User Guide

300Mbps Wireless N Access Point
TL-WA801ND

REV5.0.0 1910012077

Contents

About This Guide 1

Chapter 1. Get to Know About Your Access Point 2

1. 1. Product Overview 3
1. 2. Panel Layout 3
1. 2. 1.Top View 3
1. 2. 2.The Back Panel 4

Chapter 2. Connect the Hardware 6

2. 1. Position Your Access Point 7
2. 2. Connect Your Access Point 7
2. 2. 1.Access Point Mode 7
2. 2. 2.Repeater (Range Extender) Mode 8
2. 2. 3.Bridge with AP Mode 8
2. 2. 4.Client Mode 8
2. 2. 5.Multi-SSID Mode 9

Chapter 3. Set Up Internet Connection Via Quick Setup Wizard 10

3. 1. Log In to the Access Point 11
3. 2. Configure the Access Point 11
3. 2. 1.Access Point Mode 12
3. 2. 2.Repeater (Range Extender) Mode 13
3. 2. 3.Bridge with AP Mode 14
3. 2. 4.Client Mode 16
3. 2. 5.Multi-SSID Mode 17

Chapter 4. Configure the Access Point 20

4. 1. Status 21
4. 2. WPS 22
4. 3. Network 24
4. 3. 1. LAN 24
4. 3. 2.DHCP Settings 25
4. 3. 3.DHCP Client List 26
4. 4. Wireless 26
4. 4. 1.Wireless Settings 26

4. 4. 2.Wireless Security 33
4. 4. 3.Wireless MAC Filtering 43
4. 4. 4.Wireless Advanced 44
4. 4. 5.Wireless Statistics 46
4. 4. 6.Throughput Monitor 46
4. 5. System Tools 47
4. 5. 1.SNMP 47
4. 5. 2.Diagnostic 48
4. 5. 3.Ping Watch Dog 50
4. 5. 4.Firmware Upgrade 51
4. 5. 5.Factory Defaults 51
4. 5. 6.Backup & Restore 51
4. 5. 7.Reboot 52
4. 5. 8.password 52
4. 5. 9.System Log 53
4. 6. Logout 55

FAQ 56

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 access point 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.
Tips:	Indicates important information that helps you make better use of your device.

More Info

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

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

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

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

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

Chapter 1

Get to Know About Your Access Point

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

It contains the following sections:

- Product Overview
- Panel Layout

1. 1. Product Overview

The TP-Link Wireless N Access Point, with multiple operation modes, is designed to establish or expand a scalable high-speed wireless N network or to connect multiple Ethernet enabled devices such as game consoles, digital media adapters, printers, or network attached storage devices to a wireless network. The AP supports a host of different functions that make your wireless networking experience more fexible than ever before. Now, you can enjoy a better internet experience when downloading, gaming, video streaming or with any other application that you may wish to use.

1. 2. Panel Layout

1. 2. 1. Top View

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

LED Explanation

Name	Status	Indication
(Power)	On	Power is on.
	Flashing	The system is starting up or the firmware is being upgraded. Do not disconnect or power off your access point.
	Off	Power is off.
(Wireless)	On	The wireless function is enabled.
	Off	The wireless function is disabled.
(Ethernet)	On	The ETHERNET port is connected to a powered-on device.
	Off	The ETHERNET port is not connected to a powered-on device.
(WPS)	On/Off	This light remains on for 2 minutes when a WPS connection is established, then turns off.
	Flashing	WPS connection is in progress. This may take up to 2 minutes.

1. 2. 2. The Back Panel

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

Ports or Buttons	Description
ON/OFF	To power on or off the access point.
Power	For connecting the access point to a power socket via the provided power adapter.
ETHERNET	One LAN 10/100Mbps RJ45 port connects to a network device, such as a switch or a router.
WPS	If your client devices, such as wireless adapters, support Wi-Fi Protected Setup, then you can press this button to quickly establish a connection between the access point and the client devices and automatically configure wireless security for your wireless network.
RESET	Press and hold this button until all the LEDs turn on momentarily.
Antennas	Used for wireless operation and data transmitting. Upright them for the best Wi-Fi performance.

Chapter 2

Connect the Hardware

This chapter contains the following sections:

- Position Your Access Point
- Connect Your Access Point

2. 1. Position Your Access Point

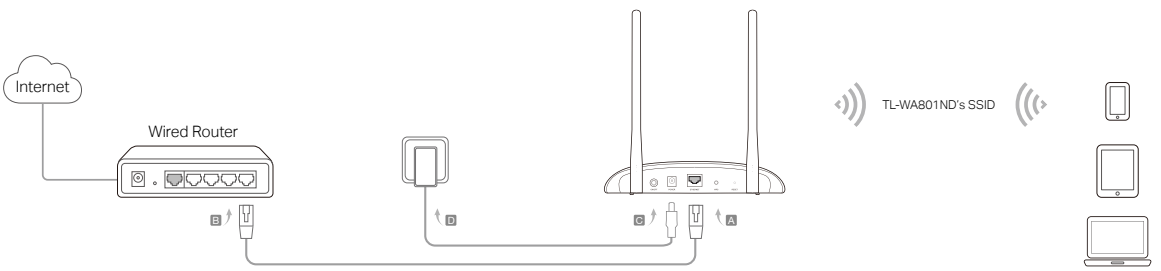
- The product should not be located in a place where it will be exposed to moisture or excessive heat.
- Place the access point in a location where it can be connected to various devices as well as to a power source.
- Make sure the cables and power cord are safely placed out of the way so they do not create a tripping hazard.
- The access point 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 Access Point

There are four operation modes supported by this access point: Access Point, Repeater/Bridge, Client and Multi-SSID. Please determine which operation mode you need and carry out the corresponding steps.

2. 2. 1. Access Point Mode

In Access Point mode, the access point transforms your existing wired network to a wireless one. This mode is suitable for dorm rooms or homes where there's already a wired router but you need a wireless network.



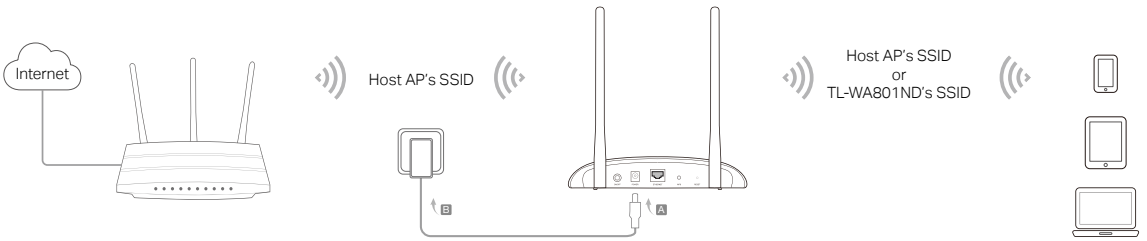
1. Connect the access point according to Step A to D in the diagram.
2. Power on the access point, wait until the Power ( ) and Wireless ( ) LEDs are lit and stable, and use the default SSID and Password printed on the label of the access point to join its Wi-Fi network.

Note:

You can surf the internet now. For your wireless network security, it is recommended to change the default SSID (network name) and the password of your Wi-Fi network.

2. 2. 2. Repeater/Bridge Mode

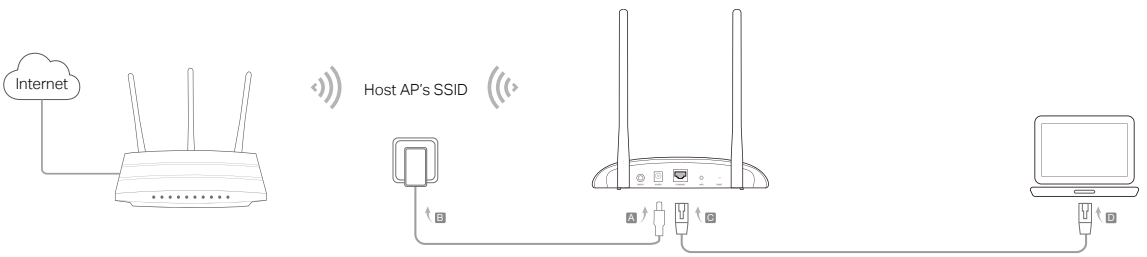
In Repeater/Bridge mode, the access point extends the range of an existing Wi-Fi network. This mode is suitable when you are in a Wi-Fi dead-zone or a place with weak wireless signal, and you want to have a larger effective range of the wireless signal throughout your home or office.



1. Connect the access point according to Step A and B in the diagram.
2. Power on the access point, wait until the Power ( ) and Wireless ( ) LEDs are lit and stable, and use the default SSID and Password printed on the label of the access point to join its Wi-Fi network.

2. 2. 3. Client Mode

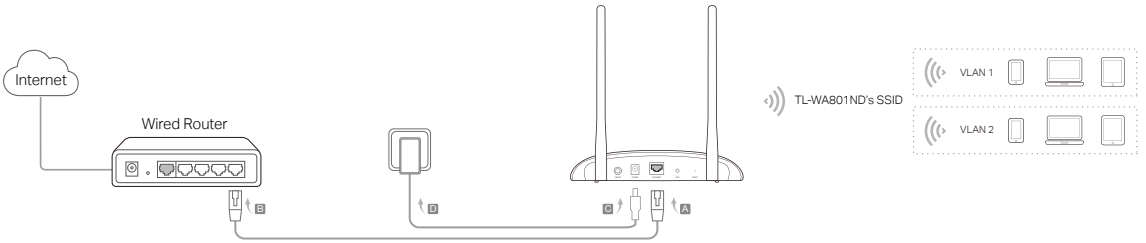
In Client mode, the access point connects your wired devices to a wireless network. This mode is suitable when you have a wired device with an Ethernet port and no wireless capability, for example, a smart TV, Media Player, or game console and you want to connect it to the internet wirelessly.



