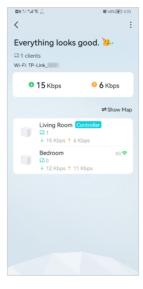


2. Tap a mesh device to check more details.



3. Check download/upload speed of the mesh device.

■B 511 **.all (\$\$\frac{2.9}{878}\$)	🕷 49% 💌 3:33
<	:
Living Room Cont Model: HX220 MAC: IP: 192.168.88.1 Uptime: 0d 0h 12m	roller C
↓ 5 Kbps	↑ <b>2</b> Kbps
Connected Clients (1)	
↓ 0 Kbps ↑ 0 Kbps	Mi Me 🗢
Firmware Version: 0.12.0 2.0. 220710 Rel.1342	

4. Tap 🖸 and change or customize the location/name of the mesh device.

<b>20</b> 0 (11	".al ₹ <sup>203</sup> 55	🕅 48% 💌 3:34
<		:
×	Device's Name	Save
~	Living Room	
	Main Bedroom	
	Bedroom	
	Office	
	Kitchen	
	Hallway	
	Study Room Basement	
	Garage	
	Custom Name	

5. Check the clients connected to the mesh device.

	<b>8</b> 49% <b>F</b> 3:33
	:
ontroller	C
	1010
1	
	↑ <b>2</b> Kbps
	Me 🗢
s	
	.0.0 v605f.0 Build
	i22n

6. Tap the client's name. Change or customize client's information.

## 5.5. Remove/Reboot Mesh Devices

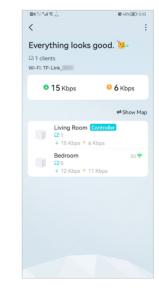
You can reset your mesh device to factory default settings or reboot your mesh device to clear cache and enhance running performance easily in the Aginet app. Follow the steps below.

#### Note:

Rebooting your mesh device will keep the current settings on it.

Removing your mesh device will reset it to factory default settings and you will need to set up your mesh device again. You can also press and hold the Reset button for at least 5 second to quickly reset your mesh device to factory default settings.

> 5:34 ::!! 5G 🔳 = + Network •© 3 L0 1 "Living Room" is receiving weak signals 🕙 🛈 Kbps 📀 0 Kbps 1 Online Clients (1) Unknown ↓ 19 Kbps ↑ 7 Kbps 2 Ħ 8



7. Tap : to remove or reboot the mesh device.

#### In Network, tap 🌐. Select a mesh device.



#### Note:

If the LED light of mesh device does not turn flashing blue after tapping Remove, press and hold the Reset button for at least 5 second to reset it.

## 5. 6. Manage Connected Devices

In Network, you can mange your connected devices easily, such as changing the device name and type.

1. Tap a connected device to check the details (e.g. real-time upload and download speeds, device name/profile, etc.).

<b>8</b> 49% <b>F</b> 3	:33
:	
n Contractor C	
↑ <b>2</b> Kbos	
Me 🗢	
2.0 2.0.0 v605f0 Build	
el.13422n	

2. Change the Device Type and Device Name as needed.

B 11 박태 중 10.8 Krs	<b>10</b> 48% 🖅 3:36	00 til ***	党 201 85
evice Info		< D	evice Type
ice Type			Android Phone
e Name	· · · · · · · · · · · · · · · · · · ·	Ţ	Desktop
			iPhone
			iPod
			iPad
		<b>一</b>	Printer
		Q	IP Camera
			Laptop
			TV
			Router
		F	Game Console

## 5.7. Create a New Network

In the Aginet app, you can create different mesh networks with your TP-Link ID and manage them conveniently from the Aginet app with one account. You can also help family or friends manage their networks with your Aginet app. Two methods are provided as below to create a new network.

Method 1. Create a new network from the Overview page

- 1. Tap + > Create a Network.
- 2. Then follow app instructions to complete the setup.

ooks good.	connect via Ethernet Cable ( Modern) 2 kbps Connect via Ethernet Cable ( Router)	18.23 18.23 中 :work Add Agent く	+ ×
Connect via Ethernet Cable (t Router)	Connect via Ethernet Cable (r Router)	a 1 lients	Connect via Ethernet Cable (t
	x(1) >> № ♥	5G4z	

Method 2. Create a new network from the Menu page

1. Tap  $\equiv$  to open the menu. Tap  $\rightleftharpoons$  > Add a Network.

8 47% FF1 3:40

- Image: Image
- 2. Then follow app instructions to complete the setup.

# Switch Network

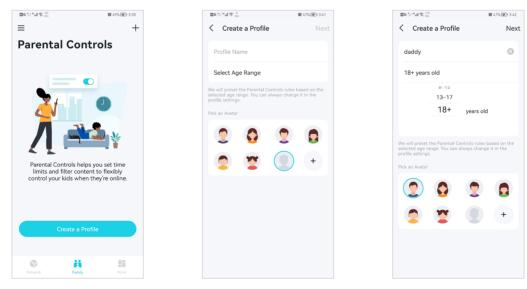
월6월 14월 18<sup>88</sup>

<

## 5.8. Parental Controls

Parental Controls helps you set time limits and filter content to flexibly control your kids when they're online.

- 1. In Family, tap Create a Profile.
- 2. Then follow app instructions to complete the setup.



a 5.1 <sup>14</sup> af € <sup>13</sup> <sub>105</sub> <b>105 \$</b> 47% <b>€</b> ) 3.42 <b>105</b> 5.1 <sup>14</sup> af € <sup>133</sup> <sub>105</sub> <b>105</b> 47% <b>€</b> ) 3.42
Create a Profile Next <
Select Devices Add
C C C C C C C C C C C C C C C C C C C
Device
Image: Section of the section of t

## 5.9. Wi-Fi Settings

You can change the network name and password of your main network at any time and share the network easily with family and friends.

