User Guide

AC4000 MU-MIMO Tri-Band Wi-Fi Router
Archer C4000

REV3.0.0 1910012539

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About This Guide

This guide is a complement of Quick Installation Guide. The Quick Installation Guide instructs you on quick internet setup, and this guide provides details of each function and shows you the way to configure these functions appropriate to your needs.

When using this guide, please notice that features of the router may vary slightly depending on the model and software version you have, and on your location, language, and internet service provider. All screenshots, images, parameters and descriptions documented in this guide are used for demonstration only.

Conventions

In this guide the following conventions are used:

Convention	Description
Underlined	Underlined words or phrases are hyperlinks. You can click to redirect to a website or a specific section.
Teal	Contents to be emphasized and texts on the web page are in teal, including the menus, items, buttons, etc.
>	The menu structures to show the path to load the corresponding page. For example, Advanced > Wireless > MAC Filtering means the MAC Filtering function page is under the Wireless menu that is located in the Advanced tab.
Note:	Ignoring this type of note might result in a malfunction or damage to the device.
Tips:	Indicates important information that helps you make better use of your device.
symbols on the web page	• click to edit the corresponding entry. • click to delete the corresponding entry. • click to enable or disable the corresponding entry. • click to view more information about items on the page.

More Info

The latest software, management app and utility can be found at Download Center at https://www.tp-link.com/support.

The Quick Installation Guide can be found where you find this guide or inside the package of the router.

Specifications can be found on the product page at https://www.tp-link.com.

A Technical Support Forum is provided for you to discuss our products at https://community.tp-link.com.

Our Technical Support contact information can be found at the Contact Technical Support page at https://www.tp-link.com/support.

Speed/Coverage Disclaimer

*Maximum wireless signal rates are the physical rates derived from IEEE Standard 802.11 specifications. Actual wireless data throughput and wireless coverage are not guaranteed and will vary as a result of 1) environmental factors, including building materials, physical objects, and obstacles, 2) network conditions, including local interference, volume and density of traffic, product location, network complexity, and network overhead, and 3) client limitations, including rated performance, location, connection, quality, and client condition.

MU-MIMO and 1024-QAM Disclaimer

*Use of MU-MIMO and 1024-QAM requires clients to also support those functions.

Chapter 1

Get to Know About Your Router

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

It chapter contains the following sections:

- Product Overview
- Appearance

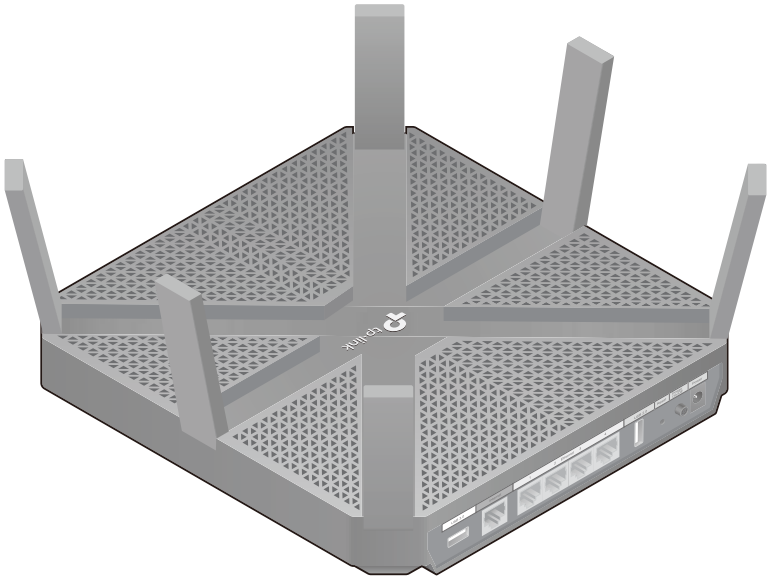
1. 1. Product Overview

The TP-Link router is designed to fully meet the need of Small Office/Home Office (SOHO) networks and users demanding higher networking performance. The powerful antennas ensure continuous Wi-Fi signal to all your devices while boosting widespread coverage throughout your home, and the built-in Ethernet ports supply high-speed connection to your wired devices.

Moreover, it is simple and convenient to set up and use the TP-Link router due to its intuitive web interface and the powerful Tether app.

1. 2. Appearance

1. 2. 1. The Back Panel

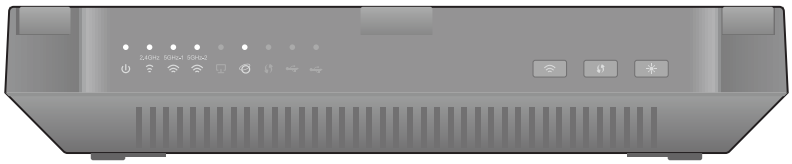


The router's ports (view from left to right) are located on the rear panel.

Item	Description
USB 3.0 Port	For connecting to a USB 3.0 device. It is also compatible with USB 2.0 devices.
Internet Port	For connecting to a DSL/Cable modem, or an Ethernet jack.
Ethernet Ports (1/2/3/4)	For connecting your PC or other wired devices to the router.
USB 2.0 Port	For connecting to a USB 2.0 device.

Item	Description
Reset Button	Press this button for more than 5 seconds to reset the router to its factory default settings.
Power On/Off Button	Press this button for 1 second to power on or off the router.
Power Port	For connecting the router to power socket via the provided power adapter.
Antennas	Used for wireless operation and data transmit. Upright them for the best Wi-Fi performance.

1. 2. 2. The Front Panel



The router's LEDs and buttons (view from left to right) are located on the front panel. You can check the router's working status by following the LED Explanation table.

LED Explanation

Name	Status	Indication
(Power)	On	The system has started up successfully.
	Flashing	The system is starting up or the firmware is being upgraded. Do not disconnect or power off your router.
	Off	Power is off.
(2.4GHz Wireless)	On	The 2.4GHz wireless band is enabled.
	Off	The 2.4GHz wireless band is disabled.
(5GHz-1 Wireless)	On	The 5GHz-1 wireless band is enabled.
	Off	The 5GHz-1 wireless band is disabled.
(5GHz-2 Wireless)	On	The 5GHz-2 wireless band is enabled.
	Off	The 5GHz-2 wireless band is disabled.
(Ethernet)	On	At least one powered-on device is connected to the router's Ethernet port.
	Off	No powered-on device is connected to the router's Ethernet port.
(Internet)	Blue On	The internet is available.
	Orange On	The router's Internet port is connected, but the internet is not available.
	Off	The router's Internet port is unplugged.

Name	Status	Indication
(WPS)	On/Off	This light remains on for 5 minutes when a WPS connection is established, then turns off.
	Flashing	WPS connection is in progress. This may take up to 2 minutes.
(USB)	On	The inserted USB device is ready to use.
	Flashing	A USB device is being identified.
	Off	No device is plugged into the USB port.

Button Explanation

Item	Description
(Wi-Fi Button)	Press and hold the Wi-Fi button for about 1 second to turn on or off the wireless function of your router.
(WPS Button)	Press this WPS button for 1 second to enable the WPS function.
(LED Button)	Press the LED button for about 1 second to turn on or off the LEDs of your router.

Chapter 2

Connect the Hardware

This chapter contains the following sections:

- Position Your Router
- Connect Your Router

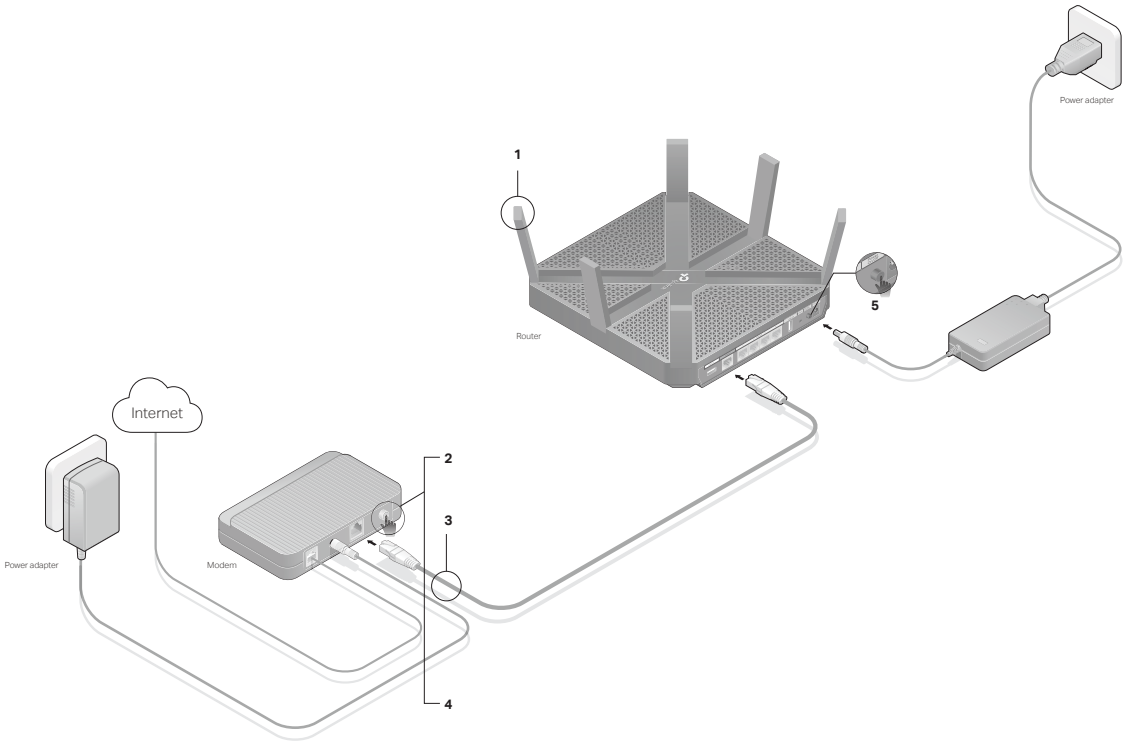
2. 1. Position Your Router

- The product should not be located in a place where it will be exposed to moisture or excessive heat.
- Place the router in a location where it can be connected to multiple 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 the router away from devices with strong electromagnetic interference, such as Bluetooth devices, cordless phones and microwaves.

2. 2. Connect Your Router

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, and then follow Step 1, 5 and 6 to complete the hardware connection.



1. Place the router horizontally and extend the antennas to the maximum angle.
2. Turn off the modem, and remove the backup battery if it has one.

3. Connect the modem to your router's Internet port with an Ethernet cable.
4. Turn on the modem, and then wait about **2 minutes** for it to restart.
5. Connect the power adapter to the router and turn on the router.
6. Confirm that the following LEDs are on and solid to verify the hardware is connected correctly.

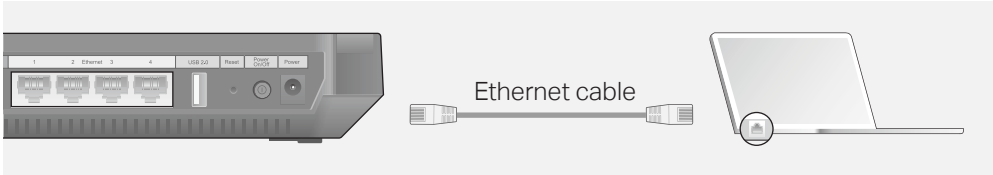
Note:

- If all the LEDs are off, press the LED On/Off button for about 1 second, and then check the LEDs again.
- If the 2.4GHz, 5GHz-1, and 5GHz-2 LEDs are off, press the Wi-Fi On/Off button for about 1 second and all the three LEDs should turn solid on.

7. Connect your computer to the router.

- **Method 1: Wired**

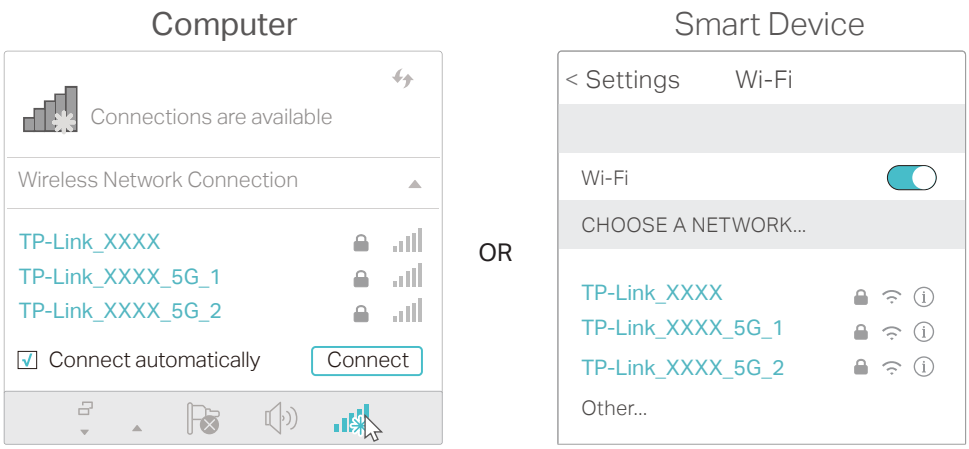
Turn off the Wi-Fi on your computer and connect the devices as shown below.



- **Method 2: Wirelessly**

1) Find the SSID (Network Name) and Wireless Password printed on the label at the bottom of the router.

2) Click the network icon of your computer or go to Wi-Fi Settings of your smart device, and then select the SSID to join the network.



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

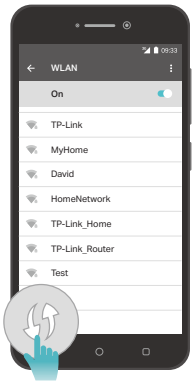
Wireless devices that support WPS, including Android phones, tablets, and most USB network cards, can be connected to your router through this method.

Note:

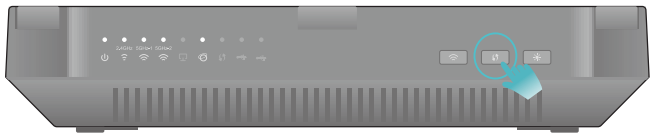
- WPS is not supported by iOS devices.
- The WPS function cannot be configured if the wireless function of the router is disabled. Also, the WPS function will be disabled if your wireless encryption is WEP. Please make sure the wireless function is enabled and is configured with the appropriate encryption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

1) Tab the WPS icon on the device's screen. Here we take an Android phone for instance.

2) Within two minutes, press the WPS button on your router.



close to



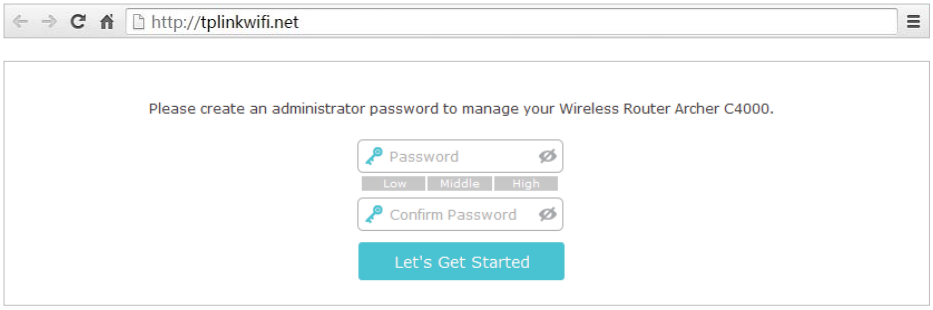
Chapter 3

Log In to 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, Mac OS or UNIX OS with a web browser, such as Microsoft Internet Explorer, Mozilla Firefox or Apple Safari.

Follow the steps below to log in to 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 create a login password for secure management purposes. Then click Let's Get Started to log in.



Note:

- If the login window does not appear, please refer to the FAQ Section.
- If you have registered a TP-Link ID and bound your cloud router to it, the login password you created here will be invalid. Please log in to the cloud router using your TP-Link ID.

Chapter 4

Set Up Internet Connection

This chapter introduces how to connect your router to the internet. The router is equipped with a web-based Quick Setup wizard. It has necessary 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 provides IPv6 service.

It contains the following sections:

- Use Quick Setup Wizard
- Manually Set Up Your Internet Connection
- Set Up the Router as an Access Point
- Set Up an IPv6 Internet Connection
- Set Up WAN Aggregation

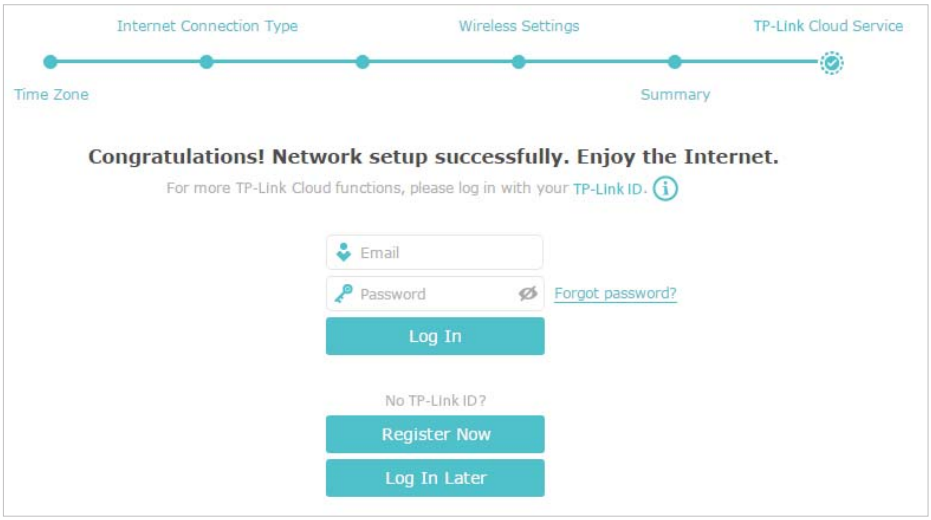
4. 1. Use Quick Setup Wizard

The Quick Setup Wizard will guide you to set up your router.

Tips: If you need the IPv6 internet connection, please refer to the section of Set Up an IPv6 Internet Connection.

Follow the steps below to set up your router.

1. Visit http://tplinkwifi.net, and log in with the password you set for the router.
2. Click Quick Setup on the top of the page. Then follow the step-by-step instructions to connect your router to the internet.
3. To enjoy a more complete service from TP-Link (remote management, TP-Link DDNS, and more.), log in with your TP-Link ID or click Resigter Now to get one. Then follow the instructions to bind the cloud router to your TP-Link ID.



Note:

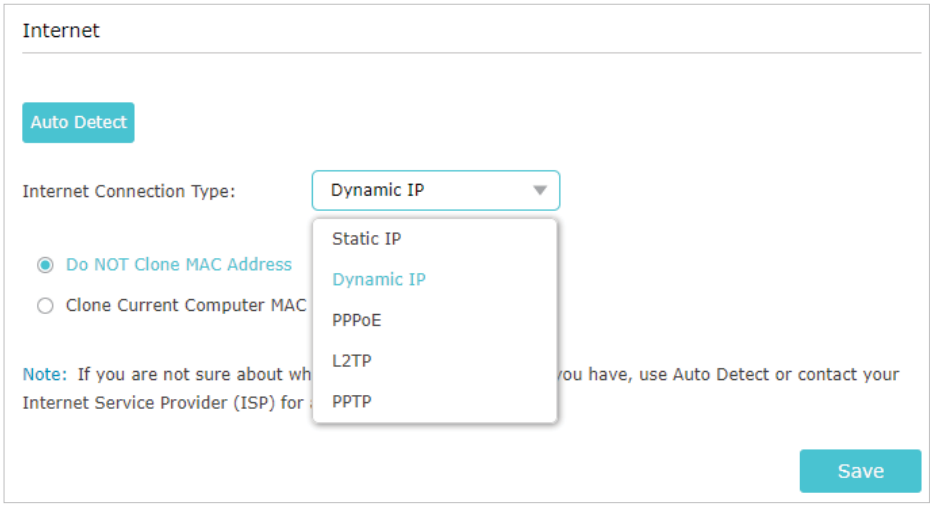
- To learn more about the TP-Link Cloud service, please refer to the TP-Link Cloud Service section.
- If you do not want to register a TP-Link ID now, you may click Log In Later to proceed.
- If you have changed the preset wireless network name (SSID) and wireless password during the Quick Setup process, all your wireless devices must use the new SSID and password to connect to the router.

4. 2. Manually Set Up Your Internet Connection

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.

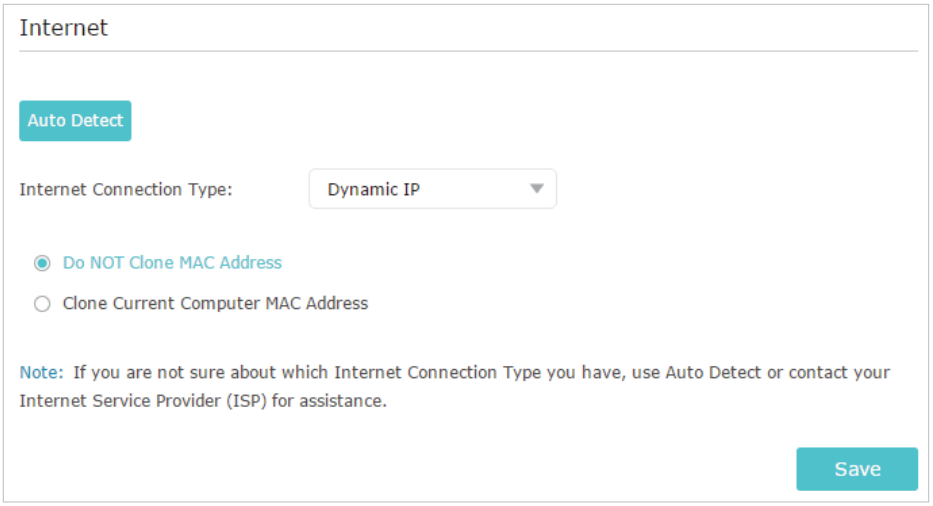
1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.
2. Go to Basic > Internet.
3. Select your internet connection type from the drop-down list.



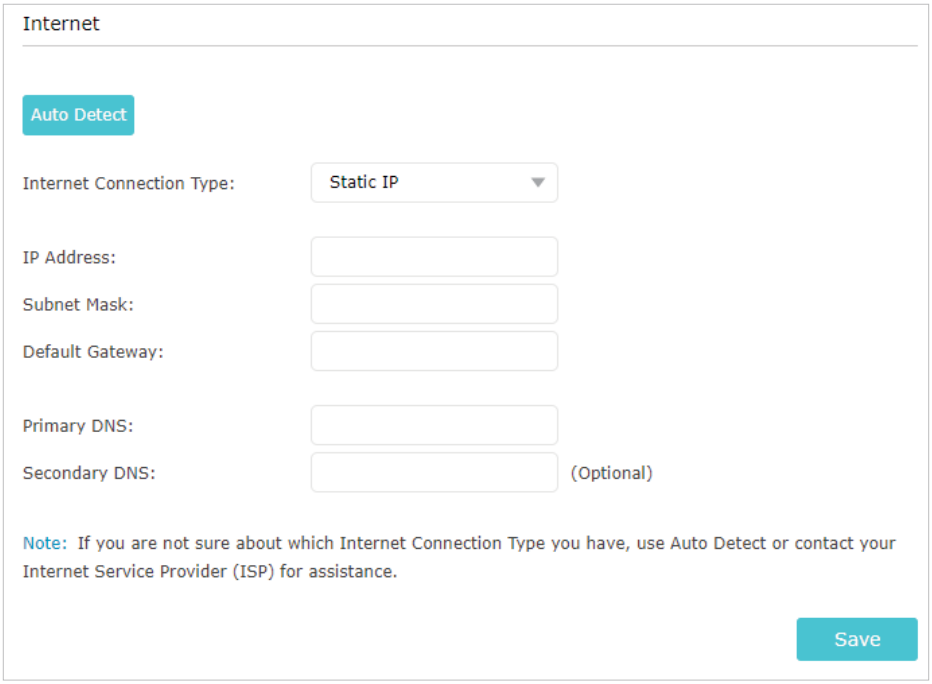
Note: If you are unsure of what your connection type is, click Auto Detect. Since different connection types require different cables and connection information, you can also refer to the demonstrations in Step 4 to determine your connection type.

4. Follow the instructions on the page to continue the configuration. Parameters on the figures are just used for demonstration.

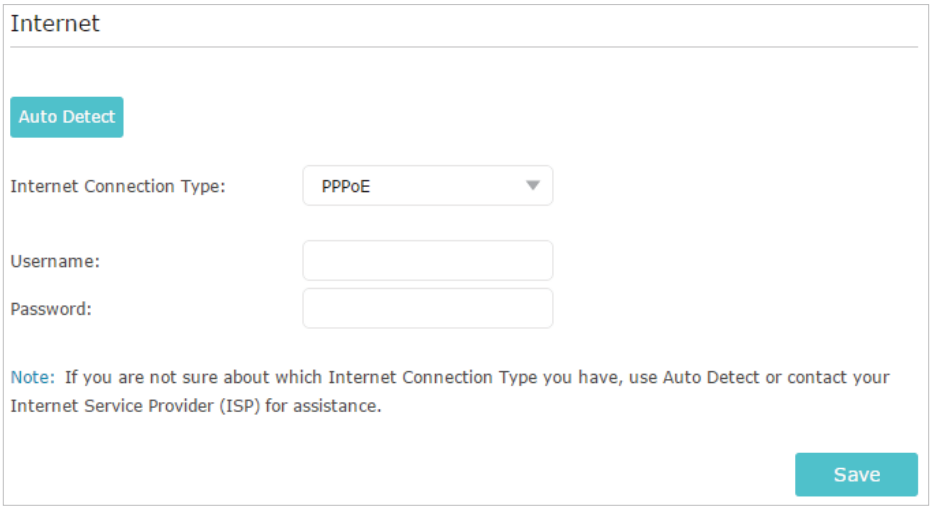
   1) If you choose Dynamic IP, you need to select whether to clone the MAC address. Dynamic IP users are usually equipped with a cable TV or fiber cable.



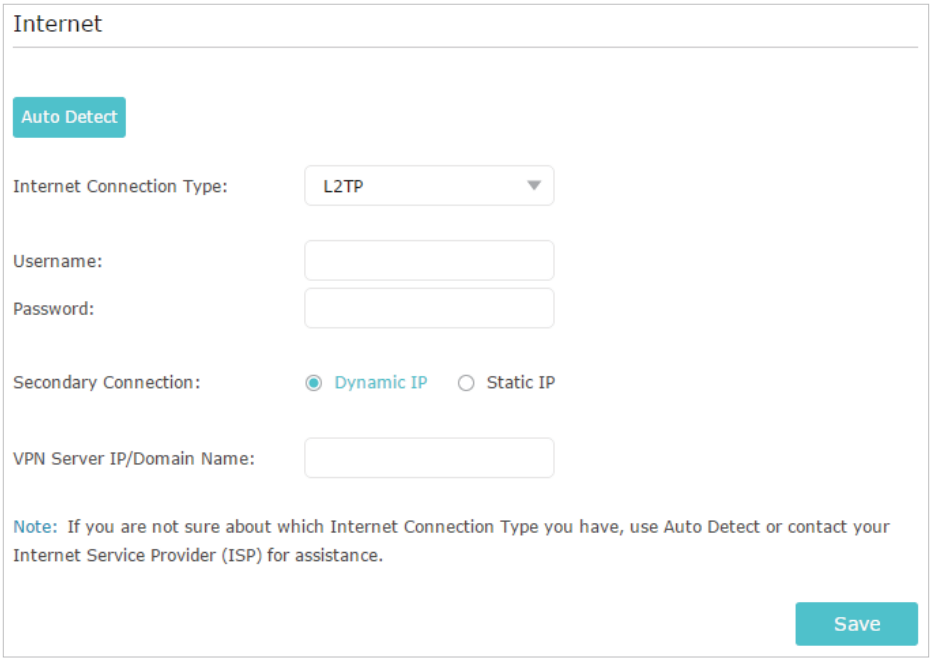
   2) If you choose Static IP, enter the information provided by your ISP in the corresponding fields.



