

User Guide

Wi-Fi 6 Portable Router TL-WR1502X

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About This Guide

This guide is a complement to Quick Installation Guide. The Quick Installation Guide provides instructions for quick internet setup, while this guide contains details of each function and demonstrates how to configure them.

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

Conventions

In this guide the following conventions are used:

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

Speed/Coverage Disclaimer

*Maximum wireless signal rates are the physical rates derived from IEEE Standard 802.11 specifications. Actual wireless data throughput, wireless coverage and number of connected devices are not guaranteed and will vary as a result of network conditions, client limitations, and environmental factors, including building materials, obstacles, volume and density of traffic, and client location.

*Use of 802.11ax (Wi-Fi 6) and its features require clients to also support corresponding features. Actual power reduction by Target Wake Time may vary as a result of network conditions, client limitations, and environmental factors.

*The 802.11ax white paper defines standardized modifications to both the IEEE 802.11 physical layers (PHY) and the IEEE 802.11 Medium Access Control (MAC) layer as enabling at least one mode of operation capable of supporting improvement of at least four times the average throughput per station (measured at the MAC data service access point) in a dense deployment scenario.

* It is recommended to use the supplied power adapter. If you use other power adapters, there is a risk of damaging the device.

*Whether the USB Internet Sharing function can be used depends on the compatibility of the 3/4G USB Modem or mobile device, and is not guaranteed to be compatible with all devices.

*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.

More Info

The latest software, management app and utility are available from the Download Center at <u>https://www.tp-link.com/support</u>.

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>.

A TP-Link Community is provided for you to discuss our products at <u>https://community.tp-link.com</u>.

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

Chapter 1

Get to Know About Your Router

This chapter introduces what the router can do and shows its appearance. It contains the following sections:

- Product Overview
- <u>Appearance</u>

1.1. Product Overview

To meet the wireless needs of almost any situation you might encounter, the TP-Link portable router, with multiple operating modes, is designed for home and travel use. The portable size of the router means that you can put it in your pocket and take it with you wherever you go. The built-in adapter makes it perfect for travelers, students, and anyone else living life on the go.

1.2. Appearance



LED Explanation

Status	Indication
Blinking Blue	 The router is starting up / being upgraded / establishing the WPS connection. The router is switching modes and will reboot.
Solid Blue	The router is connected to the internet or the main network, or the WPS connection is successfully established.
Solid Red	The router has started up but is disconnected from the internet.
Blinking Red	The router is being reset. Do not power off your router.



Button Description

Item	Description
Mode Switch	This switch is used to change the operation mode of the router. Note: If you toggle this switch accidentally, set it back to the original mode within 3 seconds. The mode of the router won't change.
WPS/Reset Button	 Press the button for 1 second and immediately press the WPS button on your client to start the WPS process. Press and hold the button for about 6 seconds until the LED blinks red to reset the router to its factory default settings.

Port Description

Item	Description
Power Port	This port is used to connect the USB-C charger provided in the package.
3G/4G USB Port	 Use this USB 2.0 port to connect your 3G/4G USB modem, mobile device, or USB storage device to the router. Your mobile device can be charged when it is connected to the powered-on router via the USB port (5 V/0.5 A).
1 Gbps LAN Port	For connecting your PC or other wired devices to the router
1 Gbps WAN Port	 In Router / 3G/4G USB Modem / USB Tethering mode, it functions as a WAN port. In Hotspot / Access Point / Range Extender / Client mode, it functions as a LAN port.

Chapter 2

Connect the Hardware

This chapter contains the following sections:

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

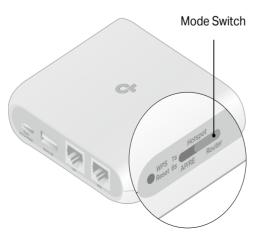
2.1. Position Your Router

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

2.2. Connect Your Router

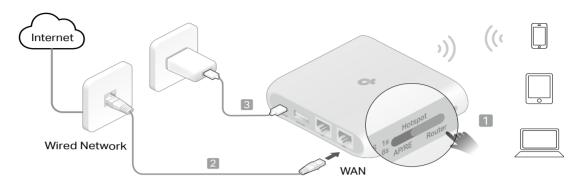
The router supports the following modes: Router, USB Internet (3G/4G USB Modem and USB Tethering), Hotspot, Access Point, Range Extender, and Client. Refer to the scenarios below to determine an appropriate network mode, and carry out the corresponding steps.

-	Mode Switch	Network Mode	Recommended Scenarios	I Want to	Requirements
		Router (Default Mode)		Share the internet with more wireless devices when the wired network is limited to one device at a time.	An existing wired network provided by a modem or other network device.
	Router	3G/4G USB Modem	During Travel (e.g., hotel, airport, cafe, cruise ship, RV, camp, etc.)	Share a 3G/4G USB modern's data with other devices.	A 3G/4G USB modem (with a SIM card inserted).
	OD -	USB Tethering		Share a mobile device's cellular data with other devices.	 A mobile device (with a SIM card inserted). A USB cable.
	Høtspot	Hotspot		Turn an existing public Wi-Fi into a private network (wired and wireless).	A public Wi-Fi.
	AP/RE	Access Point		Turn an existing wired-only network into a wireless network.	An existing wired network provided by a router, switch, etc.
		Range Extender	At Home (e.g., home, office, etc.)	Expand an existing Wi-Fi network for better Wi-Fi coverage.	An existing Wi-Fi network.
		Client		Connect a wired-only device, such as a smart TV, media player, or game console, to a Wi-Fi network.	An existing Wi-Fi network.



2. 2. 1. Router Mode (Default)

Shares the internet with more wireless devices when the wired network is limited to one device at a time. Suitable for hotel rooms and home networks.



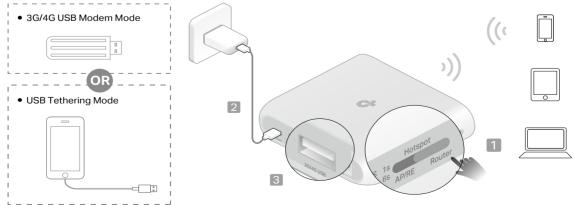
- 1. Set the Mode Switch to Router.
- 2. Connect the router's WAN port to the existing wired network with an Ethernet cable.
- 3. Power on the router.
- 4. Wait until the router's LED turns solid (blue or red) before moving on.
- 5. Connect your device to the router (wireless or wired).
- Wireless: Connect your device to the router's Wi-Fi. The default wireless network names (SSIDs) and wireless password are printed on both the Wi-Fi info card and the label at the bottom of the router.
- Wired: Turn off the Wi-Fi on your device and connect to the LAN port of the router with an Ethernet cable.

6. Go to <u>Set Up Internet Connection</u> to complete the setup.

Note: If the hotel's internet has an authentication process, you will need to authenticate only once and only on one device.

2. 2. 2. 3G/4G USB Modem / USB Tethering Mode

In 3G/4G USB Modem mode, the router shares a 3G/4G USB modem's data with other devices. And in USB Tethering mode, the router shares a mobile device's cellular data with other devices. The two modes are suitable for travel.



- 1. Set the Mode Switch to Router.
- 2. Power on the router.
- 3. Wait until the router's LED turns solid (blue or red), which indicates that the router has started up, and then connect the router's 3G/4G USB port to your USB modem or mobile device.
- 4. Connect your device to the router (wireless or wired).
- Wireless: Connect your device to the router's Wi-Fi. The default wireless network names (SSIDs) and wireless password are printed on both the Wi-Fi info card and the label at the bottom of the router.

Note: When USB tethering, avoid connecting the tethered mobile device to the router's Wi-Fi.

- Wired: Turn off the Wi-Fi on your device and connect to the LAN port of the router with an Ethernet cable.
- 5. Go to Set Up Internet Connection to complete the setup.

2. 2. 3. Hotspot Mode

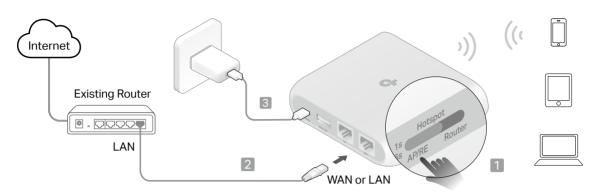
Turns an existing public Wi-Fi into a private network (wired and wireless). Suitable for travel.



- 1. Set the Mode Switch to Hotspot.
- 2. Power on the router.
- 3. Wait until the router's LED turns solid red before moving on.
- 4. Connect your device to the router (wireless or wired).
- Wireless: Connect your device to the router's Wi-Fi. The default wireless network names (SSIDs) and wireless password are printed on both the Wi-Fi info card and the label at the bottom of the router.
- Wired: Turn off the Wi-Fi on your device and connect to the WAN or LAN of the router with an Ethernet cable.
- 5. Go to <u>Set Up Internet Connection</u> to complete the setup.

2.2.4. **Access Point Mode**

Turns an existing wired-only network into a wireless network. Suitable for dorm rooms or homes where there's already a wired router but you need a wireless network.



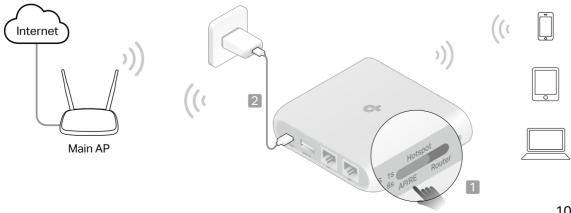
- 1. Set the Mode Switch to AP/RE.
- 2. Connect the router's WAN or LAN port to the existing router with an Ethernet cable.
- 3. Power on the router.
- 4. Wait until the router's LED turns solid (blue or red) before moving on.
- 5. Connect your device to the router (wireless or wired).
- Wireless: Connect your device to the router's Wi-Fi. The default wireless network names (SSIDs) and wireless password are printed on both the Wi-Fi info card and the label at the bottom of the router.
- Wired: Turn off the Wi-Fi on your device and connect to the WAN or LAN port of the router with an Ethernet cable.

Note: If the hotel's internet has an authentication process, you will need to authenticate it on EACH device.

6. Go to Set Up Internet Connection to complete the setup.

2.2.5. **Range Extender Mode**

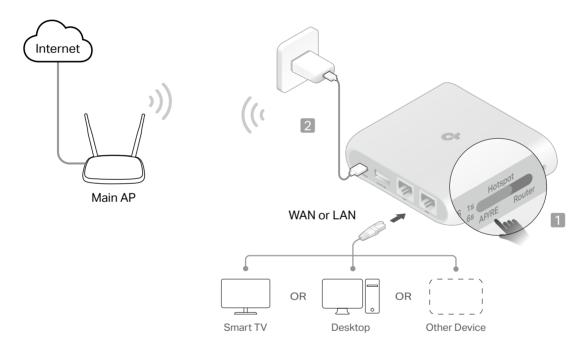
Repeats signal from an existing wireless network. Suitable to extend wireless coverage, reaching devices that were previously too far from your primary router to maintain a stable wireless connection.



- 1. Set the Mode Switch to AP/RE.
- 2. Power on the router near your main AP.
- 3. Wait until the router's LED turns into solid red before moving on.
- 4. Connect your device to the router (wireless or wired).
- Wireless: Connect your device to the router's Wi-Fi. The default wireless network names (SSIDs) and wireless password are printed on both the Wi-Fi info card and the label at the bottom of the router.
- Wired: Turn off the Wi-Fi on your device and connect to the WAN or LAN port of the router with an Ethernet cable.
- 5. Go to <u>Set Up Internet Connection</u> to complete the setup.

2. 2. 6. Client Mode

Acting as an adapter, the router in Client mode connects a wired-only device, such as a smart TV, media player, or game console, to a Wi-Fi network.



- 1. Set the Mode Switch to AP/RE.
- 2. Power on the router near your main AP.
- 3. Wait until the router's LED turns into solid red before moving on.
- 4. Connect a computer to the WAN or LAN port of the router with an Ethernet cable.

Note: In Client mode, you can only connect your devices to the router through a wired connection.

5. Go to <u>Set Up Internet Connection</u> to complete the setup.

Chapter 3

Set Up Internet Connection

This chapter guides you how to set up Internet connection via Tether app or the router's web management page. It contains the following sections:

- Set up via Tether
- Set up via the Web Management Page

3.1. Set up via Tether

Note:

1. The router in Client mode can't be managed by Tether. Please set it up using the web management page.

2. Due to Tether app updates, your actual user interface and pathway may differ from those depicted here.

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 Portable Router. Follow the steps to complete the setup and connect to the internet.
- 4. Connect your devices to the newly configured network of the router and enjoy the internet!

3. 2. Set up via the Web Management Page

3. 2. 1. Log in to the Router

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

- 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.

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

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

3. 2. 2. Configure the Router

The Quick Setup Wizard will guide you through the process to set up your router. Follow the step-by-step instructions to complete Quick Setup or go to Advanced > Quick Setup, and follow the instructions to connect your router to the internet.

Router Mode

1. Start the Quick Setup, make sure the operation mode is Router/USB Internet, and click NEXT.



2. Select Router as your network mode, and click NEXT.

Select your network mode	
Router (Current)	
Share the internet connection from an Ethernet cab	le.
○ 3G/4G USB Modem	
O USB Tethering	
ВАСК	NEXT

3. Follow the step-by-step instructions to set up the internet connection, and enjoy the internet.

Note:

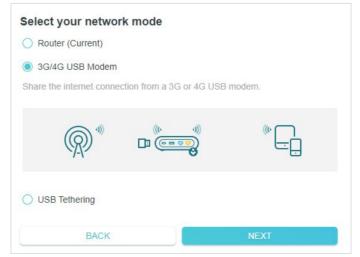
• If you have changed the preset wireless network name (SSID) and wireless password during the Quick Setup, all your wireless devices must use the new SSID and password to connect to the router.

3G/4G USB Modem /USB Tethering Mode

1. Start the Quick Setup, make sure the operation mode is Router/USB Internet, and click NEXT.



- 2. Select your desired network mode, and click NEXT.
 - If you are sharing a 3G/4G USB modem's data, select 3G/4G USB Modem.



• If you are sharing a mobile device's data, select USB Tethering.

Select your network mode
O Router (Current)
◯ 3G/4G USB Modem
USB Tethering
Share the internet connection from your mobile device with a USB cable.
BACK

3. Follow the step-by-step instructions to set up the internet connection, and enjoy the internet.

Note:

• If you have changed the preset wireless network name (SSID) and wireless password during the Quick Setup, all your wireless devices must use the new SSID and password to connect to the router.

Hotspot Mode

1. Start the Quick Setup, make sure the operation mode is Hotspot, and click NEXT.



2. Follow the step-by-step instructions to set up the internet connection, and enjoy the

internet.

Note:

- If the public hotspot requires a Captive Portal Authentication, complete the authentication during the Quick Setup before you can access the network.
- If you have changed the preset wireless network name (SSID) and wireless password during the Quick Setup, all your wireless devices must use the new SSID and password to connect to the router.

Access Point Mode

1. Start the Quick Setup, make sure the operation mode is AP/RE/Client, and click NEXT.

AP/RE/Client (Co Access Point: Ch Recommended at	ange an existing wired (Ethernet) netwo	ork into a wireless one.
<		») (* <mark> ></mark>

2. Select Access Point as your network mode, and click NEXT.

Select your network mode	
Access Point (Current)	
Change an existing wired (Ethernet) network into a wireles Recommended at home.	s one.
	()
Range ExtenderClient	
BACK	IEXT

3. Follow the step-by-step instructions to set up the internet connection, and enjoy the internet.

Note:

• If you have changed the preset wireless network name (SSID) and wireless password during the Quick Setup, all your wireless devices must use the new SSID and password to connect to the router.

Range Extender Mode

1. Start the Quick Setup, make sure the operation mode is AP/RE/Client, and click NEXT.



2. Select Range Extender as your network mode, and click NEXT.

Select your network mode		
Access Point (Current)		
Range Extender		
Extend the range of an existing Wi-Fi. R	ecommended at home.	
	((· -1)) ((· -1)) ((· -1))	()
Client		
ВАСК	NEXT	

3. Follow the step-by-step instructions to set up the internet connection.

Note:

- You can either copy or customize your extended network names during the Quick Setup. The extended networks share the same Wi-Fi password as that of your main network.
- 4. Relocate the router about halfway between your main AP and the Wi-Fi dead zone, and enjoy the internet.

Client Mode

1. Start the Quick Setup, make sure the operation mode is AP/RE/Client, and click NEXT.

AP/RE/Client (Cu Access Point: Cha Recommended at	nge an existing wired (Ethernet) network into a wireless one.
<	

2. Select Client as your network mode, and click NEXT.

Select your network mode	
Access Point (Current)	
Range Extender	
Client	
Act as a "Wireless Adapter" to connect y smart TV) to existing Wi-Fi. Recommend Note: The client device's wireless netwo the router's management interface throu	ded at home. rk will be turned off, you need to access
*)) •))	
BACK	NEXT

- 3. Follow the step-by-step instructions to set up the internet connection.
- 4. After the setup, connect your wired-only device like smart TV, game console or media player to the WAN or LAN port via an Ethernet cable to enjoy the internet.

Chapter 4

Configure the Router in Router/USB Internet Mode

This chapter presents how to configure the various features of the router working in Router mode, 3G/4G USB Modem mode, and USB Tethering mode.

It contains the following sections:

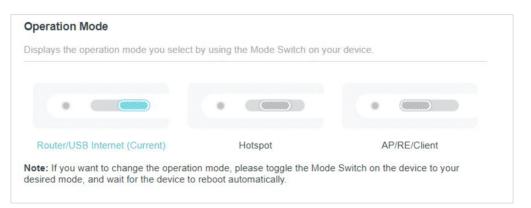
- Operation Mode
- Network Map
- <u>Network</u>
- TP-Link Cloud Service
- <u>Wireless</u>
- USB Storage Device
- <u>NAT Forwarding</u>
- Parental Controls
- <u>QoS</u>

- Security
- <u>VPN Server&Client</u>
- <u>IPv6</u>
- System

4.1. Operation Mode

- 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.
- To view the router's current mode:

Locate the Operation Mode section. The router's current operation mode is highlighted.



Locate the Connection Settings section. The router's current network mode is highlighted.

Connection Settings	
Select a network mode based on how yo	ur internet is provided,and set it up.
Network Mode:	Router (Current)
	Share the internet connection from an Ethernet cable
	◯ 3G/4G USB Modem
	O USB Tethering

To change the router's network mode:

Figure out whether the Mode Switch needs to be set in order to change the router's network mode.

If yes, follow these steps:

- 1. Set the Mode Switch to your desired mode and wait 2 minutes for the router to reboot automatically.
- 2. Refer to <u>Connect the Hardware</u>, and follow the instructions of your desired mode to set the router up.

If no, follow these steps:

1. Refer to <u>Connect the Hardware</u>, and follow the instructions of your desired mode to connect the router properly.

2. Log in to the web management page of the router and go to Internet > Connection Settings. Select your desired network mode, configure the parameters, and click SAVE.

4.2. 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.

() -	Ц		
Internet Internet Status			Clients

• Click the router to check device status and network settings. You can turn on or off the wireless network or guest network, or click Edit to change related settings.

Internet			
Router Information			
Device Name:		IPv4 LAN IP:	192.168.0.
LAN MAC Address:	D8-44-89-CC-A5-54	IPv6 LAN IP:	FE80::DA44:89FF:FECC:A5: 4/6
Wireless			🕑 Ed
2.4GHz Wireless:		5GHz Wireless:	
Network Name (SSID):	TP-Link_portable	Network Name (SSID):	TP-Link_portable_50
Password:	12345678	Password:	1234567
Channel:	Auto (Current: 5)	Channel:	Auto (Current: 149

Guest Network			🗹 Edit
2.4GHz Wireless: Network Name (SSID):	TP-Link_Guest_A554	5GHz Wireless: Network Name (SSID):	TP-Link_Guest_A554_5G
Performance			
CPU Load	Current: 40%	Memory Usage	Current: 48%
Ethernet Status			
Internet LAN 1000Mbps Full Duplex			

• Click Clients to view the client devices in your network. You can block devices so they cannot access your network.

	ternet		2.46 50 ⇒ €			ents
All (2) Connect	ved Clients	•			Vi	ew Deny List
Туре	Information	Real-time Rate	Interface	Tx/Rx Rate(Mbps)	Duration	Block
_	18503634-BG 40-ED-00-22-30-74 192.168.0.45	↑ 24.3 Kb/s ↓ 41.8 Kb/s	(<u></u>)		10 min	\otimes
	network device 💉 FA-8D-A8-FD-2B-59 192.168.0.252	↑ 0 Kb/s	(; 2.46	117 / 24	0 min	\otimes

4.3. Network

4.3.1. Status

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

2. Go to Advanced > Network > Status. You can view the current status information of the router.

Status	
Internet status overview is displayed on	this page.
Internet	
Status:	Connected
Internet Connection Type:	Dynamic IP
IP Address:	192.168.1.100
Subnet Mask:	255.255.255.0
Default Gateway:	192.168.1.1
Primary DNS:	192.168.1.1
Secondary DNS:	0.0.0.0
Online Duration:	12 Minutes

 Internet - Displays the current settings of the internet, and you can configure them on the Advanced > Network > Internet page.

Note: 3G/4G USB Modem mode and USB Tethering mode don't have the Internet section.

- Status Indicates whether the router has been connected to the internet.
- Internet Connection Type (Only for Router Mode) Indicates the way in which your router is connected to the internet.
- IP Address The Internet IP (WAN IP) address of the router.
- Subnet Mask The subnet mask associated with the Internet IP (WAN IP) address.
- Default Gateway The Gateway currently used is shown here.
- Primary & Secondary DNS The IP addresses of DNS (Domain Name System) server.
- Online Duration Displays how long the router has been connected to the internet.

Status	
Internet status overview is displayed on	this page.
Internet	
Status:	Connected
Internet Connection Type:	Dynamic IP
IP Address:	192.168.1.100
Subnet Mask:	255.255.255.0
Default Gateway:	192.168.1.1
Primary DNS:	192.168.1.1
Secondary DNS:	0.0.0.0
Online Duration:	12 Minutes

- LAN This field displays the current settings of the LAN, and you can configure them on the Network > LAN page.
 - MAC Address The physical address of the router.
 - IP Address The LAN IP address of the router.
 - Subnet Mask The subnet mask associated with the LAN IP address.



- DHCP Server This field displays the current settings of DHCP (Dynamic Host Configuration Protocol) Server, and you can configure them on the Network > DHCP Server page.
 - DHCP Server Indicates whether the DHCP server is enabled or disabled. It is enabled by default and the router acts as a DHCP server.
 - IP Address Pool The IP address range for the DHCP server to assign IP addresses.

DHCF	P Server	
DHCF	P Server: On	
IP Addre	ess Pool: 192.168.0.2-192.168.0.253	

- Dynamic DNS This field displays the current settings of the Dynamic DNS (Domain Name System), and you can configure them on the Advanced > Network > Dynamic DNS page.
 - Service Provider The Dynamic DNS service provider you have signed up for.

Dynamic DN S	
Service Provider:	TP-Link

4. 3. 2. Internet Settings for Router Mode

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

Internet		
Set up an internet connection with the set	rvice information provided by your ISF	(internet service provider).
Internet Connection Type:	Dynamic IP	

Dynamic IP

If your ISP provides the DHCP service, please select Dynamic IP, and the router will automatically get IP parameters from your ISP.

Click **RENEW** to renew the IP parameters from your ISP.

Click RELEASE to release the IP parameters.

up an internet connection with the se	ervice information provided by your ISP (internet service pro
Internet Connection Type:	Dynamic IP 🗸
IP Address:	192.168.1.100
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
DNS Address:	Get Dynamically from ISP
Primary DNS:	192.168.1.1
Secondary DNS:	0.0.0.0
MTU Size:	1500 bytes
	(Do not change unless necessary.)
Host Name:	TL-WR1502X
	Get IP using Unicast DHCP
Router MAC Address:	Use Custom MAC Address 🛛 🗸
	D8 - 44 - 89 - CC - A5 - 54

- DNS Address- The default setting is to get an IP address dynamically from your ISP. If your ISP does not automatically assign DNS addresses to the router, please select Use the Following DNS Addresses and enter the IP address in dotted-decimal notation of your ISP's primary DNS server. If a secondary DNS server address is available, enter it as well.
- MTU Size The normal MTU (Maximum Transmission Unit) value for most Ethernet networks is 1500 Bytes. It is not recommended that you change the default MTU size unless required by your ISP.
- Host Name This option specifies the name of the router.
- Get IP with Unicast DHCP A few ISPs' DHCP servers do not support the broadcast applications. If you cannot get the IP address normally, you can choose this option. (It is rarely required.)
- Router MAC Address :

- 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.

Note:

- You can only use the MAC Address Clone function for PCs on the LAN.
- If you have changed the WAN MAC address when the WAN connection is PPPoE, it will not take effect until the connection is re-established.

Static IP

If your ISP provides a static or fixed IP address, subnet mask, default gateway and DNS setting, please select Static IP.

Internet Connection Type:	Static IP	~
IP Address:		
Subnet Mask:		
Default Gateway:		
Primary DNS:		
Secondary DNS:		(Optional)
MTU Size:	1500 byte	es
	(Do not change unless necessary.)	
Router MAC Address:	Use Custom MAC Address	×
	D8 - 44 - 89 - CC - A5 - 54	4

- IP Address Enter the IP address in dotted-decimal notation provided by your ISP.
- Subnet Mask Enter the subnet mask in dotted-decimal notation provided by your ISP. Normally 255.255.255.0 is used as the subnet mask.
- Default Gateway Enter the gateway IP address in dotted-decimal notation provided by your ISP.
- Primary/Secondary DNS (Optional) Enter one or two DNS addresses in dotteddecimal notation provided by your ISP.

- MTU Size The normal MTU (Maximum Transmission Unit) value for most Ethernet networks is 1500 Bytes. It is not recommended that you change the default MTU size unless required by your ISP.
- Router MAC Address :
 - 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.

Note:

- You can only use the MAC Address Clone function for PCs on the LAN.
- If you have changed the WAN MAC address when the WAN connection is PPPoE, it will not take effect until the connection is re-established.

PPPoE

If your ISP provides PPPoE connection, select PPPoE.

Internet		
Set up an internet connection with the se	ervice information provided by your Is	SP (internet service provider).
Internet Connection Type:	PPPoE	~
Username:		
Password:		ø
IP Address:	0.0.0.0	
Primary DNS:	0.0.0.0	
Secondary DNS:	0.0.0.0	

• Username/Password - Enter the username and password provided by your ISP. These fields are case-sensitive.

	 Advanced Settings 	
Secondary Connection:	None	\sim
MTU Size:	1480	bytes
	(Do not change unless necess	ary.)
Service Name:		
	(Leave blank unless ISP require	res.)
Access Concentrator Name:		
	(Leave blank unless ISP requir	res.)
Detect Online Interval:	10 se	conds
IP Address:	Get Dynamically from ISP	\sim
DNS Address:	Get Dynamically from ISP	\sim
Primary DNS:	0.0.0.0	
Secondary DNS:	0.0.0.0	
Connection Mode:	Auto	\sim
	CONNECT	
	DISCONNECT	
Router MAC Address:	Use Custom MAC Address	\sim
	D8 - 44 - 89 - CC - A5	- 54

- Secondary Connection It's available only for PPPoE connection. If your ISP provides an extra connection type, select Dynamic IP or Static IP to activate the secondary connection.
- MTU Size The default MTU size is 1480 bytes. It is not recommended that you change the default MTU size unless required by your ISP.
- Service Name The service name should not be configured unless you are sure it is necessary for your ISP. In most cases, leaving these fields blank will work.
- Access Concentrator Name The access concentrator name should not be configured unless you are sure it is necessary for your ISP. In most cases, leaving these fields blank will work.
- Detect Online Interval The router will detect Access Concentrator online at every interval. The default value is 10. You can input the value between 0 and 120. The value 0 means no detect.
- IP Address The default setting is to get an IP address dynamically from your ISP. If your ISP does not automatically assign IP addresses to the router, please select Use

the Following IP Address and enter the IP address provided by your ISP in dotteddecimal notation.

- DNS Address The default setting is to get an IP address dynamically from your ISP. If your ISP does not automatically assign DNS addresses to the router, please select Use the Following DNS Addresses and enter the IP address in dotted-decimal notation of your ISP's primary DNS server. If a secondary DNS server address is available, enter it as well.
- Connection Mode
 - Auto In this mode, the internet connection reconnects automatically whenever it gets disconnected.
 - On Demand In this mode, the internet connection will be terminated automatically after a specified inactivity period (Max Idle Time) and be re-established when you attempt to access the internet again.
 - Time-based In this mode, the internet connection will be in effect during the Connection Time you set.
 - Manual In this mode, the internet connection is controlled manually by clicking the Connect/Disconnect button. This mode also supports the Max Idle Time function as On Demand mode. Enter a maximum time (in minutes), the internet connection can be inactive before it is terminated into the Max Idle Time. The default value is 15 minutes. If you want the internet connection remains active all the time, enter 0 (zero).

Router MAC Address:

- 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.

Note:

- Only when you have configured the system time on the Advaned > System > Time Settings page, will the time-based connecting function take effect.
- Sometimes the connection cannot be terminated although you have specified the Max Idle Time because some applications are visiting the internet continually in the background.
- You can only use the MAC Address Clone function for PCs on the LAN.
- If you have changed the WAN MAC address when the WAN connection is PPPoE, it will not take effect until the connection is re-established.

L2TP

If your ISP provides L2TP connection, please select L2TP.

ternet It up an internet connection with the se	ervice information provided by your ISP	(internet service prov
Internet Connection Type:	L2TP V	
Username:		
Password:	ø	
IP Address:	0.0.0.0	
Primary DNS:	0.0.0.0	
Secondary DNS:	0.0.0.0	
	Oynamic IP	
	Static IP	
VPN Server IP/Domain Name:		
IP Address:	0.0.0.0	
Subnet Mask:	0.0.0.0	
Default Gateway:	0.0.0	
Primary DNS:	0.0.0.0	
Secondary DNS:	0.0.0.0	
MTU Size:	1460 bytes	
	(Do not change unless necessary.)	
Connection Mode:	Auto 🗸	
	CONNECT	
	DISCONNECT	
Router MAC Address:	Use Custom MAC Address 🛛 🗸	
	D8 - 44 - 89 - CC - A5 - 54	

- Username/Password Enter the username and password provided by your ISP. These fields are case-sensitive.
- VPN Server IP/ Domain Name Enter the VPN server's IP address or domain name provided by your ISP.
- MTU Size The default MTU size is "1460" bytes, which is usually fine. It is not recommended that you change the default MTU Size unless required by your ISP.
- Connection Mode
 - Auto In this mode, the internet connection reconnects automatically whenever it gets disconnected.

