

# **User Guide**

BE7200 Dual-Band Wi-Fi 7 Router

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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.

Note: Features available in the router may vary by model and software version. Router availability may also vary by region or ISP. All images, steps, and descriptions in this guide are only examples and may not reflect your actual Router experience.

#### Conventions

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 > System > Firmware Update means the Firmware Update page is under the System menu that is located in the Advanced tab.
Note:	Ignoring this type of note might result in a malfunction or damage to the device.
Ø Tips:	Indicates important information that helps you make better use of your device.
symbols on the web page	<ul> <li>Click to edit the corresponding entry.</li> <li>Click to delete the corresponding entry.</li> <li>click to enable or disable the corresponding entry.</li> <li>Click to view more information about items on the page.</li> </ul>

In this guide the following conventions are used:

#### More Info

The latest software, management app and utility can be found at Download Center at <a href="https://www.tp-link.com/support/download">https://www.tp-link.com/support/download</a>.

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 <u>https://www.tp-link.com</u>.

TP-Link Community is provided for you to discuss our products and share knowledge at <a href="https://community.tp-link.com">https://community.tp-link.com</a>.

Our Technical Support contact information can be found at the Contact Technical Support page at <a href="https://www.tp-link.com/support">https://www.tp-link.com/support</a>.

- <sup>†</sup>Maximum wireless signal rates are the physical rates derived from IEEE Standard 802.11 specifications. Actual wireless data throughput, wireless coverage, and connected devices are not guaranteed and will vary as a result of internet service provider factors, network conditions, client limitations, and environmental factors, including building materials, obstacles, volume and density of traffic, and client location.
- <sup>‡</sup>Lower Latency refers to the latency improvement of Wi-Fi 7 routers compared to Wi-Fi 6/6E routers, based on laboratory test data. The test conditions had the same 5 GHz or 2.4 GHz single-frequency wireless interference and tested the maximum latencies of Wi-Fi 7 clients (with MLO turned on) connecting to the 5 GHz and 2.4 GHz bands of the router (with MLO turned on) simultaneously and to the 5 GHz or 2.4 GHz bands of a Wi-Fi 6/6E router (without the MLO function).
- △Higher capacity and lower latency refers to the capacity and latency improvement of Wi-Fi 7 routers compared to Wi-Fi 6/6E routers, based on laboratory test data.
- <sup>§</sup>2.5 Gbps internet speeds require compatible service plans and equipment. Actual network speed may be limited by the rate of the product's Ethernet WAN or LAN port, the rate supported by the network cable, internet service provider factors, and other environmental conditions.
- $m ^{
  m imes}$ Use of WPA3 requires clients to also support the corresponding feature.
- <sup>O</sup>Use of Wi-Fi 7 (802.11be), Wi-Fi 6 (802.11ax), and features including Multi-Link Operation (MLO), 4K-QAM, Multi-RUs, OFDMA, and MU-MIMO requires clients to also support the corresponding features.
- \*Wi-Fi generations represent the wireless standard IEEE 802.11 a/b/g/n/ac/ax/be. All devices need to support 802.11 Wi-Fi protocols. Users may require an extra modem device that is compatible with their internet service provider to gain internet access.
- \*\*HomeShield includes both basic and advanced features. Advanced features require a paid subscription. For details, visit tp-link.com/homeshield
- \*\*\*TP-Link EasyMesh-compatible products can network with other devices that use EasyMesh. Failed connections may be due to firmware conflicts of different vendors. The EasyMeshcompatible function is still being developed on some models and will be supported in subsequent software updates.

## 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

TP-Link dual band Wi-Fi 7 router, with the 802.11be Wi-Fi technology, achieves Wi-Fi performance at its ultimate level. The new features of Wi-Fi 7 and 4k QAM dramatically improve throughput and increase the capacity and efficiency of the whole network.

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

## 1.2. Appearance

#### 1. 2. 1. Front Panel



#### **LED** Explanation

LED	Status	Indication
	On	The system has started up successfully.
ப் (Power)	Flashing	The system is starting up or the firmware is being upgraded. Do not disconnect or power off your router.
	Off	Power is off.
	On	The 2.4GHz wireless band is enabled.
2.4GHz Wireless)	Off	The 2.4GHz wireless band is disabled.

	On	The 5GHz wireless band is enabled.
🕱 (5GHz Wireless)	Off	The 5GHz wireless band is disabled.
	Blue On	Internet service is available.
Ø (Internet)	Orange On	The router's Internet port is connected, but the internet service is not available.
	Off	The router's Internet port is unplugged.
G (Ethernet)	On	At least one powered-on device is connected to the router's LAN port.
<b>_</b> (,	Off	No powered-on device is connected to the router's LAN port.
	On	The USB device is identified and ready to use.
•~~ (USB)	Off	No USB device is plugged in to the USB port.
	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.

#### 1. 2. 2. Back Panel



The following parts are located on the back panel.

Item	Description
	Press for 1 second to turn on or off the LED of your router.
LED/ Wi-Fi	Press and hold for about 2 seconds to turn on or off the wireless function of your router.
Reset	Press and hold this button for about 10 seconds until the Power LED blinks to reset the router to its factory default settings.
WPS	Press for 1 second, and immediately press the WPS button on your client device to start the WPS process.
1Gbps LAN Port (2-4)	For connecting your PC or other wired devices to the router.
2.5Gbps WAN/LAN Port	For connecting your PC or other wired devices to the router.
10Gbps WAN/LAN Port	For connecting to your modem or the Ethernet outlet.
USB 3.0 Port	For connecting your USB storage devices to the router.
Power On/Off	Press to turn on or off the router.
Power Port	For connecting the router to a power socket via the provided power adapter.

## **Connect the Hardware**

This chapter contains the following sections:

- Position Your Router
- <u>Connect Your Router</u>

## 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.
- Generally, the router is placed on a horizontal surface, such as on a shelf or desktop. The device also can be mounted on the wall as shown in the following figure.



#### Note:

The length of the screw need to be at least 20mm to withstand the weight of the product.

## 2.2. Connect Your Router

#### Before you start:

1) Turn off your modem, if any, and remove the backup battery if it has one.

2) Place the router horizontally and orient the antennas vertically.

If your internet comes from an Ethernet outlet instead of a DSL / Cable / Satellite modem, connect the router's 10 GHz WAN/LAN port to it, then follow steps 3 and 4 to complete the hardware connection.

1. Connect the powered-off modem to the router's **10 Gbps Internet port** with an Ethernet cable.



- 2. Power on the modem, and then wait about 2 minutes for it to restart.
- 3. Connect the power adapter to the router. Then press the **On/Off** button to turn it on.
- 4. Verify that the hardware connection is correct by checking the following LEDs.



5. Connect your computer to the router.

#### • Method 1: Wired

Turn off the Wi-Fi on your computer and connect the devices to the LAN port of your router.

#### • Method 2: Wirelessly

- 1) Find the SSIDs (Network Names) 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.

Computer		Smart Device	
4 <sub>7</sub>		< Settings Wi-Fi	
Connections are available			
Wireless Network Connection		Wi-Fi	
TP-Link_XXXX		CHOOSE A NETWORK	
TP-Link_XXX_5G	OR	TP-Link_XXXX	🔒 🤶 (j)
		TP-Link_XXXX_5G	🗎 🔶 (Ì)
		Other	

#### • 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) Tap 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.

## 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 <u>http://tplinkwifi.net</u>, and create a login password for secure management purposes. Then click Let's Get Started to log in.

Create an administrator password For security purposes, create a local password for login before starting the quick setup.	
For security purposes, create a local password for login before starting the quick setup.	
New Password:	
ø	
Confirm Password:	
Ø	
Let's Get Started	
	New Password:

Note: If the login window does not appear, please refer to the FAQ Section.

## **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
- Quick Setup Via TP-Link Tether App
- <u>Manually Set Up Your Internet Connection</u>
- <u>Set Up the Router as an Access Point</u>
- <u>Set Up an IPv6 Internet Connection</u>

### 4.1. Use Quick Setup Wizard

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

Ø 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 <u>http://tplinkwifi.net</u>, and log in with the password you set for the router.
- Follow the step-by-step instructions to complete Quick Setup configuration or go to Advanced > Quick Setup for configuration to connect your router to the internet. 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 Sign Up Now to get one. Then follow the instructions to bind the cloud router to your TP-Link ID.

	Get TP-Link	Cloud Servic	e
Log in to bind the remotely via the	he router to your TI e Tether app, get n	P-Link ID. You can mar otified of the latest firm more.	age your network ware updates and
	TP-Link ID (Ema	il):	
	Password:		
		LOG IN	
	Sign Up Now	Forgot Password?	

Note:

- To learn more about the TP-Link Cloud service, please refer to the <u>TP-Link Cloud Service</u> section.
- If you do not want to register a TP-Link ID now, you may click Skip 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. Quick Setup Via 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. Launch the Tether app and log in with your TP-Link ID. Note: If you don't have a TP-Link ID, create one first.

3. Tap the + button, and select Add a Router. Follow the steps to complete the setup and connect to the internet.

Note: Due to Tether app updates, your actual user interface and pathway may differ from those described here.

4. Connect your devices to the newly configured wireless networks of the router and enjoy the internet!

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

Internet		
Set up an internet connection with t	he service information provided by your I	SP (internet service provider).
Internet Connection Type:	Dynamic IP	~
	Select this type if your ISP does information for internet connection	n't provide any

- 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.

Internet Set up an internet connection with th	he service information provided by your ISP (internet service provider).	
Internet Connection Type:	Dynamic IP	
Select this type if your ISP doesn't provide any information for internet connection.		
MAC Clone Set the MAC address of your router address.	Use the default address unless your ISP allows internet access from only a specific MAC	
Router MAC Address:	Use Default MAC Address	
	00 - 0A - EB - 13 - 7B - 01	

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

Internet Set up an internet connection with the	service information provided by your ISP (internet service p	provider).
Internet Connection Type:	Static IP	
	Select this type if your ISP provides specific IP parameters.	
IP Address:		
Subnet Mask:	255.255.255.0	
Default Gateway:		
Primary DNS:	172.29.1.1	
Secondary DNS:	172.29.1.2	(Optional)

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

Internet		
Set up an internet connection with	n the service information provided by your ISP	(internet
Internet Connection Type:	PPPoE	~
	Select this type if your ISP only provides username and password.	а
Username:		
Password:		Ø

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.

Internet	
Set up an internet connection with	the service information provided by your ISP (internet
Internet Connection Type:	L2TP ~
	Select this type if your ISP provides L2TP VPN server information and an account. Some ISPs also provide specific IP parameters.
Username:	
Password:	Ø
	Oynamic IP
	<ul> <li>Static IP</li> </ul>
VPN Server IP/Domain Name:	

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.

nternet Connection Type:	PPTP	~
	Select this type if your ISP pro server information and an accor also provide specific IP param	vides PPTP VPN ount. Some ISPs eters.
Isername:		
Password:		Ø
	<ul> <li>Dynamic IP</li> </ul>	
	<ul> <li>Static IP</li> </ul>	

#### 5. Click SAVE.

Ø Tips:

- 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.

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

Operation Mode		
Select an operation mode according to your	needs.	
O Minutes Deuter Made (Ormani)		
U Wireless Router Mode (Current)		
In this mode, the router can provide inte is required most commonly.	ernet access for multiple wire	ed and wireless devices. This mode
		() 
Access Point Mode In this mode, the router changes an exist	sting wired (Ethernet) netwo	rk into a wireless one.
	ernet LAN	() ب ب

- 3. After rebooting, connect the router to your existing wired router via an Ethernet cable.
- 4. Log in again to the web management page <a href="http://tplinkwifi.net">http://tplinkwifi.net</a>, and go to Advanced <a href="http://tplinkwifi.net">Advanced</a> <a href="http://tplinkwifi.net">Quick Setup</a>.
- 5. Configure your wireless settings and click NEXT.
- 6. Confirm the information and click SAVE. Now, you can enjoy Wi-Fi.
- Ø Tips:

• Functions, such as Parental Controls, QoS and NAT Forwarding, are not supported in the Access Point mode.

• Functions, such as Guest Network, are the same as those in the Router mode.

### 4.5. 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). After setting up the IPv6 internet connection, you can add IPv6 firewall rules to protect your IPv6 network.

- Set up an IPv6 Internet Connection
- 1. Visit <u>http://tplinkwifi.net</u>, 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.

Ø 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.
  - 1) Static IP: Fill in blanks and click SAVE.

IPv6 Internet			
Set up an IPv6 internet conne provider).	ection using the informa	ation provided by your ISP (interne	t service
IPv6:			
Internet Connection Type:	Static IP	~	
IPv6 Address:			
Default Gateway:			
Primary DNS:			
Secondary DNS:			
MTU Size:	1500	bytes	

 Dynamic IP(SLAAC/DHCPv6): Click Advanced to input further information if your ISP requires. Click SAVE and then click RENEW.

IPv6 Internet Set up an IPv6 internet conn	ection using the information provided by your ISP (internet service
provider).	
IPv6:	
Internet Connection Type:	Dynamic IP(SLAAC/DHCPv6) V
IPv6 Address:	:
Primary DNS:	:
Secondary DNS:	::
	RENEW
	RELEASE
Advanced Settings	

3) PPPoE: By default, the router uses the IPv4 account to connect to the IPv6 server. Click Advanced Settings 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, manually enter the username and password for the IPv6 connection.

IPv6 Internet		
Set up an IPv6 internet conn provider).	ection using the information provided by ye	our ISP (internet service
IPv6:		
Internet Connection Type:	PPPoE ~	
	Share the same PPPoE session with IPv4	
Username:		
Password:	Ø	
IPv6 Address:	::	
Advanced Settings		
	CONNECT	
	DISCONNECT	

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

IPv6 Internet	
Set up an IPv6 internet conn provider).	ection using the information provided by your ISP (internet service
IPv6:	
Internet Connection Type:	6to4 Tunnel 🗸
IPv4 Address:	0.0.0.0
IPv4 Subnet Mask:	0.0.0.0
IPv4 Default Gateway:	0.0.0.0
Tunnel Address:	
Advanced Settings	
	CONNECT
	DISCONNECT

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

IPv6 Internet	
Set up an IPv6 internet conne provider).	ection using the information provided by your ISP (internet service
IPv6:	
Internet Connection Type:	Pass-Through (Bridge)

5. Configure LAN ports. Windows users are recommended to choose from DHCPv6 and SLAAC+Stateless DHCP. Fill in Address Prefix provided by your ISP, and click SAVE.