1. Connect the access point according to Step A to D in the diagram.
2. Power on the access point, wait until the Power ( ) and Wireless ( ) LEDs are lit and stable, and use the default SSID and Password printed on the label of the access point to join its Wi-Fi network.

2. 2. 4. Multi-SSID Mode

In Multi-SSID mode, the access point creates multiple wireless networks to provide different security and VLAN groups. This mode is suitable when you want your devices connected to different wireless networks and become isolated by VLANs.



1. Connect the access point according to Step A to D in the diagram.
2. Power on the access point, wait until the Power ( ) and Wireless ( ) LEDs are lit and stable, and use the default SSID and Password printed on the label of the access point to join its Wi-Fi network.

Chapter 3

Set Up Internet Connection Via Quick Setup Wizard

This chapter introduces how to connect your access point to the internet via the web-based Quick Setup Wizard.

It contains the following sections:

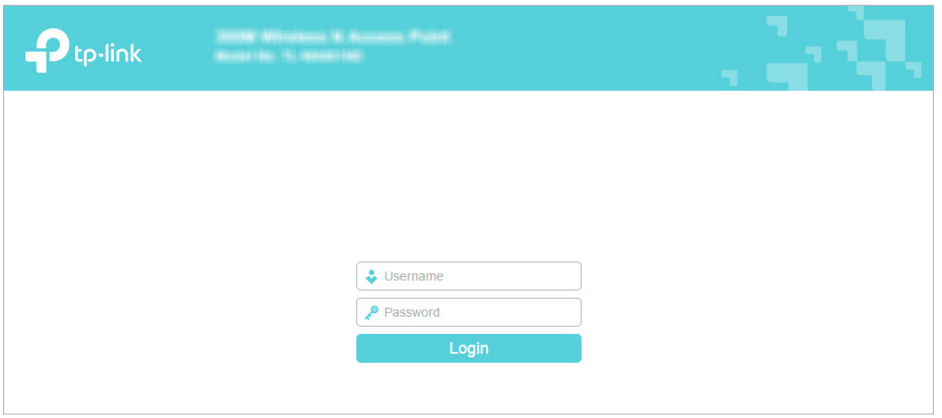
- Log In to the Access Point
- Configure the Access Point

3. 1. Log In to the Access Point

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

Follow the steps below to log in to your access point.

1. Visit http://tplinkap.net, and log in using admin (all lowercase) for both username and password.

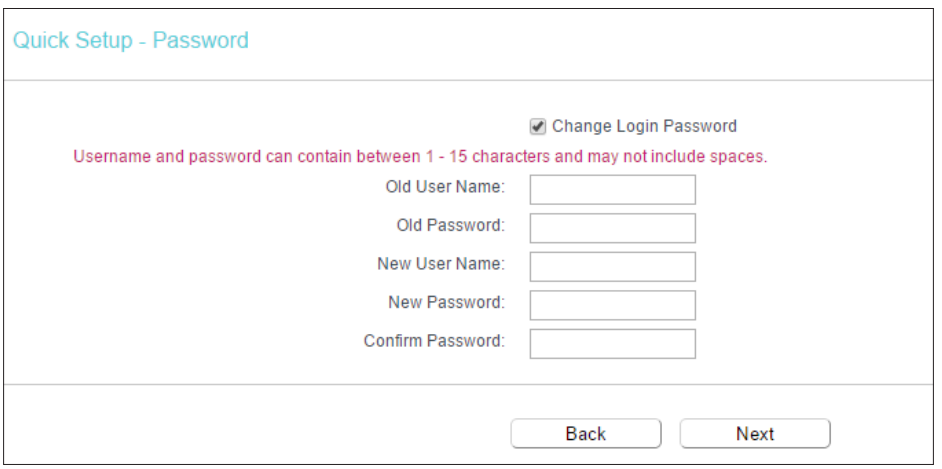


Note:
If the login window does not appear, please refer to the FAQ Section.

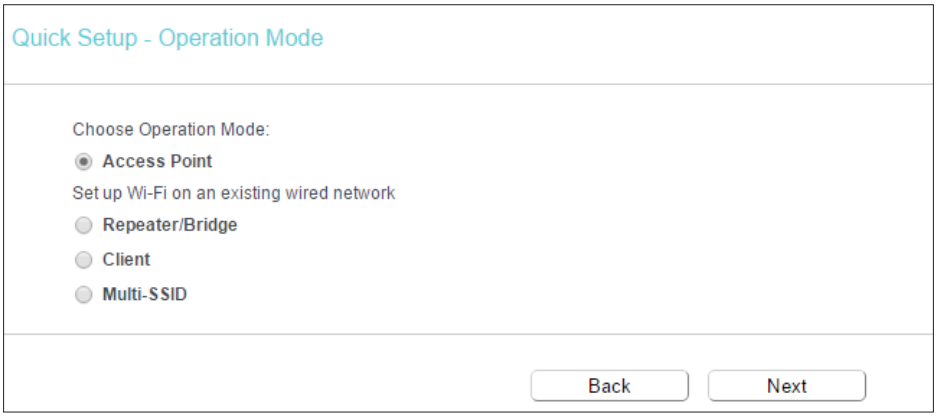
3. 2. Configure the Access Point

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

1. Go to Quick Setup and click Next to start.
2. If you want to change your login account, click check the box. Then enter your old username and password, then a new username and password. If not, click Next to move on.

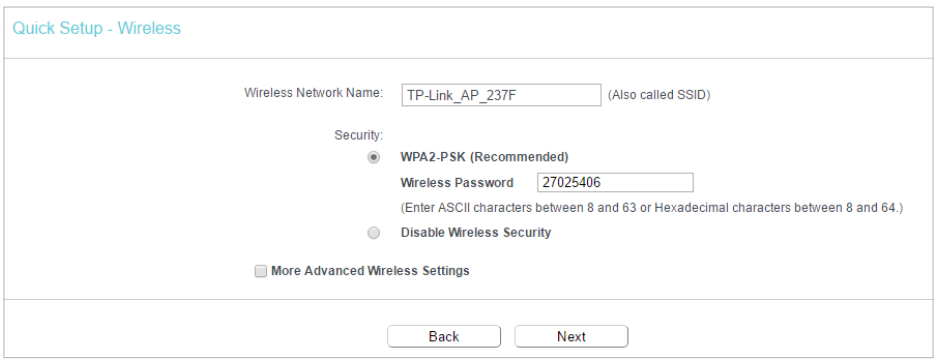


3. Choose the operation mode you need and click Next. Then follow the corresponding steps to configure your access point.

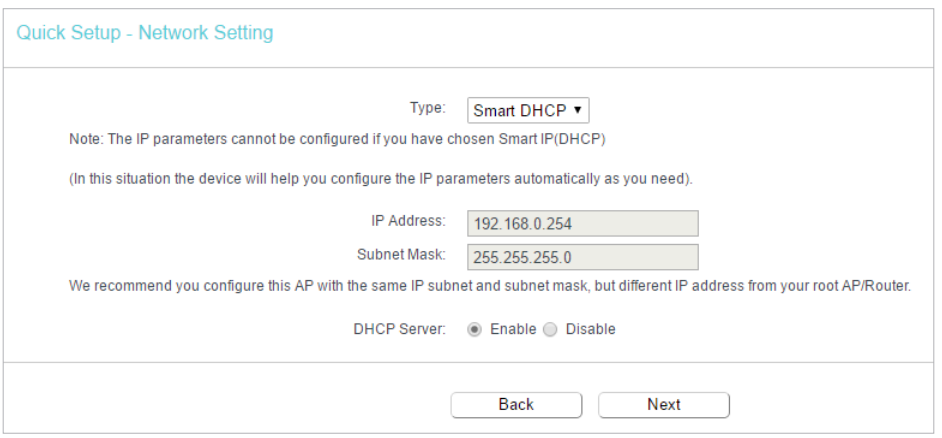


3. 2. 1. Access Point Mode

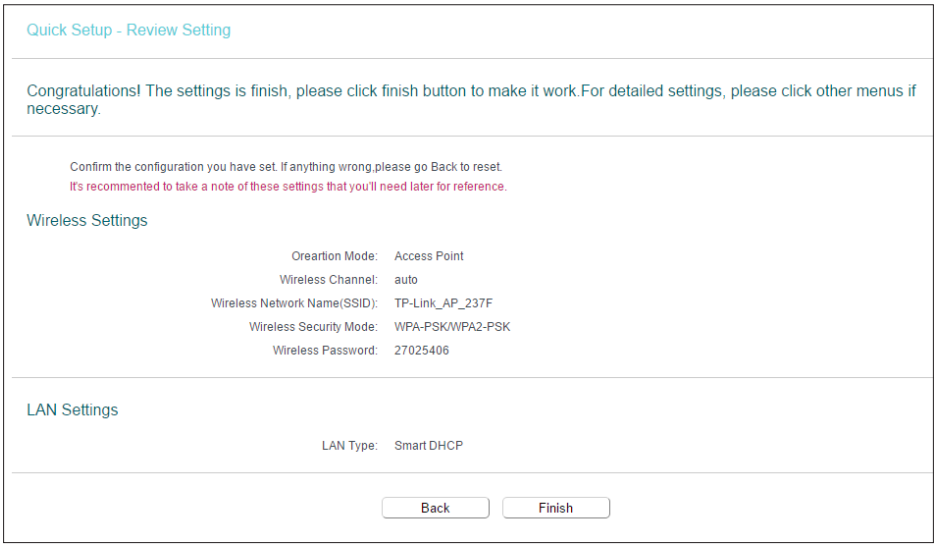
1. Either customize your Wireless Network Name and Wireless Password or keep the default ones, and then click Next.