1. In More, Tap Wi-Fi Settings.

<b>B</b> B 51 *	al 🕏 👷	<b>8</b> 49% <b>F</b> 3:28
=		
Мо	re	
6	Wi-Fi Settings	Guest Network
⊕	Internet Connection	>
2	Block List	
<u>0</u>	LED Control	
뷰		
	Reboot Schedule	
&	TP-Link ID	
۵	Operation Mode	
ĿЦ	System	
Not	vork Family	More

- 2. Manage main network (e.g. change your main network's Wi-Fi name and password, hide the network from Wi-Fi list, etc.).
- 3. Tap Advanced. For better Wi-Fi performance, set the channel width for 2.4GHz and 5GHz Wi-Fi as needed. (It is recommended to use the default settings.)

이 배 속 있	🕷 47% 💌 3:45
Advanced	
GHz	
Channel Auto	>
Channel Width	>
Auto	,
θHz	
Channel Auto	>
Channel Width Auto	>
Fransmit Power	
High	>
-ast Roaming	
-ast Roaming	
Hide Network	
en enabled, you'll need to ma work name and password to j a WPS feature will be unavailal	nually enter the pin this network.

## 5.10. Guest Network

You can create and share a separate network for guests to guarantee the security and privacy of your main network.

1. In More, Tap Guest Network.

<b>8</b> 8 51	"川奈 <sup>67</sup>	₩ 57% 💌 2:36
≡		
Mo	ore	
6	Wi-Fi Settings	Guest Network
•	Internet Connection Block List	>
a Q	LED Control	
÷	Reboot Schedule	
&	TP-Link ID	
Ø	Operation Mode	
븝	System	
	work Family	More

2. Set a Wi-Fi name and password for the guest network.

Password I	Done
789	S of t

## 5.11. Internet Connection

In Internet Connection, You can modify WAN settings (IPv4 & IPv6), enable MAC Clone mode.

1. In More, Tap Internet Connection.

= More	<b>0</b> 57% 🗩 2:36
Settings	Guest Network
Internet Connection	>
Block List	
🔔 LED Control	>
🖾 Reboot Schedule	
👶 TP-Link ID	
Ø Operation Mode	
🔛 System	
Network Family	More

2. View IPv4 details or change the internet connection type.

■ D 11 * al 字 60	<b>8</b> 47% <b>7</b> 3:47
Internet Connection	1
IPv4	IPv6
<ul> <li>Connected</li> </ul>	
Current Connection	
Ethernet WAN port	
Internet Connection Type	
Dynamic IP	
IP Address	
Subnet Mask	
Default Gateway	
Primary DNS	
Secondary DNS	
Internet Settings	

3. Enable IPv6 to set up an IPv6 internet connection.



100 (11 mm) 宗 (10 mm)	🕼 46% 💌 13:49
<	Save
Profile Name	
Internet Connection Type Dynamic IP	
Dynamic IP	
IPv4	•
21/2	
DNS Automatic	
IPv6 Disabled	
IPv6 Tunnel	
Disabled	
Advanced	
Delete Profile	

- 4. Tap Advanced and enable MAC Clone as needed.
- Tip: For more about MAC Clone, refer to <a href="https://www.tp-link.com/support/fag/2925/">https://www.tp-link.com/support/fag/2925/</a>

2.1 월에 국 100 1 월 1 월 1 월 1 월 1 월 1 월 1 월 1 월 1 월 1 월	👹 46% 🖅 I 3:49
10001-0101-0	Save
ofile Name	
nternet Connection Type	
⊃v4	-
UNS utomatic	
Pv6 Disabled	
Pv6 Tunnel Disabled	
Advanced	
Delete Profile	

## 5.12. Block List

Add devices to the block list to prevent the devices from accessing your network, ensuring the safety of your personal information shared in the network.

1. In More, Tap Block List.

<b>2</b> 8 51 4	"al † 100 € 100		₩ 57% <b>E</b> 2:36
≡			
Мо	ore		
6	Wi-Fi Settings	8	Guest Network
۲	Internet Conn	ection	>
2	Block List		
<u>A</u>	LED Control		
	Reboot Sched	lule	
\$	TP-Link ID		
Ø	Operation Mo	de	
出	System		
		<b>Family</b>	More

2. Tap + and add clients or other devices to the block list.

86 ∰ #al ⊕ 10	🕅 47% 😰 I 3:47	00 e 5	".al \$ 55	<b>8</b> 47% 💌 3:47	00	11 mail 宗 (11 mail 宗 (11 mail 12 mai	€47% <b>()</b> 3:47
< Block List	+	<	Block List	+	<	Block List	+
	Select Clients	×	Select Clients	Add	×	Add by MAC Address	Add
	Add by MAC Address		_		Ent	ter the MAC address of the device you w	ant to block.
		C	ן נ		A	AA-BB-CC-DD-EE-FF	
Block unwa	nted devices from						
accessing the them t	network by adding to Block List.						

### 5.13. Upgrade Your Mesh Device

TP-Link is dedicated to improving product features and providing a better customer experience. An up-to-date firmware provides better and more stable network performance. Always update your mesh device to the latest firmware version when prompted in the Aginet app.

1. In More, Tap System and Firmware Update.

88 11 4세 후 <sup>97</sup> 문		<b>0</b> 57% <b>₽</b> 2:36
More		
Se W	i-Fi ettings	Guest Network
Inter	net Connection	>
🔏 Block	k List	
🐥 LED	Control	
🖾 Rebo	oot Schedule	
🖑 TP-L	ink ID	
🖒 Oper	ration Mode	
⊟ Syste	em	
Network	Family	More

2. Download and install the firmware (if any) and follow app instructions to update your mesh device to the latest version.