IPv6 LAN Configure the LAN IPv6 addre addresses to the clients.	ess of the router and set the configuration type to assign IPv6
Assigned Type:	<ul> <li>ND Proxy</li> <li>DHCPv6</li> <li>SLAAC+Stateless DHCP</li> <li>SLAAC+RDNSS</li> </ul>
Address Prefix:	/64
Address:	FE80::20A:EBFF:FE13:7B00/64

6. In **MAC Clone** section, set the MAC address of your router. Use the default address unless your ISP allows internet access from only a specific MAC address.

Set the MAC address of your router. Use the default address unless your ISP allows from only a specific MAC address. Router MAC Address: Use Default MAC Address	Set the MAC address of your router. Use the default address unless your ISP allow from only a specific MAC address.         Router MAC Address:         Use Default MAC Address         00 - 0A - EB - 13 - 7B - 01	NAC CIONE	
om only a specific MAC address. outer MAC Address:	om only a specific MAC address. outer MAC Address: Use Default MAC Address 00 - 0A - EB - 13 - 7B - 01	et the MAC address of yo	ur router. Use the default address unless your ISP allows inter
Couter MAC Address: Use Default MAC Address	Couter MAC Address: Use Default MAC Address 00 - 0A - EB - 13 - 7B - 01	om only a specific MAC a	ddress.
Router MAC Address: Use Default MAC Address	Nouter MAC Address:     Use Default MAC Address       00 - 0A - EB - 13 - 7B - 01		
Router MAC Address: Use Default MAC Address ~	Router MAC Address:       Use Default MAC Address         00 - 0A - EB - 13 - 7B - 01		
	00 - 0A - EB - 13 - 7B - 01		
	00 - 0A - EB - 13 - 7B - 01	Router MAC Address:	Use Default MAC Address
	00 - 0A - EB - 13 - 7B - 01	Router MAC Address:	Use Default MAC Address
00 - 0A - FB - 13 - 7B - 01	CO ON ED ID ID OT	Router MAC Address:	Use Default MAC Address

7. Click Status to check whether you have successfully set up an IPv6 connection.

Ø Tips:

Visit the FAQ section if there is no internet connection.

#### • Set up IPv6 Firewall Rules

IPv6 Firewall protects your IPv6 network by preventing access from the internet. However, when you are hosting a service, such as a file sharing server in your local network, you can choose to allow access to the server from the internet by adding entries on this page. This feature is available only when you've set up an IPv6 connection.

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with your TP-Link ID or the password you set for the router.
- 2. Go to Advanced > IPv6, and locate the Firewall Rules section.
- 3. Click Add.
- 4. Select a service from the drop-down list of Service Type. The Port and Protocol will be automatically filled in. It is recommended to keep the default Port and Protocol if you are unsure about which to use. If the service is not listed, please manually enter the Service Type, and specify the Port and Protocol.

Add Firewall Rule		×
Service Type:	Custom ~	
Service Name:		
Internal IP:		
	VIEW CONNECTED DEVICES	
Port:		
Protocol:	- Please Select -	
	CANCEL ADD	

- 5. Specify a Service Name for the rule.
- 6. In the Internal IP field, enter a valid IPv6 address to run the service. You can click Select from clients, choose a local host device, and its IPv6 address will be automatically filled in as the Internal IP.
- 7. Click SAVE, and the newly created IPv6 firewall rule will appear in Firewall Rules.

Firewall Rules				
Add IPv6 firewall rules to all	ow specific devices	to access the specified s	ervices.	
				🕒 Add
Service Name	Port	Protocol	Status	Modify
Example	21	ТСР		ල ම

## **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 available. 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
- <u>Change Your TP-Link ID Information</u>
- 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 <u>http://tplinkwifi.net</u>, and log in with the password you set for the router.
- 2. Go to Advanced > TP-Link ID or click TP-Link ID on the very top of the page.
- 3. Click Sign Up and follow the instructions to register a TP-Link ID.

TP-Link ID			
Log in to bind the router to your T more.	P-Link ID. You can rei	motely manage you	ir network via the Tether app, and
	TP-Link ID (Email):	,	
	Password:		
	Log	₩ In	
	Sign Up	Forgot Password?	

- 4. After activating your TP-Link ID, come back to the TP-Link ID 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 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 Advanced > TP-Link ID, 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 Advanced > TP-Link ID, 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.

Change Email	8
Password	]
🖸 New Email	]
Save	
Note: New email or password may not sync to client devices immediately. Please log in agai	1

- To change your password:
- 1. Click 🗹 behind the Password.

2. Enter the current password, then a new password twice. And click Save.

Change Password	8
P Current Password	
New Password	
Low   Middle   High	
P Confirm Password	
Save	
Note: New email or password may not sync to client devices immediately. Please log in again when your device is connected	

#### 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 Advanced > TP-Link ID, 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 <u>Manage the Router via the</u> <u>TP-Link Tether App</u> to install the app and register a new TP-Link ID.

Ad	d Account	$\otimes$
	) Email	
	Cancel	Save

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

Bound Accounts							
				🕂 Bind 🕒 Unbind			
	ID	Email	Binding Date	Role			
	1	Pargur, redmun	1011	Admin			
	2	the purify to place on		User			

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

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with your TP-Link ID.
- 2. Go to Advanced > TP-Link ID, 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.

Bound Accounts							
				🕂 Bind 🗧 Unbind			
	ID	Email	Binding Date	Role			
	1	darper_redne.cm		Admin			
	2	thangour lighting \$113.com		User			

### 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. Launch the Tether app and log in with your TP-Link ID.

**Note:** If you don't have a TP-Link ID, create one first.

- 3. Connect your device to the router's wireless network.
- 4. Go back to the Tether app, select the model of your router and log in with the password you set for the router.
- 5. 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.

## **Network Map**

Network Map outlines device connectivity of your network visually and helps you manage general settings of the network.

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with your TP-Link ID or the password you set for the router.
- 2. Go to Network Map.
- 3. Click each network device icon to check and manage general network settings.
- Click Internet to check internet status.

Internet	2.4G 5G	Mesh Devices	Clients
Internet Status			
Connection Type: WAN MAC Address:	Static IP 58-11-22-0F-75-2B	Internet IP Address: Online Duration:	21 minutes

• Click the router to check device status and network settings. You can click Edit to change related settings.

Router In	formation			
Device Na	ame: CAddress:	Archer BE450 IPv4 LAN I	IP: IP: FE80::20A:EBFF	192.168.0.1 FE13:7B00/64
Wireless				Edit
Band	Network Name (SSID)	Password	Channel	Status
2.4 GHz / 5 GHz	222	123456789	2.4G Auto (Current: 7) 5G Auto (Current: 48)	
MLO Network	TP-Link_7B00_MLO	03717660		
Guest Ne	twork			Edit
Band	Network Name (SSID)	Password	Channel	Status
2.4 GHz	TP-Link_Guest_7B00			
5 GHz	TP-Link_Guest_7B00_5G			

vork					Edit
Network Name (SSIE	))	Password		Channel	Status
TP-Link_IoT_7B00		03717660			
TP-Link_IoT_7B00_5	G	03717660			
ance					
		Current: 6%	Memory Usage		Current: 63%
c o PU Core Number: 3	oo		60% • • • • • • • • • • • • • • • • • • •		·
Status					😯 Refresh
het 2.5 Gbps WANLAN	LAN 1	LAN 2	LAN 3		
	Network Name (SSIE TP-Link_IoT_7B00 TP-Link_IoT_7B00_5 ance	Network Name (SSID) TP-Link_IoT_7B00 TP-Link_IoT_7B00_5G TP-Link_IoT_7B00_5G TO Core Number: 3 Status LAN 1	Network Name (SSID)       Password         TP-Link_loT_7B00       03717660         TP-Link_loT_7B00_5G       03717660         IP-Link_loT_7B00_5G       03717660         Current: 0%       03717660         INCE       Current: 0%         Current: 0%       Current: 0%         INCE       Current: 0% <td>Network Name (SSID)       Password         TP-Link_loT_7B00       03717660         TP-Link_loT_7B00_5G       03717660         ance       Current: 8%         Memory Usage       100%         000 Mips       000 Mips         1000 Mips          1000 Mips          1000 Mips          1000 Mips          1000 Mips          1000 Mips          1000 Mips          1000 Mips          1000 Mips      </td> <td>Network Name (SSID)       Password       Channel         TP-Link_loT_7B00       03717660          TP-Link_loT_7B00_5G       03717660          ance           Current: 8%       Memory Usage          0006           0006           ance           Current: 8%       Memory Usage          0006           0006           0006           0006           0006           0006           0006           0006           0006           0006           0016           0016           0016           0016           0016           0016       </td>	Network Name (SSID)       Password         TP-Link_loT_7B00       03717660         TP-Link_loT_7B00_5G       03717660         ance       Current: 8%         Memory Usage       100%         000 Mips       000 Mips         1000 Mips          1000 Mips          1000 Mips          1000 Mips          1000 Mips          1000 Mips          1000 Mips          1000 Mips          1000 Mips	Network Name (SSID)       Password       Channel         TP-Link_loT_7B00       03717660          TP-Link_loT_7B00_5G       03717660          ance           Current: 8%       Memory Usage          0006           0006           ance           Current: 8%       Memory Usage          0006           0006           0006           0006           0006           0006           0006           0006           0006           0006           0016           0016           0016           0016           0016           0016

• Click Mesh Devices to view the devices that form a mesh network with the router.

Internet	24G 5G ⇒   ⇒ Archer BE450	Mesh Devices	Clients	
Mesh Devices				Add
Device Info	Location	Clients	Connection	
Archer BE450 192.168.0.1	Not set	1		
Archer AX10 192.168.0.192	Not set	0	aff	

• Click Clients to view the client devices in your network. You can block devices so they cannot access your network, or set Speed Limit to limit their upload and download speeds.

All (2)	2.4G The second	56 Solution	Pevices	Clients
Connected Clients	Interface	Real-time Rate	Speed Limit ⑦	View Deny List Modify
► • • • • • • • • • • • • • • • • • • •	(Wired)	↑ 0 Kbps ↓ 0 Kbps		C
<ul> <li>Phone</li> <li>192.168.0.63</li> </ul>	<b>?</b> 56	↑ 0 Kbps ↓ 0 Kbps		0 1

#### To limit the speeds of a device:

- 1. Click in the Modify column.
- 2. Enable Speed Limit.
- 3. Set the download and upload speed limit according to your needs.
- 4. Click SAVE. The speeds of the device will be limited.

Edit			×
Device Name:	Phone		
Speed Limit:	Enabled		
Download Speed Limit:	1 Mbps	~	
	Web browsing, sending emails, making social media posts		
Upload Speed Limit:	200 Kbps	~	
		CANCEL	/E

## **Wireless Settings**

This chapter guides you on how to configure the wireless settings.

It contains the following sections:

- <u>Specify Wireless Settings</u>
- <u>Schedule Your Wireless Function</u>
- Use WPS for Wireless Connection
- Advanced Wireless Settings
## 7.1. Specify Wireless Settings

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

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

bands.		
TWT:	Enable ?	
OFDMA/MU-MIMO:	Disabled	✓ What's this?
Smart Connect:	Nable 🕜	
2.4 GHz / 5 GHz:	🔽 Enable	Share Network
Network Name (SSID):	TP-Link_B281	Hide SSID
Security:	WPA2-PSK[AES]	~
Password:	11115670	
2.4 GHz / 5 GHz Advance	d Settings	
Transmit Power:	High	~
2.4 GHz Channel Width:	20/40 MHz	~
2.4 GHz Channel:	Auto	~
5 GHz Channel Width:	20/40/80/160 MHz	~
5 GHz Channel:	Auto	~

2. Go to Wireless or Advanced > Wireless > Wireless Settings.

#### • To enable or disable TWT:

TWT (Target Wake Time) allows 802.11ax routers and clients to negotiate their periods to transmit and receive data packets. Clients only wake up at TWT sessions and remain in sleep mode for the rest of the time, which significantly extend their battery life. It is disabled by default.

- 1. Go to Advanced > Wireless > Wireless Settings.
- 2. Enable TWT.

#### • To enable or disable OFDMA/MU-MIMO:

OFDMA enables multiple users to transmit data simultaneously, and thus greatly improves speed and efficiency. Noted that only when your clients also support OFDMA, can you fully enjoy the benefits. It is disabled by default.

A router with the MU-MIMO feature serves multiple devices simultaneously while a traditional router serves only one user at a time. That means MU-MIMO can provide a faster, more efficient Wi-Fi network for multiusers. It is disabled by default.

Note: Devices supporting 5GHz wireless band can enjoy the MU-MIMO service.

- 1. Go to Advanced > Wireless > Wireless Settings.
- 2. Select OFDMA+MU-MIMO or OFDMA only.

#### • To use the Smart Connect function:

Smart Connect combines the 2.4 GHz and 5 GHz bands and assigns your devices between them to balance network demands.

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

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 2.4 GHz and 5 GHz wireless networks. If you want to configure the wireless settings separately for each band, deselect the checkbox to disable this feature.
- To enable or disable the wireless function:
- 1. Go to Wireless or Advanced > Wireless > Wireless Settings.
- 2. The wireless bands are enabled by default. If you want to disable a wireless band, just deselect its Enable checkbox.
- To change the wireless network name (SSID) and wireless password:
- 1. Go to Wireless or Advanced > Wireless > Wireless Settings.
- 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 Wireless or Advanced > Wireless > Wireless Settings.
- 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 change the security option:

- 1. Go to Advanced > Wireless > Wireless Settings.
- 2. Select an option from the Security drop-down list. We recommend you don't change the default settings unless necessary.