2. Select the LAN IP type of the access point or leave the default setting Smart DHCP for most cases, and then click Next.



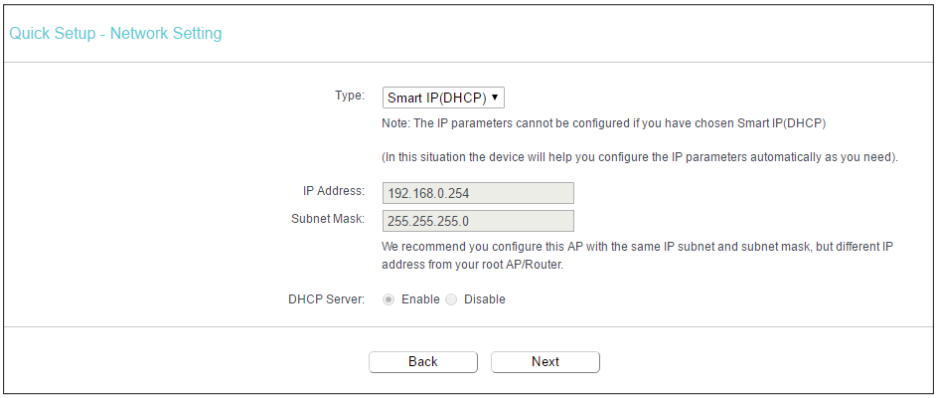
3. Click Finish to complete the configuration. Reconnect your wireless devices to the new Wi-Fi network.



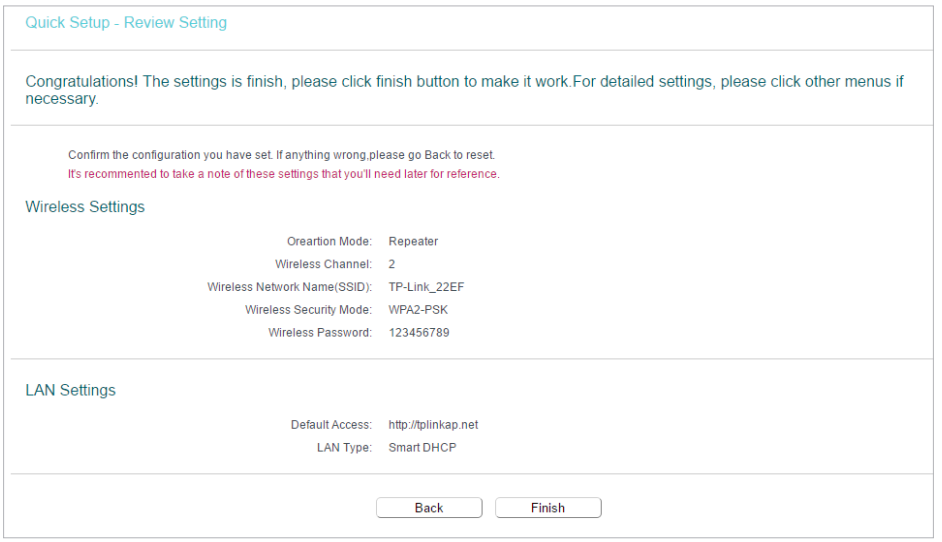
3. 2. 2. Repeater/Bridge Mode

1. Choose a network you want to extend from the AP List and click Connect. Enter the host network's password in the Password field, choose to copy the wireless name from the host network or customize your own, and then click Next.

2. Select the LAN IP type of the access point or leave the default setting Smart IP for most cases, and then click Next.



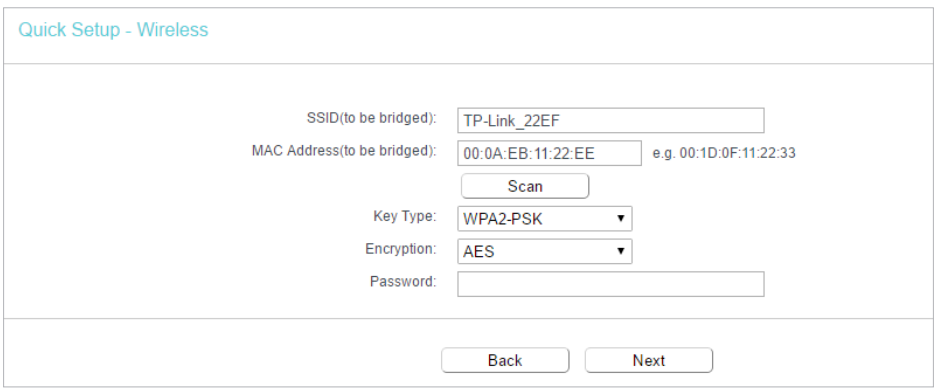
3. Click Finish to complete the configuration.



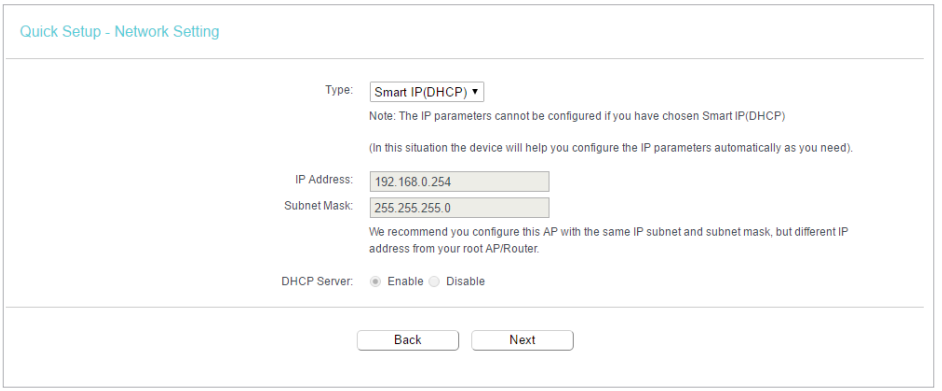
4. Relocate the access point about halfway between your host AP and the Wi-Fi dead zone.

3. 2. 3. Client Mode

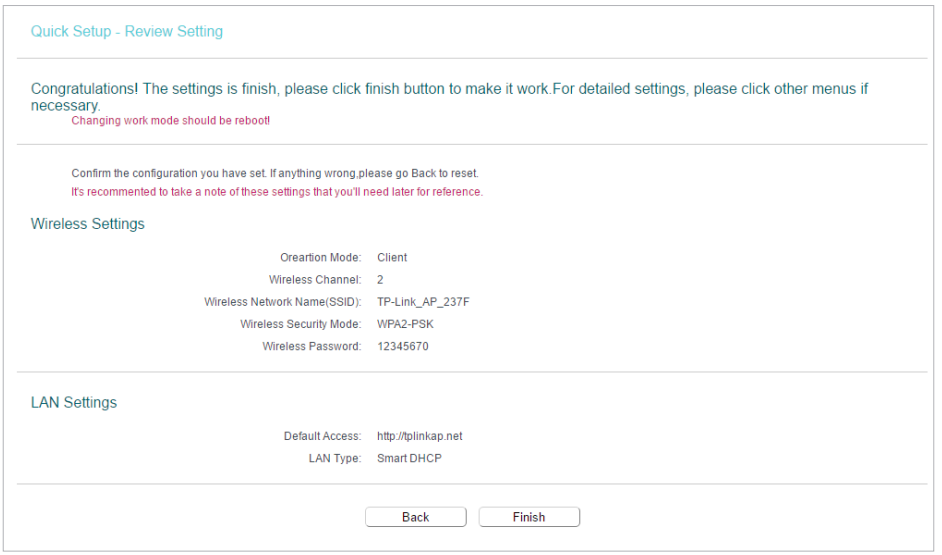
1. Choose a network you want to connect to from the AP List and click Connect. Enter the host network's password in the Wireless Password field, and then click Next.