190 Still # all 192 By	🕷 44% 💌 3:59
<	
Your firmware	is up to date.
HX220 Contro	oller
Check for	r Update

## 5.14. Advanced Features

Additional features are available under the Advanced menu. You can control mesh device's LED, enable reboot schedule, bind your TP-Link ID, change the operation mode, configure system settings.

1. In More, Tap LED Control.

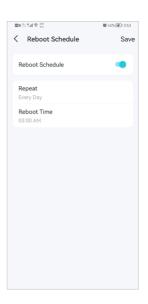
■0 5.1 <sup>4</sup> .41 \$\overline{2}, <sup>47</sup> =	<b>₩</b> 57% 🕢 2:36
More	
Settings	Guest Network
Internet Connection	>
🔏 Block List	
🔔 LED Control	>
🖾 Reboot Schedule	
👶 TP-Link ID	
Ø Operation Mode	
📙 System	
Network Family	More

2. Toggle off LED to turn off the light on mesh device. Configure the LED Off Time to turn off the LED light at bedtime only.

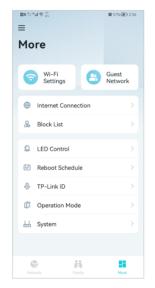
Save
•
•
ryday.

3. Enable Reboot Schedule as needed.

	2:36
Settings Guest Network	<
Internet Connection	>
کے Block List	
📮 LED Control	
🖾 Reboot Schedule	
TP-Link ID	
Depration Mode	
📙 System	
Network Family More	



#### 4. Bind your TP-Link ID.



5. Change the Operation Mode as needed.



©eorra ≡ Moi		<b>0</b> 57% <b>(₽</b> ) 2:36
6	Wi-Fi Settings	Guest Network
۲	Internet Connection	>
2	Block List	
۵	LED Control	
	Reboot Schedule	
&	TP-Link ID	
Ø	Operation Mode	
Ц	System	
Netwo		More



## Chapter 6

# **Customize Your Network Settings**

This chapter introduces how to change the default settings or adjust the basic configuration of the mesh device using the web management page.

It contains the following sections:

- <u>Configure LAN Settings</u>
- <u>Configure IPv6 LAN Settings</u>
- <u>Set Up a Dynamic DNS Service Account</u>
- <u>Create Static Routes</u>
- <u>RIP Settings</u>
- <u>Specify Wireless Settings</u>
- <u>Schedule Your Wireless Function</u>
- <u>Use WPS for Wireless Connection</u>

## 6.1. Configure LAN Settings

#### 6. 1. 1. Change the LAN IP Address

The mesh device is preset with a default LAN IP 192.168.88.1, which you can use to log in to its web management page. The LAN IP address together with the Subnet Mask also defines the subnet that the connected devices are on. If the IP address conflicts with another device in your local network or your network requires a specific IP subnet, you can change it.

Follow the steps below to change your IP address.

- 1. Visit <u>http://tplinkwifi.net</u> or <u>http://192.168.88.1</u>, and log in with the password you set for the mesh device.
- 2. Go to Advanced > Network > LAN Settings page and select IPv4.

DHCP Server	
MAC Address:	B0:A7:B9:84:99:A8
IP Address:	192 . 168 . 88 . 1
Subnet Mask:	255.255.255.0 🔻
IGMP Snooping:	Enable
Second IP:	Enable
DHCP:	Enable

- 3. Enter a new IP Address appropriate to your needs.
- 4. Select the Subnet Mask from the drop-down list. The subnet mask together with the IP address identifies the local IP subnet.
- 5. Keep IGMP Snooping enabled by default. IGMP snooping is the process of listening to IGMP (Internet Group Management Protocol) network traffic. The function prevents hosts on a local network from receiving traffic for a multicast group they have not explicitly joined.
- 6. You can configure the mesh device's Second IP and Subnet Mask for LAN interface through which you can also access the web management page.
- 7. Keep the rest settings as the default settings.
- 8. Click Save to make the settings effective.

#### 6. 1. 2. Use the Mesh Device as a DHCP Server

You can configure the mesh device to act as a DHCP server to assign IP addresses to its clients. To use the DHCP server function of the mesh device, you must configure all computers on the LAN to obtain an IP Address automatically.

Follow the steps below to configure DHCP server.

- 1. Visit <u>http://tplinkwifi.net</u> or <u>http://192.168.88.1</u>, and log in with the password you set for the mesh device.
- 2. Go to Advanced > Network > LAN Settings page and select IPv4.

DHCP:	✓ Enable
	DHCP Server O DHCP Relay
IP Address Pool:	192 · 168 · 88 · 2 - 192 · 168 · 88 · 249
Address Lease Time:	120 minutes. (1-2880. The default value is 1440.)
Default Gateway:	0 . 0 . 0 . 0 (Optional)
Default Domain:	(Optional)
Primary DNS:	0 . 0 . 0 . 0 (Optional)
Secondary DNS:	0 . 0 . 0 . 0 (Optional)

- 3. Enable DHCP function and select DHCP Server.
- 4. Specify the IP Address Pool, the start address and end address must be on the same subnet with LAN IP. The mesh device will assign addresses within this specified range to its clients. It is from 192.168.88.2 to 192.168.88.249 by default.
- 5. Enter a time duration in the Address Lease Time field. The Address Lease Time is the amount of time in which a DHCP client can lease its current dynamic IP address assigned by the mesh device. After the dynamic IP address expires, the user will be automatically assigned a new dynamic IP address.

#### 6. Keep the rest settings as the default settings and click Save.

#### Note:

- The mesh device can be configured to work as a DHCP Relay. A DHCP relay is a computer that forwards DHCP data between computers that request IP addresses and the DHCP server that assigns the addresses. Each of the device's interfaces can be configured as a DHCP relay. If it is enabled, the DHCP requests from local PCs will be forwarded to the DHCP server that runs on WAN side.
- 2. You can also appoint IP addresses within a specified range to devices of the same type by using Condition Pool feature. For example, you can assign IP addresses within the range (192.168.88.50 to192.168.88.80) to Camera devices, thus facilitating the network management. Enable DHCP feature and configure the parameters according to your situation on the Advanced > Network > LAN Settings page.