- On Demand In this mode, the internet connection will be terminated automatically after a specified inactivity period (Max Idle Time) and be re-established when you attempt to access the internet again.
- Manual In this mode, the internet connection is controlled manually by clicking the Connect/Disconnect button. This mode also supports the Max Idle Time function as On Demand mode. Enter a maximum time (in minutes), the internet connection can be inactive before it is terminated into the Max Idle Time. The default value is 15 minutes. If you want the internet connection remains active all the time, enter 0 (zero).
- Router MAC Address :
 - 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.

Note:

- Sometimes the connection cannot be terminated although you have specified the Max Idle Time because some applications are visiting the internet continually in the background.
- You can only use the MAC Address Clone function for PCs on the LAN.
- If you have changed the WAN MAC address when the WAN connection is PPPoE, it will not take effect until the connection is re-established.

PPTP

If your ISP provides PPTP connection, please select PPTP.

in internet connection with the se	ervice information provided by y	our ISP (in
Internet Connection Type:	РРТР	~
Username:		
Password:		ø
IP Address:	0.0.0.0	
Primary DNS:	0.0.0.0	
Secondary DNS:	0.0.0.0	
	Oynamic IP	
	O Static IP	
/PN Server IP/Domain Name:		
IP Address:	0.0.0.0	
Subnet Mask:	0.0.0.0	
Default Gateway:	0.0.0.0	
Primary DNS:	0.0.0.0	
Secondary DNS:	0.0.0.0	
MTU Size:	1420	bytes
	(Do not change unless nece	ssary.)
Connection Mode:	Auto	~
	CONNECT	
	DISCONNECT	
Router MAC Address:	Use Custom MAC Address	\sim
	D8 - 44 - 89 - CC - A5	5 - 54

- Username/Password Enter the username and password provided by your ISP. These fields are case-sensitive.
- VPN Server IP/ Domain Name Enter the VPN server's IP address or domain name provided by your ISP.
- MTU Size The default MTU size is "1420" bytes, which is usually fine. It is not recommended that you change the default MTU Size unless required by your ISP.
- Connection Mode
 - Auto In this mode, the internet connection reconnects automatically whenever it gets disconnected.

- On Demand In this mode, the internet connection will be terminated automatically after a specified inactivity period (Max Idle Time) and be re-established when you attempt to access the internet again.
- Manual In this mode, the internet connection is controlled manually by clicking the Connect/Disconnect button. This mode also supports the Max Idle Time function as On Demand mode. Enter a maximum time (in minutes), the internet connection can be inactive before it is terminated into the Max Idle Time. The default value is 15 minutes. If you want the internet connection remains active all the time, enter 0 (zero).
- Router MAC Address :
 - 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.

Note:

- Sometimes the connection cannot be terminated although you have specified the Max Idle Time because some applications are visiting the internet continually in the background.
- You can only use the MAC Address Clone function for PCs on the LAN.
- If you have changed the WAN MAC address when the WAN connection is PPPoE, it will not take effect until the connection is re-established.

4.3.3. NAT

Note: 3G/4G USB Modem mode and USB Tethering mode don't have this function.

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

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with the username and password you set for the router.
- 2. Go to Advanced > Network > Internet and locate the NAT section.
- 3. Configure NAT, then click SAVE.

NAT		
	NAT: <table-cell> Enable NAT</table-cell>	

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

4. 3. 4. Internet Port Negotiation Speed Setting

Note: 3G/4G USB Modem mode and USB Tethering mode don't have this function.

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with the username and password you set for the router.
- 2. Go to Advanced > Network > Internet and locate the Internet Port Negotiation Speed Setting section.
- 3. Select the duplex type from the drop-down list and click SAVE.

nternet Port Negotiation Speed S	etting		
Internet Port Negotiation Speed Setting:	Auto Negotiation	~	

4. 3. 5. Internet Settings for 3G/4G USB Modem Mode

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with the username and password you set for the router.
- 2. Go to Internet > Connection Settings.
- 3. Set up the 3G/4G USB modem connection and click SAVE.

Network Mode:		
	O Router	
	3G/4G USB Modem (Cur	rent)
	Share the internet conne modem.	ction from a 3G or 4G USB
	O USB Tethering	
USB Modem:	Identify successfully	
Location:	Russia	~
Mobile ISP:	Beeline	\sim
	Set the Dial Number, API manually.	N, Username and Password
Dial Number:	*99#	
APN:	internet.beeline.ru	
Username:	beeline	(Optional)
Password:	beeline	(Optional)
Note: The following settings will be appli	ied to both the 3G/4G USB Mo	dem mode and the USB Tethering
mode, please configure with caution.		
mode, please configure with caution. Connection Mode:	Connect Automatically	~
	Connect Automatically	minutes
Connection Mode:		minutes
Connection Mode:	15	minutes
Connection Mode: Max Idle Time:	15 0 means remain active at al	minutes times.
Connection Mode: Max Idle Time:	15 0 means remain active at al Auto	minutes times.
Connection Mode: Max Idle Time: Authentication Type:	15 0 means remain active at al Auto The default is Auto, do not ch	minutes I times.
Connection Mode: Max Idle Time: Authentication Type:	15 0 means remain active at al Auto The default is Auto, do not ch 1480	minutes I times. ange unless necessary. bytes change unless necessary
Connection Mode: Max Idle Time: Authentication Type:	15 0 means remain active at al Auto The default is Auto, do not ch 1480 The default is 1480, do not	minutes I times. ange unless necessary. bytes change unless necessary
Connection Mode: Max Idle Time: Authentication Type: MTU Size(in bytes):	15 0 means remain active at al Auto The default is Auto, do not ch 1480 The default is 1480, do not	minutes I times. ange unless necessary. bytes change unless necessary

- USB Modem Displays the connection status of the current mode.
- Location Please select the location where you are enjoying the 3G/4G USB modem service.
- Mobile ISP Please select the ISP providing the 3G/4G USB modem service. The router will automatically fill in the default Dial Number and APN of that ISP.
- Username/Password Enter the username and password provided by your ISP if any.
- Connection Mode
 - Connect Automatically In this mode, the 3G/4G connection reconnects automatically whenever it gets disconnected.
 - Connect on Demand In this mode, the 3G/4G connection will be terminated automatically after a specified inactivity period (Max Idle Time) and be reestablished when you attempt to access the internet again.
 - Connect Manually In this mode, the 3G/4G connection is controlled manually. This mode also supports the Max Idle Time function as Connect on Demand mode. Enter a maximum time (in minutes), the 3G/4G connection can be inactive before it is terminated into the Max Idle Time. The default value is 15 minutes. If you want the internet connection remains active all the time, enter 0 (zero).

- Authentication Type Some ISPs require authentication to access the internet. Please select Auto or consult your ISP.
 - Auto The router will have dynamic negotiation with the dialing server and the authentication type doesn't need to be specified.
 - PAP Password Authentication Protocol. Select PAP if required by your ISP.
 - CHAP Challenge Handshake Authentication Protocol. Select CHAP if required by your ISP.
- MTU size (in bytes) The typical MTU (Maximum Transmission Unit) size for 3G or 4G network is 1480 Bytes.
- Use the Following DNS Servers Select this checkbox and enter the DNS server address(es) in dotted decimal notation provided by your ISP. This 3G/4G USB modem connection will only use the specified DNS server(s).

4. 3. 6. Internet Settings for USB Tethering Mode

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with the username and password you set for the router.
- 2. Go to Internet > Connection Settings.
- 3. Set up the USB Tethering connection and click SAVE.

	OUSB Tethering	
	-	nection from your mobile device w
Tethering Status:	iOS Device	
	Tips for USB Tethering	
	How to connect to a smart of	levice?
IP Address:	172.20.10.2	
Default Gateway:	172.20.10.1	
DNS Server:	172.20.10.1	
	 Advanced Settings 	
Note: The following settings will be appli mode, please configure with caution.	ed to both the 3G/4G USB M	lodem mode and the USB Tether
Connection Mode:	Connect Automatically	~
Max Idle Time:	15	minutes
Max Idle Time:	15 0 means remain active at	
Max Idle Time: Authentication Type:		
	0 means remain active at	all times.
	0 means remain active at Auto	all times.
Authentication Type:	0 means remain active at Auto The default is Auto, do not c 1480	all times.
Authentication Type:	0 means remain active at Auto The default is Auto, do not c 1480	all times.
Authentication Type:	0 means remain active at Auto The default is Auto, do not o 1480 The default is 1480, do no	all times.
Authentication Type: MTU Size(in bytes):	0 means remain active at Auto The default is Auto, do not o 1480 The default is 1480, do no	all times.
Authentication Type: MTU Size(in bytes): Primary DNS:	0 means remain active at Auto The default is Auto, do not o 1480 The default is 1480, do no	all times.
Authentication Type: MTU Size(in bytes): Primary DNS:	0 means remain active at Auto The default is Auto, do not o 1480 The default is 1480, do no Use The following DNS	all times.

- Tethering Status Displays the connection info of the current mode.
- IP Address The internet IP (WAN IP) address of the router.
- Default Gateway The Gateway currently used is shown here.
- DNS Server Displays the DNS server which resolves the domain names to the corresponding IP addresses.
- Connection Mode
 - Connect Automatically In this mode, the USB Tethering reconnects automatically whenever it gets disconnected.
 - Connect on Demand In this mode, the USB Tethering connection will be terminated automatically after a specified inactivity period (Max Idle Time) and be re-established when you attempt to access the internet again.
 - Connect Manually In this mode, the USB Tethering connection is controlled manually. This mode also supports the Max Idle Time function as Connect on Demand mode. Enter a maximum time (in minutes), the USB Tethering connection can be inactive before it is terminated into the Max Idle Time. The default value is 15 minutes. If you want the internet connection remains active all the time, enter 0 (zero).
- Authentication Type Some ISPs require authentication to access the internet. Please select Auto or consult your ISP.
 - Auto The router will have dynamic negotiation with the dialing server and the authentication type doesn't need to be specified.
 - PAP Password Authentication Protocol. Select PAP if required by your ISP.
 - CHAP Challenge Handshake Authentication Protocol. Select CHAP if required by your ISP.
- MTU size (in bytes) The typical MTU (Maximum Transmission Unit) size for 3G or 4G network is 1480 Bytes.
- Use the Following DNS Servers Select this checkbox and enter the DNS server address(es) in dotted decimal notation provided by your ISP. This USB tethering connection will only use the specified DNS server(s).

4.3.7. LAN

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with the username and password you set for the router.
- 2. Go to Advanced > Network > LAN.
- 3. Configure the IP parameters of the LAN and click SAVE.

LAN	
View and configure LAN settings.	
MAC Address:	D8-44-89-CC-A5-54
IP Address:	192.168.0.1
Subnet Mask:	255.255.255.0 🗸

- MAC Address The physical address of the LAN ports. The value can not be changed.
- **IP Address** Enter the IP address in dotted-decimal notation of your router (the default one is 192.168.0.1).
- **Subnet Mask** An address code that determines the size of the network. Normally 255.255.255.0 is used as the subnet mask.

Note:

- If you have changed the IP address, you must use the new IP address to log in.
- If the new IP address you set is not in the same subnet as the old one, the IP address pool in the DHCP Server will be configured automatically, but the Virtual Server and DMZ Host will not take effect until they are re-configured.

4.3.8. IGMP

IGMP (Internet Group Management Protocol) helps the router to identify which clients are subscribed to specific multicast groups within a local network. This allows for efficient transmission of multicast data packets, avoiding unnecessary traffic waste and improving network performance.

IGMP can be used to manage multicast transmission in IPTV. If you want to set up IPTV to enable Internet/IPTV/Phone service provided by your internet service provider (ISP), follow the steps:

Before you start, make sure your ISP provides the networking service based on IGMP technology, e.g., British Telecom(BT) and Talk Talk in UK:

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with the username and password you set for the router.
- 2. Go to Advanced > Network > IGMP.
 - 1) Tick the IGMP Proxy and IGMP Snooping checkbox, then select the IGMP Version, either V2 or V3, as required by your ISP.

GMP			
Check the multicast settings. It is recomm	nended to keep them a	s default.	
IGMP Proxy:	Enable		
IGMP Snooping:	Z Enable		
IGMP Version:	V2	~	

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

4.3.9. DHCP Server

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

- To specify the IP address that the router assigns:
- 1. Visit <u>http://tplinkwifi.net</u>, and log in with the username and password you set for the router.
- 2. Go to Advanced > Network > DHCP Server and locate the DHCP Server section.

DHCP Server		
DHCP Server:	Enable	
IP Address Pool:	192.168.0.2 - 19	2.168.0.253
Address Lease Time:	120 mi	nutes
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.

Note: To use the DHCP server function of the router, you must configure all computers on the LAN as Obtain an IP Address automatically.

- To reserve an IP address for a specified client device:
- 1. Visit <u>http://tplinkwifi.net</u>, and log in with the username and password you set for the router.
- 2. Go to Advanced > Network > DHCP Server and locate the Address Reservation section.
- 3. Click Add in the Address Reservation section.

eserve IP addresses f	for specific devices conn	ected to the router.		
				🔁 Ad
Device Name	MAC Address	Reserved IP Address	Status	Modify
No Entries				

4. Click VIEW CONNECTED DEVICES and select the you device you want to reserve an IP for. Then the MAC and IP Address will be automatically filled in. You can also enter the MAC and IP address of the client device.

MAC Address:	-	-	-	5	-	
(VIEW	/ CON	NECTE	D DE	VICES	
IP Address:						
				C	ANCEL	SAVE

- To check the DHCP client list:
- 1. Visit <u>http://tplinkwifi.net</u>, and log in with the username and password you set for the router.
- 2. Go to Advanced > Network > DHCP Server and locate the DHCP Client List section. You can see the device information of the list.
- 3. Click Refresh to see the current attached devices.

w the devices that	are currently assigned with	IP addresses by the DHCP serve	er.
I Clients: 3			🗘 Refres
Device Name	MAC Address	Assigned IP Address	Lease Time
	FA-8D-A8-FD-2B-59	192.168.0.252	1:40:0
	B6-67-DA-05-15-21	192.168.0.114	1:25:16
18503634-BG	40-ED-00-22-30-74	192.168.0.45	1:32:45

4.3.10. Dynamic DNS

The router offers the DDNS (Dynamic Domain Name System) feature, which allows the hosting of a website, FTP server, or e-mail server with a fixed domain name (named by yourself) and a dynamic IP address. Thus your friends can connect to your server by entering your domain name no matter what your IP address is.

Before using this feature, you need to sign up for DDNS service providers such as www.comexe.cn, www.dyndns.org, or www.noip.com. The Dynamic DNS client service provider will give you a password or key.

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with the username and 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 (domain name) router.	for remote access to y	our device, website, or ser	ver behind the
Service 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.

ynamic DNS				
ssign a fixed host nan uter.	ne (domain name) for	remote access to	o your device, website, or se	erver behind the
s	Service Provider: TF	P-Link	~	
Curren	t Domain Name:			
omain Name List				
				🕀 Regis
Domain Name	Registered Date	Status	Operation	Delete
No Entries				

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 🗸	Register Now
Username:		
Password:	Ø	
Domain Name:		
WAN IP binding:	Enable	
Status:	Not launching	
	LOGIN AND SAVE	
	LOGOUT	

5. Click LOG IN AND SAVE.

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

4.3.11. Static Routing

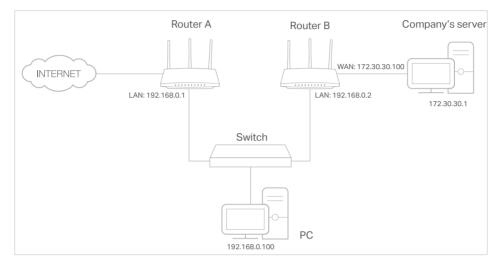
Static Routing is a form of routing that is configured manually by a network administrator or a user by adding entries into a routing table. The manually-configured routing information guides the router in forwarding data packets to the specific destination.

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 and locate the Static Routing section.



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 -	
Description:		
	CANCEL	SAVE

- 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 The Subnet Mask determines which portion of an IP address is the network portion, and which portion is the host portion.
- 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 192.168.1.2.
- 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.

outing Table			
/iew all valid routing entries t	that are currently in use.		
Active Route Number: 3			G Refrest
Network Destination	Subnet Mask	Gateway	Interface
0.0.0.0	0.0.0.0	192.168.1.1	WAN
192.168.0.0	255.255.255.0	0.0.0.0	LAN
192.168.1.0	255.255.255.0	0.0.0.0	WAN

4. 3. 12. Multi-WAN Backup

Multi-WAN is supported in the Router/USB Internet mode. When the preferred mode fails, the backup mode will take over network data transmission, ensuring network continuity and reliability.

Note: USB Internet includes the 3G/4G USB Modem mode and USB Tethering mode.

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with the username and password you set for the router.
- 2. Go to Advanced > Network > Multi-WAN Backup.
- 3. Enable Multi-WAN Backup.



4. In Network Connection Priority, modify the connection priority and the settings of the Router mode and the USB Internet mode.

work Con	nection Priority		
ify the conn	ection priority and the settings of	different network modes.	
Priority	Connection Type	Connection Status	Modify
1	Router (Current Mode)	Connected	⊘ ↓
2	USB Internet	Disconnected	© ↑

- To modify the modes' network connection settings:
 - 1. Click ^O at each mode, and enter the settings provided by your ISP.

Network Connection Settings		×
Internet Connection Type:	Dynamic IP	
	Select this type if your ISP doesn't provide any information for internet connection.	
Router MAC Address:	Use Default MAC Address	
	00 - ff - 00 - 36 - 73 - 31	
	CANCEL	₩E

Network Connection Settings				×
Note: You can use a 3G/4G USB Mo connect to a smart device?	odem or smart device to prov	ide internet	access. How to	
USB Modem:	Identify successfully			
Location:	United States	~		
Mobile ISP:	AT&T	~		
	Set the Dial Number, A Password manually.	PN, Userna	me and	
Dial Number:	*99#			
APN:	broadband			
Username:	WAP@CINGULAR.COM		(Optional)	
Password:	CINGULAR1		(Optional)	
Connection Mode:	Connect Automatically	\sim		
Max Idle Time:	15	minutes		
	0 means remain active at	all times.		
Authentication Type:	Auto	~		
	The default is Auto, do not o	change unle	ss necessary.	
MTU Size(in bytes):	1480	bytes		
	The default is 1480, do no	t change un	less necessary	
	Use The following DNS	Servers		
Primary DNS:				
Secondary DNS:			(Optional)	

• To set Multi-WAN Backup priority:

Click \checkmark / ¹ at each mode. The mode with the 1st priority will be set as the preferred mode, and the mode with the 2nd priority will be set as the backup mode. when the preferred mode fails, the backup mode will take over network data transmission.

letwork Con	nection Priority		
lodify the conn	ection priority and the settings of	different network modes.	
Priority	Connection Type	Connection Status	Modify
1	Router (Current Mode)	 Connected 	⊘ ↓
2	USB Internet	Disconnected	⊙ ↑

Connection Check:

The router uses Ping to check the connection status of the Router mode and USB Internet periodically to check whether the internet is available. You can edit the following parameters, and click SAVE.

Connection Check			
The device check the connection status of the Internet is available.	of "Router" and "USB Interne	t" periodically	y to determine whether
Track Command:	Ping		
Track Interval:	5	seconds	
Change to unavailable if Ping failed for:	3	times	
Change to available if Ping succeeded for:	6	times	
IPv4 Track IP/Domain Name:	1.1.1.1		
	8.8.8.8		(Optional)
	208.67.222.222		(Optional)
	208.67.220.220		(Optional)

Track Interval - The time interval between consecutive ICMP echo requests. You are recommended to keep it as the default.

Change to unavailable/available if Ping failed/succeeded for X Times - The connection status will change to Disconnected/Connected if the Ping Failure/ Success times reach the value you set.

IPv4 Track IP/Domain Name - Enter the IP address or domain name of the tested host or other network device that you want to check the connectivity between the router. You can add up to 4 items.

4.4. 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 section 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.

4.4.1. 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.

TP-Link ID		
Log in to bind the router to your TP-Link ID. You can remote and more.	ly manage your network via the Tether app,	
	Remote Control	
TP-Link ID (Email):	Access and control your network remotely	
	Smart Home	
Password:	Support Amazon Alexa and Goog Assistant	gle
LOG IN	Parental Controls Manages online strategy for the	
SIGN UP	connected devices	
Forgot Password?	DOWNLOAD ON THE App Store	
	Scan for Tether Search Tether	

3. Click Sign Up and follow the instructions to register a TP-Link ID.

Create a TP-Link I	D		
Select Country or Region	~		Remote Control Access and control your network remotely
Email Address			
Password	ø	2	Smart Home Support Amazon Alexa and Goo Assistant
Confirm Password	ø		Appletin
 I have fully read and accept Privacy Policy and Terms of Subscribe to the TP-Link newsletter and be the first 	of Use.	**	Parental Controls Manages online strategy for the connected devices
about amazing deals, VIP giveaways, new products a much more.	and so		DownLoad on the App Store
		L 23 7	12141

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 <u>Set up via Tether</u> 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.

4. 4. 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 TP-Link ID section.

TP-Link ID							
Edit the email and password for your TP-Link ID.							
Email:							
Password:		Ci de la companya de					
Region:	United States						
Email Subscription:							
		ewsletter and be the first to know iveaways, new products, and so					

- 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	×
Current Password: New Email: Note: New email or password may not sync to client der your device is connected to the Internet to update accou	
	CANCEL

- To change your password:
- 1. Click 🗹 behind the Password.
- 2. Enter the current password, then a new password twice. And click SAVE.

Change Password	×
Current Password:	ø
Note: New email or password may not sync to client your device is connected to the Internet to update ad	

4. 4. 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 Owner account. The Owner account can add or remove other TP-Link IDs to or from the same router. All accounts can monitor and manage the router locally or remotely, but only the owner account can:

- 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.

Add TP-Link ID to Manage 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 TP-Link IDs section.

Bound 1	TP-Link IDs						
Bind or ur	Bind or unbind TP-Link IDs to control who can manage this device.						
Owner	yinghui.chen yinghui.chen@tp-link.com	Unbind					
	General Bind						

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.

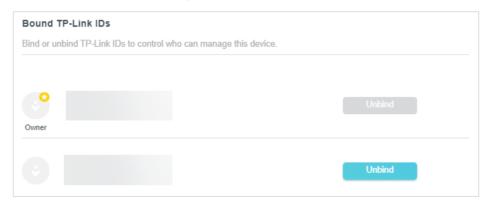
Bind TP-Link ID	×	ζ
TP-Link ID (Email):		
	CANCEL BIND	

4. The new TP-Link ID will be displayed in the Bound TP-Link IDs table.

Bound TP-Link IDs						
Bind or unbind TP-Link IDs to control who can manage this device.						
. ●	Unbind					
Owner						
	Unbind					
	Onbind					

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 TP-Link IDs section.
- 3. Tick Unbind of the TP-Link ID(s) you want to remove.



4. 4. 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.

4.5. Wireless

4.5.1. Wireless 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 > Wireless > Wireless Settings.
- 3. Configure the wireless settings for the wireless network and click SAVE.

rsonalize settings for each band.			
OFDMA:	Enable 🕜		
TWT:	Enable 🕜		
ECO Mode:	🗌 Enable 🥜		
2.4GHz:	Enable		Share Network
Network Name (SSID):	TP-Link_7330		Hide SSID
Security:	WPA2-PSK[AES]	~	
Password:	18518290		
Transmit Power:	High	~	
Channel Width:	20/40MHz	~	
Channel:	Auto	~	
Mode:	802.11b/g/n mixed	~	
5GHz:	Enable		Share Network
Network Name (SSID):	TP-Link_7330_5G		Hide SSID
Security:	WPA2-PSK[AES]	~	
Password:	18518290		
Transmit Power:	High	~	
Channel Width:	20/40/80MHz	~	
Channel:	Auto	\sim	
Mode:	802.11a/n/ac/ax mixed	~	

 OFDMA - This feature 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.

- 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.
- ECO Mode As an energy-saving feature, ECO Mode can reduce your device's energy consumption, but its Wi-Fi coverage will also be limited.
- 2.4GHz/5GHz Select this checkbox to enable the 2.4GHz/5GHz wireless network.
- Share Network- Click to save the Wi-Fi settings for sharing.
- Network Name (SSID) Enter a value of up to 32 characters. The same Name (SSID) must be assigned to all wireless devices in your network.
- Hide SSID Select this checkbox if you want to hide the network name (SSID) from the Wi-Fi network list. In this case, you need to manually join the network.
- Security Select an option from the Security drop-down list. We recommend you don't change the default settings unless necessary.
- Password Set a password for the wireless network. The value is case-sensitive.
- Transmit Power Select High, Middle or Low to specify the data transmit power. The default and recommended setting is High.
- Note: Transmit Power will become non-editable if you enable ECO Mode.
- Channel Width Select a channel width (bandwidth) for the wireless network.
- Channel Select an operating channel for the wireless network. For the 2.4 GHz and 5GHz bands, it is recommended to leave the channel to Auto, if you are not experiencing the intermittent wireless connection issue.
- Mode You can choose the appropriate "Mixed" mode.

4.5.2. Guest Network

Guest Network allows you to provide Wi-Fi access for guests without disclosing your host 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 settings to ensure network security and privacy.

- Create a Guest 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 > Wireless > Guest Network.
- 3. Enable the 2.4GHz/5GHz guest network according to your needs.

guests to use and complete the related	l information.
C Enable	Share Network
TP-Link_Guest_7330	Hide SSID
Enable	Share Network
TP-Link_Guest_7330_5G	Hide SSID
No Security	
	TP-Link_Guest_7330 C Enable TP-Link_Guest_7330_5G

- 4. Customize the SSID. Don't select Hide SSID unless you want your guests to manually input the SSID for guest network access.
- 5. Select the Security type and customize your own password. If No security is selected, no password is needed to access your guest network.
- 6. Click SAVE. Now you guests can access your guest network using the SSID and password you set!
- 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 Permission	ns
Control the data that	guests can access.
	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 my local network

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

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

4.5.3. Wireless Schedule

The wireless function can be automatically off at a specific time when you do not need the wireless function.

- 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 function.

chedule when to automatically tur		
Wireless Sched	lule: 🔽 Enable	
	maka aura Quatam Tima ia aat ta liQat fra	m Internet"
ote: Before enabling this feature,	make sure system time is set to "Get ito	in michiel.
ote: Before enabling this feature, urrent Time:	make sure system nine is set to 'Get no	in memer.
	make sure system nine is set to "Get no	↔ A
	Repeat	

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

Add Schedule						×
Wireless Off Time: From	11	~	PM	\sim		
То	7	~	AM	\sim	(next day)	
Repeat:	5	M				S
				CANCE		SAVE
			-	CANCE		SAVE

Note:

- The effective wireless 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.

4.5.4. WPS

WPS (Wi-Fi Protected Setup) can help you to quickly and securely connect to a network. This section will guide you to add a new wireless device to your router's network quickly via WPS.

Note:

- The WPS function cannot be configured if the wireless function of the router is disabled. Please make sure the wireless function is enabled before configuration.
- 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 > WPS.
- 3. Follow one of the following methods to connect your client device to the router's Wi-Fi network.

Method 1: Using a PIN

• Connects via the Client's PIN

1. Keep the WPS Status as Enabled and select Client's PIN.

WPS:	
Method 1:	Using a PIN
	Client's PIN
	O Router's PIN
	Enter your personal device's PIN here and click CONNECT
	CONNECT

- 2. Enter the PIN of your device and click CONNECT. Then your device will get connected to the router.
- Connects via the Router's PIN
- 1. Keep the WPS Status as Enabled and select Router's PIN.

WPS:	
Method 1:	Using a PIN
	Client's PIN
	Router's PIN
Router's PIN:	
	Enter the router's PIN on your personal device. Router's PIN: 18518290
	GET NEW PIN
	DEFAULT

2. Enter the router's PIN on your personal device. You can also generate a new one.

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.

Method 2: Using the WPS Button on the Web Screen

Click Start on the screen. Within two minutes, enable WPS on your personal device. A Device-(XX-XX-XX-XX-XX) Connected message should appear on the screen,

indicating successful WPS connection.

Note: XX-XX-XX-XX-XX-XX is the MAC address of your device.



Method 3: Using the WPS Button on the Router

Press the router's WPS button. Within two minutes, enable WPS on your personal device.

4.5.5. Additional 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 > Wireless > Additional Settings.

3. Configure the advanced settings of your wireless network and click SAVE.

Note: If you are not familiar with the setting items on this page, it's strongly recommended to keep the provided default values; otherwise it may result in lower wireless network performance.

Check advanced wireless settings for you	ur device.		
WMM:	Enable		
AP Isolation:	Enable		
Airtime Fairness:	Enable		
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.
- 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 40-1000 milliseconds for Beacon Interval here. Beacon Interval value determines the time interval of the beacons. The beacons are the packets sent by the router to synchronize a wireless network. The default value is 100.
- RTS Threshold Here you can specify the RTS (Request to Send) Threshold. If the packet is larger than the specified RTS Threshold size, the router will send RTS frames to a particular receiving station and negotiate the sending of a data frame. The default value is 2346.
- DTIM Interval This value determines the interval of the Delivery Traffic Indication Message (DTIM). A DTIM field is a countdown field informing clients of the next window for listening to broadcast and multicast messages. When the router has buffered broadcast or multicast messages for associated clients, it sends the next DTIM with a DTIM Interval value. You can specify the value between 1-255 Beacon 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.

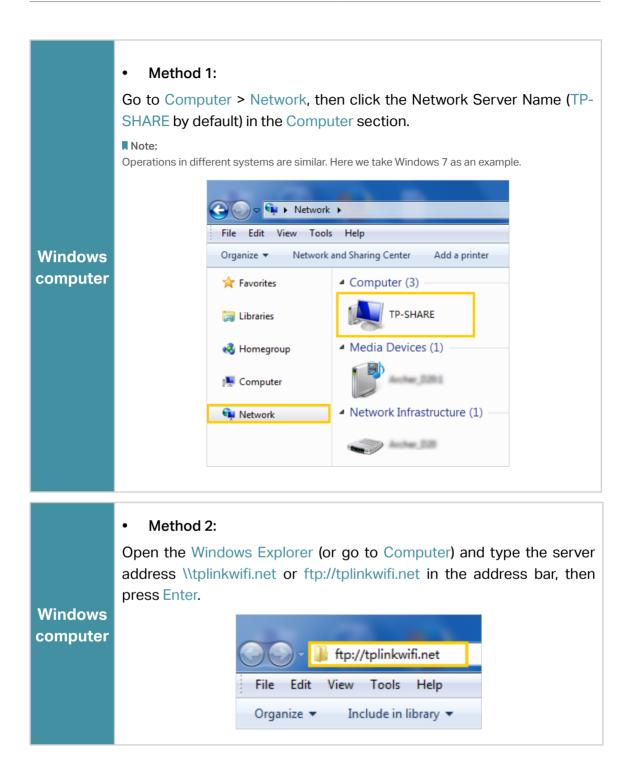
4.6. USB Storage Device

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 > USB Storage Device and click Remove.