2. Select the LAN IP type of the access point or leave the default setting Smart IP for most cases, and then click Next.

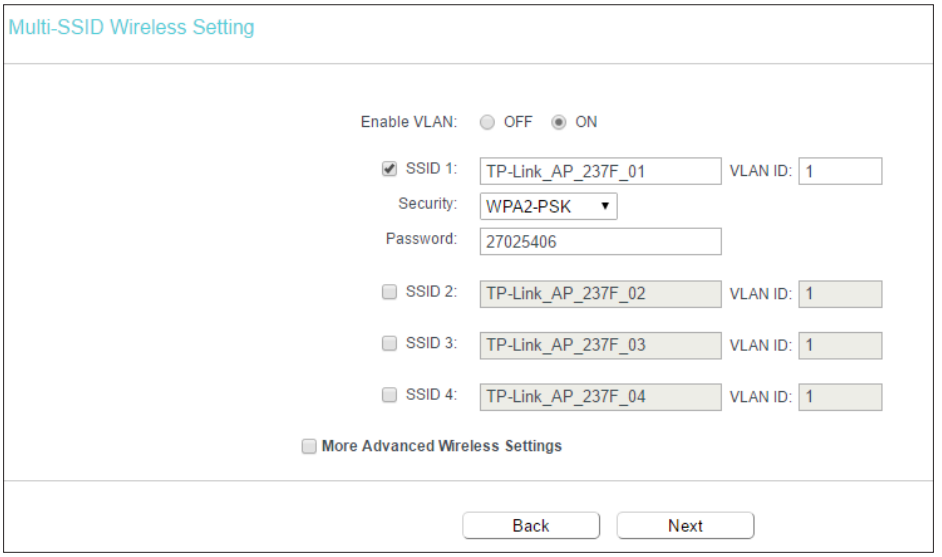


3. Click Finish to complete the configuration. Now your wired connected devices can enjoy the Internet surfing.

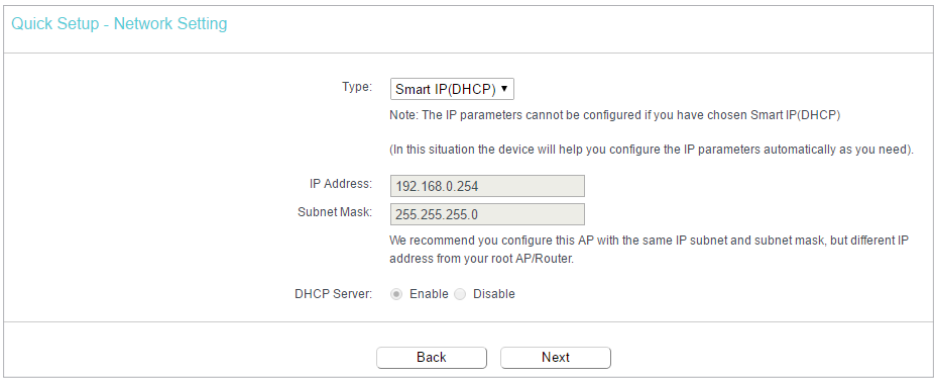


3. 2. 4. Multi-SSID Mode

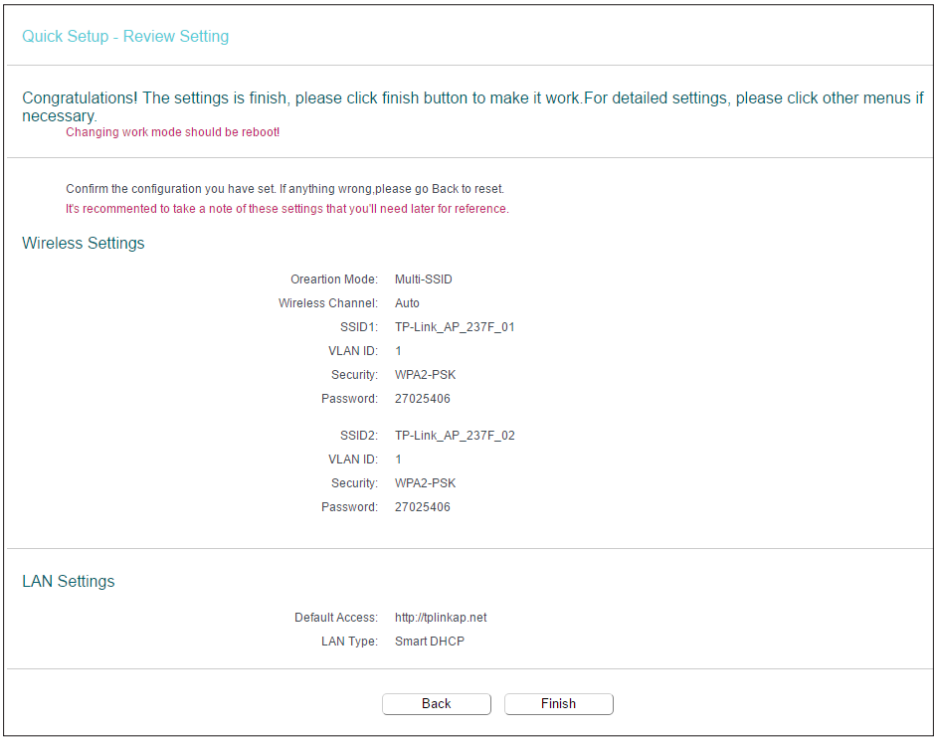
1. Enable the VLAN function and check SSIDs you want to enable. Customize the SSIDs and the passwords according to your needs and click Next.



2. Select the LAN IP type of the access point or leave the default setting Smart IP for most cases, and then click Next.



3. Click Finish to complete the configuration.



4. Connect your wireless devices to the different Wi-Fi networks to be isolated by VLANs.

Chapter 4

Configure the Access Point

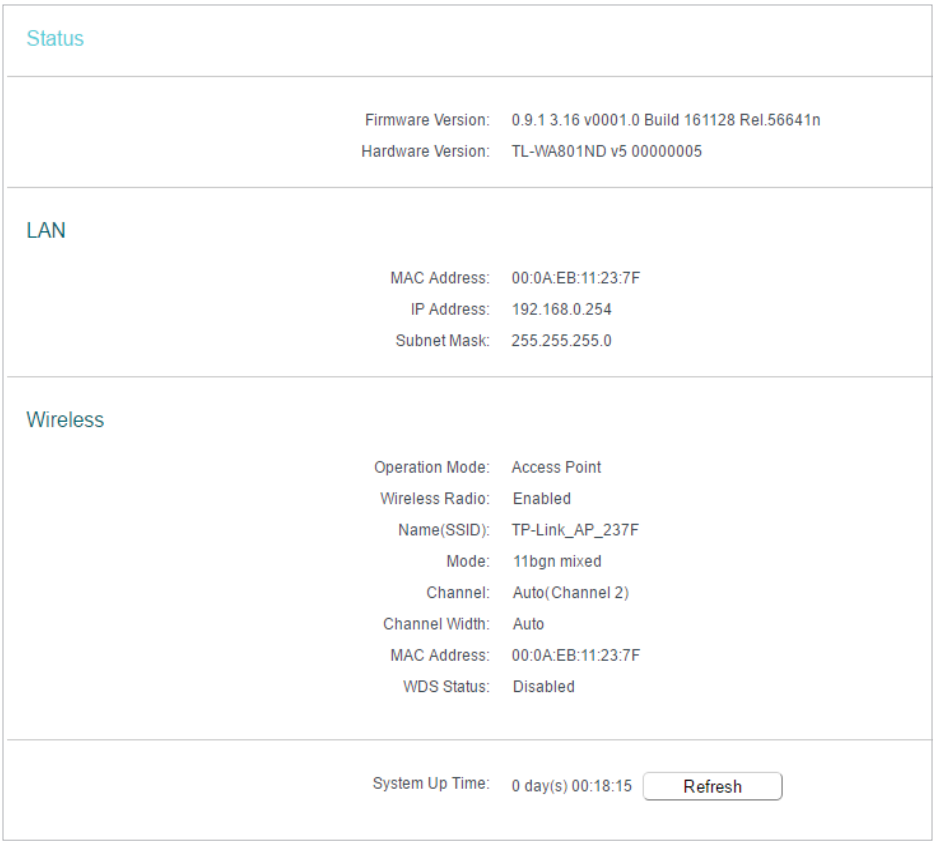
This chapter presents how to configure the various features of your access point.

It contains the following sections:

- Status
- WPS
- Network
- Wireless
- System Tools
- Logout

4. 1. Status

1. Visit http://tplinkap.net, and log in using admin (all lowercase) for both username and password.
2. Go to Status. You can view the current status information of the access point.



- Firmware Version - The version information of the access point's firmware.
- Hardware Version - The version information of the access point's hardware.
- 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 access point.
    - IP address - The LAN IP address of the access point.
    - Subnet Mask - The subnet mask associated with the LAN IP address.
- Wireless - This field displays the basic information or status of the wireless function, and you can configure them on the Wireless > Wireless Settings page.
    - Operation Mode - The current wireless working mode in use.
    - Wireless Radio - The status of wireless radio.
    - Name (SSID) - The SSID of the access point.
    - Mode - The current wireless mode which the access point works on.
    - Channel - The current wireless channel in use.
    - Channel Width - The current wireless channel width in use.

- MAC Address - The physical address of the access point.
- WDS Status - The access point's traffic stastics.
- System Up Time - The length of the time since the access point was last powered on or reset.

Click Refresh to get the latest status and settings of the access point.

4. 2. 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 access point's network quickly via WPS.

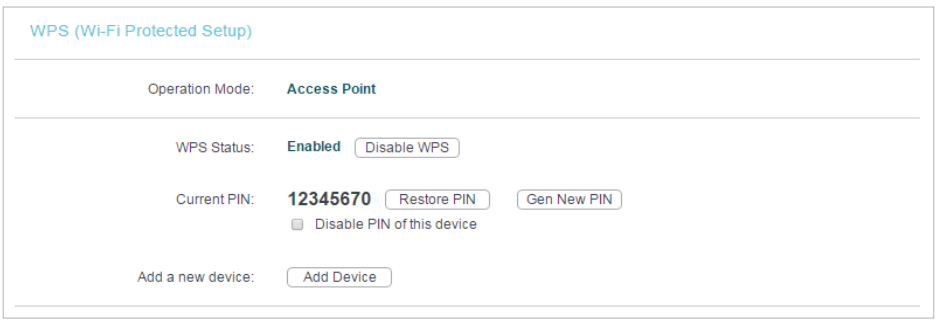
Note:

- The WPS function cannot be configured if the wireless function of the access point is disabled. Please make sure the wireless function is enabled before configuration.
- When working in Repeater or Client mode, the WPS funcion of the access point is disabled.

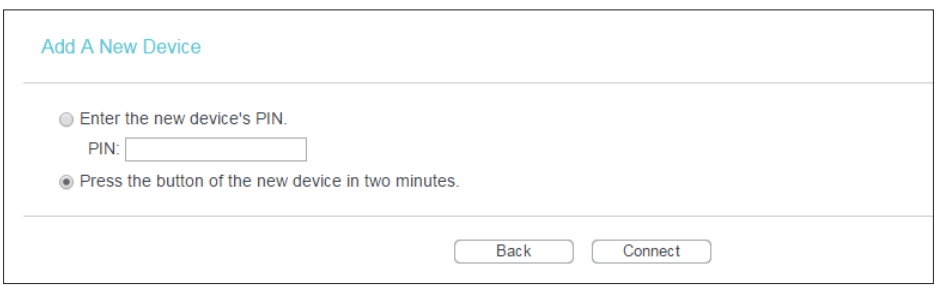
1. Visit http://tplinkap.net, and log in using admin (all lowercase) for both username and password.
2. Go to WPS.
3. Follow one of the following three methods to connect your client device to the access point's Wi-Fi network.

