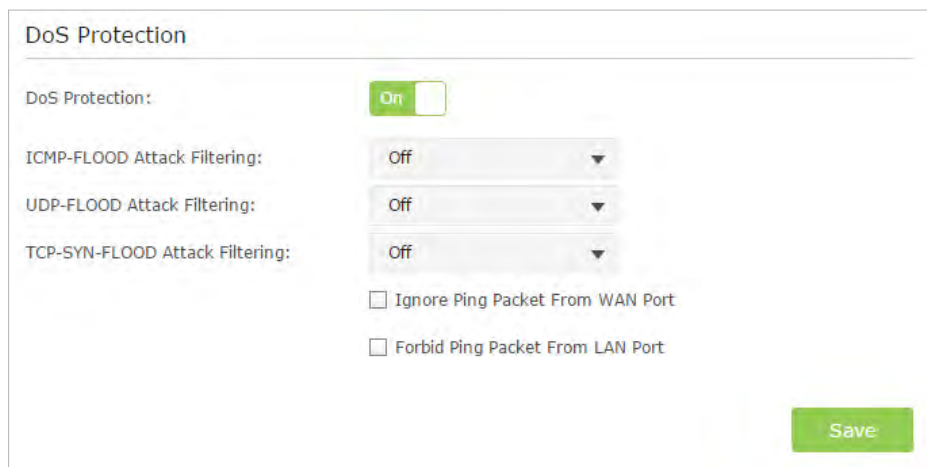
## 9.1. Protect the Network from Cyber Attacks

The SPI (Stateful Packet Inspection) Firewall and DoS (Denial of Service) Protection protect the router from cyber attacks.

The SPI Firewall can prevent cyber attacks and validate the traffic that is passing through the router based on the protocol. This function is enabled by default, and it's recommended to keep the default setting.

DoS Protection can protect your home network against DoS attacks from flooding your network with server requests. Follow the steps below to configure DoS Protection.

1. Visit <http://tplinkwifi.net>, and log in with the username and password you've set for the router.
2. Go to [Advanced](#) > [Security](#) > [Settings](#).



3. Enable [DoS Protection](#).
4. Set the level ([Off](#), [Low](#), [Middle](#) or [High](#)) of protection for [ICMP-FLOOD Attack Filtering](#), [UDP-FLOOD Attack Filtering](#) and [TCP-SYN-FLOOD Attack Filtering](#).
  - [ICMP-FLOOD Attack Filtering](#) - Enable to prevent the Internet Control Message Protocol (ICMP) flood attack.
  - [UDP-FLOOD Attack Filtering](#) - Enable to prevent the User Datagram Protocol (UDP) flood attack.
  - [TCP-SYN-FLOOD Attack Filtering](#) - Enable to prevent the Transmission Control Protocol-Synchronize (TCP-SYN) flood attack.

 **Tips:**

The level of protection is based on the traffic packets number. The protection will be triggered immediately when the number of packets exceeds the preset threshold value (the value can be set on [Advanced](#) > [System Tools](#) > [System Parameters](#) > [DoS Protection Level Settings](#)), and the vicious host will be displayed in the [Blocked DoS Host List](#).

Blocked DoS Host List

Host Number: 0 Refresh Delete

| <input type="checkbox"/> | ID | IP Address | MAC Address |
|--------------------------|----|------------|-------------|
| --                       | -- | --         | --          |

5. Select [Ignore Ping Packet From WAN/LAN Port](#) if you want to ignore the ping packets from WAN/LAN port.
6. Click [Save](#) to make the settings effective.

## 9.2. Access Control

Access Control is used to block or allow specific client devices to access your network (via wired or wireless) based on a list of blocked devices (Blacklist) or a list of allowed devices (Whitelist).

**I want to:** Block or allow specific client devices to access my network (via wired or wireless).

**How can I do that?**

1. Visit <http://tplinkwifi.net>, and log in with the username and password you've set for the router.
2. Go to [Advanced > Security > Access Control](#).
3. Enable [Access Control](#).

Access Control

Access Control: ☒ On

4. Select the access mode to either block (recommended) or allow the device(s) in the list.

**To block specific device(s)**

- 1 ) Select [Blacklist](#) and click [Save](#).

Access Mode

Default Access Mode: ☒ Blacklist ☐ Whitelist

Save

- 2 ) Select the device(s) to be blocked in the [Devices Online](#) table by ticking the box.

- 3) Click [Block](#) above the [Devices Online](#) table. The selected devices will be added to [Devices in Blacklist](#) automatically.

Online Devices

☒ Refresh
 ☒ Block

| <input type="checkbox"/>            | ID | Device Name | IP Address    | MAC Address       | Connection Type | Modify                              |
|-------------------------------------|----|-------------|---------------|-------------------|-----------------|-------------------------------------|
| <input checked="" type="checkbox"/> | 1  | XXXXXXXXXX  | 192.168.0.88  | 00-0A-EB-13-7B-00 | Wired           | <input checked="" type="checkbox"/> |
| <input checked="" type="checkbox"/> | 2  | XXXXXXXXXX  | 192.168.0.170 | 00-0A-EB-13-23-9E | Wired           | <input checked="" type="checkbox"/> |
| <input checked="" type="checkbox"/> | 3  | XXXXXXXXXX  | 192.168.0.133 | 00-0A-EB-C2-02-38 | Wired           | <input checked="" type="checkbox"/> |
| <input type="checkbox"/>            | 4  | XXXXXXXXXX  | 192.168.0.190 | E8-DE-27-B5-E2-A3 | Wired           | <input checked="" type="checkbox"/> |
| <input type="checkbox"/>            | 5  | XXXXXXXXXX  | 192.168.0.226 | 00-0A-EB-13-23-97 | Wired           | <input checked="" type="checkbox"/> |

### To allow specific device(s)

- 1) Select [Whitelist](#) and click [Save](#).

Access Mode

Default Access Mode: ☐ Blacklist ☒ [Whitelist](#)

[Save](#)

- 2) Click [Add](#) in [Devices in Whitelist](#) section. Enter the [Device Name](#) and [MAC Address](#) (You can copy and paste the information from the following list if the device is connected to your network).

Devices in Whitelist

[+ Add](#)
[- Delete](#)

| <input type="checkbox"/> | ID | Device Name | MAC Address       | Modify                                                       |
|--------------------------|----|-------------|-------------------|--------------------------------------------------------------|
| <input type="checkbox"/> | 1  | XXXXXXXXXX  | 00-0A-EB-14-7B-00 | <input checked="" type="checkbox"/> <input type="checkbox"/> |
| <input type="checkbox"/> | 2  | XXXXXXXXXX  | 00-0A-EB-13-20-91 | <input checked="" type="checkbox"/> <input type="checkbox"/> |
| <input type="checkbox"/> | 3  | XXXXXXXXXX  | 00-0A-EB-AD-72-1C | <input checked="" type="checkbox"/> <input type="checkbox"/> |

Device Name:

MAC Address:

[Cancel](#)
[OK](#)

- 3) Click [OK](#).

**Done!**

Now you can block or allow specific client devices to access your network (via wired or wireless) using the [Blacklist](#) or [Whitelist](#).

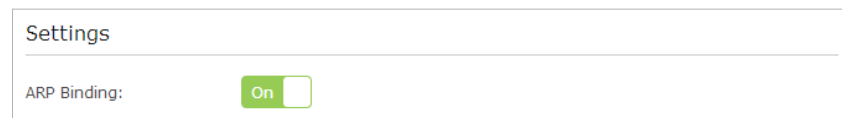
## 9.3. IP & MAC Binding

IP & MAC Binding, namely, ARP (Address Resolution Protocol) Binding, is used to bind network device's IP address to its MAC address. This will prevent ARP Spoofing and other ARP attacks by denying network access to an device with matching IP address in the Binding list, but unrecognized MAC address.

**I want to:** Prevent ARP spoofing and ARP attacks.

**How can I do that?**

1. Visit <http://tplinkwifi.net>, and log in with the username and password you've set for the router.
2. Go to [Advanced](#) > [Security](#) > [IP & MAC Binding](#).
3. Enable [ARP Binding](#).



Settings

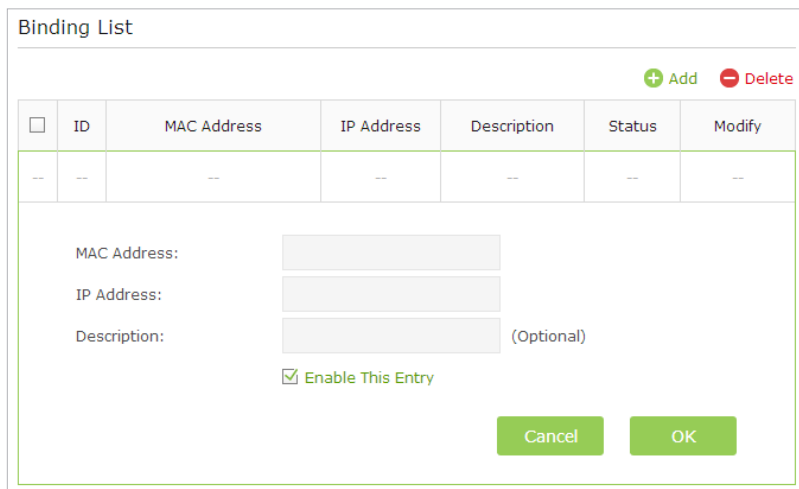
ARP Binding: ☒ On

4. Bind your device(s) according to your need.

**To bind the connected device(s):** Click  to add the corresponding device to the [Binding List](#).

**To bind the unconnected device**

- 1 ) Click [Add](#) in Binding List section.



Binding List

[+ Add](#) [- Delete](#)

| <input type="checkbox"/> | ID | MAC Address | IP Address | Description | Status | Modify |
|--------------------------|----|-------------|------------|-------------|--------|--------|
| <input type="checkbox"/> | -- | --          | --         | --          | --     | --     |

MAC Address:

IP Address:

Description:  (Optional)

☒ Enable This Entry

[Cancel](#) [OK](#)

- 2 ) Enter the [MAC address](#) and [IP address](#) that you want to bind.

- 3 ) Tick the [Enable This Entry](#) check box and click [OK](#).

**Done!**

Now you don't need to worry about ARP spoofing and ARP attacks!

## Chapter 10

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# NAT Forwarding

---

Router's NAT (Network Address Translation) feature makes the devices in the LAN use the same public IP address to communicate in the Internet, which protect the local network by hiding IP addresses of the devices. However, it also brings about the problem that external host cannot initiatively communicate with the specified device in the local network.

With forwarding feature the router can penetrate the isolation of NAT and allows the external hosts in the Internet to initiatively communicate with the devices in the local network, thus to realize some special functions.

TP-LINK router includes four forwarding rules. If two or more rules are set, the priority of implementation from high to low is Virtual Servers, Port Triggering, UPNP and DMZ.

This chapter contains the following sections:

- *Share Local Resources in the Internet by Virtual Server*
- *Open Ports Dynamically by Port Triggering*
- *Make Applications Free from Port Restriction by DMZ*
- *Make Xbox Online Games Run Smoothly by UPnP*

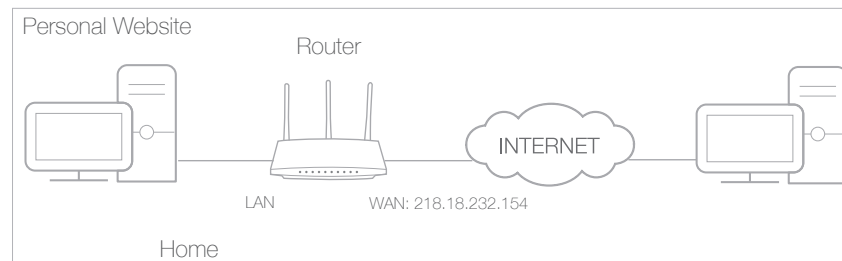
## 10.1. Share Local Resources in the Internet by Virtual Server

When you build up a server in the local network and want to share it on the Internet, Virtual Server can realize the service and provide it to the Internet users. At the same time virtual server can keep the local network safe as other services are still invisible from the Internet.

Virtual server can be used for setting up public services in your local network, such as HTTP, FTP, DNS, POP3/SMTP and Telnet. Different service uses different service port. Port 80 is used in HTTP service, port 21 in FTP service, port 25 in SMTP service and port 110 in POP3 service. Please verify the service port number before the configuration.

**I want to:** Share my personal website I've built in local network with my friends through the Internet.

**For example,** the personal website has been built in my home PC (192.168.0.100). I hope that my friends in the Internet can visit my website in some way. The PC is connected to the router with the WAN IP address 218.18.232.154.



**How can I do that?**

1. Assign a static IP address to your PC, for example 192.168.0.100.
2. Visit <http://tplinkwifi.net>, and log in with the username and password you've set for the router.
3. Go to **Advanced > NAT Forwarding > Virtual Servers**.
4. Click **Add**. Click **View Existing Services** and select **HTTP**. The external port, internal port and protocol will be automatically filled with contents. Enter the PC's IP address 192.168.0.100 in the **Internal IP** field.
5. Click **OK** to save the settings.

Virtual Servers

+ Add - Delete

| <input type="checkbox"/> | ID  | Service Type | External Port | Internal IP | Internal Port | Protocol | Status | Modify |
|--------------------------|-----|--------------|---------------|-------------|---------------|----------|--------|--------|
| ---                      | --- | ---          | ---           | ---         | ---           | ---      | ---    | ---    |

Service Type:  [View Existing Services](#)

External Port:  (XX-XX or XX)

Internal IP:

Internal Port:  (XX or Blank ,1-65535)

Protocol:

☒ Enable This Entry

**Tips:**

1. It is recommended to keep the default settings of [Internal Port](#) and [Protocol](#) if you are not clear about which port and protocol to use.
2. If the service you want to use is not in the [Service Type](#), you can enter the corresponding parameters manually. You should verify the port number that the service needs.
3. You can add multiple virtual server rules if you want to provide several services in a router. Please note that the [External Port](#) should not be overlapped.

**Done!**

Users in the Internet can enter [http:// WAN IP](#) (in this example: [http:// 218.18.232.154](#)) to visit your personal website.

**Tips:**

1. WAN IP should be a public IP address. For the WAN IP is assigned dynamically by ISP, it is recommended to apply and register a domain name for the WAN refer to [12.4. Set Up a Dynamic DNS Service Account](#). Then you can use [http:// domain name](#) to visit the website.
2. If you have changed the default [External Port](#), you should use [http:// WAN IP: External Port](#) or [http:// domain name: External Port](#) to visit the website.

## 10.2. Open Ports Dynamically by Port Triggering

Port triggering can specify a triggering port and its corresponding external ports. When a host in the local network initiates a connection to the triggering port, all the external ports will be opened for subsequent connections. The router can record the IP address of the host. When the data from the Internet return to the external ports, the router can forward them to the corresponding host. Port triggering is mainly applied to online games, VoIPs and video players. Common applications include MSN Gaming Zone, Dialpad and Quick Time 4 players, etc.

Follow the steps below to configure the port triggering rules:

1. Visit <http://tplinkwifi.net>, and log in with the username and password you've set for the router.
2. Go to **Advanced > NAT Forwarding > Port Triggering** and click **Add**.
3. Click **View Existing Applications**, and select the desired application. The external port, internal port and protocol will be automatically filled with contents. The following picture takes application **MSN Gaming Zone** as an example.
4. Click **OK** to save the settings.