4. 6. 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.



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.

4. 6. 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 > USB Storage Device.

3. Tick the Internet FTP checkbox, and then click SAVE.

elect the method for accessing	g your USB storage device. The	e device can then be	reached via the	access addre
etwork/Media Server Name:	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	ľ
Internet FTP	ftp://192.168.1.101:21 Set DDNS		21	Ø

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

	 Open the Windows Explorer (or go to Computer, only for Windows users) or open a web browser. Type the server address in the address bar: Type in ftp://<wan address="" ip="" of="" router="" the="">:<port number=""> (such</port></wan> 		
	as ftp://59.40.2.243:21). If you have specified the domain name of the router, you can also type in ftp://< <u>domain name</u> >:< <u>port</u> <u>number</u> > (such as ftp://MyDomainName:21)		
Computer	File Edit View Tools Help		
	Organize 🔻 Include in library 🔻		
	3) Press Enter on the keyboard.		
	4) Access with the username and password you set in <u>To Set Up</u> <u>Authentication for Data Security</u> .		
	✓ Tips: You can also access the USB disk via a third-party app for network files management, which can resume broken file transfers.		
Tablet	Use a third-party app for network files management.		

Ø Tips:

Click <u>Dynamic DNS</u> to learn how to set up a domain name for you router.

4. 6. 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 > USB Storage Device.
- 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.

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

Access Method	g your USB storage device. Th	e device can then be	reached via the	access addres
letwork/Media Server Name:	MyShare			
Access Method	Address	Enable	Port	Modify
Samba for Windows Samba for macOS/Linux	\\192.168.0.1 smb://192.168.0.1			Ø
Local FTP	ftp://192.168.0.1:21		21	Ĩ
Internet FTP	ftp://192.168.1.101:21 Set DDNS		21	ß

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.

Sharing	j Contents:	
	Share Selected Folders	Ø
~	G:/Pictures	

To Set Up Authentication for Data Security

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

1. In the File Sharing section, enable Secure Sharing.

Secure Sharing Customize the access sett	ings to ensure data secu	ırity.		
Username	Password		Permissions	Modify
admin		Ø	Read&Write	Ø
visit		Ø	Read	Ø

2. Click i to modify the access account. The username and password are both admin for default administrator account, and both visit for default visitor account. Accessing as an administrator can read and modify the shared folders while visitors can only read the shared folders.

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>.

4.7. NAT Forwarding

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

With the forwarding feature, the router can traverse the isolation of NAT so that clients on the internet can reach devices on the LAN and realize some specific functions.

The Mercusys router includes 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.

4.7.1. Port Forwarding

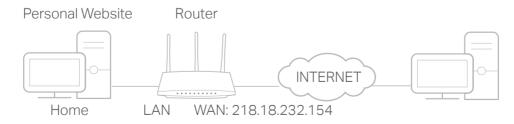
When you build up a server in the local network and want to share it on the internet, Port Forwarding can realize the service and provide it to internet users. At the same time Port Forwarding can keep the local network safe as other services are still invisible from the internet.

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

I want to:

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

For example, the personal website has been built in my home PC (192.168.1.100). I hope that my friends on the internet can visit my website in some way. My PC is connected to the router with the WAN IP address 218.18.232.154.



- 1. Set your PC to a static IP address, for example 192.168.1.100.
- 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.

Add a Port Forwarding Entry		×
Add a rule for an individual external p 200), add multiple rules. For more inf	oort or port range. For nonconsecutive p o, refer to Port Forwarding FAQ	orts (example: 100 and
Service Name:		
	VIEW COMMON SERVICES	Í.
Device IP Address:		
	VIEW CONNECTED DEVICES	
External Port:	Individual Port	
	O Port Range	
	(1-65535)	
Internal Port:		(Optional)
	(1-65535)	
Protocol:	All V	
	Enable This Entry	
	CANCEL	SAVE

- 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 Entry		×
Add a rule for an individual external p 200), add multiple rules. For more inf	oort or port range. For nonconsecutive p to, refer to Port Forwarding FAQ	orts (example: 100 and
Service Name:	HTTP	
	VIEW COMMON SERVICES	
Device IP Address:	192.168.0.100)
	VIEW CONNECTED DEVICES	
External Port:	Individual Port	
	O Port Range	
	80	
	(1-65535)	
Internal Port:	80	(Optional)
	(1-65535)	
Protocol:	TCP V	
	Enable This Entry	
	CANCEL	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>Dynamic DNS</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.

4.7.2. 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 Triggerin	ng					
Specify ports to forward packets				mically open spe ed it.	ecific external p	orts and
						🔂 Add
Service Name	Triggering Port	Triggering Protocol	External Port	External Protocol	Status	Modify
No Entries						

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 Entry		×
Service Name:	MSN Gaming Zone	
	VIEW COMMON SERVICES	
Triggering Port:	47624	
Triggering Protocol:	All	
External Port:	2300-2400,28800-29000	
	(XX or XX-XX,1-65535,at most 5 pairs	5)
External Protocol:	All	
	Enable This Entry	
	CANCEL	SAVE
	CANCEL	SAVE

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.

4.7.3. UPnP

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

Tips:

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

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



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

- 1. Visit <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.

UPnP	
	versal Plug and Play) to allow devices on your local network to dynamically open ports th as multiplayer gaming and real-time communications.
	UPnP:

4.7.4. 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.

e internet for applications such as online gaming and
0 100
CONNECTED DEVICES

5. Click SAVE.

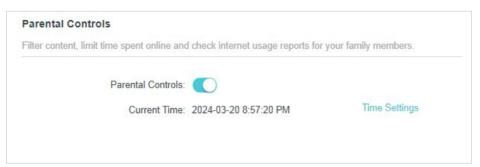
Done!

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.

4.8. 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 > Parental Controls.
- **3.** Enable Parental Controls.



- 4. In Profiles, Click Add to create a profile for a family member.
- 5. Add basic profile information.

Create Profile				×
Basic Info	Content Filter		Time Controls	
Basic Info				
Name the profile and add devices to it.				
Profile Name				
[
Devices				
+ Add Devices				
T Add Dovidos				
		Cancel	Next	
		Gancer	NEAL	

- 4) Enter a Name for the profile to make it easier to identify.
- 5) Under Devices, click + Add Devices.
- 6) Select the devices that belong to this family member. Deny/Allow settings 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.

- 7) Click Next.
- 6. Block/allow content for this profile.

Create Profile		×
Basic Info	Content Filter	Time Controls
Content Filter		
Customize content filtering setting	s for the profile.	
Filter Rule		
Select deny list or allow list to ma	nage content.	
Deny List On	Allow List Off	
Deny List		
Block all websites that contain a s	specific keyword.	
Input a keyword or URL	ADD	
	C	Cancel Next

- 1) Select the Filter Rule, and click ADD to modify the Deny or Allow List.
- Deny List: Client devices of your profile can't visit the specific websites or the websites that contain the specific keyword you added to the Deny List.
- Allow List: Client devices of your profile can only visit the specific websites and the websites that contain the specific keyword you added to the Allow List.
- 2) Click Next.
- 7. Set time restrictions on internet access.

Create Profile			×
Basic Info	Content Filter	Time Controls	
Time Controls			
Set internet access time for the p	profile.		
Internet Allowed Time Set the time period when internet Edit Time Time Limits Set daily limits for the total time s Mon-Fri 0 30mi Sat-Sun 0 30mi	spent online. in Caller and the second seco	• • • • • • • • 8h	
		Cancel Save	

- 1) In Internet Allowed Time, click + Edit Time to set the time period when internet access is allowed.
- 2) Enable Time Limits on Monday to Friday and Saturday & Sunday, and set the allowed online time to for client devices of your profile.

4.9. QoS

QoS (Quality of Service) is designed to ensure the efficient operation of the network when come across network overload or congestion. Devices set as high priority will be allocated more bandwidth and so continue to run smoothly even when there are many devices connected to the network.

I want to:

Specify priority levels for some devices or applications.

For example, I have several devices that are connected to my wireless network. I would like to set an intermediate speed on the internet for my computer for the next 2 hours.

How can I do that?

- 1. Enable QoS and set bandwidth allocation.
 - 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 > QoS > Global Settings.

- 3) Tick to enable QoS.
- 4) Input the maximum upload and download bandwidth provided by your internet service provider. 1Mbps equal s to 1000Kbps.
- 5) Click Save.

Global Settings		
Prioritize the Internet traffic of specific de	ternet traffic of specific device to guarantee a faster connection.	
Qo S:	Enable	
Upload Bandwidth:	1000	Mbps 🔹
opioda barramatri.		(inspo

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

evice Prio	ority				
Туре	Information	Real-time Rate	Traffic Usage	High Priority	Timing
P	18503634-BG	↑ 5.6 Kb/s ↓ 3.9 Kb/s	11.4MB		Always 🗸
	network device (243) FA-8D-A8-FD-2B-59	↑ 0 Kb/s ↓ 0 Kb/s	8.4MB	\bigcirc	_

Done! You can now enjoy using your computer for the next 2 hours.

4.10. Security

4. 10. 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.

Firewall	
Check the settings of the firewall that pr	otects your network. It is recommended to keep them as default
	_
SPI Firewall:	
Respond to Pings from LAN:	
Respond to Pings from WAN:	

4. 10. 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:

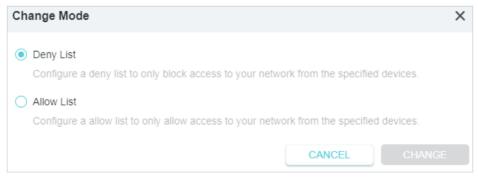
Block or allow specific client devices to access my network (via wired or wireless).

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. Toggle on to enable Access Control.



4. Click Change Mode to select the access mode to either block (recommended) or allow the device(s) in the list.



To block specific device(s):

6) Select Deny List.

Access Control			
Control the access to you	r network from the spe	ecified devices.	
Access Control:			
Current Mode:	Deny List	← Change Mode	
			G Add
Device Type	Device Name	MAC Address	Modify
There is no entry!			

7) Click 🔂 Add and select devices you want to be blocked, or enter the MAC address manually, and click ADD.

Ad	d Dev	ices				×
•		t From De Ianually	evice List			
		Туре	Device Name	IP	MAC	
		Ľ	18503634-BG	192.168.0.45	40-ED-00-22-30-74	
			network device	192.168.0.22	36-27-02-FF-6F-95	
				CA	NCEL ADD	

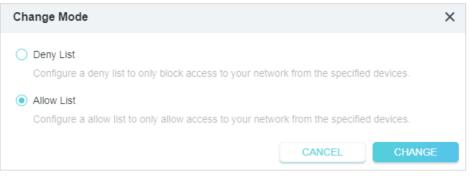
8) The Operation Succeeded message will appear on the screen, which means the selected devices have been successfully added to the Deny List.

To allow specific device(s):

1) Select Allow List and click CHANGE.

Add Devices	×
Select From Device ListAdd Manually	
Device Name:	
MAC Address:	
	CANCEL ADD

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.



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

			🔂 🔂
Device Type	Device Name	MAC Address	Modify
<u> </u>	18503634-BG	40-ED-00-22-30-74	

- 7) 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.



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.

4. 10. 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.

IP & MAC Binding	
Bind the MAC and IP addresses of devices to prevent ARP spoofing and attacks.	
IP & MAC Binding:	

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

To bind the connected device(s):

1) Locate the ARP List section and enable Bind to bind the IP and MAC addresses of a specific device.

RP List	and ID addresses of surrantiu	connected devices		
na of unbina the MAC	and IP addresses of currently	connected devices.		
				😯 Refres
Device Name	MAC Address	IP Address	Bind	Modify
network device	FA-8D-A8-FD-2B-59	192.168.0.252	\bigcirc	觉
18503634-BG	40-ED-00-22-30-74	192.168.0.45	\bigcirc	莭

To add a binding entry:

1) Click 😌 Add in the Binding List section.

Binding List			
Add or delete binding ent	ries.		
			🔂 Add
Device Name	MAC Address	IP Address	Modify
No Entries			

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.

<

3) Click SAVE.

Done!

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

4.10.4. ALG

ALG allows customized Network Address Translation (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.

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

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

4.11. 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 four 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.

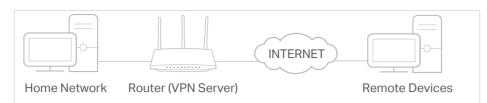
WireGuard VPN is a secure, fast and modern VPN protocol. It is based on the UDP protocol and uses modern encryption algorithms to improve work efficiency.

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

4. 11. 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.



Step1. Set up OpenVPN Server on Your Router

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

OpenVPN			
Set up an OpenVPN for secure, remote	Set up an OpenVPN for secure, remote access to your network.		
Note: No certificate has been created. C	Generate one below before enabling OpenVPN.		
OpenVPN:	C Enable		
Service Type:	UDP		
	○ TCP		
Service Port:	1194		
VPN Subnet:	10.8.0.0		
Netmask:	255.255.255.0		
Client Access:	Home Network Only		

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.
- 5. Select the Service Type (communication protocol) for OpenVPN Server: UDP, TCP.
- 6. Enter a VPN Service Port to which a VPN device connects, and the port number should be between 1024 and 65535.
- 7. In the VPN Subnet/Netmask fields, enter the range of IP addresses that can be leased to the device by the OpenVPN server.
- 8. 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.
- 9. Click SAVE.
- 10. 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.

11. 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 <u>http://openvpn.net/index.php/download/community-downloads.html</u> 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.

4. 11. 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.

РРТР				
Set up a PPTP VPN and accounts for qu	lick, remote acces	s to your network.		
PPTP:	Enable			
Client IP Address:	10.0.0.11	- 10.0.20		
		(up to 10 clients)		
Allow Samba (Network Place) access				
	Allow NetBIOS passthrough			
Allow Unencrypted connections				

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	o the VPN server.
		DA G
Username	Password	Modify
admin	admin	Ŭ Ū

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

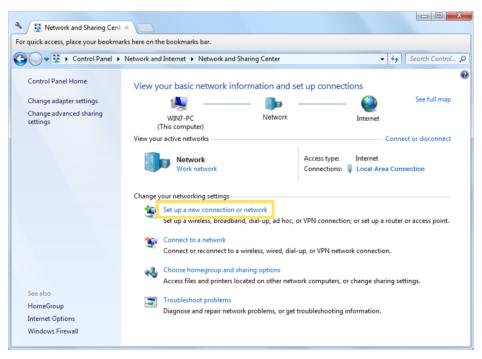
Add Account			×
	Username: Password:		
		CANCEL	ADD

6) Click ADD.

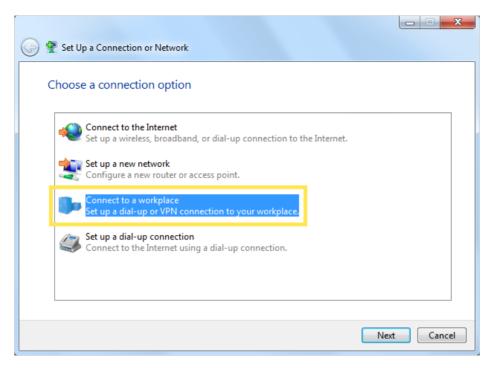
Step 2. Configure PPTP VPN Connection on Your Remote Device

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.	
🧶 — 🎱 — 🕪	
Dial directly Connect directly to a phone number without going through the Internet.	
i 🔍 — 💵	
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.

0	Le Connect to a Workplace				
	Type the Internet address to connect to				
	Your network administrator c	an give you this address.			
	Internet address:	218.18.1.73			
	Destination name:	VPN Connection			
		use this connection yone with access to this computer to use this connection. ıst set it up so I can connect later			
		Next	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:	1000	
	Password:	••••	
	Domain (optional):	Show characters Remember this password	
			Connect Cancel

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

🕞 🌆 Connect to a Workplace	
The connection is ready to use	
ing ing	
Connect now	
	Close

4. 11. 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.



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.

_2TP/IPSec			
Set up a L2TP/IPSec VPN and accounts	for quick, remote a	ccess to your network.	
L2TP/IP Sec	Enable		
Client IP Address:	10.9.0.11	- 10.9.0.20	
		(up to 10 clients)	
IPSec Encryption:	Encrypted	\sim	
IPSec Pre-Shared Key:			

- 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.
- 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.				
		🔂 Add		
Username	Password	Modify		
admin	admin	131 日		

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

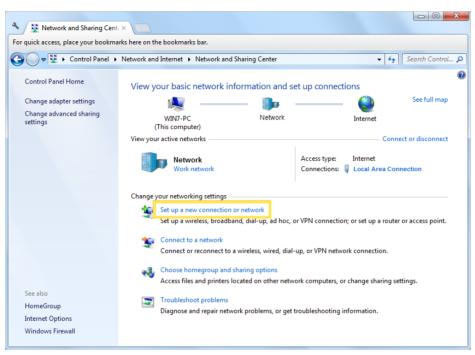
Add Account			×
	Username: Password:		
		CANCEL	ADD

9) 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.	
with the second	
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.	
1	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.	
i - I - I - I - I - I - I - I - I - I -	
Dial directly Connect directly to a phone number without going through the Internet.	
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.

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

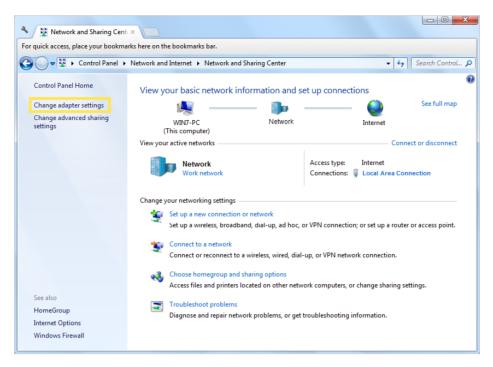
6. Enter the User name and Password you have set for the L2TP/IPSec VPN server on your router, and click Connect.

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

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

Ge 🔓 Connect	to a Workplace	
The conn	ection is ready to use	
	ili ili ili	
	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.

C C C C C C C C C C C C C C C C C C C	onnections	٩
Organize Start this connection Rename this connection >>	•= •	
Local Area Connection sec.softether.co.jp Intel(R) PRO/1000 MT Network C		

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

Connect VP	N Connection
User name: Password:	
Do <u>m</u> ain:	
Me only	ser name and password for the following users: , who uses this computer

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

VPN Connection Propertie	s		×
General Options Security	Networking	Sharing	
Type of VPN:			
Layer 2 Tunneling Protocol w	ith IPsec (L2	TP/IPSec)	-
Data encryption:		Advance	d settings
Require encryption (disconne	ct if server d	eclines)	-
Use Extensible Authentic	ation Protoco	ol (EAP)	
		Prop	
Allow these protocols			
Unencrypted passwor	d (PAP)		
Challenge <u>H</u> andshake	Authenticat	ion Protocol (C	HAP)
Microsoft CHAP Versio	on 2 (MS-CH	AP v2)	
Automatically use password (and do		logon name a	nd
		ОК	Cancel

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.

TP	operties
🖲 Use p	eshared key for authentication
<u>K</u> ey:	1881
Lice of	- VG to far an the - time time
	rtificate for authentication
	runcate for authentication ify the Name and Usage attributes of the server's certificat

Done! Click Connect to start VPN connection.

🐓 Connect VI	PN Connection
<u>U</u> ser name:	
Password:	Photosophic acceleration of the local
Do <u>m</u> ain:	
Save this	user name and password for the following users:
Me onl	y
🚱 🔿 <u>A</u> nyone	e who uses this computer
Connect	Cancel Properties Help

4. 11. 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 and accounts	for quick, remote and secure access to your network.
WireGuard:	C Enable
Tunnel IP Address:	10.5.5.1/32
Listen Port:	51820
	(1024-65535)
Client Access:	Internet and Home Network
	Advanced Settings
DNS:	Enable
Persistent Keepalive:	25
Private Key:	eGmtE4RmnopGGSzvEPP06dkMY8k2Oswd8+vGPozaJ24=
Public Key:	jfy1EJOegKql6DOJzl1pwTTj7U1IEy22/qWNDea2VnA=
	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.

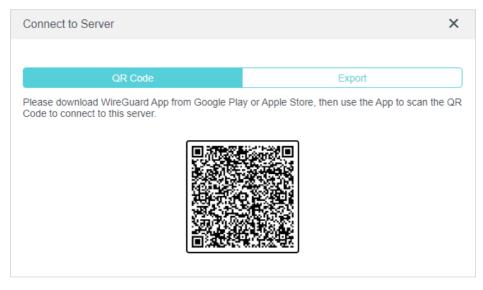
Step 2. Create accounts that can be used by remote clients to connect to the VPN server.

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

Add		×
Username:	Test	
Address:	10.5.5.3/32	
	The Address should be included in the (Server).	Allowed IPs
Allowed IPs (Client):	0.0.0/1,128.0.0/1	
Allowed IPs (Server):	10.5.5.3/32	
Pre-shared Key (Secret):	Enable	
	CANCEL	SAVE

- 2. Give a name to this account.
- 3. Enter 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	×
QR Code	Export
Please use the following configuration to set up yo	our WireGuard client.
EXP	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 = 0.0.0.051820 PersistentKeepalive = 25	

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

onfigure accounts (up to 16)	that can be used by remote clients to connect to	the VPN server.
		🔂 Ad
Username	Allowed IPs	Modify
Test	0.0.0.0/1,128.0.0.0/1	日 ふ 重
ADMIN	0.0.0.0/1,128.0.0.0/1	じ & 団

4. 11. 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:



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 clie	ts that will use the VPN function.	
	VPN Client: 🗸 ENABLE	
	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 PPTP L2TP/IPSec	
	WireGuard Peer 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:	admin	(Optional)
Password:	ø	(Optional)
Import .ovpn File:	OpenVPN-Config.ovpn	
	BROWSE	
	Upload successfully.	
	Import the CA file or edit the .ovpn	file manually
	CANCEL	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.

	Import the CA file or edit the .ovpn	file manually
Import CA File:		
	BROWSE	
Manual Settings:	EDIT	
	CANCEL	SAVE

• 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:	vpn2	
VPN Type:	PPTP V	
VPN Server:	218.18.1.73	
Username:		
Password:		
Encryption:	Auto	
	CANCEL	SAVE

 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:	vpn3	
VPN Type:	L2TP/IPSec V	
VPN Server:	218.18.1.73	
Username:		
Password:		
IPSec Pre-Shared Key:	1,234(867%)	
	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:	Test	
VPN Type:	WireGuard	
Import from Config File:	wg_client.conf	
	BROWSE	
	Upload successfully.	
NAT:	Enable	
	▼ Interface	
Private Key:	UJOn+XkyxT6xft/+nHIwNHZAh1A6	
Address:	10.5.5.3/32	
DNS Server 1:		(Optional)
DNS Server 2:		(Optional)
MTU Size:	1420 bytes	(Optional)
	▼ Peer	
Public Key:	jfy1EJOegKql6DOJzl1pwTTj7U1lEy	
Pre-Shared Key:		(Optional)
Allowed IPs:	0.0.0/1,128.0.0/1	
	CANCEL	SAVE

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

d or edit VPN serv	ver. Up to 6 VPN serve	rs can be added.		
				0
Description	VPN Type	Status	ENABLE	Modify
vpn3	L2TP/IPSec	Disconnected		0 D
vpn2	PPTP	Disconnected	\bigcirc	区面
vpn1	OpenVPN	Disconnected	\bigcirc	区前
vpn4	WireGuard	Disconnected	\bigcirc	区面

- 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.

				×
Select the Online De		access VPN server.		
	Device Type	Device Name	MAC Addres	S
			FC-AA-14-55	-FB-5D
			86-D2-DE-B	9-18-62
offline De	evices			
	Device Type	Device Name	MAC Addres	S
No Entrie	es			
			Cancel	Add

6. Save the settings.

Device Lis	t			
Manage dev	ices that will use the VPN	function.		
				🔂 Add
Туре	Device Name	MAC Address	VPN Access	Modify
	10000	FC:AA:14:55:FB:5D		莭
	No.Phase	86:D2:DE:B9:18:62		団

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

4.12. IPv6

4. 12. 1. Set up an IPv6 Internet Connection

This function allows you to set up an IPv6 internet connection using the information provided by your ISP (internet service provider).

- 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. Note: If you do not know what your internet connection type is, contact your ISP.
- 4. Fill in information as required by different connection types.
- Static IP: Fill in blanks and save the settings.

IPv6:		
Internet Connection Type:	Static IP	~
IPv6 Address:		
Default Gateway:		
Primary DNS:		
Secondary DNS:		
MTU Size:	1500	

• Dynamic IP(SLAAC/DHCPv6): Click Advanced Settings to input further information if your ISP requires. Save the settings and click RENEW.

Dynamic IP(SLAAC/DHCPv6) V	
RENEW	
RELEASE	
	II

 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. Save the settings and 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.

	the information provided by your ISP (internet service provid
IPv6:	
Internet Connection Type:	PPPoE V
	Share the same PPPoE session with IPv4
Username:	
Password:	
IPv6 Address:	
	Advanced Settings
	CONNECT

 6to4 Tunnel: An IPv4 internet connection type is a prerequisite for this connection type. Please manually set up your internet connection first. Click Advanced Settings to input further information if your ISP requires. Save the settings and click CONNECT.

Pv6 Internet	the information provided by your ISP (internet service provide
ter up an in vo internet connection using	g the information provided by your for (internet service provide
IPv6:	
Internet Connection Type:	6to4 Tunnel 🗸 🗸
IPv4 Address:	
IPv4 Subnet Mask:	
IPv4 Default Gateway:	
TUNNEL ADDRESS:	
	Advanced Settings
	CONNECT
	DISCONNECT

• Pass-Through (Bridge): Save the settings. No configuration is required.

v6 Internet		
et up an IPv6 internet connection using	the information provided by your	r ISP (internet service provider).
IPv6:		

5. Configure LAN ports. Windows users are recommended to choose from DHCPv6 and SLAAC+Stateless DHCP.

IPv6 LAN	
Configure the LAN IPv6 address of the return the clients.	outer and set the configuration type to assign IPv6 addresses to
Assigned Type:	O ND Proxy
	O DHCPv6
	SLAAC+Stateless DHCP
	SLAAC+RDNSS
Address Prefix:	/64
Address:	FE80::2FF:FF:FE36:7328/64

Note: You don't need to configure IPv6 LAN if the Internet Connection Type is Pass-Through (Bridge).

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.

MAC Clone	
Router MAC Address:	Use Default MAC Address
	00 - ff - 00 - 36 - 73 - 29

4.13. System

4. 13. 1. Firmware Upgrade

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

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

Note:

- Backup your router configuration before firmware upgrade.
- Do NOT turn off the router during the firmware upgrade.

Auto Update

Enable Auto Update and set the update time. The router will update firmware automatically at the specified time when new version is available.

Auto Update		
Update firmware for this router automatic	ally when a new version is available.	
Auto Update:		
Current Time:	2024-06-06 7:50:37 PM	Settings
Update Time:	03:00AM - 05:00AM	

Online Upgrade

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

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

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

3. Click UPGRADE if there is new firmware.

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

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

Local Upgrade

- 1. Download the latest firmware file for the router from <u>www.tp-link.com</u>.
- 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 Upgrade.
- 4. Focus on the Local Upgrade section. Click BROWSE to locate the downloaded new firmware file, and click UPGRADE.

Local Update		
Update firmware for this router from a local file		
New Firmware File:		
	BROWSE	
-	UPDATE	

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

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

4. 13. 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 > 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 BROWSE to locate the backup configuration file stored on your computer, and click RESTORE.

Restore		
Restore settings from a backup file.		
File:		
	BROWSE	
	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 detail	ult values, except your login and cloud account information.

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.

Restore all the configuration settings to their default values.
FACTORY RESTORE

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.

4. 13. 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		
Change the router's local management password.		
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.

4.13.4. 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.					
Enable					
Enable					
e ø					
	Enable				

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.

4.13.5. 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	al network devices.
Local Management via HTTPS:	C Enable
Local Managers:	All Devices

• Allow all LAN connected devices to manage the router:

Select All Devices for Local Managers.

Local Management		
Access and manage the router from loo	cal network devices.	
Local Management via HTTPS:	Enable	
Local Managero;	All Devices	~

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

Local Management				
Access and manage the router from local network devices.				
Local Management via HTTPS:	Enable			
Local Managers:	Specified Devices			
		+ Add Device		
Description	MAC Address	Operation		
No Entries				

2. Click Add Device.

Add Device							×
	Description:						
		VIEW	CONN	IECTE	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.

4.13.6. 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.

Remote Management
Access and manage the router over the internet.
Note: Remote Management is not supported when you are connected to the internet only via IPv6. If you want to use Remote Management, please make sure you have set up an IPv4 connection first. Remote Management:

Allow all devices to manage the router remotely:

Remote Management			
Access and manage the router over the internet.			
Note: Remote Management is not suppo want to use Remote Management, please			
Remote Management:	Enable		
HTTPS Port:	443		
Web Address for Management:	https://0.0.0.0:443		
Remote Managers:	All Devices V		

- 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 Managers.
- 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>Dynamic DNS</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 over the internet.		
Note: Remote Management is not suppo want to use Remote Management, pleas		
Remote Management:	Enable	
HTTPS Port:	443	
Web Address for Management:	https://0.0.0.0:443	
Remote Managers:	Specified Device ~	
Only this IP Address:		

- 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 Specified Device for Remote Managers.
- 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>https://Router's WAN</u> IP:port number (such as <u>https://113.116.60.229:1024</u>).

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

4.13.7. 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.

System Log				
View a detailed record	of system activities.			
	Current Time: 2019-	05-28 07:10:05		
Log Type: All	\checkmark			
Search	Q		C Refresh	olear All 🗳
2019-05-28 01:15: 2019-05-28 01:15: 2019-05-28 01:01: 2019-05-28 01:01: 2019-05-28 01:01: 2019-05-28 01:00: 2019-05-28 01:00: 2019-05-28 01:00: 2019-05-28 01:00: 2019-05-28 00:00:	34 Led Controller INFO 34 Led Controller INFO 36 Led Controller INFO 36 Led Controller INFO 36 Led Controller INFO 36 Time Settings INFO	ialization succeeded ialization succeeded [927] Start to run WAN1_OFF [927] Start to run WAN0_OFF [927] Start to run LAN_ON [927] Start to run WAN1_OFF [927] Start to run WAN0_OFF [927] Start to run LAN_ON [6409] Service restart [927] Start to run STATUS_O	-	

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	ess 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 > System Log.
- 3. In the Save Log section, click MAIL LOG.
- 4. Enter the information required:

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

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.