Method ONE: Press the WPS Button on Your Client Device

1. Keep the WPS Status as Enabled and click Add Device.



2. Select Press the button of the new device in two minutes and click Connect.

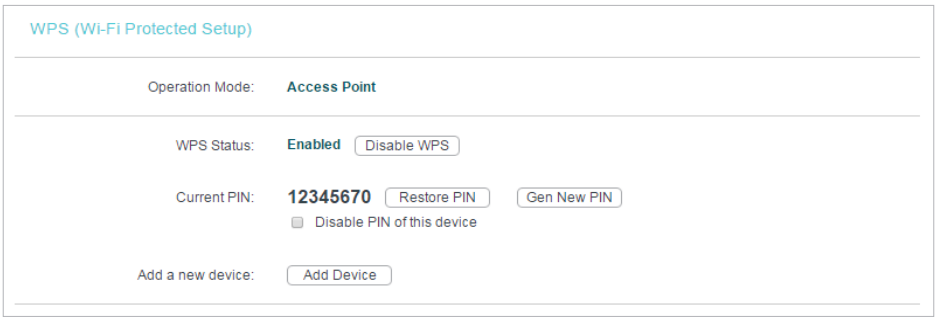


3. Within two minutes, press the WPS button on your client device.

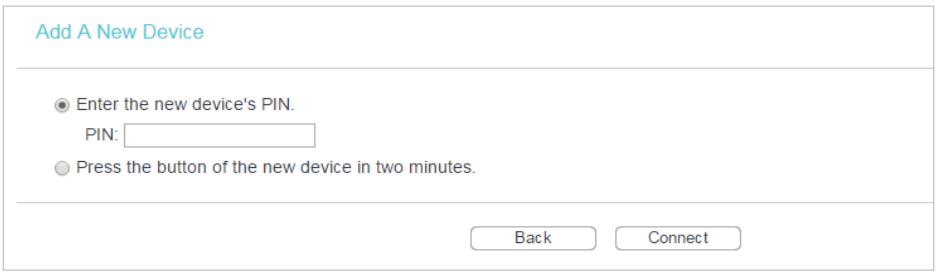
4. A success message will appear on the WPS page if the client device has been successfully added to the access point's network.

Method TWO: Enter the Client's PIN

1. Keep the WPS Status as Enabled and click Add Device.



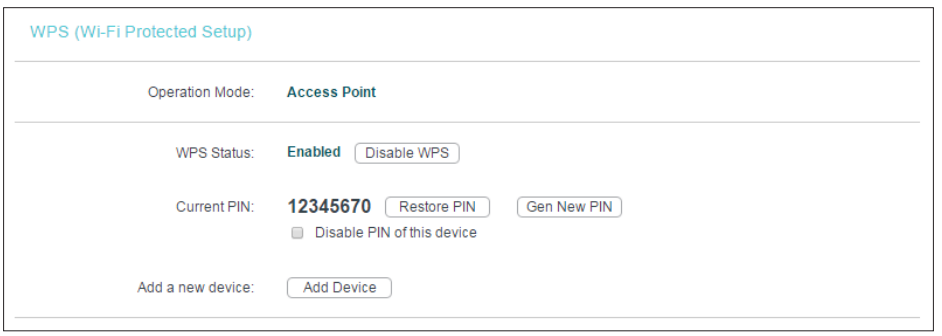
2. Select Enter the new device's PIN, enter your client device's current PIN in the PIN filed and click Connect.



3. A success message will appear on the WPS page if the client device has been successfully added to the access point's network.

Method Three: Enter the Access Point's PIN

1. Keep the WPS Status as Enabled and get the Current PIN of the access point.

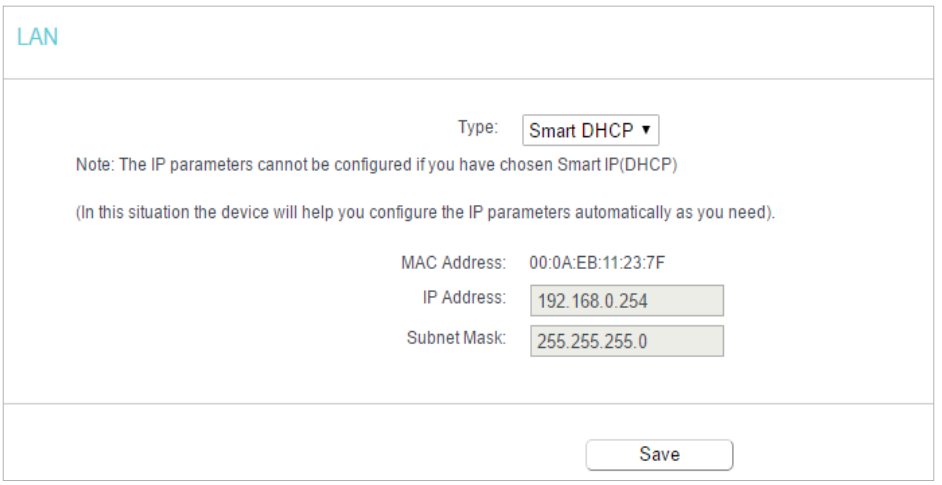


2. Enter the access point's current PIN on your client device to join the access point's Wi-Fi network.

4. 3. Network

4. 3. 1. LAN

1. Visit http://tplinkap.net, and log in using admin (all lowercase) for both username and password.
2. Go to Network > LAN.
3. Configure the IP parameters of the LAN and click Save.

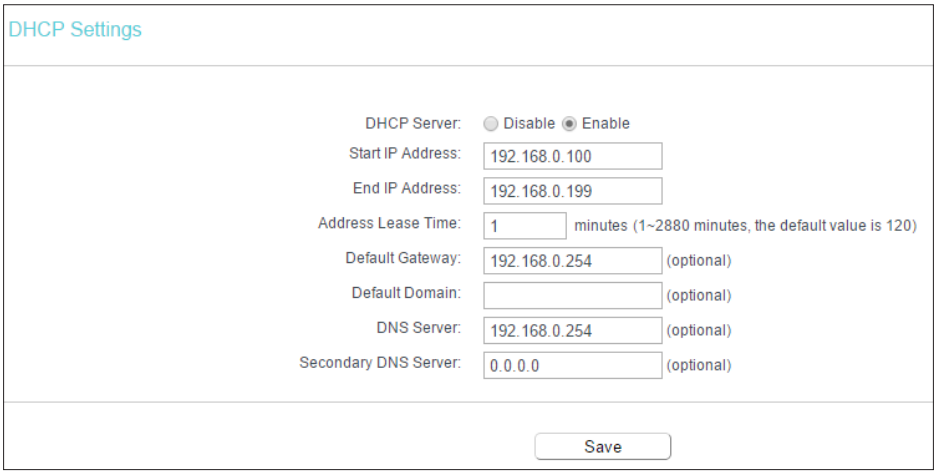


- Type - Either select Smart IP(DHCP) to get IP address from DHCP server, or Static IP to configure IP address manually.
- MAC Address - The physical address of the LAN ports. The value can not be changed.
- IP Address - Enter the IP address in dotted-decimal notation if your select Static IP (factory default - 192.168.0.254).
- 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 login.
- If you select Smart IP(DHCP), the DHCP server of the access point will not start up.
- 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.

4. 3. 2. DHCP Settings

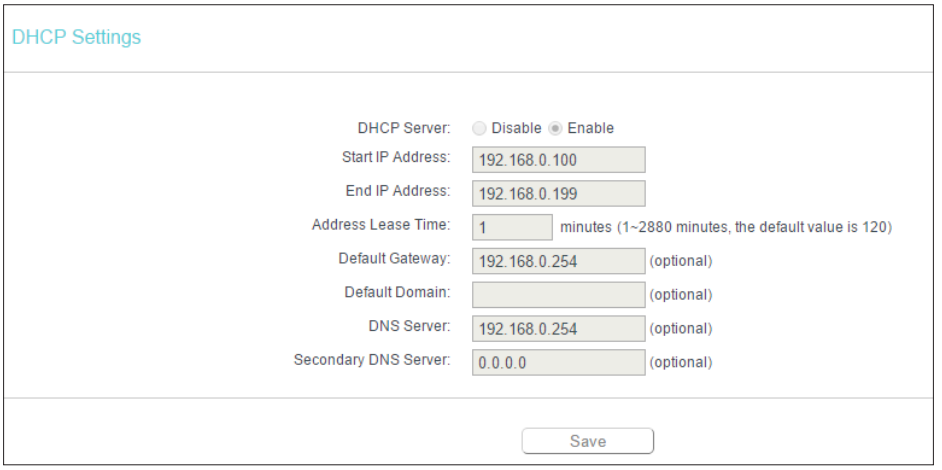
1. Visit http://tplinkap.net, and log in using admin (all lowercase) for both username and password.
2. Go to Network > DHCP Settings.
3. Specify DHCP server settings and click Save.