#### • To change the transmit power:

- 1. Go to Advanced > Wireless > Wireless Settings.
- 2. Select an option from the Transmit Power drop-down list: High, Middle or Low. The default and recommended setting is High.

#### • To change channel settings:

- 1. Go to Advanced > Wireless > Wireless Settings.
- 2. Select a Channel Width (bandwidth) for the wireless network. It is recommended to just leave it as default.
- 3. 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.
- To change the transmission mode:
- 1. Go to Advanced > Wireless > Wireless Settings.
- 2. For the 2.4 GHz and 5 GHz networks, disable Smart Connect, then select a transmission Mode according to your wireless client devices. It is recommended to just leave it as default.

#### • To create your MLO network:

MLO (Multi-Link Operation) network enables the connected Wi-Fi 7 clients to simultaneously send and receive data across different frequency bands, greatly improving the transmission rate and reliability.

1. Go to Advanced > Wireless > Wireless Settings, and locate the MLO Network section.

- 2. Enable MLO Network.
- 3. Specify an SSID in Network Name (SSID).
- 4. Select the Security type. Specify a password if the security type you selected requires it. This value is case-sensitive.
- 5. You can also click Share Network to share the SSID and password with your guests.
- 6. If you select Hide SSID, your SSID won't display when you scan for local wireless networks on your wireless device and you need to manually join the MLO network.
- 7. Click SAVE to save your settings.

MLO Network		
Create your MLO network, the different frequency bands, gre	en its connected Wi-Fi 7 eatly improving the trans	clients can simultaneously send and receive data across nission rate and reliability.
Note: The router will reboot for	or MLO setting changes	to take effect.
MLO Network:	Enabled	Share Network
Network Name (SSID):	TP-Link_B2	SSID:
Security:	WPA3-Pers	•
Password:	11115670	Password: 11115670
		Save Picture

Ø Tips:

To view the MLO network information, go to Network Map and locate the Wireless section. You can turn on or off the MLO network conveniently.

## 7.2. 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 <u>http://tplinkwifi.net</u>, 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 Schedule feature.



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

Add Schedule		×
Enable This Entry:	Enabled	
Band:	<ul> <li>✓ 2.4 GHz</li> <li>✓ 5 GHz</li> </ul>	
Wireless Off Time:	11 ~ : 00 ~ PM ~	
	07 ~ : 00 ~ AM ~ (next day)	
Repeat:	S M T W T F S	
	CANCEL	

#### Note:

- The Effective Time Schedule is based on the time of the router. You can go to Advanced > System > Time to modify the time.
- The wireless network will be automatically turned on after the time period you set.

## 7.3. 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 <u>http://tplinkwifi.net</u>, 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.

#### 7. 3. 1. Connect via the Client's PIN

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

WPS:	
Method 1:	Using a PIN
	Client's PIN
	O Router's PIN
	Enter your personal device's PIN here and click $\ensuremath{\textbf{CONNECT}}$
	CONNECT

#### 7. 3. 2. Connect via the Router's PIN

Select Router's PIN in Method 1 to enable Router's PIN. You can use the default PIN or generate a new one.

Router's PIN:		
	Enter the router's PIN on your persona Router's PIN: 38337406	I device.
	GET NEW PIN	
	DEFAULT	

Note:

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.

#### 7. 3. 3. Push the WPS Button

Click Start on the screen or directly press the router's WPS button. Within two minutes, enable WPS on your personal device. Success will appear on the screen, indicating successful WPS connection.

Method 2:	Using the button below
	Click the button below, then enable WPS on your personal device within 2 minutes.
	Start
Method 3:	Using the router's WPS button
	Press the router's WPS button, then enable WPS on your personal device within 2 minutes.

## 7.4. Advanced Wireless Settings

Check advanced wireless settings for your device.

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with your TP-Link ID or the password you set for the router.
- 2. Go to Advanced > Wireless > Additional Settings.
- 3. Configure advanced wireless settings.

Additional Settings		
Check advanced wireless setti	ngs for your device.	
WMM:	Enabled	
AP Isolation:	Enabled	
Airtime Fairness:	Enabled	
Zero Wait DFS:	Enabled	
Beacon Interval:	100	
RTS Threshold:	2346	
DTIM Interval:	1	
Group Key Update Period:	0	S

• WMM - WMM function can guarantee the packets with high-priority messages being transmitted preferentially. This function is enabled by default and uneditable.

- AP Isolation This function isolates all connected wireless stations so that wireless stations cannot access each other through WLAN.
- Airtime Fairness This function can improve the overall network performance by sacrificing a little bit of network time on your slow devices.
- Beacon Interval Enter a value between 40 and 1000 in milliseconds to determine the duration between beacon packets that are broadcasted by the router to synchronize the wireless network. The default value is 100 milliseconds.
- RTS Threshold- Enter a value between 1 and 2346 to determine the packet size of data transmission through the router. By default, the RTS (Request to Send) Threshold size is 2346. If the packet size is greater than the preset threshold, the router will send RTS frames to a particular receiving station and negotiate the sending of a data frame.
- DTIM Interval The value determines the interval of DTIM (Delivery Traffic Indication Message). Enter a value between 1 and 15 intervals. The default value is 1, which indicates the DTIM Interval is the same as Beacon Interval.
- Group Key Update Period Enter a number of seconds (minimum 30) to control the time interval for the encryption key automatic renewal. The default value is 0, meaning no key renewal.

## Chapter 8

## **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:

- <u>Create a Network for Guests</u>
- <u>Customize Guest Network Options</u>

## 8.1. Create a Network for Guests

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with your TP-Link ID or the password you set for the router.
- 2. Go to Advanced > Wireless > Guest Network or click Wireless on the top page. Locate the Guest Network section.
- 3. Create a guest network as needed.
  - 1) Tick the Enable checkbox for the 2.4GHz or 5 GHz 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) Enable Bandwidth Control if you want to limit the network speed of your guests. Then enter the limited bandwidth value.
  - 4) Set the effective time to keep the guest network.
  - 5) Select the Security type and customize your own password. If No security is selected, no password is needed to access your guest network.

Guest Network		
Enable the wireless bands you war	t your guests to use and complete the relate	d information.
2.4 GHz:	Enable	Share Network
Network Name (SSID):	TP-Link_Guest_B281	Hide SSID
Bandwidth Control:	Enable	
Download Bandwidth:	1000 Mbps	
Upload Bandwidth:	1000 Mbps	
5 GHz:	Enable	
Effective Time:	No Limit ~	
Security:	No Security ~	
	This security type is not considered secure. encryption.	Consider selecting a more secure

- 4. Click SAVE. Now your guests can access your guest network using the SSID and password you set!
- 5. You can also click Share Network to share the SSID and password to your guests.

Guest Network Enable the wireless bands you want your guests to use and complete the related information.		
2.4 GHz:	Enabled	Share Network
etwork Name (SSID):	TP-Link_Gu	SSID:
width Control:	Enabled	281
nload Bandwidth:	1000	No Password
oad Bandwidth:	1000	Save Picture

#### Ø Tips:

To view guest network information, go to Network Map and locate the Guest Network section. You can turn on or off the guest network function conveniently.

### 8.2. Customize Guest Network Options

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with your TP-Link ID or the password you set for the router.
- 2. Go to Advanced > Wireless > Guest Network. Locate the Guest Permissions section.
- 3. Customize guest network options according to your needs.

Guest Permissions	
Control the data that guests can acces	S.
	Allow guests to see each other
	Allow guests to access your local network

Allow guests to see 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 and Ping.

Allow guests to access your 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 and Ping.

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

Chapter 9

## **IoT Network**

This router can create a dedicated wireless network for you to manage your IoT devices together, such as smart lights and cameras, enhancing their connection stability.

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with your TP-Link ID or the password you set for the router.
- 2. Go to Advanced > Wireless > IoT Network.
- 3. Create an IoT network as needed.
  - 1) Tick the Enable checkbox for the 2.4GHz, or 5 GHz wireless network. For the 5 GHz network, make sure your IoT devices can connect to a 5 GHz network.
  - 2) Customize the SSID. Don't select Hide SSID unless you want your IoT devices to manually input the SSID for network access.
  - 3) Select the Security type and customize your own password. If No security is selected, no password is needed to access the IoT network.

IoT Network			
Create a dedicated wireless cameras.	network to manage your IoT de	vices together, such as smart lights and	
2.4 GHz:	Enabled	Share Network	
Network Name (SSID):		SSID:	
Security:	WPA2-	0	
Password:	037176	Password: 03717660	
5 GHz:	Enat	Save Picture	
	Make sure your IoT devices	can connect to a 5 GHz network.	
Network Name (SSID):	TP-Link_IoT_7B00_5G		
Security:	WPA2-PSK[AES]		
Password:	03717660		

- 4. Click SAVE. Now you can connect your IoT devices to the dedicated IoT network.
- 5. You can also click Share Network to share the SSID and password to others.

## Chapter 10

## **USB Settings**

This chapter describes how to use the USB ports to share files and 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:

- <u>Access the USB Storage Device</u>
- Media Sharing
- Time Machine

## 10.1. 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.

Ø 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 Sharing and click Remove.

#### 10. 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.

	Method	1:			
	Go to Computer > Network, then click the Network Server Name (TP-SHARE by default) in the Computer section.				
	Note: Operations in diff	erent systems are similar.	Here we take Windows 7 as an examp	le.	
		C v 🗣 🕨 Network	•		
		File Edit View Tools	Help		
Windows		Organize  Vetwork and Sharing Center Add a printer			
computer		쑦 Favorites	Computer (3)		
		🧊 Libraries	TP-SHARE		
		🍓 Homegroup	<ul> <li>Media Devices (1)</li> </ul>		
		🖳 Computer			
		👊 Network	<ul> <li>Network Infrastructure (1)</li> </ul>		
			Andrew 2020		

Windows computer	<ul> <li>Method 2:</li> <li>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.</li> </ul>	
Мас	<ul> <li>1) Select Go &gt; Connect to Server.</li> <li>2) Type the server address smb://tplinkwifi.net.</li> <li>3) Click Connect.</li> <li>Image: Connect to Server Image: Connect The Server Image: Connect</li></ul>	
Tablet	Use a third-party app for network files management.	

#### Ø Tips:

You can also access your USB storage device by using your Network/Media Server Name as the server address. Refer to <u>To Customize the Address of the USB Storage Device</u> to learn more.

#### 10. 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 <u>http://tplinkwifi.net</u>, and log in with your TP-Link ID or the password you set for the router.
- 2. Go to Advanced > USB > Storage Sharing.
- 3. Enable the Internet FTP checkbox, and then click SAVE.

elect the method for acce Idress.	essing your USB storage dev	rice. The device car	then be reache	ed via the acc
etwork/Media Server Nar	ne: TP-Share			
Access Method	Address	Enable	Port	Modify
Samba for Windows Samba for macOS/Linux	\\192.168.0.1 smb://192.168.0.1			Ĩ
Local FTP	ftp://192.168.0.1:21		21	
Internet FTP	ftp://10.160.53.49:21 Set DDNS		21	Ø

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



Ø Tips:

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

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

#### • To Customize the Address of the USB Storage Device

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

 In the Access Method session, make sure Samba for Windows Samba for macOS/ Linux is ticked, and enter a Network/Media Server Name as you like, such as MyShare, then click SAVE.

Access Method Select the method for accessing your USB storage device. The device can then be reached via the access address.				
Access Method	Address	Enable	Port	Modify
Samba for Windows Samba for macOS/Linux	\\192.168.0.1 smb://192.168.0.1			ď
Local FTP	ftp://192.168.0.1:21		21	ß
Internet FTP	ftp://10.160.53.49:21 Set DDNS		21	Ø

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

#### To Only Share Specific Content

Focus on the File Sharing section. Specify sharing folders that you want to share and click SAVE.

Share Selected Folders	Sharin	g Contents:	
G:/Document		Share Selected Folders	Ø
G:/Hctures	V	G:/Document G:/Pictures	

#### • To Customize the authentication settings

By default, Secure Sharing is enabled. You can find and edit the sharing username and password for authentication to access your USB storage device.

In the Secure Sharing section, click  $\[ex]$  to modify the access account, and pay attention to the default username and password. Accessing as an administrator can read and modify the shared folders while visitors can only read the shared folders.

S	Secure Sharing				
Customize the access settings to ensure data security.					
	Username	Password		Permissions	Modify
	admin		ø	Read&Write	
	visit	•••••	ø	Read	Ø

#### Note:

- 1. 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.
- 2. 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 <u>To Customize the Address of the USB Storage Device</u>.

## 10.2. Media Sharing

The feature of Media Sharing allows you to view photos, play music and watch movies stored on the USB storage device directly from DLNA-supported devices, such as your computer, tablet and PS2/3/4.

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

Media Sharing	
View photos, play mu	sic and watch movies stored on the USB storage device via the access address.
	Media Sharing: 🔍

- 4. When your USB storage device 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 storage devices.
- 5. Refer to the following table for detailed instructions.



## 10.3. Time Machine

- 1. Visit<u>http://tplinkwifi.net</u>, and log in with your TP-Link ID or the password you set for the router.
- 2. Go to Advanced > USB > Time Machine.
- You can follow the web instructions to back up all files on your Mac to a USB storage device connected to your router.

	Step 1:	Step 2:	Step 3:
Image: Second	Image: Product of the state	Click Select Backup Disk then	City your name and password for the surver *Autor AX11000 "so that Time Machine can access it. Name: Password: Cancel Common Cancel Common Co
i, open Syst lick Time Ma	em Preferences and Ichine.	select BackupTM.	shared account and click Connect
lotes:		anaction for the backup to get higher on	eed.
lotes: . We recomi	mend you use a wired co	intection for the backup to get higher sp	

• Or follow the instructions below:

Time Machine		
Back up all files on your Mac to a USB storage device connected to your router.		
Time Machine:	Enable	
Backup Location:		
	Please select a location for	r Time Machine backups
	SELECT	
Storage Limit for Backups:	0.0	GB
	(Enter "0" for no limit.)	