Port Triggering

+ Add - Delete

| <input type="checkbox"/> | ID | Application | Triggering Port | Triggering Protocol | External Port | External Protocol | Status | Modify |
|--------------------------|----|-------------|-----------------|---------------------|---------------|-------------------|--------|--------|
| <input type="checkbox"/> | -- | --          | --              | --                  | --            | --                | --     | --     |

Application:  View Existing Applications

Triggering Port:  (XX,1-65535)

Triggering Protocol:  ▼

External Port:  (XX or XX-XX,1-65535,at most 5 pairs)

External Protocol:  ▼

☒ Enable This Entry

Cancel
OK

**Tips:**

1. You can add multiple port triggering rules according to your network need.
2. The triggering ports can not be overlapped.
3. If the application you need is not listed in the Existing Applications list, please enter the parameters manually. You should verify the external ports the application uses first and enter them into External Port field according to the format the page displays.

## 10.3. Make Applications Free from Port Restriction by DMZ

When a PC is set to be a DMZ (Demilitarized Zone) host in the local network, it is totally exposed to the Internet, which can realize the unlimited bidirectional communication between internal hosts and external hosts. The DMZ host becomes a virtual server with all ports opened. When you are not clear about which ports to open in some special applications, such as IP camera and database software, you can set the PC to be a DMZ host.

**Note:**

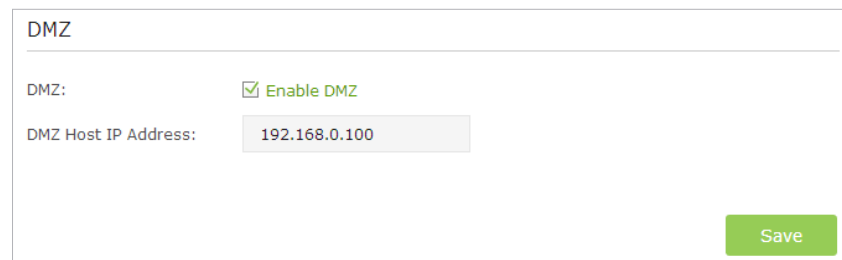
DMZ is more applicable in the situation that users are not clear about which ports to open. When it is enabled, the DMZ host is totally exposed to the Internet, which may bring some potential safety hazard. If DMZ is not in use, please disable it in time.

**I want to:** Make the home PC join the Internet online game without port restriction.

**For example,** due to some port restriction, when playing the online games, you can login normally but cannot join a team with other players. To solve this problem, set your PC as a DMZ with all ports opened.

**How can I do that?**

1. Assign a static IP address to your PC, for example 192.168.0.100.
2. Visit <http://tplinkwifi.net>, and log in with the username and password you've set for the router.
3. Go to **Advanced > NAT Forwarding > DMZ** and select the checkbox to enable DMZ.
4. Enter the IP address 192.168.0.100 in the **DMZ Host IP Address** filed.



DMZ

DMZ: ☒ Enable DMZ

DMZ Host IP Address: 192.168.0.100

Save

5. Click **Save** to save the settings.

**Done!** The configuration is completed. You've set your PC to a DMZ host and now you can make a team to game with other players.

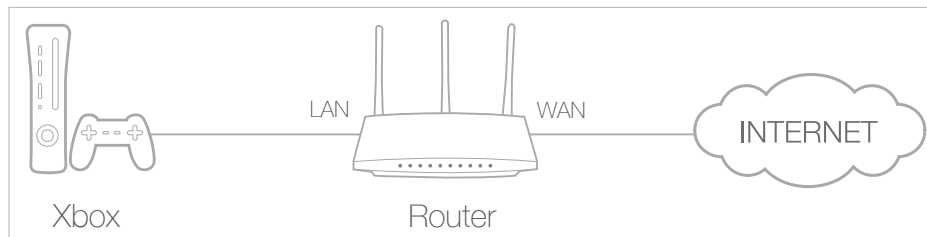
## 10.4. Make Xbox Online Games Run Smoothly by UPnP

UPnP (Universal Plug and Play) protocol allows the applications or host devices to automatically find the front-end NAT device and send request to it to open the corresponding ports. With UPnP enabled, the applications or host devices in the both sides of NAT device can freely communicate with each other realizing the seamless connection of the network. You may need to enable the UPnP if you want to use applications for multiplayer gaming, peer-to-peer connections, real-time communication (such as VoIP or telephone conference) or remote assistance, etc.

🔑 **Tips:**

1. UPnP is enabled by default in this router.
2. Only the application supporting UPnP protocol can use this feature.
3. UPnP feature needs the support of operating system (e.g. Windows Vista/ Windows 7/ Windows 8, etc. Some of operating system need to install the UPnP components).

**For example,** when you connect your Xbox to the router which has connected to the Internet to play online games, UPnP will send request to the router to open the corresponding ports allowing the following data penetrating the NAT to transmit. Therefore, you can play Xbox online games without a hitch.



If necessary, you can follow the steps to change the status of UPnP.

1. Visit <http://tplinkwifi.net>, and log in with the username and password you've set for the router.
2. Go to **Advanced** > **NAT Forwarding** > **UPnP** and toggle on or off according to your needs.

UPnP

UPnP: On

UPnP Service List

Total Clients: 0 Refresh

| ID | Service Description | External Port | Protocol | Internal IP Address | Internal Port |
|----|---------------------|---------------|----------|---------------------|---------------|
| -- | --                  | --            | --       | --                  | --            |

## Chapter 11

---

# VPN Server

---

The VPN (Virtual Private Networking) Server allows you to access your home network in a secured way through Internet when you are out of home. The router offers two ways to setup VPN connection: OpenVPN and PPTP (Point to Point Tunneling Protocol) VPN.

OpenVPN is somewhat complex but with greater security and more stable. It is suitable for restricted environment, such as campus network and company intranet.

PPTP VPN is more easily used and its speed is faster, it's compatible with most operating systems and also supports mobile devices. Its security is poor and your packets may be cracked easily, and PPTP VPN connection may be prevented by some ISP.

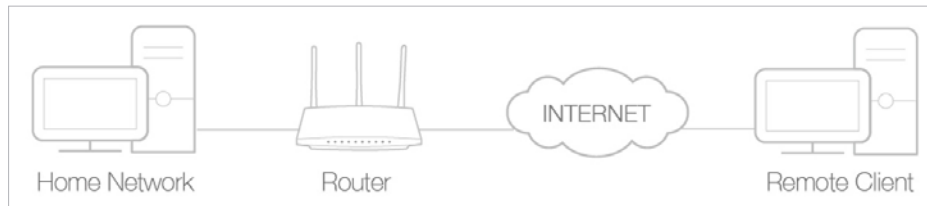
Please choose the appropriate VPN server connection type according to your needs.

This chapter contains the following sections:

- [\*Use OpenVPN to Access Your Home Network\*](#)
- [\*Use PPTP VPN to Access Your Home Network\*](#)

## 11.1. Use OpenVPN to Access Your Home Network

In the OpenVPN connection, the home network can act as a server, and the remote client can access the server through the router which acts as an OpenVPN Server gateway. To use the VPN feature, you should enable OpenVPN Server on your router, and install and run VPN client software on the remote client. Please follow the steps below to set up an OpenVPN connection.



### Step1. Set up OpenVPN Server on Your Router

1. Visit <http://tplinkwifi.net>, and log in with the username and password you've set for the router.
2. Go to **Advanced > VPN Server > OpenVPN**. And then Select **Enable VPN Server**.

OpenVPN

Note: No certificate currently, please **Generate** one before enabling VPN Server.

☒ Enable VPN Server

Service Type: ☒ UDP ☐ TCP

Service Port: 1194

VPN Subnet/Netmask: 10.8.0.0 255.255.255.0

Client Access: ☒ Home Network Only ☐ Internet and Home Network

Save

**Note:**

1. Before you enable VPN Server, we recommend you configure Dynamic DNS Service (recommended) or assign a static IP address for router's WAN port and synchronize your System Time with Internet.
2. The first time you configure the OpenVPN Server, you may need to **Generate** a certificate before you enable the VPN Server.

3. Select the **Service Type** (communication protocol) for OpenVPN Server: UDP, TCP.
4. Enter a VPN **Service Port** to which a VPN client connects, and the port number should be between 1024 and 65535.

**Note:**

If you have configured NAT Settings, please make sure the **Service Port number** is not the same as the external port of NAT Settings.

5. In **VPN Subnet/Netmask** field, enter the range of IP addresses that can be leased to the client by the OpenVPN server.

6. Select your [Client Access](#) type., select [Home Network Only](#) if you only want the remote client to access your home network, select [Internet and Home Network](#) if the remote client also want to access Internet through VPN Server.
7. Click [Save](#).
8. Click [Generate](#) to generate a new certificate.

Certificate

Generate the certificate.

Generate

**Note:**

If you have already generated one, please skip this step, or click Generate to update the certificate.

9. Click [Export](#) to save the OpenVPN configuration file. Remote client will use this configuration file to access your router.

Configuration File

Export the configuration.

Export

## Step 2. Configure OpenVPN Connection on Your Remote Client

1. Visit <http://openvpn.net/index.php/download/community-downloads.html> to download the OpenVPN software, and install it on your client where you want to run the OpenVPN client utility.

**Note:**

You need to install the OpenVPN client utility on each client that you plan to use for VPN connections to your router. Mobile devices should download third-party app from Google Play or APP Store.

2. After the installation, copy the file exporting from your router to OpenVPN client utility's "config" folder (for Windows): [C:\Program Files\OpenVPN\config](#). The path is depending on where the OpenVPN client utility is installed on.
3. Run the OpenVPN client utility and connect it to OpenVPN Server.

## 11.2. Use PPTP VPN to Access Your Home Network

PPTP VPN Server is used to create a VPN connection for remote client. To use the VPN feature, you should enable PPTP VPN Server on your router, and configure the PPTP connection on the remote client. Please follow the steps below to set up a PPTP VPN connection.

### Step 1. Set up PPTP VPN Server on Your Router

1. Visit <http://tplinkwifi.net>, and log in with the username and password you've set for the router.
2. Go to [Advanced](#) > [VPN Server](#) > [PPTP VPN](#). And then select [Enable VPN Server](#).

**PPTP VPN**

☒ **Enable VPN Server**

Client IP Address:  -  (up to 10 clients)

Username:

Password:

**Save**

**Note:**

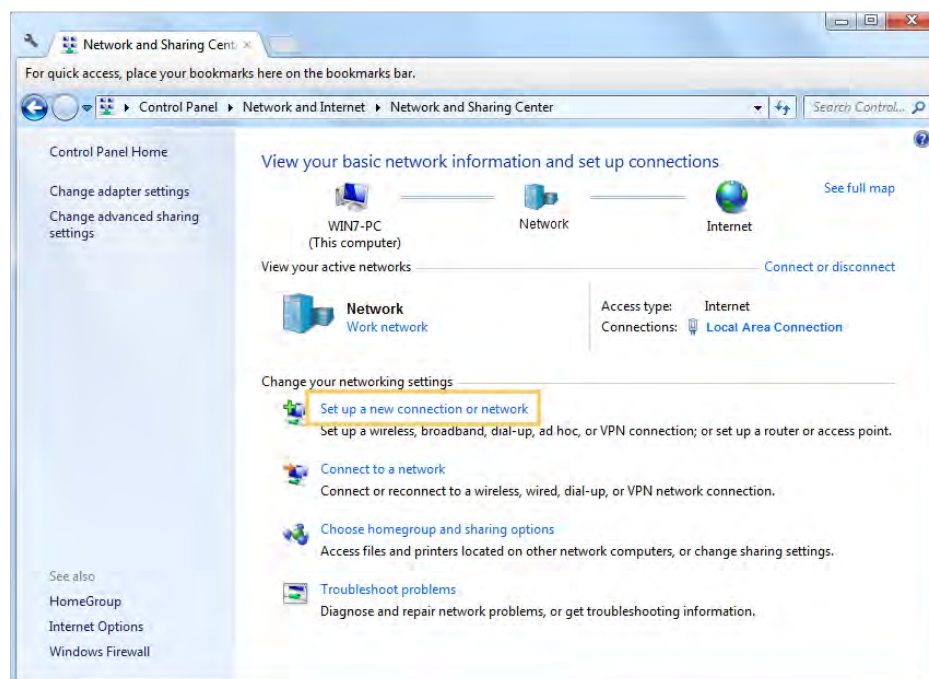
Before you enable VPN Server, we recommend you configure Dynamic DNS Service (recommended) or assign a static IP address for router's WAN port and synchronize your System Time with Internet. If you have configured NAT Settings, please make sure your external port of NAT settings is not 1723.

3. In the **Client IP Address** field, enter the range of IP addresses (up to 10 clients) that can be leased to the client by the PPTP VPN server.
4. Enter the **Username** and **Password** to authenticate clients to the PPTP VPN server.
5. Click **Save**.

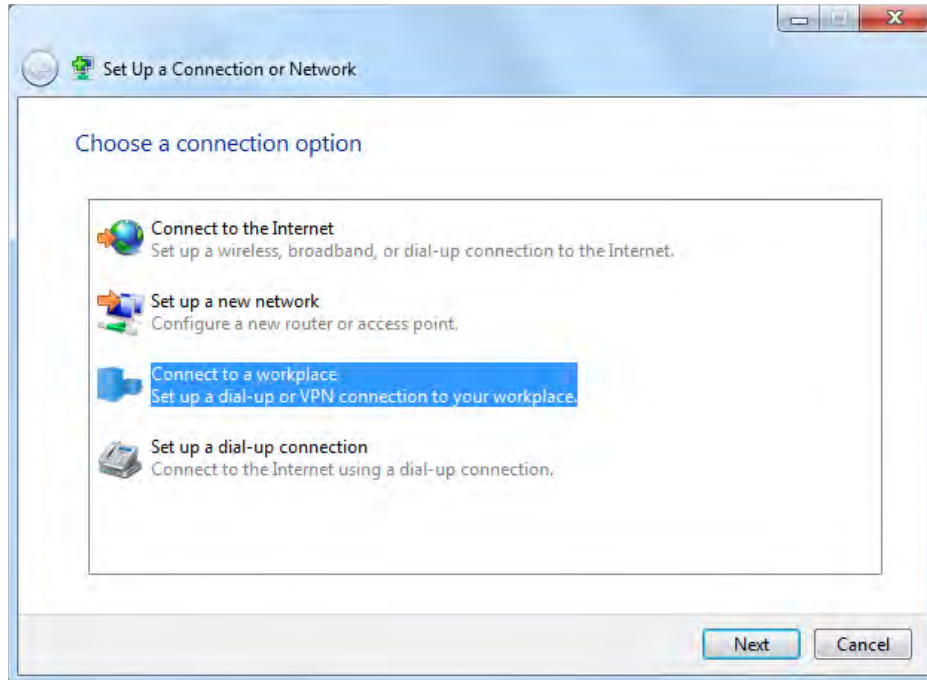
## Step 2. Configure PPTP VPN Connection on Your Remote Client

Remote client can use Windows built-in PPTP software or third-party PPTP software to connect to PPTP Server. Here we use **Windows built-in PPTP software** as an example.

1. Go to **Start > Control Panel > Network and Internet > Network and Sharing Center**.
2. Select **Set up a new connection or network**.