- DHCP Server - Enable or disable the DHCP server. If disabled, you must have another DHCP server within your network or else you must configure the computer manually.
- Start IP Address - Specify an IP address for the DHCP Server to start with when assigning IP addresses. 192.168.0.100 is the default start address.
- End IP Address - Specify an IP address for the DHCP Server to end with when assigning IP addresses. 192.168.0.199 is the default end address.
- Address Lease Time - The Address Lease Time is the amount of time a network user will be allowed to connect to the access point with the current dynamic IP Address. When time is up, the user will be automatically assigned a new dynamic IP address. The range of the time is 1 ~ 2880 minutes. The default value is 120.
- Default Gateway (Optional) - It is suggested to input the IP address of the LAN port of the access point. The default value is 192.168.0.254.
- Default Domain (Optional) - Input the domain name of your network.
- Primary DNS (Optional) - Input the DNS IP address provided by your ISP.
- Secondary DNS (Optional) - Input the IP address of another DNS server if your ISP provides two DNS servers.

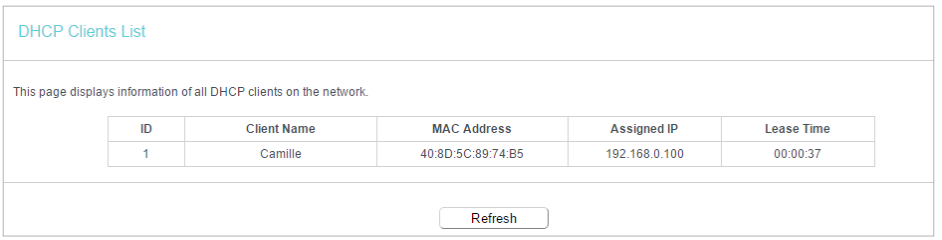
Note:

- To use the DHCP server function of the access point, you must configure all computers on the LAN as Obtain an IP Address automatically.
- When you choose Smart IP (DHCP) in Network > LAN, the DHCP Server function will be disabled. You will see the page as below.



4. 3. 3. DHCP Client List

1. Visit http://tplinkap.net, and log in using admin (all lowercase) for both username and password.
2. Go to DHCP > DHCP Client List to view the information of the clients connected to the access point.



- Client Name - The name of the DHCP client.
- MAC Address - The MAC address of the DHCP client.
- Assigned IP - The IP address that the access point has allocated to the DHCP client.
- Lease Time - The time of the DHCP client leased. After the dynamic IP address has expired, a new dynamic IP address will be automatically assigned to the user.

You cannot change any of the values on this page. To update this page and show the current attached devices, click Refresh.

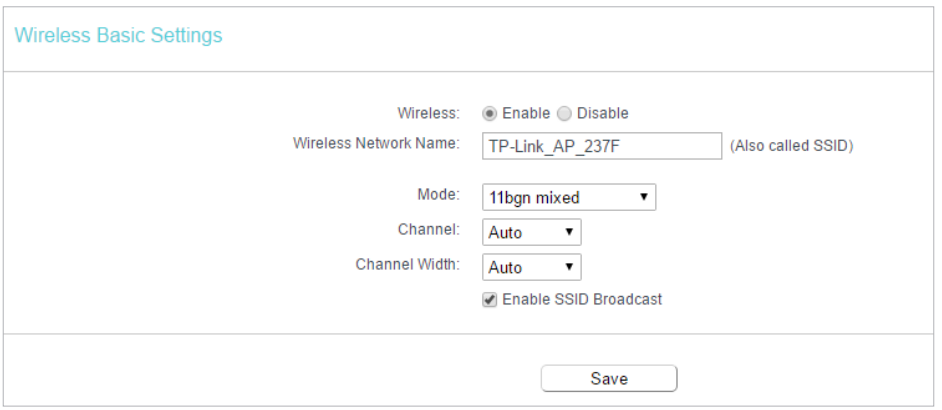
4. 4. Wireless

4. 4. 1. Wireless Settings

1. Visit http://tplinkap.net, and log in using admin (all lowercase) for both username and password.
2. 4 operation modes are supported here, including Access Point, Repeater/Bridge, Client, and Multi - SSID.

Access Point Mode

3. Go to Wireless > Basic Settings.

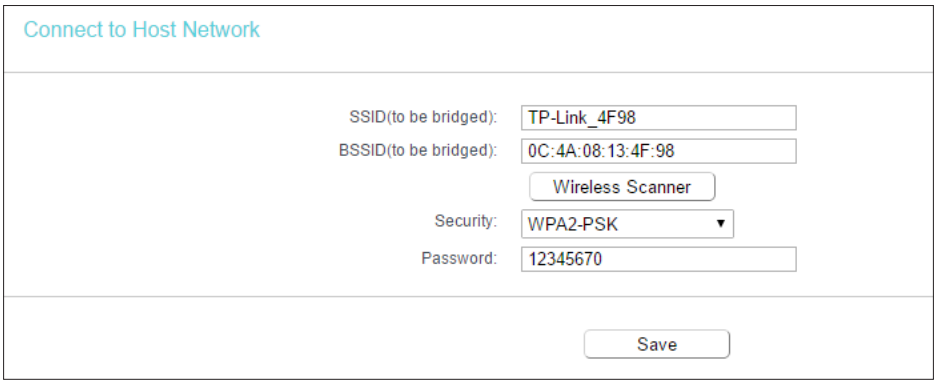


- Wireless - Enable or disable wireless radio.
- Wireless Network Name - Identifies your wireless network name. Create a name up to 32 characters and make sure all wireless points in the wireless network with the same SSID. The default SSID is TP-Link_AP_XXXX (XXXX indicates the last unique four characters of each device's MAC address). This value is case-sensitive. For example, TEST is NOT the same as test.
- Mode - Select the desired wireless mode. The options are:
  - 11bg mixed - Both 802.11b and 802.11g wireless stations can connect to the device.
  - 11bgn mixed - All 802.11b, 802.11g and 802.11n wireless stations can connect to the device.
- Channel - Determines the operating frequency to be used. It is not necessary to change the wireless channel unless you notice interference problems with another nearby access point.
- Channel Width - Determines the channel width to be used. It is unnecessary to change the default value unless required.
- Enable Wireless Radio - Select or deselect this check box to allow or deny wireless stations to access the device.
- Enable SSID Broadcast - Select or deselect this check box to allow or deny the device to broadcast its name (SSID) on the air. If it's allowed, when wireless clients survey the local area for wireless networks to associate with, they will detect the SSID broadcast by the device.

Note:
To apply any settings you have altered on the page, please click the Save button, and then you will be reminded to reboot the device.

Repeater/Bridge Mode

4. Go to Wireless > Connect to Network.

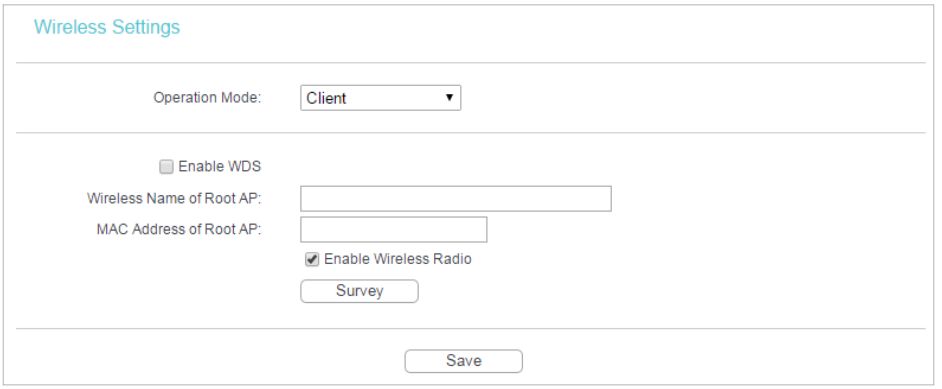


- SSID (to be bridged) - Enter the case-sensitive SSID of the host network which the extender wille be connecting to or click Wireless Scanner and select a Wi-Fi network.
- MAC Address (to be bridged) - Enter the MAC Address of the host network which the extender will be connecting to or click Wireless Scanner and select a Wi-Fi nework.
- Security - Select one of the security options to match with the host network.
  - No Security - This option disables the wireless security.
  - WPA-PSK - This option supports implementation of the WPA (Wi-Fi Protected Access) standard. It is recommended.
    - Password - You can enter ASCII or Hexadecimal characters. For Hexadecimal, the length should be between 8 and 64 characters; for ASCII, the length should be between 8 and 63 characters.
  - WPA2-PSK - This option supports implementation of the WPA2 (Wi-Fi Protected Access) standard. It is also recommended.
    - Password - You can enter ASCII or Hexadecimal characters. For Hexadecimal, the length should be between 8 and 64 characters; for ASCII, the length should be between 8 and 63 characters.
  - WEP - This option is the most basic form of wireless security that can be used if your client devices can only access wireless using WEP (Wireless Equivalent Privacy).
    - Index - Select which of the four keys will be used.
    - Autentication Type - Select Shared Key or Open System authentication type.
    - WEP KeyFormat - Select ASCII or Hexadecimal format.
    - Password - Enter the matching WEP key information for your network.

Note:

To apply any settings you have altered on the page, please click the Save button, and then you will be reminded to reboot the device.