Tips: SMTP server is available for users in most webmail systems. For example, the SMTP server address of Hotmail is smtp-mail.outlook.com.

- 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.

4. 13. 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		
Troubleshoot network connectivity proble	ems.	
Diagnostic Tools:	Ping	~
Diagnostic roots.	Ting	*
IP Address/Domain Name:		
Ping Count:	4	
Ping Packet Size:	64	Bytes
	s	TART

- 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.

PING 192.168.0.1 (192.168.0.1): 64 data bytes Reply from 192.168.0.1: bytes=64 ttl=64 seq=1 time=0.322 ms Reply from 192.168.0.1: bytes=64 ttl=64 seq=2 time=0.286 ms Reply from 192.168.0.1: bytes=64 ttl=64 seq=3 time=0.286 ms Ping Statistic "192.168.0.1" Packets: Sent=4, Received=4, Lost=0 (0.00% loss) Round-trip min/avg/max = 0.286/0.312/0.334 ms ping is stopped.

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.
```

4.13.9. Set Up System Language

Set the system language for the router 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 & Language and select the language you want.

English	\sim	
	English	English

4. 13. 10. Set Up System Time

System time is the time displayed while the router is running. The system time you configure here will be used for other time-based functions like Parental Controls. You can choose the way to obtain the system time as needed.

- 1. Visit <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 & Language.
- 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.	
Current Time:	
24-Hour Time:	
Set Time:	Get from Internet
Time Zone:	(UTC-08:00) Pacific Time (US & Canada)
NTP Server I:	time.nist.gov
NTP Server II:	time-nw.nist.gov (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 time.	
Current Time:	
24-Hour Time:	
Set Time:	Get from Managing Device

- 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 time.		
Current Time:		
24-Hour Time:		
Set Time:	Manually	·
Date:	05/28/2019	
Time:	07 🔹 : 17	. 19 🗸

- 2. Set the current Date (In MM/DD/YYYY format).
- 3. Set the current Time (In HH/MM/SS format).
- 4. Click SAVE.
- To set up Daylight Saving Time:
- 1. Tick the Enable box of Daylight Saving Time.

Daylight Saving Time					
Automatically synchronize the system tir	ne with da	ylight sav	ing time.		
Daylight Saving Time:	Enab	le			
Start:	Mar	~	2nd	~	
	Sun	~	10:00	~	
End:	Nov	~	First	~	
	Sun	~	09:00	~	
Running Status:	Daylight S	Saving Tim	ne is on.		

- 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.

4. 13. 11. 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 router reboo	ots automatically.	
Reboot Schedule:	Enable	
Note: Make sure Time Settings are corre	ect before using this function.	
Current Time:		
Reboot Time:	03 🗸 : 00	\sim
Repeat:	Every Week	\sim
	Monday	\sim

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

4. 13. 12. 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:				
Night Mode				
Set a time period when the LEDs will be	off automati	cally.		
Night Mode:	Enable			
Note: Make sure Time Settings are corre	ect before u	sing this function.		
Current Time:				
LED Off From:	22	✓ : 00	~	
To:	06	✓ : 00	~	(next day)

Chapter 5

Configure the Router in Hotspot Mode

This chapter presents how to configure the various features of the router working in Hotspot mode.

It contains the following sections:

- Network Map
- <u>Network</u>
- TP-Link Cloud Service
- <u>Wireless</u>
- USB Storage Device
- <u>NAT Forwarding</u>
- Parental Controls
- <u>QoS</u>
- <u>Security</u>

- <u>VPN Server&Client</u>
- <u>IPv6</u>
- System

5.1. Operation Mode

- 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.
- To view the router's current mode:

Locate the Operation Mode section. The router's current operation mode is highlighted.

isplays the operation mode you s	elect by using the Mode Switch on yo	ui device.
•	•	•
Router/USB Internet	Hotspot (Current)	AP/RE/Client

- To change the router's network mode:
- 1. Set the Mode Switch to your desired mode and wait 2 minutes for the router to reboot automatically.
- 2. Refer to <u>Connect the Hardware</u>, and follow the instructions of your desired mode to set the router up.
- To change the router's internet connection settings:

Locate the Connection Settings section. The router's current network mode, host Wi-Fi information, internet connection type, etc., are displayed. You can change the connected hotspot by clicking the WI-FI SCANNER button.

Connection Settings		
Share the internet from a public Wi-Fi an	d create your private and secure Wi-Fi r	etwork.
Network Mode:	Hotspot (WISP)	
	Wi-Fi SCANNER	
Wireless Band:	2.4GHz	
	◯ 5GHz	
Network Name (SSID):	TP-Link_4E3A	
MAC Address:	D8 - 44 - 89 - 5E - 4E - 3A	
	Lock to AP	
Security:	WPA/WPA2-Personal	
Password:	35145714	
Internet Connection Type:	Dynamic IP V	
	Select this type if your ISP doesn't pro internet connection.	ovide any information fo
Router MAC Address:	Use Custom MAC Address	

5.2. 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 Public Wi-Fi to check internet status.

Public Wi-Fi	(* *)	Clients
Internet Status		
WISP SSID: Connection Type:	TP-Link_4E3A Internet IP Address: Dynamic IP WAN MAC Address:	192.168.1.101 D8-44-89-CC-A5-55

• Click the router to check device status and network settings. You can turn on or off the wireless network or guest network, or click Edit to change related settings.

Public Wi-Fi	() ()	<u>ц</u> °	Clients
Router Information			
Device Name: LAN MAC Address:	D8-44-89-CC-A5-54	IPv4 LAN IP: IPv6 LAN IP:	192.168.0.1 FE80::DA44:89FF:FECC:A55 4/64
Wireless			🕑 Edit
2.4GHz Wireless: Network Name (SSID): Password: Channel:	TP-Link_portable 12345678 Auto (Current: 4)	5GHz Wireless: Network Name (SSID): Password: Channel:	TP-Link_portable_5G 12345678 Auto (Current: 149)
Guest Network			🕑 Edit
2.4GHz Wireless: Network Name (SSID):	TP-Link_Guest_A554	5GHz Wireless: Network Name (SSID):	TP-Link_Guest_A554_5G
Performance			
CPU Load	Current: 33%	Memory Usage	Current: 46%
Ethernet Status			
Internet LAN 1000Mbps Full Duplex			

• Click Clients to view the client devices in your network. You can block devices so they cannot access your network.

Pu All (1)	الله من الله من من الله من الله		(° *) 			ents
Connec	ted Clients				Vī	ew Deny List
Туре	Information	Real-time Rate	Interface	Tx/Rx Rate(Mbps)	Duration	Block
_	18503634-BG <a> 40-ED-00-22-30-74 192.168.0.45	↑ 11.2 Kb/s↓ 7.7 Kb/s	-		29 min	\otimes

5.3. Network

5. 3. 1. Status

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with the username and password you set for the router.
- 2. Go to Advanced > Network > Status. You can view the current status information of the router.

Status		
Internet status overview is displayed on this page.		
Internet		
Status:	Connected	
Internet Connection Type:	Dynamic IP	
IP Address:	192.168.1.102	
Subnet Mask:	255.255.255.0	
Default Gateway:	192.168.1.1	
Primary DNS:	192.168.1.1	
Secondary DNS:	0.0.0.0	
Online Duration:	5 Minutes	

- Internet This field displays the current settings of the internet, and you can configure them on the Advanced > Network > Internet page
 - Status Indicates whether the router has been connected to the internet.
 - Internet Connection Type Indicates the way in which your router is connected to the internet.

- IP Address The WAN IP address of the router.
- Subnet Mask The subnet mask associated with the WAN IP address.
- Default Gateway The Gateway currently used is shown here.
- Primary & Secondary DNS The IP addresses of DNS (Domain Name System) server.
- Online Duration Displays how long the router has been connected to the internet.

LAN	
MAC Address	D8-44-89-CC-A5-54
IP Address	192.168.0.1
Subnet Mask	255.255.255.0

- LAN This field displays the current settings of the LAN, and you can configure them on the Network > LAN page.
 - MAC Address The physical address of the router.
 - IP Address The LAN IP address of the router.
 - Subnet Mask The subnet mask associated with the LAN IP address.

DHCP Server	
DHCP Server:	On
IP Address Pool:	192.168.0.2-192.168.0.253

- DHCP Server This field displays the current settings of DHCP (Dynamic Host Configuration Protocol) Server, and you can configure them on the Network > DHCP Server page.
 - DHCP Server Indicates whether the DHCP server is enabled or disabled. It is enabled by default and the router acts as a DHCP server.
 - IP Address Pool The IP address range for the DHCP server to assign IP addresses.



 Dynamic DNS - This field displays the current settings of the Dynamic DNS (Domain Name System), and you can configure them on the Advanced > Network > Dynamic DNS page. • Service Provider - The Dynamic DNS service provider you have signed up for.

5.3.2. Internet

Note: 3G/4G USB Modem mode and USB Tethering mode don't have the Internet section.

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

Internet			
Set up an internet connection with the set	rvice information provide	ed by your ISP (internet service	provider).
Internet Connection Type:	Dynamic IP	\sim	

Dynamic IP

If your ISP provides the DHCP service, please select Dynamic IP, and the router will automatically get IP parameters from your ISP.

Click RENEW to renew the IP parameters from your ISP.

Click RELEASE to release the IP parameters.

Internet Connection Type:	Dynamic IP 🗸 🗸
IP Address:	192.168.137.117
Subnet Mask:	255.255.255.0
Default Gateway:	192.168.137.1
Primary DNS:	192.168.137.1
Secondary DNS:	0.0.0.0
	RENEW
	RELEASE
	▼ Advanced Settings
DNS Address:	Get Dynamically from ISP
Primary DNS:	192.168.137.1
Secondary DNS:	0.0.0.0
MTU Size:	1500 bytes
	(Do not change unless necessary.)
Host Name:	
	Get IP using Unicast DHCP

- DNS Address- The default setting is to get an IP address dynamically from your ISP. If your ISP does not automatically assign DNS addresses to the router, please select Use the Following DNS Addresses and enter the IP address in dotted-decimal notation of your ISP's primary DNS server. If a secondary DNS server address is available, enter it as well.
- MTU Size The normal MTU (Maximum Transmission Unit) value for most Ethernet networks is 1500 Bytes. It is not recommended that you change the default MTU size unless required by your ISP.
- Host Name This option specifies the name of the router.
- Get IP with Unicast DHCP A few ISPs' DHCP servers do not support the broadcast applications. If you cannot get the IP address normally, you can choose this option. (It is rarely required.)
- Router MAC Address :

- 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.

Note:

• You can only use the MAC Address Clone function for PCs on the LAN.

Static IP

If your ISP provides a static or fixed IP address, subnet mask, default gateway and DNS setting, please select Static IP.

nternet		
Set up an internet connection with the se	rvice information provided by your ISP (internet service provide
Internet Connection Type:	Static IP V	
IP Address:		
Subnet Mask:		
Default Gateway:		
Primary DNS:		
Secondary DNS:		(Optional)
MTU Size:	1500 bytes	
Dautar MAC Address	(Do not change unless necessary.)	
Router MAC Address:	Use Custom MAC Address	

- IP Address Enter the IP address in dotted-decimal notation provided by your ISP.
- Subnet Mask Enter the subnet mask in dotted-decimal notation provided by your ISP. Normally 255.255.255.0 is used as the subnet mask.
- Default Gateway Enter the gateway IP address in dotted-decimal notation provided by your ISP.
- Primary/Secondary DNS (Optional) Enter one or two DNS addresses in dotteddecimal notation provided by your ISP.
- MTU Size The normal MTU (Maximum Transmission Unit) value for most Ethernet networks is 1500 Bytes. It is not recommended that you change the default MTU size unless required by your ISP.

- Router MAC Address :
 - 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.