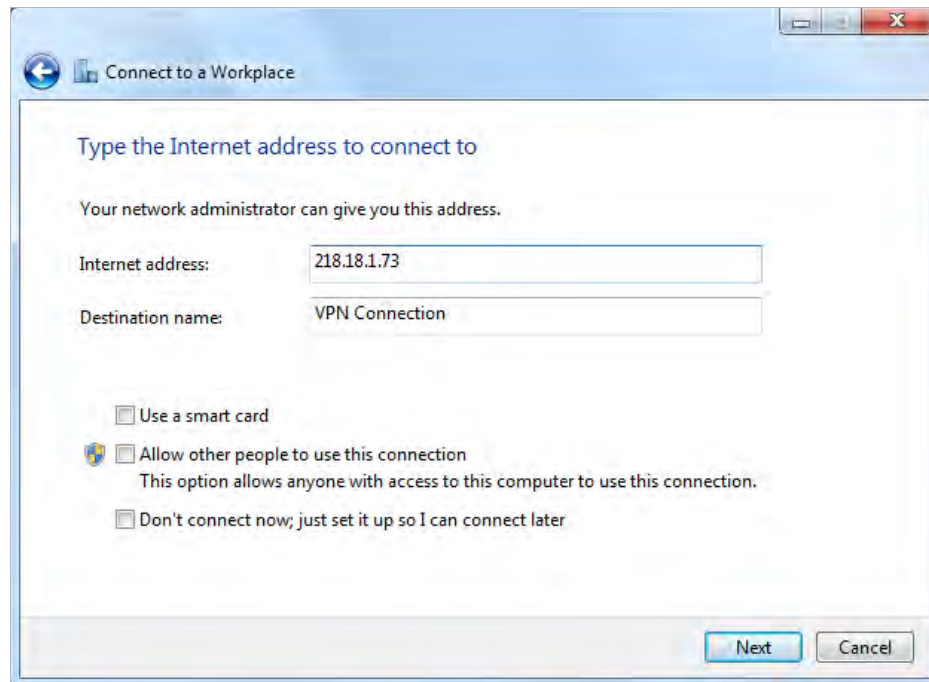
3. Select **Connect to a workplace** and click **Next**.



4. Select **Use my Internet connection (VPN)**.

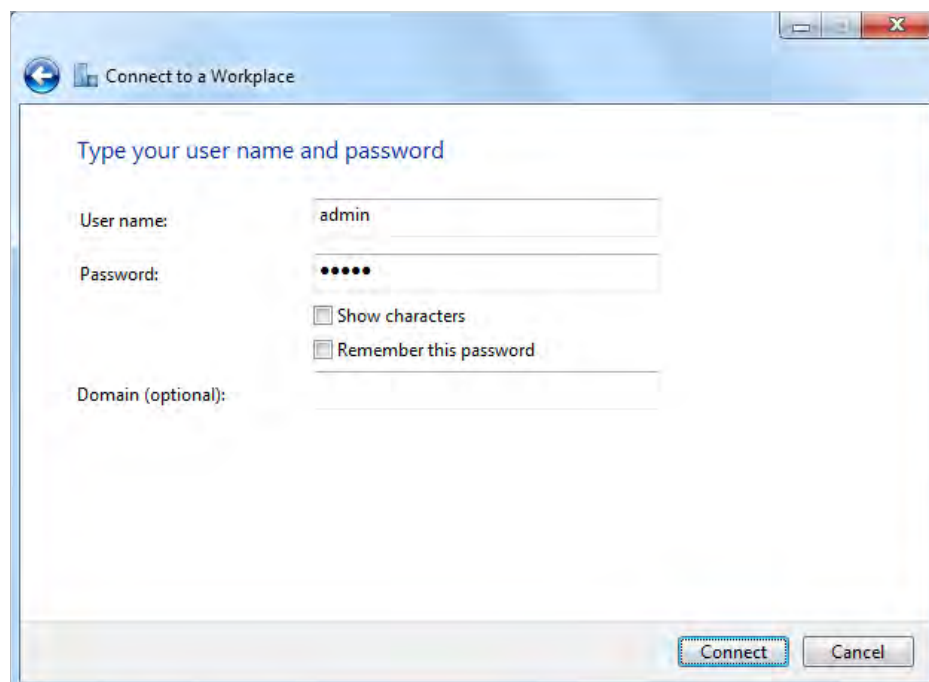


5. Enter the WAN IP address of the router (for example: 218.18.1.73) in the [Internet address](#) field. Click [Next](#).



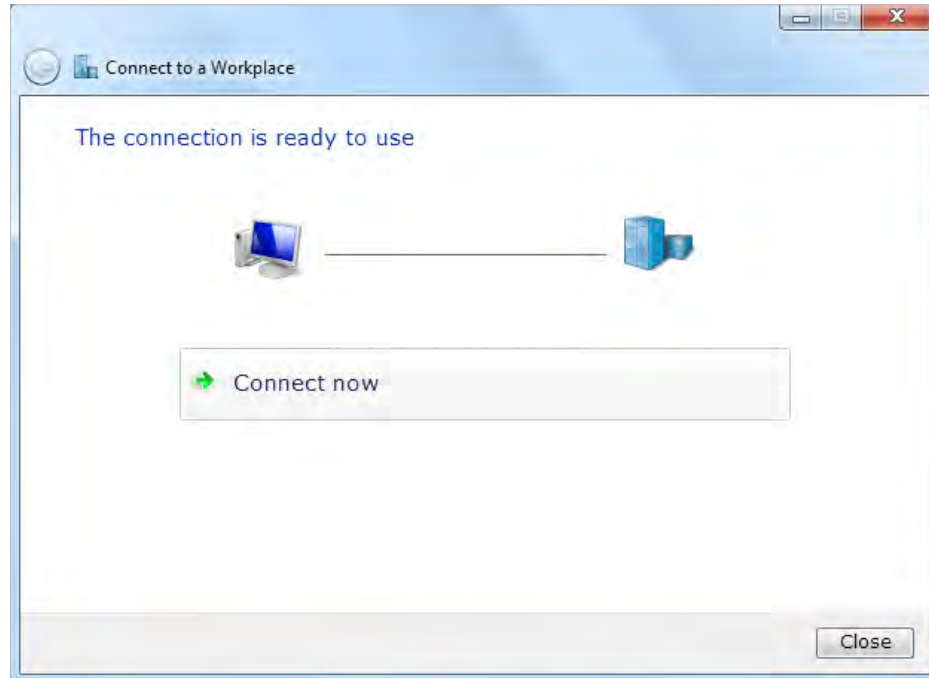
The screenshot shows the 'Connect to a Workplace' dialog box. The title bar says 'Connect to a Workplace'. The main text says 'Type the Internet address to connect to'. Below this, it says 'Your network administrator can give you this address.' There are two input fields: 'Internet address:' with the value '218.18.1.73' and 'Destination name:' with the value 'VPN Connection'. Below these fields are three checkboxes: 'Use a smart card' (unchecked), 'Allow other people to use this connection' (unchecked) with a subtext 'This option allows anyone with access to this computer to use this connection.', and 'Don't connect now; just set it up so I can connect later' (unchecked). At the bottom right are 'Next' and 'Cancel' buttons.

6. Enter the [User name](#) and [Password](#), it's the username and password you have set on your router, and click [Connect](#).



The screenshot shows the 'Connect to a Workplace' dialog box. The title bar says 'Connect to a Workplace'. The main text says 'Type your user name and password'. There are two input fields: 'User name:' with the value 'admin' and 'Password:' with masked characters '•••••'. Below the password field are two checkboxes: 'Show characters' (unchecked) and 'Remember this password' (unchecked). At the bottom right are 'Connect' and 'Cancel' buttons.

7. The PPTP VPN connection is created and ready to use.



## Chapter 12

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# Customize Your Network Settings

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This chapter guides you on how to configure advanced networking features that are available for this router.

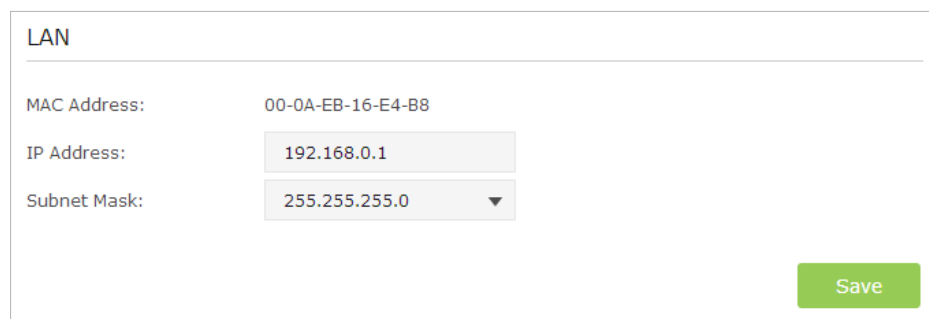
This chapter contains the following sections:

- *[Change the LAN Settings](#)*
- *[Configure to Support IPTV Service](#)*
- *[Specify DHCP Server Settings](#)*
- *[Set Up a Dynamic DNS Service Account](#)*
- *[Create Static Routes](#)*
- *[Specify Wireless Settings](#)*
- *[Use WPS for Wireless Connection](#)*

## 12.1. Change the LAN Settings

The router is preset with a default LAN IP 192.168.0.1, which you can use to log in to its web-based management page. The LAN IP address together with the Subnet Mask also defines the subnet that the connected devices are on. If the IP address conflicts with another device on your local network or your network requires a specific IP subnet, you can change it.

1. Visit <http://tplinkwifi.net>, and log in with the username and password you've set for the router.
2. Go to [Advanced](#) > [Network](#) > [LAN](#).
3. Type in a new IP Address appropriate to your needs. And Leave the [Subnet Mask](#) as the default settings.



4. Click [Save](#).

**Note:**

If you have set the Virtual Server, DMZ or DHCP address reservation, and the new LAN IP address is not in the same subnet with the old one, then you should reconfigure them.

## 12.2. Configure to Support IPTV Service

**I want to:** Configure IPTV setup to enable Internet / IPTV / Phone service provided by my Internet Service Provider (ISP).

**How can I do that?**

1. Visit <http://tplinkwifi.net>, and log in with the username and password you've set for the router.
2. Go to [Advanced](#) > [Network](#) > [IPTV](#).
3. **If your ISP provide the networking service based on IGMP technology**, e.g., British Telecom(BT) and Talk Talk in UK:
  - 1) Tick the [IGMP Proxy](#) checkbox and select the [IGMP Version](#), either V2 or V3, according to the information provided by your ISP.

|               |                                            |
|---------------|--------------------------------------------|
| IGMP Proxy:   | <input checked="" type="checkbox"/> Enable |
| IGMP Version: | V2 ▼                                       |

2 ) Click [Save](#).

3 ) After configuring IGMP proxy, IPTV can work behind your router now. You can connect your set-top box to any of the router's Ethernet port.

**If IGMP is not the technology your ISP apply to provide IPTV service:**

1 ) Tick the [Enable IPTV](#) check box.

2 ) Select the appropriate [Mode](#) according to your ISP. Select [Bridge](#) if your ISP is not listed and no other parameters are required, and then skip to Step 4. Select [Custom](#) if your ISP is not listed but provides necessary parameters.

|       |                                                 |
|-------|-------------------------------------------------|
| IPTV: | <input checked="" type="checkbox"/> Enable IPTV |
| Mode: | Bridge ▼                                        |
| LAN1: |                                                 |
| LAN2: |                                                 |
| LAN3: |                                                 |
| LAN4: |                                                 |

Bridge  
 Russia  
 Singapore-ExStream  
 Malaysia-Unifi  
 Malaysia-Maxis  
 Custom

[Save](#)

3 ) After you have selected a mode, the necessary parameters are predetermined. You can perform other configuration, e.g. enter the [IPTV Multicast VLAN ID](#) and select the [IPTV Multicast VLAN Priority](#) in [Russia](#) mode according to your ISP.

4 ) For [Russia](#), [Singapore-ExStream](#), [Malaysia-Unifi](#) and [Malaysia-Maxis](#) mode, connect device to the predetermined LAN port. For [Bridge](#) and [Custom](#) mode, select the [LAN](#) type and connect the set-top box to the corresponding port.

5 ) Click [Save](#).

## Done!

Your IPTV setup is done now! You may need other configurations on your set-top box before enjoying your TV.

### Tips

Qos and IPTV cannot be enabled at the same time.

## 12.3. Specify DHCP Server Settings

By default, the DHCP (Dynamic Host Configuration Protocol) Server is enabled and the router acts as a DHCP server; it dynamically assigns TCP/IP parameters to client devices from the IP Address Pool. You can change the settings of DHCP Server if necessary, and you can reserve LAN IP address for specified client device.

1. Visit <http://tplinkwifi.net>, and log in with the username and password you've set for the router.
2. Go to [Advanced](#) > [Network](#) > [DHCP Server](#).

➤ **To specify the IP address that the router assigns:**



The screenshot shows the 'Settings' page for the DHCP Server. It includes a checkbox for 'Enable DHCP Server' which is checked. Below this are input fields for 'IP Address Pool' (192.168.0.100 - 192.168.0.199), 'Address Lease Time' (120 minutes), 'Default Gateway' (192.168.0.1), 'Primary DNS', and 'Secondary DNS'. A green 'Save' button is located at the bottom right.

| Settings             |                                                        |
|----------------------|--------------------------------------------------------|
| DHCP Server:         | <input checked="" type="checkbox"/> Enable DHCP Server |
| IP Address Pool:     | 192.168.0.100 - 192.168.0.199                          |
| Address Lease Time:  | 120 minutes. (1-2880. The default value is 120.)       |
| Default Gateway:     | 192.168.0.1 (Optional)                                 |
| Primary DNS:         | (Optional)                                             |
| Secondary DNS:       | (Optional)                                             |
| <a href="#">Save</a> |                                                        |

1. Make sure that the [Enable DHCP Server](#) checkbox is selected.
2. Enter the starting and ending IP address in the [IP Address Pool](#).
3. Enter other parameters if the ISP offers, the [Default Gateway](#) is automatically filled and is the same as the LAN IP address of the router.
4. Click [Save](#) to make the settings effective.

➤ **To reserve an IP address for a specified client device:**

1. Click the [Add](#) button in [Address Reservation](#) section.

Address Reservation

+ Add
- Delete

| <input type="checkbox"/> | ID  | MAC Address | Reserved IP Address | Description | Status | Modify |
|--------------------------|-----|-------------|---------------------|-------------|--------|--------|
| <input type="checkbox"/> | --- | ---         | ---                 | ---         | ---    | ---    |

MAC Address:
View Existing Devices

IP Address:

Description:
(a-z, A-Z, 0-9, -, \_)

☐ Enable This Entry

Cancel
OK

2. Click [View Existing Devices](#) or enter the [MAC address](#) of the client device.
3. Enter the [IP address](#) to set to the client device.
4. Enter the [Description](#) for the rule.
5. Tick the [Enable This Entry](#) checkbox and click [OK](#).

## 12.4. Set Up a Dynamic DNS Service Account

Most ISPs (Internet service providers) assign a dynamic IP address to the router and you can use this IP address to access your router remotely. However, the IP address can change any time and you don't know when it changes. In this case, you might need the DDNS (Dynamic Domain Name Server) feature on the router to allow you and your friends to access your router and local servers (FTP, HTTP, etc.) using domain name, in no need of checking and remembering the IP address.

### Note:

DDNS does not work if the ISP assigns a private WAN IP address (such as 192.168.1.x) to the router.