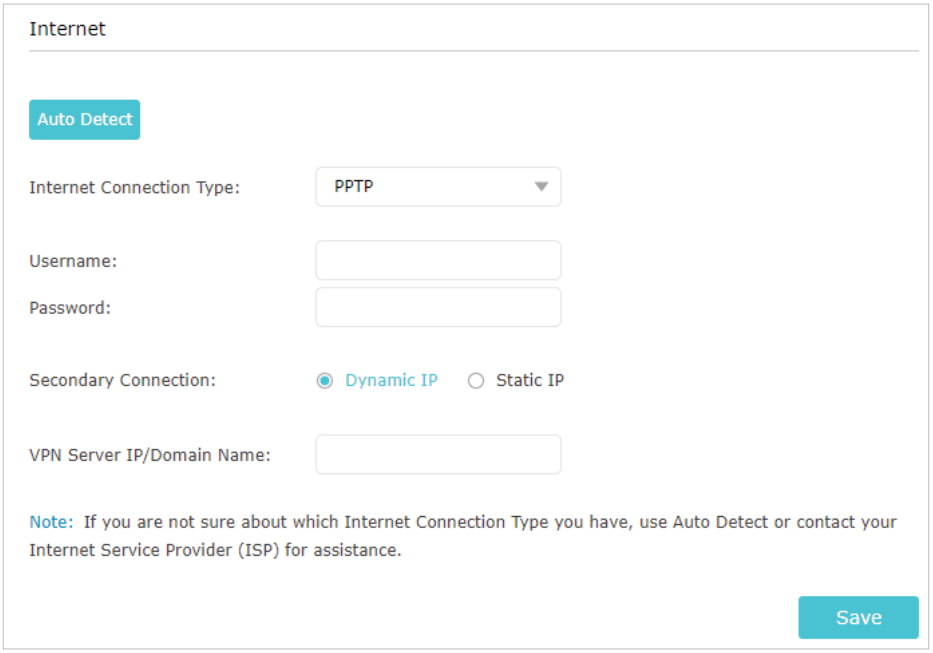
3) If you choose PPPoE, enter the Username and Password provided by your ISP. PPPoE users usually have DSL cable modems.



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 you have chosen.



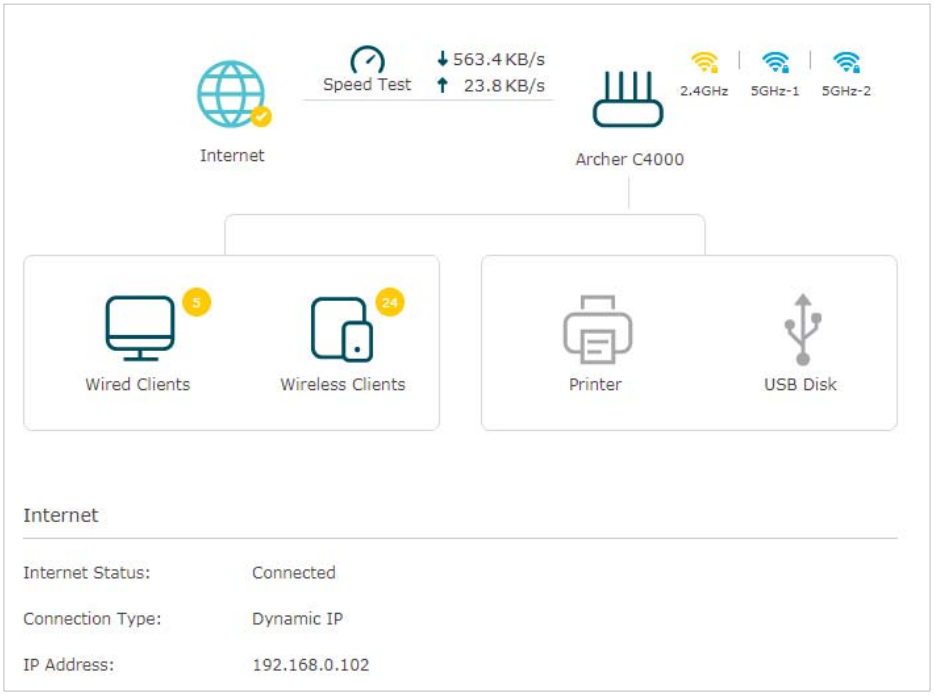
5) If you choose PPTP, enter the Username and Password, and choose the Secondary Connection provided by your ISP. Different parameters are needed according to the Secondary Connection you have chosen.



5. Click Save.

6. To check your internet connection, click Network Map on the left of the page. After the connection succeeds, the screen will display as follows. Here we take Dynamic IP as an example.

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



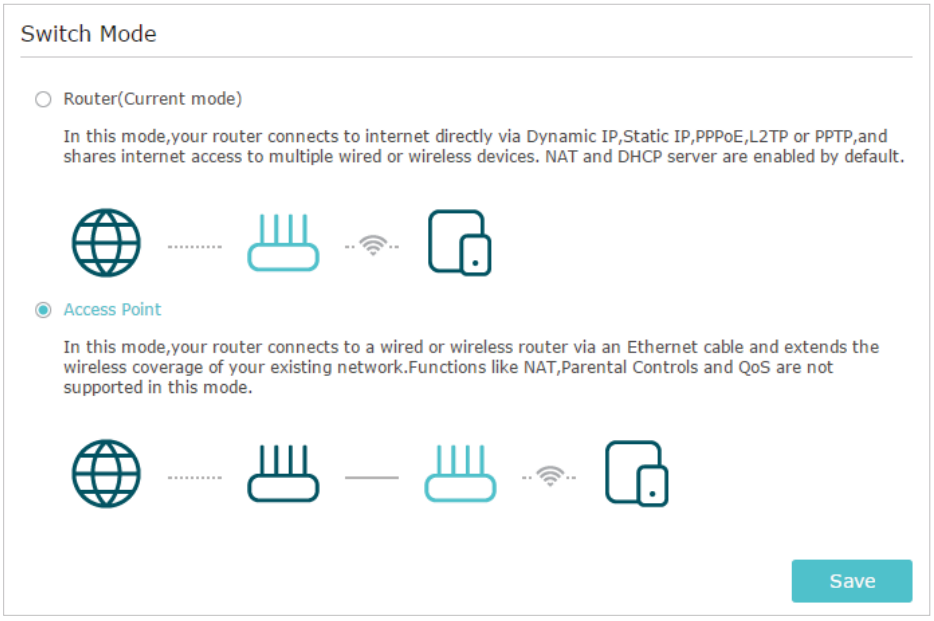
Tips:

- If your internet connection type is BigPond Cable, please go to Advanced > Network > Internet to set your router.
- If you use Dynamic IP and PPPoE and you are provided with any other parameters that are not required on the page, please go to Advanced > Network > Internet to complete the configuration.
- If you still cannot access the internet, refer to the FAQ section for further instructions.

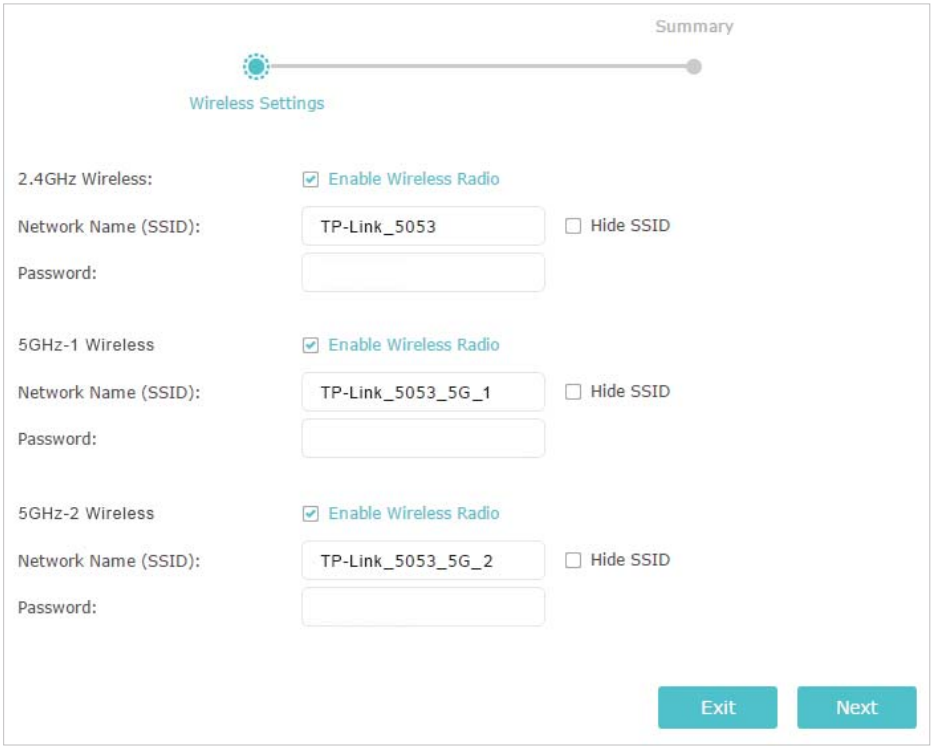
4. 3. Set Up the Router as an Access Point

The router can work as an access point, transforming your existing wired network to a wireless one.

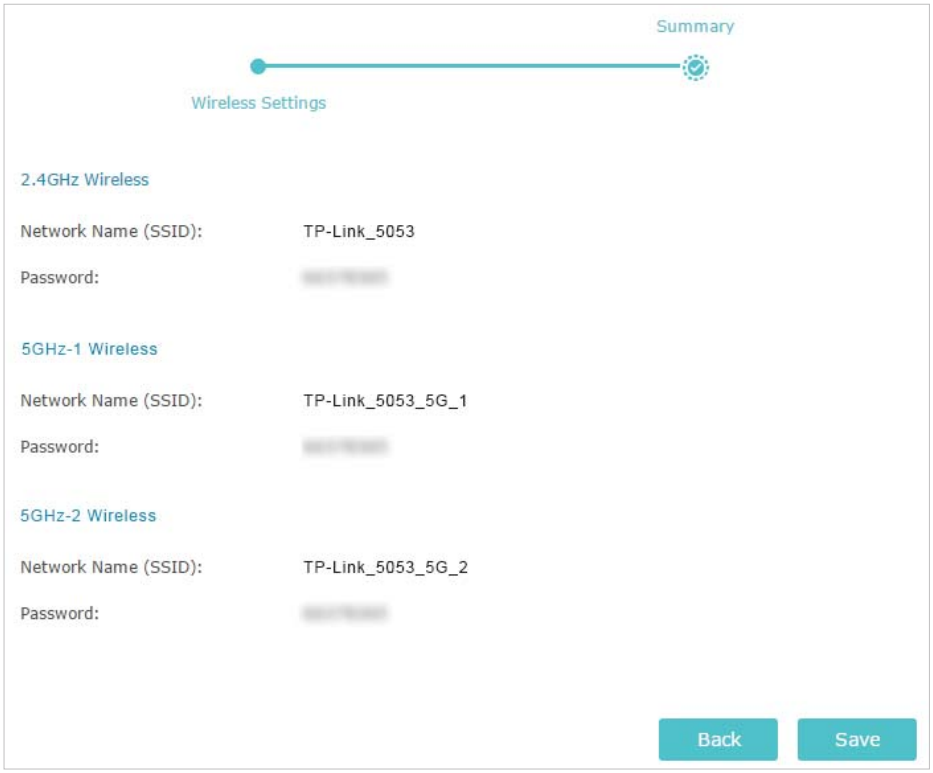
1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.
2. Go to Advanced > Operation Mode, select Access Point and click Save. The router will reboot and switch to Access Point mode.



3. After rebooting, connect the router to your existing wired router via an Ethernet cable.
4. Connect to the Wi-Fi of the router and log in again to the web management page http://tplinkwifi.net, and click Quick Setup.
5. Configure your wireless settings and click Next.



6. Confirm the information and click Save. Now, you can enjoy Wi-Fi.



Tips: Functions, such as Parental Controls, Qos and NAT Forwarding, are not supported in the Access Point mode.

4. 4. Set Up an IPv6 Internet Connection

Your ISP provides information about one of the following IPv6 internet connection types: PPPoE, Dynamic IP(SLAAC/DHCPv6), Static IP, 6to4 tunnel, Pass-Through (Bridge).

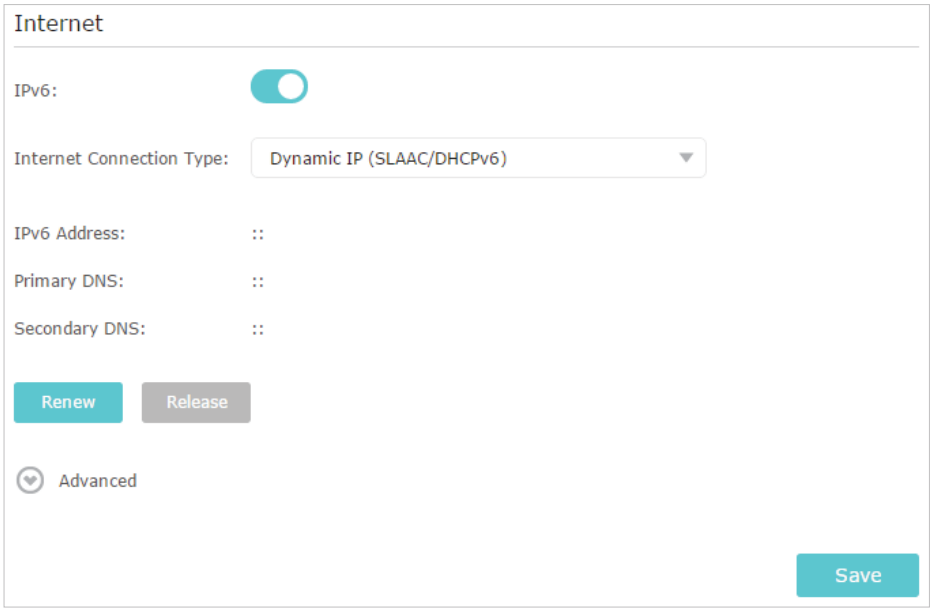
1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.
2. Go to Advanced > IPv6.
3. Enable IPv6 and select the internet connection type provided by your ISP.

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

4. Fill in information as required by different connection types. Red blanks must be filled in.

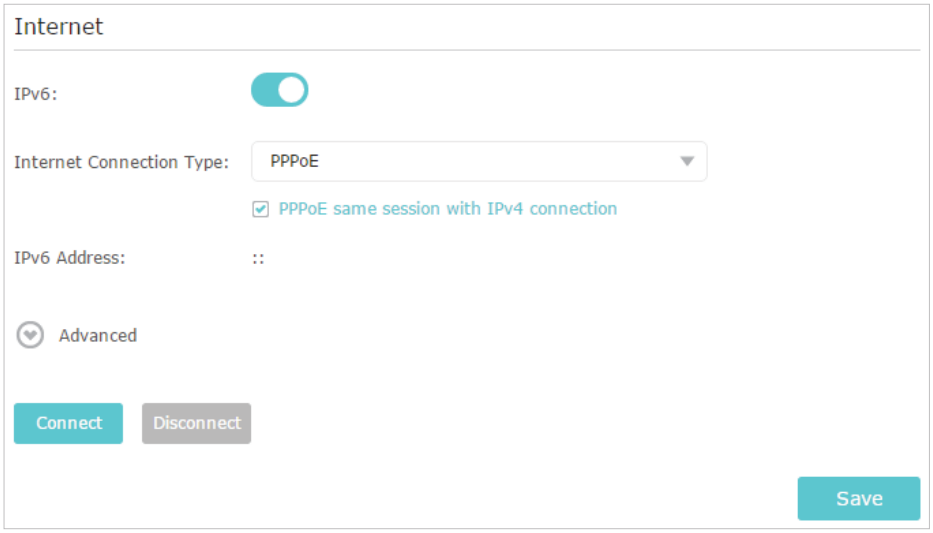
    1) Static IP: Fill in blanks and click Save.

2) Dynamic IP (SLAAC/DHCPv6): Click Advanced to input further information if your ISP requires. Click Save.

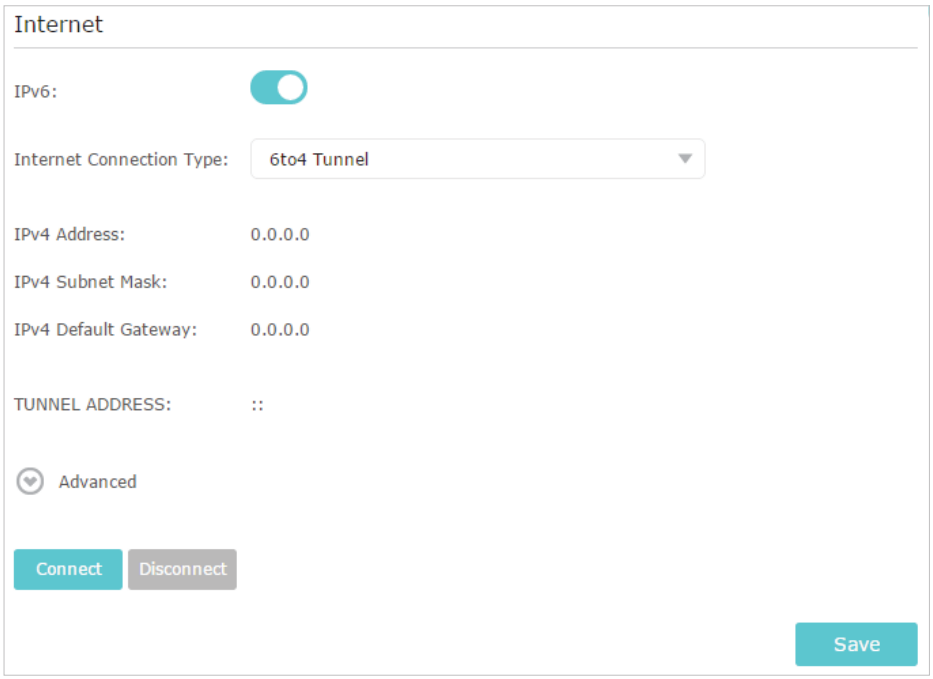


3) PPPoE: By default, the router uses the IPv4 account to connect to the IPv6 server. Click Advanced to input further information if your ISP requires. Click Save and then click Connect.

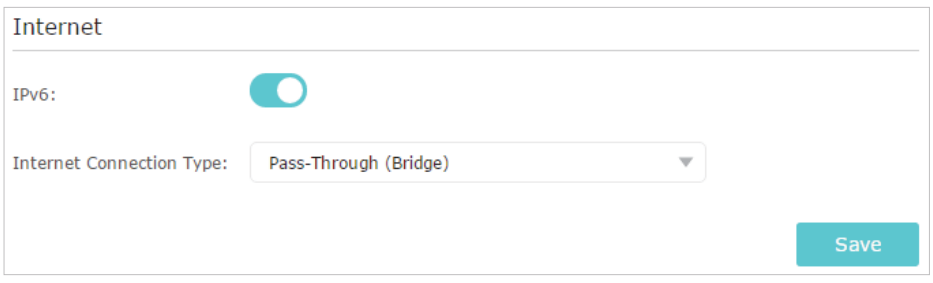
Note: If your ISP provides two separate accounts for the IPv4 and IPv6 connections, please untick the PPPoE same session with IPv4 connection checkbox and manually enter the username and password for the IPv6 connection.



4) 6to4 Tunnel: An IPv4 internet connection type is a prerequisite for this connection type (Manually Set Up Your Internet Connection). Click Advanced to input further information if your ISP requires. Click Save and then click Connect.



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



5. Configure LAN ports. Windows users are recommended to choose from the first two types. Fill in Address Prefix provided by your ISP, and click Save.

Tips: Find Help on the web management page to know more about items.

6. Click Status to check whether you have successfully set up an IPv6 connection. The following figure is an example of a successful PPPoE configuration.

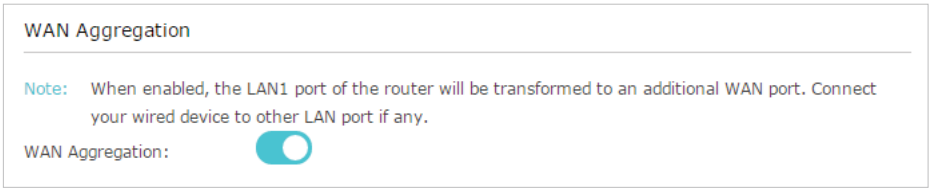
Tips: Visit the FAQ section if there is no internet connection.

4. 5. Set Up WAN Aggregation

WAN Aggregation transforms the LAN1 port to an additional WAN port, and makes a single high-bandwidth data path. Unleash faster internet from ISPs that provide bandwidth rates over 1Gbps and no longer be limited by your networking hardware.

Note: Before enabling this feature, make sure that your ISP supports WAN Aggregation and your modem has two WAN ports.

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.
2. Go to Advanced > Network > Internet.
3. Toggle on WAN Aggregation to enable it and the router will reboot to apply the settings.



4. Connect the router's WAN port and LAN1 port to your modem's two WAN ports with two Ethernet cables.

Chapter 5

TP-Link Cloud Service

TP-Link Cloud service provides a better way to manage your cloud devices. Log in to your router with a TP-Link ID, and you can easily monitor and manage your home network when you are out and about via the Tether app. To ensure that your router stays new and gets better over time, the TP-Link Cloud will notify you when an important firmware upgrade is avaliable. Surely you can also manage multiple TP-Link Cloud devices with a single TP-Link ID.

This chapter introduces how to register a new TP-Link ID, bind or unbind TP-Link IDs to manage your router, and the Tether app with which you can manage your home network no matter where you may find yourself.

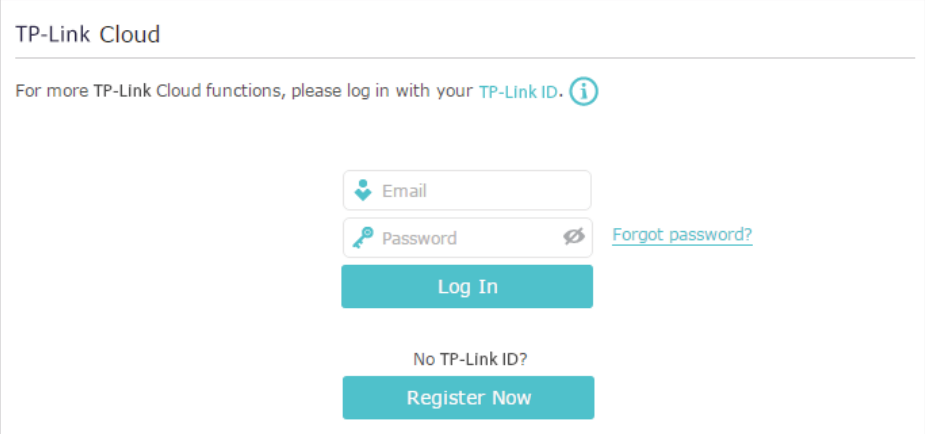
It contains the following sections:

- Register a TP-Link ID
- Change Your TP-Link ID Information
- Manage the User TP-Link IDs
- Manage the Router via the TP-Link Tether App

5. 1. Register a TP-Link ID

If you have skipped the registration during the Quick Setup process, you can:

1. Visit http://tplinkwifi.net, and log in with the password you set for the router.
2. Go to Basic > TP-Link Cloud.
3. Click Register Now and follow the instructions to register a TP-Link ID.



4. After activating your TP-Link ID, come back to the TP-Link Cloud page to log in. The TP-Link ID used to log in to the router for the first time will be automatically bound as an Admin.

Note:

- To learn more about the Admin and User TP-Link ID, refer to Manage the User TP-Link IDs.
- Once the router is bound to your TP-Link ID, you need to log in to the router with the TP-Link ID.
- Once you have registered a TP-Link ID on the web management page, you can only register another TP-Link ID via the Tether APP. Please refer to Manage the Router via the TP-Link Tether App to install the app.
- If you want to unbind the admin TP-Link ID from your router, please go to Basic > TP-Link Cloud, an click Unbind in the Device Information section.

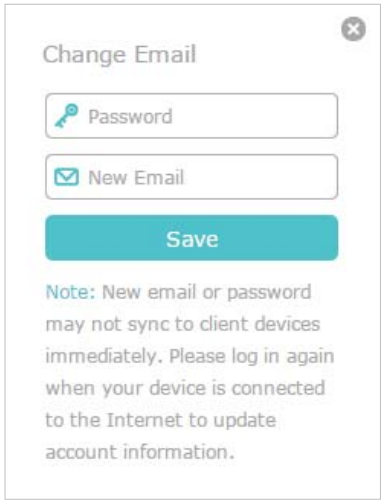
5. 2. Change Your TP-Link ID Information

Follow the steps below to change your email address and password of your TP-Link ID as needed.

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID.
2. Go to Basic > TP-Link Cloud, and focus on the Account Information section.

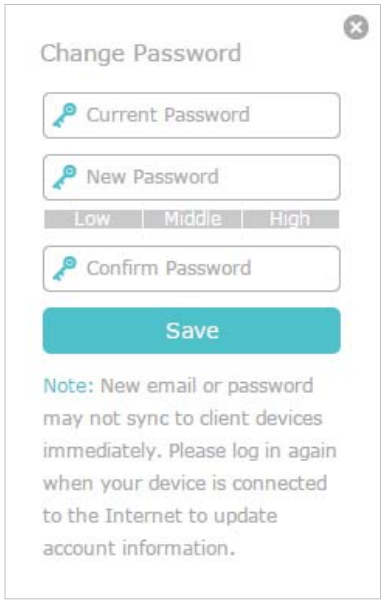
- **To change your email address**:

1. Click behind the Email.
2. Enter the password of your TP-Link ID, then a new email address. And click Save.



- **To change your password:**

1. Click behind the Password.
2. Enter the current password, then a new password twice. And click Save.



5. 3. Manage the User TP-Link IDs

The TP-Link ID used to log in to the router for the first time will be automatically bound as the Admin account. An admin account can add or remove other TP-Link IDs to or from the same router as Users. All accounts can monitor and manage the router locally or remotely, but user accounts cannot:

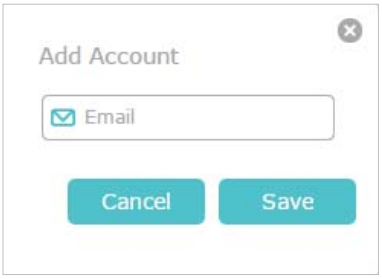
- Reset the router to its factory default settings either on the web management page or in the Tether app.

- Add/remove other TP-Link IDs to/from the router.

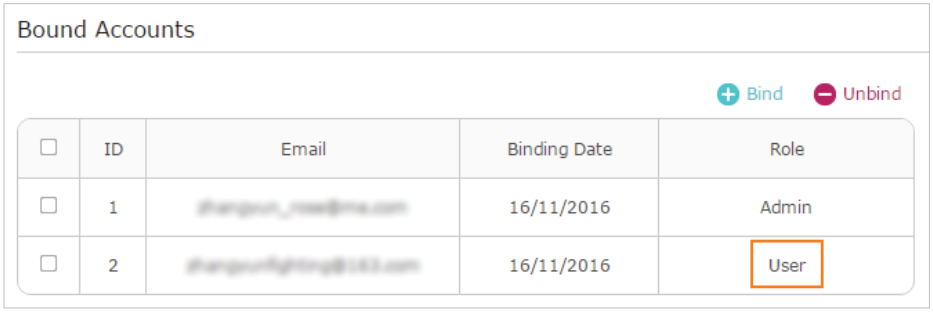
5. 3. 1. Add TP-Link ID to Manage the Router

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID.
2. Go to Basic > TP-Link Cloud, and focus on the Bound Accounts section.
3. Click Bind, enter another TP-Link ID as needed and click Save.

Note: If you need another TP-Link ID, please register a new one via the Tether app. Refer to Manage the Router via the TP-Link Tether App to install the app and register a new TP-Link ID.

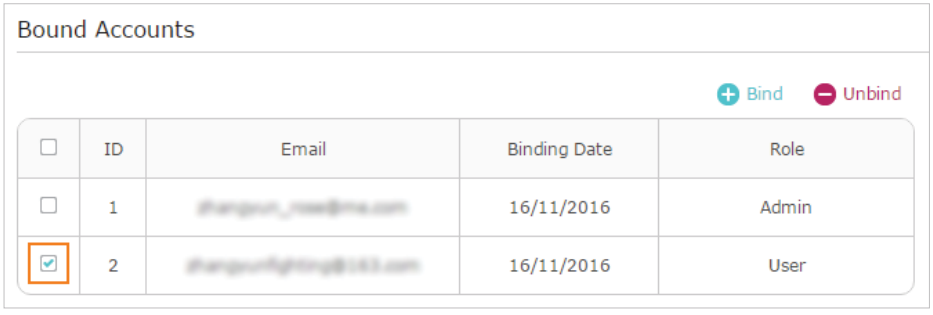


4. The new TP-Link ID will be displayed in the Bound Accounts table as a User.



5. 3. 2. Remove TP-Link ID(s) from Managing the Router

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID.
2. Go to Basic > TP-Link Cloud, and focus on the Bound Accounts section.
3. Tick the checkbox(es) of the TP-Link ID(s) you want to remove and click Unbind.



5. 4. Manage the Router via the TP-Link Tether App

The Tether app runs on iOS and Android devices, such as smartphones and tablets.