#### 6. 1. 3. Reserve LAN IP Addresses

You can view and add a reserved address for a client. When you specify an IP address for a device on the LAN, that device will always receive the same IP address each time when it accesses the DHCP server. If there are some devices in the LAN that require permanent IP addresses, please configure Address Reservation on the mesh device for the purpose.

Follow the steps below to reserve an IP address for your devices.

- 1. Visit <u>http://tplinkwifi.net</u> or <u>http://192.168.88.1</u>, and log in with the password you set for the mesh device.
- 2. Go to Advanced > Network > LAN Settings page, and select IPv4.
- **3.** Scroll down to the Address Reservation section, and click Add to add an address reservation entry for your device.

Address R	Reservation					
					🕂 Add	Delete
	MAC Address		Reserved IP Address	Group	Enable	Modify
	-		-	-	-	
MAC	Address:	-		Scan		
IP Ac	Idress:					
Grou	ıp:	De	fault 🔻			
		🕑 Er	able This Entry			
				Cancel	ОК	

- 4. Enter the MAC Address of the device for which you want to reserve IP address.
- 5. Specify the IP address which will be reserved by the mesh device.
- 6. Select the Enable This Entry check box and click OK to make the settings effective.

## 6.2. Configure IPv6 LAN Settings

Based on the IPv6 protocol, the mesh device provides two ways to assign IPv6 LAN addresses:

- Configure the RADVD (Mesh Device Advertisement Daemon) address type
- Configure the DHCPv6 Server address type

#### 6. 2. 1. Configure the RADVD Address Type

- 1. Visit <u>http://tplinkwifi.net</u> or <u>http://192.168.88.1</u>, and log in with the password you set for the mesh device.
- 2. Go to Advanced > Network > LAN Settings.
- 3. Select IPv6 to configure IPv6 LAN parameters.

DHCP Server		IPv4 IPv6
Group:	Default	
Address Type:	RADVD O DHCPv6 Server	
Enable RDNSS	Enable	
Enable ULA Prefix	Enable	
Site Prefix Type:	Delegated      Static	
WAN Connection:	No available interface	
		Save

1) Select RADVD as the address type to make the mesh device assign IPv6 address prefixes to hosts.

#### Note:

Do not select the Enable RDNSS and Enable ULA Prefix check boxes unless required by your ISP. Otherwise you may not be able to access the IPv6 network. For more information about RDNSS and ULA Prefix, contact our technical support.

- 2) Keep Site Prefix Type as the default setting Delegated. If your ISP has provided a specific IPv6 site prefix, select Static and enter the prefix.
- 3) Keep WAN Connection as the default settings.
- 4. Click Save to make the settings effective.

#### 6. 2. 2. Configure the DHCPv6 Server Address Type

- 1. Visit <u>http://tplinkwifi.net</u> or <u>http://192.168.88.1</u>, and log in with the password you set for the mesh device.
- 2. Go to Advanced > Network > LAN Settings.
- 3. Select IPv6 to configure IPv6 LAN parameters.

DHCP Server			IPv4   IPv
Group:	Default		
Address Type:	O RADVD	HCPv6 Server	
Starting IPv6 Address:	: 1	(1~FFFE)	
Ending IPv6 Address:	:: FFFE	(1~FFFE)	
Address Lease Time:	7200	seconds	
Site Prefix Type:	Delegated	Static	
WAN Connection:	No available in	terface 💌	

- 1) Select DHCPv6 Server as the address type to make the mesh device assign IPv6 addresses to hosts.
- 2) Specify the Starting/Ending IPv6 Address for the IPv6 suffixes. The mesh device will generate IPv6 addresses within the specified range.
- 3) Keep Address Lease Time as the default setting.
- 4) Keep Site Prefix Type as the default value Delegated. If your ISP has provided a specific IPv6 site prefix, select Static and enter the prefix.
- 5) Keep WAN Connection as the default setting.
- 4. Click Save to make the settings effective.

## 6.3. Set Up a Dynamic DNS Service Account

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

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

To set up DDNS, please follow the instructions below:

- 1. Visit <u>http://tplinkwifi.net</u> or <u>http://192.168.88.1</u>, and log in with the password you set for the mesh device.
- 2. Go to Advanced > Network > Dynamic DNS.
- 3. Select the Service Provider (TP-Link/Dyndns/NO-IP).

4. Log in with your DDNS account, select a service provider. Enter the username, password and domain name of the account (such as lisa.ddns.net).

Dynamic DNS Settings	
Service Provider:	○ TP-Link
Username:	
Password:	ø
Domain Name:	
Login Logout	Disconnected
	Save

5. Click Log in and Save.

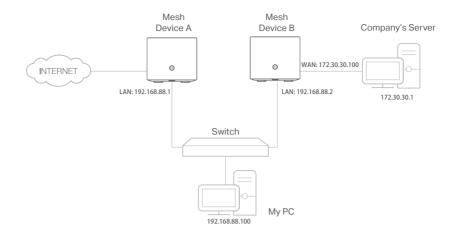
Ø	Tips: If you want to	use a new DDNS acc	ount, please log out fi	rst, then log in with	the new account.

## 6.4. Create Static Routes

A static route is a pre-determined path that network information must travel to reach a specific host or network. Data from one point to another will always follow the same path regardless of other considerations. Normal internet usage does not require this setting to be configured.

I want to: Visit multiple networks and multiple servers at the same time.