To set up DDNS, please follow the instructions below:

1. Visit <http://tplinkwifi.net>, and log in with the username and password you've set for the router.
2. Go to [Advanced](#) > [Network](#) > [Dynamic DNS](#).
3. Select the DDNS [Service Provider](#) (NO-IP or DynDNS). If you don't have a DDNS account, select a service provider and click [Go to register](#).

Dynamic DNS

Service Provider:
☐ NO-IP
☒ DynDNS
[Go to register...](#)

Username:

Password:

Domain Name:

Update Interval:

✖ Not launching

4. Enter the username, password and domain name of the account (such as lisadns.ddns.net).

5. Click [Login and Save](#).

**Tips:**

If you want to use a new DDNS account, please [Logout](#) first, then login with the new account.

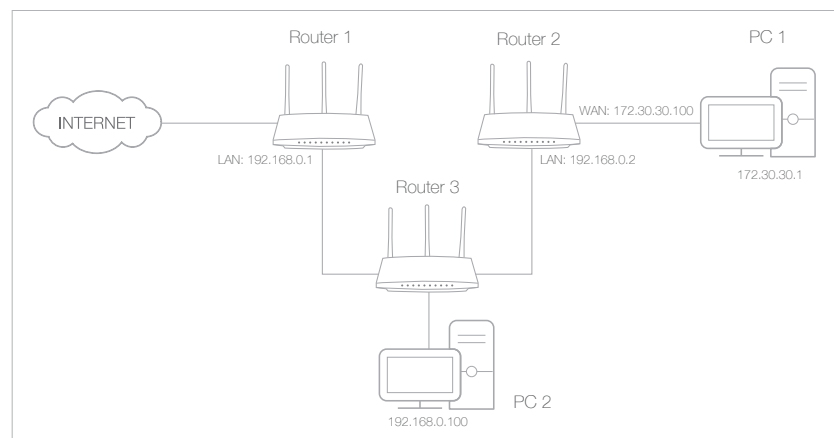
## 12.5. Create Static Routes

Static routing is a form of routing that is configured manually by a network administrator or a user by adding entries into a routing table. The manually-configured routing information guides the router in forwarding data packets to the specific destination.

**I want to:**

Visit multiple networks and multiple servers at the same time.

[For example](#), in a small office, my PC can surf the Internet, but I also want to visit my company's network. Now I have a switch and another router. I connect the devices as shown in the following figure so that the physical connection between my PC and my company's server is achieved. To surf the Internet and visit my company's network at the same time, I need to configure the static routing.



## How can I do that?

1. Change the router's LAN IP addresses to two different IP addresses on the same subnet. Disable Router 2's DHCP function.
2. Visit <http://tplinkwifi.net>, and log in with the username and password you've set for the router.
3. Go to [Network](#) > [Advanced Routing](#).
4. Click [Add](#) and finish the settings according to the following explanations:

Static Routing

+ Add - Delete

| <input type="checkbox"/> | ID | Network Destination | Subnet Mask | Default Gateway | Interface | Description | Status | Modify |
|--------------------------|----|---------------------|-------------|-----------------|-----------|-------------|--------|--------|
| <input type="checkbox"/> |    |                     |             |                 |           |             |        |        |

Network Destination:   
 Subnet Mask:   
 Default Gateway:   
 Interface:   
 Description:   
☒ Enable This Entry

**Network Destination:** The destination IP address that you want to assign to a static route. This IP address cannot be on the same subnet with the WAN IP or LAN IP of the router. In the example, the IP address of the company network is the destination IP address, so here enters 172.30.30.1.

**Subnet Mask:** Determines the destination network with the destination IP address. If the destination is a single IP address, enter 255.255.255.255; otherwise, enter the subnet mask of the corresponding network IP. In the example, the destination network is a single IP, so here enters 255.255.255.255.

**Default Gateway:** The IP address of the gateway device to which the data packets will be sent. This IP address must be on the same subnet with the router's IP which sends out the data. In the example, the data packets will be sent to the LAN port of Router 2 and then to the Server, so the default gateway should be 192.168.0.2.

**Interface:** Determined by the port (WAN/LAN) that sends out the data packets. In the example, the data is sent to the gateway through the LAN port, so LAN should be selected.

**Description:** Enter a description for this static routing entry.

5. Click **OK** to save the settings.
6. Check the **System Routing Table** below. If you can find the entry you've set in the **System Routing Table**, the static routing is set successfully.

| System Routing Table    |                     |                 |             |                                                                                             |
|-------------------------|---------------------|-----------------|-------------|---------------------------------------------------------------------------------------------|
| Active Routes Number: 3 |                     |                 |             |  Refresh |
| ID                      | Network Destination | Subnet Mask     | Gateway     | Interface                                                                                   |
| 1                       | 192.168.0.2         | 255.255.255.255 | 0.0.0.0     | lan                                                                                         |
| 2                       | 172.30.30.1         | 255.255.255.255 | 192.168.0.2 | lan                                                                                         |
| 3                       | 192.168.0.0         | 255.255.255.0   | 0.0.0.0     | lan                                                                                         |

**Done!**

Open a web browser on your PC. Enter the company server's IP address to visit the company network.

## 12.6. Specify Wireless Settings

The router's wireless network name (SSID) and password, and security option are preset in the factory. The preset SSID and password can be found on the product label. You can customize the wireless settings according to your needs.

Visit <http://tplinkwifi.net>, and log in with the username and password you've set for the router.

### ➤ To enable or disable the wireless function of 2.4GHz, 5GHz-1 or 5GHz-2:

1. Go to **Basic > Wireless**.
2. The wireless radio is enabled by default, if you want to disable the wireless function of the router, just clear the **Enable Wireless Radio** checkbox. In this case, all the wireless settings will be invalid.

### ➤ To change the wireless network name (SSID) and wireless password:

1. Go to **Basic > Wireless**.
2. Create a new SSID in **Network Name (SSID)** and customize the password for the network in **Password**. The default SSID is TP-LINK\_XXXX for 2.4GHz, TP-LINK\_XXXX\_5G\_1 for 5GHz-1, TP-LINK\_XXXX\_5G\_2 for 5GHz-2, and the value is case-sensitive.

**Note:**

If you use a wireless device to change the wireless settings, you will be disconnected when the settings are effective. Please write down the new SSID and password for future use.

**➤ To hide SSID of 2.4GHz or 5GHz:**

1. Go to [Basic](#) > [Wireless](#).
2. Select [Hide SSID](#), and your SSID will not broadcast. Your SSID won't display when you scan for local wireless network on your wireless device and you need to manually join the network.

**➤ To change the working region for the router:**

1. Go to [Advanced](#) > [Wireless](#) > [Wireless Settings](#).
2. Select the [Region](#) from the drop-down list and click [Save](#).



The screenshot shows a web interface titled "Region Settings". Below the title is a label "Region:" followed by a dropdown menu. The dropdown menu is open, showing "China" as the selected option. To the right of the dropdown is a green "Save" button.

**Note:**

Per FCC regulations, all Wi-Fi products marketed in the U.S. are fixed to the U.S. region.



The screenshot shows a web interface titled "Region Settings". Below the title is a label "Region:" followed by a dropdown menu. The dropdown menu is open, showing "United States" as the selected option. To the right of the dropdown is a green "Save" button.

**➤ To change the security option:**

1. Go to [Advanced](#) > [Wireless](#) > [Wireless Settings](#).

Wireless Settings 2.4GHz | 5GHz-1 | 5GHz-2

☒ Enable Wireless Radio

Network Name (SSID):  ☐ Hide SSID

Security: WPA/WPA2-Personal (Recommended)

Version: ☒ Auto ☐ WPA-PSK ☐ WPA2-PSK

Encryption: ☒ Auto ☐ TKIP ☐ AES

Password:

Mode: 802.11b/g/n mixed

Channel Width: Auto

Channel: Auto

Transmit Power: ☐ Low ☐ Middle ☒ High

Save

2. Select the wireless network [2.4GHz](#), [5GHz-1](#) or [5GHz-2](#).
3. Select an option from the [Security](#) dropdown list. The router provides four security options, No Security, WPA/WPA2 - Personal (Recommended), WPA/WPA2 - Enterprise and WEP. We recommend you don't change the default settings unless necessary. If you select other options, configure the related parameters according to the help page.

#### In addition

- [Mode](#) - Select a transmission mode according to your wireless client devices. [802.11b/g/n mixed](#), [802.11g/n mixed](#) or [802.11n only](#) for [2.4GHz](#); and [802.11a/n/ac mixed](#), [802.11n/ac mixed](#) or [802.11ac only](#) for [5GHz](#). It is recommended to just leave it as default.
- [Channel Width](#) - Select a channel width (bandwidth) for the wireless network.
- [Channel](#) - Select an operating channel for the wireless network. It is recommended to leave the channel to [Auto](#), if you are not experiencing the intermittent wireless connection issue.
- [Transmit Power](#) - Select either [High](#), [Middle](#) or [Low](#) to specify the data transmit power. The default and recommended setting is [High](#).

## 12.7. Use WPS for Wireless Connection

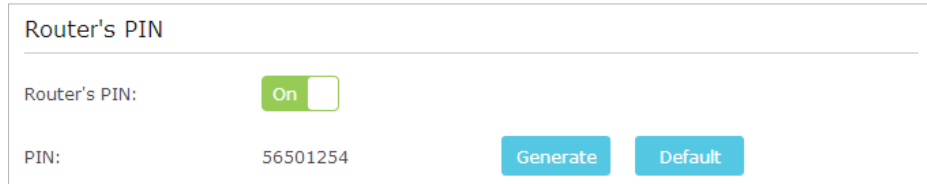
Wi-Fi Protected Setup (WPS) gives consumers an easier approach to set up a security-protected Wi-Fi connection.

1. Visit <http://tplinkwifi.net>, and log in with the username and password you've set for the router.

2. Go to [Advanced](#) > [Wireless](#) > [WPS](#) .

### 12.7.1. Set the Router's PIN

Router's PIN is enabled by default to allow wireless devices to connect to the router using the PIN. You can use the default one or generate a new one.



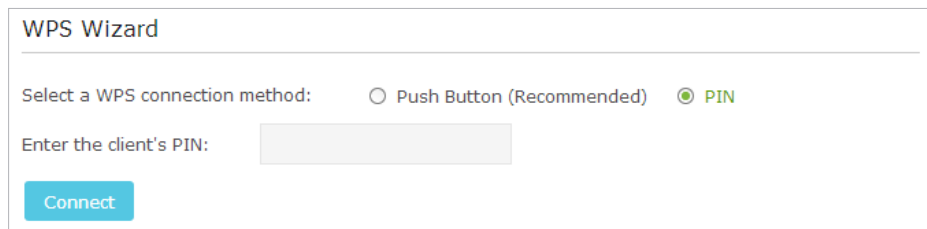
**Note:**

1. If you want to enable/disable the WPS feature, go to [System Tools](#) > [System Parameters](#) > [WPS](#), select or clear the [Enable WPS](#) check box.
2. PIN (Personal Identification Number) is an eight-character identification number preset to each router. WPS supported devices can connect to your router with the PIN. The default PIN is labeled on the bottom of the router.

### 12.7.2. Use the WPS Wizard for Wi-Fi Connections

1. Select a setup method:

- **Push Button(Recommended):** Click the [Connect](#) button on the screen. Within two minutes, push the WPS button on the client device.
- **PIN:** Enter the client's PIN, and click [Connect](#).



2. [Success](#) will appear on the above screen and the WPS LED on the router will keep on for five minutes if the client has been successfully added to the network.

## 12.8. Schedule Your Wireless Function

The wireless network (2.4GHz, 5GHz-1 and 5GHz-2) can be automatically off at a specific time when you do not need the wireless connection.

1. Visit <http://tplinkwifi.net>, and log in with the username and password you've set for the router.
2. Go to [Advanced](#) > [Wireless](#) > [Wireless Schedule](#).
3. Select [2.4GHz](#), [5GHz-1](#) or [5GHz-2](#) to change the corresponding settings.
4. Toggle On to enable the Wireless Schedule feature.

Wireless Schedule

2.4GHz | 5GHz-1 | 5GHz-2

Wireless Schedule:
☒ On

Edit Schedule:


Save

5. Click the icon  to set the Effective Time. Drag the cursor over the cells to choose the period during which you need the wireless off automatically, and click **OK**.

System Time: Thu 1st Jan 1970 20:37:09 GMT-08:00

|       | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday |
|-------|--------|---------|-----------|----------|--------|----------|--------|
| 00:00 |        |         |           |          |        |          |        |
| 01:00 |        |         |           |          |        |          |        |
| 02:00 |        |         |           |          |        |          |        |
| 03:00 |        |         |           |          |        |          |        |
| 04:00 |        |         |           |          |        |          |        |
| 05:00 |        |         |           |          |        |          |        |
| 06:00 |        |         |           |          |        |          |        |
| 07:00 |        |         |           |          |        |          |        |
| 08:00 |        |         |           |          |        |          |        |
| 09:00 |        |         |           |          |        |          |        |
| 10:00 |        |         |           |          |        |          |        |
| 11:00 |        |         |           |          |        |          |        |
| 12:00 |        |         |           |          |        |          |        |
| 13:00 |        |         |           |          |        |          |        |
| 14:00 |        |         |           |          |        |          |        |
| 15:00 |        |         |           |          |        |          |        |
| 16:00 |        |         |           |          |        |          |        |
| 17:00 |        |         |           |          |        |          |        |
| 18:00 |        |         |           |          |        |          |        |
| 19:00 |        |         |           |          |        |          |        |
| 20:00 |        |         |           |          |        |          |        |
| 21:00 |        |         |           |          |        |          |        |
| 22:00 |        |         |           |          |        |          |        |
| 23:00 |        |         |           |          |        |          |        |
| 24:00 |        |         |           |          |        |          |        |

☒ Effective Time

Cancel
Reset
OK

6. Click **Save**.

**Note:**

1. The Effective Time Schedule is based on the time of the router. You can go to [Advanced > System Tools > Time Settings](#) to modify the time.
2. If you just set time for one wireless band, the other two wireless bands are still always on. So set time for other two bands to schedule your whole wireless networks.
3. The wireless LED will be off if the corresponding wireless network is disabled.
4. The wireless network will be automatically turned on after the time period you set.

## Chapter 13

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# Manage the Router

---

This chapter will show you the configuration for managing and maintaining your router.

This chapter includes the following sections:

- *Set Up System Time*
- *Test the Network Connectivity*
- *Upgrade the Firmware*
- *Backup and Restore Configuration Settings*
- *Change the Administrator Account*
- *Password Recovery*
- *Local Management*
- *Remote Management*
- *System Log*
- *Monitor the Internet Traffic Statistics*
- *Control LEDs*

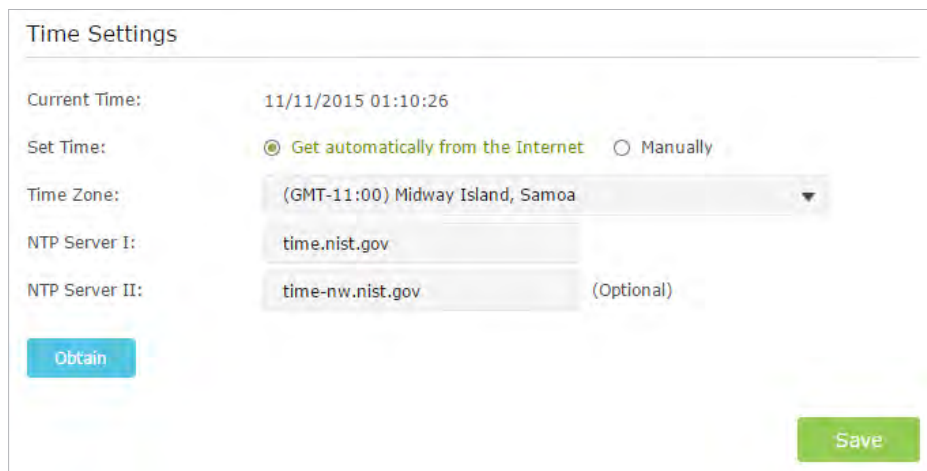
## 13.1. Set Up System Time

System time is the time displayed while the router is running. The system time you configure here will be used for other time-based functions like Parental Controls. You can manually set how to get the system time.