1. Launch the Apple App Store or Google Play store and search "TP-Link Tether" or simply scan the QR code to download and install the app.

2. Connect your device to the router's wireless network.
3. Launch the Tether app, select the model of your router and log in with your TP-Link ID or the password you set for the router.
4. Manage your router as needed.

Note: If you need to remotely access your router from your smart devices, you need to:

- Log in with your TP-Link ID. If you don't have one, refer to Register a TP-Link ID.
- Make sure your smartphone or tablet can access the internet with cellular data or a Wi-Fi network.

Chapter 6

Guest Network

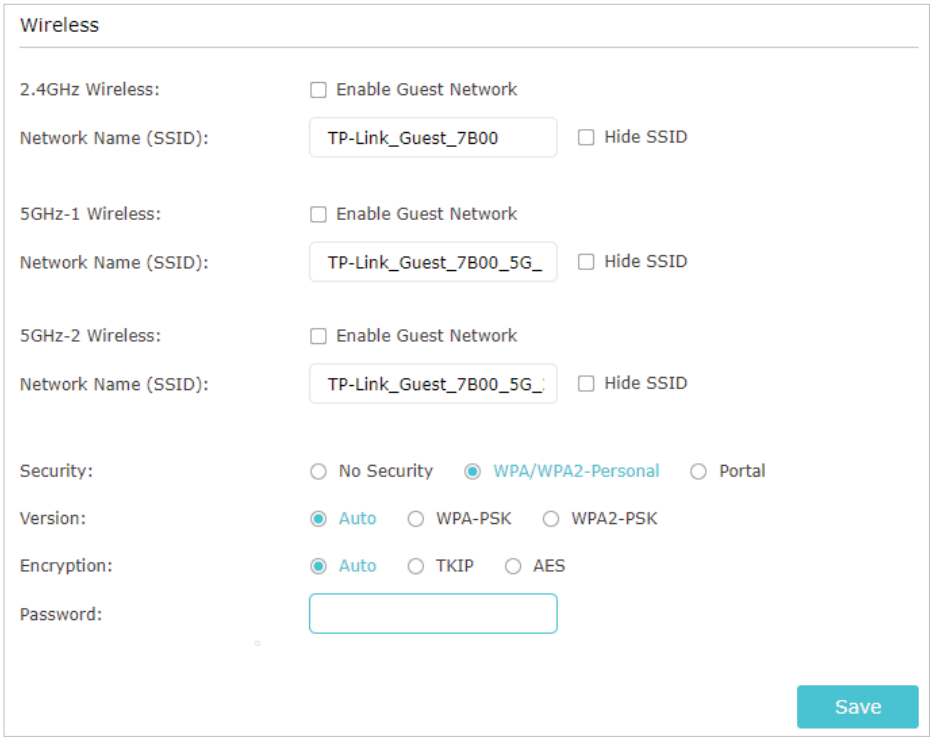
This function allows you to provide Wi-Fi access for guests without disclosing your main network. When you have guests in your house, apartment, or workplace, you can create a guest network for them. In addition, you can customize guest network options to ensure network security and privacy.

It contains the following sections:

- Create a Network for Guests
- Set Portal Authentication
- Customize Guest Network Options

6. 1. Create a Network for Guests

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.
2. Go to Advanced > Guest Network. Locate the Wireless section.
3. Create a guest network as needed.
   1) Tick the Enable Guest Network checkbox for the 2.4GHz/5GHz-1/5GH-2 wireless network.
   2) Customize the SSID. Don't select Hide SSID unless you want your guests to manually input the SSID for guest network access.
   3) Set Security to WPA/WPA2 Personal, keep the default Version and Encryption values, and customize your own password.



4. Click Save. Now your guests can access your guest network using the SSID and password you set!

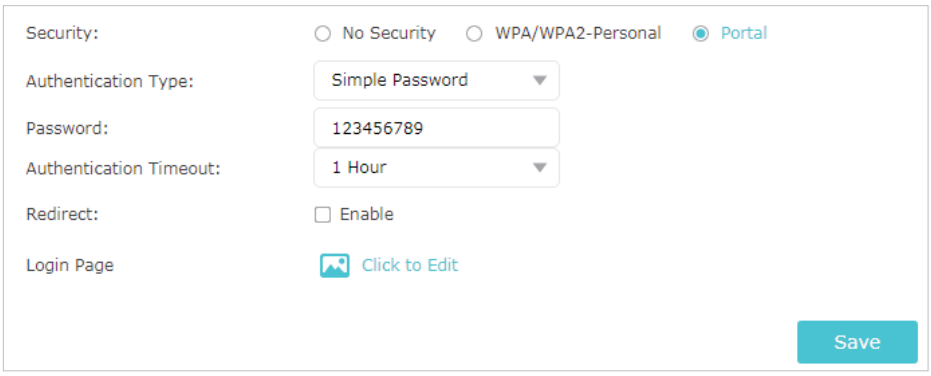
Tips: To view guest network information, go to Advanced > Status and locate the Guest Network section.

6. 2. Set Portal Authentication

Imagine that you run a small shop and provide a guest network for your customers. You want to seize every opportunity to promote your shop, which makes portal authentication an excellent choice. Customers will be directed to a web page for access verification, on which your personalized promotion is displayed. Moreover, you can

specify a web link so that the newly connected guest will be redirected to, for example, the official website of your shop.

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.
2. Go to Advanced > Guest Network. Locate the Wireless section.
3. Select Portal for Security.

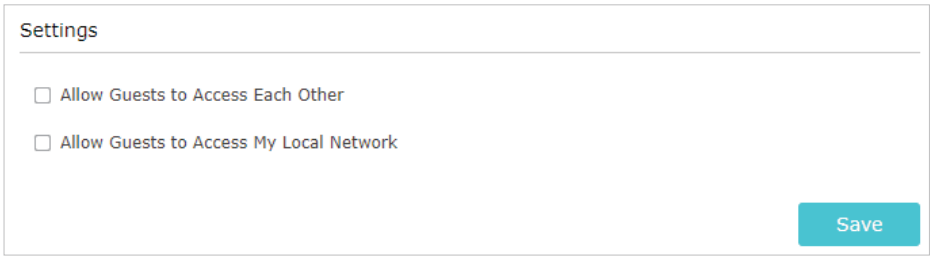


4. Select the Authentication Type.
   - Simple Password – Specify a password for authentication (8-16 alphanumeric or "_" characters are allowed).
   - No Authentication – Clients can access the network without any authentication.
5. Specify the Authentication Timeout. When a guest's authentication expires, they have to reconnect to the network.
6. (Optional) Enable Redirect and enter the desired web link. The newly connected guest will be redirected to the website you have specified.
7. (Optional) You can click Click to Edit to personalize the authentication page.
   - Portal Title – Up to 31 characters.
   - Terms of Use – Up to 1023 characters.
   - Logo Image – Upload a JPG or PNG image (less than 100KB) to customize the logo.
   - Background Image – Upload a JPG or PNG image (less than 2MB) to customize the background.
8. Click Save.

6. 3. Customize Guest Network Options

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.
2. Go to Advanced > Guest Network. Locate the Settings section.

3. Customize guest network options according to your needs.



- Allow Guests to Access Each Other

  Tick this checkbox if you want to allow the wireless clients on your guest network to communicate with each other via methods such as network neighbors, Samba, Ping and FTP.

- Allow Guests to Access My Local Network

  Tick this checkbox if you want to allow the wireless clients on your guest network to communicate with the devices connected to your router's LAN ports or main network via methods such as network neighbors, Samba, Ping and FTP.

4. Click Save. Now you can ensure network security and privacy!

Tips: To view guest network information, go to Advanced > Status and locate the Guest Network section.

Chapter 7

USB Settings

This chapter describes how to use the USB ports to share files, media from the USB storage devices over your home network locally, or remotely through the internet.

The router supports USB external flash drives and hard drives.

It contains the following sections:

- Access the USB Storage Device
- Media Sharing
- Time Machine

7. 1. Access the USB Storage Device

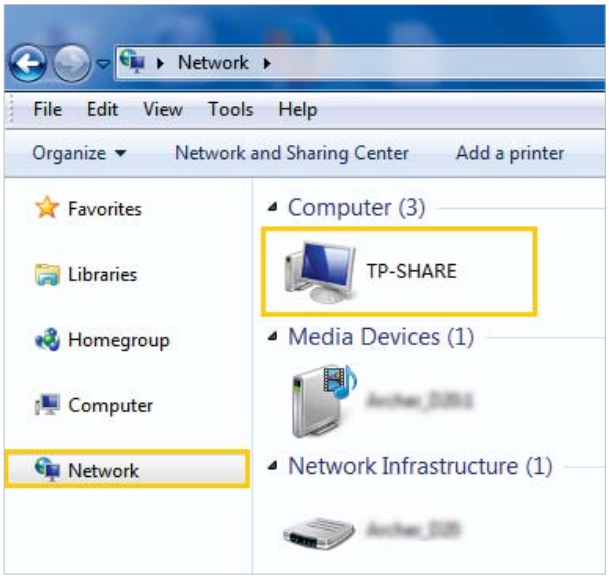
Insert your USB storage device into the router's USB port and then access files stored there locally or remotely.

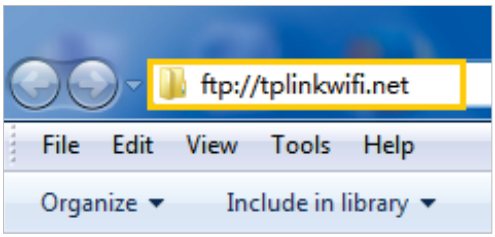
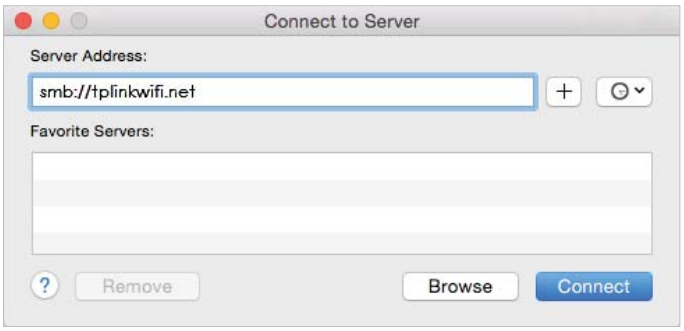
Tips:

- 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, exFat, NTFS or HFS+.
- Before you physically disconnect a USB device from the router, safely remove it to avoid data damage: Go to Advanced > USB Storage Device > Device Settings and click Remove.

7. 1. 1. Access the USB Device Locally

Insert your USB storage device into the router's USB port and then refer to the following table to access files stored on your USB storage device.

Windows computer	Go to Computer > Network, then click the Network Server Name (TP-SHARE by default) in the Computer section. **Note:** Operations in different systems are similar. Here we take Windows 7 as an example. 

<table>
<tr><td>Windows computer</td><td>Open the Windows Explorer (or go to Computer) and type the server address \\tplinkwifi.net or ftp://tplinkwifi.net in the address bar, then press Enter.
 
</td></tr>
<tr><td>Mac</td><td>1) Select Go > Connect to Server.
2) Type the server address smb://tplinkwifi.net.
3) Click Connect.
 

4) When prompted, select the Guest radio box. (If you have set up a username and a password to deny anonymous access to the USB disks, you should select the Registered User radio box. To learn how to set up an account for the access, refer to To set up authentication for data security.)</td></tr>
<tr><td>Tablet</td><td>Use a third-party app for network files management.</td></tr>
</table>

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.

7. 1. 2. Access the USB Device Remotely

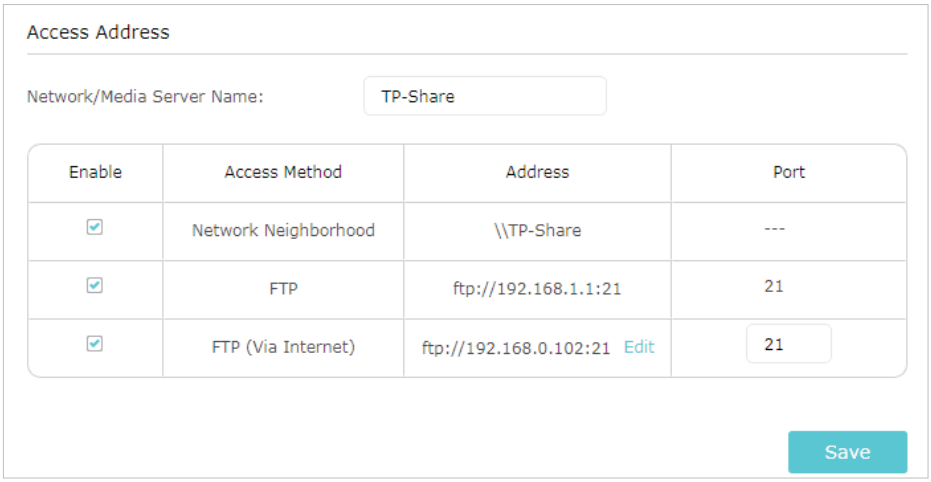
You can access your USB disk outside the local area network. For example, you can:

- 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.

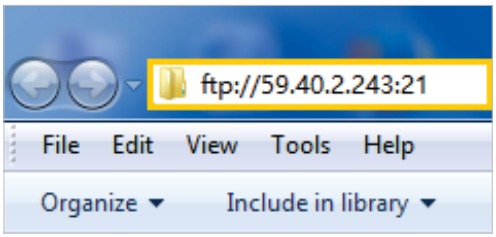
Note: If your ISP assigns a private WAN IP address (such as 192.168.x.x or 10.x.x.x), you cannot use this feature because private addresses are not routed on the Internet.

Follow the steps below to configure remote access settings.

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.
2. Go to Advanced > USB Sharing > USB Storage Device.
3. Tick the FTP(Via Internet) checkbox, and then click Save.



4. Refer to the following table to access your USB disk remotely.

Computer	1) Open the Windows Explorer (or go to Computer, only for Windows users) or open a web browser. 2) Type the server address in the address bar: Type in ftp://<WAN IP address of the router>:<port number> (such as ftp://59.40.2.243:21). If you have specified the domain name of the router, you can also type in ftp://<domain name>:<port number> (such as ftp://MyDomainName:21)  3) Press Enter on the keyboard. 4) Access with the username and password you set in To set up authentication for data security. **Tips:** You can also access the USB disk via a third-party app for network files management, which can resume broken file transfers.
Tablet	Use a third-party app for network files management.

Tips: Click Set Up a Dynamic DNS Service Account to learn how to set up a domain name for you router.

7. 1. 3. Customize the Access Settings

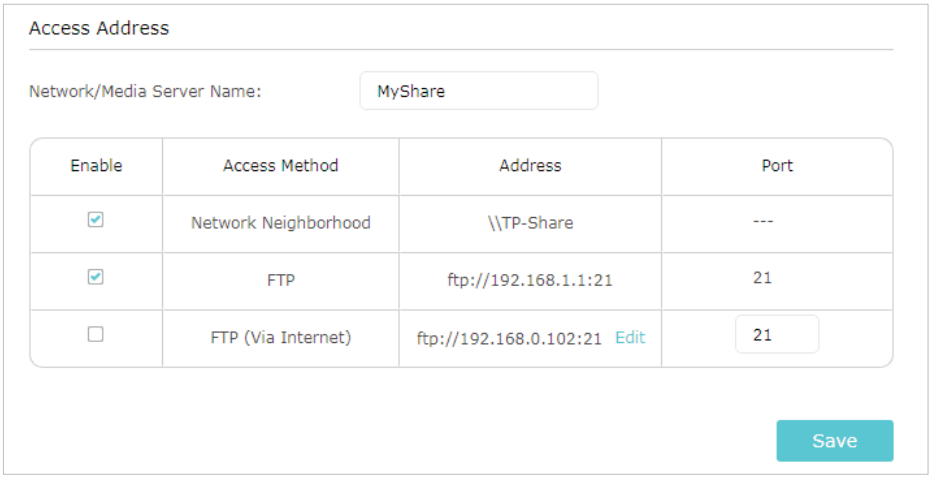
By default, all the network clients can access all folders on your USB disk. You can customize your sharing settings by setting a sharing account, sharing specific contents and setting a new sharing address on the router's web management page.

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.
2. Go to Advanced > USB Sharing > USB Storage Device.

- **To customize the address of the USB disk:**

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

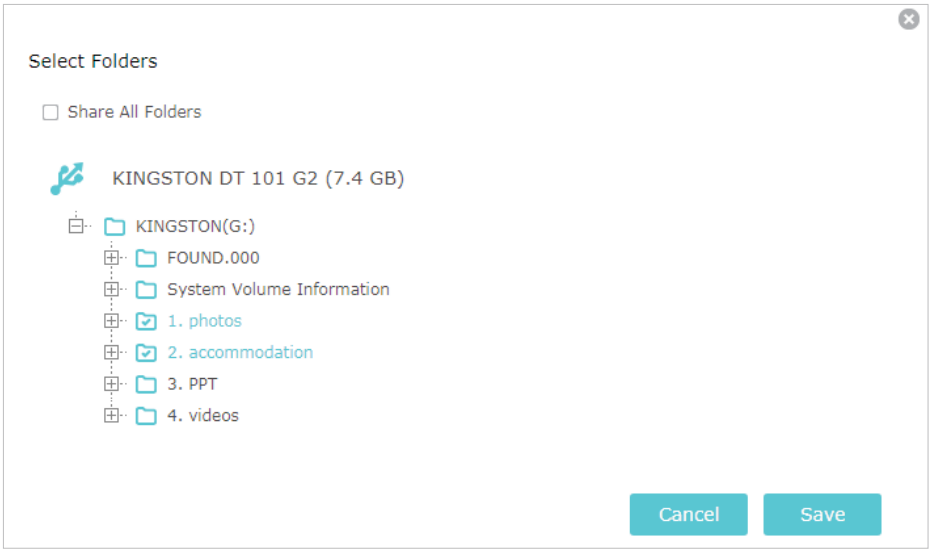
1. In the Access Address section, make sure Network Neighborhood is ticked, and enter a Network/Media Server Name as you like, such as MyShare, then click Save.



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

- **To only share specific content:**

1. Focus on the Sharing Contents and Security section. Click the button to specify sharing folders and click Save.

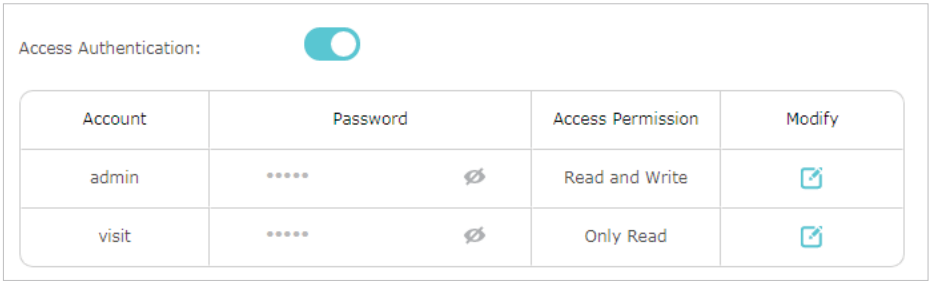


2. Decide the way you share the folder:
   - Access Authentication: Tick to enable access authentication for sharing folders, and you will be required to log in to the Sharing Account to access the USB disk. Refer to To customize the address of the USB disk to learn more.
   - Enable Media Sharing: Tick to enable media sharing for sharing folders, and you can view photos, play music and watch movies stored on the USB disk directly from DLNA-supported devices. Click Media Sharing to learn more.

- **To set up authentication for data security:**

You can set up authentication for your USB device so that network clients will be required to enter username and password when accessing the USB disk.

In the Sharing Contents and Security part, enable Access Authentication. The default accounts are admin and visit. Click to customize the username and a password.



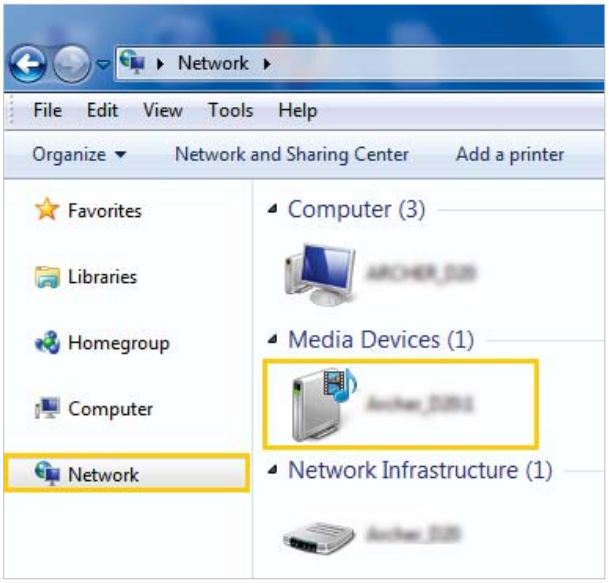
Note: For Windows users, do not set the sharing username the same as the Windows username. Otherwise, Windows credential mechanism may cause the following problems:

- If the sharing password is also the same as the Windows password, authentication will not work since the Windows will automatically use its account information for USB access.
- If the sharing password is different from the Windows password, the Windows will be unable to remember your credentials and you will always be required to enter the sharing password for USB access.
- Due to Windows credential mechanism, you might be unable to access the USB disk after changing Authentication settings. Please log out from the Windows and try to access again. Or you can change the address of the USB disk by referring to To customize the address of the USB disk.

7. 2. 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, tablet and PS2/3/4.

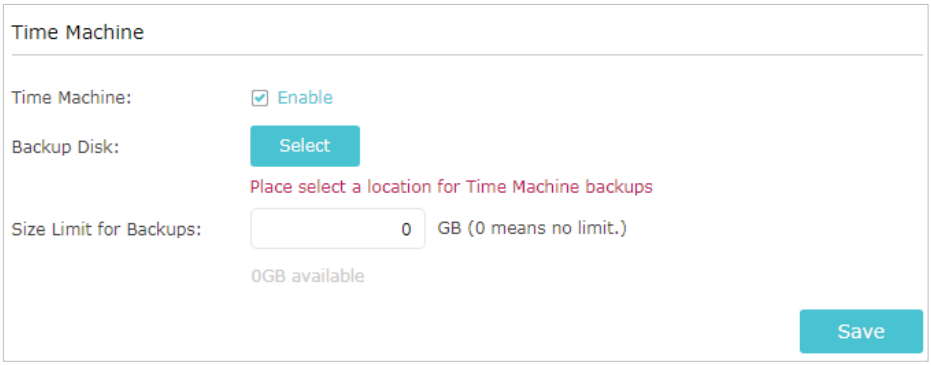
1. When your USB disk is inserted into the router, your DLNA-supported devices (such as your computer and pad) connected to the router can detect and play the media files on the USB disks.
2. Refer to the following table for detailed instructions.

Windows Computer	• Go to Computer > Network, then click the Media Server Name (Model number-share by default) in the Media Devices section. **Note:** Here we take Windows 7 as an example. 
Tablet	• Use a third-party DLNA-supported player.

7. 3. Time Machine

Time Machine backs up all files on your Mac computer to a USB storage device connected to your router.

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.
2. Go to Advanced > USB Sharing > Time Machine.



3. Tick the checkbox to enable Time Machine.
4. Click Select to select a location for Time Machine backups.
5. Set the Size Limit for Backups.

Note: 0 means no limit for the space.

6. Click Save.

Chapter 8

HomeCare – Parental Controls, QoS, Antivirus

TP-Link HomeCare™ powered by Trend Micro™ provides a kit of features to help you create a personalized network that caters for the whole family. You can ensure appropriate internet access for everyone with Parental Controls, save bandwidth for the things that matter with QoS and keep your network secure with built-in Antivirus.

It contains the following sections:

- Parental Controls
- QoS
- Antivirus

8. 1. Parental Controls

Parental Controls allows you to set up unique restrictions on internet access for each member of your family. You can block inappropriate content, set daily limits for the total time spent online and restrict internet access to certain times of the day.

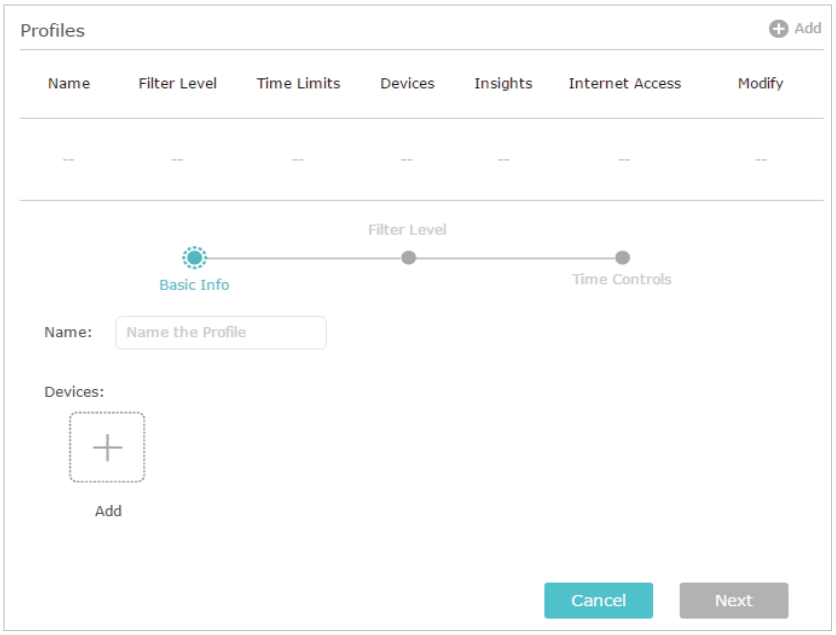
8. 1. 1. Scenario 1: Setting Up Access Restrictions

I want to:

Block access to inappropriate online content for my child's devices, restrict internet access to 2 hours every day and block internet access during bed time (10 PM to 7 AM) on weekdays.

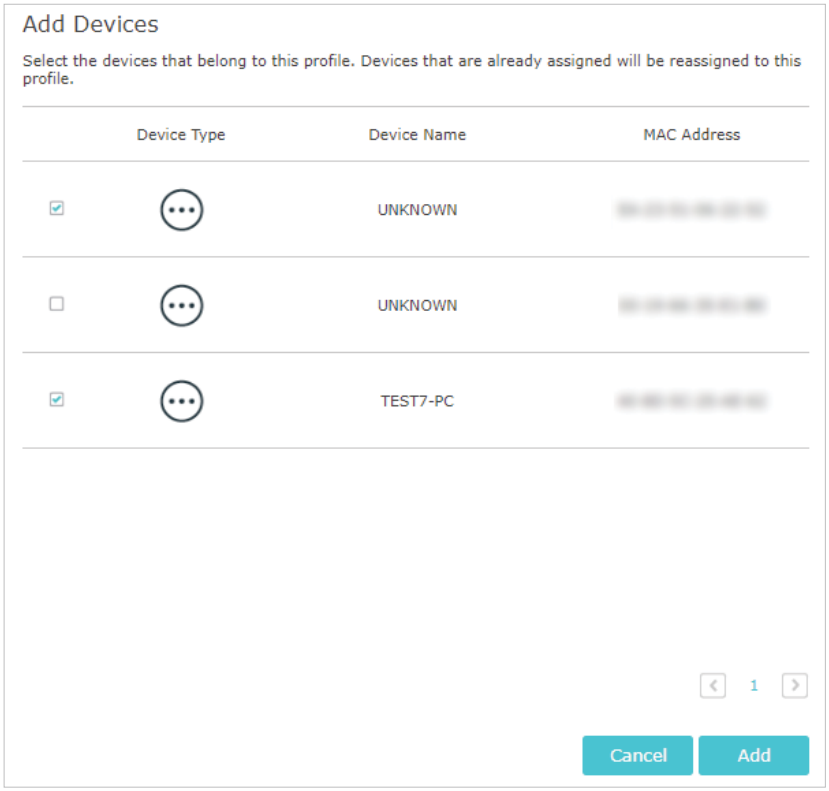
How can I do that?

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.
2. Go to Basic > HomeCare > Parental Controls or Advanced > Parental Controls.
3. Click Add to create a profile for a family member.
4. Add basic profile information.



1) Enter a Name for the profile to make it easier to identify.

2) Under Devices, click +.