```
Note:
```

- You can only use the MAC Address Clone function for PCs on the LAN.
- If you have changed the WAN MAC address when the WAN connection is PPPoE, it will not take effect until the connection is re-established.

5.3.3. NAT

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

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with the username and password you set for the router.
- 2. Go to Advanced > Network > Internet and locate the NAT section.
- 3. Configure NAT, then click SAVE.

NAT: 🔽 Enable NAT		
	NAT: 🗹 Enable NAT	NAT: 🗹 Enable NAT

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

5. 3. 4. Internet Port Negotiation Speed Setting

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with the username and password you set for the router.
- 2. Go to Advanced > Network > Internet and locate the Internet Port Negotiation Speed Setting section.
- 3. Select the duplex type from the drop-down list and click **SAVE**.

ernet Port Negotiation Speed S	etting		
Internet Port Negotiation Speed	Auto Manatistica		
Setting:	Auto Negotiation	\sim	

5.3.5. LAN

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with the username and password you set for the router.
- 2. Go to Advanced > Network > LAN.
- 3. Configure the IP parameters of the LAN and click SAVE.

LAN	
View and configure LAN settings.	
MAC Address:	D8-44-89-CC-A5-54
IP Address:	192.168.0.1
Subnet Mask:	255.255.255.0 🗸

- MAC Address The physical address of the LAN ports. The value can not be changed.
- IP Address Enter the IP address in dotted-decimal notation of your router (the default one is 192.168.0.1).
- Subnet Mask An address code that determines the size of the network. Normally 255.255.255.0 is used as the subnet mask.

Note:

- If you have changed the IP address, you must use the new IP address to log in.
- If the new IP address you set is not in the same subnet as the old one, the IP address pool in the DHCP Server will be configured automatically, but the Virtual Server and DMZ Host will not take effect until they are re-configured.

5. 3. 6. IGMP

IGMP (Internet Group Management Protocol) helps the router to identify which clients are subscribed to specific multicast groups within a local network. This allows for efficient transmission of multicast data packets, avoiding unnecessary traffic waste and improving network performance.

IGMP can be used to manage multicast transmission in IPTV. If you want to set up IPTV to enable Internet/IPTV/Phone service provided by your internet service provider (ISP), follow the steps:

Before you start, make sure your ISP provides the networking service based on IGMP technology, e.g., British Telecom(BT) and Talk Talk in UK:

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with the username and password you set for the router.
- 2. Go to Advanced > Network > IGMP.
 - 1) Tick the IGMP Proxy and IGMP Snooping checkbox, then select the IGMP Version, either V2 or V3, as required by your ISP.

GMP			
Check the multicast settings. It is recomm	nended to keep them a	s default.	
IGMP Proxy:	Enable		
IGMP Snooping:	Enable		
IGMP Version:	V2	~	

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

5.3.7. DHCP Server

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

- To specify the IP address that the router assigns:
- 1. Visit <u>http://tplinkwifi.net</u>, and log in with the username and password you set for the router.
- 2. Go to Advanced > Network > DHCP Server and locate the DHCP Server section.

DHCP Server		
DHCP Server:	Enable	
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.

Note: To use the DHCP server function of the router, you must configure all computers on the LAN as Obtain an IP Address automatically.

- To reserve an IP address for a specified client device:
- 1. Visit <u>http://tplinkwifi.net</u>, and log in with the username and password you set for the router.
- 2. Go to Advanced > Network > DHCP Server and locate the Address Reservation section.
- 3. Click Add in the Address Reservation section.

eserve IP addresses I	or specific devices conr	lected to the router.		
				🔂 Ad
Device Name	MAC Address	Reserved IP Address	Status	Modify
No Entries				

4. Click VIEW CONNECTED DEVICES and select the you device you want to reserve an IP for. Then the MAC and IP Address will be automatically filled in. You can also enter the MAC and IP address of the client device.

MAC Address:	(*)	7	85	5	-	
(VIEW	CON	NECTE	D DE	VICES	
IP Address:						
				C	ANCEL	SAVE

- To check the DHCP client list:
- 1. Visit <u>http://tplinkwifi.net</u>, and log in with the username and password you set for the router.
- 2. Go to Advanced > Network > DHCP Server and locate the DHCP Client List section. You can see the device information of the list.
- 3. Click Refresh to see the current attached devices.

iew the devices that	are currently assigned with	IP addresses by the DHCP serve	er.
otal Clients: 3			G Refresh
Device Name	MAC Address	Assigned IP Address	Lease Time
	FA-8D-A8-FD-2B-59	192.168.0.252	1:40:0
110	B6-67-DA-05-15-21	192.168.0.114	1:25:16
18503634-BG	40-ED-00-22-30-74	192,168,0,45	1:32:45

5. 3. 8. Dynamic DNS

The router offers the DDNS (Dynamic Domain Name System) feature, which allows the hosting of a website, FTP server, or e-mail server with a fixed domain name (named by yourself) and a dynamic IP address. Thus your friends can connect to your server by entering your domain name no matter what your IP address is.

Before using this feature, you need to sign up for DDNS service providers such as www.comexe.cn, www.dyndns.org, or www.noip.com. The Dynamic DNS client service provider will give you a password or key.

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with the username and 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 (domain name) router.	for remote access to	your device, website, or se	rver behind the
Service 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.

ynamic DNS ssign a fixed host na uter.	me (domain name) fo	r remote access to	your device, website, or se	erver behind the	
	Service Provider:	rP-Link	~		
Current Domain Name:					
				🕀 Regist	
Domain Name	Registered Date	Status	Operation	Delete	

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 🗸	Register Now
Username:		
Password:	Ø	
Domain Name:		
WAN IP binding:	Enable	
Status:	Not launching	
	LOGIN AND SAVE	
	LOGOUT	

5. Click LOG IN AND SAVE.

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

5. 3. 9. Static Routing

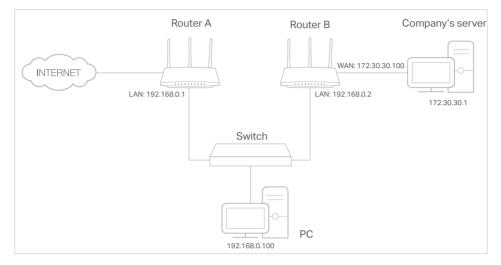
Static Routing is a form of routing that is configured manually by a network administrator or a user by adding entries into a routing table. The manually-configured routing information guides the router in forwarding data packets to the specific destination.

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 and locate the Static Routing section.



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 -	
Description:	CANCEL	SAVE

- 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 The Subnet Mask determines which portion of an IP address is the network portion, and which portion is the host portion.
- 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 192.168.1.2.
- 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.

outing Table			
/iew all valid routing entries t	hat are currently in use.		
Active Route Number: 3			G Refrest
Network Destination	Subnet Mask	Gateway	Interface
0.0.0.0	0.0.0.0	192.168.1.1	WAN
192.168.0.0	255.255.255.0	0.0.0.0	LAN
192.168.1.0	255.255.255.0	0.0.0.0	WAN

5.4. 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 section 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.

5. 4. 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.

P-Link ID og in to bind the router to your TP-Link ID. You can remo nd more.	tely manage your network via the Tether app,
TP-Link ID (Email):	Remote Control Access and control your networ remotely
Password:	Smart Home Support Amazon Alexa and Gov Assistant
LOG IN	Parental Controls Manages online strategy for the connected devices
SIGN UP	Connected devices
Forgot Password?	DOWNLOAD ON THE DOWNLOAD ON THE App Store Google Play
	Scan for Tether Search Tether

3. Click Sign Up and follow the instructions to register a TP-Link ID.

TP-Li	nk ID	
g in d mo	to bind the router to your TP-Lin ore.	ık ID. You
	Create a TP-Link I	D
	Select Country or Region	~
	Email Address	
	Password	ø
	Confirm Password	ø
	I have fully read and accept Privacy Policy and Terms of the second	
	Subscribe to the TP-Link newsletter and be the first	to know
	about amazing deals, VIP giveaways, new products much more.	and so
	SIGN UP	
	I already have TP-Link	D

- 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 <u>Set up via Tether</u> 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. 4. 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 <u>http://tplinkwifi.net</u>, and log in with your TP-Link ID.
- 2. Go to Advanced > TP-Link ID, and focus on the TP-Link ID section.

TP-Link ID		
Edit the email and password for your TP	-Link ID.	
Email:		Ø
Password:	•••••	Ø
Region:	United States	
Email Subscription:		
		wsletter and be the first to know veaways, new products, and so

- 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	×
Current Password: New Email:	Ø
Note: New email or password may no your device is connected to the Intern	ot sync to client devices immediately. Please log in again when net to update account information.
	CANCEL

• To change your password:

1. Click 🗹 behind the Password.

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

Change Password		×
Current Password: New Password: Confirm Password:	Ø Ø Ø	
Note: New email or password may no your device is connected to the Interr	ot sync to client devices immediately. Plea let to update account information.	ase log in again when

5. 4. 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 Owner account. The Owner account can add or remove other TP-Link IDs to or from the same router. All accounts can monitor and manage the router locally or remotely, but only the owner account can:

- 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.

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 TP-Link IDs section.

Bound	TP-Link IDs
Bind or u	nbind TP-Link IDs to control who can manage this device.
Owner	yinghui.chen yinghui.chen@tp-link.com
	🔂 Bind

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.

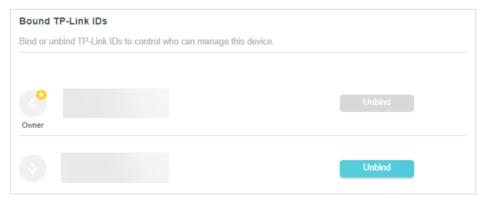
Bind TP-Link ID	×
TP-Link ID (Email):	
	CANCEL BIND

4. The new TP-Link ID will be displayed in the Bound TP-Link IDs table.

Bound TP-Link IDs	
Bind or unbind TP-Link IDs to control who can manage this device.	
Owner	Unbind
	Unbind

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 TP-Link IDs section.
- 3. Tick Unbind of the TP-Link ID(s) you want to remove.



5. 4. 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.

5.5. Wireless

5. 5. 1. Wireless 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 > Wireless > Wireless Settings.
- 3. Configure the wireless settings for the wireless network and click SAVE.

Wireless Settings			
Personalize settings for each band.			
OFDMA:	Enable ?		
TWT:	Enable		
ECO Mode:	Enable ?		
2.4GHz:	Enable		Share Network
Network Name (SSID):	TP-Link_portable		Hide SSID
Security:	WPA2-PSK[AES]	~	
Password:	12345678		
Transmit Power:	High	~	
Channel Width:	20/40MHz	~	
Channel:	Auto	\sim	
Mode:	802.11b/g/n mixed	~	
5GHz:	Enable		Share Network
Network Name (SSID):	TP-Link_portable_5G		Hide SSID
Security:	WPA2-PSK[AES]	\sim	
Password:	12345678		
Transmit Power:	High	~	
Channel Width:	20/40/80MHz	\sim	
Channel:	Auto	V	
Mode:	802.11a/n/ac/ax mixed	V	

- OFDMA This feature 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.
- 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.
- Eco Mode As an energy-saving feature, ECO Mode can reduce your device's energy consumption, but its Wi-Fi coverage will also be limited.
- 2.4GHz/5GHz Select this checkbox to enable the 2.4GHz/5GHz wireless network.
- Share Network- Click to save the Wi-Fi settings for sharing.
- Network Name (SSID) Enter a value of up to 32 characters. The same Name (SSID) must be assigned to all wireless devices in your network.

- Hide SSID Select this checkbox if you want to hide the network name (SSID) from the Wi-Fi network list. In this case, you need to manually join the network.
- Security Select an option from the Security drop-down list. We recommend you don't change the default settings unless necessary.
- Password Set a password for the wireless network. The value is case-sensitive.
- Transmit Power Select High, Middle or Low to specify the data transmit power. The default and recommended setting is High.

Note: Transmit Power will become non-editable if you enable ECO Mode.

- Channel Width Select a channel width (bandwidth) for the wireless network.
- Channel Select an operating channel for the wireless network. For the 2.4 GHz and 5GHz bands, it is recommended to leave the channel to Auto, if you are not experiencing the intermittent wireless connection issue.
- Mode You can choose the appropriate "Mixed" mode.

5. 5. 2. Guest Network

Guest Network allows you to provide Wi-Fi access for guests without disclosing your host 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 settings to ensure network security and privacy.

Create a Guest 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 > Wireless > Guest Network.
- 3. Enable the 2.4GHz/5GHz guest network according to your needs.

nable the wireless bands you want you	guesis to use and complete the rel	ateu mormation.
2.4GHz:	Enable	Share Network
Network Name (SSID):	TP-Link_Guest_7330	Hide SSID
5GHz:	Z Enable	Share Network
Network Name (SSID):	TP-Link_Guest_7330_5G	Hide SSID
Security:	No Security	~

4. Customize the SSID. Don't select Hide SSID unless you want your guests to manually input the SSID for guest network access.

- 5. Select the Security type and customize your own password. If No security is selected, no password is needed to access your guest network.
- 6. Click SAVE. Now you guests can access your guest network using the SSID and password you set!
- 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 Permissio	ns
Control the data tha	guests can access.
	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 my local network

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

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

5. 5. 3. Wireless Schedule

The wireless function can be automatically off at a specific time when you do not need the wireless function.

- 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 function.

schedule when to automatically tur	n off your wireless network.	
Wireless Sched	ule: 🗹 Enable	
lote: Before enabling this feature,	make sure System Time is set to "Get fro	om Internet".
current Time:		
current Time:		🔁 Ac
Current Time: Wireless Off Time	Repeat	Ac Modify

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

Wireless Off Time: From	11	~	PM	\sim		
То	7	\sim	AM	\sim	(next day)	
Demost		•				
Repeat:	S	M				S
						SAVE

Note:

- The effective wireless 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.

5.5.4. WPS

WPS (Wi-Fi Protected Setup) can help you to quickly and securely connect to a network. This section will guide you to add a new wireless device to your router's

network quickly via WPS.

Note:

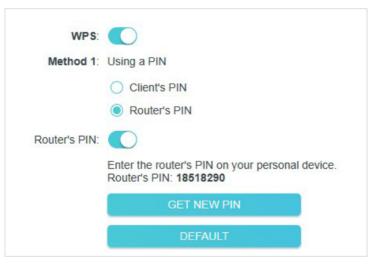
- The WPS function cannot be configured if the wireless function of the router is disabled. Please make sure the wireless function is enabled before configuration.
- 1. Visit <u>http://tplinkwifi.net</u>, and log in with your TP-Link ID or the password you set for the router.
- 2. Go to Advanced > Wireless > WPS.
- 3. Follow one of the following methods to connect your client device to the router's Wi-Fi network.

Method 1: Using a PIN

- Connects via the Client's PIN
- 1. Keep the WPS Status as Enabled and select Client's PIN.

WPS:	
Method 1:	Using a PIN
	Client's PIN
	O Router's PIN
	Enter your personal device's PIN here and click CONNECT
	CONNECT

- 2. Enter the PIN of your device and click CONNECT. Then your device will get connected to the router.
- Connects via the Router's PIN
- 1. Keep the WPS Status as Enabled and select Router's PIN.



2. Enter the router's PIN on your personal device. You can also generate a new one.

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.

Method 2: Using the WPS Button on the Web Screen

Click Start on the screen. Within two minutes, enable WPS on your personal device. A Device-(XX-XX-XX-XX-XX) Connected message should appear on the screen,

indicating successful WPS connection.

Note: XX-XX-XX-XX-XX is the MAC address of your device.

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 WPS Button on the Router

Press the router's WPS button. Within two minutes, enable WPS on your personal device.

5. 5. 5. Additional 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 > Wireless > Additional Settings.

3. Configure the advanced settings of your wireless network and click SAVE.

Note: If you are not familiar with the setting items on this page, it's strongly recommended to keep the provided default values; otherwise it may result in lower wireless network performance.

Additional Settings			
Check advanced wireless settings for you	ur device.		
WMM:	Enable		
AP Isolation:	Enable		
Airtime Fairness:	Enable		
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.
- 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 40-1000 milliseconds for Beacon Interval here. Beacon Interval value determines the time interval of the beacons. The beacons are the packets sent by the router to synchronize a wireless network. The default value is 100.
- RTS Threshold Here you can specify the RTS (Request to Send) Threshold. If the packet is larger than the specified RTS Threshold size, the router will send RTS frames to a particular receiving station and negotiate the sending of a data frame. The default value is 2346.
- DTIM Interval This value determines the interval of the Delivery Traffic Indication Message (DTIM). A DTIM field is a countdown field informing clients of the next window for listening to broadcast and multicast messages. When the router has buffered broadcast or multicast messages for associated clients, it sends the next DTIM with a DTIM Interval value. You can specify the value between 1-255 Beacon 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.

5.6. USB Storage Device

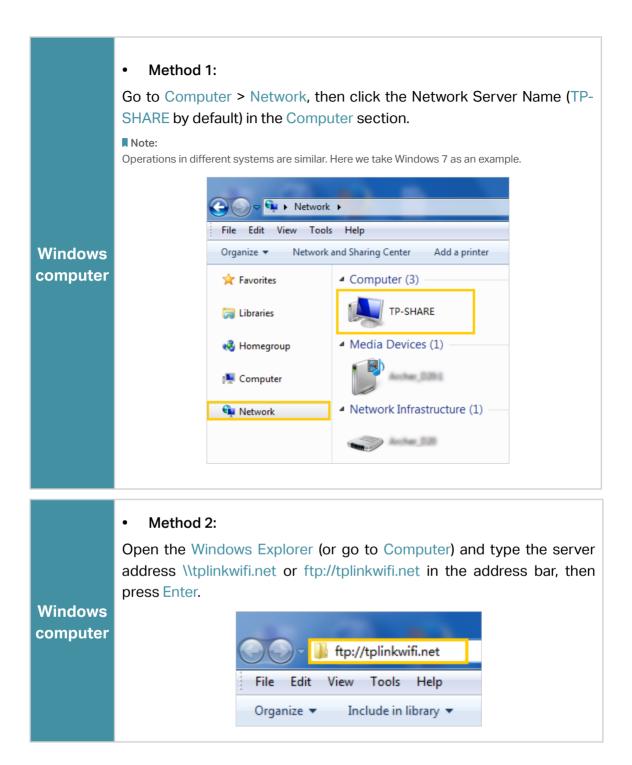
Insert your USB storage device into the router's USB port and then access files stored there locally or remotely.

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 > USB Storage Device and click Remove.

5. 6. 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.



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.

5. 6. 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 > USB Storage Device.

3. Tick the Internet FTP checkbox, and then click SAVE.

elect the method for accessing	g your USB storage device. The	e device can then be	reached via the	access addre
etwork/Media Server Name:	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	ď
Internet FTP	ftp://192.168.1.101:21 Set DDNS		21	ß

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

	 Open the Windows Explorer (or go to Computer, only for Windows users) or open a web browser. Type the server address in the address bar: Type in ftp://<wan address="" ip="" of="" router="" the="">:<port number=""> (such</port></wan> 				
	as ftp://59.40.2.243:21). If you have specified the domain name of the router, you can also type in ftp://< <u>domain name</u> >:< <u>port</u> <u>number</u> > (such as ftp://MyDomainName:21)				
Computer	File Edit View Tools Help				
	Organize 🔻 Include in library 🔻				
	3) Press Enter on the keyboard.				
	4) Access with the username and password you set in <u>To Set Up</u> <u>Authentication for Data Security</u> .				
	Tips: You can also access the USB disk via a third-party app for network files management, which can resume broken file transfers.				
Tablet	Use a third-party app for network files management.				

Ø Tips:

Click Dynamic DNS to learn how to set up a domain name for you router.

5. 6. 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 > USB Storage Device.
- 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.

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

ccess Method elect the method for accessing your USB storage device. The device can then be reached via the access addres					
Network/Media Server Name:	MyShare				
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	, P	
Internet FTP	ftp://192.168.1.101:21 Set DDNS		21	ß	

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.

Sharing	g Contents:	
	Share Selected Folders	Ø
~	G:/Document	
	G:/Pictures	

To Set Up Authentication for Data Security

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

1. In the File Sharing section, enable Secure Sharing.

ecure Sharing ustomize the access settings to ensure data security.					
Username	Password		Permissions	Modify	
admin		Ø	Read&Write	Ø	
visit		Ø	Read	Ø	

2. Click i to modify the access account. The username and password are both admin for default administrator account, and both visit for default visitor account. Accessing as an administrator can read and modify the shared folders while visitors can only read the shared folders.

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>.

5.7. NAT Forwarding

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

With the forwarding feature, the router can traverse the isolation of NAT so that clients on the internet can reach devices on the LAN and realize some specific functions.

The Mercusys router includes 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.

5.7.1. Port Forwarding

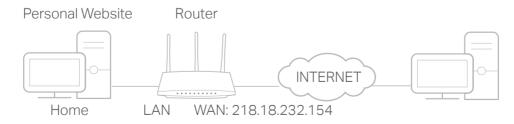
When you build up a server in the local network and want to share it on the internet, Port Forwarding can realize the service and provide it to internet users. At the same time Port Forwarding can keep the local network safe as other services are still invisible from the internet.

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

I want to:

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

For example, the personal website has been built in my home PC (192.168.1.100). I hope that my friends on the internet can visit my website in some way. My PC is connected to the router with the WAN IP address 218.18.232.154.



- 1. Set your PC to a static IP address, for example 192.168.1.100.
- 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.

Add a Port Forwarding Entry		×
Add a rule for an individual external p 200), add multiple rules. For more inf	oort or port range. For nonconsecutive pro, refer to Port Forwarding FAQ	orts (example: 100 and
Service Name:		
	VIEW COMMON SERVICES	
Device IP Address:		
	VIEW CONNECTED DEVICES	
External Port:	Individual Port	
	O Port Range	
	(1-65535)	
Internal Port:		(Optional)
	(1-65535)	
Protocol:	All	
	Enable This Entry	
	CANCEL	SAVE

- 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 Entry		×
Add a rule for an individual external p 200), add multiple rules. For more inf	oort or port range. For nonconsecutive p fo, refer to Port Forwarding FAQ	orts (example: 100 and
Service Name:	HTTP	
	VIEW COMMON SERVICES	
Device IP Address:	192.168.0.100)
	VIEW CONNECTED DEVICES	
External Port:	 Individual Port Port Range 	
	80	
	(1-65535)	
Internal Port:	80	(Optional)
	(1-65535)	
Protocol:	ТСР 🗸	
	Enable This Entry	
	CANCEL	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>Dynamic DNS</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.

5.7.2. 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 Triggerin	ng					
	allow devices o s (from the inter			mically open spe red it.	ecific external p	orts and
						🔂 Add
Service Name	Triggering Port	Triggering Protocol	External Port	External Protocol	Status	Modify
No Entries						

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 Entry		×
Service Name:	MSN Gaming Zone	
	VIEW COMMON SERVICES	
Triggering Port:	47624	
Triggering Protocol:	All	
External Port:	2300-2400,28800-29000	
	(XX or XX-XX,1-65535,at most 5 pairs	s)
External Protocol:	All	
	Enable This Entry	
	CANCEL	SAVE
	CANCLL	SAVL

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.

5.7.3. UPnP

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

Tips:

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

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



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

- 1. Visit <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.

UPnP	
	UPnP (Universal Plug and Play) to allow devices on your local network to dynamically open ports ications such as multiplayer gaming and real-time communications.
	UPnP:

5.7.4. 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.

e internet for applications such as online gaming and
0 100
CONNECTED DEVICES

5. Click SAVE.

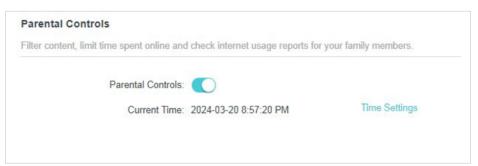
Done!

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.

5.8. 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 > Parental Controls.
- 3. Enable Parental Controls.



- 4. In Profiles, Click Add to create a profile for a family member.
- 5. Add basic profile information.

Create Profile				×
Basic Info	Content Filter		Time Controls	
Basic Info				
Name the profile and add devices to it.				
Profile Name				
Devices + Add Devices				
		Cancel	Next	

- 4) Enter a Name for the profile to make it easier to identify.
- 5) Under Devices, click + Add Devices.
- 6) Select the devices that belong to this family member. Deny/Allow settings 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.

- 7) Click Next.
- 6. Block/allow content for this profile.

Create Profile		×
Basic Info	Content Filter	Time Controls
Content Filter		
Customize content filtering setting	s for the profile.	
Filter Rule		
Select deny list or allow list to ma	nage content.	
Deny List On	Allow List Off	
Deny List		
Block all websites that contain a s	specific keyword.	
Input a keyword or URL	ADD	
	C	Cancel Next

- 1) Select the Filter Rule, and click ADD to modify the Deny or Allow List.
- Deny List: Client devices of your profile can't visit the specific websites or the websites that contain the specific keyword you added to the Deny List.
- Allow List: Client devices of your profile can only visit the specific websites and the websites that contain the specific keyword you added to the Allow List.
- 2) Click Next.
- 7. Set time restrictions on internet access.

Create Profile			×
Basic Info	Content Filter	Time	Controls
Time Controls			
Set internet access time for the p	profile.		
Internet Allowed Time Set the time period when interne	t access is allowed.		
+ Edit Time			
Time Limits			
Set daily limits for the total time s	spent online.		
Mon-Fri 🚺 30m	in Carlo and a second sec		8h
Sat-Sun 🚺 30m	in CIII OIIII 2h		8h
	(Cancel	Save

- 1) In Internet Allowed Time, click + Edit Time to set the time period when internet access is allowed.
- 2) Enable Time Limits on Monday to Friday and Saturday & Sunday, and set the allowed online time to for client devices of your profile.

5.9. QoS

QoS (Quality of Service) is designed to ensure the efficient operation of the network when come across network overload or congestion. Devices set as high priority will be allocated more bandwidth and so continue to run smoothly even when there are many devices connected to the network.

I want to:

Specify priority levels for some devices or applications.

For example, I have several devices that are connected to my wireless network. I would like to set an intermediate speed on the internet for my computer for the next 2 hours.

How can I do that?

- 1. Enable QoS and set bandwidth allocation.
 - 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 > QoS > Global Settings.

- 3) Tick to enable QoS.
- 4) Input the maximum upload and download bandwidth provided by your internet service provider. 1Mbps equal s to 1000Kbps.
- 5) Click Save.

Global Settings		
Prioritize the Internet traffic of specific de	evice to guarant	ee a faster connection
Qo S:	Enable	
Upload Bandwidth:	1000	Mbps 🗸

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

evice Prio	rity				
Туре	Information	Real-time Rate	Traffic Usage	High Priority	Timing
P	18503634-BG	↑ 5.6 Kb/s ↓ 3.9 Kb/s	11.4MB		Always 🗸
	network device (2.46) FA-8D-A8-FD-2B-59	↑ 0 Kb/s ↓ 0 Kb/s	8.4MB	\bigcirc	_

Done! You can now enjoy using your computer for the next 2 hours.

5.10. Security

5. 10. 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.

irewall			
Check the settings of the firewall that protects your network. It is recommended to keep them as default			
SPI Firewall:			
SFI Filewall.			
Respond to Pings from LAN:			
Respond to Pings from WAN:	\bigcirc		

5. 10. 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:

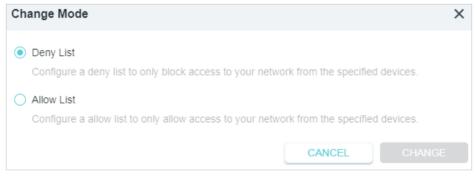
Block or allow specific client devices to access my network (via wired or wireless).

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. Toggle on to enable Access Control.



4. Click Change Mode to select the access mode to either block (recommended) or allow the device(s) in the list.



To block specific device(s):

6) Select Deny List.

Access Control			
Control the access to your network from the specified devices.			
Access Control:			
Current Mode:	Deny List	← Change Mode	
			🔂 Add
Davias Tura	Device News		
Device Type	Device Name	MAC Address	Modify
There is no entry!			

7) Click 🔂 Add and select devices you want to be blocked, or enter the MAC address manually, and click ADD.

Ado	d Dev	ices				×
•		t From De Ianually	evice List			
		Туре	Device Name	IP	MAC	
		Ľ	18503634-BG	192.168.0.45	40-ED-00-22-30-74	
			network device	192.168.0.22	36-27-02-FF-6F-95	
				C/	ANCEL ADD	

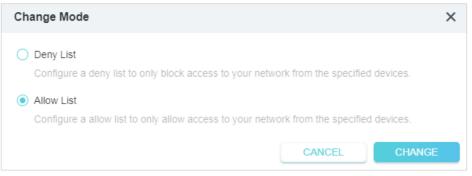
8) The Operation Succeeded message will appear on the screen, which means the selected devices have been successfully added to the Deny List.

To allow specific device(s):

1) Select Allow List and click CHANGE.

Add Devices	×
 Select From Device List Add Manually 	
Device Name:	
MAC Address:	
	CANCEL ADD

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.



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

			🔂 🔂
Device Type	Device Name	MAC Address	Modify
_	18503634-BG	40-ED-00-22-30-74	

- 7) 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.



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.

5. 10. 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.

IP & MAC Binding		
Bind the MAC and IP addresses of devices to prevent ARP spoofing and attacks.		
IP & MAC Binding:		

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

To bind the connected device(s):

1) Locate the ARP List section and enable Bind to bind the IP and MAC addresses of a specific device.

RP List	and IP addresses of currently	connected devices.		
				😯 Refre
Device Name	MAC Address	IP Address	Bind	Modify
network device	FA-8D-A8-FD-2B-59	192.168.0.252	\bigcirc	莭
18503634-BG	40-ED-00-22-30-74	192.168.0.45	\bigcirc	莭

To add a binding entry:

1) Click 😌 Add in the Binding List section.

Binding List			
Add or delete binding en	ries.		
			🔂 Add
Device Name	MAC Address	IP Address	Modify
No Entries			

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.

×

3) Click SAVE.

Done!

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

5.10.4. ALG

ALG allows customized Network Address Translation (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.

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

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

5.11. 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 four 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.

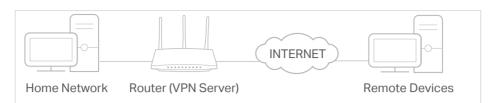
WireGuard VPN is a secure, fast and modern VPN protocol. It is based on the UDP protocol and uses modern encryption algorithms to improve work efficiency.

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

5. 11. 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.



Step1. Set up OpenVPN Server on Your Router

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

OpenVPN					
Set up an OpenVPN for secure, remote	Set up an OpenVPN for secure, remote access to your network.				
Note: No certificate has been created. C	Generate one below before enabling OpenVPN.				
OpenVPN:	C Enable				
Service Type:	UDP				
	○ TCP				
Service Port:	1194				
VPN Subnet:	10.8.0.0				
Netmask:	255.255.255.0				
Client Access:	Home Network Only				

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.
- 5. Select the Service Type (communication protocol) for OpenVPN Server: UDP, TCP.
- 6. Enter a VPN Service Port to which a VPN device connects, and the port number should be between 1024 and 65535.
- 7. In the VPN Subnet/Netmask fields, enter the range of IP addresses that can be leased to the device by the OpenVPN server.
- 8. 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.
- 9. Click SAVE.
- 10. 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.

11. 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 <u>http://openvpn.net/index.php/download/community-downloads.html</u> 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.

5. 11. 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.

PPTP					
Set up a PPTP VPN and accounts for quick, remote access to your network.					
PPTP:	Enable				
Client IP Address:	10.0.0.11	- 10.0.0.20			
		(up to 10 clients)			
	Allow Samba	(Network Place) access			
	Allow NetBIO	S passthrough			
	Allow Unencry	ypted connections			

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	o the VPN server.
		DAA 🗗
Username	Password	Modify
admin	admin	Ŭ Ū

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

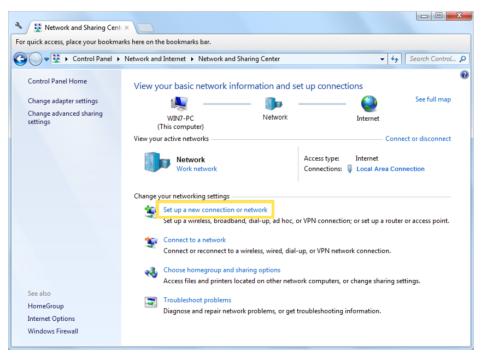
Add Account				×
	Username: Password:			
			CANCEL	ADD

6) Click ADD.

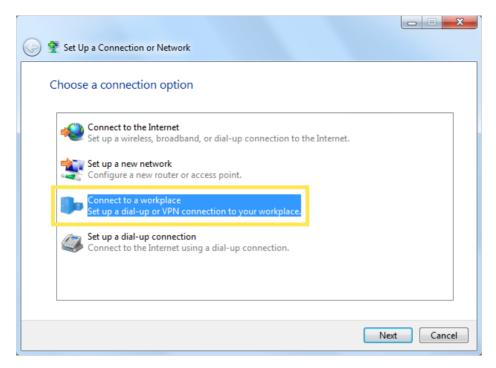
Step 2. Configure PPTP VPN Connection on Your Remote Device

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.	
i i i i i i i i i i i i i i i i i i i	
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 address to connect to		
	Your network administrator c	an give you this address.	
	Internet address:	218.18.1.73	
	Destination name:	VPN Connection	
		use this connection yone with access to this computer to use this connection. ust set it up so I can connect later	
		Next	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:	1000	
	Password:	••••	
	Domain (optional):	Show characters Remember this password	
			Connect Cancel

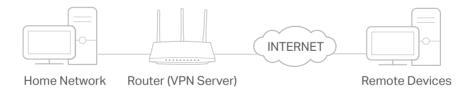
7. Click Connect Now when the VPN connection is ready to use.

🕞 🌆 Connect to a Workplace	
The connection is ready to use	
in the second se	
Connect now	
	Close

5. 11. 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.



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 a	access to your network.	
L2TP/IPSec:	Enable		
Client IP Address:	10.9.0.11	- 10.9.0.20	
		(up to 10 clients)	
IPSec Encryption:	Encrypted	~	
IPSec Pre-Shared Key:			

- 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.
- 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	o the VPN server.
		🔂 Add
Username	Password	Modify
admin	admin	区面

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

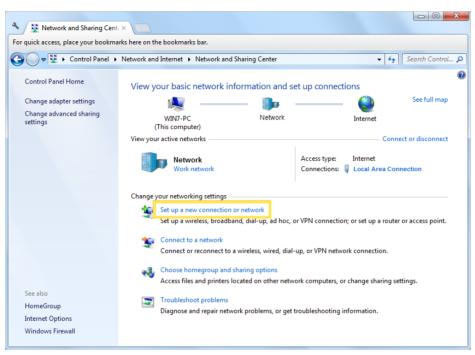
Add Account			×
	Username: Password:		
		CANCEL	ADD

9) 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.	
with the second	
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.	
1	Next Cancel

4. Select Use my Internet connection (VPN).

G In 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.	
i i	
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.

🚱 🌆 Con	nect to a Workplace		
Type t	he Internet addr	ess to connect to	
Your ne	etwork administrator (can give you this address.	
Internet	t address:	218.18.1.73	
Destina	tion name:	VPN Connection	
	Use a smart card		
-	Allow other people to This option allows an	o use this connection yone with access to this computer to use this connection.	
	Don't connect now; j	ust set it up so I can connect later	
		Nex	t Cancel

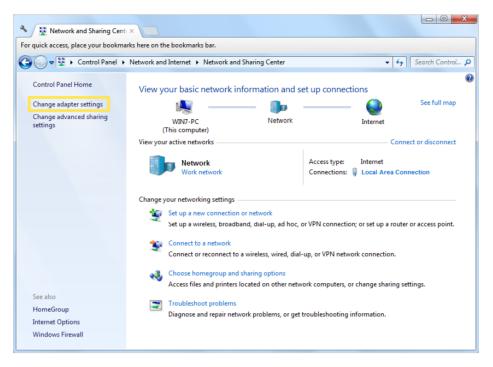
6. Enter the User name and Password you have set for the L2TP/IPSec VPN server on your router, and click Connect.

0	Connect to a Workplace		
	Type your user name	and password	
	User name:	allers.	
	Password:	•••••	
		Show characters Remember this password	_
	Domain (optional):		
			Connect Cancel

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

Ge 🔓 Connect	to a Workplace	
The conn	ection is ready to use	
	ili	
	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.

Search Network Connections + + + Search Network C	onnections	٩
Organize Start this connection Rename this connection >>	•= •	
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.

E 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

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

VPN Connection	Properti	es		
General Options	Security	Networking	Sharing	
Type of VPN:				
Layer 2 Tunneling	Protocol	with IPsec (L2	TP/IPSec)	•
Data encryption:			Advand	ced settings
Require encryption	n (disconr	nect if server d	eclines)	•
Authentication	e Authent	ication Protoc	ol (EAP)	
			P	operties
Allow these pr	otocols			
Unencrypte	ed passw	ord (PAP)		
Challenge	<u>H</u> andshal	e Authenticat	ion Protocol	(CHAP)
Microsoft Q	HAP Ven	sion 2 (MS-CH	AP v2)	
		e my Windows omain, if any)	logon name	and
2			ОК	Cancel

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.

ZTP	roperties	
	eshared key for authentication	
<u>K</u> ey:	1881	
	rtificate for authentication ify the Name and Usage attributes of the server's certifica	e
		e
		e

Done! Click Connect to start VPN connection.

🐓 Connect VP	N Connection
<u>U</u> ser name:	
Password:	75 charge file an el case or i del feed
Do <u>m</u> ain:	
Save this u	iser name and password for the following users:
Me only	/
😗 🔿 <u>A</u> nyone	who uses this computer
Connect	Cancel Properties <u>H</u> elp

5. 11. 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 and accounts	for quick, remote and secure access to your network.
WireGuard:	C Enable
Tunnel IP Address:	10.5.5.1/32
Listen Port:	51820
	(1024-65535)
Client Access:	Internet and Home Network
	Advanced Settings
DNS:	Enable
Persistent Keepalive:	25
Private Key:	eGmtE4RmnopGGSzvEPP06dkMY8k2Oswd8+vGPozaJ24=
Public Key:	jfy1EJOegKql6DOJzl1pwTTj7U1lEy22/qWNDea2VnA=
	RENEW KEY

3. Set the tunnel IP address and listen port. Do NOT change it unless necessary.

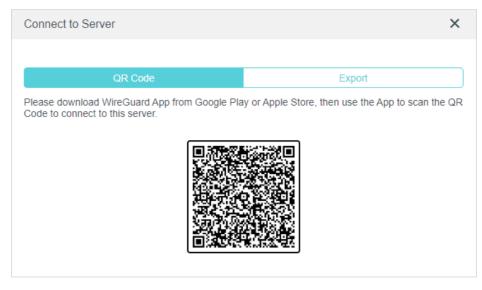
- 4. Select your Client Access type. Select Home Network Only if you only want the remote device to access your home network; select Internet and Home Network if you also want the remote device to access internet through the VPN Server.
- 5. (Optional) Click Advanced Settings to display more settings. 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.

Add		×
Username:	Test	
Address:	10.5.5.3/32	
	The Address should be included in the (Server).	e Allowed IPs
Allowed IPs (Client):	0.0.0.0/1,128.0.0.0/1	
Allowed IPs (Server):	10.5.5.3/32	
Pre-shared Key (Secret):	Enable	
	CANCEL	SAVE

- 2. Give a name to this account.
- 3. Enter 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			×
QR Code		Export	
Please use the following configuration to set up yo	our WireGuard client	-	
EXF	PORT		
[Interface] PrivateKey = UJOn+XkyxT6xft/+nHIwNHZAh1Ai Address = 10.5.5.3/32 [Peer] PublicKey = jfy1EJOegKql6DOJz11pwTTj7U1IE] AllowedIPs = 0.0.0.0/1,128.0.0.0/1 Endpoint = 0.0.0.0:51820 PersistentKeepalive = 25		Y= 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.

onfigure accounts (up to 16) that can be used by remote clients to connect to	the VPN server.
		🕀 Ado
Username	Allowed IPs	Modify
Test	0.0.0/1,128.0.0/1	🖸 🖉 🛅
ADMIN	0.0.0/1,128.0.0.0/1	🖸 🖉 🛅

5. 11. 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:



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 that v	vill use the VPN function.
VP	N Client: 🗹 ENABLE

- 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 PPTP		
NAT:	L2TP/IPSec WireGuard		
	 Peer 		
		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 v	
Username:	admin	(Optional)
Password:	ø	(Optional)
Import .ovpn File:	OpenVPN-Config.ovpn	
	BROWSE Upload successfully.	
	Import the CA file or edit the .ovpn	file manually
	CANCEL	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.

	Import the CA file or edit the .ovpn	file manually
Import CA File:		
	BROWSE	
Manual Settings:	EDIT	
	CANCEL	SAVE

• 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:	vpn2	
Description.	vpriz	
VPN Type:	PPTP	
VPN Server:	218.18.1.73	
Username:		
Password:		
Encryption:	Auto	
	CANCEL	SAVE

 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:	vpn3	
VPN Type:	L2TP/IPSec V	
VPN Server:	218.18.1.73	
Username:		
Password:		
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:	Test	
VPN Type:	WireGuard V	
Import from Config File:	wg_client.conf	
	BROWSE	
	Upload successfully.	
NAT:	Enable	
	▼ Interface	
Private Key:	UJOn+XkyxT6xft/+nHIwNHZAh1A6	
Address:	10.5.5.3/32	
DNS Server 1:		(Optional)
DNS Server 2:		(Optional)
MTU Size:	1420 bytes	(Optional)
	▼ Peer	
Public Key:	jfy1EJOegKql6DOJzl1pwTTj7U1IEy	
Pre-Shared Key:		(Optional)
Allowed IPs:	0.0.0.0/1,128.0.0.0/1	
	CANCEL	SAVE

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

d or edit VPN serv	ver. Up to 6 VPN serve	rs can be added.		
				0
Description	VPN Type	Status	ENABLE	Modify
vpn3	L2TP/IPSec	Disconnected		0 d
vpn2	PPTP	Disconnected	\bigcirc	00
vpn1	OpenVPN	Disconnected	\bigcirc	区量
vpn4	WireGuard	Disconnected	\bigcirc	回面

- 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.

				×
elect the		access VPN server.		
	Device Type	Device Name	MAC A	ddress
			FC-AA-	14-55-FB-5D
			86-D2-	DE-B9-18-62
ffline De	evices			
	Device Type	Device Name	MACA	ddress
No Entrie	es			
			Cancel	Add

6. Save the settings.

Device Lis	it			
Manage dev	ices that will use the VPN	function.		
				🔂 Add
Туре	Device Name	MAC Address	VPN Access	Modify
•••	1000	FC:AA:14:55:FB:5D		莭
•••	My-Phone	86:D2:DE:B9:18:62		创

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

5.12. IPv6

5. 12. 1. Set up an IPv6 Internet Connection

This function allows you to set up an IPv6 internet connection using the information provided by your ISP (internet service provider).

- 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. Note: If you do not know what your internet connection type is, contact your ISP.
- 4. Fill in information as required by different connection types.
- Static IP: Fill in blanks and save the settings.

IPv6:		
Internet Connection Type:	Static IP	~
IPv6 Address:		
Default Gateway:		
Primary DNS:		
Secondary DNS:		
MTU Size:	1500	

• Dynamic IP(SLAAC/DHCPv6): Click Advanced Settings to input further information if your ISP requires. Save the settings and click RENEW.

) the information provided by your ISP (ir	
IPv6:		
Internet Connection Type:	Dynamic IP(SLAAC/DHCPv6) V	
IPv6 Address:		
Primary DNS:	0	
Secondary DNS:		
	RENEW	
	RELEASE	
	Advanced Settings	

5. Configure LAN ports. Windows users are recommended to choose from DHCPv6 and SLAAC+Stateless DHCP.

IPv6 LAN		
Configure the LAN IPv6 address of the n the clients.	outer and set the configuration type to assig	gn IPv6 addresses to
Assigned Type:	O ND Proxy	
	O DHCPv6	
	SLAAC+Stateless DHCP	
	SLAAC+RDNSS	
Address Prefix:		64
Address:	FE80::2FF:FF:FE36:7328/64	

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.

AC Clone		
	Router MAC Address:	Use Default MAC Address
		00 - ff - 00 - 36 - 73 - 29

5.13. System

5. 13. 1. Firmware Upgrade

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

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

Note:

- Backup your router configuration before firmware upgrade.
- Do NOT turn off the router during the firmware upgrade.

Auto Update

Enable Auto Update and set the update time. The router will update firmware automatically at the specified time when new version is available.

Auto Update		
Update firmware for this router automatic	cally when a new version is available.	
Auto Update:		
Current Time:	2024-06-06 7:50:37 PM	Settings
Update Time:	03:00AM - 05:00AM	

Online Upgrade

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

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

Online Update	
Update firmware for this router over the ir	nternet.
Firmware Version:	
Hardware Version:	
	CHECK FOR UPDATES
	Firmware is up to date.

3. Click UPGRADE if there is new firmware.

4. Wait a few minutes for the upgrade 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 UPGRADE, and log in to the web management page with the username and password you set for the router. You will see the Firmware Upgrade page.

Local Upgrade

- 1. Download the latest firmware file for the router from <u>www.tp-link.com</u>.
- 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 Upgrade.
- 4. Focus on the Local Upgrade section. Click BROWSE to locate the downloaded new firmware file, and click UPGRADE.

∟ocal Update		
pdate firmware for this router from a local file		
New Firmware File:		
	BROWSE	
_	UPDATE	r

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

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

5. 13. 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 > 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 BROWSE to locate the backup configuration file stored on your computer, and click RESTORE.

Restore	
Restore settings from a backup file.	
-11-1	
File:	
	BROWSE
	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 defa	ult values, except your login and cloud account information.

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.

Restore all the configuration settings to their default values.
FACTORY RESTORE

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.

5. 13. 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	
Change the router's local management password.	
Old Password:	
New Password:	
Confirm New Password:	÷

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

5. 13. 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:	C Enable
From:	
To:	
SMTP Server:	
Authentication:	Enable
Username:	
Password:	

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.

5. 13. 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	al network devices.	
Local Management via HTTPS:	Enable	
Local Managers:	All Devices V	

• Allow all LAN connected devices to manage the router:

Select All Devices for Local Managers.

Local Management	
Access and manage the router from loca	al network devices.
Local Management via HTTPS:	Enable
Local Managers:	All Devices

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

Local Management		
Access and manage the router from loca	al network devices.	
Local Management via HTTPS:	Enable	
Local Managers:	Specified Devices	
		🔂 Add Device
Description	MAC Address	Operation
No Entries		

2. Click Add Device.

Add Device				×
	Description:			
		VIEW CONNECT	TED 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.

5.13.6. 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.

Remote Management	
Access and manage the router over the	internet.
Note: Remote Management is not suppr want to use Remote Management, pleas	orted when you are connected to the internet only via IPv6. If you

• Allow all devices to manage the router remotely:

Remote Management		
Access and manage the router over the	internet.	
Note: Remote Management is not support want to use Remote Management, pleas		
Remote Management:	Enable	
HTTPS Port:	443	
Web Address for Management:	https://0.0.0.0:443	
Remote Managers:	All Devices V	

- 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 Managers.
- 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>Dynamic DNS</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 over the	internet.	
Note: Remote Management is not suppo want to use Remote Management, pleas		
Remote Management:	Enable	
HTTPS Port:	443	
Web Address for Management:	https://0.0.0.0:443	
Remote Managers:	Specified Device V	
Only this IP Address:		

- 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 Specified Device for Remote Managers.
- 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>https://Router's WAN</u> IP:port number (such as <u>https://113.116.60.229:1024</u>).

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

5. 13. 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.

System Log	g			
View a detaile	ed record of system activit	es.		
	Current Time:	2019-05-28 07:10:05		
Log Type:	All			
Search	Q	,	😯 Refresh 🛛 🗳 Clear Al	
2019-05-28 02:07:29 Traffic Statistics INFO [5949] stats reset 2019-05-28 01:15:28 NAT INFO [3687] Initialization succeeded 2019-05-28 01:15:28 NAT INFO [3687] Initialization succeeded 2019-05-28 01:01:34 Led Controller INFO [927] Start to run WAN1_OFF 2019-05-28 01:01:34 Led Controller INFO [927] Start to run WAN0_OFF 2019-05-28 01:01:34 Led Controller INFO [927] Start to run WAN1_OFF 2019-05-28 01:00:36 Led Controller INFO [927] Start to run WAN1_OFF 2019-05-28 01:00:36 Led Controller INFO [927] Start to run WAN0_OFF 2019-05-28 01:00:36 Led Controller INFO [927] Start to run WAN0_OFF 2019-05-28 01:00:36 Led Controller INFO [927] Start to run LAN_ON 2019-05-28 01:00:36 Led Controller INFO [927] Start to run LAN_ON 2019-05-28 00:00:35 Led Controller INFO [927] Start to run STATUS_ON 2019-05-28 00:00:34 QoS INFO [6286] Service start				

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	ess 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 > System Log.
- 3. In the Save Log section, click MAIL LOG.
- 4. Enter the information required:

Mail Log		×
	Set your mail information below.	
Email From:	Require Password	
Username:		
Email Password:	1111 1	
SMTP Server:		
Email To:		
	Mail Log Automatically	
Frequency:	Every Day 🗸 🗸	
Mail Time:	00 🗸 : 00 🗸	
	CANCEL	SAVE

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.

Tips: SMTP server is available for users in most webmail systems. For example, the SMTP server address of Hotmail is smtp-mail.outlook.com.

- 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.

5. 13. 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		
Troubleshoot network connectivity proble	ems.	
Diagnostic Tools:	Ping	~
Diagnostic roots.	Filly	~
IP Address/Domain Name:		
Ping Count:	4	
Ping Packet Size:	64	Bytes
	s	TART

- 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.

F F F F F	PING 192.168.0.1 (192.168.0.1): 64 data bytes Reply from 192.168.0.1: bytes=64 ttl=64 seq=1 time=0.322 ms Reply from 192.168.0.1: bytes=64 ttl=64 seq=2 time=0.308 ms Reply from 192.168.0.1: bytes=64 ttl=64 seq=3 time=0.286 ms Ping Statistic "192.168.0.1" Packets: Sent=4, Received=4, Lost=0 (0.00% loss) Round-trip min/avg/max = 0.286/0.312/0.334 ms ping is stopped.

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

1 Archer Trace Co	e to 192.168.0 (192.168.0.1) mplete. e is stopped.	 		
liaceroui	e is stopped.			

5. 13. 9. Set Up System Language

Set the system language for the router 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 & Language and select the language you want.

English	\sim	
	English	English

5. 13. 10. Set Up System Time

System time is the time displayed while the router is running. The system time you configure here will be used for other time-based functions like Parental Controls. You can choose the way to obtain the system time as needed.

- 1. Visit <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 & Language.
- 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.		
Current Time:		
24-Hour Time:		
Set Time:	Get from Internet	
Time Zone:	(UTC-08:00) Pacific Time (US & Cana	ada) 🗸
NTP Server I:	time.nist.gov	
NTP Server II:	time-nw.nist.gov	(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 time.	
Current Time:	
24-Hour Time:	
Set Time:	Get from Managing Device 🗸

- 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 time.		
Current Time:		
24-Hour Time:		
Set Time:	Manually ~	
Date:	05/28/2019	
Time:	07 🗸 : 17 🗸	: 19 🗸

- 2. Set the current Date (In MM/DD/YYYY format).
- 3. Set the current Time (In HH/MM/SS format).
- 4. Click SAVE.
- To set up Daylight Saving Time:
- 1. Tick the Enable box of Daylight Saving Time.

Daylight Saving Time	ne with da	ylight sav	ing time.	
Daylight Saving Time:	Enab	le		
Start:	Mar	~	2nd	\sim
	Sun	~	10:00	~
End:	Nov	~	First	~
	Sun	~	09:00	~

- 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.

5. 13. 11. 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 router reboots automatically.			
Reboot Schedule:	Enable		
Note: Make sure Time Settings are corre	ect before using this function.		
Current Time:			
Reboot Time:	03 🗸 : 00	~	
Repeat:	Every Week	~	
	Monday	~	

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

5. 13. 12. 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:		
Night Mode		
Set a time period when the LEDs will be	off automatically.	
Night Mode:	C Enable	
Note: Make sure Time Settings are corre	ect before using this function.	
Current Time:		
LED Off From:	22 🗸 100	~
To:	06 🗸 : 00	✓ (next day)

Chapter 6

Configure the Router in Access Point Mode

This chapter presents how to configure the various features of the router working in Access Point mode.

It contains the following sections:

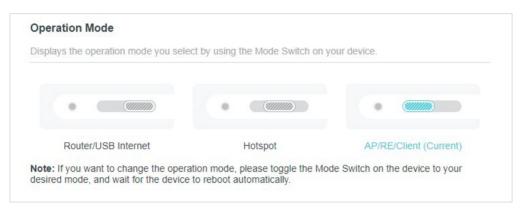
- Operation Mode
- <u>Network Map</u>
- Wireless
- <u>Network</u>
- <u>USB Storage Device</u>
- <u>Access Control</u>
- Firmware Upgrade
- Backup and Restore Configuration Settings
- <u>Change the Login Password</u>
- Password Recovery
- Local Management
- <u>System Log</u>

- <u>Test the Network</u>
 <u>Connectivity</u>
- <u>Set Up System Language</u>
- <u>Set Up System Time</u>
- <u>Set the Router to Reboot</u>
 <u>Regularly</u>
- <u>Control the LED</u>
- <u>TP-Link Cloud Service</u>

6.1. Operation Mode

- 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.
- To view the router's current mode:

Locate the Operation Mode section. The router's current operation mode is highlighted.



Locate the Connection Settings section. The router's current network mode is highlighted.

Connection Settings	
Select the proper network mode based o	n your internet source and application scenario.
Network Mode:	Access Point (Current)
	Change an existing wired (Ethernet) network into a wireless one. Recommended at home.
	O Range Extender
	O Client

• To change the router's network mode:

Figure out whether the Mode Switch needs to be set in order to change the router's network mode.

If yes, follow these steps:

- 1. Set the Mode Switch to your desired mode and wait 2 minutes for the router to reboot automatically.
- 2. Refer to <u>Connect the Hardware</u>, and follow the instructions of your desired mode to set the router up.

If no, follow these steps:

1. Refer to <u>Connect the Hardware</u>, and follow the instructions of your desired mode to connect the router properly.

2. Log in to the web management page of the router and go to Internet > Connection Settings. Select your desired network mode, configure the parameters (if any), and click SAVE.

6.2. 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	Ш	2.49 59 중 중	Clients
Internet Status			
Connection Type:	Dynamic IP	IP Address:	192.168.1.102

• Click the router to check device status and network settings. You can turn on or off the wireless network or guest network, or click Edit to change related settings.

Internet	(<u> </u>		Clients
Device Information			
Device Name:		IPv4 LAN IP:	192.168.1.102
Working Mode:	Access Point	LAN MAC Address:	D8-44-89-CC-A5-54
Wireless			🕑 Edit
2.4GHz Wireless:		5GHz Wireless:	
Network Name (SSID):	TP-Link_portable	Network Name (SSID):	TP-Link_portable_5G
Password:	12345678	Password:	12345678
Channel:	Auto (Current: 5)	Channel:	Auto (Current: 149)
Guest Network			🕑 Edit
2.4GHz Wireless:	\bigcirc	5GHz Wireless:	Ø
Network Name (SSID):	TP-Link_Guest_A554	Network Name (SSID):	TP-Link_Guest_A554_5G
Performance			
CPU Load	Current: 33	Memory Usage	Current: 4
		Q	<u> </u>
CPU Core Number: 1			
Ethernet Status			
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			
Internet LAN			
1000Mbps 1000Mbps			

• Click Clients to view the client devices in your network.

	ternet	•••••	• •• ? ??	(	Clients
I (1) Connect	v ded Clients				
Туре	Information		Interface	Tx/Rx Rate(Mbps)	Duration
	18503634-BG 40-ED-00-22-30-74 192.168.1.101	2	-		7 min

## 6.3. Wireless

#### 6. 3. 1. Wireless 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 Wireless.
- 3. Configure the wireless settings for the wireless network and click SAVE.