For example, in a small office, my PC can surf the internet through Mesh Device A, but I also want to visit my company's network. Now I have a switch and another Mesh Device B. I connect the devices as shown in the following image so that the physical connection between my PC and my company's server is established. To surf the internet and visit my company's network at the same time, I need to configure the static routing.



## How can I do that?

- 1. Make sure the mesh devices use different LAN IP addresses on the same subnet. Disable Mesh Device B's DHCP function.
- 2. Visit <u>http://tplinkwifi.net</u> or <u>http://192.168.88.1</u>, and log in with the password you set for the Mesh Device A.
- **3.** Go to Advanced > Network > Static Routing. Select your current WAN Interface and click Save.

Default Ga	teway Se	ttings				IPv4   IPv6
Select a WAN	N interface a	as the system defau	It gateway.			
Select WAN I	nterface:		ipoe_eth_0_2_d	▼		
						Save
Static Rout	ting					Add 🖨 Delete
		Network				
	ID	Destination	Subnet Mask	Gateway	Status	Modify

4. Click Add to add a new static routing entry. Finish the settings according to the following explanations:

						e	Add 😑 Delete
	ID	Network Destination	Subnet Mask	Gatew	ау	Enable	Modify
			-				
Netw	ork Destinat	ion	172 . 30 . 3	30 . 1			
Subr	net Mask:		255 . 255 . 2	. 255 . 255			
Gate	way:		192 . 168	88 . 2			
Inter	face:		ipoe_0_0_d	V			
			Enable This Entry				
					Cancel		ок

- Network Destination: The destination IP address that you want to assign to a static route. This IP address cannot be on the same subnet with the WAN IP or LAN IP of the Mesh Device A. In the example, the IP address of the company network is the destination IP address, so here we enter 172.30.30.1.
- Subnet Mask: Determines the destination network with the destination IP address. If the destination is a single IP address, enter 255.255.255.255; otherwise, enter the subnet mask of the corresponding network IP. In the example, the destination network is a single IP, so here we enter 255.255.255.255.
- 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 mesh device's IP which sends out the data. In the example, the data packets will be sent to the LAN port of Mesh Device B and then to the Server, so the default gateway should be 192.168.88.2.
- Interface: Determined by the port (WAN/LAN) that sends out the data packets. In the example, the data is sent to the gateway through the LAN port of Mesh Device A, so LAN should be selected.
- 5. Select the Enable This Entry check box to enable this entry.
- 6. Click Save to make the settings effective.

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

## 6.5. **RIP Settings**

To activate RIP for the WAN interface, select the desired RIP version and operation and place a check in the 'Enabled' checkbox. To stop RIP on the WAN Interface, uncheck the 'Enabled' checkbox. Click the 'Save' button to start/stop RIP and save the configuration.

- 1. Visit <u>http://tplinkwifi.net</u> or <u>http://192.168.88.1</u>, and log in with your TP-Link ID or the password you set for the mesh device.
- 2. Go to Advanced > Network > RIP Settings.
- 3. Configure RIP settings.

to activate RIP for the v checkbox. To stop RIP o ave the configuration.			I RIP version and o ne 'Enabled' checkt			
NOTE: RIP cannot be c	onfigured on ti	he WAN interface	which has NAT ena	bled.		
ID5 Authentication:	<b>~</b>	) Enable				
ID5 Key ID 0:						
ID5 Key ID 1:						
					_	
						Save
Interface	Version	AcceptRA	SendRA	Enabled	RipngEnabled	Modif

- MD5 Authentication Enable MD5 Authentication to enhance the rip RA packets security.
- MD5 Key ID 0 Setting the MD5 Key ID 0 value.
- MD5 Key ID 1 Setting the MD5 Key ID 1 value.
- Interface The WAN interface name of the RIP rule table's entry used in.
- Version The RIP version (RIPv1/RIPv2) of the RIP rule table's entry used.
- AcceptRA Enable it to make the RIP rule entry can accept the mesh device Advertisement.
- SendRA Enable it to make the RIP rule entry can send the mesh device Advertisement.
- Enabled Enable it to make the RIP rule entry active for IPv4.
- RipngEnabled Enable it to make the RIP rule entry active for IPv6, which is also known as Ripng.
- Modify Click here to modify the RIP rule entry.

## 6. 6. Specify Wireless Settings

#### 6. 6. 1. Change Basic Wireless Settings

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

Visit <u>http://tplinkwifi.net</u> or <u>http://192.168.88.1</u>, and log in with the password you set for the mesh device.

#### > To enable or disable the wireless function:

- 1. Go to Basic > Wireless.
- 2. The wireless radio is enabled by default. If you want to disable the wireless function of the mesh device, just clear the Enable check boxes. In this case, all the wireless settings will be invalid.
- > To change the wireless network name (SSID) and wireless password:
- 1. Go to Basic > Wireless.
- 2. Enter a new SSID (32 characters at most) in the Network Name (SSID) field and a new password in the Password field and click Save. The SSID and password are case-sensitive.

#### Note:

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

- > To hide SSID:
- 1. Go to Basic > Wireless.
- 2. Select Hide SSID, and your SSID will not be broadcast. Your SSID won't display on your wireless devices when you scan for local wireless networks and you need to manually join the network.

#### > To change the mode or channel:

1. Go to Advanced > Wireless > Wireless Settings.

Mode:	802.11b/g/n mixed	•
Channel:	Auto	•
Channel Width:	Auto	•
Transmit Power:	🔿 Low 🔿 Middle 💿 High	

2. Select the wireless network mode or channel and click Save to make the settings effective.

Mode: Select the desired transmission mode.

- 802.11b/g/n mixed: Select if you are using a mix of 802.11b, 11g, and 11n wireless clients.
- 802.11b/g/n/ax mixed: Select if you are using a mix of 802.11b, 11g, 11n and 11ax wireless clients.
- 802.11a/n/ac mixed: Select if you are using a mix of 802.11a, 11n, and 11ac wireless clients.
- 802.11a/n/ac/ax mixed: Select if you are using a mix of 802.11a, 11n, 11ac and 11ax wireless clients.