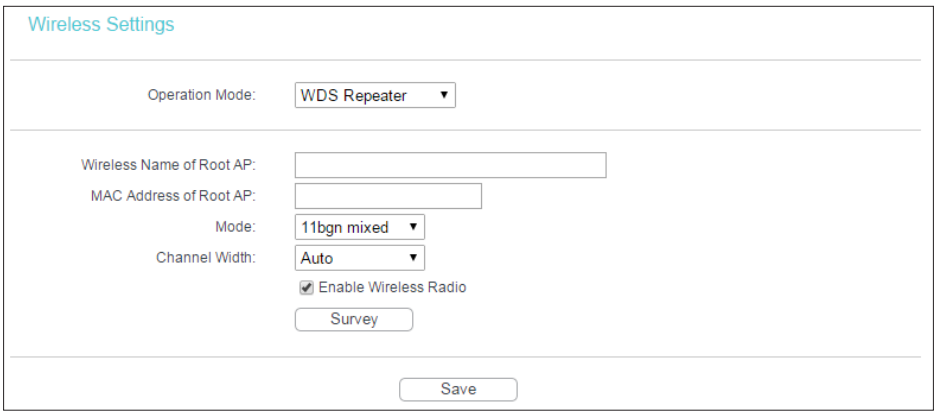
Client Mode



- Enable WDS - The AP client can connect to AP with WDS enabled or disabled. If WDS is enabled, all traffic from wired networks will be forwarded in the format of WDS frames consisting of four address fields. If WDS is disabled, three address frames are used. If your AP supports WDS well, please enable this option.
- Wireless Name of Root AP - Enter the SSID of AP that you want to access or click Survey to find the network you want to connec to.
- MAC Address of Root AP - Enter the MAC address of AP that you want to access.
- Enable Wireless Radio - Select or deselect this check box to enable or disable wireless function.
- Click the Survey button to detect the SSIDs in the local area.

Note:
To apply any settings you have altered on the page, please click the Save button, and then you will be reminded to reboot the device.

WDS Repeater Mode



- Wireless Name of Root AP - Enter the SSID of AP that you want to access or click Survey to find the network you want to connect to.
- MAC Address of Root AP - Enter the MAC address of AP that you want to access.
- Mode - Select the desired wireless mode. The options are:

- 11b only - Only 802.11b wireless stations can connect to the device.
- 11g only - Only 802.11g wireless stations can connect to the device.
- 11n only - Only 802.11n wireless stations can connect to the device.
- 11bg mixed - Both 802.11b and 802.11g wireless stations can connect to the device.
- 11bgn mixed - All 802.11b, 802.11g and 802.11n wireless stations can connect to the device.

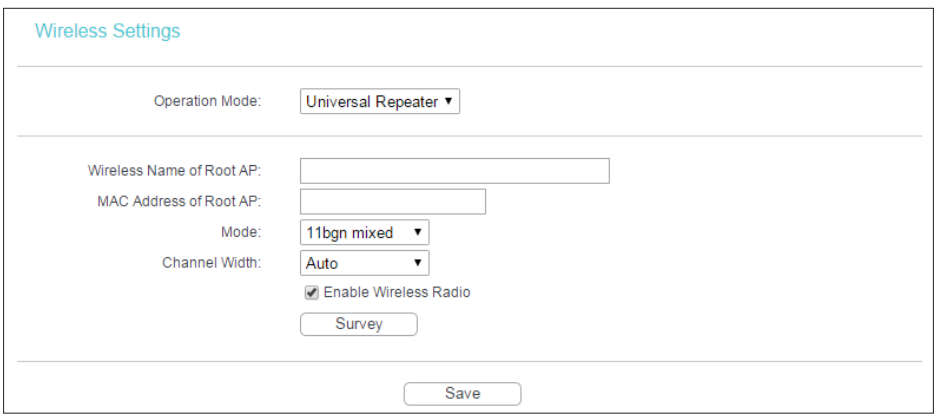
- Channel Width - Determines the channel width to be used. It is unnecessary to change the default value unless required.
- Enable Wireless Radio - Select or deselect this check box to allow or deny wireless stations to access the device.

Click the Survey button to detect the SSIDs in the local area.

Note:

To apply any settings you have altered on the page, please click the Save button, and then you will be reminded to reboot the device.

Universal Repeater Mode



- Wireless Name of Root AP - Enter the SSID of AP that you want to access or click Survey to find the network you want to connect to.
- MAC Address of Root AP - Enter the MAC address of AP that you want to access.
- Mode - Select the desired wireless mode. The options are:
  - 11b only - Only 802.11b wireless stations can connect to the device.
  - 11g only - Only 802.11g wireless stations can connect to the device.
  - 11n only - Only 802.11n wireless stations can connect to the device.
  - 11bg mixed - Both 802.11b and 802.11g wireless stations can connect to the device.
  - 11bgn mixed - All 802.11b, 802.11g and 802.11n wireless stations can connect to the device.

- Channel Width - Determines the channel width to be used. It is unnecessary to change the default value unless required.
- Enable Wireless Radio - Select or deselect this check box to allow or deny wireless stations to access the device.

Click the Survey button to detect the SSIDs in the local area.

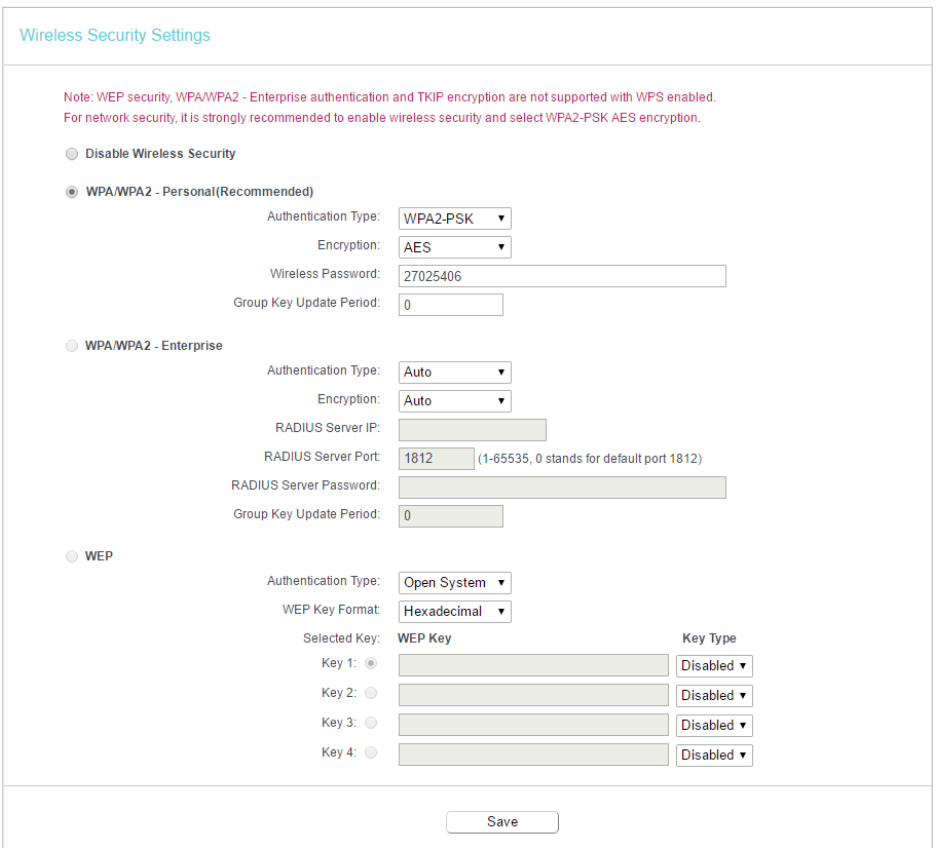
Note:

To apply any settings you have altered on the page, please click the Save button, and then you will be reminded to reboot the device.

4. 4. 2. Wireless Security

1. Visit http://tplinkap.net, and log in using admin (all lowercase) for both username and password.
2. 4 operation modes are supported here, including Access Point, Repeater/Bridge, Client, and Multi - SSID.
3. Configure the security settings of your wireless network and click Save. The security options are different for different operation mode.

Access Point

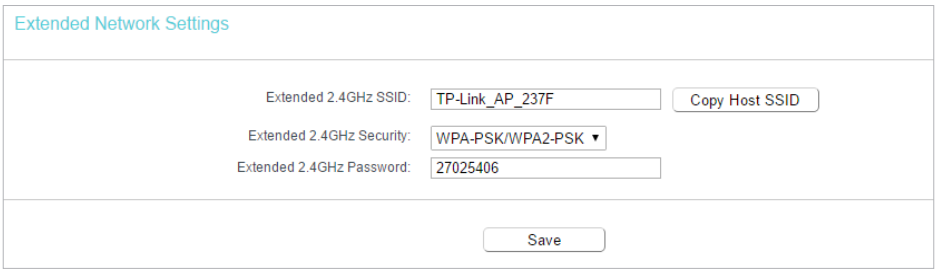


- Disable Wireless Security - The wireless security function can be enabled or disabled. If disabled, wireless clients can connect to the router without a password. It's strongly recommended to choose one of the following modes to enable security.
- WPA-PSK/WPA2-Personal - It's the WPA/WPA2 authentication type based on pre-shared passphrase.
  - Authentication Type - Select Auto, WPA-PSK or WPA2-PSK.
  - Encryption - Select Auto, TKIP or AES.
  - Wireless Password - Enter ASCII or Hexadecimal characters. For Hexadecimal, the length should be between 8 and 64 characters; for ASCII, the length should be between 8 and 63 characters.
  - Group Key Update Period - Specify the group key update interval in seconds. The value can be 0 or at least 30. Enter 0 to disable the update.
- WPA /WPA2-Enterprise - It's based on Radius Server.
  - Authentication Type - Select Auto, WPA or WPA2.
  - Encryption - Select Auto, TKIP or AES.
  - Radius Server IP - Enter the IP address of the Radius server.
  - Radius Server Port - Enter the port that Radius server used.
  - Radius Server Password - Enter the password for the Radius server.
  - Group Key Update Period - Specify the group key update interval in seconds. The value should be 30 or above. Enter 0 to disable the update.
- WEP - It is based on the IEEE 802.11 standard.
  - Authentication Type - The default setting is Auto, which can select Shared Key or Open System authentication type automatically based on the wireless client's capability and request.
  - WEP Key Format - Hexadecimal and ASCII formats are provided here. Hexadecimal format stands for any combination of hexadecimal digits (0-9, a-f, A-F) in the specified length. ASCII format stands for any combination of keyboard characters in the specified length.
  - WEP Key (Password) - Select which of the four keys will be used and enter the matching WEP key. Make sure these values are identical on all wireless clients in your network.
  - Key Type - Select the WEP key length (64-bit, 128-bit or 152-bit) for encryption. Disabled means this WEP key entry is invalid.
  - 64-bit - Enter 10 hexadecimal digits (any combination of 0-9, a-f and A-F. Null key is not permitted) or 5 ASCII characters.
  - 128-bit - Enter 26 hexadecimal digits (any combination of 0-9, a-f and A-F. Null key is not permitted) or 13 ASCII characters.