Visit <http://tplinkwifi.net>, and log in with the username and password you've set for the router. Go to [Advanced](#) > [System Tools](#) > [Time Settings](#).

➤ **To automatically synchronize the time:**

1. In the [Set Time](#) field, select [Get automatically from the Internet](#).



Time Settings

Current Time: 11/11/2015 01:10:26

Set Time: ☒ Get automatically from the Internet ☐ Manually

Time Zone: (GMT-11:00) Midway Island, Samoa

NTP Server I: time.nist.gov

NTP Server II: time-nw.nist.gov (Optional)

Obtain

Save

2. Select your local [Time Zone](#) from the drop-down list.
3. In the [NTP Server I](#) field, enter the IP address or domain name of your desired NTP Server.
4. In the [NTP Server II](#) field, enter the IP address or domain name of the second NTP Server. (Optional)
5. Click [Obtain](#) to get the current Internet time.
6. Click [Save](#) to make the settings effective.

➤ **To manually set the date and time:**

1. In the [Set Time](#) field, select [Manually](#).

Time Settings

Current Time: 11/11/2015 01:10:26

Set Time: ☐ Get automatically from the Internet ☒ Manually

Date:  MM/DD/YYYY

Time:  :  :  (HH/MM/SS)

Save

2. Set the current [Date](#) (In [MM/DD/YYYY](#) format).
3. Set the current [Time](#) (In [HH/MM/SS](#) format).
4. Click [Save](#) to make the settings effective.

➤ **To set up Daylight Saving Time:**

1. Select [Enable Daylight Saving Time](#).

Daylight Saving Time

☒ Enable Daylight Saving Time

Start: 2015

End: 2015

Running Status: Daylight Saving Time is off.

Save

2. Select the correct [Start](#) date and time when daylight saving time starts at your local time zone.
3. Select the correct [End](#) date and time when daylight saving time ends at your local time zone.
4. Click [Save](#) to make the settings effective.

## 13.2. Test the Network Connectivity

Diagnostics is used to test the connectivity between the router and the host or other network devices.

1. Visit <http://tplinkwifi.net>, and log in with the username and password you've set for the router.
2. Go to [Advanced](#) > [System Tools](#) > [Diagnostics](#).

Diagnostics

Diagnostic Tool:
☒ Ping
☐ Traceroute

IP Address/Domain Name:

Start

3. Enter the information with the help of page tips:

- 1 ) Choose [Ping](#) or [Traceroute](#) as the diagnostic tool to test the connectivity;
  - [Ping](#) is used to test the connectivity between the router and the tested host, and measure the round-trip time.
  - [Traceroute](#) is used to display the route (path) your router has passed to reach the tested host, and measure transit delays of packets across an Internet Protocol network.
- 2 ) Enter the [IP Address](#) or [Domain Name](#) of the tested host.

4. Click [Start](#) to begin the diagnostics.

**Tips:**

Click [Advanced](#), you can modify the ping count, ping packet size or the Traceroute Max TTL. It's recommended to keep the default value.

The figure below indicates the proper connection between the router and the Yahoo server (www.Yahoo.com) tested through [Ping](#).

```

PING www.Yahoo.com (116.214.12.74): 64 data bytes
Reply from 116.214.12.74: bytes=64 ttl=50 seq=1 time=51.640 ms
Reply from 116.214.12.74: bytes=64 ttl=50 seq=2 time=53.671 ms
Reply from 116.214.12.74: bytes=64 ttl=50 seq=3 time=56.045 ms
Reply from 116.214.12.74: bytes=64 ttl=50 seq=4 time=57.857 ms

--- Ping Statistic "www.Yahoo.com" ---
Packets: Sent=4, Received=4, Lost=0 (0.00% loss)
Round-trip min/avg/max = 51.640/54.803/57.857 ms
  
```

The figure below indicates the proper connection between the router and the Yahoo server (www.Yahoo.com) tested through [Traceroute](#).

```

traceroute to www.Yahoo.com (116.214.12.74), 20 hops max, 38 byte packets
 1 219.133.12.1 (219.133.12.1) 19.556 ms 22.274 ms 22.024 ms
 2 113.106.38.77 (113.106.38.77) 30.115 ms 22.649 ms 20.931 ms
 3 * * *
 4 183.56.65.14 (183.56.65.14) 26.210 ms 29.428 ms 28.272 ms
 5 * 202.97.60.25 (202.97.60.25) 29.272 ms 25.461 ms
 6 202.97.60.46 (202.97.60.46) 27.335 ms 27.616 ms 28.272 ms
 7 202.97.60.149 (202.97.60.149) 22.805 ms 24.024 ms 24.711 ms
 8 202.97.6.30 (202.97.6.30) 47.610 ms 54.452 ms 61.137 ms
 9 r4105-s2.tp.hinet.net (220.128.6.110) 51.171 ms 50.515 ms 56.107 ms
10 220.128.11.190 (220.128.11.190) 60.950 ms 60.200 ms 60.419 ms
  
```

## 13.3. Upgrade the Firmware

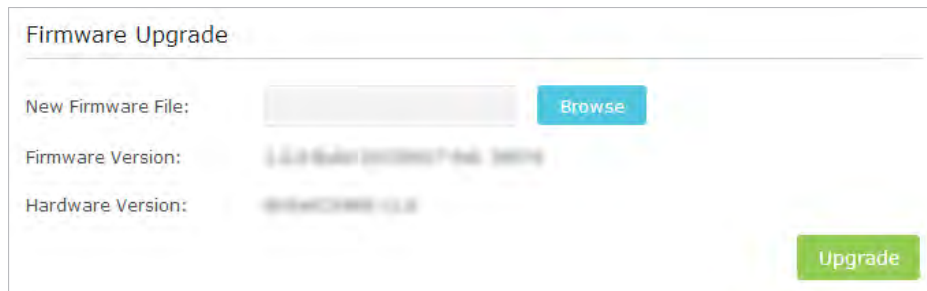
TP-LINK is dedicated to improving and enriching the product features, giving you a better network experience. We will release the latest firmware at TP-LINK official website, you can download the latest firmware file from the [Support](#) page of our website [www.tp-link.com](http://www.tp-link.com) and upgrade the firmware to the latest version.

■ **Note:**

1. Make sure the latest firmware file is matched with the hardware version (as shown in the webpage).
2. Make sure that you have a stable connection between the router and your computer. It is NOT recommended to upgrade the firmware wirelessly.
3. Make sure you remove any USB storage device connected to the router before the firmware upgrade to prevent data loss.
4. Backup your router configuration.
5. Do NOT turn off the router during the firmware upgrade.

Follow the steps to upgrade the firmware.

1. Download the latest firmware file for the router from our website [www.tp-link.com](http://www.tp-link.com).
2. Visit <http://tplinkwifi.net>, and log in with the username and password you've set for the router.
3. Go to [Advanced](#) > [System Tools](#) > [Firmware Upgrade](#).
4. Click [Browse](#) to locate the downloaded new firmware file, and click [Upgrade](#).



The screenshot shows the 'Firmware Upgrade' web interface. It features a title bar 'Firmware Upgrade'. Below it, there is a section for 'New Firmware File:' with a text input field and a blue 'Browse' button. Underneath, the 'Firmware Version:' is displayed as 'V1.0.0.0 (20160714-10:10:10)' and the 'Hardware Version:' is 'V1.0.0.0 (20160714-10:10:10)'. At the bottom right, there is a green 'Upgrade' button.

5. Wait a few moments for the upgrading and rebooting.

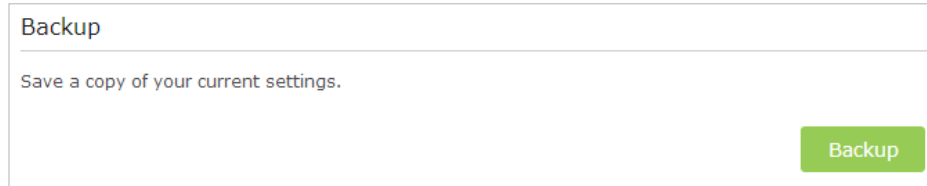
## 13.4. Backup and Restore Configuration Settings

The configuration settings are stored as a configuration file in the router. You can backup the configuration file to your computer for future use and restore the router to a previous settings from the backup file when needed. Moreover, if necessary you can erase the current settings and reset the router to the default factory settings.

1. Visit <http://tplinkwifi.net>, and log in with the username and password you've set for the router.
2. Go to [Advanced](#) > [System Tools](#) > [Backup & Restore](#).

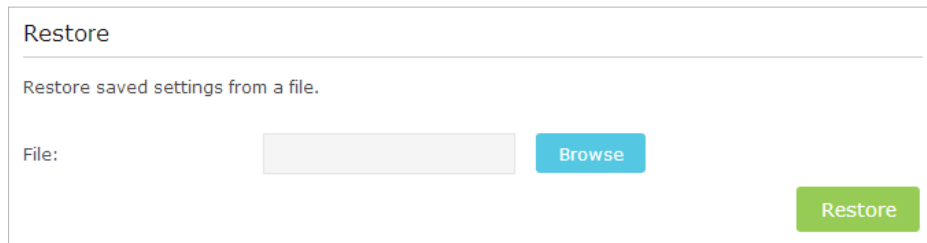
➤ **To backup configuration settings:**

Click [Backup](#) to save a copy of the current settings to your local computer. A '.bin' file of the current settings will be stored to your computer.

The screenshot shows a web interface for backing up configuration settings. At the top, the title "Backup" is displayed. Below it, the instruction "Save a copy of your current settings." is shown. In the bottom right corner, there is a green button labeled "Backup".

➤ **To restore configuration settings:**

1. Click [Browse](#) to locate the backup configuration file stored on your computer, and click [Restore](#).

The screenshot shows a web interface for restoring configuration settings. The title "Restore" is at the top. Below it, the instruction "Restore saved settings from a file." is shown. There is a "File:" label followed by a text input field and a blue "Browse" button. In the bottom right corner, there is a green button labeled "Restore".

2. Wait a few moments for the restoring and rebooting.

■ **Note:** During the restoring process, do not turn off or reset the router.

➤ **To reset the router to factory default settings:**

1. Click [Factory Restore](#) to reset the router.

The screenshot shows a web interface for factory default restore. The title "Factory Default Restore" is at the top. Below it, the instruction "Revert all the configuration settings to their default values." is shown. In the bottom right corner, there is a green button labeled "Factory Restore".

2. Wait a few moments for the reset and reboot.

■ **Note:**

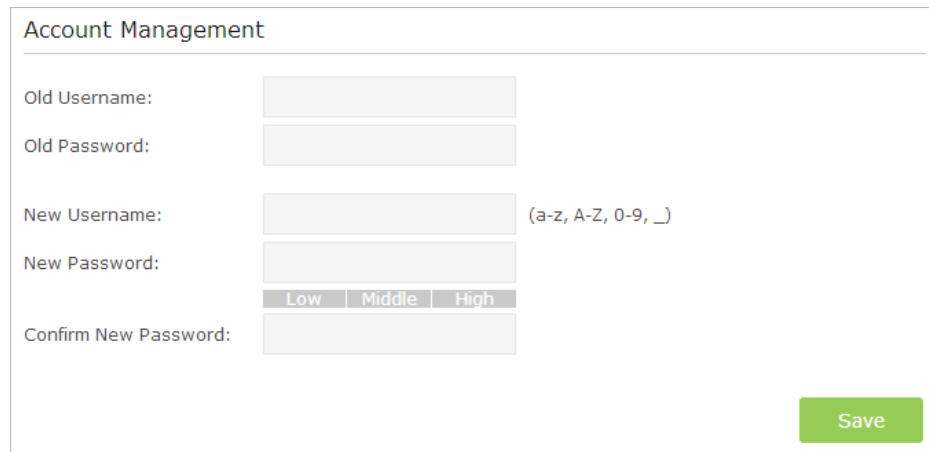
1. During the resetting process, do not turn off or reset the router.
2. We strongly recommend you backup the current configuration settings before resetting the router.

## 13.5. Change the Administrator Account

The account management feature allows you to change your login username and password of the web-based management page.

1. Visit <http://tplinkwifi.net>, and log in with the username and password you've set for the router before.

2. Go to [Advanced](#) > [System Tools](#) > [Administration](#) and focus on the [Account Management](#) section.



The screenshot shows the 'Account Management' section of a web interface. It contains several input fields: 'Old Username:', 'Old Password:', 'New Username:', 'New Password:', and 'Confirm New Password:'. The 'New Password:' field has a strength indicator below it with three tabs: 'Low', 'Middle', and 'High'. To the right of the 'New Username:' field, there is a text constraint '(a-z, A-Z, 0-9, \_)'. A green 'Save' button is located at the bottom right of the form.

3. Enter the old username and old password. Enter the new username and enter the new password twice (both case-sensitive). Click [Save](#).
4. Use the new username and password for the following logins.

## 13.6. Password Recovery

This feature allows you to recover your login username and password in case you forget them.

1. Visit <http://tplinkwifi.net>, and log in with the username and password you've set for the router.
2. Go to [Advanced](#) > [System Tools](#) > [Administration](#) and focus on the [Password Recovery](#) section.
3. Select the [Enable Password Recovery](#) checkbox.
4. Specify a [mailbox \(From\)](#) to send the recovery letter and enter its [SMTP Server](#) address. Specify a [mailbox \(To\)](#) to receive the recovery letter. If the mailbox (From) to send the recovery letter requires encryption, select [Enable Authentication](#) and enter its username and password.

### Tips:

- SMTP server is available for users in most webmail systems. For example, the SMTP server address of Gmail is smtp.gmail.com. You can refer to their Help page to learn the SMTP server address.
- Generally, Enable Authentication should be selected if the login of the mailbox requires username and password.

## Password Recovery

---

☒ Enable Password Recovery

From:

To:

SMTP Server:

☒ Enable Authentication

Username:

Password:

Test Email

Save

5. Click **Save** to make the settings effective.

You can click [Test Email](#) to test whether the configuration is successful. To recover your login username and password, please refer to [FAQ](#).

## 13.7. Local Management

This feature allows you to limit the number of client devices on your LAN from accessing the router using the MAC address-based authentication.

1. Visit <http://tplinkwifi.net>, and log in with the username and password you've set for the router.
2. Go to **Advanced > System Tools > Administration** and complete the settings in **Local Management** section according to your needs.

- **Allow all LAN connected devices to manage the router:**

Toggle on **Access for All LAN Connected Devices.**

**Local Management**

Access for All LAN Connected Devices: ☒ On ☐ Off

Toggle On to enable the management for all devices on LAN or keep it Off to enable the management for a specific device.