Note: When 802.11n only mode is selected, only 802.11n wireless stations can connect to the mesh device. It is strongly recommended that you select 802.11b/g/n mixed (for 2.4GHz) and 802.1 a/n/ac/ax mixed (for 5GHz), and all of 802.11a, 802.11b, 802.11g, 802.11n, 802.11ac, and 802.11ax wireless stations can connect to the mesh device.

Channel: Select the channel you want to use from the drop-down list. This field determines which operating frequency will be used. It is not necessary to change the wireless channel unless you notice interference problems with another nearby access point.

Channel Width: Select the channel width from the drop-down list. The default setting is Auto, which can adjust the channel width for your clients automatically.

Transmit Power: Select Low, Middle, or High to specify the data transmit power. The default and recommended setting is High.

#### > To change the security option:

1. Go to Advanced > Wireless > Wireless Settings.

Security:	WPA2-PSK[AES]	
Password:	90844195	
	Low Middle High	
Mode:	802.11b/g/n/ax mixed	V
Channel:	Auto	•
Channel Width:	Auto	•
Transmit Power:	🔿 Low 🔿 Middle 💿 High	
		Save

2. Select an option from the Security drop-down list and configure the related parameters. The mesh device provides four options, No Security, WPA-PSK[TKIP]+WPA2-PSK[AES], WPA2-PSK[AES], WPA2-PSK[AES]+WPA3-Personal. WPA3 uses the newest standard and the security level is the highest. We recommend you don't change the default settings unless necessary.

3. Click Save to make the settings effective.

#### > To enable network roaming:

Network roaming helps devices choose better AP based on actual conditions to balance network demands. (For mesh devices, Band Steering is disabled by default.)

- 1. Go to Advanced > Wireless > Wireless Settings.
- 2. Locate the Band Steering section, select the Enable check box to make the settings effective.

Band Steering		
Band Steering:		

#### 6. 6. 2. Advanced Wireless Settings

Advanced wireless settings are for those who want more network controls. You can follow the instructions below to configure your mesh device.

- 1. Visit <u>http://tplinkwifi.net</u> or <u>http://192.168.88.1</u>, and log in with the password you set for your mesh device.
- 2. Go to Advanced > Wireless > Advanced Settings.

#### > To change basic advanced settings:

Locate the Advanced Settings section and configure the advanced settings according to the explanation below, and then click Save.

Advanced Settings		2.4GHz   5GHz
Beacon Interval:	100	(40-1000)
RTS Threshold:	2346	(1-2346)
DTIM Interval:	1	(1-255)
Group Key Update Period:	0	seconds
WMM:	Enable	
Short GI:	Enable	
AP Isolation:	Enable	
Air time fairness:	Enable	
Fast Roaming (802.11r):	Enable	
		Save

• Beacon Interval: Enter a value between 40 and 1000 in milliseconds to determine the duration between which beacon packets are broadcast by the mesh device to synchronize the wireless network. The default is 100 milliseconds.

- RTS Threshold: Enter a value between 1 and 2347 to determine the packet size of data transmission through the mesh device. By default, the RTS (Request to Send) Threshold size is 2347. If the packet size is greater than the preset threshold, the mesh device sends Request to Send frames to a particular receiving station and negotiates the sending of a data frame, or else the packet will be sent immediately.
- DTIM Interval: Enter a value between 1 and 255 to determine the interval of the Delivery Traffic Indication Message (DTIM). 1 indicates the DTIM Interval is the same as Beacon Interval.
- Group Key Update Period: Enter the number of seconds to control the time interval for the encryption key automatic renewal. The default is 0, indicating no key renewal.
- WMM: This feature guarantees the packets with high-priority messages being transmitted preferentially. WMM is enabled compulsively under 802.11n or 802.11ac mode.
- Short GI: This feature is enabled by default and recommended to increase the data capacity by reducing the Guard Interval (GI) time.
- AP Isolation: Select this check box to enable the AP Isolation feature that allows you to confine and restrict all wireless devices on your network from interacting with each other, but still able to access the internet.
- Air time fairness: Select this checkbox to enable the Airtime Fairness(ATF) feature that allows you to optimize the throughput of each flow. The ATF traffic scheduler uses the per-destination airtime targets to balance airtime usage across flow destinations.
- Fast Roaming (802.11r): This feature allows a client device to roam quickly in environments implementing the WPA2 Enterprise security, by ensuring that the client device does not need to re-authenticate to the RADIUS server every time it roams from one access point to another. It's recommended that you keep the feature enabled for better roaming experiences.

#### Note:

If you are not familiar with the settings mentioned above, it's strongly recommended that you keep the provided default settings; otherwise it may result in lower wireless network performance.

#### > To enable or disable WPS function:

WPS (Wi-Fi Protected Setup) provides you with an easier approach to set up a securityprotected Wi-Fi connection. This function is enabled by default, but if you do not need this function, clear the WPS Enable check box.

- 1. Visit <u>http://tplinkwifi.net</u> or <u>http://192.168.88.1</u>, and log in with the password you set for your mesh device.
- 2. Go to Advanced > Wireless > WPS.

Router PIN				
Other devices can connect to thi	s Router by WPS with the	Router's PIN code.		
Enable Router's PIN:				
Router's PIN:	02824260	Generate	Default	
WPS Settings				
Enable WPS:				
Select a setup method:				
Push Button (Recommended)				
Connect Failed to	on the router or click the add the device!	"Connect" button on this p	age.	
O PIN Number				

#### > To create multi-SSID network:

The mesh device supports additional up to three multi-SSID wireless networks for client access in each wireless band. You can specify the access and security settings to ensure network security and privacy according to your situation.