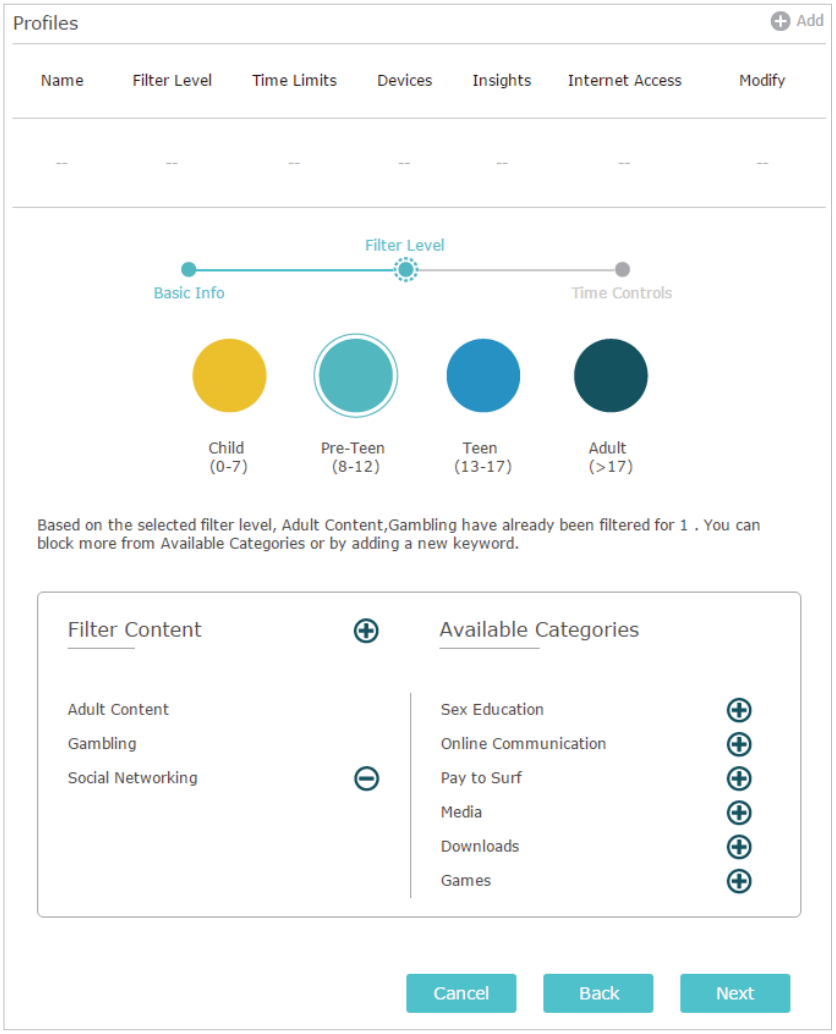


3) Select the devices that belong to this family member. Access restrictions will be applied to these devices. Click Add when finished.

Note: Only devices that have previously been connected to your router's network are listed here. If you are unable to find the device you want to add, connect it to your network and then try again.

4) Click Next.

5. Block content for this profile.



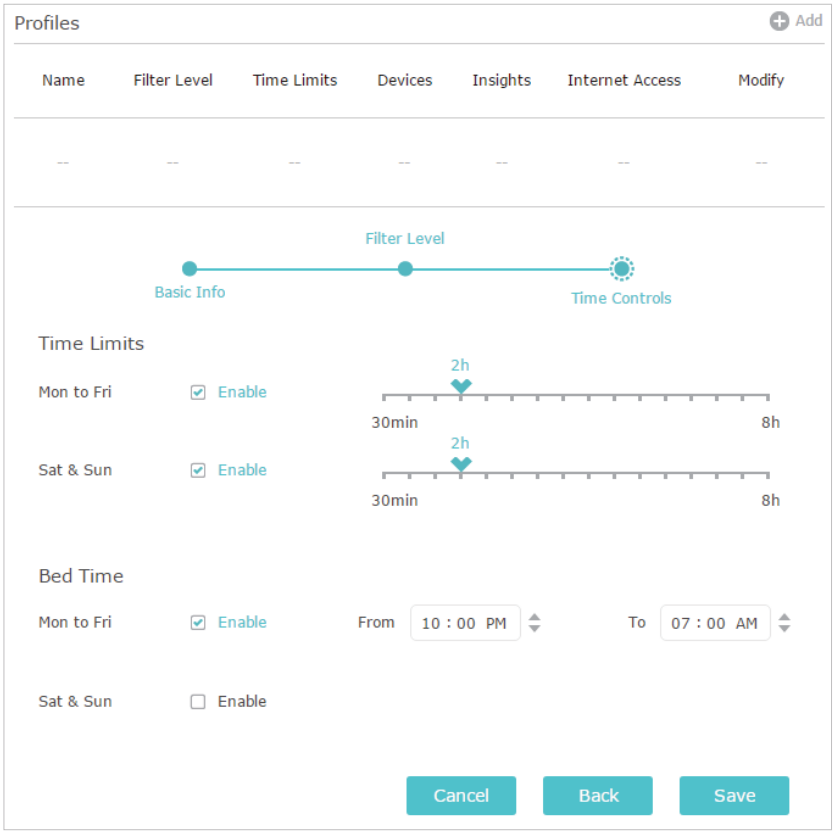
1) Select a filter level based on the age of the family member this profile belongs to. Blocked content will then be displayed in the Filter Content list.

2) If needed, you can edit the blocked content by clicking ⊕ and ⊖ to move categories between the Filter Content and Available Categories lists.

3) You can also block a specific website or application by clicking ⊕ next to Filter Content. Enter a keyword (for example, "Facebook") or a URL (for example, "www.facebook.com"), then click Add.

4) Click Next.

6. Set time restrictions on internet access.



1) Enable Time Limits on Monday to Friday and Saturday & Sunday then set the allowed online time to 2 hours each day.

2) Enable Bed Time on Monday to Friday and use the up/down arrows or enter times in the fields. Devices under this profile will be unable to access the internet during this time period.

3) Click Save.

Done!

The amount of time your child spends online is controlled and inappropriate content is blocked on their devices.

8. 1. 2. Scenario 2: Monitoring Internet Usage

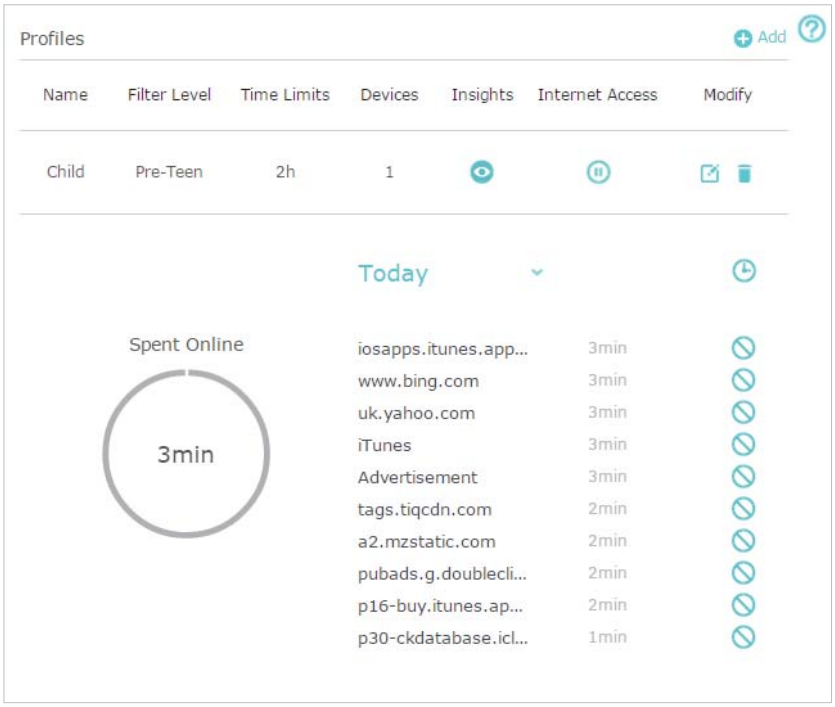
I want to:

Check which websites my child has visited and how much time they have spent online recently.

How can I do that?

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.

2. Go to Basic > HomeCare > Parental Controls or Advanced > Parental Controls.



3. Find the correct profile and click in the Insights column.

Note: If you have not set up a profile for your child yet, you should do that first by clicking Add , then follow the steps to create a profile. Refer to Scenario 1: Setting Up Access Restrictions for detailed instructions.

4. Use the drop-down menu to view the websites visited and time spent online for any of the last 7 days. Click to view a complete history.

Tips: Click to block the corresponding content for this profile.

Done!

You can now check up on your child's online activities.

8. 2. QoS

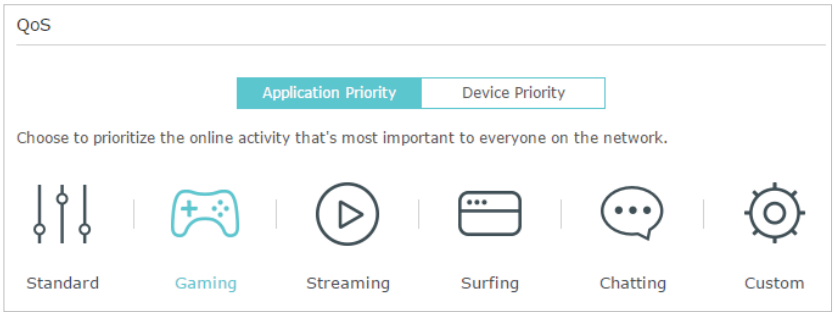
QoS (Quality of Service) allows you to prioritize the internet traffic of specific online activities, such as gaming or streaming. Activities set as high priority will be allocated more bandwidth and so continue to run smoothly even when there is heavy traffic on the network. You can also prioritize the connection of specific devices for a set duration.

I want to:

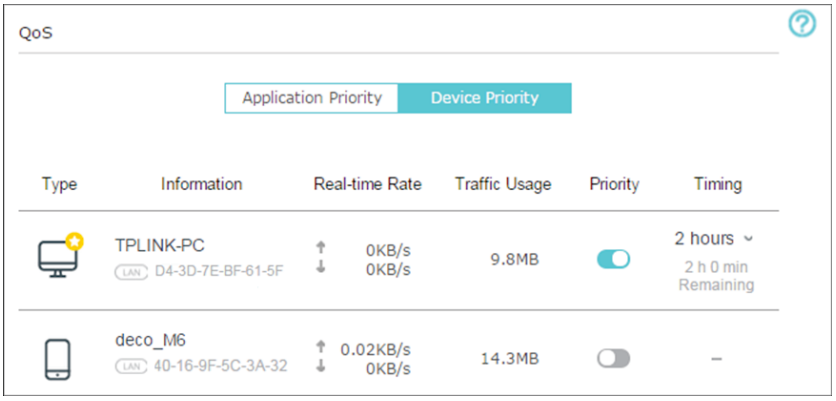
Ensure a fast connection while I play online games with friends on my computer for the next 2 hours.

How can I do that?

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.
2. Go to Basic > HomeCare > QoS or Advanced > QoS.
3. In the Application Priority tab, click Gaming to prioritize this online activity. The default is Standard, with no application prioritized.



4. In the Device Priority tab, find your computer and toggle on Priority. Click the entry in the Timing column and select 2 hours as the duration you want the device to be prioritized for.



Done!

You can now enjoy playing games without lag on your computer for the next 2 hours.

8. 3. Antivirus

Your router supports built-in Antivirus powered by Trend Micro™. It provides malicious content filtering and intrusion prevention for your home network, as well as a quarantine for infected devices. An active database protects every connected device from external threats.

Antivirus includes the following protection:

- Malicious Content Filter

Blocks malicious websites listed in Micro Trend's database. The database is automatically updated so new malicious websites are blocked when they go live.

• Intrusion Prevention System

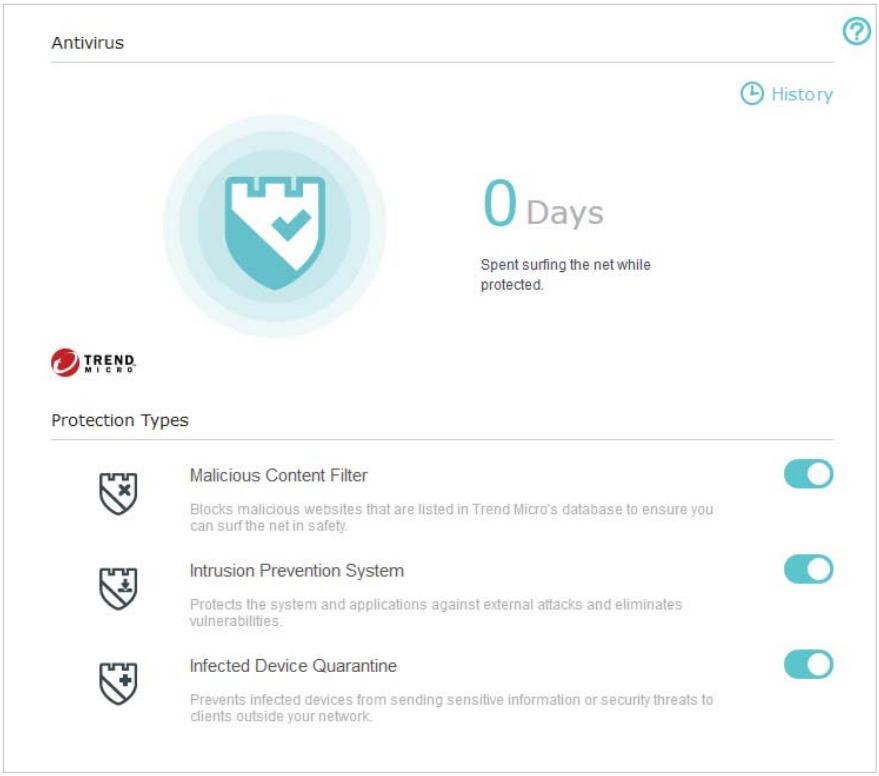
Identifies and blocks potential threats from attackers and fixes vulnerabilities in the network.

• Infected Device Quarantine

Prevents infected devices from sending your sensitive information to clients outside your network or spreading security threats.

- **To access your router's Antivirus settings:**

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.
2. Go to Basic > HomeCare > Antivirus or Advanced > Security > Antivirus.



3. Choose the protection types you want to enable. It is recommended to keep them all enabled to ensure the best protection for your network.
4. Click History to view threats that have been detected and resolved.

Chapter 9

Network Security

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.

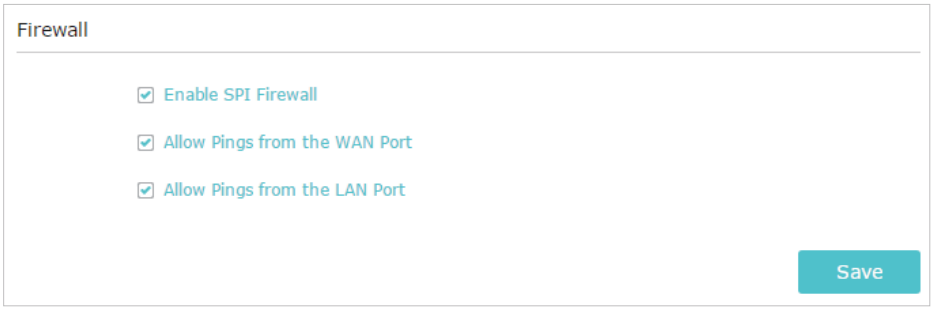
It contains the following sections:

- 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 protects the router from cyber attacks and validate the traffic that is passing through the router based on the protocol. This function is enabled by default.

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.
2. Go to Advanced > Security > Firewall. It's recommended to keep the default settings. If necessary, deselect corresponding checkbox and click Save.



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).

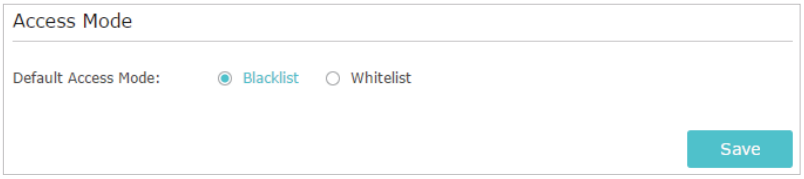
How can I do that?

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.
2. Go to Advanced > Security > Access Control.
3. Enable Access Control.

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

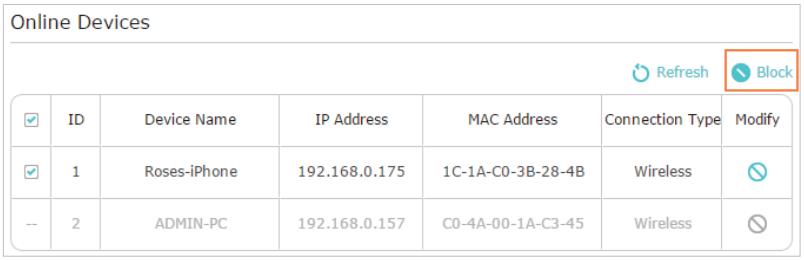
To block specific device(s):

1) Select Blacklist and click Save.



2) Select the device(s) to be blocked in the Online Devices table by ticking the checkbox(es).

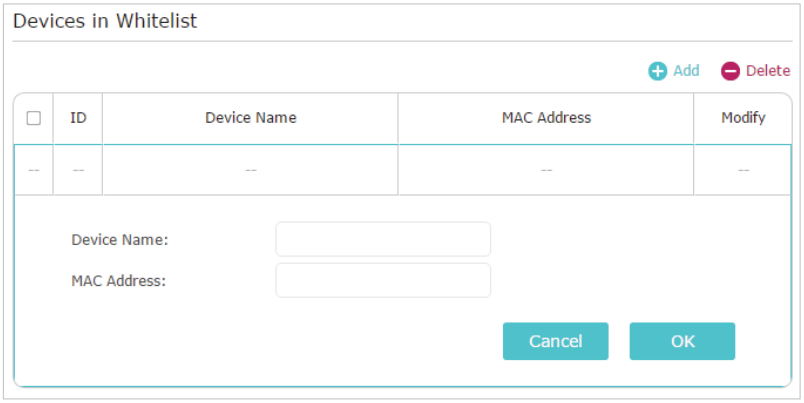
3) Click Block above the Online Devices table. The selected devices will be added to Devices in Blacklist automatically.



To allow specific device(s):

1) Select Whitelist and click Save.

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



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 your TP-Link ID or the password you set for the router.
2. Go to Advanced > Security > IP & MAC Binding.
3. Enable IP&MAC Binding.

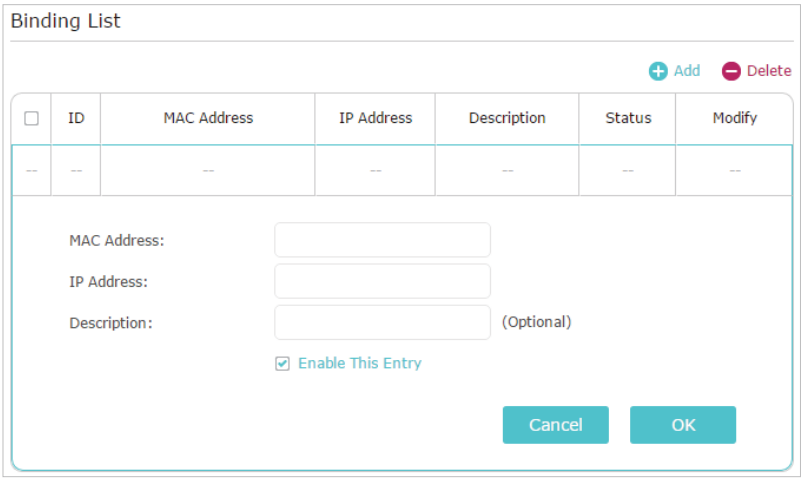
4. Bind your device(s) according to your need.

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 the Binding List section.



2) Enter the MAC address and IP address that you want to bind. Enter a Description for this binding entry.

3) Tick the Enable This Entry checkbox and click OK.

Done!

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

Chapter 10

NAT Forwarding

The router's NAT (Network Address Translation) feature makes devices on the LAN use the same public IP address to communicate with devices on the internet, which protects the local network by hiding IP addresses of the devices. However, it also brings about the problem that an external host cannot initiatively communicate with a specified device on the local network.

With the forwarding feature the router can penetrate the isolation of NAT and allows devices on the internet to initiatively communicate with devices on the local network, thus realizing some special functions.

The TP-Link router supports 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.

It contains the following sections:

- Share Local Resources on the Internet by Virtual Servers
- 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 on the Internet by Virtual Servers

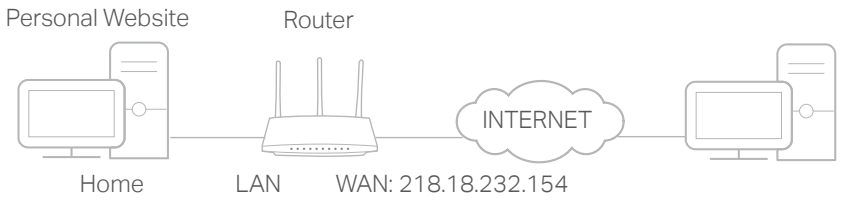
When you build up a server on the local network and want to share it on the internet, Virtual Servers can realize the service and provide it to internet users. At the same time Virtual Servers can keep the local network safe as other services are still invisible from the internet.

Virtual Servers can be used for setting up public services on your local network, such as HTTP, FTP, DNS, POP3/SMTP and Telnet. Different services use different service ports. 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:

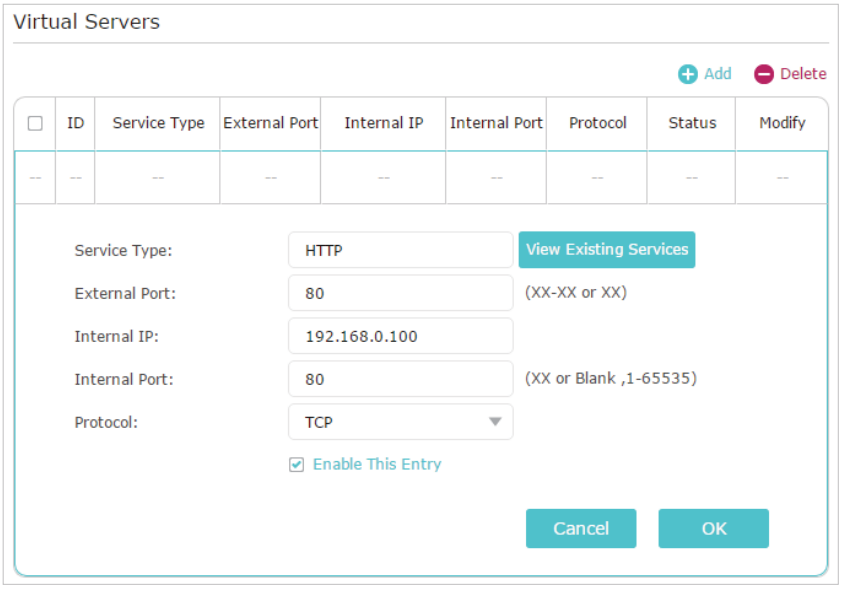
Share my personal website I've built in local network with my friends through the internet.

For example, the personal website has been built on my home PC (192.168.0.100). I hope that my friends on 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 your TP-Link ID or the password you 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 in. Enter the PC's IP address 192.168.0.100 in the Internal IP field.
5. Click OK.



Tips:

- 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.
- 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.
- 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 on the internet can enter http:// WAN IP (in this example: http:// 218.18.232.154) to visit your personal website.

Tips:

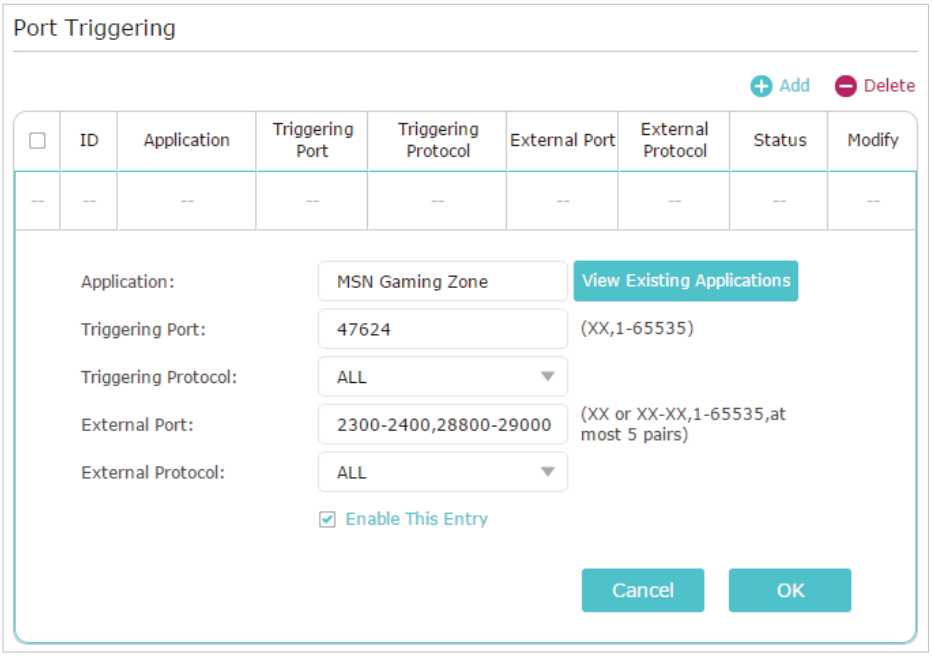
- The WAN IP should be a public IP address. For the WAN IP is assigned dynamically by the ISP, it is recommended to apply and register a domain name for the WAN referring to Set Up a Dynamic DNS Service Account. Then users on the internet can use http:// domain name to visit the website.
- If you have 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 on 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, video players and common applications including 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 your TP-Link ID or the password you 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 Triggering Port, External Port and Protocol will be automatically filled in. The following picture takes application MSN Gaming Zone as an example.
4. Click OK.



Tips:

- You can add multiple port triggering rules according to your network need.
- The triggering ports can not be overlapped.
- 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 on 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: When DMZ is enabled, the DMZ host is totally exposed to the internet, which may bring some potential safety hazards. If DMZ is not in use, please disable it in time.

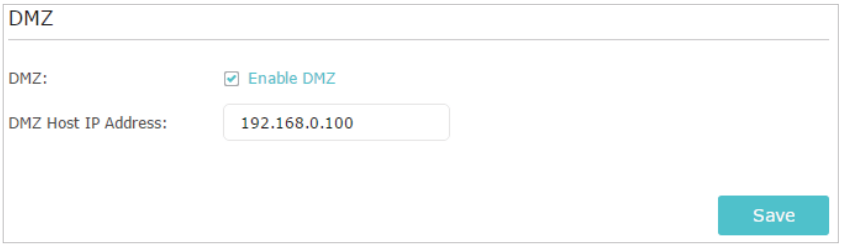
I want to:

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 host with all ports open.

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 your TP-Link ID or the password you set for the router.
3. Go to Advanced > NAT Forwarding > DMZ and select Enable DMZ.
4. Enter the IP address 192.168.0.100 in the DMZ Host IP Address filed.



5. Click Save.

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.

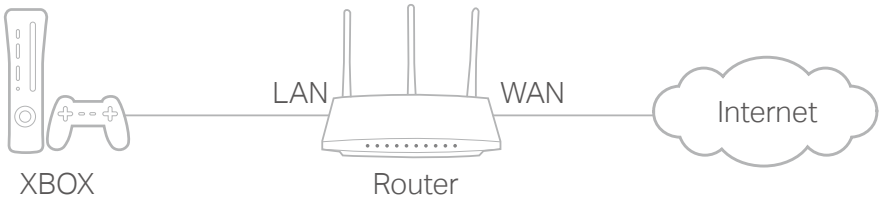
10. 4. Make Xbox Online Games Run Smoothly by UPnP

The UPnP (Universal Plug and Play) protocol allows 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 on the local network and the internet can freely communicate with each other thus 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:

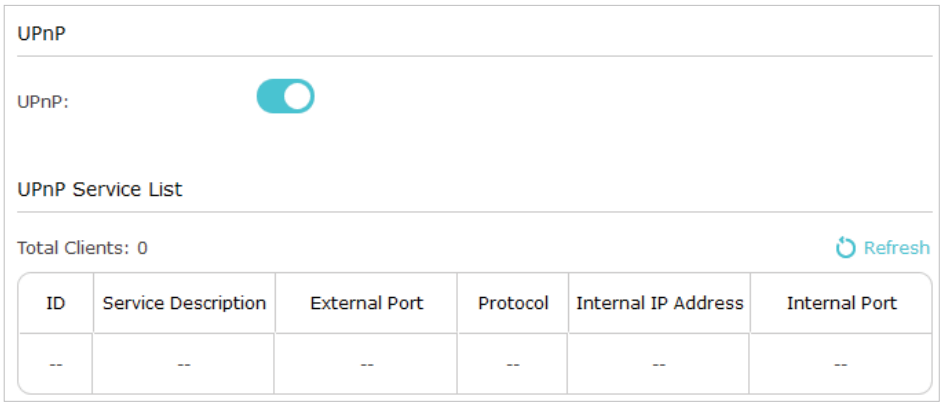
- UPnP is enabled by default in this router.
- Only the application supporting UPnP protocol can use this feature.
- UPnP feature needs the support of operating system (e.g. Windows Vista/ Windows 7/ Windows 8, etc. Some of operating system need to install the UPnP components).