- 1. Tick the checkbox to enable Time Machine.
- 2. Click SELECT to select a location for Time Machine backups.
- 3. Set the Size Limit for Backups.

Note: 0 means no limit for the space.

4. Click SAVE.

## Chapter 11

## **HomeShield**

Customize your home network with enhanced security using a kit of features built in TP-Link HomeShield. Whether protecting your sensitive data or limiting the access of kids and guests, TP-Link HomeShield provides you the tools you need to fully manage your network.

It contains the following sections:

- Network Check
- Parental Controls
- <u>QoS</u>
- More Features

\*For an easier way to check your home network protection system, you can download the Tether app to enjoy full Homeshield Pro feature.

## 11.1. Network Check

Scan your whole network to help analyze and optimize your network.

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with your TP-Link ID or the password you set for the router.
- 2. Go to Advanced > HomeShield > Network Check.
- 3. Click SCAN.
- 4. Optimize your network according to the tips.

	The following items can be op	timized.	
	Router Security	Perfect	
	Tireless Security	1 risk	
	RESCAN		
Router Security ?			
Firmware Version			
Remote Management			
Respond to Pings from WA	AN		
Port Forwarding			
Port Triggering			
DMZ			
Wireless Security			
Wireless Encryption			
Wi-Fi Password	strong. It is recommended to use a	combination of letters, numbers	Change Passy s, and symbols

## 11.2. 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.

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

Create Profile		×
0	2	3
Basic Info	Content Filter	Time Controls
Basic Info		
Name the profile and add	devices to it.	
Profile Name:		
Age:	Prefer Not to Say	~ ?
Devices:		
+ Add Devices		
	c	CANCEL

- 1) Enter a Name for the profile to make it easier to identify. Set the age to get the corresponding filter level.
- 2) Click + Add Devices.
- 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.

Create Profile		×
O	2 Content Filter	3 Time Controls
Content Filter		
Select categories to block the co	rresponding content.	
Select Categories 🥝		
Mature Content	🔽 Chat Messaging	Social
Online Shopping	Streaming Media	File Sharing
Gaming		
Blocked Websites Block a specific website by addir	ng a URL, or block all websites cor	ntaining a specific keyword.
Enter a keyword or URL	Add	
Allowed Websites Allow access to specific website from the Blocked History.	s that would be blocked by the Cor	ntent Filter. You can also add
		BACK

- 1) Select the content categories to block in the Content Filter list.
- 2) You can also block/allow a specific website. Enter a keyword (for example, "Facebook") or a URL (for example, "www.facebook.com"), then click Add.
- 3) Click NEXT.
- 6. Set time restrictions on internet access.

Create Profile		×
Ø	⊘	3
Basic Info	Content Filter	Time Controls
Time Controls		
Set internet access time for th	e profile.	
Bedtime When enabled, internet is una	vailable during this period.	
Bedtime:		
From:	09 V: 00 V PM V	
To:	07 V: 00 V AM V	(next day)
Want more flexible time con and download Tether to enjo	trols? Go to Homeshield > More Feature y full Homeshield Pro feature.	s for a detailed introduction
	BA	CK SAVE

- 4) Enable Bedtime 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.
- 5) Click SAVE.
- 6) After adding a profile, you can click the Insight icon to check the detailed visited history, and click (ii) to pause the network for this profile anytime.

Parental Con	trols				
asily manage your kid's online activities by blocking inappropriate content, setting online time limits, and reating flexible schedules.				ie limits, and	
Note: To get acc	Current T	Fime: 2022-09-0	8 2:28:48 AM	me, ao ta Time, Satting	as to check Get
rom Internet is	selected.	S that take enect	based on system i	nie, go to nine Setting	gs to check det
					🔂 Add
Name	Time Spent Online	Devices	Insights	Internet Access	🛟 Add Modify

Note: You can go to Advanced > HomeShield > More Features for a detailed introduction and download Tether to enjoy full Homeshield Pro feature.

## 11.3. QoS

QoS (Quality of Service) allows you to prioritize connection of specific devices for a set duration. Devices set as high priority will be allocated more bandwidth and so continue to run smoothly even when there is heavy traffic on the network.

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with your TP-Link ID or the password you set for the router.
- 2. Go to Advanced > HomeShield > QoS.
- 3. Enable QoS to set the total bandwidth. Then click SAVE.
- 4. Enable High Priority for the desired device and set its effective time.

	r specific device to guarante			
00S:	Enabled			
ownload Bandwidth:	2500	Mbps	~	
pload Bandwidth:	2500	Mbps	~	
evice Phonty				
Device Info	Real-time Rate	Traffic Usage	High Priority	Timing

### 11.4. More Features

Download the Tether app and subscribe to enjoy the full features of HomeShield.

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with your TP-Link ID or the password you set for the router.
- 2. Go to Advanced > HomeShield > More Features.
- 3. Follow the web instructions to get full features of HomeShield.



## Chapter 12

# EasyMesh with Seamless Roaming

This product is compatible with EasyMesh. This chapter introduces the EasyMesh feature.

It contains the following sections:

- Add a Router as a Satellite Device
- Add a Range Extender as a Satellite Device
- Manage Devices in the EasyMesh Network

EasyMesh routers and extenders work together to form one unified Wi-Fi network. Walk through your home and stay connected with the fastest possible speeds thanks to EasyMesh's seamless coverage.

Note: Routers and range extenders must be compatible with EasyMesh or OneMesh™. Firmware upgrades may be required.

### 12. 1. Add a Router as a Satellite Device

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

EasyMesh Connect EasyMesh and OneMesh devices to create a mesh network for seamless Wi-Fi coverage and centralized management.  EasyMesh:  What's EasyMesh?  EasyMesh Network Set up and manage your EasyMesh network.  Current Mode: Main Router 🖕 Change Mode In this mode, you can add EasyMesh and OneMesh devices to boost Wi-Fi coverage. Note: TP-Link satellite routers will follow the main router's LED Control Settings.  Ethernet Wireless Archer BE				
Connect EasyMesh and OneMesh devices to create a mesh network for seamless Wi-Fi coverage and centralized management.  EasyMesh:  What's EasyMesh?  EasyMesh Network Set up and manage your EasyMesh network.  Current Mode: Main Router  Current Mode: Main Router  Change Mode Main Router  Change Mai	EasyMesh			
EasyMesh:  What's EasyMesh?  EasyMesh Network Set up and manage your EasyMesh network.  Current Mode: Main Router 🖕 Change Mode In this mode, you can add EasyMesh and OneMesh devices to boost WI-Fi coverage. Note: TP-Link satellite routers will follow the main router's LED Control Settings.  Description: Lethernet ····· Wireless  Archer BE	Connect EasyMesh and management.	OneMesh devices to crea	ate a mesh network for se	eamless Wi-Fi coverage and centralized
What's EasyMesh?          EasyMesh Network         Set up and manage your EasyMesh network.         Current Mode:       Main Router (r) Change Mode         In this mode, you can add EasyMesh and OneMesh devices to boost Wi-Fi coverage.         Note: TP-Link satellite routers will follow the main router's LED Control Settings.	EasyMesh:			
EasyMesh Network Set up and manage your EasyMesh network. Current Mode: Main Router Change Mode In this mode, you can add EasyMesh and OneMesh devices to boost Wi-Fi coverage. Note: TP-Link satellite routers will follow the main router's LED Control Settings. Current Mode: Change Mode In this mode, you can add EasyMesh and OneMesh devices to boost Wi-Fi coverage. Note: TP-Link satellite routers will follow the main router's LED Control Settings. Current Mode: Change Mode In this mode, you can add EasyMesh and OneMesh devices to boost Wi-Fi coverage. Note: TP-Link satellite routers will follow the main router's LED Control Settings. Current Mode: Change Mode In this mode, you can add EasyMesh and OneMesh devices to boost Wi-Fi coverage. Note: TP-Link satellite routers will follow the main router's LED Control Settings.	What's EasyMesh?			
EasyMesh Network Set up and manage your EasyMesh network. Current Mode: Main Router 🖕 Change Mode In this mode, you can add EasyMesh and OneMesh devices to boost Wi-Fi coverage. Note: TP-Link satellite routers will follow the main router's LED Control Settings.  The thermet Wireless Archer BE				
Set up and manage your EasyMesh network.  Current Mode: Main Router 🖕 Change Mode In this mode, you can add EasyMesh and OneMesh devices to boost Wi-Fi coverage. Note: TP-Link satellite routers will follow the main router's LED Control Settings.  Description: Ethernet ······ Wireless  Archer BE	EasyMesh Network			
Current Mode: Main Router $\Leftarrow$ Change Mode In this mode, you can add EasyMesh and OneMesh devices to boost Wi-Fi coverage. Note: TP-Link satellite routers will follow the main router's LED Control Settings. Ethernet Wireless 	Set up and manage your	EasyMesh network.		
In this mode, you can add EasyMesh and OneMesh devices to boost Wi-Fi coverage. Note: TP-Link satellite routers will follow the main router's LED Control Settings.  Ethernet  Archer BE	Current Mode:	Main Router	💪 Change Mode	
Note: TP-Link satellite routers will follow the main router's LED Control Settings.	In this mode, you can ad	d EasyMesh and OneMe	sh devices to boost Wi-F	i coverage.
Ethernet Wireless			mutada I ED Cantral Ca	
Archer BE	Note: TP-Link satellite ro	uters will follow the main	router's LED Control Se	ttings.
Archer BE	Note: TP-Link satellite ro	outers will follow the main	router's LED Control Se	Ethernet Wireless
Archer BE	Note: TP-Link satellite ro	uters will follow the main	router's LED Control Se	Ethernet Wireless
	Note: TP-Link satellite ro	uters will follow the main		ttings. Ethernet Wireless

3. Click ADD SATELLITE DEVICES, select TP-Link Router, then click NEXT.

Add Satellite Devices	×
Which type of satellite devices do you want to add?	
TP-Link Router (Includes TP-Link EasyMesh and OneMesh routers)	
TP-Link Extender (Includes TP-Link EasyMesh and OneMesh extenders)	
Others (Includes EasyMesh devices of other brands)	
CANCEL	

4. Follow the page instructions to prepare your satellite router, then click DONE.



5. Click ADD. When prompted "This device has been added successfully", click OK, then click FINISH.

## 12.2. Add a Range Extender as a Satellite Device

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

EasyMesh			
Connect EasyMesh and C management.	)neMesh devices to crea	ate a mesh network for	seamless Wi-Fi coverage and centralized
EasyMesh:			
What's EasyMesh?			
EasyMesh Network			
Set up and manage your l	EasyMesh network.		
Current Mode:	Main Router	🖕 Change Mode	
Current Mode: In this mode, you can add	Main Router	← Change Mode sh devices to boost Wi	-Fi coverage.
Current Mode: In this mode, you can add Note: TP-Link satellite rou	Main Router EasyMesh and OneMe uters will follow the main	Change Mode sh devices to boost Wi router's LED Control \$	-Fi coverage. Settings.
Current Mode: In this mode, you can add Note: TP-Link satellite rou	Main Router EasyMesh and OneMe uters will follow the main	Sh devices to boost Win router's LED Control S	-Fi coverage. Settings. Ethernet Wireless

- 3. Plug in the extender next to the main router.
- 4. With in 2 minutes, press the WPS button on main router and on the extender. Wait until the WPS process is complete.

5. Done! You can check the mesh device on the router's web page too.

## 12.3. Manage Devices in the EasyMesh Network

In an EasyMesh network, you can manage all mesh devices and connected clients on your main router's web page.

- To view mesh devices and connected clients in the network:
- 1. Visit <u>http://tplinkwifi.net</u>, and log in with your TP-Link ID or the password you set for the router.
- 2. Go to Network Map.
- 3. Click 💆 to view all mesh devices, and click 🛒 to view all connected clients.

#### To manage an EasyMesh device in the network:

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with your TP-Link ID or the password you set for the router.
- 2. Go to Advanced > EasyMesh. Locate Mesh Device Detail section.

Mesh Device Detail				
Mesh Devices: 3				🔂 Add
Device Info	Location	Clients	Connection	Modify
Archer BE400 00-0A-EB-13-AD-44 192.168.0.1	Not set	1		Ø
Archer AX10 00-FE-00-29-20-FF 192.168.0.192	Not set	0	atl	00
RE600X A8-6E-84-07-2F-6B 192.168.0.83	Not set	1	aff	60t

3. Click the Modify button to view detailed information and change its settings.

DUV	ice Info	Clients
Name:	Archer AX10	
IP Address:	192.168.0.192	
MAC Address:	00-FE-00-29-20-FF	
Signal Strength:	atl	
LED Status:	Enabled	
Note: Currently, this s subsequent firmware	atellite device doesn't support LED Co updates.	ontrol, please stay tuned for
Link Speed:	0 (2.4 GHz)	
	1200 Mbps (5 GHz)	

• Change device information.

## Chapter 13

# **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 from cyber attacks, block or allow specific client devices to access your network using Access Control, you can prevent ARP spoofing and ARP attacks using IP & MAC Binding, protect your network security by isolating your IoT devices.

It contains the following sections:

- Protect the Network from Cyber Attacks
- <u>Access Control</u>
- IP & MAC Binding
- <u>ALG</u>
- Device Isolation

\*For a more comprehensive home network protection system, refer to the <u>HomeShield</u> chapter.

## 13.1. 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 <u>http://tplinkwifi.net</u>, 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.



## 13.2. 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 (Deny List) or a list of allowed devices (Allow List).

#### I want to:

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

#### How can I do that?

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with your TP-Link ID or the password you set for the router.
- 2. Go to Advanced > Security > Access Control.
- **3.** Click Change Mode, and select the access mode to either block (recommended) or allow the device(s) in the list.