- 1. Visit <u>http://tplinkwifi.net</u> or <u>http://192.168.88.1</u>, and log in with the password you set for your mesh device.
- 2. Go to Advanced > Wireless > Multi-SSID.
  - 1) Locate the Multi-SSID section, and enable 2.4GHz or 5GHz to open the corresponding setup page.
  - 2) Select the Enable MSSID 1 or 2 check box(es) to enable the corresponding multi-SSID network.

Multi-SSID		2.4GHz 5GHz
MSSID1:	✓ Enable	
Network Name (SSID):	TP-Link_D8A1_1	Hide SSID
Security:	No Security	▼
See each other:	Allow guests to see each other	
USB Storage Sharing:	Allow guests to access my USB Sto	rage Sharing
MSSID2:	✓ Enable	
Network Name (SSID):	TP-Link_D8A1_2	Hide SSID
Security:	No Security	$\checkmark$
See each other:	Allow guests to see each other	
USB Storage Sharing:	Allow guests to access my USB Sto	rage Sharing
		Save

- 3) Enter a new Network Name (SSID) or use the default name, this field is case sensitive. Don't select Hide SSID unless you want your guests to manually input the SSID for Wi-Fi access.
- 4) Select the Security option for the multi-SSID network, WPA/WPA2 Personal is recommended, and you can set a password for the network.

If you want to allow the clients in your Multi-SSID network to communicate with each other via methods such as Network Neighborhood and Ping, select the Allow Guests to See Each Other check box.

If you want to allow the clients in your Multi-SSID network to access your mesh device's USB storage sharing via methods such as Network Neighborhood and FTP, select the Allow Guests to Access My USB Storage Sharing check box.

5) Repeat step 1) to step 4) to set other wireless networks if needed, and click Save to make the settings effective.

#### 6. 6. 3. View Wireless Information

- > To view the detailed wireless network settings:
- 1. Visit <u>http://tplinkwifi.net</u> or <u>http://192.168.88.1</u>, and log in with the password you set for the mesh device.
- 2. Go to Advanced > Status page. You will find the Wireless panel.
- 3. Click 2.4GHz or 5GHz to view the wireless details.

2.4GHz   5GHz
: TP-Link_BDB2
On
802.11bgn mixed
Auto
8
7C:8B:CA:83:BD:B2

@ Tips: You can also see the wireless details by clicking the mesh device icon on Basic> Network Map.

- > To view the detailed information of the connected wireless clients:
- 1. Visit <u>http://tplinkwifi.net</u> or <u>http://192.168.88.1</u>, and log in with the password you set for the mesh device.
- 2. Go to Advanced > Wireless > Statistics page.
- **3.** You can view the detailed information of the wireless clients, including its connection type and security option as well as the packets transmitted.

Tips: You can also see the wireless details by clicking the wireless clients icon on Basic > Network Map.

## 6.7. Schedule Your Wireless Function

You can automatically turn off your wireless networks when you do not need the wireless connection.

- 1. Visit <u>http://tplinkwifi.net</u> or <u>http://192.168.88.1</u>, and log in with the password you set for the mesh device.
- 2. Go to Advanced > Wireless > Wireless Schedule.
- 3. Enable the Wireless Schedule function.

Thu	Fri	Sat

#### 4. Click Add to set the Wireless Off Time, and click Save to make the settings effective.

#### Note:

- 1. Make sure that the time of the mesh device is correct before using this function. For details, refer to Set System Time.
- 2. The wireless LED will turn off if the corresponding wireless network is disabled.
- 3. The wireless network will be automatically turned on after the time period you set.

## 6.8. Use WPS for Wireless Connection

You can use WPS (Wi-Fi Protected Setup) to add a new wireless device to your existing network quickly and easily.

#### Method 1: Use the WPS button

Use this method if your client device has a WPS button.

- 1. Press the WiFi/WPS button of the mesh device.
- 2. Press the WPS button of the client device directly.
- 3. The WPS LED flashes for about 2 minutes during the WPS process.

4. When the WPS LED is on, the client device has successfully connected to the mesh device.

#### Method 2: Use the "Connect" button on the web management page

Use this method if your client device has a WPS button.

- 1. Visit <u>http://tplinkwifi.net</u> or <u>http://192.168.88.1</u>, and log in with the password you set for the mesh device.
- 2. Go to Advanced > Wireless > WPS page.

WPS Settings	
Enable WPS:	
Select a setup met	nod:
Push Button (R	ecommended)
Press the physical	"push button" on the router or click the "Connect" button on this page.
Connect	Failed to add the device!
O PIN Number	

- **3.** Click Connect on the page.
- 4. Press the WPS button of the client device directly.
- 5. The WPS LED of the mesh device flashes for about 2 minutes during the WPS process.
- 6. When the WPS LED is on, the client device has successfully connected to the mesh device.

#### Method 3: Enter the mesh device's PIN on your client device

Use this method if your client device asks for the mesh device's PIN.

- 1. Visit <u>http://tplinkwifi.net</u> or <u>http://192.168.88.1</u>, and log in with the password you set for the mesh device.
- 2. Go to Advanced > Wireless > WPS, and enable Mesh Device's PIN.

Router PIN				
Other devices can connect to Enable Router's PIN:	this Router by WPS with the	Router's PIN code.		
Router's PIN:	02824260	Generate	Default	

**3.** Take a note of the current PIN of the mesh device. You can also click the Generate button to get a new PIN.

- 4. Enter the mesh device's PIN on the client device. (The default PIN is also printed on the label of the mesh device.)
- 5. The WPS LED flashes for about 2 minutes during the WPS process.
- 6. When the WPS LED is on, the client device has successfully connected to the mesh device.