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 your TP-Link ID or the password you set for the router.
2. Go to Advanced > NAT Forwarding > UPnP and toggle on or off according to your needs.



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.

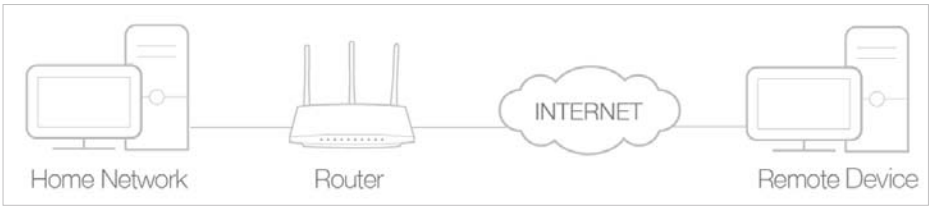
PPTP VPN is more easily used and its speed is faster, it's compatible with most operating systems and also supports mobile devices. Its security is poor and your packets may be cracked easily, and PPTP VPN connection may be prevented by some ISP.

It contains the following sections, please choose the appropriate VPN server connection type as needed.

- Use OpenVPN to Access Your Home Network
- Use PPTP VPN to Access Your Home Network

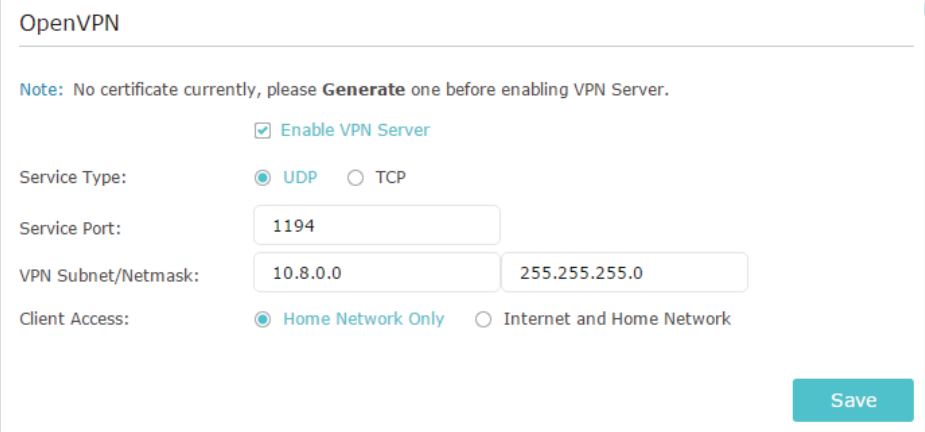
11. 1. Use OpenVPN to Access Your Home Network

In the OpenVPN connection, the home network can act as a server, and the remote device 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 device. 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 your TP-Link ID or the password you set for the router.
2. Go to Advanced > VPN Server > OpenVPN, and select Enable VPN Server.



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.
- The first time you configure the OpenVPN Server, you may need to Generate a certificate before you enable the VPN Server.

3. Select the Servive Type (communication protocol) for OpenVPN Server: UDP, TCP.
4. Enter a VPN Service Port to which a VPN device connects, and the port number should be between 1024 and 65535.
5. In the VPN Subnet/Netmask fields, enter the range of IP addresses that can be leased to the device by the OpenVPN server.

6. Select your Client Access type. Select Home Network Only if you only want the remote device to access your home network; select Internet and Home Network if you also want the remote device to access internet through the VPN Server.
7. Click Save.
8. Click Generate to get a new certificate.

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 which will be used by the remote device to access your router.

Step 2. Configure OpenVPN Connection on Your Remote Device

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

Note: You need to install the OpenVPN client utility on each device that you plan to apply the VPN funxtion to access your router. Mobile devices should download a third-party app from Google Play or Apple App Store.

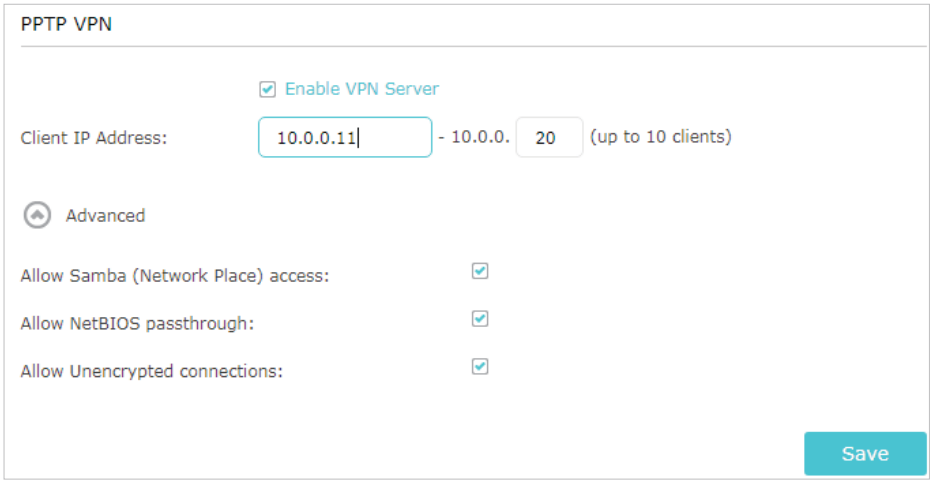
2. After the installation, copy the file exported from your router to the OpenVPN client utility's "config" folder (for example, C:\Program Files\OpenVPN\config on Windows). The path depends on where the OpenVPN client utility is installed.
3. Run the OpenVPN client utility and connect it to OpenVPN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

11. 2. Use PPTP VPN to Access Your Home Network

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

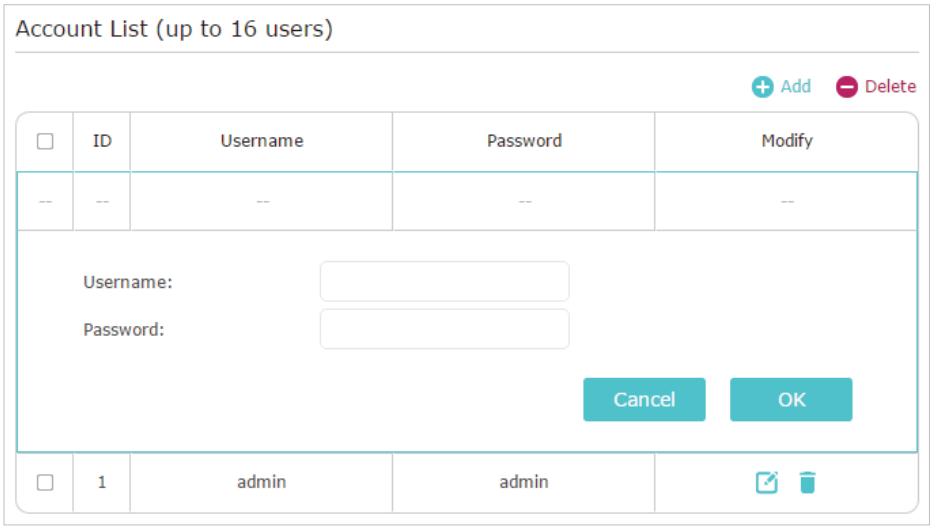
Step 1. Set up PPTP VPN Server on Your Router

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.
2. Go to Advanced > VPN Server > PPTP VPN, and select Enable VPN Server.



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.

3. In the Client IP Address filed, enter the range of IP addresses (up to 10) that can be leased to the devices by the PPTP VPN server.
4. Click Advanced to set the PPTP connection permission according to your needs.
   - Select Allow Samba (Network Place) access to allow your VPN device to access your local Samba server.
   - Select Allow NetBIOS passthrough to allow your VPN device to access your Samba server using NetBIOS name.
   - Select Allow Unencrypted connections to allow unencrypted connections to your VPN server.
5. Click Save.
6. Configure the PPTP VPN connection account for the remote device, you can create up to 16 accounts.



1) Click Add.

2) Enter the Username and Password to authenticate devices to the PPTP VPN Server.

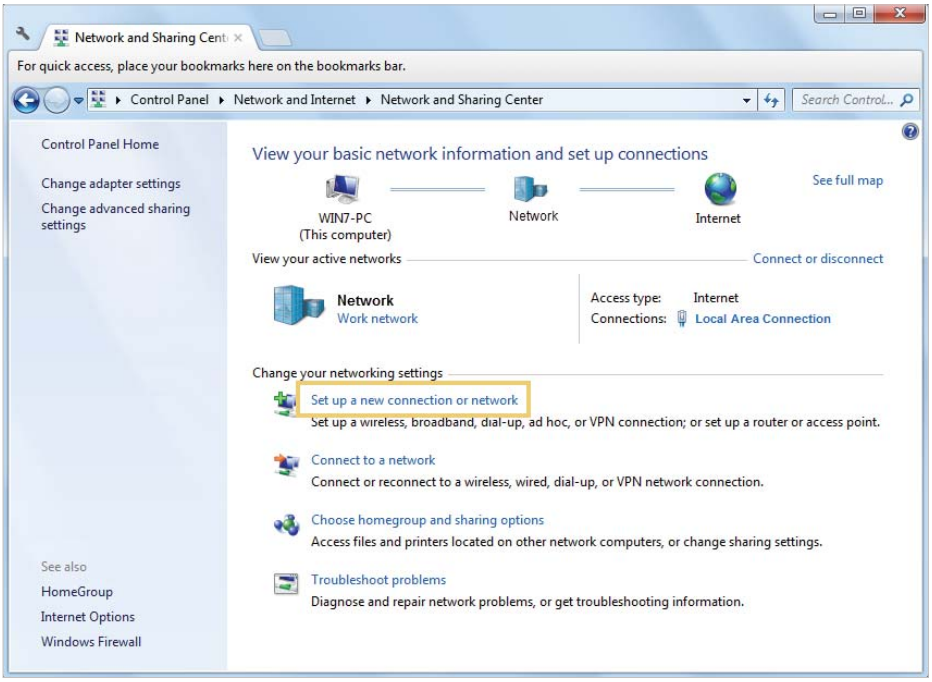
3) Click OK.

Step 2. Configure PPTP VPN Connection on Your Remote Device

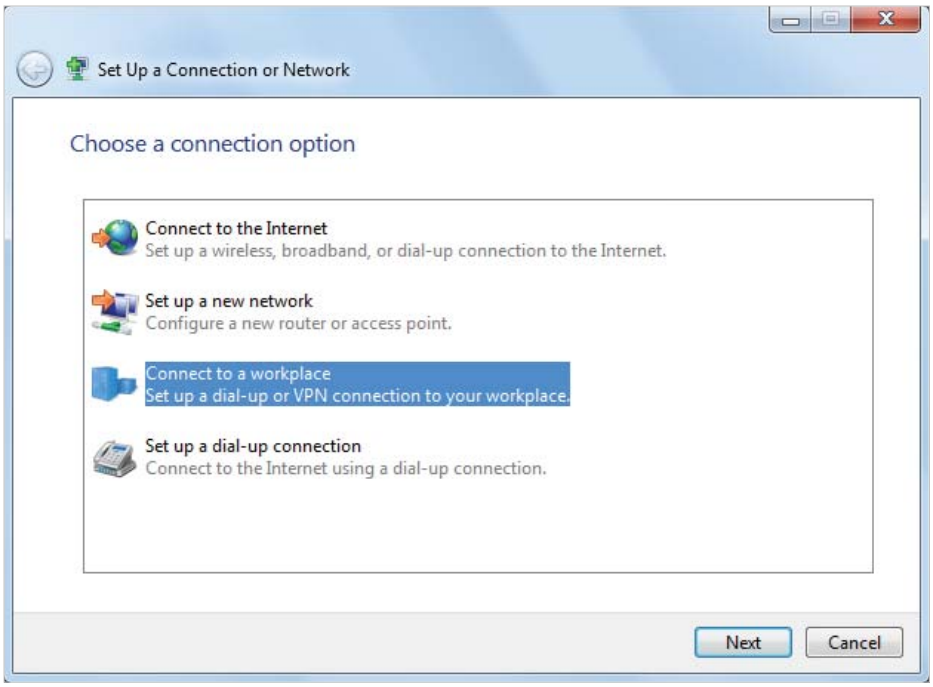
The remote device can use the Windows built-in PPTP software or a third-party PPTP software to connect to PPTP Server. Here we use the Windows built-in PPTP software as an example.

1. Go to Start > Control Panel > Network and Internet > Network and Sharing Center.

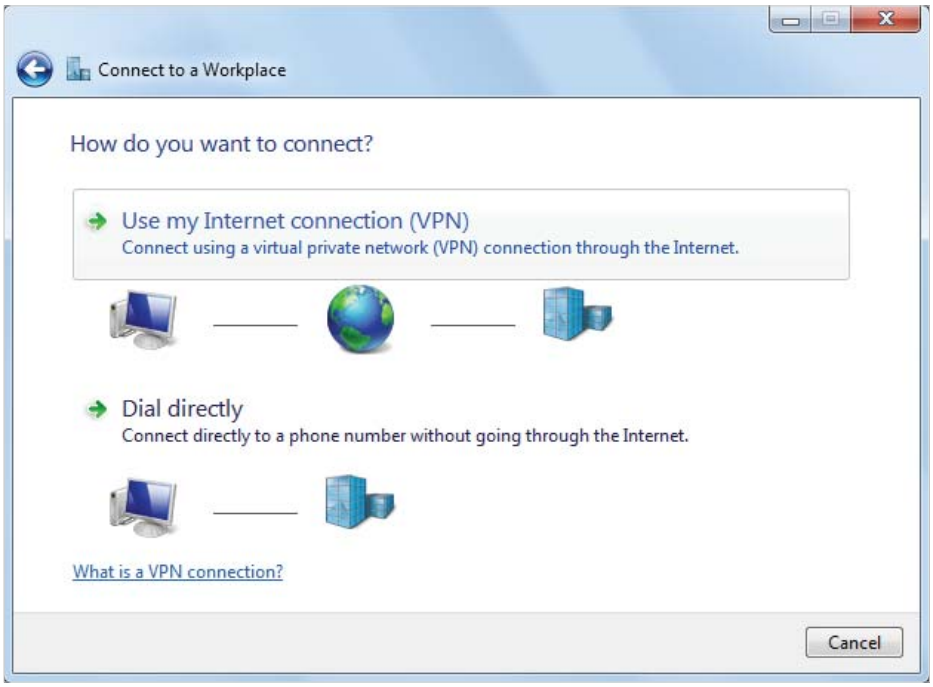
2. Select Set up a new connection or network.



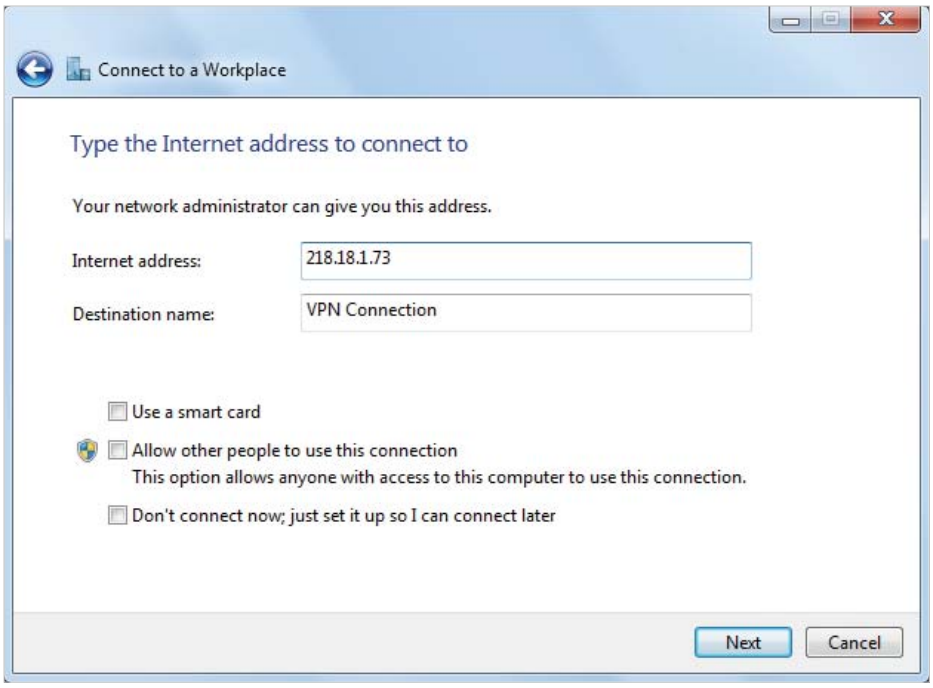
3. Select Connect to a workplace and click Next.



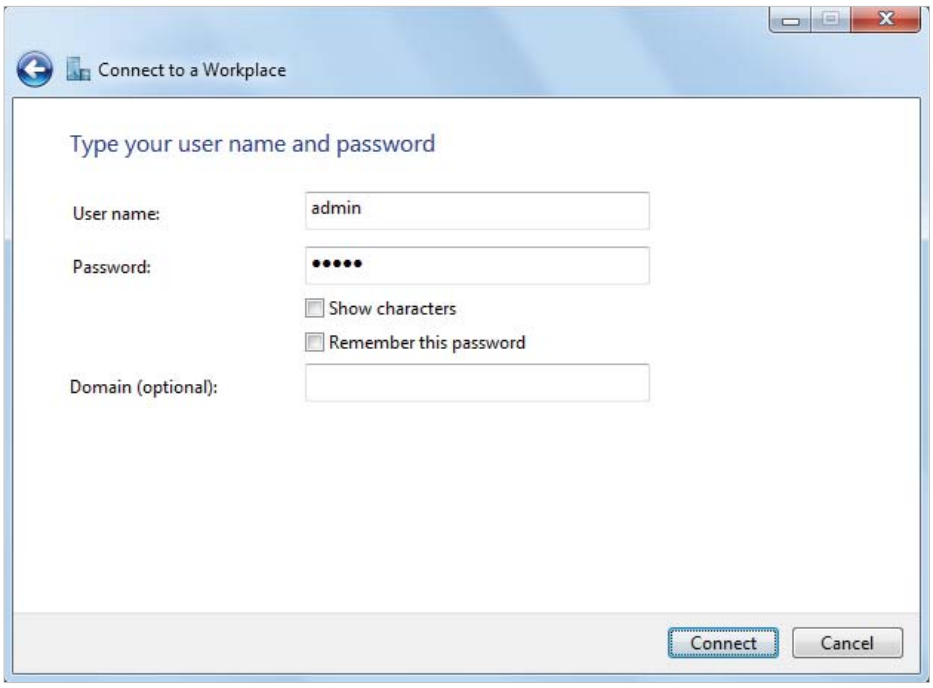
4. Select Use my Internet connection (VPN).



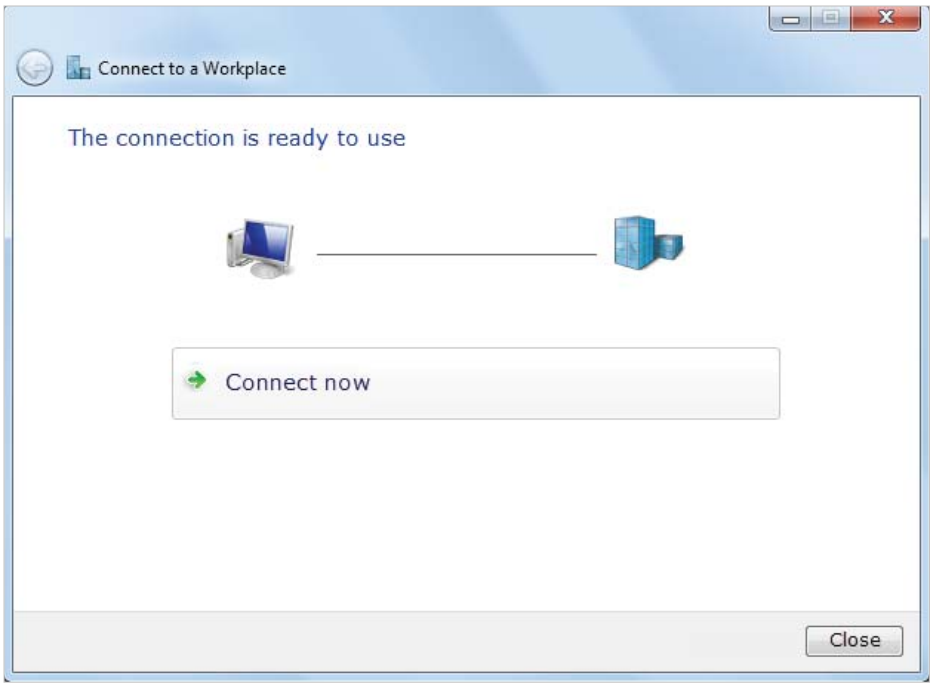
5. Enter the internet IP address of the router (for example: 218.18.1.73) in the Internet address field. Click Next.



6. Enter the User name and Password you have set for the PPTP VPN server on your router, and click Connect.



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


Connect to a Workplace
The connection is ready to use
Connect now
Close

Chapter 12

Customize Your Network Settings

This chapter guides you on how to configure advanced network features.

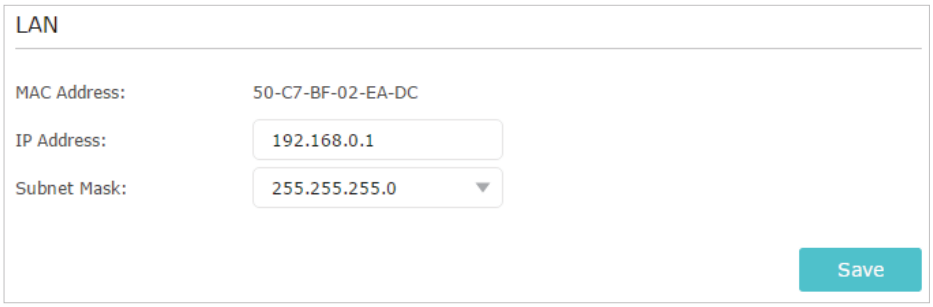
It contains the following sections:

- Change the LAN Settings
- Set Up Link Aggregation
- 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
- Schedule Your Wireless Function

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 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 your TP-Link ID or the password you 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.



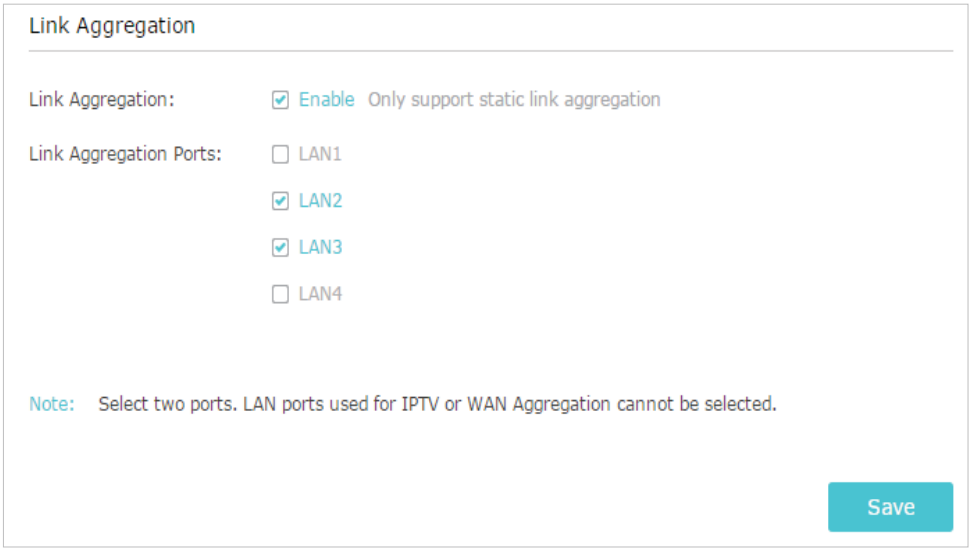
4. Click Save.

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 these features.

12. 2. Set Up Link Aggregation

The Link Aggregation feature combines two ports together to make a single highbandwidth data path, thus sustaining a higher-speed and more stable wired network.

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.
2. Go to Advanced > Network > LAN.
3. Tick the Enable checkbox to enable Link Aggregation.



4. Specify two ports for Link Aggregation.

Note: LAN ports used for IPTV or WAN aggregation cannot be selected.

5. Click Save.

12. 3. Configure to Support IPTV Service

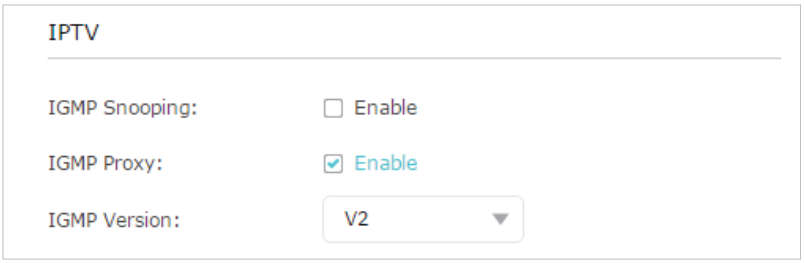
I want to:

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 your TP-Link ID or the password you set for the router.
2. Go to Advanced > Network > IPTV.
3. **If your ISP provides 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, as required by your ISP.



2) Click Save.

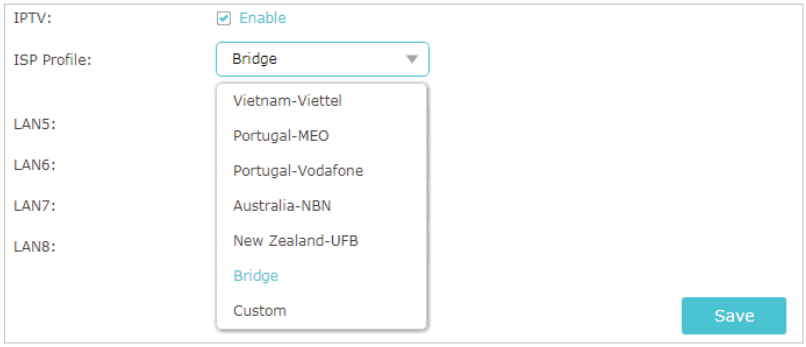
3) After configuring IGMP proxy, IPTV can work behind your router now. You can connect your set-top box to any of the router's Ethernet port.

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

1) Tick Enable IPTV.

2) Select the appropriate Mode according to your ISP.

- Select Bridge if your ISP is not listed and no other parameters are required.
- Select Custom if your ISP is not listed but provides necessary parameters.



3) After you have selected a mode, the necessary parameters, including the LAN port for IPTV connection, are predetermined. If not, select the LAN type to determine which port is used to support IPTV service.

4) Click Save.

5) Connect the set-top box to the corresponding LAN port which is predetermined or you have specified in Step 3.

Done!

Your IPTV setup is done now! You may need to configure your set-top box before enjoying your TV.

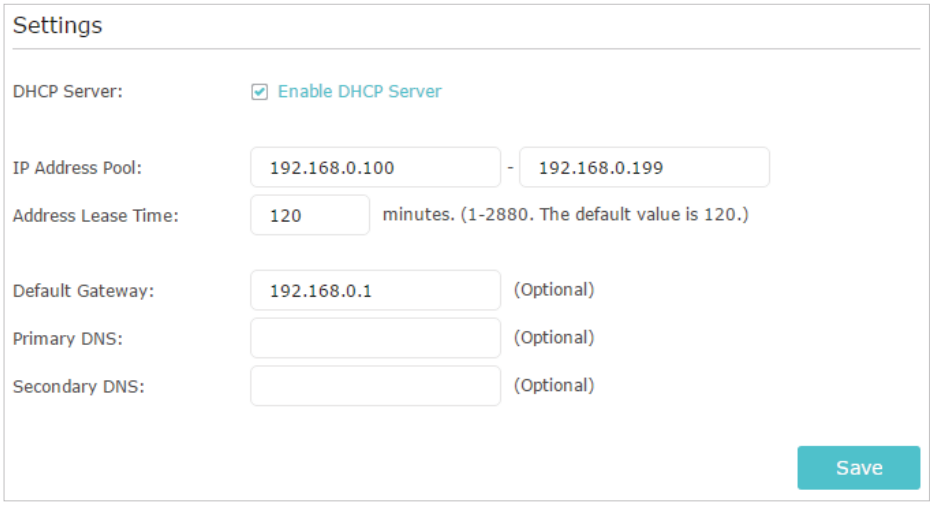
Tips: Qos and IPTV cannot be enabled at the same time.

12. 4. 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 the DHCP Server if necessary, and you can reserve LAN IP addresses for specified client devices.