- Allow specific devices to manage the router:
  - 1) Toggle off [Access for All LAN Connected Devices](#).
  - 2) Click [Add](#).

**Local Management**

Access for All LAN Connected Devices: ☐ Off Toggle On to enable the management for all devices on LAN or keep it Off to enable the management for a specific device.

+ Add - Delete

| <input type="checkbox"/> | ID | MAC Address | Description | Status | Modify |
|--------------------------|----|-------------|-------------|--------|--------|
| --                       | -- | --          | --          | --     | --     |

MAC Address:  View Existing Devices

Description:

☐ Enable This Entry

Cancel
OK

|    |   |                   |          |  |  |
|----|---|-------------------|----------|--|--|
| -- | 1 | 50-E5-49-1E-06-80 | Your PC! |  |  |
|----|---|-------------------|----------|--|--|

- 3) Click [View Existing Devices](#) and select the device to manage the router from the Existing Devices list, or enter the MAC address of the device manually.
- 4) Specify a [Description](#) for this entry.
- 5) Tick the [Enable This Entry](#) checkbox.
- 6) Click [OK](#) to make the settings effective.

## 13.8. Remote Management

This feature allows you to control remote devices' authority to manage the router.

1. Visit <http://tplinkwifi.net>, and log in with the username and password you've set for the router.
2. Go to [Advanced](#) > [System Tools](#) > [Administration](#) and complete the settings in [Remote Management](#) section according to your needs.

**Remote Management**

☒ Disable Remote Management  
☐ Enable Remote Management for All Devices  
☐ Enable Remote Management for Specified Devices

Web Management Port:

Remote Management IP Address:

Save

- **Forbid all devices to manage the router remotely:** Select [Disable Remote Management](#) and click [Save](#).
- **Allow all devices to manage the router remotely:**
  - 1) Select [Enable Remote Management for All Devices](#).
  - 2) Enter [Web Management Port](#) (1024-65535 or 80).
  - 3) Click [Save](#).

Devices on the Internet can log in to [http://Router's WAN IP address:port number](#) (such as [http://113.116.60.229:1024](#)) to manage the router.

 **Tips:**

1. You can find the WAN IP address of the router on [Basic > Network Maps > Internet](#).
2. The router's WAN IP is usually a dynamic IP. Please refer to [Set Up a Dynamic DNS Service Account](#) if you want to log in to the router through a domain name.

- **Allow specific devices to manage the router remotely:**
  - 1) Select [Enable Remote Management for Specified Devices](#).
  - 2) Enter [Web Management Port](#) (1024-65535 or 80).
  - 3) In [Remote Management IP address](#), enter the IP address of the remote device to manage the router.
  - 4) Click [Save](#).

Devices using this WAN IP can manage the router by logging in to [http://Router's WAN IP:port number](#) (such as [http://113.116.60.229:1024](#)).

 **Tips:**

The router's WAN IP is usually a dynamic IP. Please refer to [Set Up a Dynamic DNS Service Account](#) if you want to log in to the router through a domain name.

## 13.9. System Log

When the router does not work properly, you can save the system log and send it to the technical support for troubleshooting.

➤ **To Save the System Log in Local:**

1. Visit [http://tplinkwifi.net](#), and log in with the username and password you've set for the router.
2. Go to [Advanced > System Tools > System Log](#).
3. Choose the type and level of the system logs according to your need.
4. Click [Save Log](#) to save the system logs to local.

System Log

Log Filter: Type= ALL and Level= ALL

Refresh Delete All

| ID | Time                | Type             | Level  | Log Content                                          |
|----|---------------------|------------------|--------|------------------------------------------------------|
| 1  | 2015-11-02 15:42:37 | Local Management | NOTICE | [14777] Accessable mode change: Devices in the list. |
| 2  | 2015-11-02 15:40:45 | Local Management | NOTICE | [9995] Accessable mode change: All devices.          |
| 3  | 2015-11-02 15:40:42 | Local Management | NOTICE | [9879] Accessable mode change: Devices in the list.  |
| 4  | 1970-01-03 18:20:01 | IP & MAC Binding | INFO   | [25481] Daemon connection succeeded                  |
| 5  | 1970-01-03 18:20:01 | IP & MAC Binding | INFO   | [25481] Config interface initialization succeeded    |

1

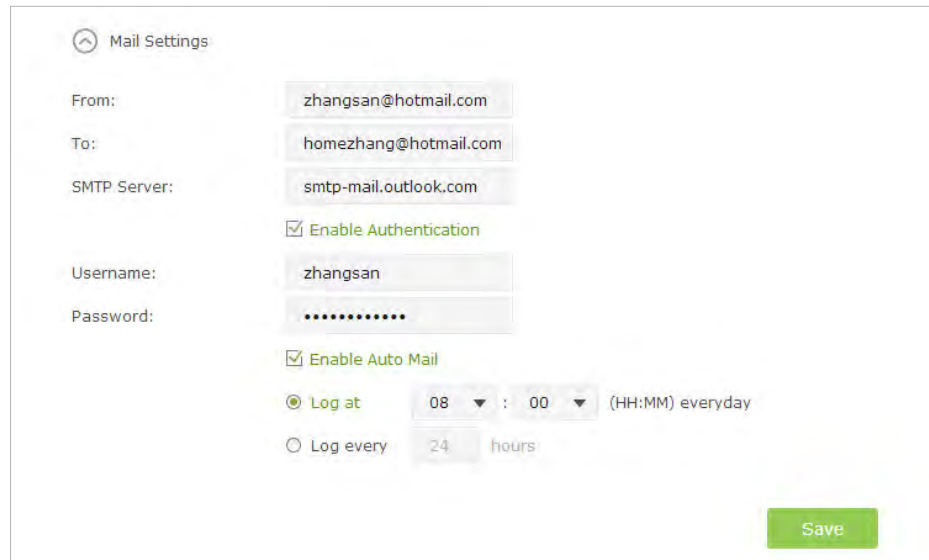
Mail Settings

Mail Log Save Log

### ➤ To Send the System Log to a Mailbox at a Fixed Time:

For example, I want to check my router's working status at a fixed time every day. However, it's too troublesome to login to the web interface every time I want to go checking. It would be great if the system logs could be sent to my mailbox at 8 a.m. every day.

1. Visit <http://tplinkwifi.net>, and log in with the username and password you've set for the router.
2. Go to [Advanced](#) > [System Tools](#) > [System Log](#).
3. Click [Mail Settings](#).
4. Enter the information with the help of page tips:

The image shows a 'Mail Settings' configuration window. It contains several input fields: 'From:' with 'zhangsan@hotmail.com', 'To:' with 'homezhang@hotmail.com', 'SMTP Server:' with 'smtp-mail.outlook.com', 'Username:' with 'zhangsan', and 'Password:' with masked characters. There are two checkboxes: 'Enable Authentication' and 'Enable Auto Mail', both of which are checked. Below these, there are two radio buttons: 'Log at' (selected) and 'Log every'. The 'Log at' option has a time picker set to '08 : 00' and the text '(HH:MM) everyday'. The 'Log every' option has a time picker set to '24' and the text 'hours'. A green 'Save' button is located at the bottom right of the form.

- 1) **From:** Enter the email address used to send the system log.
- 2) **To:** Enter the recipient's email address, which can be the same to or different from the sender's email address.
- 3) **SMTP Server:** Enter the SMTP server address.

🔗 **Tips:** SMTP server is available for users in most webmail systems. For example, the SMTP server address of Hotmail is smtp-mail.outlook.com. You can refer to their Help page to learn the SMTP server address.

- 4) Select **Enable Authentication**.

🔗 **Tips:** Generally, Enable Authentication should be selected if the login of the mailbox requires username and password.

- 5) **Username:** Enter the email address used to send the system log.
- 6) **Password:** Enter the password to login the sender's email address.
- 7) Select **Enable Auto Mail**.

🔗 **Tips:** The router will send the system log to the designated email address if this option is enabled.

- 8) Set a fixed time. The recipient will receive the system log sent at this time every day.

5. Click **Save**.

## 13. 10. Monitor the Internet Traffic Statistics

The Traffic Statistics page displays the network traffic of the LAN, WAN and WLAN sent and received packets, allows you to monitor the volume of Internet traffic statistics.

1. Visit <http://tplinkwifi.net>, and log in with the username and password you've set for the router.
2. Go to **Advanced > System Tools > Traffic Statistics**.

3. Toggle on [Traffic Statistics](#), and then you can monitor the traffic statistics in [Traffic Statistics List](#) section.

Traffic Statistics

Traffic Statistics:
☒ On

Traffic Statistics List

Refresh

Reset All

Delete All

| IP Address/MAC Address           | Total Packets | Total Bytes | Current Packets | Current Bytes | Modify |
|----------------------------------|---------------|-------------|-----------------|---------------|--------|
| 192.168.0.200/ 50-E5-49-1E-06-80 | 0             | 0           | 0               | 0             |        |
| 192.168.0.20/ 40-16-9F-BF-51-0C  | 1             | 594         | 0               | 0             |        |
| 192.168.0.155/ 00-14-78-43-45-45 | 1             | 346         | 0               | 0             |        |
| 192.168.0.1/ 00-0A-EB-13-09-19   | 1             | 594         | 0               | 0             |        |
| 192.168.0.123/ C4-E9-84-23-06-C6 | 1             | 594         | 0               | 0             |        |
| 192.168.0.4/ 00-0A-EB-13-01-02   | 2             | 412         | 0               | 0             |        |
| 192.168.0.100/ C8-85-50-5D-02-40 | 0             | 0           | 0               | 0             |        |
| 192.168.0.184/ C8-85-50-5D-02-40 | 0             | 0           | 0               | 0             |        |

<

1

2

>

Click [Refresh](#) to update the statistic information on the page.

Click [Reset All](#) to reset all statistic values in the list to zero.

Click [Delete All](#) to delete all statistic information in the list.

Click to reset the statistic information of the specific device.

Click to delete the specific device item in the list.

## 13. 11. Control LEDs

The router LEDs indicate router activities and behavior. You can turn on or turn off the router from the web-based management page.

### ➤ To turn on or turn off the LEDs:

- Press the LED button of the router about 2 seconds to turn on or off the LEDs.
- Visit <http://tplinkwifi.net>, and log in with the username and password you've set for the router. Click the [LED](#) icon on the top right of the page.

➤ **To turn off LEDs during Night Mode Period:**

- 1) Visit <http://tplinkwifi.net>, and log in with the username and password you've set for the router.
- 2) Go to [Advanced](#) > [System Tools](#) > [System Parameters](#).
- 3) In the [LED Control](#) section, select the [Enable Night Mode](#) checkbox.
- 4) Specify a time period in the [Night Mode Period](#) according to your needs, and the LEDs will be off during the period.
- 5) Click [Save](#) to make the settings effective.

LED Control

Night mode:

☒ Enable Night Mode

Night Mode Period:

22

▼

:

00

▼

to

06

▼

:

00

▼

(HH:MM)

Save

# FAQ

## Q1. What can I do if I forgot my wireless password?

The default password is labeled at the bottom of the router. If the password has been altered, please connect the router to the computer using a cable and follow the steps below:

1. Visit <http://tplinkwifi.net>, and log in with the username and password you've set for the router.
2. Go to **Advanced** > **Wireless** > **Wireless Settings**, locate the password on the loading page, and mark down your new password for future use.

## Q2. How to retrieve the username and password of the web management page?

The default username and password of the web management page are **admin** (in lower case). If the password has been altered, please follow the steps below:

**If you have altered the login username and password, and Password Recovery is enabled:**

 **Note:** Ensure the Internet access is available before using this method.

1. Visit <http://tplinkwifi.net>;
2. Click **Forget password** > **Send Code**, the verification code will be sent to the mailbox you set when enabling Password Recovery;
3. Login to your mailbox to copy the verification code;
4. Paste the verification code on the window which pops up in Step 2;
5. Click **Confirm** (the login username and password will be reset as **admin** after the click);
6. Enter **admin** (in lower case) as both username and password to login.

 **Tips:** Please refer to [Password Recovery](#) to learn how to configure Password Recovery.

**If you have altered the username and password but Password Recovery is disabled:**

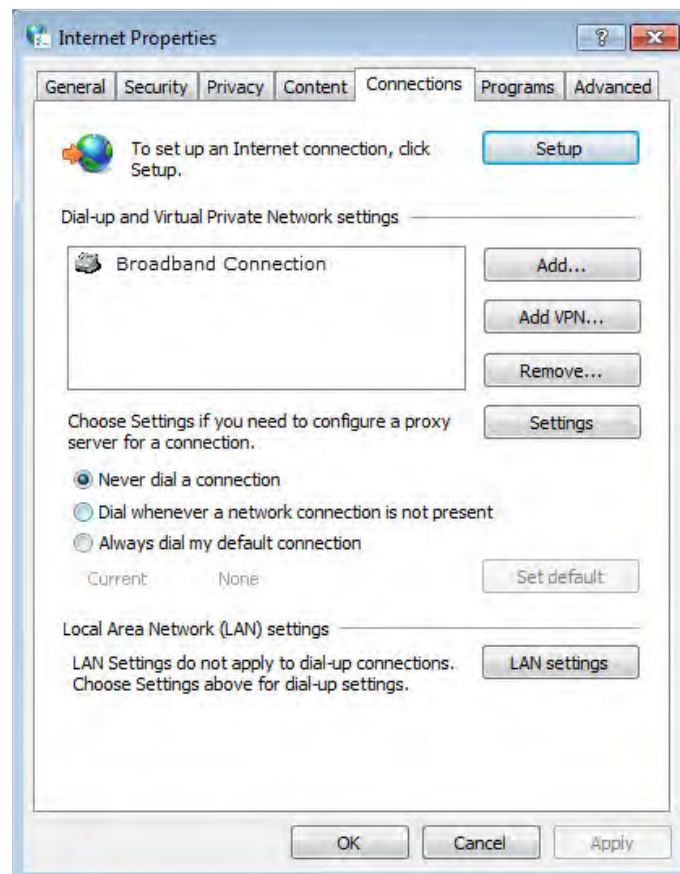
1. Reset the router to factory default settings: Press and hold the Reset button for about 7 seconds and then release;
2. Visit <http://tplinkwifi.net>, enter **admin** (in lower case) as both username and password to login.

 **Note:** You'll need to reconfigure the router to surf the Internet once the router is reset, and please mark down your new password for future use.

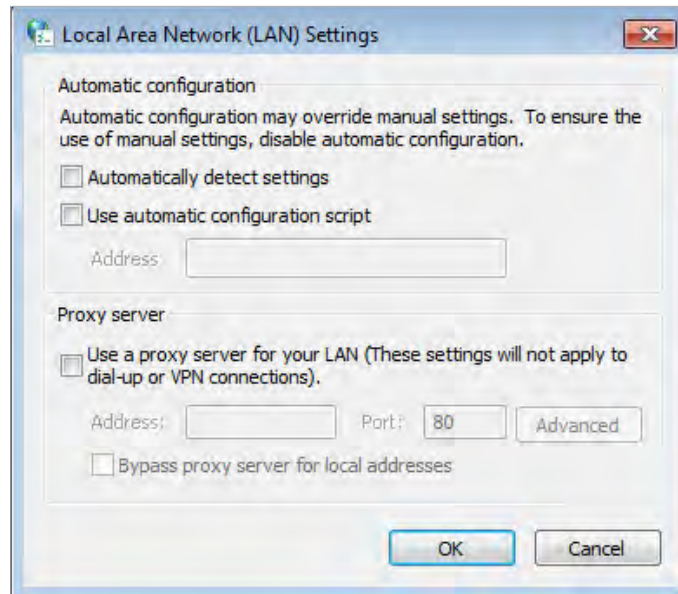
## Q3. I cannot login to the router's web management page, what can I do?