#### To block specific device(s):

1) Make sure your current Access Control mode is Deny List. If not, click Change Mode, select Deny List and, click CHANGE.
| Access Control          |                                |             |        |
|-------------------------|--------------------------------|-------------|--------|
| Control the access to y | our network from the specified | devices.    |        |
| Access Control:         |                                |             |        |
| Current Mode:           | Deny List 🛛 🖕 🕻                | Change Mode |        |
|                         |                                |             | 🔂 Add  |
| Device Type             | Device Name                    | MAC Address | Modify |
| There is no entry       | /!                             |             |        |
|                         |                                |             |        |

- 2) Click 🕂 Add and select devices you want to be blocked and Click ADD.
- 3) The Operation Succeeded message will appear on the screen, which means the selected devices have been successfully added to the Deny List.

Device Type	Device Name	MAC Address	Modify
	Phone	5E-13-04-0F-A1-F2	创

To allow specific device(s):

1) click Change Mode, select Allow List, and click CHANGE.



2) Your own device is in the allow list by default and cannot be deleted. Click 🕤 Add to add other devices to the allow list.

Device Type	Device Name	MAC Address	Modify
<b>e</b>	19233109-BG	40-ED-00-22-05-93	

- Add connected devices
- 1) Click Select From Device List.
- 2) Select the devices you want to be allowed and click ADD.

Add Devices			×
<ul> <li>Select From Device List</li> <li>Add Manually</li> </ul>			
Type Device Name	IP	MAC	
There is no entry!			
		CANCEL	ADD

- 3) The Operation Succeeded message will appear on the screen, which means the selected devices have been successfully added to the allow list.
- Add unconnected devices
- 1) Click Add Manually.
- 2) Enter the Device Name and MAC Address of the device you want to be allowed and click ADD.

Add Devices	×
<ul> <li>Select From Device List</li> <li>Add Manually</li> <li>Device Name:</li> <li>MAC Address:</li> </ul>	
	CANCEL

3) The Operation Succeeded message will appear on the screen, which means the device has been successfully added to the allow list.

#### Done!

Now you can block or allow specific client devices to access your network (via wired or wireless) using the Deny List or Allow List.

## 13.3. 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 <u>http://tplinkwifi.net</u>, 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):

1) Click 🔂 Add in the Binding List section.

Binding List			
Add or delete binding entries	ð.		
			🔂 Add
Device Name	MAC Address	IP Address	Modify
There is no entry!			

2) Click VIEW CONNECTED DEVICES and select the device you want to bind. The MAC Address and IP Address fields will be automatically filled in.

Add Binding Entry		×
MAC Address:		
	VIEW CONNECTED DEVICES	
IP Address:		
	CANCEL	SAVE

3) Click SAVE.

To bind the unconnected device:

1) Click 🔂 Add in the Binding List section.

Binding List			
Add or delete binding entries	δ.		
			🕒 Ade
Device Name	MAC Address	IP Address	Modify
There is no entry!			

- 2) Enter the MAC Address and IP Address that you want to bind.
- 3) Click SAVE.

#### Done!

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

### 13.4. ALG

ALG allows customized NAT traversal filters to be plugged into the gateway to support address and port translation for certain application layer "control/data" protocols such as FTP, TFTP, H323 etc. It is recommended to keep the default settings.

You may need to disable SIP ALG when you are using voice and video applications to create and accept a call through the router, since some voice and video communication applications do not work well with SIP ALG.

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

ALG				
Check the ALG (Application L	ayer Gateway) settings.	. It is recommended to	keep them as defau	lt.
PPTP Passthrough:				
L2TP Passthrough:				
IPSec Passthrough:				
FTP ALG:				
TFTP ALG:				
RTSP ALG:				
H323 ALG:				
SIP ALG:				

### 13.5. Device Isolation

Some devices, such as IoT devices, are vulnerable to security threats. To keep your important devices and data safe, you can isolate these devices to protect your network from being infected.

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

Device Isolation:	O (2)		
lote: We recommend	disabling AP Isolation which n	nav isolate all devices from each other	
ote. we recommend	r disability AF Isolation which h	nay isolate all devices from each other.	
and a data of the second second			
solated Devices			
solated Devices: 1			0
solated Devices: 1			•
solated Devices: 1 Device Type	Device Name	MAC Address	Hodify
solated Devices: 1 Device Type	Device Name	MAC Address	🚯 / Modify

3. Click +Add to add your IoT devices.

Add Devices			×
Main Network (0 / 4)			
Device Type	Device Name	MAC Address	
□ 📮	network device	16-64-7C-04-9D-0B	
•	Phone	5E-13-04-0F-A1-F2	
- 5	PC	58-11-22-0F-75-2B	
•	ArcherAX10	00-FE-00-29-20-FF	
		CANCEL ADD	

#### Done!

While isolated, isolated devices (these devices) can still access the internet and communicate with other isolated devices. However, isolated devices (these devices) cannot transfer data with devices on your home, including managing gateway devices, accessing USB devices, etc.

## Chapter 14

## **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 Port Forwarding, Port Triggering, UPNP and DMZ.

It contains the following sections:

- Share Local Resources on the Internet by Port Forwarding
- Open Ports Dynamically by Port Triggering
- <u>Make Applications Free from Port Restriction by DMZ</u>
- Make Xbox Online Games Run Smoothly by UPnP

## 14.1. Share Local Resources on the Internet by Port Forwarding

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

Port Forwarding 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.

\*Image may differ from your actual product.



#### How can I do that?

- 1. Assign a static IP address to your PC, for example 192.168.0.100.
- 2. Visit <u>http://tplinkwifi.net</u>, and log in with your TP-Link ID or the password you set for the router.
- 3. Go to Advanced > NAT Forwarding > Port Forwarding.
- 4. Click 🔂 Add.

Port Forward	<b>ting</b> ) make specific d	evices or service	es on your lo	cal network ac	ccessible ove	er the internet.
	D. 1. ID	5		D. ( )	<b>C</b> (-)	Add
Name	Address	Port	Port	Protocol	Status	woarry
There is	no entry!					

- 5. Click VIEW COMMON SERVICES and select HTTP. The External Port, Internal Port and Protocol will be automatically filled in.
- 6. Click VIEW CONNECTED DEVICES and select your home PC. The Device IP Address will be automatically filled in. Or enter the PC's IP address 192.168.0.100 manually in the Device IP Address field.
- 7. Click SAVE.

Add a Port Forwarding E	intry	×
Note: Add a rule for an individ 100 and 200), add multiple rul	lual external port or port range. For non es. For more info, refer to Port Forward	consecutive ports (example: ing FAQ.
Service Name:	НТТР	
	VIEW COMMON SERVICES	
Device IP Address:	192.168.0.63	
	VIEW CONNECTED DEVICES	
External Port:	<ul> <li>Individual Port</li> <li>Port Range</li> </ul>	
	80	
Internal Port:	80	(Optional)
Protocol:	TCP v	
Enable This Entry:	Enabled	
	CAN	SAVE

Ø 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 common services list, you can enter the corresponding parameters manually. You should verify the port number that the service needs.

• You can add multiple port forwarding 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.

Ø 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 <u>Set Up a Dynamic DNS Service Account</u>. 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.

## 14.2. 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 <u>http://tplinkwifi.net</u>, 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.

Port T	riggerin	g					
Specify (from th	ports to a ne interne	allow devices on yo t) to the device that	our local network t triggered it.	k to dynamically	open specific ex	ternal ports and	d forward packets
							🔂 Add
Se Na	ervice ame	Triggering Port	Triggering Protocol	External Port	External Protocol	Status	Modify
	There is n	o entry!					

3. Click VIEW COMMON SERVICES, and select the desired application. The Triggering Port, Triggering Protocol and External Port will be automatically filled in. The following picture takes application MSN Gaming Zone as an example.

Add a Port Triggering En	try	×
Service Name:	MSN Gaming Zone	
	VIEW COMMON SERVICES	
Triggering Port:	47624	
Triggering Protocol:	All	
External Port:	2300-2400,28800-29000	
External Protocol:	All	
Enable This Entry:	Enabled	
	CANCEL	

#### 4. Click SAVE.

- Ø 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.

# 14.3. 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 log in 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 <u>http://tplinkwifi.net</u>, and log in with your TP-Link ID or the password you set for the router.
- 3. Go to Advanced > NAT Forwarding > DMZ and tick to enable DMZ.
- 4. Click VIEW CONNECTED DEVICES and select your PC. The Device IP Address will be automatically filled in. Or enter the PC's IP address 192.168.0.100 manually in the DMZ Host IP Address field.

DMZ	
Expose a specific device in your local ne real-time communications.	stwork to the internet for applications such as online gaming and
DMZ:	Enable
DMZ Host IP Address:	192.168.0.100
	VIEW CONNECTED DEVICES

#### 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.

# 14.4. 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.

\*Image may differ from your actual product.



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

- 1. Visit <u>http://tplinkwifi.net</u>, 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.

JPnP	
Enable UPnP (Univers applications such as m	al Plug and Play) to allow devices on your local network to dynamically open ports for ultiplayer gaming and real-time communications.
1D-D-	

## Chapter 15

## **VPN Server&Client**

The router offers several ways to set up VPN connections:

**VPN Server** allows remote devices to access your home network in a secured way through the internet. The router supports three types of VPN Server:

**OpenVPN** is somewhat complex but with higher security and more stability, suitable for restricted environments such as campus network and company intranet.

**PPTP VPN** is easy to use with the built-in VPN software of computers and mobile devices, but it is vulnerable and may be blocked by some ISPs.

**L2TP/IPSec VPN** is more secure but slower than PPTP VPN, and may have trouble getting around firewalls.

**WireGuard VPN** is a secure, fast and modern VPN protocol. It is based on the UDP protocol and uses modern encryption algorithms to improve work efficiency.

**VPN Client** allows devices in your home network to access remote VPN servers, without the need to install VPN software on each device.

This chapter contains the following sections:

- <u>Use OpenVPN to Access Your Home Network</u>
- <u>Use PPTP VPN to Access Your Home Network</u>
- Use L2TP/IPSec VPN to Access Your Home Network
- <u>Use WireGuard VPN to Access Your Home Network</u>
- <u>Use VPN Client to Access a Remote VPN Server</u>

## 15. 1. Use OpenVPN to Access Your Home Network

OpenVPN Server is used to create an OpenVPN connection for remote devices to access your home network.

To use the VPN feature, you need to enable OpenVPN Server on your router, and install and run VPN client software on remote devices. Please follow the steps below to set up an OpenVPN connection.

\*Image may differ from your actual product.



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

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

OpenVPN Set up an OpenVPN for s	ecure, remote access to your network.	
Note: No certificate has b	een created. Generate one below before enabling Op	penVPN
OpenVPN:	Enabled	
Service Type:	• UDP	
	O TCP	
Interface Type:	TUN	~
Service Port:	1194	
VPN Subnet:	10.8.0.0	
Netmask:	255.255.255.0	
Client Access:	Home Network Only	2

#### 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 Service 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.

Certificate		
Generate the certificate.		
	GENERATE	

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

9. Click EXPORT to save the OpenVPN configuration file which will be used by the remote device to access your router.

Configuration File		
Export the configuration file.		
	EXPORT	

#### 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 function 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.

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

PPTP VPN Server is used to create a PPTP VPN connection for remote devices to access your home network.

To use the VPN feature, you need to set up PPTP VPN Server on your router, and configure the PPTP connection on remote devices. Please follow the steps below to set up a PPTP VPN connection.

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

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



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 field, enter the range of IP addresses (up to 10) that can be leased to the devices by the PPTP VPN server.
- 4. 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.

Account List Configure accounts (up to 16) that can be used by remote clients to connect to the VPN server.				
			<b>•</b> A	₹
Username	Password		Modify	
admin		Ø	0 D	

1) Click Add.

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

Add Account		×
Username:		
Password:	B	
	CANCEL	ADD

3) Click ADD.

#### 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).

🕝 🗽 Connect to a Workplace	
How do you want to connect?	
Use my Internet connection (VPN) Connect using a virtual private network (VPN) connection through the Internet.	
i - I - I - I - I - I - I - I - I - I -	
Dial directly Connect directly to a phone number without going through the Internet.	
ing ing ing	
What is a VPN connection?	
	Cancel

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

G	Le Connect to a Workplace		
	Type the Internet addre		
	Your network administrator c	an give you this address.	
	Internet address:	218.18.1.73	
	Destination name:	VPN Connection	
	Use a smart card Content of the second of t	use this connection yone with access to this computer to use this connection. ust set it up so I can connect later	
		Nex	Cancel

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

G	Connect to a Workplace		
	Type your user name	and password	
	User name:	100000	
	Password:	•••••	
	Domain (optional):	Show characters	
			Connect Cancel

7. Click Connect Now when the VPN connection is ready to use.

🥪 🌆 Connect to a Workplace	
The connection is ready to use	
in in iteration in	
Connect now	
	Close

## 15.3. Use L2TP/IPSec VPN to Access Your Home Network

L2TP/IPSec VPN Server is used to create a L2TP/IPSec VPN connection for remote devices to access your home network.

To use the VPN feature, you need to set up L2TP/IPSec VPN Server on your router, and configure the L2TP/IPSec connection on remote devices. Please follow the steps below to set up the L2TP/IPSec VPN connection.

\*Image may differ from your actual product.



#### Step 1. Set up L2TP/IPSec VPN Server on Your Router

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with your TP-Link ID or the password you set for the router.
- 2. Go to Advanced > VPN Server > L2TP/IPSec, and enable L2TP/IPSec.

#### Note:

- Firmware update may be required to support L2TP/IPSec VPN Server.
- 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.

L2TP/IPSec				
Set up a L2TP/IPSec VPN and accounts for quick, remote access to your network.				
LZIF/IF Jec.				
Client IP Address:	10.9.0.11 - 10.9.0.20			
IPSec Encryption:	Encrypted			
	21			
IPSec Pre-Shared Key:	admin			
	Allow NetbIOS passtnrough			

- 3. In the Client IP Address field, enter the range of IP addresses (up to 10) that can be leased to the devices by the L2TP/IPSec VPN server.
- 4. Keep IPSec Encryption as Encrypted and create an IPSec Pre-Shared Key.