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.
2. Go to Advanced > Network > DHCP Server.

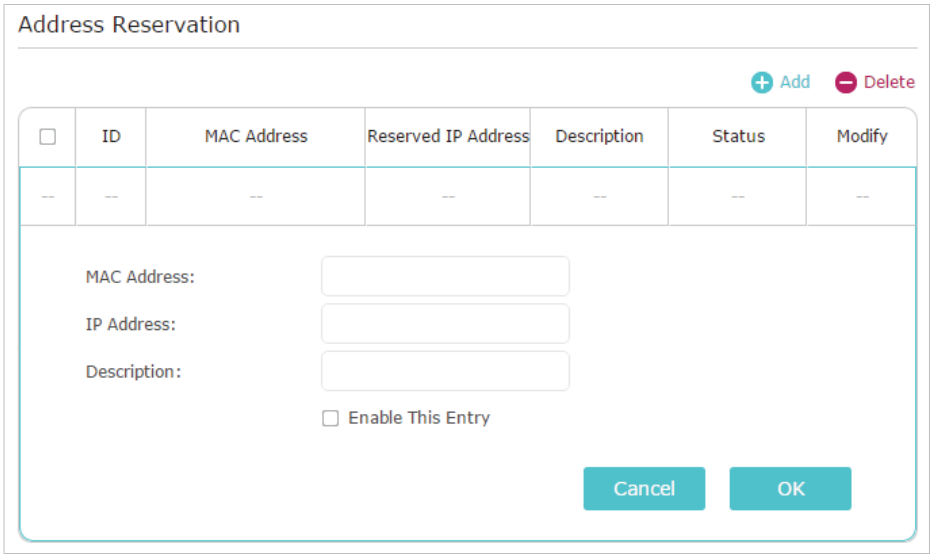
- **To specify the IP address that the router assigns:**



1. Tick the Enable DHCP Server checkbox.
2. Enter the starting and ending IP addresses in the IP Address Pool.
3. Enter other parameters if the ISP offers. The Default Gateway is automatically filled in and is the same as the LAN IP address of the router.
4. Click Save.

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

1. Click Add in the Address Reservation section.



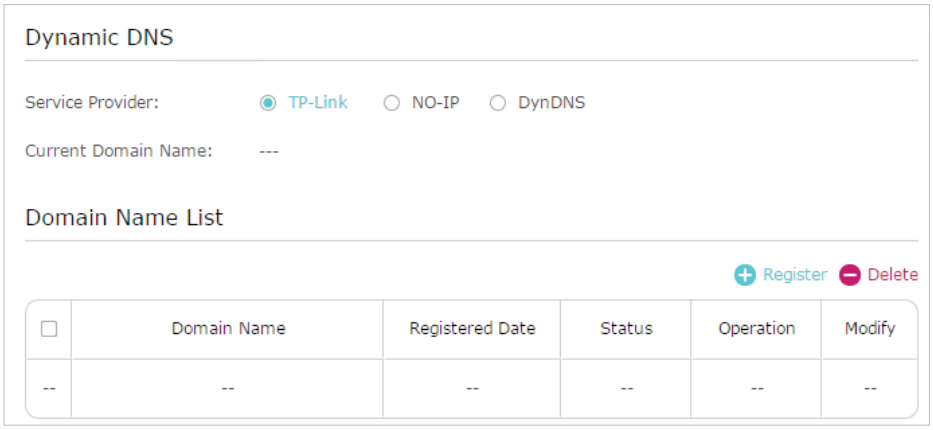
2. Click View Exsiting Devices or enter the MAC address of the client device.
3. Enter the IP address to reserve for the client device.
4. Enter the Description for this entry.
5. Tick the Enable This Entry checkbox and click OK.

12. 5. Set Up a Dynamic DNS Service Account

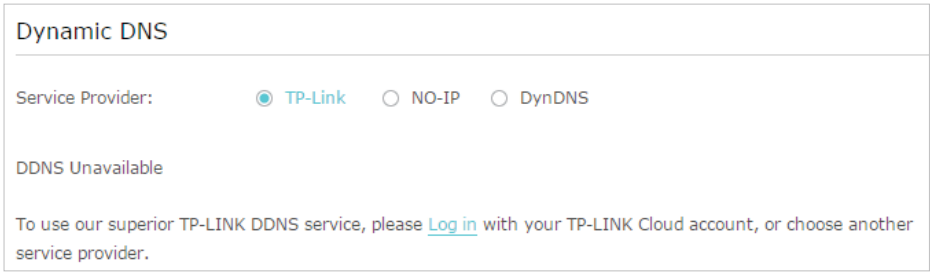
Most ISPs assign a dynamic IP address to the router and you can use this IP address to access your router remotely. However, the IP address can change from time to time and you don't know when it changes. In this case, you might apply the DDNS (Dynamic Domain Name Server) feature on the router to allow you and your friends to access your router and local servers (FTP, HTTP, etc.) using a domain name without 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.

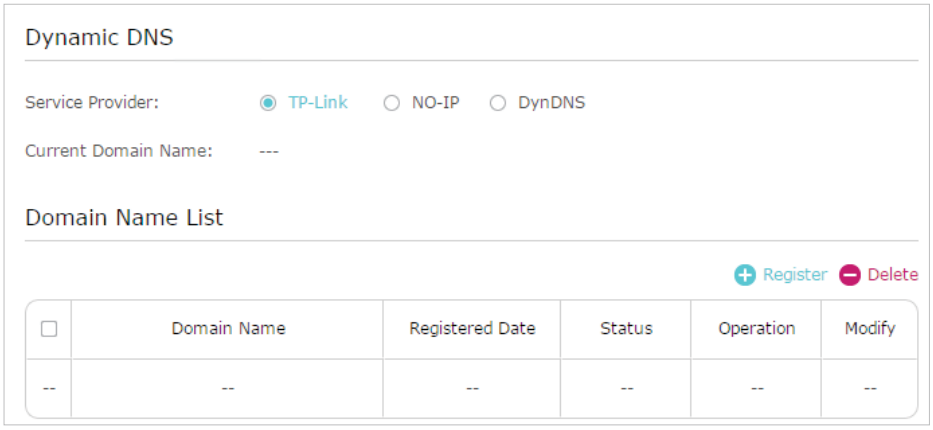
1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.
2. Go to Advanced > Network > Dynamic DNS.
3. Select the DDNS Service Provider: TP-Link, NO-IP or DynDNS. It is recommended to select TP-Link so that you can enjoy TP-Link's superior DDNS service. Otherwise, please select NO-IP or DynDNS. If you don't have a DDNS account, you have to register first by clicking Go to register.



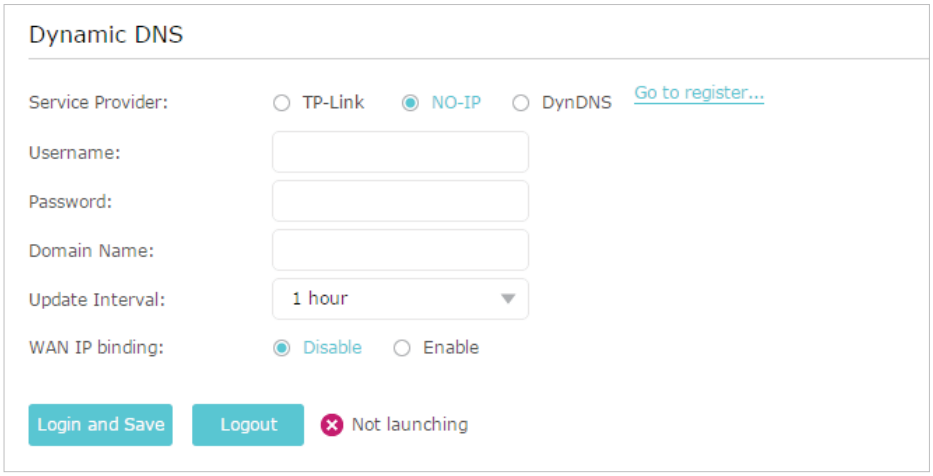
Note: To enjoy TP-Link's DDNS service, you have to log in with a TP-Link ID. If you have not logged in with one, click Log in.



4. Click Register in the Domain Name List if you have selected TP-Link, and enter the Domain Name as needed.



If you have selected NO-IP or DynDNS, enter the username, password and domain name of your account.



5. Click Login and Save.

Tips: If you want to use a new DDNS account, please click Logout first, and then log in with a new account.

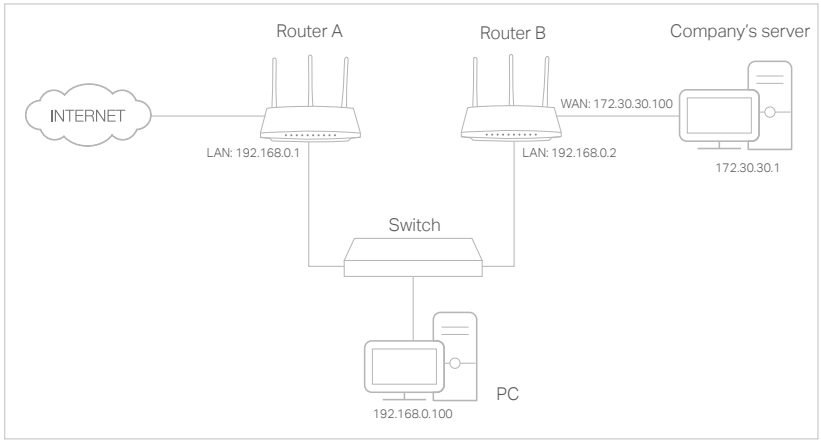
12. 6. Create Static Routes

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:

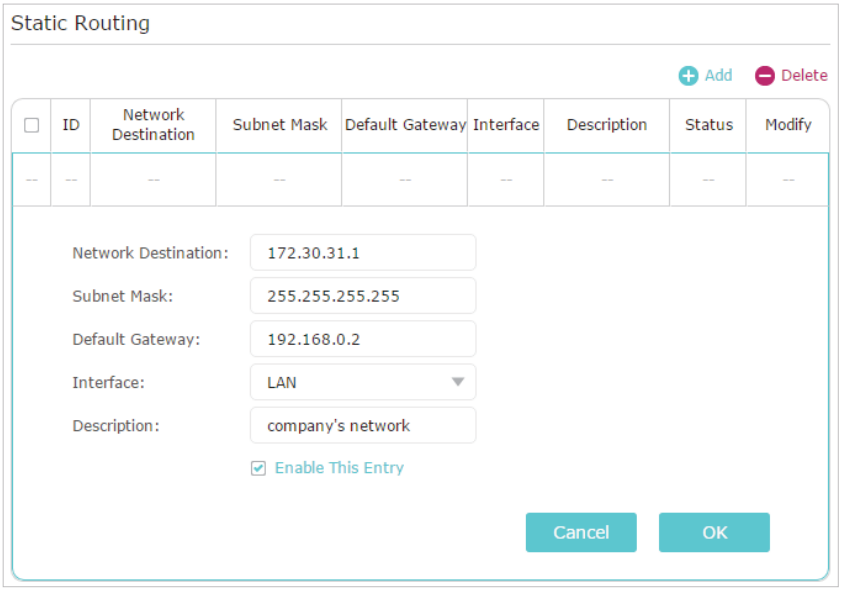
Visit multiple networks and servers at the same time.

For example, in a small office, my PC can surf the internet through Router A, but I also want to visit my company's network. Now I have a switch and Router B. I connect the devices as shown in the following figure so that the physical connection between my PC and my company's server is established. 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 routers' LAN IP addresses to two different IP addresses on the same subnet. Disable Router B's DHCP function.
2. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for Router A.
3. Go to Advanced > Network > Static Routing.
4. Click Add and finish the settings according to the following explanations:



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 Router A. In the example, the IP address of the company network is the destination IP address, so here enter 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

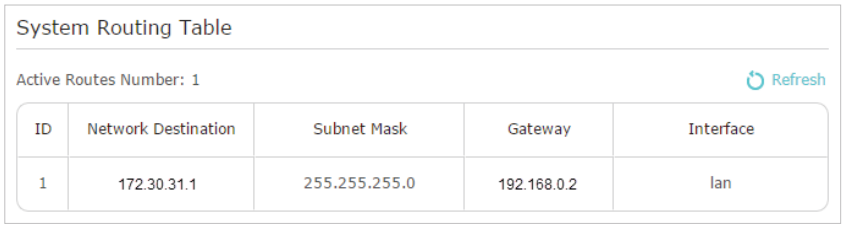
subnet mask of the corresponding network IP. In the example, the destination network is a single IP, so here enter 255.255.255.255.

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 data. In the example, the data packets will be sent to the LAN port of Router B 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 data packets. In the example, the data are sent to the gateway through the LAN port of Router A, so LAN should be selected.

Description: Enter a description for this static routing entry.

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



Done!

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

12. 7. 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 label of the router. You can customize the wireless settings according to your needs.

Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.

- **To enable or disable the wireless function:**

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 untick 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 value is case-sensitive.

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

- **To hide SSID:**

1. Go to Basic > Wireless.
2. Select Hide SSID, and your SSID won't display when you scan for local wireless networks on your wireless device and you need to manually join the network.

- **To use the smart connect function:**

The smart connect function lets you to enjoy a more high-speed network by assigning your devices to best wireless bands based on actual conditions to balance network demands.

1. Go to Advanced > Wireless > Wireless Settings.
2. Enable Smart Connect.

3. Keep the default values or set a new SSID and password, and click Save. This SSID and password will be applied for the 2.4GHz and 5GHz wireless networks.

- **To change the security option:**

1. Go to Advanced > Wireless > Wireless Settings.
2. Select the wireless network 2.4GHz, 5GHz-1 or 5GHz-2.
3. Select an option from the Security drop-down list. 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. 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.

- **To enable the Airtime Fairness feature:**

The Airtime Fairness feature can improve the overall network performace by sacrificing a little bit of network time on your slow devices. Enable Airtime Fairness when you wish to sacrifice some of the networking time from the slow devices, so that your faster devices can achieve better quality of service.

For example, you have a gaming computer next to the router in the living room, and a slower family computer upstairs. Enable the airtime fairness feature so that your gaming computer can perform as optimally as possible.

1. Go to Advanced > Wireless > Wireless Settings.
2. Select the wireless network 2.4GHz, 5GHz-1 or 5GHz-2.
3. Check the box for Enable Airtime Fairness.
4. Click Save.

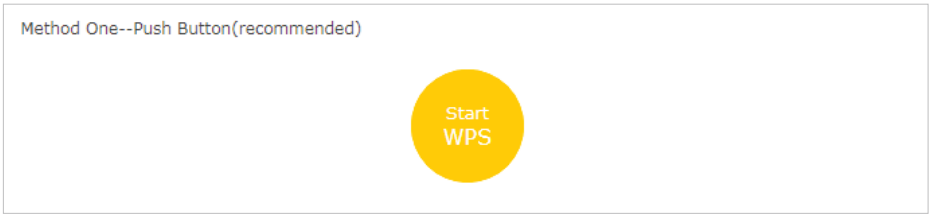
12. 8. Use WPS for Wireless Connection

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

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.
2. Make sure the Wi-Fi of your router is on and go to Advanced > Wireless > WPS.

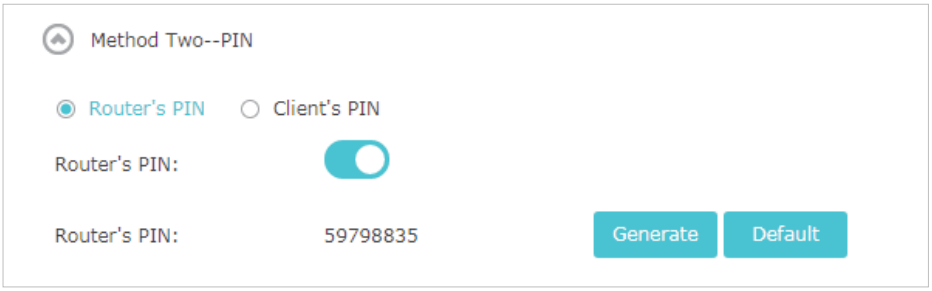
12. 8. 1. Push the WPS Button

Click Start WPS on the screen. Within two minutes, press the WPS button on your device. Success will appear on the above screen and the LED of the router should change from pulsing white to solid on, indicating successful WPS connection.



12. 8. 2. Connect via 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.

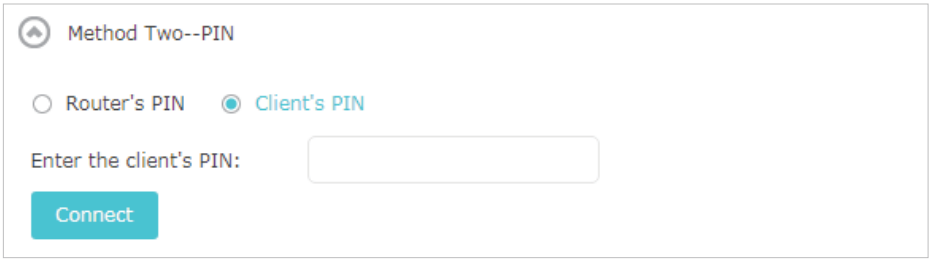


Note:

- If you want to enable/disable the WPS feature, go to System Tools > System Parameters > WPS, tick or untick the Enable WPS checkbox.
- 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 printed on the label of the router.

12. 8. 3. Connect via the Client's PIN

Enter the PIN of your device and click Connect. Then your device will get connected to the router.

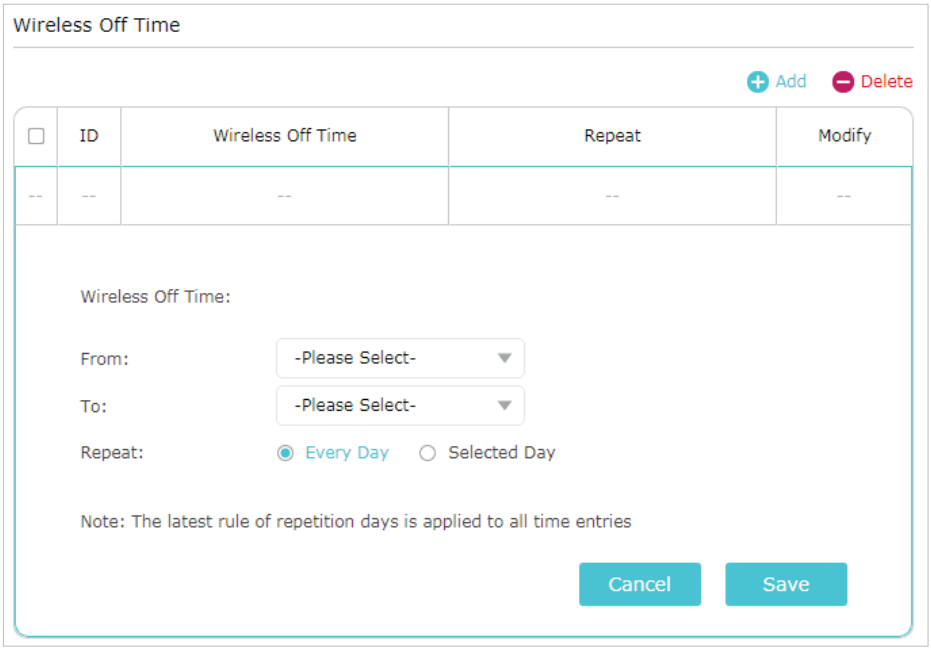


12. 9. Schedule Your Wireless Function

The wireless network 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 your TP-Link ID or the password you set for the router.
2. Go to Advanced > Wireless > Wireless Schedule.
3. Enable the Wireless Off Time Schedule feature.

4. Click Add to specify a wireless off period during which you need the wireless off automatically, and click Save.



Note:

- 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.
- The wireless network will be automatically turned on after the time period you set.

Chapter 13

Manage the Router

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

It contains the following sections:

- Set Up System Time
- Control the LED
- Test the Network Connectivity
- Test Your Internet Speed
- Upgrade the Firmware
- Backup and Restore Configuration Settings
- Set the Router to Reboot Regularly
- Change the Login Password
- Default Password Recovery
- Local Management
- Remote Management
- System Log
- Monitor the Internet Traffic Statistics
- System Parameters

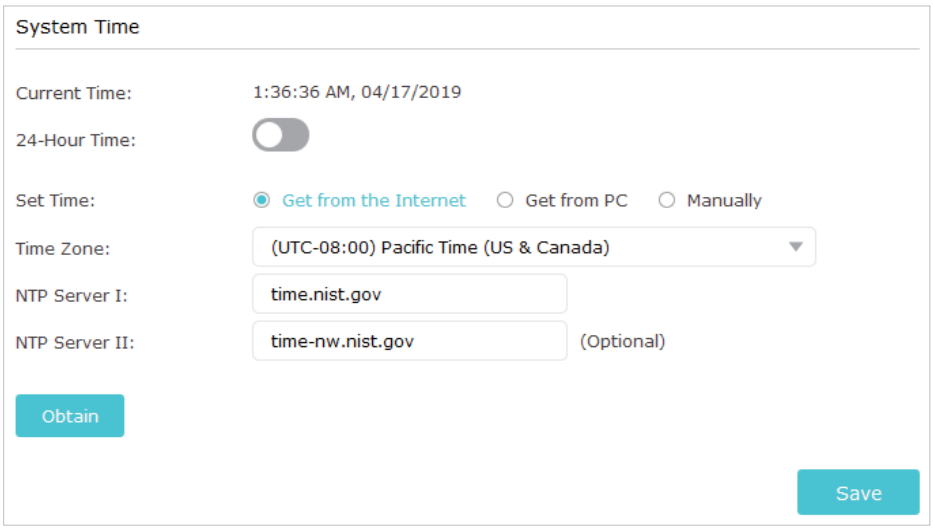
13. 1. Set Up System Time

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 choose the way to obtain the system time as needed.

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.
2. Go to Advanced > System Tools > Time Settings.

- **To get time from the internet:**

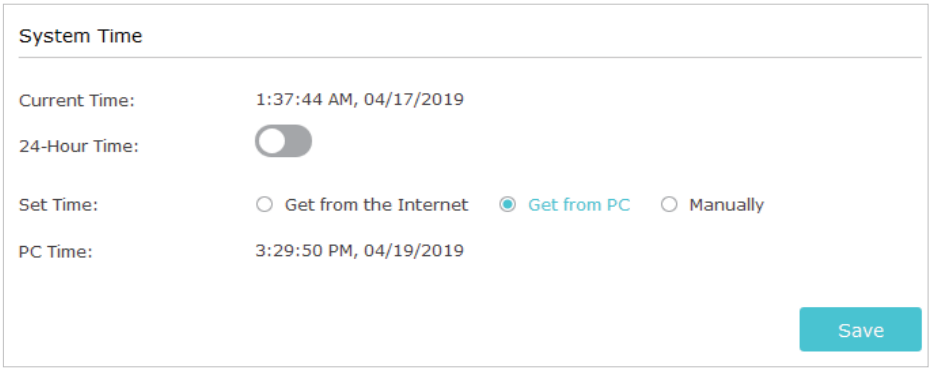
1. In the Set Time field, select Get from the Internet.



2. Select your local Time Zone from the drop-down list.
3. In the NTP Server I fileld, enter the IP address or domain name of your desired NTP Server.
4. (Optional) In the NTP Server II fileld, enter the IP address or domain name of the second NTP Server.
5. Click Obtain to get the current Internet time and click Save.

- **To get time from your computer:**

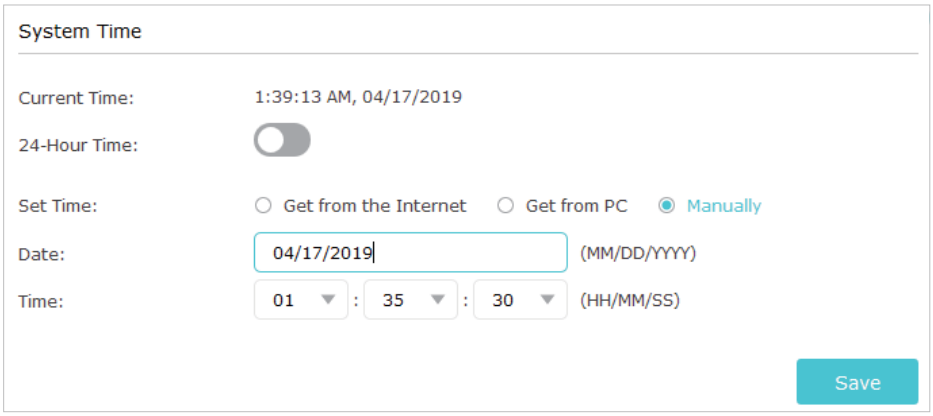
1. In the Set Time field, select Get from PC.



2. The time of your computer will then be displayed and click Save.

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

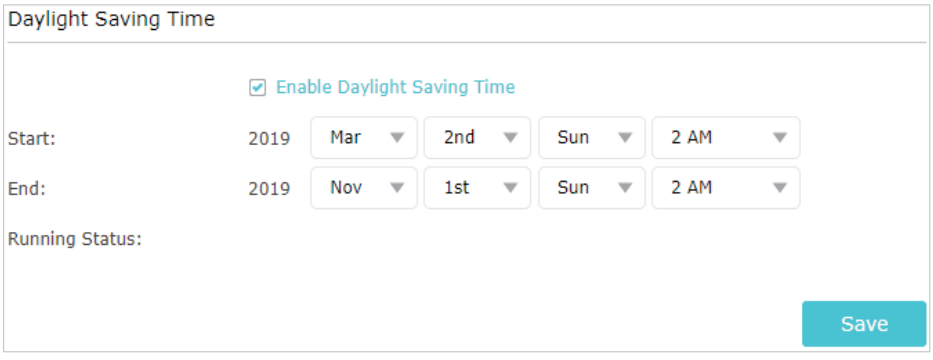
1. In the Set Time field, select Manually.



2. Set the current Date (In MM/DD/YYYY format).
3. Set the current Time (In HH/MM/SS format).
4. Click Save.

- **To set up Daylight Saving Time:**

1. Select Enable Daylight Saving Time.

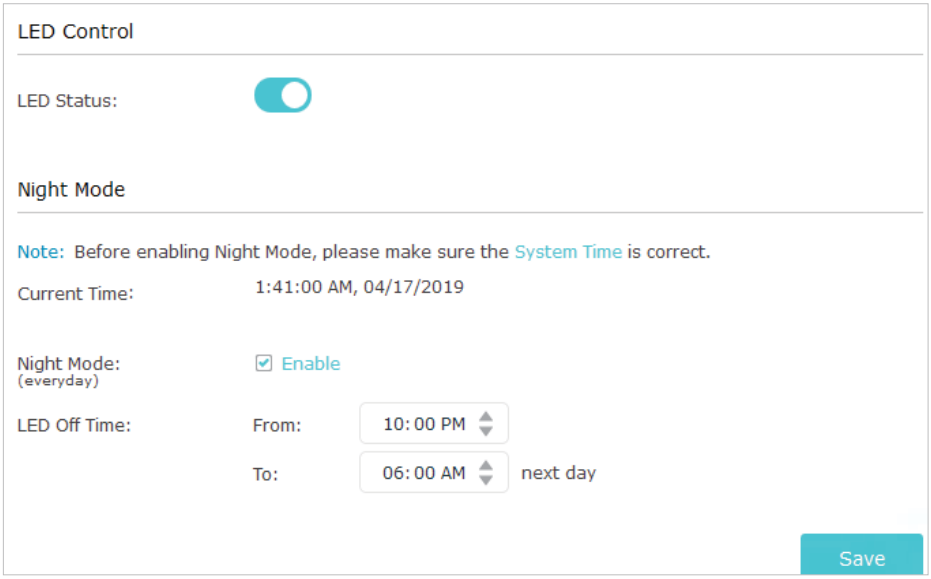


2. Select the correct Start date and time when daylight saving time starts at your local time zone.
3. Select the correct End date and time when daylight saving time ends at your local time zone.
4. Click Save.

13. 2. Control the LED

The LED of the router indicates its activities and status. You can enable the Night Mode feature to specify a time period during which the LED is off.

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.
2. Go to Advanced > System Tools > LED Control.
3. Enable Night Mode.
4. Specify a time period in the LED Off Time filed, and the LED will be off during this period every day.
5. Click Save.

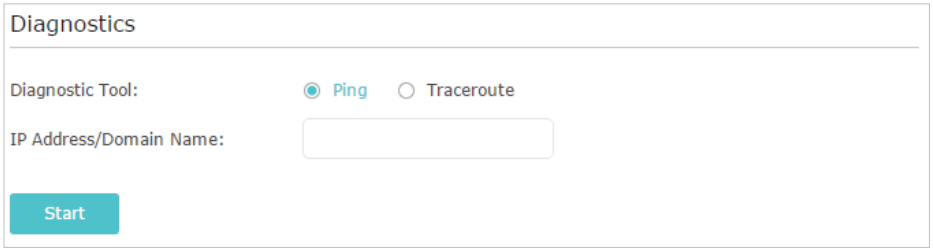


13. 3. Test the Network Connectivity

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 your TP-Link ID or the password you set for the router.