This can happen for a variety of reasons, please try the methods below and try again.

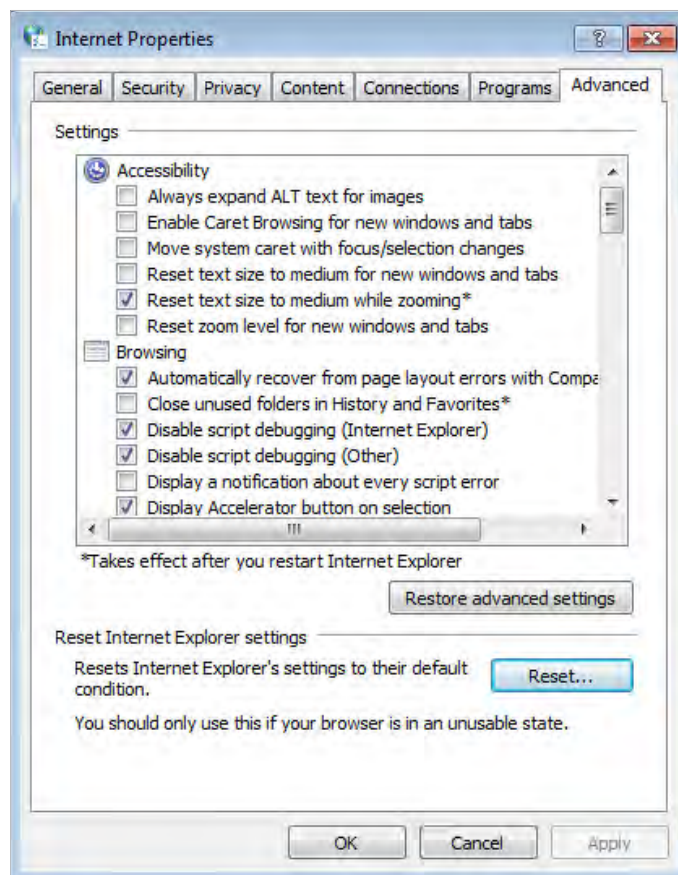
- Make sure the router connects to the computer correctly and the corresponding LED indicator(s) light up.
- Make sure the IP address of your computer is configured as [Obtain an IP address automatically](#) and [Obtain DNS server address automatically](#).
- Make sure the <http://tplinkwifi.net> you input is right.
- Check your computer's settings:
  - 1) Go to [Start](#) > [Control Panel](#) > [Network and Internet](#), and click [View network status and tasks](#);
  - 2) Click [Internet Options](#) on the bottom left;
  - 3) Click [Connections](#), select [Never dial a connection](#);



- 4) Click [LAN settings](#), deselect the following three options and click [OK](#);



5) Go to [Advanced](#) > [Restore advanced settings](#), click [OK](#) to save the settings.



- Change a web browser or computer and login again.
- Reset the router to factory default settings and try again. If login still fails, please contact the technical support.

■ **Note:** You'll need to reconfigure the router to surf the Internet once the router is reset.

## Q4.How to use the WDS Bridging function to extend my wireless network?

For example, my house covers a large area. The wireless network coverage of the router I'm using (the root router) is limited. I want to use an extended router to extend the wireless network of the root router.

■ Note:

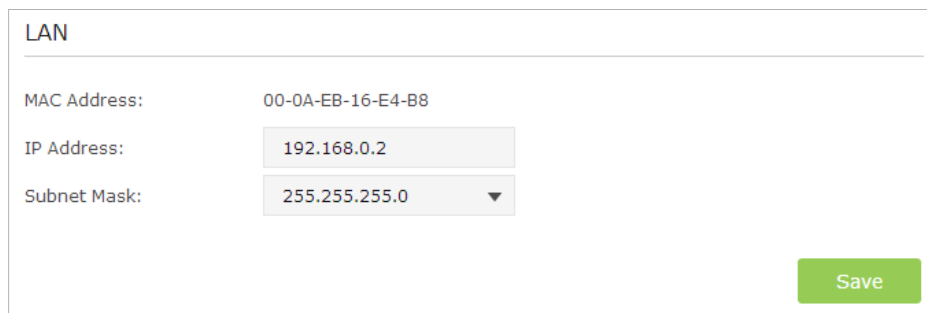
- WDS bridging only requires configuration on the extended router;
- WDS bridging function can be enabled either in 2.4GHz frequency or 5GHz frequency for a dual-band router. We use the WDS bridging function in 2.4GHz frequency as an example.

1. Visit <http://tplinkwifi.net>, and log in with the username and password you've set for the router.

2. Configure the IP address of the router:

- 1) Go to [Advanced](#) > [Network](#) > [LAN](#), configure the IP address of the extended router to be in the same subnet with the root router; (For example, the IP address of the root router is 192.168.0.1, the IP address of the extended router can be 192.168.0.2~192.168.0.254. We take 192.168.0.2 as example.)
- 2) Click [Save](#).

■ Note: Login to the web management page again if the IP address of the router is altered.



|                      |                                            |
|----------------------|--------------------------------------------|
| LAN                  |                                            |
| MAC Address:         | 00-0A-EB-16-E4-B8                          |
| IP Address:          | <input type="text" value="192.168.0.2"/>   |
| Subnet Mask:         | <input type="text" value="255.255.255.0"/> |
| <a href="#">Save</a> |                                            |

3. Survey the SSID to be bridged:

- 1) Go to [Advanced](#) > [System Tools](#) > [System Parameters](#) and focus on the [2.4GHz WDS](#) section, click [Enable WDS Bridging](#);
- 2) Click [Survey](#), locate the root router's SSID and click [Choose](#) (Here we take TP-LINK\_2512 as example);
- 3) If the root router has wireless password, you should enter the wireless password of the root router;
- 4) Click [Save](#).

2.4GHz WDS

WDS Bridging:

☒ Enable WDS Bridging

SSID(to be bridged):

TP-LINK\_2512

Survey

MAC Address(to be bridged):

00-00-00-84-25-12

Example: 00-1D-0F-11-22-33

WDS Mode:

Auto

Security:

☐ None
☒ WPA-PSK/WPA2-PSK
☐ WEP

Password:

123456789

Save

#### 4. Disable DHCP:

- 1) Go to [Network](#) > [DHCP Server](#).
- 2) Deselect [Enable DHCP Server](#) and click [Save](#).

Now you can go to [Advanced](#) > [Status](#) > [Wireless](#) to check the WDS status. When the [WDS status](#) is [Run](#), it means WDS bridging is successfully built.

### Q5.I cannot access the Internet even though the configuration is finished, what can I do?

1. Visit <http://tplinkwifi.net>, and log in with the username and password you've set for the router.
2. Go to [Advanced](#) > [Status](#) to check Internet status:

As the follow picture shows, if IP Address is a valid IP address, please try the methods below and try again:

Internet

IPv4 | IPv6

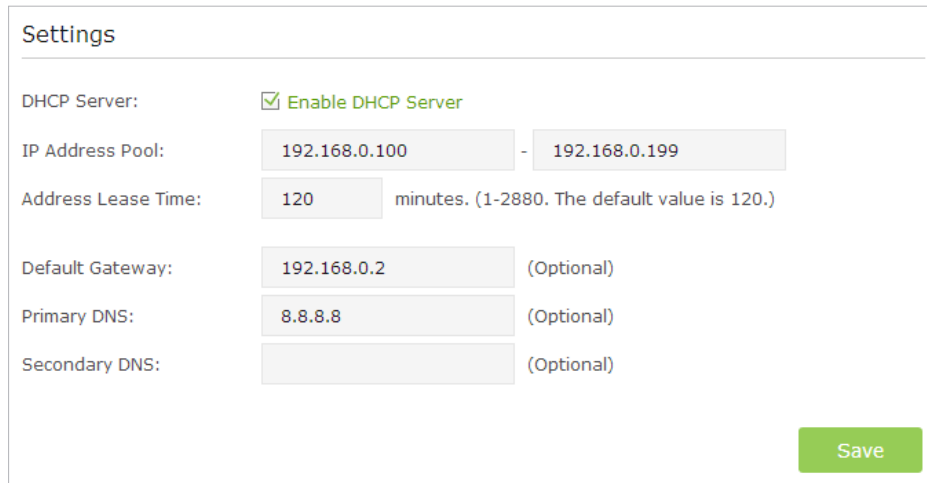
|                  |                   |
|------------------|-------------------|
| MAC Address:     | 00-0A-EB-AC-88-16 |
| IP Address:      | 59.40.0.91        |
| Subnet Mask:     | 255.255.255.0     |
| Default Gateway: | 59.40.0.1         |
| Primary DNS:     | 202.96.128.166    |
| Secondary DNS:   | 202.96.134.133    |
| Connection Type: | Dynamic IP        |

- Your computer might not recognize any DNS server addresses, please manually configure DNS server.

1) Go to [Advanced](#) > [Network](#) > [DHCP Server](#).

2) Enter 8.8.8.8 as Primary DNS, click [Save](#).

 **Tips:** 8.8.8.8 is a safe and public DNS server operated by Google.



Settings

DHCP Server: ☒ **Enable DHCP Server**

IP Address Pool: 192.168.0.100 - 192.168.0.199

Address Lease Time: 120 minutes. (1-2880. The default value is 120.)

Default Gateway: 192.168.0.2 (Optional)

Primary DNS: 8.8.8.8 (Optional)

Secondary DNS: (Optional)

[Save](#)

- Power cycle the modem and the TP-LINK router.
  - 1) Power off your modem and TP-LINK router, leave them off for 1 minute.
  - 2) Power on your modem first, wait about 2 minutes until it get a solid cable or Internet light.
  - 3) Power back TP-LINK router.
  - 4) Wait another 1 or 2 minutes and check the Internet access.
- Reset the router to factory default settings and reconfigure the router with the help of [Quick Setup](#).
- Please refer to [Upgrade the Firmware](#) to upgrade the firmware of the router.
- Check the TCP/IP settings on the particular device if all other devices can get Internet from the router.

**As the follow picture shows, if the IP Address is 0.0.0.0, please try the methods below and try again:**

| Field            | Value             |
|------------------|-------------------|
| MAC Address:     | 00-0A-EB-AC-88-16 |
| IP Address:      | 0.0.0.0           |
| Subnet Mask:     | 0.0.0.0           |
| Default Gateway: | 0.0.0.0           |
| Primary DNS:     | 0.0.0.0           |
| Secondary DNS:   | 0.0.0.0           |
| Connection Type: | None              |

- Make sure the physical connection between the router and the modem is proper
- Clone the MAC address of your computer.
  - 1) Visit <http://tplinkwifi.net>, and log in with the username and password you've set for the router.
  - 2) Go to **Advanced** > **Network** > **Internet** and focus on the **MAC Clone** section.
  - 3) Choose an option to your need (Enter the MAC address if **Use Custom MAC Address** is selected), and click **Save**.

MAC Clone

☒ Use Default MAC Address  
☐ Use Current Computer MAC Address  
☐ Use Custom MAC Address

**Save**

**Tips:**

- Some ISP will register the MAC address of your computer when you access the Internet for the first time through their Cable modem, if you add a router into your network to share your Internet connection, the ISP will not accept it as the MAC address is changed, so we need to clone your computer's MAC address to the router.
  - The MAC addresses of a computer in wired connection and wireless connection are different.
- **Modify the LAN IP address of the router.**

**Note:**

Most TP-LINK routers use 192.168.0.1/192.168.1.1 as their default LAN IP address, it may be conflicting with the IP range of your existent ADSL modem/router. If so, the router is not able to communicate with your modem and cause you can't access the Internet. To resolve this problem, we need to change the LAN IP address of the router to avoid such conflict, for example, 192.168.2.1.

- 1) Visit <http://tplinkwifi.net>, and log in with the username and password you've set for the router.
- 2) Go to [Advanced](#) > [Network](#) > [LAN](#).
- 3) Modify the LAN IP address as the follow picture shows. Here we take 192.168.2.1 as an example.
- 4) Click [Save](#).

LAN

MAC Address: 00-0A-EB-16-E4-B8

IP Address: 192.168.2.1

Subnet Mask: 255.255.255.0 ▼

Save

- Power cycle the modem and the TP-LINK router.
  - 1) Power off your modem and TP-LINK router, leave them off for 1 minute.
  - 2) Power on your modem first, wait about 2 minutes until it get a solid cable or Internet light.
  - 3) Power back TP-LINK router.
  - 4) Wait another 1 or 2 minutes and check the Internet access.
- Double check the Internet Connection Type.
  - 1) Confirm your Internet Connection Type, which can be learned from the ISP.
  - 2) Visit <http://tplinkwifi.net>, and log in with the username and password you've set for the router.
  - 3) Go to [Advanced](#) > [Network](#) > [Internet](#).
  - 4) Select your [Internet Connection Type](#) and fill in other parameters with the help of page tips.
  - 5) Click [Save](#).

IPv4

Internet Connection Type: PPPoE ▼

Static IP

Dynamic IP

PPPoE

BigPond Cable

L2TP

PPTP

Username:

Password:

IP Address:

Primary DNS:

Secondary DNS: 0.0.0.0

⌵ Advanced

Connect Disconnect

Save

6) Power cycle the modem and the TP-LINK router again.

- Please refer to [Upgrade the Firmware](#) to upgrade the firmware of the router.

If you've tried every method above but cannot access the Internet, please contact the technical support.

## Q6. I cannot find my wireless network or I cannot connect the wireless network, what can I do?

If you fail to find any wireless network, please follow the steps below:

- Make sure the wireless function is enabled if you're using a laptop with built-in wireless adapter. You can refer to the relevant document or contact the laptop manufacturer.
- Make sure the wireless adapter driver is installed successfully and the wireless adapter is enabled.

- **On Windows 7**

- 1) If you see the message [No connections are available](#), it is usually because the wireless function is disabled or blocked somehow;
- 2) Clicking on [Troubleshoot](#) and windows might be able to fix the problem by itself.

- **On Windows XP**

- 1) If you see the message [Windows cannot configure this wireless connection](#), this is usually because windows configuration utility is disabled or you are running another wireless configuration tool to connect the wireless;
- 2) Exit the wireless configuration tool (the TP-LINK Utility, for example);

- 3) Select and right click on [My Computer](#) on desktop, select [Manage](#) to open Computer Management window;
- 4) Expand [Services and Applications](#) > [Services](#), find and locate [Wireless Zero Configuration](#) in the Services list on the right side;
- 5) Right click [Wireless Zero Configuration](#), and then select [Properties](#);
- 6) Change [Startup type](#) to [Automatic](#), click on Start button and make sure the Service status is Started. And then click [OK](#);

**If you can find other wireless network except your own, please follow the steps below:**

- Check the WLAN LED indicator on your wireless router/modem.
- Make sure your computer/device is still in the range of your router/modem, move closer if it is currently too far away.
- Go to [Advanced](#) > [Wireless](#) > [Wireless Settings](#), and check the wireless router settings, double check your Wireless Network Name, make sure the Region is selected correctly and wireless is not hidden.