Note: Enable NetBIOS Passthrough function to allow NetBIOS packets to be broadcasted through VPN tunnel.

- 5. Click SAVE.
- 6. Configure the L2TP/IPSec VPN connection account for the remote device. You can create up to 16 accounts.

Account List			
Configure accounts (up to 16) that can be used by remote clients to connect to the VPN server.			
		🔂 🔂	
Username	Password	Modify	
admin	admin	<u>ت</u> ک	

- 4) Click Add.
- 5) Enter the Username and Password to authenticate devices to the L2TP/IPSec VPN Server.

Add Account	×
Username:	
Password:	Ø
	CANCEL ADD

6) Click ADD.

Step 2. Configure L2TP/IPSec VPN Connection on Your Remote Device

The remote device can use the Windows or Mac OS built-in L2TP/IPSec software or a third-party L2TP/IPSec software to connect to L2TP/IPSec Server. Here we use the Windows built-in L2TP/IPSec 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.

🍚 👰 Set Up a Connection or Network	
Choose a connection option	
Connect to the Internet Set up a wireless, broadband, or dial-up connection to the Internet.	
Set up a new network Configure a new router or access point.	
Connect to a workplace Set up a dial-up or VPN connection to your workplace.	
Set up a dial-up connection Connect to the Internet using a dial-up connection.	
	Next Cancel

4. Select Use my Internet connection (VPN).

🕒 🌆 Connect to a Workplace	
How do you want to connect?	
Use my Internet connection (VPN) Connect using a virtual private network (VPN) connection through the Internet.	
🧔 — 🎱 — 🦫	
Dial directly Connect directly to a phone number without going through the Internet.	
ių — ip	
What is a VPN connection?	
	Cancel

5. Enter the internet IP address of the router (for example: 218.18.1.73) in the Internet address field, and select the checkbox Don't connect now; just set it up so I can connect later. Click Next.

3	🔚 Connect to a Workplace		
	Type the Internet addr	ess to connect to	
	Your network administrator of	an give you this address.	
	Internet address:	218.18.1.73	
	Destination name:	VPN Connection	
	Use a smart card		
	Allow other people to use this connection This option allows anyone with access to this computer to use this connection.		
	📝 Don't connect now; ji	ust set it up so I can connect later	
		Nex	t Cancel

6. Enter the User name and Password you have set for the L2TP/IPSec VPN server on your router, and click Connect.

3	🜆 Connect to a Workplace		
	Type your user name a	and password	
	User name:	1810	
	Password:	•••••	
	Domain (optional):	Show characters	
			Connect Cancel

7. Click Close when the VPN connection is ready to use

G In Connect	to a Workplace	
The conr	nection is ready to use	
	in	
	Connect now	
		Close

8. Go to Network and Sharing Center and click Change adapter settings.



9. Find the VPN connection you created, then double-click it.

🗸 🖉 🗣 🐨 Network and I 🕨 Network	Connections	Network Connections	۶
Organize 💌 Start this connection Re	ename this connection »	₩ <b>-</b> ▼	
Local Area Connection sec.softether.co.jp Intel(R) PRO/1000 MT Network C	VPN Connection Disconnected WAN Miniport		

10. Enter the User name and Password you have set for the L2TP/IPSec VPN server on your router, and click Properties.

Second Connection	×
User name:	
Password:	seet dot test
Do <u>m</u> ain:	
Save this user name and password for the <ul></ul>	following users:
Connect Cancel Propertie	es <u>H</u> elp

11. Switch to the Security tab, select Layer 2 Tunneling Protocol with IPsec (L2TP/ IPSec) and click Advanced settings.

	Security	Networking	Sharing	
Type of VPN:				
Layer 2 Tunnelin	g Protocol	with IPsec (L2	TP/IPSec)	•
Data encryption:			Advanced	settings
Require encrypti	on (disconr	nect if server d	eclines)	-
Authentication				
O Use Extensit	ole Authent	ication Protoco	ol (EAP)	
			Prope	rties
Allow these particular of the second seco	protocols			
Unencryp	oted passw	ord (PAP)		
Unencryp	oted passw e <u>H</u> andshal	ord (PAP) ke Authenticat	ion Protocol (CH	AP)
Unencryp Challenge Microsoft	e <u>H</u> andshal <u>C</u> HAP Ver	ord (PAP) ke Authenticat sion 2 (MS-CH	ion Protocol (CH AP v2)	AP)
Allow these provide the second sec	protocols			

12. Select Use preshared key for authentication and enter the IPSec Pre-Shared Key you have set for the L2TP/IPSec VPN server on your router. Then click OK.

dvanced Pr L2TP	operties		×
Ose providence of the second secon	shared key for authentication	n	
O Use <u>c</u> e	tificate for authentication fy the Name and Usage attrib	outes of the server's certifi	cate
		ОКС	ancel

Done! Click Connect to start VPN connection.

Connect VPN Connection
User name:
Password:
Do <u>m</u> ain:
Save this user name and password for the following users:
Me only
🚱 🔿 Anyone who uses this computer
Connect Cancel Properties Help

# 15.4. Use WireGuard VPN to Access Your Home Network

WireGuard VPN Server is used to create a Wire Guard VPN connection for remote devices to access your home network.

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

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

WireGuard Set up a WireGuard VPN an	d accounts for quick, remote and secure access to yo
WireGuard:	Enabled
Tunnel IP Address:	10.5.5.1/32
Listen Port:	51820
Client Access:	Internet and Home Network
<ul> <li>Advanced Settings</li> </ul>	
DNS:	Enabled
Persistent Keepalive:	25
Private Key:	IKpwcr8Nztv0tkVAHviwaAArxpVH6iDwx6eMj XaQC1I=
Public Key:	xj9bP0sYrxa4rKBRdhx2qNBWY5uJjTg3YbQ kuXrlj0M=
	RENEW KEY

- 3. Set the Tunnel IP Address and Listen Port. Do NOT change it unless necessary.
- 4. 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.
- 5. (Optional) Click Advanced Settings to display more settings. If DNS is turned on, the router will become the DNS server of the VPN client that establishes a connection with it. Change the Persistent Keepalive time (25 seconds by default) to send out heartbeat regularly, you can also click RENEW KEY to update the private key and public key.

## Step 2. Create accounts that can be used by remote clients to connect to the VPN server.

		X
10.5.5.2/32		
0.0.0/0		
10.5.5.2/32		
Enabled		
	CANCEL	SAVE
	10.5.5.2/32 0.0.0.0/0 10.5.5.2/32 Enabled	10.5.5.2/32 0.0.0.0/0 10.5.5.2/32 Enabled CANCEL

1. Locate the Account List section. Click Add to create an account.

- 2. Give a Username to this account.
- 3. View the Address of the virtual interface assigned to this account. Do NOT change it unless necessary.
- 4. Traffic sent from the WireGard VPN client to the allowed IPs (client) will be transmitted through the tunnel. By default, all network traffic from clients will be transmitted through the tunnel. Do NOT change it unless necessary.
- 5. Traffic sent from the WireGard VPN server to the allowed IPs (server) will be transmitted through the tunnel. Do NOT change it unless necessary.
- 6. Enable or disable Pre-shared Key.
- 7. Click SAVE.

Note: One account can only be used by one WireGuard VPN client at the same time to connect to the WireGuard VPN server.



- 8. Connect to the WireGuard server.
- For mobile phones, download WireGuard App from Google Play or Apple Store, then use the App to scan the QR Code to connect to this server.
- For other devices (e.g. TP-Link WireGuard VPN client), Click EXPORT to save the WireGuard VPN configuration file which will be used by the remote device to access your router.

Connect to Server	X
QR Code	Export
Please use the following configuration to set up yo	our WireGuard client.
EXF	PORT
[Interface] PrivateKey = UJOn+XkyxT6xft/+nHIwNHZAh1A4 Address = 10.5.5.3/32 [Peer] PublicKey = jfy1EJOegKql6DOJzl1pwTTj7U1IEy AllowedIPs = 0.0.0.0/1,128.0.0.0/1 Endpoint = 0.0.0.0:51820 PersistentKeepalive = 25	66wzEBP2vMIUpEVY= y22/qWNDea2VnA=
	DONE

9. On the account list, you can click the button to modify the VPN server settings, connect to the server, or delete the account.

ccount List		
onfigure accounts (up to 16) t	hat can be used by remote clients to connect to	the VPN server.
		🕀 Ado
Username	Allowed IPs	Modify
Test	0.0.0/1,128.0.0.0/1	🖸 🖉 🗇
ADMIN	0.0.0/1,128.0.0.0/1	C & Ū
ADMIN ote: If you have renewed the nnect to the VPN server	key, please reconfigure the client, otherwise the	client will not be able t

## 15. 5. Use VPN Client to Access a Remote VPN Server

VPN Client is used to create VPN connections for devices in your home network to access a remote VPN server.

To use the VPN feature, simply configure a VPN connection and choose your desired devices on your router, then these devices can access the remote VPN server. Please follow the steps below:

\*Image may differ from your actual product.



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

Note: Firmware update may be required to support VPN Client.

3. Enable VPN Client, then save the settings.

VPN Client		
Set up profiles for clients	s that will use the VPN function.	
VPN Client:		

- 4. Add VPN servers, and enable the one you need.
  - 1) In the Server List section, click Add.
  - 2) Specify a Description for the VPN, and choose the VPN Type.

Add Profile		×
Description:		
VPN Type:	WireGuard	
Import from Config File:	OpenVPN	
NAT:	PPTP L2TP/IPSec	
Interface	WireGuard	
Peer		
	CANCEL	CANE.
	CANCEL	SAVE

- 3) Enter the VPN information provided by your VPN provider.
- OpenVPN: Enter the VPN username and password if required by your VPN provider, otherwise simply leave them empty. Then import the configuration file provided by your VPN provider.

Add Profile		×
Description:	VPN1	
VPN Type:	OpenVPN ~	
Username:	Ζ	(Optional)
Password:	····· Ø	(Optional)
Import .ovpn File:	企 UPLOAD	
	Import the CA file or edit the ovpn file manually	
	CAN	SAVE

Note: You can also check the box of Import the CA file or edit the . ovpn file manually, then upload the CA file or manually configure the settings.



• PPTP: Enter the VPN server address (for example: 218.18.1.73) and the VPN username and password provided by your VPN provider.

Add Profile		×
Description:	VPN1	
VPN Type:	PPTP ~	
VPN Server:		
Username:		
Password:	Ø	
Encryption:	Auto	
	CANCEL	
	ONICLE ONE	

 L2TP/IPSec VPN: Enter the VPN server address (for example: 218.18.1.73), VPN username and password, and IPSec pre-shared key provided by your VPN provider.

Add Profile		×
Description:	VPN1	
VPN Type:	L2TP/IPSec v	
VPN Server:		
Username:		
Password:	Ø	
IPSec Pre-Shared Key:		
	CANCEL	SAVE

• WireGuard VPN: Give a description, and click BROWSE to import the WireGuard VPN server configuration. Then you will see the detailed parameters. Do NOT change the parameters unless necessary.

Add Profile		×
Description:	VPN1	
VPN Type:	WireGuard ~	
Import from Config File:	순 UPLOAD	
NAT:	Enabled	
▼ Interface		
Private Key:		]
Address:		
DNS Server 1:		) (Optional)
DNS Server 2:		(Optional)
MTU Size:	1420 bytes	(Optional)
V Peer		
Public Key:		
Pre-Shared Key:		) (Optional)
Allowed IPs:		)
Endpoint Address:		)
Endpoint Port:		)
Persistent Keepalive:	25	(Optional)
	CAN	CEL SAVE

- 4) Save the settings.
- 5) In the server list, enable the VPN server you need.

Server List Add or edit VPN serv	ver. Up to 6 VPN serve	rs can be added.		
				🔂 Add
Description	VPN Type	Status	ENABLE	Modify
vpn3	L2TP/IPSec	Disconnected		<u>ت</u>
vpn2	PPTP	Disconnected	$\bigcirc$	区面
vpn1	OpenVPN	Disconnected	$\bigcirc$	区面
vpn4	WireGuard	Disconnected	$\bigcirc$	C Ū

- 5. Add and manage the devices that will use the VPN function.
  - 1) In the Device List section, click Add.
  - 2) Choose and add the devices that will access the VPN server you have configured.

Add Profile		×
Description:		
VPN Type:	WireGuard	
Import from Config File:	OpenVPN	
NAT:	PPTP L2TP/IPSec	
Interface	WireGuard	
Peer		_
	CA	NCEL SAVE

6. Save the settings.

Device List							
ices that will use the VPN	function.						
			🔂 Add				
Device Name	MAC Address	VPN Access	Modify				
	FC:AA:14:55:FB:5D		一世				
My Press	86:D2:DE:B9:18:62		Ū				
	st rices that will use the VPN Device Name	Device Name       MAC Address         Image: Comparison of the temperature of the temperature of temperat	Device Name       MAC Address       VPN Access         FC:AA:14:55:FB:5D       O         86:D2:DE:B9:18:62       O				

Done! Now the devices you specified can access the VPN server you enabled.
## Chapter 16

# **Customize Your Network Settings**

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

It contains the following sections:

- <u>Change the Internet Settings</u>
- <u>Change the LAN Settings</u>
- <u>Configure to Support IPTV Service</u>
- <u>Specify DHCP Server Settings</u>
- <u>Set Up a Dynamic DNS Service Account</u>
- <u>Create Static Routes</u>

## 16.1. Change the Internet Settings

After setting up your internet, you can also easily change the internet settings if needed in the future.