ersonalize settings for each band.			
OFDMA:	Enable 🕜		
TWT:	Enable ?		
ECO Mode:	Enable 🥜		
2.4GHz:	Enable		Share Network
Network Name (SSID):	TP-Link_portable		Hide SSID
Security:	WPA2-PSK[AES]	~	
Password:	12345678		
Transmit Power:	High	~	
Channel Width:	20/40MHz	~	
Channel:	Auto	~	
Mode:	802.11b/g/n mixed	~	
5GHz:	Enable		Share Network
Network Name (SSID):	TP-Link_portable_5G		Hide SSID
Security:	WPA2-PSK[AES]	~	
Password:	12345678		
Transmit Power:	High	~	
Channel Width:	20/40/80MHz	~	
Channel:	Auto	~	
Mode:	802.11a/n/ac/ax mixed	~	

- OFDMA This feature 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.
- 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.
- Eco Mode As an energy-saving feature, ECO Mode can reduce your device's energy consumption, but its Wi-Fi coverage will also be limited.
- 2.4GHz/5GHz Select this checkbox to enable the 2.4GHz/5GHz wireless network.
- Share Network- Click to save the Wi-Fi settings for sharing.

- Network Name (SSID) Enter a value of up to 32 characters. The same Name (SSID) must be assigned to all wireless devices in your network.
- Hide SSID Select this checkbox if you want to hide the network name (SSID) from the Wi-Fi network list. In this case, you need to manually join the network.
- Security Select an option from the Security drop-down list. We recommend you don't change the default settings unless necessary.
- Password Set a password for the wireless network. The value is case-sensitive.
- Transmit Power Select High, Middle or Low to specify the data transmit power. The default and recommended setting is High.

Note: Transmit Power will become non-editable if you enable ECO Mode.

- Channel Width Select a channel width (bandwidth) for the wireless network.
- Channel Select an operating channel for the wireless network. For the 2.4 GHz and 5GHz bands, it is recommended to leave the channel to Auto, if you are not experiencing the intermittent wireless connection issue.
- Mode You can choose the appropriate "Mixed" mode.

#### 6. 3. 2. Guest Network

Guest Network allows you to provide Wi-Fi access for guests without disclosing your host 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 settings to ensure network security and privacy.

- Create a Guest 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 Wireless > Guest Network.
- 3. Enable the 2.4GHz/5GHz guest network according to your needs.

2.4GHz:	Enable	Share Network
Network Name (SSID):	TP-Link_Guest_7330	Hide SSID
5GHz:	Enable	Share Network
Network Name (SSID):	TP-Link_Guest_7330_5G	Hide SSID
Security:	No Security	

- 4. Customize the SSID. Don't select Hide SSID unless you want your guests to manually input the SSID for guest network access.
- 5. Select the Security type and customize your own password. If No security is selected, no password is needed to access your guest network.
- 6. Click SAVE. Now you guests can access your guest network using the SSID and password you set!
- 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 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 ad	ccess.	
	Allow guests to see each other	
	Allow guesis to see each other	

#### • 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.

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

#### 6. 3. 3. Wireless Schedule

The wireless function can be automatically off at a specific time when you do not need the wireless function.

- 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 Wireless > Wireless Schedule.
- 3. Enable the Wireless Schedule function.

Schedule when to automatically turn off your wireless network.			
Wireless Sched	ule: 🗹 Enable		
ote: Before enabling this feature,	make sure System Time is set to "Get fro	om Internet".	
urrent Time:			
urrent Time:		🔁 Ad	
urrent Time: Wireless Off Time	Repeat	Ad Modify	

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

dd Schedule						
Wireless Off Time: From	11	~	PM	$\sim$		
То	7	$\sim$	AM	$\sim$	(next day)	
Repeat:	S	M				S
				0.0105		0.0.5
			-	CANCE		SAVE

#### Note:

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

#### 6.3.4. WPS

# WPS (Wi-Fi Protected Setup) can help you to quickly and securely connect to a network. This section will guide you to add a new wireless device to your router's

#### network quickly via WPS.

Note:

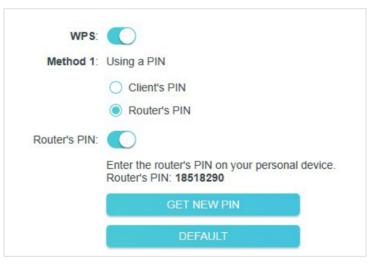
- The WPS function cannot be configured if the wireless function of the router is disabled. Please make sure the wireless function is enabled before configuration.
- 1. Visit <u>http://tplinkwifi.net</u>, and log in with your TP-Link ID or the password you set for the router.
- 2. Go to Wireless > WPS.
- 3. Follow one of the following methods to connect your client device to the router's Wi-Fi network.

#### Method 1: Using a PIN

- Connects via the Client's PIN
- 1. Keep the WPS Status as Enabled and select Client's PIN.

WPS:	
Method 1:	Using a PIN
	Client's PIN
	O Router's PIN
	Enter your personal device's PIN here and click CONNECT
	CONNECT
	Sec. 1

- 2. Enter the PIN of your device and click CONNECT. Then your device will get connected to the router.
- Connects via the Router's PIN
- 1. Keep the WPS Status as Enabled and select Router's PIN.



2. Enter the router's PIN on your personal device. You can also generate a new one.

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.

#### Method 2: Using the WPS Button on the Web Screen

Click Start on the screen. Within two minutes, enable WPS on your personal device. A Device-(XX-XX-XX-XX-XX) Connected message should appear on the screen,

#### indicating successful WPS connection.

Note: XX-XX-XX-XX-XX is the MAC address of your device.

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 WPS Button on the Router

Press the router's WPS button. Within two minutes, enable WPS on your personal device.

#### 6. 3. 5. Additional 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 Wireless > Additional Settings.

#### 3. Configure the advanced settings of your wireless network and click SAVE.

**Note:** If you are not familiar with the setting items on this page, it's strongly recommended to keep the provided default values; otherwise it may result in lower wireless network performance.

Additional Settings			
Check advanced wireless settings for you	ur device.		
WMM:	Enable		
AP Isolation:	Enable		
Airtime Fairness:	Enable		
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.
- 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 40-1000 milliseconds for Beacon Interval here. Beacon Interval value determines the time interval of the beacons. The beacons are the packets sent by the router to synchronize a wireless network. The default value is 100.
- RTS Threshold Here you can specify the RTS (Request to Send) Threshold. If the packet is larger than the specified RTS Threshold size, the router will send RTS frames to a particular receiving station and negotiate the sending of a data frame. The default value is 2346.
- DTIM Interval This value determines the interval of the Delivery Traffic Indication Message (DTIM). A DTIM field is a countdown field informing clients of the next window for listening to broadcast and multicast messages. When the router has buffered broadcast or multicast messages for associated clients, it sends the next DTIM with a DTIM Interval value. You can specify the value between 1-255 Beacon 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.

## 6.4. Network

#### 6.4.1. Status

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with the username and password you set for the router.
- 2. Go to Advanced > Network > Status. You can view the current status information of the router.

Status	
Internet status overview is displayed on	this page.
LAN	
MAC Address:	00-FF-00-36-73-30
IP Address:	192.168.0.254
Subnet Mask:	255.255.255.0
DHCP Server	
DHCP Server:	Auto
IP Address Pool:	192.168.0.2-192.168.0.253

- LAN This field displays the current settings of the LAN, and you can configure them on the Network > LAN page.
  - MAC Address The physical address of the router.
  - IP Address The LAN IP address of the router.
  - Subnet Mask The subnet mask associated with the LAN IP address.
- DHCP Server This field displays the current settings of DHCP (Dynamic Host Configuration Protocol) Server, and you can configure them on the Network > DHCP Server page.
  - DHCP Server Indicates whether the DHCP server is enabled or disabled. It is enabled by default and the router acts as a DHCP server.
  - IP Address Pool The IP address range for the DHCP server to assign IP addresses.

#### 6.4.2. LAN

In Access Point mode, this router is preset with Dynamic IP, which allows it to dynamically obtain an IP address and gateway from the main router/AP. It is recommended that you keep the default LAN settings to avoid IP conflict with the main router/AP or other devices on your local network.

If you want to set a static IP address for the access point, follow the steps below:

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with the username and password you set for the router.
- 2. Go to Advanced > Network > LAN.
- 3. In IP Type, select Static IP.

LAN					
View and configure LAN settings.					
MAC Address:	00-FF-00-36-73-30				
ІР Туре:	O Dynamic IP				
	Static IP				
IP Address:	192.168.0.252				
Subnet Mask:	255.255.255.0	$\sim$			
Default Gateway:	192.168.0.252				

#### 4. Leave other parameters as the default settings.

#### 5. Click SAVE.

Note:

After setting a static IP address, you can use the new IP address to log into the web management page besides http:// tplinkwifi.net.

#### 6.4.3. DHCP Server

By default, the DHCP (Dynamic Host Configuration Protocol) server works in Auto mode to avoid IP conflict. It will automatically assign IP addresses to clients from its IP address pool only when the DHCP server of the main router/AP is disabled.

You can change the DHCP server settings if necessary, and you can reserve LAN IP addresses for specified client devices.

Note:

If you disable the DHCP server and there is no other DHCP server within your LAN, you have to configure the IP address for each client manually.

#### • To specify the IP address that the router assigns:

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with the username and password you set for the router.
- 2. Go to Advanced > Network > DHCP Server and locate the DHCP Server section.

OHCP Server			
Dynamically assign IP addresses to the o	devices connected to the acc	ess point.	
DHCP Server:	O Auto		
	On On		
	Off		
IP Address Pool:	192.168.0.2	192.168.0	249
Address Lease Time:	120	minutes	
Default Gateway:	192.168.0.254		(Optional)
Primary DNS:			(Optional)
Secondary DNS:			(Optional)

- 1. Turn on DHCP Server.
- 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.

Note: To use the DHCP server function of the router, you must configure all computers on the LAN as Obtain an IP Address automatically.

#### • To reserve an IP address for a specified client device:

The DHCP server of the router works when it is turned on, or when it is in Auto mode with the DHCP server of the main router/AP disabled. When it is working, you can view the DHCP clients and reserve IP addresses for them.

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with the username and password you set for the router.
- 2. Go to Advanced > Network > DHCP Server and locate the Address Reservation section.
- 3. Click Add in the Address Reservation section.

Reserve IP addresses f	or specific devices conr	nected to the router.		
				🔂 Add
Device Name	MAC Address	Reserved IP Address	Status	Modify
No Entries				

4. Click VIEW CONNECTED DEVICES and select the you device you want to reserve an IP for. Then the MAC and IP Address will be automatically filled in. You can also enter the MAC and IP address of the client device.

MAC Address:	-	5	858	5	-	
	VIEW	CON	NECTE	D DE	/ICES	
IP Address:						
				C	ANCEL	SAVE

- To check the DHCP client list:
- 1. Visit <u>http://tplinkwifi.net</u>, and log in with the username and password you set for the router.
- 2. Go to Advanced > Network > DHCP Server and locate the DHCP Client List section. You can see the device information of the list.
- 3. Click Refresh to see the current attached devices.

w the devices that	are currently assigned with	IP addresses by the DHCP serve	ЪГ.
al Clients: 3			G Refres
Device Name	MAC Address	Assigned IP Address	Lease Time
	FA-8D-A8-FD-2B-59	192.168.0.252	1:40:0
	B6-67-DA-05-15-21	192.168.0.114	1:25:16
18503634-BG	40-ED-00-22-30-74	192,168.0.45	1:32:45

## 6.5. USB Storage Device

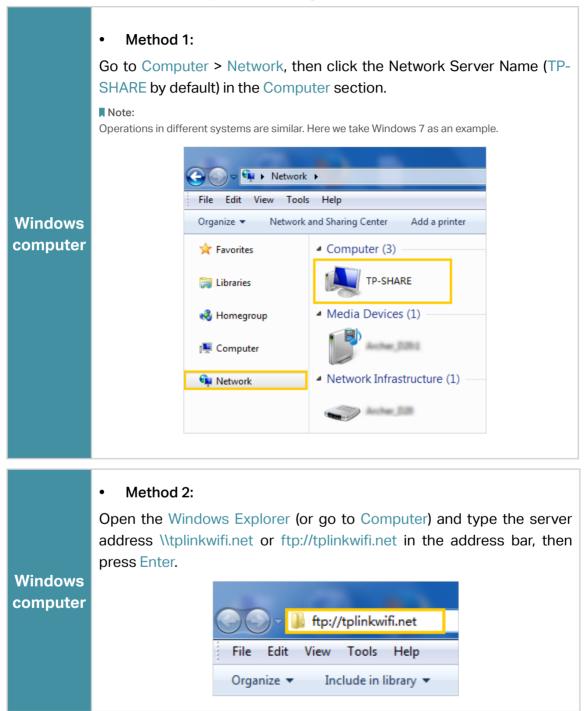
# Insert your USB storage device into the router's USB port and then access files stored there locally.

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 > USB Storage Device and click Remove.

#### 6.5.1. 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.



Мас	<ol> <li>Select Go &gt; Connect to Server.</li> <li>Type the server address smb://tplinkwifi.net.</li> <li>Click Connect.</li> <li>Click Connect.</li> <li>Image: Server Address: Server Server Address: Server Server Address: Server Server</li></ol>
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.

#### 6. 5. 2. 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 > USB Storage Device.
- 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.

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

Access Method			
Select the method for ac address.	cessing your USB storage device. T	The device can then be reached	l via the access
Network/Media	Server Name: MyShare		
Enable	Access Method	Address	Port
	Samba for Windows Samba for macOS/Linux	\\192.168.0.254 smb://192.168.0.254	
۵	Local FTP	ftp://192.168.0.254:21	21

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.

Sharing	Contents:	
	Share Selected Folders	Ø
1	G:/Document	
	G:/Pictures	

#### • To Set Up Authentication for Data Security

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

1. In the File Sharing section, enable Secure Sharing.

cure Sharing				
stomize the access set	tings to ensure data secu	rity.		
Username	Password		Permissions	Modify
admin	•••••	Ø	Read&Write	Ø
visit		Ø	Read	Ø

2. Click i to modify the access account. The username and password are both admin for default administrator account, and both visit for default visitor account. Accessing as an administrator can read and modify the shared folders while visitors can only read the shared folders.

#### 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>.

### 6.6. 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. Toggle on to enable Access Control.



4. Click Change Mode to select the access mode to either block (recommended) or allow the device(s) in the list.

Change Mode	×
Deny List Configure a deny list to only block access to your network from the specified device	S.
<ul> <li>Allow List</li> <li>Configure a allow list to only allow access to your network from the specified device</li> </ul>	S.
CANCEL	HANGE

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

1) Select Deny List.

	ccess Control			
C	ontrol the access to your	network from the sp	ecified devices.	
A	ccess Control:			
C	urrent 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, or enter the MAC address manually, and click ADD.

Ac	ld Dev	ices				×
() C		t From De Ianually	evice List			
		Туре	Device Name	IP	MAC	
			18503634-BG	192.168.0.45	40-ED-00-22-30-74	
			network device	192.168.0.22	36-27-02-FF-6F-95	
				CA	NCEL ADD	

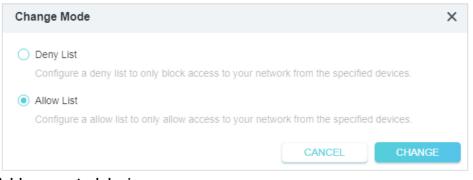
3) The Operation Succeeded message will appear on the screen, which means the selected devices have been successfully added to the Deny List.

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

1) Select Allow List and click CHANGE.

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

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.



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

				Add
Device Type	Device Name	MAC Address	Modify	
<b>_</b>	18503634-BG	40-ED-00-22-30-74		

- 7) 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 De	vices				×
	ct From De Manually	evice List			
	Туре	Device Name	IP	MAC	
		18503634-BG	192.168.0.45	40-ED-00-22-30-74	
0	ļ	network device	192.168.0.22	36-27-02-FF-6F-95	

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.

## 6.7. Firmware Upgrade

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

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

Note:

[•] Backup your router configuration before firmware upgrade.

[•] Do NOT turn off the router during the firmware upgrade.

#### Auto Update

Enable Auto Update and set the update time. The router will update firmware automatically at the specified time when new version is available.

Auto Update		
Update firmware for this router automatic	ally when a new version is availab	le.
Auto Update:		
Current Time:	2024-06-06 7:50:37 PM	Settings
Update Time:	03:00AM - 05:00AM	~

#### **Online Upgrade**

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

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

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

3. Click UPGRADE if there is new firmware.

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

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

#### Local Upgrade

- 1. Download the latest firmware file for the router from <u>www.tp-link.com</u>.
- 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 Upgrade.

4. Focus on the Local Upgrade section. Click BROWSE to locate the downloaded new firmware file, and click UPGRADE.

Local Update		
Ipdate firmware for this router from a local file		
New Firmware File:		
	BROWSE	
-	UPDATE	1

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

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

## 6.8. 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 > 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 BROWSE to locate the backup configuration file stored on your computer, and click RESTORE.

Restore	
Restore settings from a backup file.	
File:	
	BROWSE
	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 defa	ult values, except your login and cloud accour	nt information.
Restore all configuration settings to defa	ult values, except your login and cloud accour	nt information.

#### 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.

## 6.9. 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 section 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.

#### 6.9.1. 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.

TP-Link ID	
Log in to bind the router to your TP-Link ID. You can remo and more.	tely manage your network via the Tether app,
	Remote Control
TP-Link ID (Email):	Access and control your network remotely
	Smart Home
Password:	Support Amazon Alexa and Google
ø	Assistant
	Parental Controls
LOG IN	Manages online strategy for the
SIGN UP	connected devices
Forgot Password?	DOWNLOAD ON THE App Store
	Scan for Tether Search Tether

3. Click Sign Up and follow the instructions to register a TP-Link ID.

Create a TP-Link ID		
Select Country or Region	Ac	mote Control cess and control your network notely
Email Address		
Password 🔗	Su Su	n <b>art Home</b> pport Amazon Alexa and Goog sistant
Confirm Password		an an bail is
I have fully read and accepted th     Privacy Policy and Terms of Use.     Subscribe to the TP-Link     newsletter and be the first to kno	Ma Ma	rental Controls inages online strategy for the nnected devices
about amazing deals, VIP giveaways, new products and so much more.		DOWINLOAD ON THE App Store
	Scan for Tethe	er Search Tether

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 <u>Set up via Tether</u> 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.

#### 6. 9. 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 TP-Link ID section.

TP-Link ID		
Edit the email and password for your TP-	-Link ID.	
Email:		
Password:		Ci de la companya de
Region:	United States	
Email Subscription:		
		wsletter and be the first to know iveaways, new products, and so

- 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	×
Current Password: New Email: Note: New email or password may not syn your device is connected to the Internet to	C to client devices immediately. Please log in again when update account information.
	CANCEL

- To change your password:
- 1. Click 🗹 behind the Password.
- 2. Enter the current password, then a new password twice. And click SAVE.

Change Password	×
Current Password: New Password: Confirm Password:	Ø Ø Ø
Note: New email or password may not s your device is connected to the Internet	sync to client devices immediately. Please log in again when to update account information.

#### 6.9.3. 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 Owner account. The Owner account can add or remove other TP-Link IDs to or from the same router. All accounts can monitor and manage the router locally or remotely, but only the owner account can:

- 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.

#### Add TP-Link ID to Manage 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 TP-Link IDs section.

Bound 1	TP-Link IDs	
Bind or ur	nbind TP-Link IDs to control who can manage this device	à
Owner	yinghui.chen@tp-link.com	Unbind
	🔂 Bind	

#### 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.

Bind TP-Link ID		×
TP-Link ID (Email):		
	CANCEL	BIND

4. The new TP-Link ID will be displayed in the Bound TP-Link IDs table.

Bound TP-Link IDs	
Bind or unbind TP-Link IDs to control who can manage this device.	
<b>e</b>	Unbind
Owner	
	Unbind

#### 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 TP-Link IDs section.
- 3. Tick Unbind of the TP-Link ID(s) you want to remove.

Bound TP-Link IDs		
Bind or unbind TP-Link IDs to control who can manage this device.		
<b>°</b>	Unbind	
Owner		
	Unbind	

#### 6.9.4. 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 <u>Register a TP-Link ID</u>. Make sure your smartphone or tablet can access the internet with cellular data or a Wi-Fi network.

## 6.10. 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 > Administration and focus on the Change Password section.

Change Password		
Change the router's local management password.		
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.

### 6.11. 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 > 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.

Ø 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:	Enable	
,		
From:		
To:		
SMTP Server:		
Authentication:	Enable	
Username:		
Password:	Ø	

5. Click SAVE.

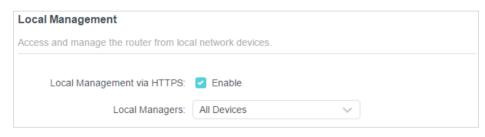
To recover the login password, please visit <u>http://tplinkwifi.net</u>, click Forgot Password? on the login page and follow the instructions to set a new password.

## 6.12. 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 > 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.



Allow all LAN connected devices to manage the router:

Select All Devices for Local Managers.

Local Management	
Access and manage the router from loca	al network devices.
Local Management via HTTPS:	C Enable
Local Managers:	All Devices

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

Local Management		
Access and manage the router from loca	al network devices.	
Local Management via HTTPS:	Enable	
Local Managers:	Specified Devices	
		Add Device
Description	MAC Address	Operation
No Entries		

2. Click Add Device.

Add Device				×
	Description:			
		VIEW CONNE	CTED 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.

# 6.13. 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 Log.
- 3. Choose the type and level of the system logs as needed.

System L	og			
View a deta	iled record of system activiti	es.		
	Current Time:	2019-05-28 07:10:05		
Log Type:	All			
Search	Q		🗘 Refresh	olear All 🎸
2019-03 2019-03 2019-03 2019-03 2019-03 2019-03 2019-03 2019-03 2019-03 2019-03	5-28 01:01:34 Led Controlle 5-28 01:01:34 Led Controlle 5-28 01:00:36 Led Controlle 5-28 01:00:36 Led Controlle 5-28 01:00:36 Led Controlle 5-28 01:00:36 Time Settings	587] Initialization succeeded 587] Initialization succeeded r INFO [927] Start to run WAN1_OFF r INFO [927] Start to run WAN0_OFF r INFO [927] Start to run UAN_ON r INFO [927] Start to run WAN1_OFF r INFO [927] Start to run UAN_ON INFO [6409] Service restart r INFO [927] Start to run STATUS_ON		

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	ess 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 Log.
- 3. In the Save Log section, click MAIL LOG.
- 4. Enter the information required:

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

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.

Tips: SMTP server is available for users in most webmail systems. For example, the SMTP server address of Hotmail is smtp-mail.outlook.com.

- 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.

## 6. 14. 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 > Diagnostics.

Diagnostics			
Troubleshoot network connectivity problems.			
Diagnostic Tools:	Ping	$\sim$	
IP Address/Domain Name:			
Ping Count:	4		
Ping Packet Size:	64	Bytes	
		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.

# 6.15. Set Up System Language

Set the system language for the router 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 & Language and select the language you want.

Language			
Set the router's system language.			
Language:	English	$\sim$	

# 6.16. Set Up System Time

System time is the time displayed while the router is running. The system time you configure here will be used for other time-based functions like Parental Controls. You can choose the way to obtain the system time as needed.

- 1. Visit <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 > Time & Language.
- 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.	
Current Time:	
24-Hour Time:	
Set Time:	Get from Internet
Time Zone:	(UTC-08:00) Pacific Time (US & Canada)
NTP Server I:	time.nist.gov
NTP Server II:	time-nw.nist.gov (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 time.	
Current Time:	
24-Hour Time:	
Set Time:	Get from Managing Device

- 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 time.		
Current Time:		
24-Hour Time:		
Set Time:	Manually V	
Date:	05/28/2019	
Time:	07 🔹 : 17 🔹	: 19 🗸

- 2. Set the current Date (In MM/DD/YYYY format).
- 3. Set the current Time (In HH/MM/SS format).
- 4. Click SAVE.
- To set up Daylight Saving Time:
- 1. Tick the Enable box of Daylight Saving Time.

Automatically synchronize the system time with daylight saving time.				
Daylight Saving Time:	Enab	le		
Start:	Mar	~	2nd	$\sim$
	Sun	~	10:00	$\sim$
End:	Nov	~	First	$\sim$
	Sun	~	09:00	~

- 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.

# 6.17. 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 > Reboot.

3. Tick the Enable box of Reboot Schedule.

Reboot Schedule		
Set when and how often the router rebo	ots automatically.	
Reboot Schedule:	Enable	
Note: Make sure Time Settings are corre	ect before using this function.	
Current Time:		
Reboot Time:	03 🗸 : 00	~
Repeat:	Every Week	~
	Monday	~

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

# 6.18. 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 > 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:				
Night Mode				
Set a time period when the LEDs will be	off automatic	ally.		
Night Mode:	Enable			
Note: Make sure Time Settings are corre	ect before usi	ing this function.		
Current Time:				
LED Off From:	22	✓ : 00	~	
To:	06	✓ : 00	~	(next day)

# Chapter 7

# **Configure the Router in Range Extender Mode**

This chapter presents how to configure the various features of the router working in Range Extender mode.

It contains the following sections:

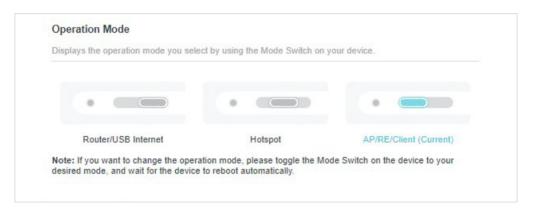
- Operation Mode
- Network Map
- Wireless
- <u>Network</u>
- <u>USB Storage Device</u>
- <u>Access Control</u>
- <u>Firmware Upgrade</u>
- Backup and Restore Configuration Settings
- TP-Link Cloud Service
- <u>Change the Login Password</u>

- Password Recovery
- Local Management
- <u>System Log</u>
- <u>Test the Network</u>
   <u>Connectivity</u>
- <u>Set Up System Language</u>
- <u>Set Up System Time</u>
- <u>Set the Router to Reboot</u> <u>Regularly</u>
- <u>Control the LED</u>

# 7.1. Operation Mode

- 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.
- To view the router's current mode:

Locate the Operation Mode section. The router's current operation mode is highlighted.



Locate the Connection Settings section. The router's current network mode is highlighted.

Connection Settings		
Select the proper network mode based o	your internet source and application scenario.	
Network Mode:	Access Point	
	Range Extender (Current) Extend the range of an existing Wi-Fi. Recommended a home.	at
	Client	

#### To change the router's network mode:

Figure out whether the Mode Switch needs to be set in order to change the router's network mode.

#### If yes, follow these steps:

- 1. Set the Mode Switch to your desired mode and wait 2 minutes for the router to reboot automatically.
- 2. Refer to <u>Connect the Hardware</u>, and follow the instructions of your desired mode to set the router up.

#### If no, follow these steps:

1. Refer to <u>Connect the Hardware</u>, and follow the instructions of your desired mode to connect the router properly.

2. Log in to the web management page of the router and go to Internet > Connection Settings. Select your desired network mode, configure the parameters (if any), and click SAVE.

# 7.2. Network Map

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

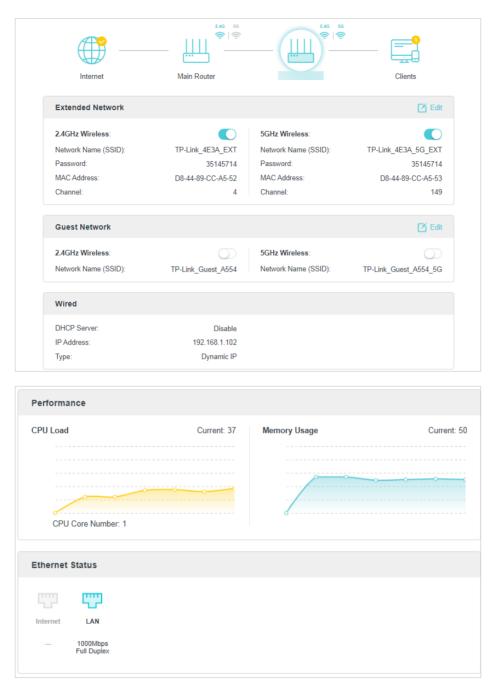
- 1. Visit <u>http://tplinkwifi.net</u>, and log in with your TP-Link ID or the password you set for the router.
- 2. Go to Network Map.
- 3. Click each network device icon to check and manage general network settings.
- Click Internet to check internet status.

Internet	246 5G ⇒ i ⇔ Main Router	246 56 중 । 중 	- Clients
Internet Status			
Internet Status:	Connected		

• Click Main Router to check the wireless network information of the connected host router.

<b>—</b>		
Internet	Main Router	Clients
Connect to Main Network		🕑 Ed
Wireless Network:		
Network Name (SSID):	TP-Link_4E3A	
Password:	35145714	
MAC Address:	D8-44-89-5E-4E-3A	
Signal:	Strong	

• Click the router to check device status and network settings. You can turn on or off the extended network or guest network, or click Edit to change related settings.



• Click Clients to view the client devices in your network.

Inter	net	Main Router				Clients
All (1)	$\checkmark$					
Connected	l Clients					
Туре	Information			Interface	Tx/Rx Rate(Mbps)	Duration
···	18503634-BG 40-ED-00-22-30-74 192.168.1.100		2	<b></b>		3 min

# 7.3. Wireless

## 7. 3. 1. Configure Wireless Network

If you want to extend another main network after Quick Setup, you can refer to this section. Moreover, you can change the wireless settings for your extended networks.

Note: Here we take the configuration of the 5GHz network as an example.

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with your TP-Link ID or the password you set for the router.
- To extend another host network:
- 2. Go to Wireless >Wireless Settings.
- 3. Find Wireless Band, select 5GHz, and click Wi-Fi SCANNER to find all available networks.

Connect to Main Network	
Connect this device to your main network	ς.
	Wi-Fi SCANNER
Wireless Band:	2.4GHz
	● 5GHz
Network Name (SSID):	
MAC Address:	
	Lock to AP
Security:	None ~

4. Select the 5GHz main network you want to extend.

#### Note:

- If the network you want to extend is on but not listed, please try the following steps.
- $\cdot$  Move the router closer to your main router, and rescan for networks.
- · You can manually enter the Network Name (SSID) and password of the network you want to extend, and click SAVE.
- 5. Once a main network is selected, the SSID and security type will be automatically filled in. If the selected network is encrypted, enter the password in the Password field.
- 6. (Optioal) If you enable Lock to AP, the router's connection will be restricted to the network with this specific MAC address.
- 7. Click SAVE.
- To enable or disable the extended network:
- 1. Go to Wireless > Wireless Settings > Extended Network.
- 2. Extended networks are enabled by default. If you want to disable the wireless function of a certain band, just clear the Enable checkbox. In this case, all the wireless settings of this band will be invalid.
- 3. Click SAVE.
- To change the wireless network name (SSID):
- 1. Go to Wireless >Wireless Settings > Extended Network.
- 2. Create a new SSID in Extended 2.4GHz SSID or click Copy Host SSID. The value is case-sensitive.

Extended Network		
Personalize settings for your extended n	etwork.	
2.4GHz:	Enable	Share Network
Extended SSID:	TP-Link_XXXX	Hide SSID
	COPY MAIN NETWORK SSID	
5GHz:	Enable	Share Network
Extended SSID:	TP-Link_XXXX_5G	Hide SSID
	COPY MAIN NETWORK SSID	

- To hide the SSID of the extended network:
- 1. Go to Wireless > Wireless Settings > Extended Network.
- 2. Select Hide SSID, and the corresponding SSID will not be displayed when wireless devices scan for local wireless networks. You need to manually enter the SSID to join the network.

#### 3. Click SAVE.

- To share the extended network:
- 1. Go to Wireless >Wireless Settings > Extended Network.
- 2. Click Share Network of the corresponding band, and click Save Picture to share it to your guests.

ersonalize settings for your extended n	etwork.	
2.4GHz:	Enable	Share Network
Extended SSID:		SSID: C TP-Link_7330 No Password
5GHz:	🗹 Enab	Save Picture
Extended SSID:	TP-Link_XXXX_5G	Hide SSID

## 7. 3. 2. Guest Network

Guest Network allows you to provide Wi-Fi access for guests without disclosing your host 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 settings to ensure network security and privacy.

#### Create a Guest 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 Wireless > Guest Network.
- 3. Enable the 2.4GHz/5GHz guest network according to your needs.

nable the wireless bands you want your	guests to use and complete the relate	d information.
2.4GHz:	Enable	Share Network
Network Name (SSID):	TP-Link_Guest_7330	Hide SSID
5GHz:	Enable	Share Network
Network Name (SSID):	TP-Link_Guest_7330_5G	Hide SSID
Security	No Security	

- 4. Customize the SSID. Don't select Hide SSID unless you want your guests to manually input the SSID for guest network access.
- 5. Select the Security type and customize your own password. If No security is selected, no password is needed to access your guest network.
- 6. Click SAVE. Now you guests can access your guest network using the SSID and password you set!
- 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 Wireless > Guest Network. Locate the Guest Permissions section.
- 3. Customize guest network options according to your needs.

Guest Permissions		
Control the data that gues	ts can access.	
	Allow guests to see each other	

#### 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.

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

#### 7. 3. 3. Wireless Schedule

The wireless function can be automatically off at a specific time when you do not need the wireless function.

- 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 Wireless > Wireless Schedule.
- 3. Enable the Wireless Schedule function.

Vireless Schedule		
chedule when to automatically	turn off your wireless network.	
Wireless Sch	nedule: 🗹 Enable	
ote: Before enabling this featur	re, make sure System Time is set to "Get from	n Internet".
urrent Time:		
		Add
	Repeat	Add Modify

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

dd Schedule						
Wireless Off Time: From	11	~	PM	~		
То	7	~	AM	$\sim$	(next day)	
Repeat:	S	M				S
				CANCE		SAVE

Note:

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

## 7. 3. 4. Additional 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 Wireless > Additional Settings.

#### 3. Configure the advanced settings of your wireless network and click SAVE.

**Note:** If you are not familiar with the setting items on this page, it's strongly recommended to keep the provided default values; otherwise it may result in lower wireless network performance.

Additional Settings			
Check advanced wireless settings for you	ur device.		
WMM:	Enable		
AP Isolation:	Enable		
Airtime Fairness:	Enable		
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.
- 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 40-1000 milliseconds for Beacon Interval here. Beacon Interval value determines the time interval of the beacons. The beacons are the packets sent by the router to synchronize a wireless network. The default value is 100.
- RTS Threshold Here you can specify the RTS (Request to Send) Threshold. If the packet is larger than the specified RTS Threshold size, the router will send RTS frames to a particular receiving station and negotiate the sending of a data frame. The default value is 2346.
- DTIM Interval This value determines the interval of the Delivery Traffic Indication Message (DTIM). A DTIM field is a countdown field informing clients of the next window for listening to broadcast and multicast messages. When the router has buffered broadcast or multicast messages for associated clients, it sends the next DTIM with a DTIM Interval value. You can specify the value between 1-255 Beacon 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.

# 7.4. Network

## 7.4.1. Status

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with the username and password you set for the router.
- 2. Go to Advanced > Network > Status. You can view the current status information of the router.

Status	
Internet status overview is displayed on	this page.
LAN	
MAC Address:	00-FF-00-36-73-30
IP Address:	192.168.0.254
Subnet Mask:	255.255.255.0
DHCP Server	
DHCP Server:	Auto
IP Address Pool:	192.168.0.2-192.168.0.253

- LAN This field displays the current settings of the LAN, and you can configure them on the Network > LAN page.
  - MAC Address The physical address of the router.
  - IP Address The LAN IP address of the router.
  - Subnet Mask The subnet mask associated with the LAN IP address.
- DHCP Server This field displays the current settings of DHCP (Dynamic Host Configuration Protocol) Server, and you can configure them on the Network > DHCP Server page.
  - DHCP Server Indicates whether the DHCP server is enabled or disabled. It is enabled by default and the router acts as a DHCP server.
  - IP Address Pool The IP address range for the DHCP server to assign IP addresses.

## 7.4.2. LAN

The router in Range Extender mode is preset with a default LAN IP 192.168.0.254, with which you can log in to the 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 the username and password you set for the router.
- 2. Go to Advanced > Network > LAN.
- 3. In IP Type, select Static IP.
- 4. Enter a new IP Address as needed (such as 192.168.0.252), and leave the Subnet Mask as the default settings .
- 5. Enter the gateway that is in the same subnet as the IP address. The gateway is usually the LAN IP address of your router.
- 6. Click SAVE.

LAN		
View and configure LAN settings.		
MAC Address:	00-FF-00-36-73-30	
ІР Туре:	O Dynamic IP	
	Static IP	
IP Address:	192.168.0.252	
Subnet Mask:	255.255.255.0	$\sim$
Default Gateway:	192.168.0.252	

- Note:
- If you have changed the IP address, you must use the new IP address to log in.
- If the new IP address you set is not in the same subnet as the old one, the IP address pool in the DHCP Server will be configured automatically, but the Virtual Server and DMZ Host will not take effect until they are re-configured.

## 7.4.3. DHCP Server

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

- To specify the IP address that the router assigns:
- 1. Visit <u>http://tplinkwifi.net</u>, and log in with the username and password you set for the router.
- 2. Go to Advanced > Network > DHCP Server and locate the DHCP Server section.

OHCP Server			
Dynamically assign IP addresses to the o	devices connected to the acc	ess point.	
DHCP Server:	O Auto		
	On On		
	Off		
IP Address Pool:	192.168.0.2	192.168.0	249
Address Lease Time:	120	minutes	
Default Gateway:	192.168.0.254		(Optional)
Primary DNS:			(Optional)
Secondary DNS:			(Optional)

- 1. Turn on DHCP Server.
- 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.

Note: To use the DHCP server function of the router, you must configure all computers on the LAN as Obtain an IP Address automatically.

#### • To reserve an IP address for a specified client device:

The DHCP server of the router works when it is turned on, or when it is in Auto mode with the DHCP server of the main router disabled. When it is working, you can view the DHCP clients and reserve IP addresses for them.

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with the username and password you set for the router.
- 2. Go to Advanced > Network > DHCP Server and locate the Address Reservation section.
- 3. Click Add in the Address Reservation section.

Reserve IP addresses f	or specific devices conr	ected to the router.		
				🔂 Ado
Device Name	MAC Address	Reserved IP Address	Status	Modify
No Entries				

4. Click VIEW CONNECTED DEVICES and select the you device you want to reserve an IP for. Then the MAC and IP Address will be automatically filled in. You can also enter the MAC and IP address of the client device.

MAC Address:	-	5	858	5	-	
	VIEW	CON	NECTE	D DE	/ICES	
IP Address:						
				C	ANCEL	SAVE

- To check the DHCP client list:
- 1. Visit <u>http://tplinkwifi.net</u>, and log in with the username and password you set for the router.
- 2. Go to Advanced > Network > DHCP Server and locate the DHCP Client List section. You can see the device information of the list.
- 3. Click Refresh to see the current attached devices.

	are current	ly assigned with IP	addresses by the DHCP serve	er.
al Clients: 3				G Refresh
Device Name	MAC Ad	dress	Assigned IP Address	Lease Time
	FA-8D-A	8-FD-2B-59	192.168.0.252	1:40:0
	B6-67-D	A-05-15-21	192.168.0.114	1:25:16
18503634-BG	40-ED-0	0-22-30-74	192.168.0.45	1:32:45
uting Table	entries that	are currently in u	se.	
		are currently in u	se.	🗘 Ref
v all valid routing o	: 3	are currently in u Subnet Mask	se. Gateway	C Ref
v all valid routing v ve Route Number Network Destina	: 3			• • • •
all valid routing o	: 3	Subnet Mask	Gateway	Interface

# 7.5. USB Storage Device

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

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 > USB Storage Device and click Remove.

## 7.5.1. 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.

	<ul> <li>Method 1:</li> <li>Go to Computer &gt; Network, then click the Network Server SHARE by default) in the Computer section.</li> <li>Note:</li> <li>Operations in different systems are similar. Here we take Windows 7 as an example.</li> </ul>	
Windows computer	Get Control       Get Control         File       Edit       View         Tools       Help         Organize       Network and Sharing Center         Add a printer	

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	<ol> <li>Select Go &gt; Connect to Server.</li> <li>Type the server address smb://tplinkwifi.net.</li> <li>Click Connect.</li> <li>Click Connect.</li> <li>Server Address:         <ul> <li>(nmb://tplinkwifi.net)</li> <li>(nmb:/tplinkwifi.net)</li> <li></li></ul></li></ol>
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.

## 7. 5. 2. 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 > USB Storage Device.
- 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.

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

Access Method Select the method for a address.	ccessing your USB storage device. T	he device can then be reached	via the access
Network/Med	a Server Name: MyShare		
Enable	Access Method	Address	Port
	Samba for Windows Samba for macOS/Linux	\\192.168.0.254 smb://192.168.0.254	
8	Local FTP	ftp://192.168.0.254:21	21

- 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.

Sharing Co	ontents:	
SI	hare Selected Folders	Ø
	:/Document :/Pictures	

To Set Up Authentication for Data Security

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

1. In the File Sharing section, enable Secure Sharing.

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

2. Click i to modify the access account. The username and password are both admin for default administrator account, and both visit for default visitor account. Accessing as an administrator can read and modify the shared folders while visitors can only read the shared folders.

#### 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>.

# 7.6. 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:

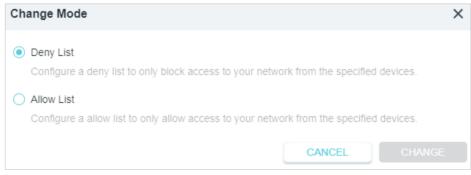
Block or allow specific client devices to access my network (via wired or wireless).

## 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. Toggle on to enable Access Control.

Access Control	
Control the access to your network from the specified devices.	
Access Control:	

4. Click Change Mode to select the access mode to either block (recommended) or allow the device(s) in the list.



### To block specific device(s):

1) Select Deny List.

Access Control			
Control the access to your	network from the sp	ecified devices.	
Access Control:			
Current Mode:	Deny List	← Change Mode	
			🔂 Add
Davias Tura	Device News		
Device Type	Device Name	MAC Address	Modify
There is no entry!			

2) Click 🔂 Add and select devices you want to be blocked, or enter the MAC address manually, and click ADD.

Add	d Dev	ices				×
		t From De Ianually	evice List			
		Туре	Device Name	IP	MAC	
		Ľ	18503634-BG	192.168.0.45	40-ED-00-22-30-74	
			network device	192.168.0.22	36-27-02-FF-6F-95	
				C	ANCEL ADD	

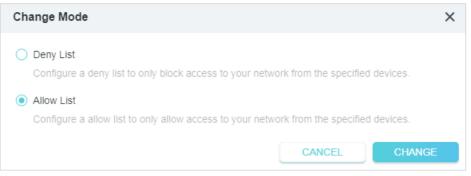
3) The Operation Succeeded message will appear on the screen, which means the selected devices have been successfully added to the Deny List.

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

1) Select Allow List and click CHANGE.

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

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.



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

			🔂 🔂
Device Type	Device Name	MAC Address	Modify
<u> </u>	18503634-BG	40-ED-00-22-30-74	

- 7) 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 Dev	vices				×
_	ct From De Manually	evice List			
	Туре	Device Name	IP	MAC	
		18503634-BG	192.168.0.45	40-ED-00-22-30-74	
0	ļ.	network device	192.168.0.22	36-27-02-FF-6F-95	

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.

# 7.7. Firmware Upgrade

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

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

Note:

- Backup your router configuration before firmware upgrade.
- Do NOT turn off the router during the firmware upgrade.

## Auto Update

Enable Auto Update and set the update time. The router will update firmware automatically at the specified time when new version is available.

Auto Update		
Update firmware for this router automatio	cally when a new version is available.	
Auto Update:		
Current Time:	2024-06-06 7:50:37 PM	Settings
Update Time:	03:00AM - 05:00AM 🗸 🗸	

## **Online Upgrade**

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

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

Online Update		
Update firmware for this router over the ir	nternet.	
Firmware Version: Hardware Version:		
	CHECK FOR UPDATES	
	Firmware is up to date.	

#### 3. Click UPGRADE if there is new firmware.

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

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

## Local Upgrade

- 1. Download the latest firmware file for the router from <u>www.tp-link.com</u>.
- 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 Upgrade.
- 4. Focus on the Local Upgrade section. Click BROWSE to locate the downloaded new firmware file, and click UPGRADE.

Local Update		
Update firmware for this router from a local file		
New Firmware File:		
-	BROWSE	
	UPDATE	

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

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

# 7.8. 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 > 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 BROWSE to locate the backup configuration file stored on your computer, and click RESTORE.

Restore	
Restore settings from a backup file.	
File:	
	BROWSE
	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 defa	ult values, except your login and cloud account information.

#### 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.

Restore all the configuration settings to the	heir default values.
	FACTORY RESTORE

#### 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.

# 7.9. 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 section 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.

## 7.9.1. 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.

-Link ID in to bind the router to your TP-Link ID. You can remaind more.	otely manage your network via the Tether app
TP-Link ID (Email):	Remote Control Access and control your netwo remotely
Password:	Smart Home Support Amazon Alexa and Go Assistant
LOG IN	Parental Controls Manages online strategy for the
SIGN UP	connected devices
Forgot Password?	DOWNLOAD ON THE App Store
	Scan for Tether Search Tether

3. Click Sign Up and follow the instructions to register a TP-Link ID.

Link ID			
in to bind the router to your more.	TP-Link ID. You can rem	otely manage your network	via the Tethe
Create a TP-L	_ink ID		
		Remote C	
Select Country or Regi	ion 🗸	Access and remotely	d control your
Email Address			
Password	ø	Smart Ho Support Ar	<b>ne</b> nazon Alexa a
Confirm Password	Ø	Assistant	
Commin assword			
I have fully read and	accepted the	Parental C	Controls
		Manages d	online strategy
I have fully read and	erms of Use. -Link		online strategy
I have fully read and Privacy Policy and T Subscribe to the TP- newsletter and be th about amazing deals	erms of Use. -Link le first to know s, VIP	Manages d	devices
I have fully read and Privacy Policy and T Subscribe to the TP- newsletter and be th	erms of Use. -Link le first to know s, VIP	Manages d	online strategy devices
<ul> <li>I have fully read and Privacy Policy and T</li> <li>Subscribe to the TP- newsletter and be th about amazing deals giveaways, new pro- much more.</li> </ul>	erms of Use. -Link er first to know s, VIP ducts and so	Manages d	devices
<ul> <li>I have fully read and Privacy Policy and T</li> <li>Subscribe to the TP- newsletter and be th about amazing deals giveaways, new procession</li> </ul>	erms of Use. -Link er first to know s, VIP ducts and so	Manages d	devices

- 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 <u>Set up via Tether</u> 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.

## 7.9.2. 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 <u>http://tplinkwifi.net</u>, and log in with your TP-Link ID.
- 2. Go to Advanced > TP-Link ID, and focus on the TP-Link ID section.

TP-Link ID						
Edit the email and password for your TP-Link ID.						
Email:		Ø				
Password:	•••••	Ø				
Region:	United States					
Email Subscription:						
		wsletter and be the first to know iveaways, new products, and so				

- 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	×
Current Password: New Email:	Ø
Note: New email or password may no your device is connected to the Intern	ot sync to client devices immediately. Please log in again when to update account information.
	CANCEL

• To change your password:

## 1. Click 🗹 behind the Password.

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

Change Password		×
Current Password: New Password: Confirm Password:	Ø Ø Ø	
Note: New email or password may no your device is connected to the Intern	ot sync to client devices immediately. Ple net to update account information.	ease log in again when SAVE

## 7.9.3. 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 Owner account. The Owner account can add or remove other TP-Link IDs to or from the same router. All accounts can monitor and manage the router locally or remotely, but only the owner account can:

- 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.

#### 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 TP-Link IDs section.

Bound TP-Link IDs						
Bind or u	Bind or unbind TP-Link IDs to control who can manage this device.					
Owner	yinghui.chen yinghui.chen@tp-link.com	Unbind				
	e Bind					

#### 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.

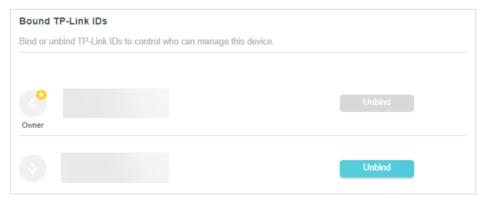
Bind TP-Link ID	×
TP-Link ID (Email):	
	CANCEL BIND

4. The new TP-Link ID will be displayed in the Bound TP-Link IDs table.

Bound TP-Link IDs					
Bind or unbind TP-Link IDs to control who can manage this device.					
Owner	Unbind				
	Unbind				

## 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 TP-Link IDs section.
- 3. Tick Unbind of the TP-Link ID(s) you want to remove.



## 7.9.4. 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.

# 7.10. 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 > Administration and focus on the Change Password section.

Change Password	
Change the router's local management password.	
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.

# 7.11. 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 > 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.

Reset local management password via preset questions and answers.						
Enable						
Enable						
e ø						
	Enable					

#### 5. Click SAVE.

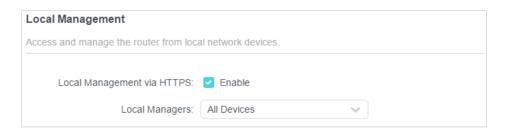
To recover the login password, please visit <u>http://tplinkwifi.net</u>, click Forgot Password? on the login page and follow the instructions to set a new password.

# 7.12. 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 > 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.



• Allow all LAN connected devices to manage the router:

Select All Devices for Local Managers.

Local Manageme	nt		
Access and manage	the router from loca	I network devices.	
Local Manage	ement via HTTPS:	Enable	

• Allow specific devices to manage the router:

1. Select Specified Devices for Local Managers and click SAVE.

Local Management		
Access and manage the router from loca	al network devices.	
Local Management via HTTPS:	<ul> <li>Enable</li> </ul>	
Local Managers:	Specified Devices	
		Add Device
Description	MAC Address	Operation
No Entries		

## 2. Click Add Device.

Add Device								X
ſ	Description:							
		VIEW	CONN	ECTE	D DEV	CES		
МА	C Address:	-	-	-	-	-		
					CA	NCEL	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.

# 7.13. 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 Log.
- 3. Choose the type and level of the system logs as needed.

System Lo	og		
View a deta	iled record of system activiti	ies.	
	Current Time:	2019-05-28 07:10:05	
Log Type:	All		
Search	Q	😯 Refresh	olear All 🎸
2019-05 2019-05 2019-05 2019-05 2019-05 2019-05 2019-05 2019-05 2019-05 2019-05	5-28 01:15:28 NAT INFO 036 5-28 01:01:34 Led Controlle 5-28 01:01:34 Led Controlle 5-28 01:01:34 Led Controlle 5-28 01:00:36 Led Controlle 5-28 01:00:36 Led Controlle 5-28 01:00:36 Led Controlle 5-28 01:00:36 Time Settings	587] Initialization succeeded 587] Initialization succeeded 587] Initialization succeeded 587] Initialization succeeded 587] INFO [927] Start to run WAN1_OFF 57 INFO [927] Start to run UAN_ON 57 INFO [927] Start to run WAN0_OFF 57 INFO [927] Start to run LAN_ON 57 INFO [6409] Service restart 57 INFO [927] Start to run STATUS_ON	

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	ess 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 Log.
- 3. In the Save Log section, click MAIL LOG.
- 4. Enter the information required:

Mail Log		×
	Set your mail information below.	
Email From:		
	Require Password	
Username:		
Email Password:		
SMTP Server:		
Email To:		
	<ul> <li>Mail Log Automatically</li> </ul>	
Frequency:	Every Day 🗸 🗸	
Mail Time:	00 🗸 : 00 🗸	
	CANCEL	SAVE

- 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.

Tips: SMTP server is available for users in most webmail systems. For example, the SMTP server address of Hotmail is smtp-mail.outlook.com.

- 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.

# 7.14. 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 > Diagnostics.

Diagnostics		
Troubleshoot network connectivity proble	ems.	
Diagnostic Tools:	Ping	~
IP Address/Domain Name:		
Ping Count:	4	
Ping Packet Size:	64	Bytes
	ST	ART

- 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.