2. Go to Advanced > System Tools > Diagnostics.



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

1) Choose Ping or Traceroute as the diagnostic tool to test the connectivity;

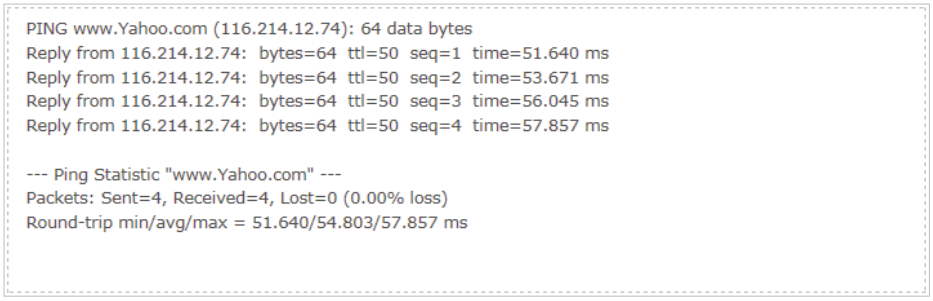
- Ping is used to test the connectivity between the router and the tested host, and measure the round-trip time.
- Traceroute is used to display the route (path) your router has passed to reach the tested host, and measure transit delays of packets across an Internet Protocol network.

2) Enter the IP Address or Domain Name of the tested host.

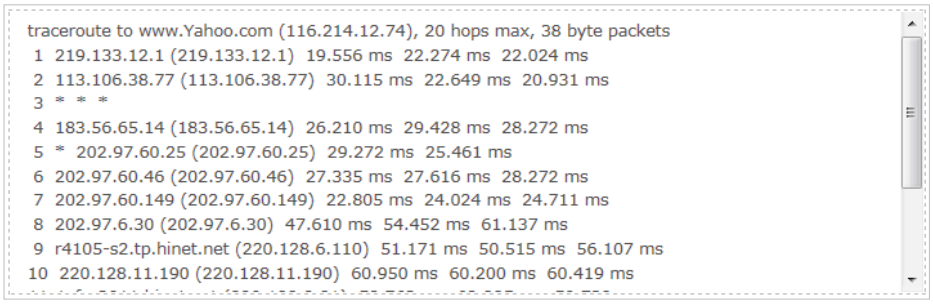
4. Click Start to begin the diagnostics.

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.



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

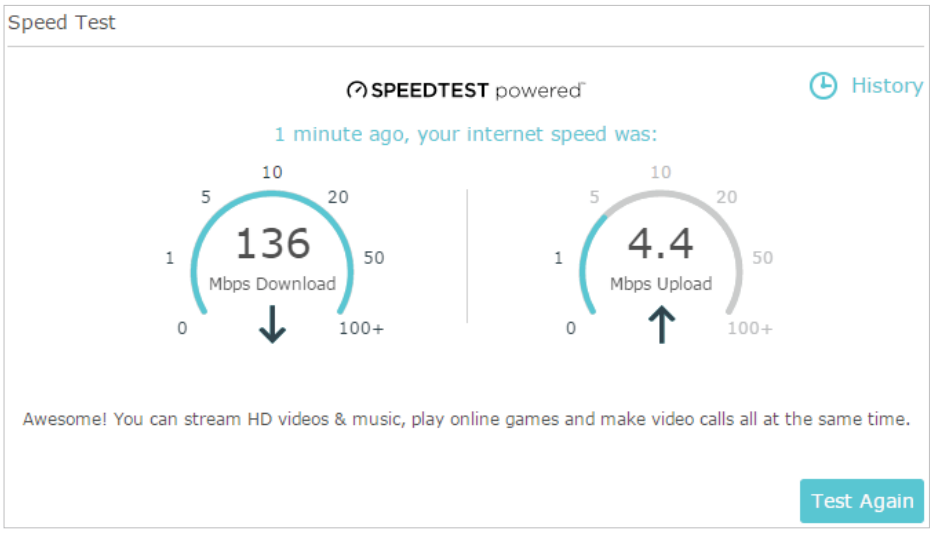


13. 4. Test Your Internet Speed

Speed Test provides an easy way to monitor your network speed. It reveals the current upload and download speeds received from your provider and gives practical advice about the activities you can enjoy.

- **To test your internet speed**:

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.
2. Go to Basic > Network Map and click Speed Test .
3. If it is the first time you run a test, the router will start the test automatically. Otherwise, click Test Again.

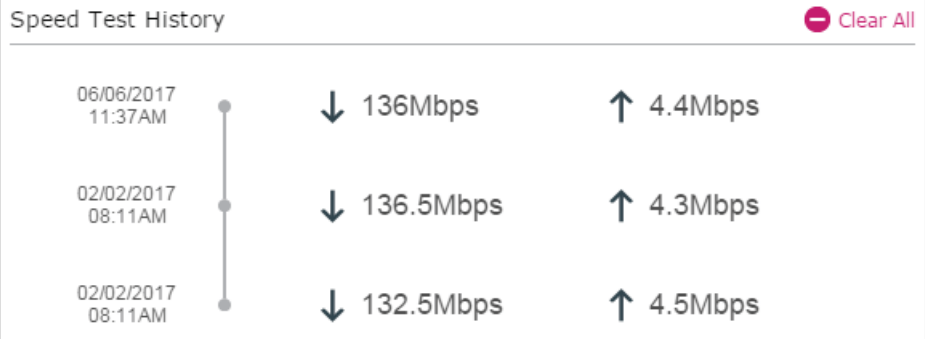


Note:

- To run a speed test, your router must be connected to the internet.
- For a more accurate result, make sure no apps or programs are running on devices on your network.

- **To view history of internet speeds:**

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.
2. Go to Basic > Network Map and click Speed Test .
3. Click History to view a record of previous speed test results.



13. 5. Upgrade the Firmware

TP-Link aims at providing better network experience for users.

We will inform you through the web management page if there's any update firmware available for your router. Also, the latest firmware will be released at the TP-Link official website www.tp-link.com, and you can download it from the Support page for free.

Note:

- Make sure you remove all attached USB devices from the router before the firmware upgrade to prevent data loss.
- Backup your router configuration before firmware upgrade.
- Do NOT turn off the router during the firmware upgrade.

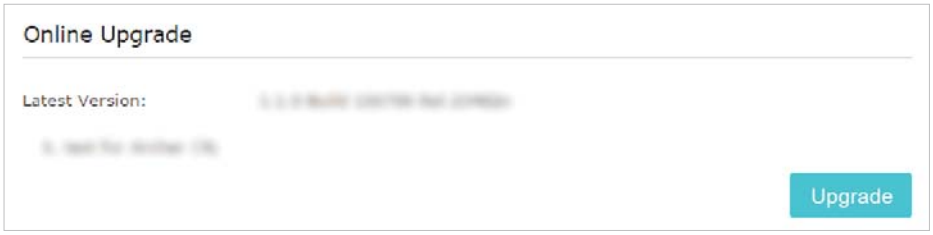
13. 5. 1. Online Upgrade

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.
2. When the latest firmware is available for your router, the update icon

will display in the top-right corner of the page. Click the icon to go to the Firmware Upgrade page.

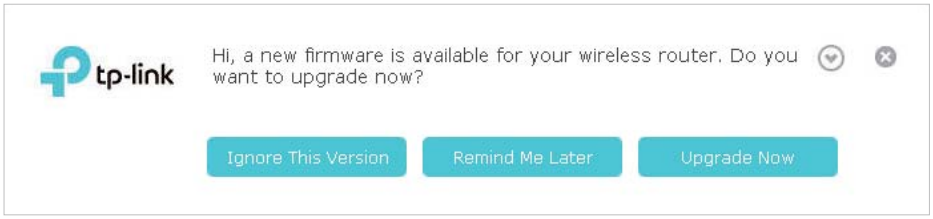
   Alternatively, you can go to Advanced > System Tools > Firmware Upgrade, and click Check for upgrade to see whether the latest firmware is released.

3. Focus on the Online Upgrade section, and click Upgrade.



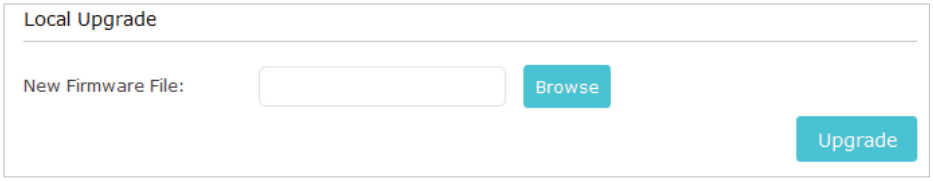
4. Wait a few minutes for the upgrade and reboot to complete.

Tips: If there's a new and important firmware update for your router, you will see the notification (similar as shown below) on your computer as long as a web browser is opened. Click Upgrade Now, and log into the web management page with the username and password you set for the router. You will see the Firmware Upgrade page.



13. 5. 2. Local Upgrade

1. Download the latest firmware file for the router from www.tp-link.com.
2. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.
3. Go to Advanced > System Tools > Firmware Upgrade.
4. Focus on the Device Information section. Make sure the downloaded firmware file is matched with the Hardware Version.
5. Focus on the Local Upgrade section. Click Browse to locate the downloaded new firmware file, and click Upgrade.



6. Wait a few minutes for the upgrade and reboot to complete.

Note: If you fail to upgrade the firmware for the router, please contact our Technical Support.

13. 6. 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.

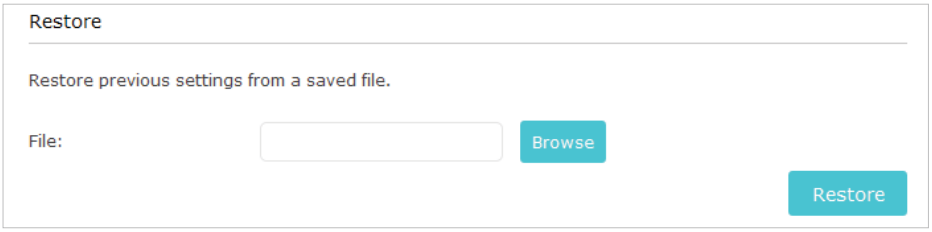
1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.
2. Go to Advanced > System Tools > Backup & Restore.

- **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.

- **To restore configuration settings:**

1. Click Browse to locate the backup configuration file stored on your computer, and click Restore.

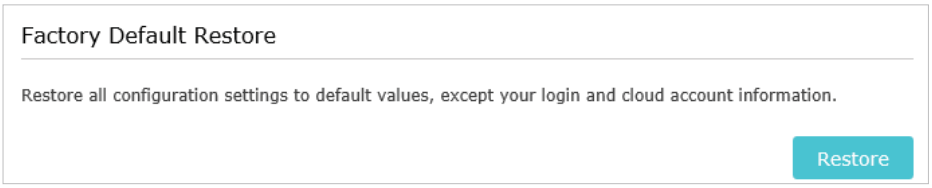


2. Wait a few minutes for the restoring and rebooting.

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

- **To reset the router except your login password and TP-Link ID:**

1. Click Restore under the Factory Default Restore session.



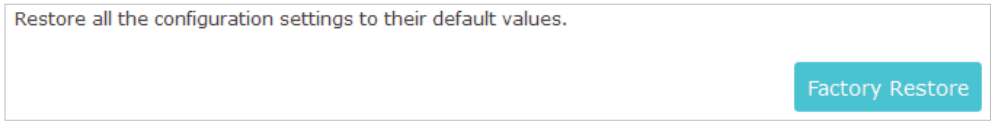
2. Wait a few minutes for the resetting and rebooting.

Note:

- During the resetting process, do not turn off the router.
- After reset, you can still use the current login password or the TP-Link ID to log in to the web management page.

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

1. Click Factory Restore to reset the router.



2. Wait a few minutes for the resetting and rebooting.

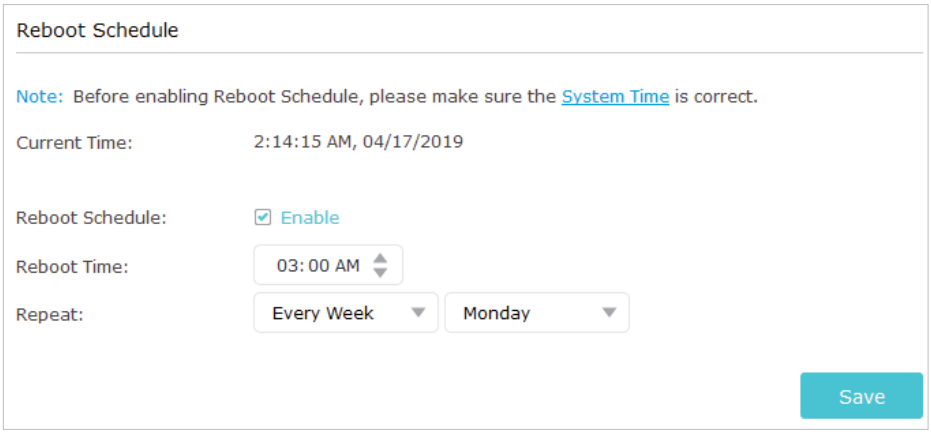
Note:

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

13. 7. Set the Router to Reboot Regularly

The Scheduled Reboot feature cleans the cache to enhance the running performance of the router.

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.
2. Go to Advanced > System Tools > Reboot Schedule.
3. Check the box to enable Reboot Schedule.



4. Specify the Reboot Time when the router reboots and Repeat to decide how often it reboots.
5. Click Save.

13. 8. Change the Login Password

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

Note: If you are using a TP-Link ID to log in to the web management page, the account management feature will be disabled. To manage the TP-Link ID, go to Basic > TP-Link Cloud.

1. Visit http://tplinkwifi.net, and log in with the password you set for the router.

2. Go to Advanced > System Tools > Administration and focus on the Account Management section.

3. Enter the old password, then a new password twice (both case-sensitive). Click Save.
4. Use the new password for future logins.

13. 9. Default Password Recovery

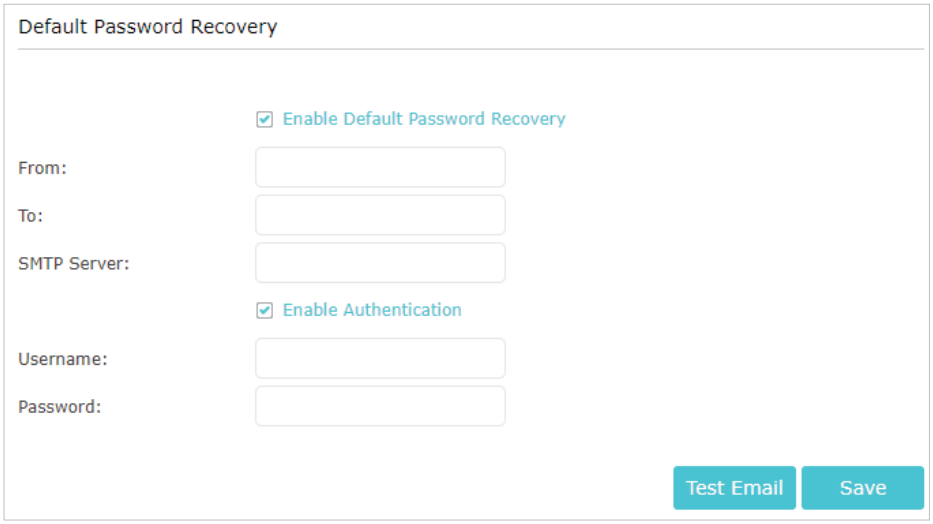
This feature allows you to recover the login password without restoring router.

Note: If you are using a TP-Link ID to log in to the web management page, the Default Password Recovery feature will be disabled. To manage the TP-Link ID, go to Basic > TP-Link Cloud.

1. Visit http://tplinkwifi.net, and log in with the password you set for the router.
2. Go to Advanced > System Tools > Administration and focus on the Default Password Recovery section.
3. Tick the Enable Password Recovery checkbox.
4. Specify a mailbox (From) for sending the recovery letter and enter its SMTP Server address. Specify a mailbox (To) for receiving 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.



5. Click Save.

You can click Test Email to test whether the configuration is successful.

To recover the login password, please visit http://tplinkwifi.net, click Forgot Password? on the login page and follow the instructions to set a new password.

13. 10. Local Management

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

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.
2. Go to Advanced > System Tools > Administration and complete the settings In Local Management section as needed.

- **Allow Local Management via both HTTPS and HTTP:**

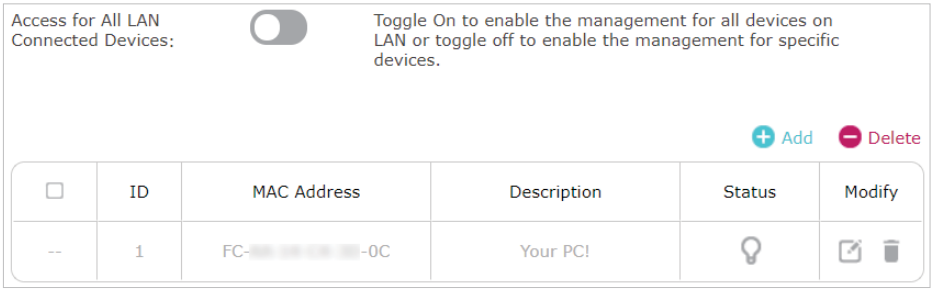
Toggle on Local Management via HTTPS.

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

Toggle on Access for All LAN Connected Devices.

- **Allow specific devices to manage the router:**

1. Toggle off Access for All LAN Connected Devices.
2. Click Add.

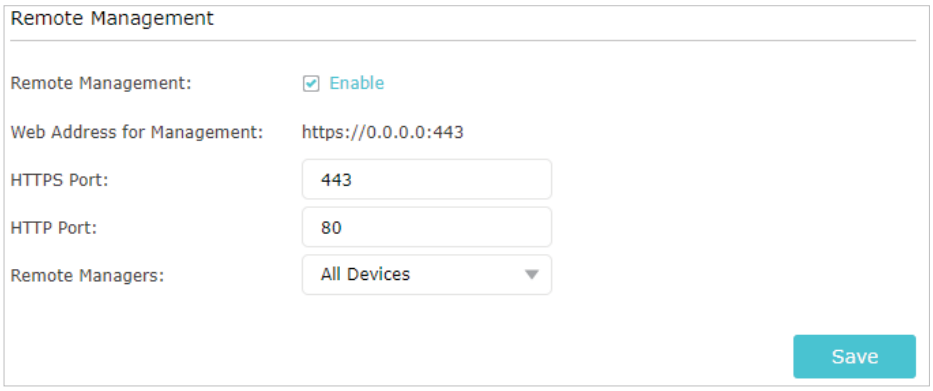


3. Click Scan and select the device to manage the router from the Existing Devices list, or enter the MAC address of the device manually.
4. Specify a Description for this entry.
5. Tick the Enable This Entry checkbox and click OK.

13. 11. Remote Management

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

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.
2. Go to Advanced > System Tools > Administration and complete the settings in Remote Management section as needed.



- **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.

2. Use the default value HTTPS Port: 443 and HTTP Port: 80 or enter values between 1024 and 65535.
3. Select All Devices in Remote Managers.
4. Click Save.

- **Allow Specified device to manage the router remotely:**

1. Select Enable Remote Management.
2. Use the default value HTTPS Port: 443 and HTTP Port: 80 or enter values between 1024 and 65535.
3. Select Specified Devices in Remote Managers.
4. Enter IP address of the device in Only this IP address.
5. Click Save.

Devices on the internet can log in to https://Router's WAN IP address: HTTPS port number (such as http://113.116.60.229:1024) or http://Router's WAN IP address: HTTP port number to manage the router.

Tips:

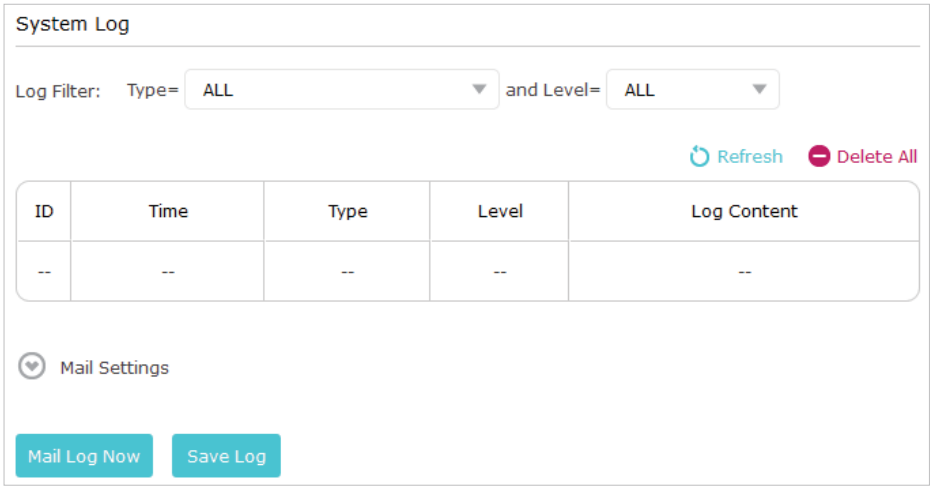
- You can find the WAN IP address of the router on Basic > Network Maps > Internet.
- The router's WAN IP is usually a dynamic IP. Please refer to Set Up a Dynamic DNS Service Account if you want to log in to the router through a domain name.

13. 12. System Log

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

- **To save the system log locally:**

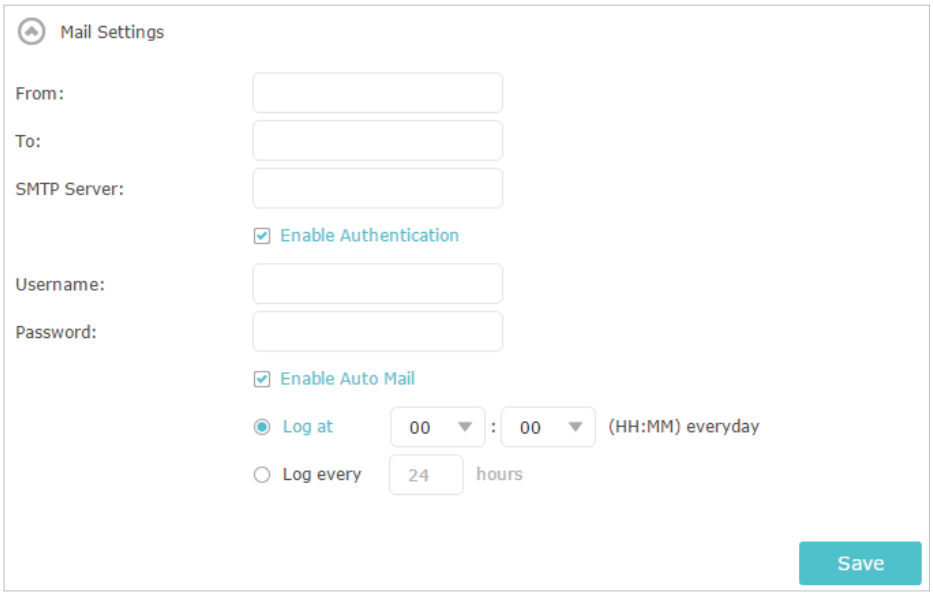
1. Visit http://tplinkwifi.net, and log in your TP-Link ID or the password you set for the router.
2. Go to Advanced > System Tools > System Log.
3. Choose the type and level of the system logs as needed.
4. Click Save Log to save the system logs to a local disk.



- **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 log in to the web management page 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 your TP-Link ID or the password you set for the router.
2. Go to Advanced > System Tools > System Log.
3. Click Mail Settings.
4. Enter the information required:



1) From: Enter the email address used for sending the system log.

2) To: Enter the recipient's email address, which can be the same as 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 for sending 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.

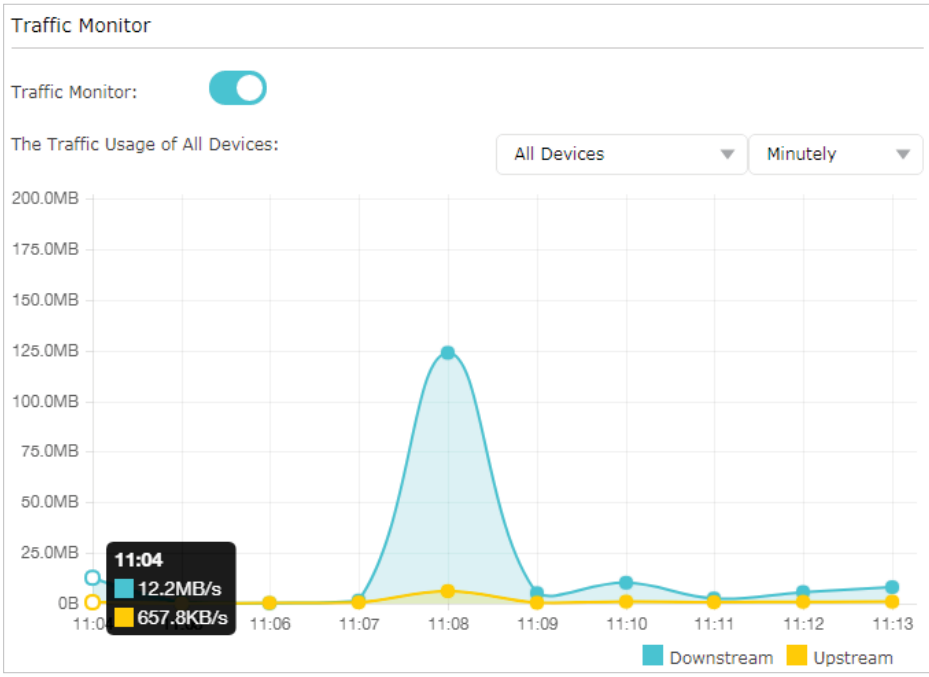
8) Set a fixed time. The recipient will receive the system log sent at this time every day.

5. Click Save.

13. 13. Monitor the Internet Traffic Statistics

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

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.
2. Go to Advanced > System Tools > Traffic Monitor.
3. Toggle on Traffic Monitor, and then you can monitor the traffic usage of all the connected devices or a single device.



4. Check the total traffic statistics of each device on Traffic Monitor List.

Click Refresh to update the statistic information on the page.

Click Reset All to reset all statistic values in the list to zero.

13. 14. System Parameters

13. 14. 1. 2.4GHz/5GHz Wireless

You can configure the parameters of traffic transmission rules in wireless networks. It's recommended to keep the default settings if you are not sure of the proper ones in the case.

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.
2. Go to Advanced > System Tools > System Parameters. Focus on 2.4GHz/5GHz Wireless section.

- Bacon Interval - Enter a value between 40 and 1000 to determine the duration between beacon packets that are broadcasted by the router to synchronize the wireless network. The default is 100 milliseconds.
- RTS Threshold – Enter a value between 1 and 2346 to determine the packet size of data transmission through the router. The default size is 2346. If the packet size is greater than the preset threshold, the router sends Request of Send frames to a particular receiving station and negotiates the sending of a data frame, or else the packet will be sent immediately.
- DTIM Interval - Enter a value between 1 and 15 to determine the interval of DTIM (Delivery Traffic Indication Message). The default interval is 1, indicating the DTIM interval is the same as Beacon Interval.
- Group Key Update Period - Enter the number of seconds between 30 and 86400, or use the default value 0 that indicates no key interval to control the time interval for the encryption key automatic renewal.
- WMM Feature - It is enabled by default and highly recommended, for the WMM function guarantees the packets with high-priority messages being transmitted preferentially.
- Short GI Feature - It is enabled by default and highly recommended, for it will increase the packet capacity by reducing the GI (Guard Interval) time.
- AP Isolation Feature - If you want to confine and restrict all wireless devices connected to the network from interacting with each other, but still able to access the internet, enable AP Isolation feature.