Note:

- 1. The WPS LED on the mesh device will light on for five minutes if the device has been successfully added to the network.
- 2. The WPS function cannot be configured if the wireless function of the mesh device is disabled. Please make sure the wireless function is enabled before configuring WPS.

#### Method 4: Enter the client device's PIN on the mesh device

- 1. Visit <u>http://tplinkwifi.net</u> or <u>http://192.168.88.1</u>, and log in with the password you set for the mesh device.
- 2. Go to Advanced > Wireless > WPS, and click PIN Number.
- 3. Enter the Client's PIN.

PIN Number	
Enter the client's PIN:	
Connect	

- 4. Then click the Connect button.
- 5. Device has been added successfully! or the similar information will appear on the web page, which means the client device has successfully connected to the mesh device.

Chapter 7

# **Multi-SSID**

Multi-SSID function allows you to provide Wi-Fi access for your visitors without disclosing your main network. When you have guests in your house, apartment, or workplace, you can create a multi-SSID wireless network for them. In addition, you can customize the network settings to ensure your network security and privacy.

#### > To create a multi-SSID network:

- 1. Visit <u>http://tplinkwifi.net</u> or <u>http://192.168.88.1</u>, and log in with the password you set for the mesh device.
- 2. Go to Basic > Multi-SSID or Advanced > Wireless > Multi-SSID.
- 3. Create the multi-SSID network as needed.

Multi-SSID			2.4GHz   5GHz
MSSID1:	Enable		
Network Name (SSID):	TP-Link1	Hide SSID	
Security:	No Security		
See each other:	Allow guests to see each other		
MSSID2:	Enable		
Network Name (SSID):	TP-Link2	Hide SSID	
Security:	No Security	~	
See each other:	✓ Allow guests to see each other		
			Save

- 1) Select the Enable check box to create the corresponding multi-SSID network. You can create three multi-SSID wireless networks at most.
- 2) Enter a new Network Name (SSID) or use the default name, this field is casesensitive. Don't select Hide SSID unless you want your guests to manually input the SSID for Wi-Fi access.
- 3) Select the Security option for the multi-SSID wireless network, WPA/WPA2/ WPA3 Personal (Recommended) is recommended, and you can set a password for the network.
- 4. Click Save to make the settings effective. Now your guests can access your multi-SSID wireless network using the SSID and password specified.

## Chapter 8

# **TP-Link Cloud Service**

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

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

It contains the following sections:

- Register a TP-Link ID
- <u>Change Your TP-Link ID Information</u>
- Manage the User TP-Link IDs
- <u>Manage the Mesh Device via the TP-Link Aginet App</u>

## 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> or <u>http://192.168.88.1</u>, and log in with the password you set for the mesh device.
- 2. Go to Basic > TP-Link Cloud.
- 3. Click Sign Up and follow the instructions to register a TP-Link ID.

TP-Link ID		
Log in to bind the router to your 1 more.	P-Link ID. You can remotely manage your network via	the Tether app, and
	TP-Link ID (Email): Password:	
	Log In Sign Up Forgot Password?	

- 4. After activating your TP-Link ID, come back to the TP-Link Cloud page to log in. The TP-Link ID used to log in to the mesh device 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 Aginet APP. Please refer to <u>Manage the Mesh Device via the TP-Link Aginet App</u> to install the app.
- If you want to unbind the admin TP-Link ID from your mesh device, please go to Basic > TP-Link Cloud, an click Unbind in the Device Information section.

## 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 or http://192.168.88.1, and log in with your TP-Link ID.
- 2. Go to Basic > TP-Link Cloud, and focus on the Account Information section.
- To change your email address:
- 1. Click 🥑 behind the Email.
- 2. Enter the password of your TP-Link ID, then a new email address. And click Save.

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

- 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  Low Middle High  Confirm Password  Save  Note: New email or password			
New Password Low Middle High Confirm Password Save	Cha	nge Password	8
Low Middle High	~	Current Password	
Confirm Password	~	New Password	
Save		ow   Middle   High	
	~	Confirm Password	
Note: New email or password		Save	
may not sync to client devices immediately. Please log in again when your device is connected to the Internet to update account information.		: New email or password	

## 8.3. Manage the User TP-Link IDs

The TP-Link ID used to log in to the mesh device for the first time will be automatically bound as the Admin account. An admin account can add or remove other TP-Link IDs

to or from the same mesh device as Users. All accounts can monitor and manage the mesh device locally or remotely, but user accounts cannot:

- Reset the mesh device to its factory default settings either on the web management page or in the Aginet app.
- Add/remove other TP-Link IDs to/from the mesh device.

#### 8. 3. 1. Add TP-Link ID to Manage the Mesh Device

- 1. Visit <u>http://tplinkwifi.net</u> or <u>http://192.168.88.1</u>, and log in with your TP-Link ID.
- 2. Go to Basic > TP-Link Cloud, and focus on the Bound Accounts section.

#### 3. Click 🕂 Bind , enter another TP-Link ID as needed and click Save.

**Note:** If you need another TP-Link ID, please register a new one via the Aginet app. Refer to <u>Manage the Mesh Device</u> <u>via the TP-Link Aginet App</u> to install the app and register a new TP-Link ID.

Ad	d Account	$\otimes$
	) Email	
I	Cancel	Save

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

Bound Accounts						
				🕂 Bind 🛛 🖨 Unbind		
	ID	Email	Binding Date	Role		
	1	thergour, reading con-		Admin		
	2	thangs and giving \$143, com		User		

#### 8. 3. 2. Remove TP-Link ID(s) from Managing the Mesh Device

- 1. Visit <u>http://tplinkwifi.net</u> or <u>http://192.168.88.1</u>, and log in with your TP-Link ID.
- 2. Go to Basic > TP-Link Cloud, and focus on the Bound Accounts section.
- 3. Tick the checkbox(es) of the TP-Link ID(s) you want to remove and click Unbind.