```
PING 192.168.0.1 (192.168.0.1): 64 data bytes
Reply from 192.168.0.1: bytes=64 ttl=64 seq=1 time=0.322 ms
Reply from 192.168.0.1: bytes=64 ttl=64 seq=2 time=0.308 ms
Reply from 192.168.0.1: bytes=64 ttl=64 seq=3 time=0.286 ms
Reply from 192.168.0.1: bytes=64 ttl=64 seq=4 time=0.334 ms
--- Ping Statistic "192.168.0.1" ---
Packets: Sent=4, Received=4, Lost=0 (0.00% loss)
Round-trip min/avg/max = 0.286/0.312/0.334 ms
ping is stopped.
```

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.
```

# 7.15. Set Up System Language

Set the system language for the router 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 & Language and select the language you want.

Language		
Set the router's system language.		
Language:	English	$\sim$

# 7.16. Set Up System Time

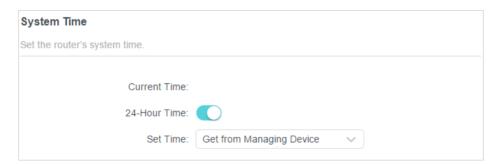
System time is the time displayed while the router is running. The system time you configure here will be used for other time-based functions like Parental Controls. You can choose the way to obtain the system time as needed.

- 1. Visit <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 > Time & Language.

- 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.	
Current Time:	
24-Hour Time:	
Set Time:	Get from Internet
Time Zone:	(UTC-08:00) Pacific Time (US & Canada)
NTP Server I:	time.nist.gov
NTP Server II:	time-nw.nist.gov (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.



- 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 time.		
Current Time:		
24-Hour Time:		
Set Time:	Manually	
Date:	05/28/2019	
Time:	07 🗸 : 17 🗸	: 19 🗸

- 2. Set the current Date (In MM/DD/YYYY format).
- 3. Set the current Time (In HH/MM/SS format).
- 4. Click SAVE.
- To set up Daylight Saving Time:
- 1. Tick the Enable box of Daylight Saving Time.

Daylight Saving Time					
Automatically synchronize the system tir	ne with da	ylight sav	ing time.		
Daylight Saving Time:	Enab	le			
Start:	Mar	~	2nd	~	
	Sun	~	10:00	~	
End:	Nov	~	First	~	
	Sun	~	09:00	~	
Running Status:	Daylight S	Saving Tim	ne is on.		