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with your TP-Link ID or the password you set for the router.
- 2. Go to Advanced > Network > Internet.
- To change the internet connection settings:

Internet Connection Type:	Dynamic IP	$\sim$
IP Address:	192.168.1.3	
Subnet Mask:	255.255.255.0	
Default Gateway:	192.168.1.1	
Primary DNS:	192.168.1.1	
Secondary DNS:	0.0.0.0	
	RENEW	
	RELEASE	
Advanced Settings		
NS Address:	Get Dynamically from ISP	$\sim$
Primary DNS:	192.168.1.1	
Secondary DNS:	0.0.0.0	
MTU Size:	1500	bytes
Host Name:	ArcherBE400	

- 1. Select the internet connection type and configure the settings according to the information provided by your ISP.
- 2. (Optional) Reveal the advanced settings and change the settings if needed. It's recommended to keep the default settings.
- 3. Click SAVE.
- To change the MAC address of the router:

MAG CIONE	
Set the MAC address of your specific MAC address.	router. Use the default address unless your ISP allows internet access from o
Router MAC Address:	Use Default MAC Address
	Use Default MAC Address Clone Current Device MAC

#### You have three options:

- Use Default MAC Address Do not change the default MAC address of your router in case the ISP does not bind the assigned IP address to the MAC address.
- Clone Current Device MAC Select to copy the current MAC address of the computer that is connected to the router, in case the ISP binds the assigned IP address to the MAC address.
- Use Custom MAC Address Select if your ISP requires you to register the MAC address and enter the correct MAC address in this field, in case the ISP binds the assigned IP address to the specific MAC address.

#### To Set up 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. If you want to enable NAT, tick the checkbox, and click SAVE.

NAT		
NAT:	Enable NAT	

To change the Internet Port Negotiation Speed Setting

Internet Port Negotiation Speed Setting				
Internet Port Negotiation Speed Setting:	Auto Negotiation	~		

You can change the internet port speed mode. Auto Negotiation is recommended.

• To enable Flow Controller

With Flow Controller enabled, when a device gets overloaded it will send a PAUSE frame to notify the peer device to stop sending data for a specified period of time, thus avoiding the packet loss caused by congestion. Flow Controller is enabled by default.

Flow Controller	
With this option enabled, sending data for a specif	when a device gets overloaded it will send a PAUSE frame to notify the peer device to stop ied period of time, thus avoiding the packet loss caused by congestion.
Flow Control:	✓ RX Enabled
	TX Enabled

## 16.2. 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 <u>http://tplinkwifi.net</u>, 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.

LAN		
View and configure LAN	settings.	
MAC Address:	00-0A-EB-13-7B-00	
IP Address:	192.168.1.1	
Subnet Mask:	255.255.255.0	~

#### 4. Click SAVE.

**Note:** If you have set the Port Forwarding, 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.

## 16.3. Flow Controller

With Flow Controller enabled, when a device gets overloaded it will send a PAUSE frame to notify the peer device to stop sending data for a specified period of time, thus avoiding the packet loss caused by congestion.

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with your TP-Link ID or the password you set for the router.
- 2. Go to Advanced > Network > LAN, and locate the Flow Controller section.
- 3. Flow Controller is enabled by default. Please note that enable Flow Controller may cause internet drop with some devices.



## 16.4. 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 <u>http://tplinkwifi.net</u>, and log in with your TP-Link ID or the password you set for the router.
- 2. Go to Advanced > Network > IPTV/VLAN.
- 1. 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 and IGMP Snooping checkbox, then select the IGMP Version, either V2 or V3, as required by your ISP.

IGMP				
Check the multicast settings. It is	s recommended to keep them as default.			
GMP Proxy:	Enabled			
GMP Snooping:	Enabled			
GMP Version:	V2 ~			
Wireless Multicast Forwarding:	Enabled			

- 2) Check the Wireless Multicast Forwarding status. When enabled, the multicast packets will be forwarded automatically. You are recommended to keep it as default.
- 3) Click SAVE.

4) 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/VLAN.
- 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.

PTV/VLAN:	Enabled	
Mode:	Bridge	~
AN 1:	Internet	~
LAN 2:	Internet	~
LAN 3:	IPTV	~
AN 4	IPTV	

- 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.

### 16.5. 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 <u>http://tplinkwifi.net</u>, 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:

DHCP Server			
Dynamically assign IP add	resses to the devices connected	to the router.	
DHCP Server:	Enabled		
IP Address Pool:	192.168.0.2	- 192.168.0.253	
Address Lease Time:	120	minutes	
Default Gateway:	192.168.0.1		(Optional)
Primary DNS:			(Optional)
Secondary DNS:			(Optional)

- 1. Tick the Enable 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.

Add a Reservation Entry		×
MAC Address:		
	VIEW CONNECTED DEVICES	
IP Address:		
	CANCEL SAVE	

- 2. Click VIEW CONNECTED DEVICES and select the you device you want to reserve an IP for. Then the MAC Address will be automatically filled in. Or enter the MAC address of the client device manually.
- 3. Enter the IP address to reserve for the client device.
- 4. Click SAVE.

## 16. 6. 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 <u>http://tplinkwifi.net</u>, 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 Register Now.

Dynamic DNS				
Assign a fixed host name ( router.	domain name)	for remote acces	ss to your device, v	website, or server behind the
Serv	ice Provider:	TP-Link	·	/

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.

(domain name) for re	emote access t	to your device, website, or ser	ver behind the
vice Provider: TP.			
	-Link	$\sim$	
omain Name:			
			Registe
Registered Date	Status	Operation	Delete
	omain Name: Registered Date	Domain Name: Registered Date Status	Domain Name: Registered Date Status Operation

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

Dynamic DNS		
Assign a fixed host name (domain name router.	e) for remote access to your device, we	bsite, or server behind the
Service Provider:	NO-IP V	Register Now
Username:		
Password:	Ø	
Domain Name:		
WAN IP binding:	Enable	
Status:	Not launching	
	LOGIN AND SAVE	
	LOGOUT	

#### 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.

## 16.7. 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.

\*Image may differ from your actual product.



#### 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 <u>http://tplinkwifi.net</u>, and log in with your TP-Link ID or the password you set for Router A.
- 3. Go to Advanced > Network > Routing.
- 4. Click Add and finish the settings according to the following explanations:

Add a Routing Entry		×
Network Destination:		
Subnet Mask:		
Default Gateway:		
Interface:	- Please Select - V	
Description:		
	CANCEL SAV	E

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/WLAN should be selected.

Description: Enter a description for this static routing entry.

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

Routing Table			
View all valid routing entries t	that are currently in use.		
Active Route Number: 3			C Refresh
Network Destination	Subnet Mask	Gateway	Interface
172.30.30.1	255.255.255.255	192.168.0.2	LAN
192.168.0.0	255.255.255.0	0.0.0.0	LAN
0.0.0.0	0.0.0.0	0.0.0.0	WAN

#### Done!

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

## Chapter 17

# **Manage the Router**

This chapter will show you the configuration for managing and maintaining your router. It contains the following sections:

- <u>Update the Firmware</u>
- Backup and Restore Configuration Settings
- <u>Change the Login Password</u>
- Password Recovery
- Local Management
- <u>Remote Management</u>
- System Log
- <u>Test the Network Connectivity</u>
- <u>Set System Time</u>
- Set the Router to Reboot Regularly
- <u>Control the LED</u>

## 17.1. Update 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 new firmware available for your router. Also, the latest firmware will be released at the TP-Link official website <u>www.tp-link.com</u>, and you can download it from the <u>Support</u> page for free.

Note:

- Back up your router's configurations before firmware update.
- Do NOT turn off the router during the firmware update.

#### 17.1.1. Auto Update

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with your TP-Link ID or the password you set for the router.
- 2. Go to Advanced > System > Firmware Update.
- 3. Enable Auto Update.

Auto Update Update firmware for this	router automatically when a new version is avai	ilable.	
Auto Update:			
Current Time:	2024-06-05 11:27:33 PM		Time Settings
Update Time:	03:00 AM-05:00 AM	~	

4. Specify the Update Time and save the settings.

The router will update firmware automatically at the specified time when new version is available.

#### 17.1.2. Online Update

- 1. Visit <u>http://tplinkwifi.net</u>, 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 of will display in the top-right corner of the page. Click the icon to go to the Firmware Update page.

Alternatively, you can go to Advanced > System > Firmware Update, and click CHECK FOR UPDATES to see whether the latest firmware is released.

3. Focus on the Online Update section, and click UPDATE if there is new firmware.

Online Update		
Update firmware for this router over the	internet.	
Firmware Version:		
Hardware Version:		
	CHECK FOR UPDATES	

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

**V** Tips: If there's a new and important firmware update for your router, you will see the prompt notification on your computer as long as a web browser is opened. Click to update, and log in to the web management page with the username and password you set for the router. You will see the Firmware Update page.

#### 17.1.3. Local Update

- 1. Download the latest firmware file for the router from www.tp-link.com.
- 2. Visit <u>http://tplinkwifi.net</u>, and log in with your TP-Link ID or the password you set for the router.
- 3. Go to Advanced > System > Firmware Update.
- 4. Focus on the Local Update section. Click UPLOAD to locate the downloaded new firmware file, and click UPDATE.

Local Update		
Update firmware for this router from	a local file.	
New Firmware File:	t UPLOAD	
	UPDATE	

5. Wait a few minutes for the update and reboot to complete.

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

#### 17.1.4. EasyMesh Satellite Update

EasyMesh Satellite Update allows you to remotely check and update the firmware of the satellite devices connected to this router via EasyMesh.

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with your TP-Link ID or the password you set for the router.
- 2. Go to Advanced > System > Firmware Update, and locate the EasyMesh Satellite Update section.

3. The router's satellite devices will appear on the table. Click CHECK FOR UPDATES to see whether the latest firmware is released. If you want to update a satellite device, click <sup>①</sup> on the right of the corresponding device.

Note: The update will take a few minutes and the satellite router will reboot.

Туре	Device Name	Model	Firmware Version	Latest Firmware Version	Update
□.•	My RE3	Archer RE60 00XD	1.0.0 Build 20230110 rel .15178	1.0.1 Build 20230404 rel .15864 What's New	Û

## 17.2. 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 <u>http://tplinkwifi.net</u>, 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 BACK UP 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.

Backup		
Save current router settings to a file.		
	BACK UP	

- To restore configuration settings:
- 1. Click UPLOAD to locate the backup configuration file stored on your computer, and click RESTORE.

Restore	
Restore settings from a backup file.	
File:	亡 UPLOAD
	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. In the Factory Default Restore section, click RESTORE.

Factory Default Restore				
Restore all settings to default values.				
Restore all configuration settings to default values, except your login and cloud account information.				
	RESTORE			

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.

## 17.3. 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 Advanced > TP-Link ID.

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with the password you set for the router.
- 2. Go to Advanced > System > Administration and focus on the Change Password section.

Change Password	iord
	ord.
Old Password:	Ø
New Password:	Ø
Confirm New Password:	ø

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

## 17.4. Password Recovery

This feature allows you to recover the login password you set for you router in case you forget it.

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

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with the password you set for the router.
- 2. Go to Advanced > System > Administration and focus on the Password Recovery section.
- 3. Tick the Enable box of Password Recovery.
- 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, Tick the Enable box of 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.
- Generally, Authentication should be enabled if the login of the mailbox requires username and password.

Password Recovery Reset local management password via preset questions and answers.				
Password Recovery:	Enabled			
From:				
To:				
SMTP Server:				
Authentication:	Enabled			
Username:				
Password:	Ø			

#### 5. Click SAVE.

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

### 17.5. 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 <u>http://tplinkwifi.net</u>, and log in with your TP-Link ID or the password you set for the router.
- 2. Go to Advanced > System > Administration and complete the settings In Local Management section as needed.
- Access the router via HTTPS and HTTP:

Tick the Enable box of Local Management via HTTPS to access the router via HTTPS and HTTP, or keep it disabled to access the router only via HTTP.

Local Management	
Access and manage the router from loca	l network devices.
Local Management via HTTPS:	Enable

• Allow all LAN connected devices to manage the router:

Select All Devices for Local Management.

Local Management			
Access and manage the router fro	m local network devices.		
Local Management via HTTPS:	Enabled		
Local Managers:	All Devices	~	

- Allow specific devices to manage the router:
- 1. Select Specific Devices for Local Management and click SAVE.

Local Management Access and manage the router from local network devices.				
Local Management via HTTPS:	Enabled			
Local Managers:	Specified Devices			
		Add Device		
Description	MAC Address	Modify		
There is no entry!				

2. Click Add Device.

Add Device	×
Description:	(Optional)
	VIEW CONNECTED DEVICES
MAC Address:	
	CANCEL SAVE

- 3. Click VIEW CONNECTED DEVICES and select the device to manage the router from the Connected Devices list, or enter the MAC address of the device manually.
- 4. Specify a Description for this entry.
- 5. Click SAVE.

## 17.6. Remote Management

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

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

- 2. Go to Advanced > System > Administration and complete the settings in Remote Management section as needed.
- Forbid all devices to manage the router remotely:

Do not tick the Enable checkbox of Remote Management.

• Allow all devices to manage the router remotely:

Access and manage the router of	ver the internet.
Note: Remote Management is no use Remote Management, please	t supported when you are connected to the internet only via IPv6. If you wa a make sure you have set up an IPv4 connection first.
Remote Management:	Enabled
HTTPS Port:	443
Veb Address for Management:	https://10.160.53.49:443

- 1. Tick the Enable checkbox of Remote Management.
- 2. Keep the HTTPS port as default settings (recommended) or enter a value between 1024 and 65535.
- 3. Select All Devices for Remote Management.
- 4. Click SAVE.

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

Ø Tips:

- You can find the WAN IP address of the router on Network Map > Internet.
- The router's WAN IP is usually a dynamic IP. Please refer to <u>Set Up a Dynamic DNS Service Account</u> if you want to log in to the router through a domain name.
- Allow a specific device to manage the router remotely:

Remote Management Access and manage the router ov	er the internet.	
Note: Remote Management is not use Remote Management, please	t supported when you are connected to the inte make sure you have set up an IPv4 connectio	ernet only via IPv6. If you want to n first.
Remote Management:	Enabled	
HTTPS Port:	443	
Web Address for Management:	https://192.168.1.3:443	
Remote Managers:	Specified Device ~	
Only this IP Address:		

- 1. Tick the Enable checkbox of Remote Management.
- 2. Keep the HTTPS and HTTP port as default settings (recommended) or enter a value between 1024 and 65535.
- 3. Select Specified Device for Remote Management.
- 4. In the Only this IP Address field, enter the IP address of the remote device to manage the router.
- 5. Click SAVE.