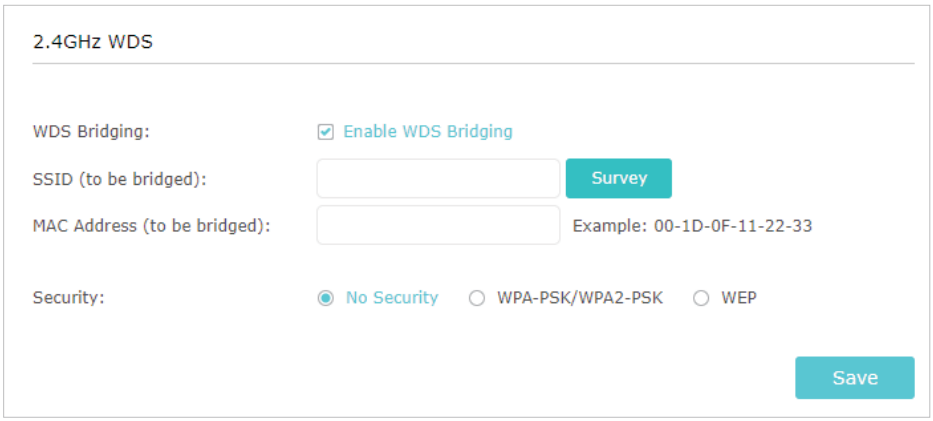
13. 14. 2. 2.4GHz/5GHz WDS

WDS (Wireless Distribution System) Bridging feature allows you to extend the wireless network coverage by briging with an AP (access point) in local network. The access point should also support WDS Bridging feature.

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.
2. Go to Advanced > System Tools > System Parameters. Focus on 2.4GHz/5GHz WDS section.

- **To bridge a network by Survey/Scan feature:**

1. Enable the WDS Bridging feature.



2. Click Survey to scan all available networks and select the network you want to bridge. The SSID (network name) and MAC Address will be automatically populated. You can also manually fill in these parameters.
3. Select a Security type and enter related parameters, which should be the same as the network to be bridged.
4. Click Save.

Note: You need to enable and configure the WDS Bridging feature for the access point as well.

- **To bridge a network manually:**

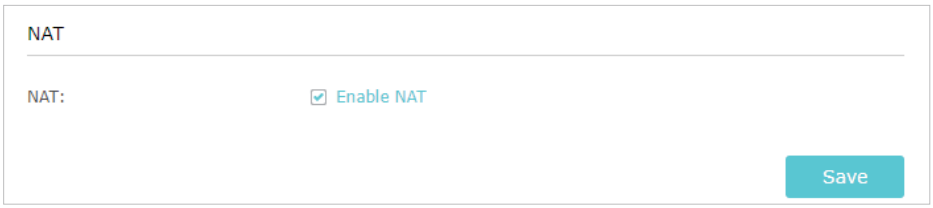
1. Enable the WDS Bridging feature.
2. Enter the SSID (network name) and MAC Address of the network to be bridged .
3. Select a Security type and enter related parameters, which should be the same as the network to be bridged.
4. Click Save.

13. 14. 3. NAT

The router's NAT (Network Address Translation) feature makes devices on the LAN use the same public IP address to communicate with devices on the internet, which protects the local network by hiding IP addresses of the devices.

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.

2. Go to Advanced > System Tools > System Parameters. Focus on NAT section.

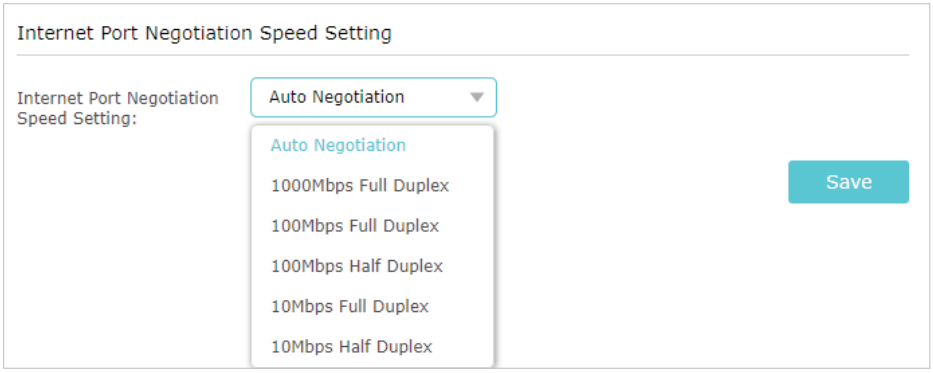


3. NAT feature is enable by dafault and it's highly recommended. If you disable it, you may have no access to the internet and NAT Forwarding will not take effect.

13. 14. 4. Internet Port Negotiation Speed Setting

The router's NAT (Network Address Translation) feature makes devices on the LAN use the same public IP address to communicate with devices on the internet, which protects the local network by hiding IP addresses of the devices.

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.
2. Go to Advanced > System Tools > System Parameters. Focus on Internet Port Negotiation Speed Setting section.



3. Select the duplex type from the drop-down list and click Save.

Chapter 14

Work with Alexa and IFTTT

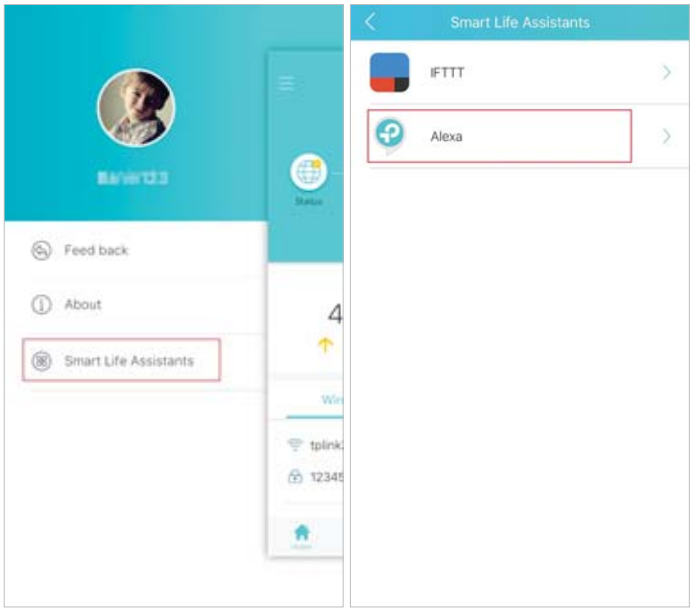
This chapter will show you how to configure your router to work with Alexa and IFTTT.

Control your network devices using simply the power of your voice with the TP-Link Router Skill for Amazon. Prioritize the Internet connection of your laptop, switch off your router's LED or ask Alexa to read out the password of the guest network, all without stopping what you're doing.

With IFTTT, you can trigger actions when devices are connecting, disconnecting, or being added to your network. You can even choose to prioritize certain devices every time you use them.

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.
2. Go to Advanced > Smart Life Assistant.
3. Follow the on-screen instructions on the Alexa or IFTTT section to set up smart control of your router.

   Or download TP-Link Tether app, open it and tap the ☰ icon, then select Smart Life Assistants to complete the setup.



FAQ

Q1. What should I do if I forget my wireless password?

The default wireless password is printed on the label of the router. If the password has been altered:

1. Connect your computer to the router using an Ethernet cable.
2. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.
3. Go to Basic > Wireless to retrieve or reset your wireless password.

Q2. What should I do if I forget my web management password?

- If you are using a TP-Link ID to log in, or you have enabled the Default Password Recovery feature of the router, click Forgot password on the login page and then follow the instructions to reset it.
- Alternatively, press and hold the Reset button of the router until the Power LED binks to reset it, and then visit http://tplinkwifi.net to create a new login password.

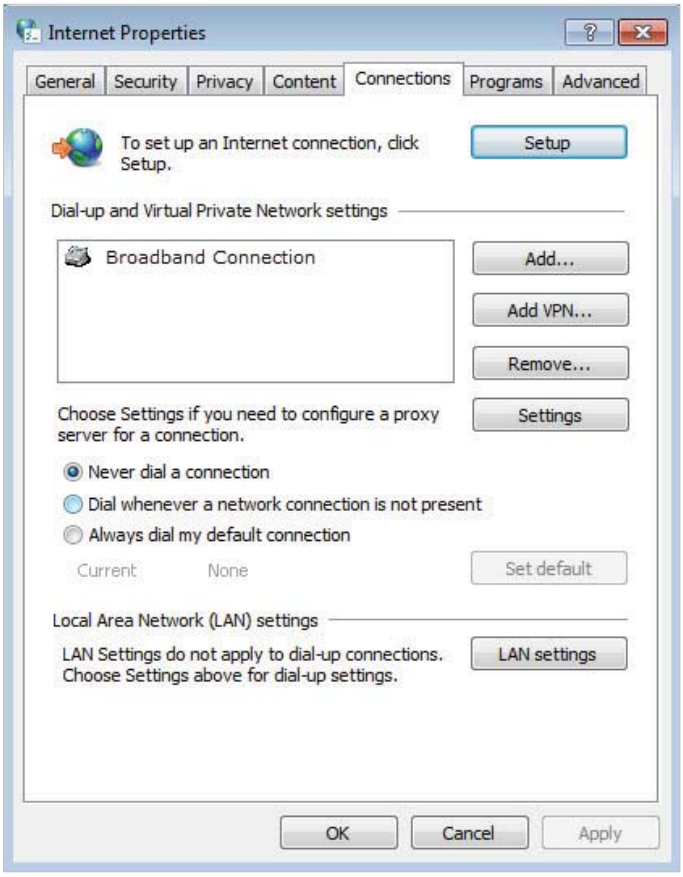
Note:

- Please refer to Default Password Recovery to learn how to configure Password Recovery.
- 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. What should I do if I can't log in to the router's web management page?

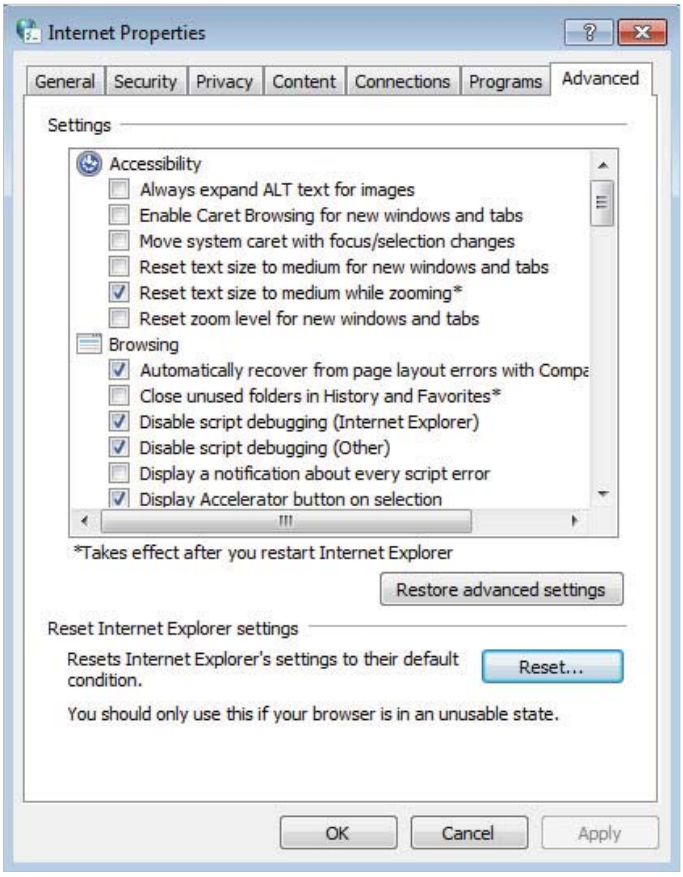
This can happen for a variety of reasons. Please try the methods below to log in again.

- Make sure your computer is connected to the router 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 http://tplinkwifi.net or http://192.168.0.1 is correctly entered.
- 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 and select Never dial a connection.



4) Click LAN settings and deselect the following three options and click OK.

5) Go to Advanced > Restore advanced settings, click OK to save the settings.



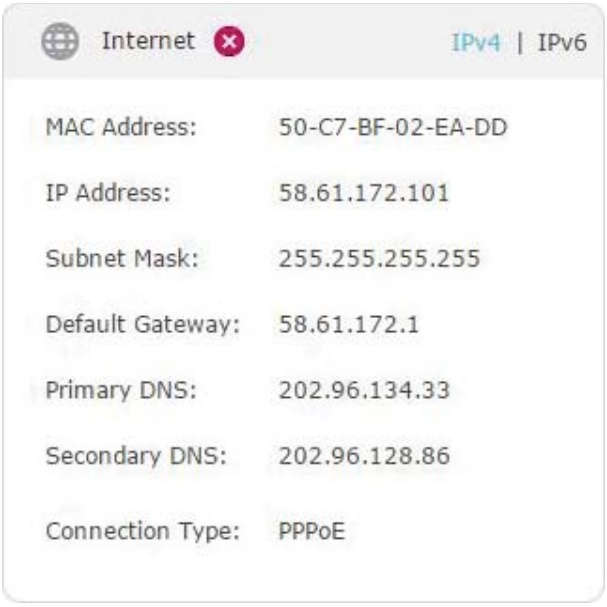
- Use another web browser or computer to log in again.
- Reset the router to factory default settings and try again. If login still fails, please contact the technical support.

Note: You'll need to reconfigure the router to surf the internet once the router is reset.

Q4. What should I do if I can't access the internet even though the configuration is finished?

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.
2. Go to Advanced > Status to check internet status:

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

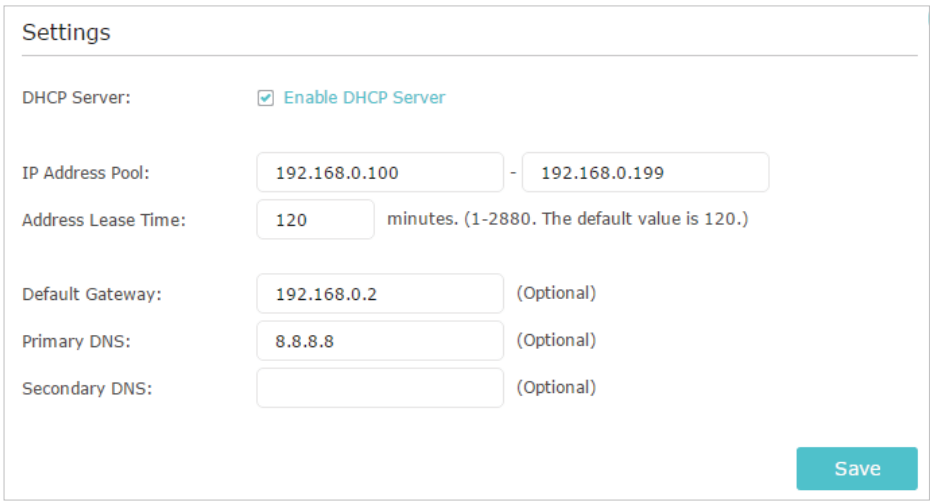


- Your computer might not recognize any DNS server addresses. Please manually configure the DNS server.

  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.



- Restart the modem and the router.

  1) Power off your modem and router, and leave them off for 1 minute.

  2) Power on your modem first, and wait about 2 minutes until it gets a solid cable or Internet light.

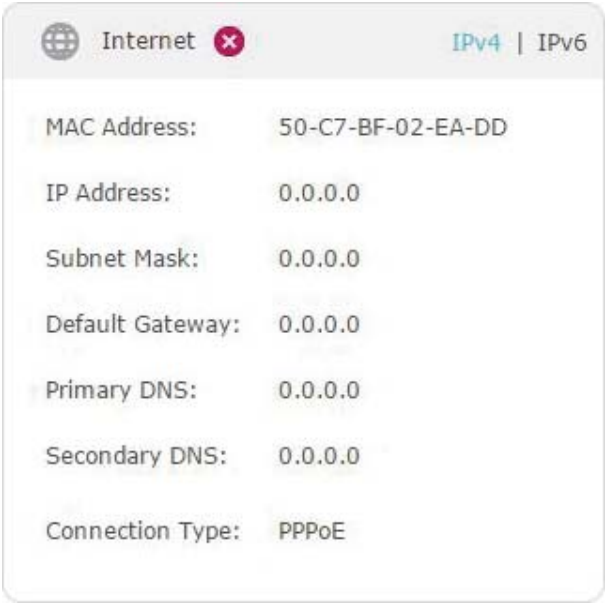
  3) Power on the router.

  4) Wait another 1 or 2 minutes and check the internet access.

- Reset the router to factory default settings and reconfigure the router.

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

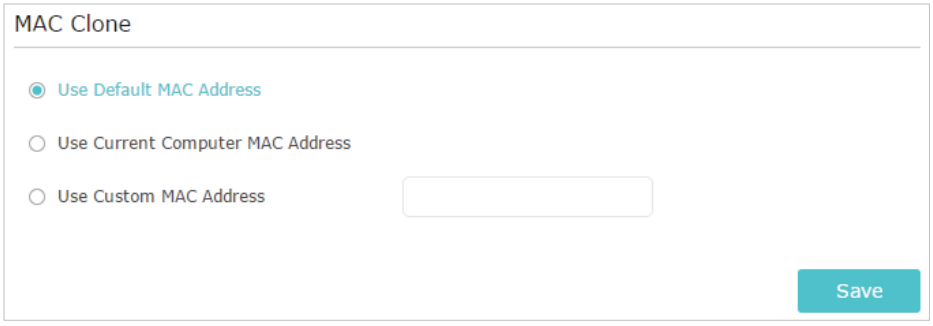


- Make sure the physical connection between the router and the modem is proper.
- Clone the MAC address of your computer.

  1) Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.

  2) Go to Advanced > Network > Internet and focus on the MAC Clone section.

  3) Choose an option as needed (enter the MAC address if Use Custom MAC Address is selected), and click Save.



Tips:

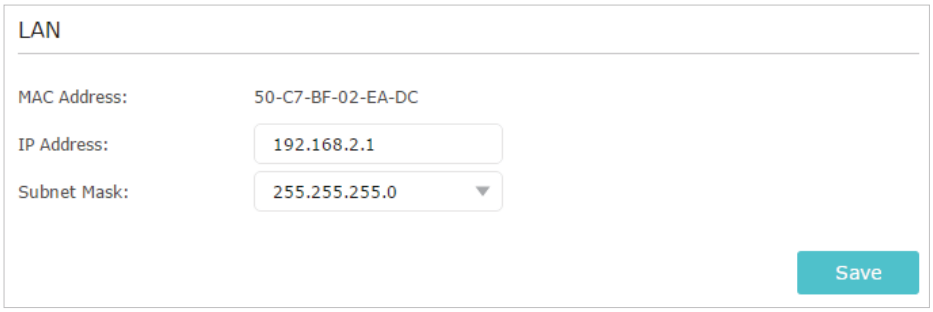
- Some ISP will register the MAC address of your computer when you access the internet for the first time through their Cable modem, if you add a router into your network to share your internet connection, the ISP will not accept it as the MAC address is changed, so we need to clone your computer's MAC 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.

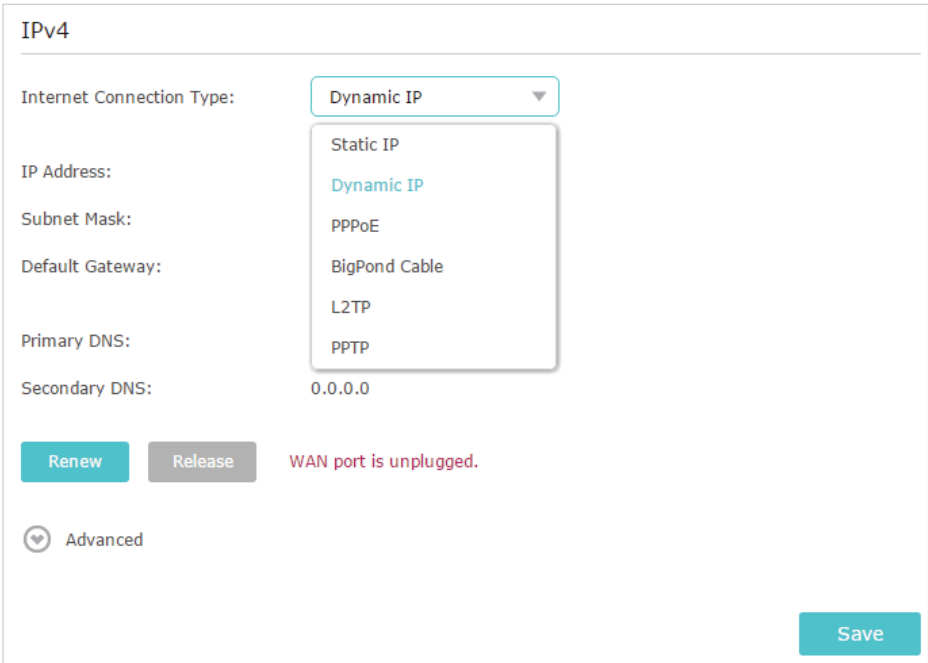
  Note:

  Most TP-Link routers use 192.168.0.1/192.168.1.1 as their default LAN IP address, which may conflict with the IP range of your existing ADSL modem/router. If so, the router is not able to communicate with your modem and 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 your TP-Link ID or the password you 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.



- Restart the modem and the router.
  1) Power off your modem and router, and leave them off for 1 minute.
  2) Power on your modem first, and wait about 2 minutes until it get a solid cable or Internet light.
  3) Power on the 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 your TP-Link ID or the password you set for the router.
  3) Go to Advanced > Network > Internet.
  4) Select your Internet Connection Type and fill in other parameters.
  5) Click Save.



6) Restart the modem and the router again.

- Please upgrade the firmware of the router.

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

Q5. What should I do if I can't find my wireless network or I cannot connect the wireless network?

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

- Make sure the wireless function of your device 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) Click 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.

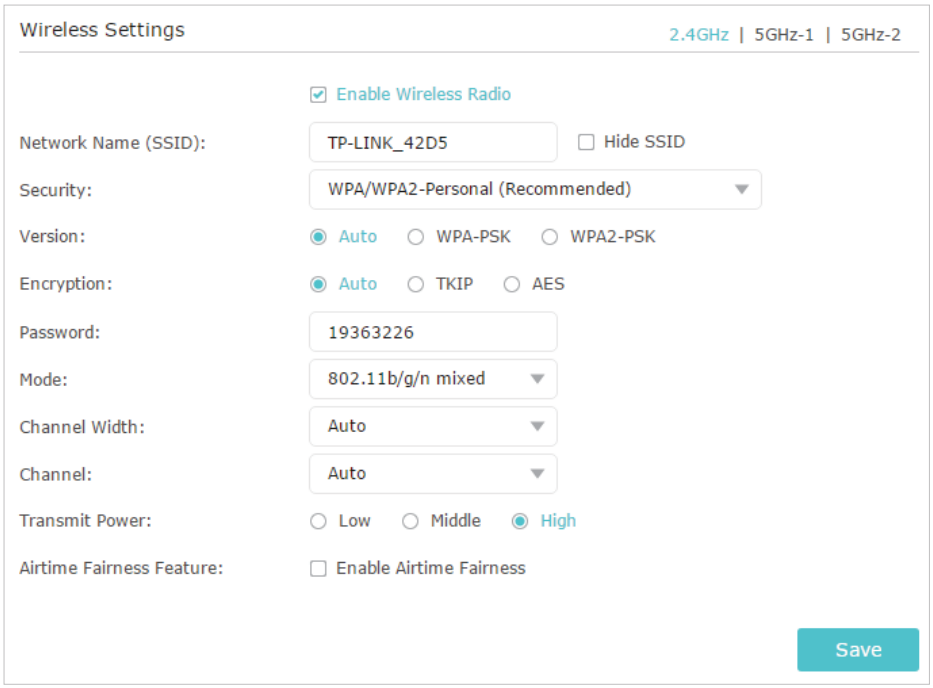
4) Expand Services and Applications > Services, find and locate Wireless Zero Configuration in the Services list on the right side.

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 it closer if it is currently too far away.
- Go to Advanced > Wireless > Wireless Settings, and check the wireless settings. Double check your wireless Network Name and SSID is not hided.



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

- **Authenticating problem/password mismatch:**

1) Sometimes you will be asked 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 label of your 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 to show note of 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 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.

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FCC compliance information statement

Product Name: AC4000 MU-MIMO Tri-Band Wi-Fi Router

Model Number: Archer C4000

Component Name	Model
I.T.E. Power Supply	S050FU1200400 S048CV1200330

Responsible party:

TP-Link USA Corporation, d/b/a TP-Link North America, Inc.

Address: 145 South State College Blvd. Suite 400, Brea, CA 92821

Website: http://www.tp-link.com/us/

Tel: +1 626 333 0234

Fax: +1 909 527 6803

E-mail: sales.usa@tp-link.com

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 28 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter."

We, TP-Link USA Corporation, has determined that the equipment shown as above has been shown to comply with the applicable technical standards, FCC part 15. There is no unauthorized change is made in the equipment and the equipment is properly maintained and operated.

Issue Date: 2019-04-22

FCC compliance information statement

Product Name: I.T.E. Power Supply
Model Number: S050FU1200400/S048CV1200330
Responsible party:
TP-Link USA Corporation, d/b/a TP-Link North America, Inc.
Address: 145 South State College Blvd. Suite 400, Brea, CA 92821
Website: http://www.tp-link.com/us/
Tel: +1 626 333 0234
Fax: +1 909 527 6803
E-mail: sales.usa@tp-link.com

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.

We, TP-Link USA Corporation, has determined that the equipment shown as above has been shown to comply with the applicable technical standards, FCC part 15. There is no unauthorized change is made in the equipment and the equipment is properly maintained and operated.

Issue Date: 2019-04-22

CE Mark Warning

CE

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.

OPERATING FREQUENCY (the maximum transmitted power)

2400 MHz-2483.5 MHz(20dBm)

5150 MHz-5250 MHz(23dBm)

5250 MHz-5350 MHz(23dBm)

5470 MHz-5725 MHz(30dBm)

EU declaration of conformity

TP-Link hereby declares that the device is in compliance with the essential requirements and other relevant provisions of directives 2014/53/EU, 2009/125/EC and 2011/65/EU.

The original EU declaration of conformity may be found at

https://www.tp-link.com/en/ce

RF Exposure Information

This device meets the EU requirements (2014/53/EU Article 3.1a) 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.

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.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

1. l'appareil ne doit pas produire de brouillage;

2. l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, meme si le brouillage est susceptible d'en compromettre le fonctionnement

This radio transmitter (IC: 8853A-C4000/ Model: Archer C4000) has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain indicated. Antenna types not included in this list below, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

Le présent émetteur radio (IC: 8853A-C4000/ Model: Archer C4000) a été approuvé par Industrie Canada pour fonctionner avec les types d'antenne énumérés ci-dessous et ayant un gain admissible maximal. Les types d'antenne non inclus dans cette liste ci-dessous et dont le gain est supérieur au gain maximal indiqué, sont strictement interdits pour l'exploitation de l'émetteur.

Antenna	Three External Non-detachable Omni-Directional Antennas @2.4G & 5GHz Three External Non-detachable Omni-Directional Antennas @5GHz

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 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.

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.

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.

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 25cm 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 25 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信；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。

4.7.9.1應避免影響附近雷達系統之操作。

4.7.9.2高增益指向性天線只得應用於固定式點對點系統。

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。

限用物質含有情況標示聲明書

產品元件名稱	限用物質及其化學符號					
	鉛 Pb	鎘 Cd	汞 Hg	六價鉻 CrVI	多溴聯苯 PBB	多溴二苯醚 PBDE
PCB	○	○	○	○	○	○
外殼	○	○	○	○	○	○
電源適配器	–	○	○	○	○	○

備考1. "超出0.1 wt %" 及 "超出0.01 wt %" 系指限用物質之百分比含量超出百分比含量基準值。

備考2. "○"系指該項限用物質之百分比含量未超出百分比含量基準值。

備考3. " – " 系指該項限用物質為排除項目。

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

Safety Information

- Keep the device away from water, fire, humidity or hot environments.
- Do not attempt to disassemble, repair, or modify the device.
- Do not use damaged charger or USB cable to charge the device.
- Do not use any other chargers than those recommended.
- Do not use the device where wireless devices are not allowed.
- Adapter shall be installed near the equipment and shall be easily accessible.

- Use only power supplies which are provided by manufacturer and in the original packing of this product. If you have any questions, please don't hesitate to contact us.

Please read and follow the above safety information when operating the device. We cannot guarantee that no accidents or damage will occur due to improper use of the device. Please use this product with care and operate at your own risk.

For EU/EFTA, this product can be used in the following countries:

AT	BE	BG	CH	CY	CZ	DE	DK
EE	EL	ES	FI	FR	HR	HU	IE
IS	IT	LI	LT	LU	LV	MT	NL
NO	PL	PT	RO	SE	SI	SK	UK

Explanations of the symbols on the product label

Symbol	Explanation
⎓	DC voltage
	Indoor use only
	RECYCLING This product bears the selective sorting symbol for Waste electrical and electronic equipment (WEEE). This means that this product must be handled pursuant to European directive 2012/19/EU in order to be recycled or dismantled to minimize its impact on the environment. User has the choice to give his product to a competent recycling organization or to the retailer when he buys a new electrical or electronic equipment.