- 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.

# 7.17. 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 > Reboot.

3. Tick the Enable box of Reboot Schedule.

Reboot Schedule		
Set when and how often the router reboo	ots automatically.	
Reboot Schedule:	Enable	
Note: Make sure Time Settings are corre	ect before using this function.	
Current Time:		
Reboot Time:	03 🗸 : 00	~
Repeat:	Every Week	~
	Monday	~

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

# 7.18. 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 > 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:	
Night Mode	
Set a time period when the LEDs will be	off automatically.
Night Mode:	
Note: Make sure Time Settings are corre	ect before using this function.
Current Time:	
LED Off From:	22 🗸 : 00 🗸
To:	06 ✓ : 00 ✓ (next day)

# **Chapter 8**

# **Configure the Router in Client Mode**

This chapter presents how to configure the various features of the router working in Client mode.

It contains the following sections:

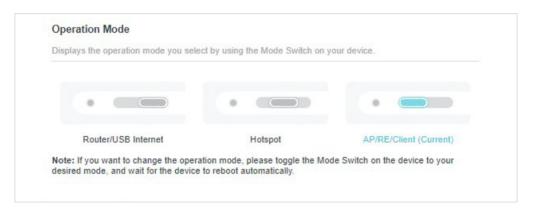
- Operation Mode
- Network Map
- <u>Wireless</u>
- <u>Network</u>
- USB Storage Device
- <u>Access Control</u>
- Firmware Upgrade
- Backup and Restore Configuration Settings
- TP-Link Cloud Service
- <u>Change the Login Password</u>

- <u>Password Recovery</u>
- Local Management
- <u>System Log</u>
- <u>Test the Network</u>
   <u>Connectivity</u>
- <u>Set Up System Time</u>
- <u>Set the Router to Reboot</u> <u>Regularly</u>
- <u>Control the LED</u>

# 8.1. Operation Mode

- 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.
- To view the router's current mode:

Locate the Operation Mode section. The router's current operation mode is highlighted.



Locate the Connection Settings section. The router's current network mode is highlighted.

Connection Settings	
Select the proper network mode based on	your internet source and application scenario.
Network Mode:	Access Point
	O Range Extender
	Olient (Current)
	Act as a "Wireless Adapter" to connect your wired devices (e.g.Blu-ray player, smart TV) to existing Wi-Fi. Recommended at home.

## To change the router's network mode:

Figure out whether the Mode Switch needs to be set in order to change the router's network mode.

## If yes, follow these steps:

- 1. Set the Mode Switch to your desired mode and wait 2 minutes for the router to reboot automatically.
- 2. Refer to <u>Connect the Hardware</u>, and follow the instructions of your desired mode to set the router up.

## If no, follow these steps:

1. Refer to <u>Connect the Hardware</u>, and follow the instructions of your desired mode to connect the router properly.

2. Log in to the web management page of the router and go to Internet > Connection Settings. Select your desired network mode, configure the parameters (if any), and click SAVE.

# 8.2. 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	Main Router	 Clients
Internet Status		
Internet Status:	Connected	

 Click Main Router to check the wireless network information of the connected host router.

<b>—</b>	- <u> </u>	
Internet	Main Router	Clients
Connect to Main Network		🗹 Edi
Wireless Network:		
Wireless Network: Network Name (SSID):	TP-Link_4E3A	
Network Name (SSID):	TP-Link_4E3A 35145714	
	_	

• Click the router to check device status and network settings.

Internet	Main Router		Clients
Device Information			
Working Mode: IP Address:	Client 192.168.1.102	MAC Address: Subnet Mask:	D8-44-89-CC-A5-54 255.255.255.0
Performance			
CPU Load	Current: 31	Memory Usage	Current: 48
Ethernet Status			

• Click Clients to view the client devices in your network.

	ternet	Main Router				Clients
All (1) Connect	v ted Clients					
Туре	Information			Interface	Tx/Rx Rate(Mbps)	Duration
···	18503634-BG 40-ED-00-22-30-74 192.168.1.100		2	<b>~</b>		3 min

# 8.3. Wireless

## 8.3.1. Configure Wireless Network

If you want to connect another main network after Quick Setup, you can refer to this section.

Note: Here we take the configuration of the 2.4GHz network as an example.

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with your TP-Link ID or the password you set for the router.
- To change the main network:
- 2. Go to Wireless.
- 3. Find Wireless Band, select 2.4GHz, and click Wi-Fi SCANNER to find all available networks.

Connect to Main Network					
Connect this device to your main network.					
	Wi-Fi SCANNER				
Wireless Band:	O 2.4GHz				
	● 5GHz				
Network Name (SSID):					
MAC Address:					
	Lock to AP				
Security:	None ~				

## 4. Select the 2.4GHz main network you want to extend.

#### Note:

If the network you want to extend is on but not listed, please try the following steps.

 $\cdot$  Move the router closer to your main router, and rescan for networks.

- · You can manually enter the Network Name (SSID) and password of the network you want to extend, and click SAVE.
- 5. Once a main network is selected, the SSID and security type will be automatically filled in. If the selected network is encrypted, enter the password in the Password field.
- 6. (Optioal) If you enable Lock to AP, the router's connection will be restricted to the network with this specific MAC address.
- 7. Click SAVE.

# 8.4. Network

## 8.4.1. Status

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with the username and password you set for the router.
- 2. Go to Advanced > Network > Status. You can view the current status information of the router.

Status					
Internet status overview is displayed on this page.					
LAN					
MAC Address:	00-FF-00-36-73-30				
IP Address:	192.168.0.254				
Subnet Mask:	255.255.255.0				
DHCP Server					
DHCP Server:	Auto				
IP Address Pool:	192.168.0.2-192.168.0.253				

- LAN This field displays the current settings of the LAN, and you can configure them on the Network > LAN page.
  - MAC Address The physical address of the router.
  - IP Address The LAN IP address of the router.
  - Subnet Mask The subnet mask associated with the LAN IP address.
- DHCP Server This field displays the current settings of DHCP (Dynamic Host Configuration Protocol) Server, and you can configure them on the Network > DHCP Server page.
  - DHCP Server Indicates whether the DHCP server is enabled or disabled. It is enabled by default and the router acts as a DHCP server.
  - IP Address Pool The IP address range for the DHCP server to assign IP addresses.

## 8.4.2. LAN

The router in Client mode is preset with a default LAN IP 192.168.0.254, with which you can log in to the 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 the username and password you set for the router.
- 2. Go to Advanced > Network > LAN.
- 3. In IP Type, select Static IP.
- 4. Enter a new IP Address as needed (such as 192.168.0.252), and leave the Subnet Mask as the default settings .
- 5. Enter the gateway that is in the same subnet as the IP address. The gateway is usually the LAN IP address of your router.
- 6. Click SAVE.

LAN		
View and configure LAN settings.		
MAC Address:	00-FF-00-36-73-30	
ІР Туре:	O Dynamic IP	
	Static IP	
IP Address:	192.168.0.252	
Subnet Mask:	255.255.255.0	$\sim$
Default Gateway:	192.168.0.252	

- Note:
- If you have changed the IP address, you must use the new IP address to log in.
- If the new IP address you set is not in the same subnet as the old one, the IP address pool in the DHCP Server will be configured automatically, but the Virtual Server and DMZ Host will not take effect until they are re-configured.

## 8.4.3. DHCP Server

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

- To specify the IP address that the router assigns:
- 1. Visit <u>http://tplinkwifi.net</u>, and log in with the username and password you set for the router.
- 2. Go to Advanced > Network > DHCP Server and locate the DHCP Server section.

OHCP Server			
Dynamically assign IP addresses to the o	devices connected to the acc	ess point.	
DHCP Server:	O Auto		
	On On		
	Off		
IP Address Pool:	192.168.0.2	192.168.0	249
Address Lease Time:	120	minutes	
Default Gateway:	192.168.0.254		(Optional)
Primary DNS:			(Optional)
Secondary DNS:			(Optional)

- 1. Turn on DHCP Server.
- 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.

Note: To use the DHCP server function of the router, you must configure all computers on the LAN as Obtain an IP Address automatically.

#### • To reserve an IP address for a specified client device:

The DHCP server of the router works when it is turned on, or when it is in Auto mode with the DHCP server of the main router disabled. When it is working, you can view the DHCP clients and reserve IP addresses for them.

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with the username and password you set for the router.
- 2. Go to Advanced > Network > DHCP Server and locate the Address Reservation section.
- 3. Click Add in the Address Reservation section.

Reserve IP addresses for specific devices connected to the router.						
				🔂 Ado		
Device Name	MAC Address	Reserved IP Address	Status	Modify		
No Entries						

4. Click VIEW CONNECTED DEVICES and select the you device you want to reserve an IP for. Then the MAC and IP Address will be automatically filled in. You can also enter the MAC and IP address of the client device.

MAC Address:	-	5	858	5	-	
	VIEW	CON	NECTE	D DE	/ICES	
IP Address:						
				C	ANCEL	SAVE

- To check the DHCP client list:
- 1. Visit <u>http://tplinkwifi.net</u>, and log in with the username and password you set for the router.
- 2. Go to Advanced > Network > DHCP Server and locate the DHCP Client List section. You can see the device information of the list.
- 3. Click Refresh to see the current attached devices.

al Clients: 3				G Refresh
Device Name	MAC Ac	idress	Assigned IP Address	Lease Time
	FA-8D-A	\8-FD-2B-59	192.168.0.252	1:40:0
	B6-67-D	A-05-15-21	192.168.0.114	1:25:16
18503634-BG	40-ED-0	10-22-30-74	192.168.0.45	1:32:45
uting Table	entries tha	t are currently in u	se.	
v all valid routing		t are currently in u	se.	🗘 Ref
v all valid routing	r: 3	t are currently in u Subnet Mask	se. Gateway	C Ref
	r: 3			
v all valid routing ve Route Number Network Destin	r: 3	Subnet Mask	Gateway	Interface

# 8.5. USB Storage Device

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

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 > USB Storage Device and click Remove.

## 8.5.1. 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, th SHARE by default) in the Comp	en click the Network Server Name (TP- uter section.
	Note:     Operations in different systems are similar.	Here we take Windows 7 as an example.
	File Edit View Too	
Windows	*	and Sharing Center Add a printer
computer	🔶 Favorites	Computer (3)
	😭 Libraries	TP-SHARE
	輚 Homegroup	Media Devices (1)
	1 Computer	
	🗣 Network	<ul> <li>Network Infrastructure (1) —</li> </ul>
		Anthen (200

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	<ol> <li>Select Go &gt; Connect to Server.</li> <li>Type the server address smb://tplinkwifi.net.</li> <li>Click Connect.</li> <li>Click Connect.</li> <li>Server Address:         <ul> <li>(Provide Servers:</li> <li>(Provide Serverse:</li></ul></li></ol>
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.

# 8. 5. 2. 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 > USB Storage Device.
- 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.

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

Network/Media Server Name: MyShare	
Enable Access Method Address	Port
Samba for Windows \\192.168.0.254 Samba for macOS/Linux smb://192.168.0.254	
Local FTP ftp://192.168.0.254:21	21

- 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.

Sharing	g Contents:	
	Share Selected Folders	Ø
<b>*</b>	G:/Document	
	G:/Pictures	

To Set Up Authentication for Data Security

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

1. In the File Sharing section, enable Secure Sharing.

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

2. Click i to modify the access account. The username and password are both admin for default administrator account, and both visit for default visitor account. Accessing as an administrator can read and modify the shared folders while visitors can only read the shared folders.

#### 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>.

# 8.6. Firmware Upgrade

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

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

Note:

- Backup your router configuration before firmware upgrade.
- Do NOT turn off the router during the firmware upgrade.

# Auto Update

Enable Auto Update and set the update time. The router will update firmware automatically at the specified time when new version is available.

Auto Update		
Update firmware for this router automatic	cally when a new version is available.	
Auto Update:		
Current Time:	2024-06-06 7:50:37 PM	Settings
Update Time:	03:00AM - 05:00AM 🗸 🗸	

## **Online Upgrade**

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

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

Online Update		
Update firmware for this router over the internet.		
Firmware Version: Hardware Version:		
I	CHECK FOR UPDATES Firmware is up to date.	

- 3. Click UPGRADE if there is new firmware.
- 4. Wait a few minutes for the upgrade and reboot to complete.

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

## Local Upgrade

- 1. Download the latest firmware file for the router from <u>www.tp-link.com</u>.
- 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 > Firmware Upgrade.
- 4. Focus on the Local Upgrade section. Click BROWSE to locate the downloaded new firmware file, and click UPGRADE.

Local Update		
Jpdate firmware for this router from a local f	le.	
New Firmware File:		
	BROWSE	
	UPDATE	

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

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

# 8.7. 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 > 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 BROWSE to locate the backup configuration file stored on your computer, and click RESTORE.

Restore		
Restore settings from a backup file.		
File:		
	BROWSE	
	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 defa	ault values, except your login and cloud account information.

## 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.

Restore all the configuration settings to	their default values.
	FACTORY RESTORE

## 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.

# 8.8. 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 section 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.

# 8.8.1. 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.

TP-Link ID					
Log in to bind the router to your TP-Link ID. You can remotely manage your network via the Tether a and more.					
	Remote Control				
TP-Link ID (Email):	Access and control your network remotely				
Password:	Smart Home Support Amazon Alexa and Goog Assistant				
LOG IN	Parental Controls Manages online strategy for the connected devices				
SIGN UP					
Forgot Password?	DOWNLOAD ON THE App Store				
	Scan for Tether Search Tether				

3. Click Sign Up and follow the instructions to register a TP-Link ID.

Create a TP-Link	: ID		
Select Country or Region	~		e Control and control your netwo y
Email Address			
Password	ø	Smart I Support Assistar	Amazon Alexa and G
Confirm Password	ø	M2212181	11.
<ul> <li>I have fully read and acc Privacy Policy and Terms</li> <li>Subscribe to the TP-Link newsletter and be the firs about amazing deals, VI giveaways, new products</li> </ul>	s of Use. st to know P	Manage	al Controls
much more.			Get IT ON Google Play
Choir or		Scan for Tether	Search Tether

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 <u>Set up via Tether</u> 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.

## 8.8.2. 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 TP-Link ID section.

TP-Link ID					
Edit the email and password for your TP-Link ID.					
Email:					
Password:		C .			
Region:	United States				
Email Subscription:					
		wsletter and be the first to know iveaways, new products, and so			

- 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	×
Current Password: New Email: Note: New email or password may not sy your device is connected to the Internet t	ync to client devices immediately. Please log in again when o update account information.
	CANCEL

- To change your password:
- 1. Click 🗹 behind the Password.
- 2. Enter the current password, then a new password twice. And click SAVE.

Change Password	×			
Current Password:	Ø			
Confirm Password:       Ø         Note: New email or password may not sync to client devices immediately. Please log in again when your device is connected to the Internet to update account information.				
	CANCEL			

# 8.8.3. 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 Owner account. The Owner account can add or remove other TP-Link IDs to or from the same router. All accounts can monitor and manage the router locally or remotely, but only the owner account can:

- Reset the router to its factory default settings either on the web management page.
- Add/remove other TP-Link IDs to/from the router.

## 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 TP-Link IDs section.

Bound TP-Link IDs						
Bind or ur	Bind or unbind TP-Link IDs to control who can manage this device.					
Owner	yinghui.chen@tp-link.com					
	🔂 Bind					

## 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.

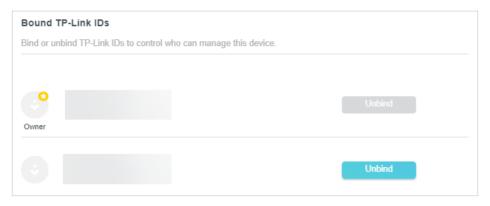
Bind TP-Link ID	×
TP-Link ID (Email):	CANCEL BIND
	CANCLE

4. The new TP-Link ID will be displayed in the Bound TP-Link IDs table.

Bound TP-Link IDs					
Bind or unbind TP-Link IDs to control who can manage this device.					
<b>e</b>	Unbind				
Owner					
	Unbind				

## 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 TP-Link IDs section.
- 3. Tick Unbind of the TP-Link ID(s) you want to remove.



# 8.9. 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 > Administration and focus on the Change Password section.

Change Password				
Change the router's local management password.				
Old Password:	<u>+===</u>			
New Password:				
Confirm New Password:				

3. Enter the old password, then a new password twice (both case-sensitive). Click SAVE.

4. Use the new password for future logins.

# 8.10. 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 > 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:	C Enable	
From:		
To:		
SMTP Server:		
Authentication:	Enable	
Username:		
Password:	Ø	

#### 5. Click SAVE.

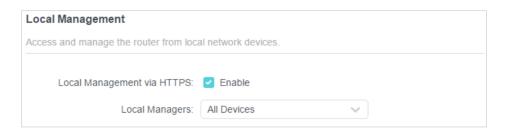
To recover the login password, please visit <u>http://tplinkwifi.net</u>, click Forgot Password? on the login page and follow the instructions to set a new password.

# 8.11. 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 > 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.



• Allow all LAN connected devices to manage the router:

Select All Devices for Local Managers.

Local Manageme	nt		
Access and manage	the router from loca	I network devices.	
Local Manage	ement via HTTPS:	Enable	

• Allow specific devices to manage the router:

1. Select Specified Devices for Local Managers and click SAVE.

Local Management		
Access and manage the router from loca	al network devices.	
Local Management via HTTPS:	<ul> <li>Enable</li> </ul>	
Local Managers:	Specified Devices	
		Add Device
Description	MAC Address	Operation
No Entries		

#### 2. Click Add Device.

Add Device								x
	Description:							
	(	VIEW	CONN	IECTE	D DEV	ICES		
	MAC Address:	-	-	-	-	-		
						411051	0.015	
					C	ANCEL	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.

# 8.12. System Log

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

- To save the system log locally:
- 1. Visit <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 Log.
- 3. Choose the type and level of the system logs as needed.

System Lo	og		
View a deta	iled record of system activit	ies.	
	Current Time:	2019-05-28 07:10:05	
Log Type:	All 🗸		
Search	Q	🕄 Refresh	olear All 🗳
2019-05 2019-05 2019-05 2019-05 2019-05 2019-05 2019-05 2019-05 2019-05 2019-05	5-28 01:15:28 NAT INFO [30 5-28 01:15:28 NAT INFO [30 5-28 01:01:34 Led Controlle 5-28 01:01:34 Led Controlle 5-28 01:01:34 Led Controlle 5-28 01:00:36 Led Controlle 5-28 01:00:36 Led Controlle 5-28 01:00:36 Led Controlle 5-28 01:00:36 Time Settings	ics INFO [5949] stats reset 687] Initialization succeeded 687] Initialization succeeded er INFO [927] Start to run WAN1_OFF er INFO [927] Start to run LAN_ON er INFO [927] Start to run WAN1_OFF er INFO [927] Start to run WAN0_OFF er INFO [927] Start to run WAN0_OFF er INFO [927] Start to run LAN_ON s INFO [6409] Service restart er INFO [927] Start to run STATUS_ON 286] Service start	

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 address 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 Log.
- 3. In the Save Log section, click MAIL LOG.
- 4. Enter the information required:

Mail Log	×
	Set your mail information below.
Email Fro	
	Require Password
Usernam	e:
Email Passwor	d:
SMTP Serve	r:
Email	0:
	<ul> <li>Mail Log Automatically</li> </ul>
Frequence	y: Every Day 🗸
Mail Tim	e: 00 v : 00 v
	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.

Tips: SMTP server is available for users in most webmail systems. For example, the SMTP server address of Hotmail is smtp-mail.outlook.com.

- 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.

# 8.13. 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 > Diagnostics.

Diagnostics		
roubleshoot network connectivity problems.		
Diagnostic Tools:	Ping	~
IP Address/Domain Name:		
Ping Count:	4	
Ping Packet Size:	64	Bytes
	STAR	т
	STAR	а

- 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.

```
PING 192.168.0.1 (192.168.0.1): 64 data bytes
Reply from 192.168.0.1: bytes=64 ttl=64 seq=1 time=0.322 ms
Reply from 192.168.0.1: bytes=64 ttl=64 seq=2 time=0.308 ms
Reply from 192.168.0.1: bytes=64 ttl=64 seq=3 time=0.286 ms
Reply from 192.168.0.1: bytes=64 ttl=64 seq=4 time=0.334 ms
--- Ping Statistic "192.168.0.1" ---
Packets: Sent=4, Received=4, Lost=0 (0.00% loss)
Round-trip min/avg/max = 0.286/0.312/0.334 ms
ping is stopped.
```

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.
```

# 8.14. Set Up System Language

Set the system language for the router 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 & Language and select the language you want.

Language		
Set the router's system language.		
Language:	English	$\sim$

# 8.15. Set Up System Time

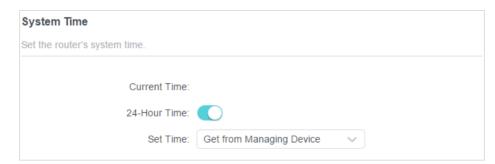
System time is the time displayed while the router is running. The system time you configure here will be used for other time-based functions like Parental Controls. You can choose the way to obtain the system time as needed.

- 1. Visit <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 > Time & Language.

- 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.	
Current Time:	
24-Hour Time:	
Set Time:	Get from Internet
Time Zone:	(UTC-08:00) Pacific Time (US & Canada)
NTP Server I:	time.nist.gov
NTP Server II:	time-nw.nist.gov (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.



- 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 time.		
Current Time:		
24-Hour Time:		
Set Time:	Manually	
Date:	05/28/2019	
Time:	07 🗸 : 17 🗸	: 19 🗸

- 2. Set the current Date (In MM/DD/YYYY format).
- 3. Set the current Time (In HH/MM/SS format).
- 4. Click SAVE.
- To set up Daylight Saving Time:
- 1. Tick the Enable box of Daylight Saving Time.

Daylight Saving Time					
Automatically synchronize the system tir	ne with da	ylight sav	ing time.		
Daylight Saving Time:	Enab	le			
Start:	Mar	~	2nd	~	
	Sun	~	10:00	~	
End:	Nov	~	First	~	
	Sun	~	09:00	~	
Running Status:	Daylight S	Saving Tim	ne is on.		

- 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.

# 8.16. 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 > Reboot.

3. Tick the Enable box of Reboot Schedule.

Reboot Schedule		
Set when and how often the router rebo	ots automatically.	
Reboot Schedule:	Enable	
Note: Make sure Time Settings are corre	ect before using this function.	
Current Time:		
Reboot Time:	03 🗸 : 00	$\sim$
Repeat:	Every Week	~
	Monday	~

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

# 8.17. 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 > 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:					
Night Mode					
Set a time period when the LEDs will be	off automat	ically.			
Night Mode:	Enable				
Note: Make sure Time Settings are correct before using this function.					
Current Time:					
LED Off From:	22	♥: 00	$\sim$		
To:	06	✓ : 00	~	(next day)	

# FAQ

# Q1. What should I do if there is no internet access?

- Check if the internet is working normally by connecting a computer/phone directly to the current network. If it is not, contact your internet service provider. If you're in a hotel room or on a trade show, the internet may be limited and requires that you authenticate for the service or purchase the internet access.
- If you are using a cable modem, power off your modem for about 5 minutes, then power it on and check the internet. If your modem has more than one Ethernet port, keep other ports unconnected.
- Log in to the web management page, and go to the Network Map page to check whether the internet IP address is valid or not. If it's valid, go to Advanced > Network
   Internet, click Advanced Settings, select Use the Following DNS Addresses, set the primary DNS to 8.8.8.8, and set the secondary DNS to 8.8.4.4. If it is not, check the hardware connection or contact your internet service provider.

# Q2. How do I restore the router to its factory default settings?

With the router powered on, press and hold the RESET button for about 6 seconds until the LED blinks red to restore the factory default settings.

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

# Q3. What should I do if I forget my Wi-Fi password?

- If you have not changed the default wireless password, it can be found on the label of the router.
- Connect a computer directly to the LAN port of the router using an Ethernet cable.
   Log in to the router's web management page at <a href="http://tplinkwifi.net">http://tplinkwifi.net</a>, and go to the Wireless page to retrieve or reset your wireless password.

# Q4. What should I do if I forget my login password of the web management page?

- If you are using a TP-Link ID to log in, click Forgot Password? on the login page and then follow the instructions to reset it.
- Alternatively, refer to FAQ > Q2 to reset the router. Then visit http://tplinkwifi.net to create a new login password.

# Q5. What should I do if my wireless signal is unstable or weak?

It may be caused by too much interference.

• Set your wireless channel to a different one.

- Choose a location with less obstacles that may block the signal between the router and the main AP. An open corridor or a spacious location is ideal.
- Move the router to a new location away from Bluetooth devices and other household electronics, such as cordless phone, microwave, and baby monitor, to minimize signal interference.
- When in Range Extender mode, the ideal location to place the router is halfway between your main AP and the Wi-Fi dead zone. If that is not possible, place the router closer to your main AP to ensure stable performance.

# Q6. What should I do if I cannot enter the captive portal when the router is set to Hotspot mode?

- If the portal login page didn't open during the Quick Setup process, connect your smartphone or computer to the router, then open any website, and you will be redirected to the portal login page.
- If some public hotspots limit the number of devices each customer can access by MAC address, do the following:

1. Connect a smartphone to the public hotspot's Wi-Fi. Find the smartphone's MAC address on its Wi-Fi list, and write the MAC address down.

2. Log in to the web management page of the router and go to Advanced > Network > Internet > Router MAC Address. Select Use Custom MAC Address, enter the MAC address that your smartphone uses to connect to the public hotspot's Wi-Fi, and click SAVE.

## Q7. What should I do if I want to change the router's network mode?

Refer to the Determine Network Mode section and figure out whether the Mode Switch needs to be set in order to change the router's network mode.

• If yes, follow these steps:

1. Set the Mode Switch to your desired mode and wait 2 minutes for the router to reboot automatically.

- 2. Follow the QIG instructions of your desired mode to set the router up.
- If no, follow these steps:

1. Refer to the Connect the Hardware section of your desired mode to connect your router properly.

2. Log in to the web management page of the router and go to Internet > Connection Settings. Select your desired network mode, configure the parameters, and click SAVE.

## FCC compliance information statement



### Product Name: AX1500 Wi-Fi 6 Portable Router

Model Number: TL-WR1502X

Component Name	Model
I.T.E. Power	DSA-18QFB FUS A

# Responsible party:

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

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/ TV technician for help.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference.
- 2. This device must accept any interference received, including interference that may cause undesired operation.

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

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

# FCC RF Radiation Exposure Statement

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

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

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

Issue Date: 2024-01-31

### FCC compliance information statement

Product Name: I.T.E. Power Supply Model Number: DSA-18QFB FUS A Responsible party: **Responsible party: TP-Link USA Corporation** Address: 10 Mauchly, Irvine, CA 92618 Website: http://www.tp-link.com/us/ Tel: +1 626 333 0234 Fax: +1 909 527 6804 E-mail: sales.usa@tp-link.com

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

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.

- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/ TV technician for help.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference.
- 2. This device must accept any interference received, including interference that may cause undesired operation.

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

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

Issue Date: 2024.01.31

# CE Mark Warning

This is a class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

# **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	ΗU	IE
IS	IT	LI	LT	LU	LV	МΤ	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.



# **Canadian Compliance Statement**

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

(1) This device may not cause interference.

(2) This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

1) L'appareil ne doit pas produire de brouillage;

2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

## Caution:

The device for operation in the band 5150–5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;

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

### Avertissement:

Le dispositif fonctionnant dans la bande 5150-5250 MHz est réservé uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;

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

# **Radiation Exposure Statement:**

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

### Déclaration d'exposition aux radiations:

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

## Industry Canada Statement

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

### Korea Warning Statements:

당해 무선설비는 운용중 전파혼신 가능성이 있음.

## NCC Notice & BSMI Notice:

注意!

取得審驗證明之低功率射頻器材,非經核准,公司、商號或使用者均不得擅自變更頻 率、加大功率或變更原設計之特性及功能。

低功率射頻器材之使用不得影響飛航安全及干擾合法通信;經發現有干擾現象時,應立 即停用,並改善至無干擾時方得繼續使用。

前述合法通信,指依電信管理法規定作業之無線電通信。

低功率射頻器材須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

應避免影響附近雷達系統之操作。

## 安全諮詢及注意事項

- 請使用原裝電源供應器或只能按照本產品注明的電源類型使用本產品。
- 清潔本產品之前請先拔掉電源線。請勿使用液體、噴霧清潔劑或濕布進行清潔。
- 注意防潮,請勿將水或其他液體潑灑到本產品上。

シート シート AV1500 Wi-Fi 6 Portable Pouter

- 插槽與開口供通風使用,以確保本產品的操作可靠並防止過熱,請勿堵塞或覆蓋 開口。
- 請勿將本產品置放於靠近熱源的地方。除非有正常的通風,否則不可放在密閉位 置中。
- 不要私自拆開機殼或自行維修,如產品有故障請與原廠或代理商聯繫。

設備名稱: AX1500 WI-FI 6 Portable Router				WR1502X			
Equipment	quipment name				Type designation (Type)		
	限用物質及其化學符號						
	Restricted substances and its chemical symbols						
單元 Unit	鉛 汞 Lead Mercury		鎘 Cadmium	六價鉻 Hexavalent chromium	多溴聯苯 Polybrominated biphenyls		
	(Pb)	(Hg)	(Cd)	(Cr+6)	(PBB)		
PCB	0	0	0	0	0		
外殼	0	0	0	0	0		
電源供應器	_	0	0	0	$\bigcirc$		
天線	0	0	0	0	0		
備考1. [*] 超出0.1 wt % 及 [*] 超出0.01 wt % 係指限用物質之百分比含量超出百分比含量基準值。							
Note 1: "Exceeding 0.1 wt %" and "exceeding 0.01 wt %" indicate that the percentage content of the restricted substance exceeds the reference percentage value of presence condition. 備考2. ⁽⁾ 係指該項限用物質之百分比含量未超出百分比含量基準值。							

限用物質含有情況標示聲明書

型號(型式): TL-

Note 2: " $\bigcirc$ " indicates that the percentage content of the restricted substance does not exceed the percentage of reference value of presence.

備考3. *-* 係指該項限用物質為排除項目。

Note 3: The "-" indicates that the restricted substance corresponds to the exemption.

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			
Æ	Class II equipment with functional earthing			
$\sim$	Alternating current			
	Direct current			
♦€♦	Polarity of d.c. power connector			
	For indoor use only			

Symbol	Explanation
4	Dangerous voltage
	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)
$\square$	Fuse
₩ N	Fuse is used in neutral N
X	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.
Reference in the second	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)