**Note:**

Different countries have different laws about wireless channel. For example, USA allows 2.4GHz channel from 1 to 11, while UK allows from 1 to 13. If you select the Region as UK or the Channel as 12/13 while you are in USA, your computer might not be able to pick up the signal.

### Region Settings

Region: 

China

Save

### Smart Connect

Enable Smart Connect: 

Off

### Wireless Settings

2.4GHz | 5GHz-1 | 5GHz-2

☒ Enable Wireless Radio

Network Name (SSID): 

TP-LINK\_E4B8

Hide SSID

Security: 

WPA/WPA2-Personal (Recommended)

Version: 

☒ Auto

☐ WPA-PSK

☐ WPA2-PSK

Encryption: 

☒ Auto

☐ TKIP

☐ AES

Password: 

56501254

Mode: 

802.11b/g/n mixed

Channel Width: 

Auto

Channel: 

Auto

Transmit Power: 

☐ Low

☐ Middle

☒ High

Save

If you can find your wireless network but fail to connect, please follow the steps below:

- **Authenticating problem, password mismatch:**

- 1) Sometimes it will ask you to type in a PIN number when you connect to the wireless network for the first time. This PIN number is different from the Wireless Password/Network Security Key, usually you can only find it on the back of your wireless router.



- 2) If you cannot find the PIN or PIN failed, you may choose [Connecting using a security key instead](#), and then type in the [Wireless Password/Network Security Key](#).
- 3) If it continues on saying [Network Security Key Mismatch](#), it is suggested to confirm the wireless password of your wireless router.

■ **Note:** Wireless Password/Network Security Key is case sensitive.

- **Windows was unable to connect to XXXX / Can not join this network / Taking longer than usual to connect to this network:**
  - Check the wireless signal strength of your network, if it is weak (1~3 bars), please move the router closer and try again.
  - Change the wireless Channel of the router to 1,6,or 11 to reduce interference from other networks.
  - Re-install or update the driver for your wireless adapter of the computer.

## Q7.What can I do if I cannot access the USB disk after I modify the Authentication settings?

This situation probably happens on your Windows computer due to its special credential mechanism. Once you successfully access the USB disk, the connection will be temporarily recorded and you will be refused to access the USB disk with another account.

You can follow either method below to solve this problem:

- **Method 1:** Log off (sign out) from the Windows to delete the temporary connection record.
- **Method 2: (Only for Local Storage Sharing)** Change the Address of the USB Disk by referring to [To Customize the Address of the USB Disk](#).

## Q8.What can I do if I am still required to enter the password for USB access even though I have selected Remember my credentials in my

## **Windows computer?**

Because of Windows special credential mechanism, if the USB access username you set is the same as the Windows account name, Windows will be unable to remember the password you set for the USB.

To solve this problem, you can set a different USB access username or make the USB access password the same as your Windows account. After you modify the access account, remember to log off (sign out) from the Windows.

### **Q9. Why am I never required to enter the account information for USB access even though I have enabled the Authentication feature?**

This situation probably happens on your Windows computer due to its special credential mechanism. If your USB access username and password are both the same as your Windows account, the Windows will automatically use its account information to access the USB disk. Therefore, you will have no need to enter the username and password.

# Specifications

| Hardware               |                                                                                                                                                                                                               |
|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ethernet Ports         | Four 10/100/1000Mbps LAN Ports<br>One 10/100/1000Mbps WAN Port                                                                                                                                                |
| USB Port               | One USB 3.0 Port<br>One USB 2.0 Port                                                                                                                                                                          |
| Button                 | WPS Button, Reset Button, Wireless On/Off Button, LED On/Off Button, Power On/Off Button                                                                                                                      |
| External Power Supply  | 12V/5A                                                                                                                                                                                                        |
| Dimensions (W x D x H) | 230mm×230mm×43mm                                                                                                                                                                                              |
| Antenna                | Four dual band Fixed antennas & Four single band Fixed antennas                                                                                                                                               |
| Wireless               |                                                                                                                                                                                                               |
| Wireless Standards     | IEEE 802.11ac/n/a 5GHz, IEEE 802.11b/g/n 2.4GHz                                                                                                                                                               |
| Frequency              | 2.4GHz, 5GHz Band 1&4                                                                                                                                                                                         |
| Signal Rate            | 2166Mbps at 5GHz, 1000Mbps at 2.4GHz                                                                                                                                                                          |
| Transmit Power         | CE: <20dBm(2.4GHz), <23dBm(5GHz)<br>FCC: <30dBm                                                                                                                                                               |
| Reception Sensitivity  | 5GHz: 11a 6Mbps: -91dBm; 11a 54Mbps: -73dBm; 11n HT20: -69dBm; 11n HT40: -67dBm;<br>11ac HT20: -66dBm; 11ac HT40: -61dBm; 11ac HT80: -58dBm<br>2.4GHz: 11g 54Mbps: -76dBm; 11n HT20: -73dBm; 11n HT40: -71dBm |
| Wireless Function      | Enable/Disable Wireless Radio, WDS Bridge, WMM, Wireless Statistics                                                                                                                                           |
| Wireless Security      | 64/128-bit WEP, WPA/WPA2, WPA-PSK/WPA-PSK2 encryptions                                                                                                                                                        |
| Software               |                                                                                                                                                                                                               |
| WAN Type               | Dynamic IP/Static IP/PPPoE/PPTP(Dual Access)/L2TP(Dual Access)/Bigpond                                                                                                                                        |
| DHCP                   | Server, DHCP Client List, Address Reservation                                                                                                                                                                 |
| Quality of Service     | WMM, Bandwidth Control                                                                                                                                                                                        |
| Port Forwarding        | Virtual Server, Port Triggering, UPnP, DMZ                                                                                                                                                                    |
| Dynamic DNS            | DynDns, NO-IP                                                                                                                                                                                                 |
| VPN                    | PPTP, Open VPN                                                                                                                                                                                                |
| Access Control         | Parental Control, Local Management Control, Host list, Access Schedule, Rule Management                                                                                                                       |
| Firewall Security      | DoS, SPI Firewall, IP Address Filter/Domain Filter, IP and MAC Address Binding                                                                                                                                |
| Protocols              | Supports IPv4 and IPv6                                                                                                                                                                                        |
| USB Sharing            | Supports Samba(Storage)/FTP Server/Media Server/Printer Server                                                                                                                                                |
| Management             | Access Control, Local Management, Remote Management                                                                                                                                                           |
| Guest Network          | 2.4GHz guest network x 1, 5GHz guest network x 1                                                                                                                                                              |
| Environment            |                                                                                                                                                                                                               |
| Operating Temperature  | 0°C~40°C (32°F ~104°F)                                                                                                                                                                                        |
| Storage Temperature    | -40°C~70°C (-40°F ~158°F)                                                                                                                                                                                     |
| Operating Humidity     | 10%~90% non-condensing                                                                                                                                                                                        |
| Storage Humidity       | 5%~90% non-condensing                                                                                                                                                                                         |

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## 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.

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.
2. This device must accept any interference received, including interference that may cause undesired operation.

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

Note: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

### **FCC RF Radiation Exposure Statement**

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This device and its antenna must not be co-located or operating in conjunction with any other antenna or transmitter.

"To comply with FCC RF exposure compliance requirements, this grant is applicable to only Mobile Configurations. The antennas used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter."

The device operates in 2.4 ~ 2.4835 GHz / 5.15 ~ 5.25 GHz / 5.725 – 5.85 GHz frequency range. It is restricted in indoor environment only. This device meets all the other requirements specified in Part 15C / E, Section 15.247 / 15.407 of the FCC Rules.

For product available in the USA/Canada market, only channel 1~11 can be operated. Selection of other channels is not possible.

## 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.

## RF Exposure Information

This device meets the EU requirements (1999/519/EC) on the limitation of exposure of the general public to electromagnetic fields by way of health protection.

The device complies with RF specifications when the device used at 20 cm from your body.

## National Restrictions

This device is intended for home and office use in all EU countries (and other countries following the EU directive 1999/5/EC) without any limitation except for the countries mentioned below:

| Country            | Restriction            | Reason/remark                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------------|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Belarus            | Not implemented        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Norway             | Implemented            | This subsection does not apply for the geographical area within a radius of 20 km from the centre of Ny-Ålesund on Svalbard.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Italy              | Implemented            | The public use is subject to general authorisation by the respective service provider.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Russian Federation | Limited implementation | <p><b>1. SRD with FHSS modulation</b></p> <p>1.1. Maximum 2.5 mW e.i.r.p.</p> <p>1.2. Maximum 100 mW e.i.r.p. Permitted for use SRD for outdoor applications without restriction on installation height only for purposes of gathering telemetry information for automated monitoring and resources accounting systems. Permitted to use SRD for other purposes for outdoor applications only when the installation height is not exceeding 10 m above the ground surface.</p> <p>1.3. Maximum 100 mW e.i.r.p. Indoor applications.</p> <p><b>2. SRD with DSSS and other than FHSS wideband modulation</b></p> <p>2.1. Maximum mean e.i.r.p. density is 2 mW/MHz. Maximum 100 mW e.i.r.p.</p> <p>2.2. Maximum mean e.i.r.p. density is 20 mW/MHz. Maximum 100 mW e.i.r.p. It is permitted to use SRD for outdoor applications only for purposes of gathering telemetry information for automated monitoring and resources accounting systems or security systems.</p> <p>2.3. Maximum mean e.i.r.p. density is 10 mW/MHz. Maximum 100 mW e.i.r.p. Indoor applications.</p> |
| Ukraine            | Limited implementation | e.i.r.p. ≤100 mW with built-in antenna with amplification factor up to 6 dBi.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

ATTENTION: Due to EU law, the country settings must be identical to the country where the device is operating (important due to non-harmonised frequencies in the EU).

Restricted to indoor use.

### **Canadian Compliance Statement**

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:

1. This device may not cause interference, and
2. This device must accept any interference, including interference that may cause undesired operation of the device.

Cet appareil est conforme aux norms CNR exemptes de licence d'Industrie Canada. Le fonctionnement est soumis aux deux conditions suivantes:

1. cet appareil ne doit pas provoquer d'interférences et
2. cet appareil doit accepter toute interférence, y compris celles susceptibles de provoquer un fonctionnement non souhaité de l'appareil.

### **Caution:**

1. The device for operation in the band 5150–5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;
2. For devices with detachable antenna(s), the maximum antenna gain permitted for devices in the bands 5250-5350 MHz and 5470-5725 MHz shall be such that the equipment still complies with the e.i.r.p. limit;
3. For devices with detachable antenna(s), the maximum antenna gain permitted for devices in the band 5725-5850 MHz shall be such that the equipment still complies with the e.i.r.p. limits specified for point-to-point and non-point-to-point operation as appropriate; and

The high-power radars are allocated as primary users (i.e. priority users) of the bands 5250-5350 MHz and 5650-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

DFS (Dynamic Frequency Selection) products that operate in the bands 5250- 5350 MHz, 5470-5600MHz, and 5650-5725MHz.

### **Avertissement:**

1. Le dispositif fonctionnant dans la bande 5150-5250 MHz est réservé uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;
2. Le gain maximal d'antenne permis pour les dispositifs avec antenne(s) amovible(s) utilisant les bandes 5250-5350 MHz et 5470-5725 MHz doit se conformer à la limitation P.I.R.E.;

3. Le gain maximal d'antenne permis pour les dispositifs avec antenne(s) amovible(s) utilisant la bande 5725-5850 MHz doit se conformer à la limitation P.I.R.E spécifiée pour l'exploitation point à point et non point à point, selon le cas.

En outre, les utilisateurs devraient aussi être avisés que les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu'ils ont la priorité) pour les bandes 5250-5350 MHz et 5650-5850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

Les produits utilisant la technique d'atténuation DFS (sélection dynamique des fréquences) sur les bandes 5250- 5350 MHz, 5470-5600MHz et 5650-5725MHz.

### **Radiation Exposure Statement:**

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

### **Déclaration d'exposition aux radiations:**

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

### **Industry Canada Statement**

CAN ICES-3 (B)/NMB-3(B)

### **Korea Warning Statements:**

당해 무선설비는 운용중 전파혼신 가능성이 있음.

### **NCC Notice & BSMI Notice:**

注意！

依據 低功率電波輻射性電機管理辦法

第十二條 經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性或功能。

第十四條 低功率射頻電機之使用不得影響飛航安全及干擾合法通行；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。前項合法通信，指依電信規定作業之無線電信。低功率射頻電機需忍受合法通信或工業、科學以及醫療用電波輻射性電機設備之干擾。

減少電磁波影響，請妥適使用。

於5.25GHz至5.35GHz區域內操作之無線設備的警告聲明  
工作頻率5.250~5.350GHz該頻段限於室內使用。

## 安全諮詢及注意事項

- 請使用原裝電源供應器或只能按照本產品注明的電源類型使用本產品。
- 清潔本產品之前請先拔掉電源線。請勿使用液體、噴霧清潔劑或濕布進行清潔。
- 注意防潮，請勿將水或其他液體潑灑到本產品上。
- 插槽與開口供通風使用，以確保本產品的操作可靠並防止過熱，請勿堵塞或覆蓋開口。
- 請勿將本產品置放於靠近熱源的地方。除非有正常的通風，否則不可放在密閉位置中。
- 請不要私自打開機殼，不要嘗試自行維修本產品，請由授權的專業人士進行此項工作。



Продукт сертифіковано згідно с правилами системи УкрСЕПРО на відповідність вимогам нормативних документів та вимогам, що передбачені чинними законодавчими актами України.



## Safety Information

- When product has power button, the power button is one of the way to shut off the product; when there is no power button, the only way to completely shut off power is to disconnect the product or the power adapter from the power source.
- Don't disassemble the product, or make repairs yourself. You run the risk of electric shock and voiding the limited warranty. If you need service, please contact us.
- Avoid water and wet locations.
- Adapter shall be installed near the equipment and shall be easily accessible.
- The plug considered as disconnect device of adapter.
-  Use only power supplies which are provided by manufacturer and in the original packing of this product.

**This product can be used in the following countries:**

|    |    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|----|
| AT | BG | BY | CA | CZ | DE | DK | EE |
| ES | FI | FR | GB | GR | HU | IE | IT |
| LT | LV | MT | NL | NO | PL | PT | RO |
| RU | SE | SG | SK | TR | UA | US |    |

## DECLARATION OF CONFORMITY

For the following equipment:

Product Description: AC5400 Wireless Tri-Band MU-MIMO Gigabit Router

Model No.: **Archer C5400**

Trademark: **TP-LINK**

We declare under our own responsibility that the above products satisfy all the technical regulations applicable to the product within the scope of Council Directives:

Directives 1999/5/EC, Directives 2004/108/EC, Directives 2006/95/EC, Directives 1999/519/EC, Directives 2011/65/EU

The above product is in conformity with the following standards or other normative documents

**EN 300 328 V1.8.1**

**EN 301 489-1 V1.9.2 & EN 301 489-17 V2.2.1**

**EN 55022: 2010 + AC: 2011**

**EN 55024: 2010**

**EN 60950-1: 2006 + A11: 2009 + A1: 2010 + A12: 2011 + A2: 2013**

**EN 50385: 2002**

**EN 301 893 V1.7.1**

*The product carries the CE Mark:*

**C € 1588 !**

Person responsible for making this declaration:



Yang Hongliang  
Product Manager of International Business

Date of issue: 2015/11/11