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

Tips: The router's WAN IP is usually a dynamic IP. Please refer to <u>Set Up a Dynamic DNS Service Account</u> if you want to log in to the router through a domain name.

## 17.7. 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 <u>http://tplinkwifi.net</u>, and log in your TP-Link ID or the password you set for the router.
- 2. Go to Advanced > System > System Log.
- 3. Choose the type and level of the system logs as needed.

View a deta	ailed record of system ad	tivities.		
	Current T	ime:		
Log Type:	All	~		
Search		Q	🗘 Refresh	olear Al
2020-0	7-13 18:56:59 IP & MAC	Binding INFO [10144] ARP Bin	ding enabled	
2020-0	7-13 18:56:54 Access C	ontrol INFO [9777] Service start	abled	
2020-0	7-13 18:56:54 Access C	ontrol INFO [9777] Service stop		
2020-0	7-13 18:56:20 Access C	ontrol INFO [8319] Service start		
2020-0	7-13 18:56:20 Access C	ontrol NOTICE [8319] Flush con	intrack table succeeded	
2020-0	7-13 18:56:20 Access C	ontrol INFO [8319] Function ena	abled	
2020-0	7-13 18:56:19 Access C	ontrol INFO [8319] Service stop		
2020-0	7-13 18:54:35 QOS INFO	2 [3431] Service start		
2020-0	7-13 18.54.32 Q05 INF0	[3431] Function enabled		
2020-0	7-13 18:54:32 OoS INE(	1 [3/[31] Service ston		

4. In the Save Log section, click SAVE TO LOCAL to save the system logs to a local disk.

Save Log	
Send system log to a specific email addr	ress or save locally.
	MAIL LOG
	SAVE TO LOCAL

• 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 <u>http://tplinkwifi.net</u>, 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. In the Save Log section, click MAIL LOG.
- 4. Enter the information required:

Mail Log		×
Note: Set your mail information	on below.	
Email From:		
	Require Password	
Username:		
Email Password:	Ø	
SMTP Server:		
Email To:		
	Mail Log Automatically	
Frequency:	Every Day 🗸	
Mail Time:	00 ~ 00 ~	
	CANCEL	

- 1) Email From: Enter the email address used for sending the system log.
- 2) Select Require Password.

Tips: Generally, Require Password should be selected if the login of the mailbox requires username and password.

- 3) Username: Enter the email address used for sending the system log.
- 4) Email Password: Enter the password to login the sender's email address.
- 5) SMTP Server: Enter the SMTP server address.

- 6) Email To: Enter the recipient's email address, which can be the same as or different from the sender's email address.
- 7) Select Mail Log Automatically.

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

8) Frequency: This determines how often the recipient will receive the system log.

```
5. Click SAVE.
```

## 17.8. Test the Network Connectivity

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

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

Diagnostics		
Froubleshoot network connectiv	ity problems.	
Diagnostics Tools:	Ping	~
P Address/Domain Name:		
Ping Count:	4	
Ping Packet Size:	64	Bytes
	s	START

- 3. Enter the information:
  - 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.

- 3) Modify the Ping Count number and the Ping Packet Size. It's recommended to keep the default value.
- 4) If you have chosen Traceroute, you can modify the Traceroute Max TTL. It's recommended to keep the default value.
- 4. Click START to begin the diagnostics.

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.

```
traceroute to 192.168.0.1, 5 hops max, 38 byte packets
1 Archer (192.168.0.1) 0.045 ms 0.015 ms 0.008 ms
Trace Complete.
traceroute is stopped.
```

## 17.9. Set 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 <u>http://tplinkwifi.net</u>, and log in with your TP-Link ID or the password you set for the router.
- 2. Go to Advanced > System > Time .

#### • To get time from the internet:

1. Enable 24-Hour Time if you want the time to display in a 24-hour way.

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

System Time		
Set the router's system time	e.	
Current Time:	2024-06-06 22:28:21	
24-Hour Time:		
Set Time:	Get from Internet	~
Time Zone:	(UTC-10:00) Hawaii	~
NTP Server I:	us.pool.ntp.org	
NTP Server II:	north-america.pool.ntp.org	(Optional)

- 3. Select your local Time Zone from the drop-down list.
- 4. In the NTP Server I field, enter the IP address or domain name of your desired NTP Server.
- 5. (Optional) In the NTP Server II field, enter the IP address or domain name of the second NTP Server.
- 6. Click SAVE.
- To get time from your computer:
- 1. In the Set Time field, select Get from Managing Device.

System Time		
Set the router's system tin	ie.	
Current Time:	2024-06-06 22:27:37	
24-Hour Time:		
Set Time:	Get from Managing Device	
Time Zone:	(UTC-10:00) Hawaii	~

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.

System Time		
Set the router's system til	ne.	
Current Time:	2024-06-06 22:30:17	
24 Hour Time:		
24-nour nine.		
Set Time:	Manually ~	
Time Zone:	(UTC-10:00) Hawaii	~
Date:	2024/06/06	
Time:		
inity.		

- 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 Daylight Saving Time:
- 1. Tick the Enable box of Daylight Saving Time.

Automatically synchronize the	system time with daylight	saving time.		
Daylight Saving Time:	Enabled			
Start: 2024	Mar	~	2nd	~
	Sun	~	02:00 AM	~
End: 2024	Nov	~	First	~
	Sun	~	02:00 AM	~
Running Status:	Daylight Saving Time	e is off.		

- 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.

### 17. 10. Set the Router to Reboot Regularly

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

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

Reboot Schedule	
Set when and how often the ro	uter reboots automatically.
Reboot Schedule:	Enabled
Note: Before using this feature	, make sure System Time is set to "Get from Internet".
Reboot Time:	3 ~ : 00 ~ AM ~
Repeat:	Every Week ~
	Monday

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

## 17.11. 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 <u>http://tplinkwifi.net</u>, and log in with your TP-Link ID or the password you set for the router.
- 2. Go to Advanced > System > LED Control.
- 3. Enable Night Mode.
- 4. Specify the LED off time, and the LED will be off during this period every day.
- 5. Click SAVE.

LED Control	
Turn the router's LEDs on or off.	
LED Status:	
Note: TP-Link satellite routers will f	ollow the main router's LED Control Settings.
Night Mode	
Set a time period when the LEDs w	ill be off automatically.
Night Mode:	Enabled
Note: Before using this feature, ma	ke sure System Time is set to "Get from Internet".
Current Time:	2024-06-06 22:29:30
LED Off From:	23 ~ . 00 ~
To:	7 ~ . (next day)

# 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 <u>http://tplinkwifi.net</u>, and log in with your TP-Link ID or the password you set for the router.
- 3. Go to 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 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 blinks to restore factory default settings, and then visit <u>http://tplinkwifi.net</u> to create a new login password.

#### Note:

- Please refer to 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 <a href="http://tplinkwifi.net">http://192.168.0.1</a> 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.

cherar poc	curity	Privacy	Content	Connections	Programs	Advanced
N Se	o set up etup.	an Inter	net connec	tion, click	Set	up
Dial-up and	Virtua	Private N	Network se	ttings		13
🎒 Bro	adbar	nd Conn	ection		Add	ł
					Add V	'PN
					Remo	ve
Choose Server for	ettings a conr	if you nee lection.	ed to config	gure a proxy	Sett	ings
Never	dial a (	connection	n			
🔘 Dial w	heneve	r a netwo	ork connect	tion is not pres	ent	
Alway	s dial m	y default	connection	ı		
Curren	1	None			Set de	efault
Local Area	Netwo	rk (LAN) s	settings —			
LAN Setti Choose S	ngs do ettings	not apply above fo	r to dial-up r dial-up se	connections. ettings.	LAN se	ttings

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

use of manua	ntiguration may override manual settings. To ensure th I settings, disable automatic configuration.
Automatic	ally detect settings
Use autor	natic configuration script
Address	
Proxy server	
Use a pro dial-up or	ky server for your LAN (These settings will not apply to VPN connections).
Address	Port: 80 Advanced
Address;	

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

🚯 Internet Properti	es				? <b>x</b>
General Security	Privacy	Content	Connections	Programs	Advanced
Settings					
Accessibilit Alway Enable Move Reset Reset Browsing Autom Close Disable Disable	ty s expand c Caret Br system ca text size text size zoom leve atically re unused for a script de s script de y a notific	ALT text fr owsing for rret with fo to medium to medium to medium el for new v cover fron lders in His sbugging (I sbugging (I sbugging (C ation abou	or images new windows a cus/selection d for new window while zooming* windows and ta n page layout e story and Favor internet Explore Other) t every script e	and tabs manges vs and tabs bs rrors with Co ites* er) rror	ompa
<ul> <li>✓ Displat</li> </ul>	/ Accelera	III	on selection		•
*Takes effect a	after you	restart Int	ernet Explorer		
			Restore	advanced s	ettings
Reset Internet Exp	plorer set	tings			
Resets Internet condition.	Explorer	s settings	to their default	Rese Isable state	et
				ncel	Apply

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

#### 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 is a safe and public DNS server operated by Google.

Dynamically assign IP addres	sses to the devices connected t	o the router.	
DHCP Server:	Enabled		
P Address Pool:	192.168.1.100	- 192.168.1.249	
Address Lease Time:	120	minutes	
Default Gateway:	192.168.1.1		(Optional)
Primary DNS:			(Optional)
Secondary DNS:			(Optional)

- 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:

Status Internet status overview is displaye	ed on this page.
Internet	
Status:	Connected
Internet Connection Type:	Dynamic IP
IP Address:	192
Subnet Mask:	255.255.255.0
Default Gateway:	192
Primary DNS:	192.168.0.1

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

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

MAC Clone		
Set the MAC address of your specific MAC address.	router. Use the default address unless your ISP allows internet access from	only a
Router MAC Address:	Use Default MAC Address	
	Use Default MAC Address	
	Clone Current Device MAC	
	Use Custom MAC Address	

#### Ø 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 <u>http://tplinkwifi.net</u>, 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.

LAN		
View and configure LAN	settings.	
MAC Address:	00-0A-EB-13-7B-00	
IP Address:	192.168.1.1	
Subnet Mask:	255.255.255.0	~

• 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 <u>http://tplinkwifi.net</u>, 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.

Internet Connection Type:	Dynamic IP V
IP Address:	Dynamic IP
Subpot Mack:	PPPoE
Subnet Mask.	Transix
Default Gateway:	Xpass
Primary DNS:	v6 Connect
Secondary DNS:	OCN Virtual Connect
	RENEW
	RELEASE

- 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 Wireless or 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:
  - 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.
# CE Mark Warning

# CE

# **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, 2011/65/EU and (EU)2015/863.

The original EU Declaration of Conformity may be found at https://www.tp-link.com/en/support/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.

# **National Restrictions**

#### Frequency band: 5150 - 5250 MHz:

Indoor use: Inside buildings only. Installations and use inside road vehicles and train carriages are not permitted. Limited outdoor use: If used outdoors, equipment shall not be attached to a fixed installation or to the external body of road vehicles, a fixed infrastructure or a fixed outdoor antenna. Use by unmanned aircraft systems (UAS) is limited to within the 5170 - 5250 MHz band.

#### Frequency band: 5250 - 5350 MHz:

Indoor use: Inside buildings only. Installations and use in road vehicles, trains and aircraft are not permitted. Outdoor use is not permitted.

#### Frequency band: 5470 - 5725 MHz:

Installations and use in road vehicles, trains and aircraft and use for unmanned aircraft systems (UAS) are not permitted.

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

#### UKCA Mark UK CA

# **UK Declaration of Conformity**

TP-Link hereby declares that the device is in compliance with the essential requirements and other relevant provisions of the Radio Equipment Regulations 2017.

The original UK Declaration of Conformity may be found at https://www.tp-link.com/support/ukca

# **National Restrictions**

Attention: This device may only be used indoors in Great Britain.



# Korea Warning Statements:

당해 무선설비는 운용중 전파혼신 가능성이 있음.



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

EHC

#### **Safety Information**

- Keep the device away from water, fire, humidity or hot environments.
- Do not attempt to disassemble, repair, or modify the device. If you need service, please contact us.
- 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.
- Operating Temperature: 0°C ~ 40°C (32°F ~ 104°F)
- This product uses radios and other components that emit electromagnetic fields. Electromagnetic fields and magnets may interfere with pacemakers and other implanted medical devices. Always keep the product and its power adapter more than 15 cm (6 inches) away from any pacemakers or other implanted medical devices. If you suspect your product is interfering with your pacemaker or any other implanted medical device, turn off your product and consult your physician for information specific to your medical device.

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.

#### Explanations of the symbols on the product label

Note: The product label can be found at the bottom of the product and its I.T.E. power supply. Symbols may vary from products.

Symbol	Explanation
	Class II equipment
Ē	Class II equipment with functional earthing
$\sim$	Alternating current
	Direct current
♦€♦	Polarity of d.c. power connector
	For indoor use only
4	Dangerous voltage

Symbol	Explanation
A.	Caution, risk of electric shock
VI	Energy efficiency Marking
	Protective earth
Ţ	Earth
$\rightarrow$	Frame or chassis
ŧ	Functional earthing
	Caution, hot surface
$\underline{\wedge}$	Caution
	Operator's manual
(	Stand-by
	"ON"/"OFF" (push-push)
-	Fuse
- <u>-</u> N	Fuse is used in neutral N
	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.
Refer	Caution, avoid listening at high volume levels for long periods
	Disconnection, all power plugs
m	Switch of mini-gap construction

Symbol	Explanation
μ	Switch of micro-gap construction (for US version) Switch of micro-gap / micro-disconnection construction (for other versions except US)
3	Switch without contact gap (Semiconductor switching device)