Note:

- If you do not set the key, the wireless security function is still disabled even if you have selected Shared Key as Authentication Type.
- You will be reminded to reboot the device after clicking the Save button.

Repeater/Bridge



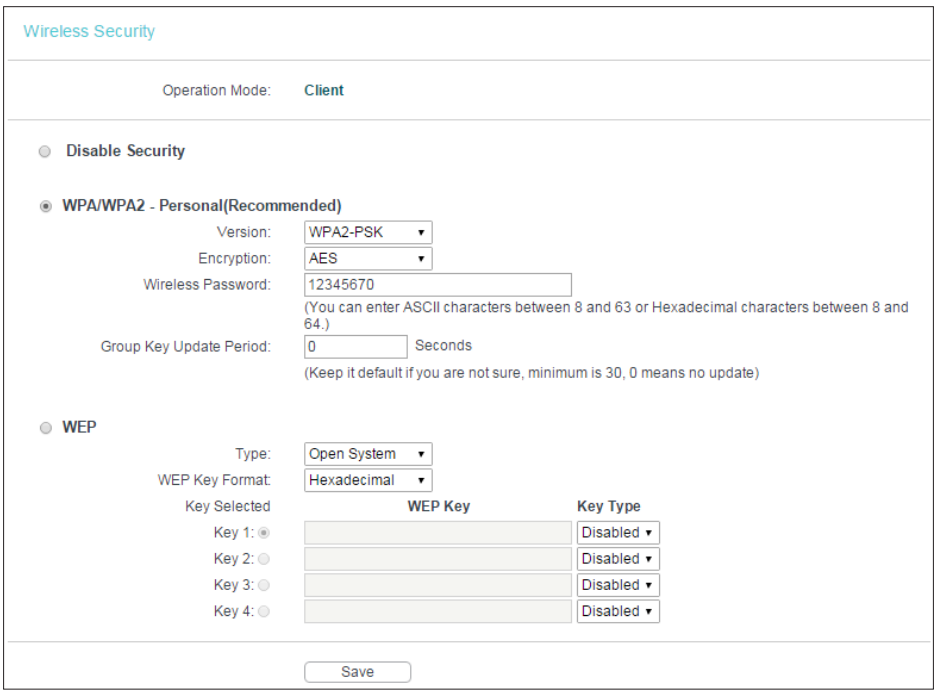
You can choose which SSID to configure wireless security settings for in the blank behind Operation Mode.

- Disable Security - Check this box radio button to disable wireless security. If disabled, the wireless stations will be able to connect this device without encryption. It is strongly recommended that you choose one of the security types to enable security.
- WPA/WPA2-Personal (Recommended) - Select WPA/WPA2 based on Radius Server.
  - Version - You can select one of following versions.
    - Automatic (Recommended) - Select WPA-Personal or WPA2-Personal automatically based on the wireless station's capability and request.
    - WPA-PSK - Pre-shared key of WPA.
    - WPA2-PSK - Pre-shared key of WPA2.
  - Encryption - You can select either Automatic(Recommended), TKIP or AES.
  - Wireless password - You can enter ASCII or Hexadecimal characters. For Hexadecimal, the length should be between 8 and 64 characters; for ASCII, the length should be between 8 and 63 characters.
  - Group Key Update Period - Specify the group key update interval in seconds. The value can be either 0 or at least 30. Enter 0 to disable the update.
- WPA/WPA2-Enterprise - Select WPA/WPA2 based on Radius Server.
  - Version - You can select one of following versions.
    - Automatic - Select WPA or WPA2 automatically based on the wireless station's capability and request.
    - WPA - Wi-Fi Protected Access.
    - WPA2 - WPA version 2.
  - Encryption - You can select either Automatic, TKIP or AES.
  - Radius Server IP - Enter the IP address of the Radius Server.
  - Radius Port - Enter the port used by radius service.
  - Radius password - Enter the password for the Radius Server.

- Group Key Update Period - Specify the group key update interval in seconds. The value can be either 0 or at least 30. Enter 0 to disable the update.

Note:
You will be reminded to reboot the device after clicking the Save button.

Client

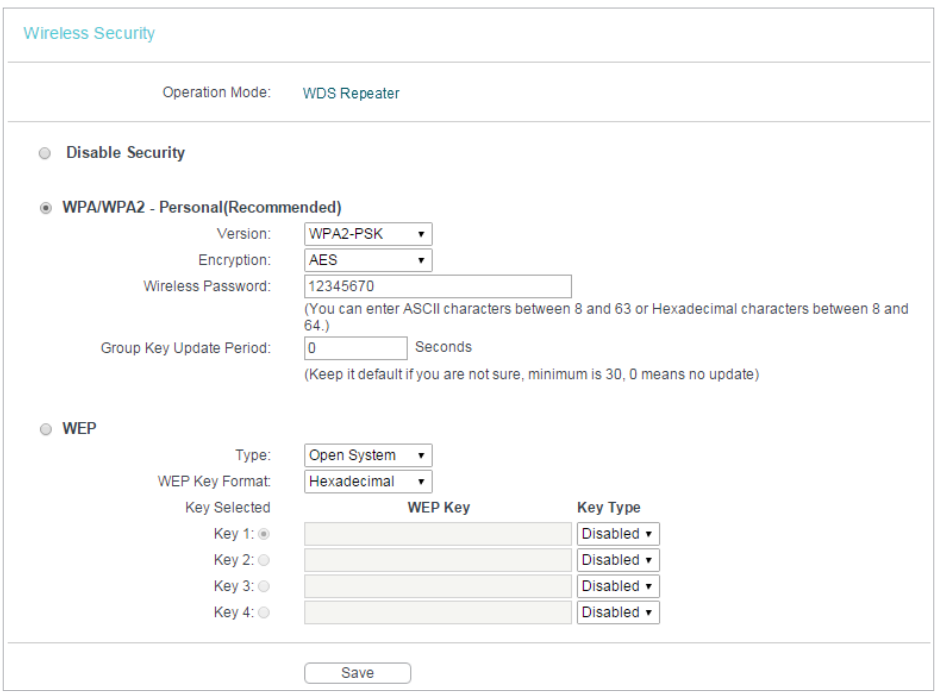


- Disable Security - Check this box radio button to disable wireless security. If disabled, the wireless stations will be able to connect this device without encryption. It is strongly recommended that you choose one of the security types to enable security.
- WPA/WPA2-Personal (Recommended) - Select WPA/WPA2 based on Radius Server.
  - Version - You can select one of following versions.
    - Automatic (Recommended) - Select WPA-Personal or WPA2-Personal automatically based on the wireless station's capability and request.
    - WPA-PSK - Pre-shared key of WPA.
    - WPA2-PSK - Pre-shared key of WPA2.
  - Encryption - You can select either Automatic(Recommended), TKIP or AES.
  - Wireless password - You can enter ASCII or Hexadecimal characters. For Hexadecimal, the length should be between 8 and 64 characters; for ASCII, the length should be between 8 and 63 characters.
  - Group Key Update Period - Specify the group key update interval in seconds. The value can be either 0 or at least 30. Enter 0 to disable the update.
- WEP - Select 802.11 WEP security.
  - Type - You can select one of following types.
    - Automatic - Select Shared Key or Open System authentication type automatically based on the wireless station's capability and request.
    - Shared Key - Select 802.11 Shared Key authentication type.
    - Open System - Select 802.11 Open System authentication.

- WEP Key Format - You can select ASCII or Hexadecimal format. ASCII format stands for any combination of keyboard characters in the specified length. Hexadecimal format stands for any combination of hexadecimal digits (0-9, a-f, A-F) in the specified length.
- WEP Key - Select which of the four keys will be used and enter the matching WEP key information for your network in the selected key radio button. These values must be identical on all wireless stations in your network.
- Key Type - You can select the WEP key length (64-bit, or 128-bit, or 152-bit.) for encryption. "Disabled" means this WEP key entry is invalid.
  - For 64-bit encryption - You can enter 10 hexadecimal digits (any combination of 0-9, a-f, A-F, zero key is not permitted) or 5 ASCII characters.
  - For 128-bit encryption - You can enter 26 hexadecimal digits (any combination of 0-9, a-f, A-F, zero key is not permitted) or 13 ASCII characters.
  - For 152-bit encryption - You can enter 32 hexadecimal digits (any combination of 0-9, a-f, A-F, zero key is not permitted) or 16 ASCII characters.

Note:
- If you do not set the key, the wireless security function is still disabled even if you have selected Shared Key as Authentication Type.
- You will be reminded to reboot the device after clicking the Save button.

WDS Repeater



- Disable Security - Check this box radio button to disable wireless security. If disabled, the wireless stations will be able to connect this device without encryption. It is strongly recommended that you choose one of the security types to enable security.

- WPA/WPA2-Personal (Recommended) - Select WPA/WPA2 based on Radius Server.
  - Version - You can select one of following versions.
    - Automatic (Recommended) - Select WPA-Personal or WPA2-Personal automatically based on the wireless station's capability and request.
    - WPA-PSK - Pre-shared key of WPA.
    - WPA2-PSK - Pre-shared key of WPA2.
  - Encryption - You can select either Automatic(Recommended), TKIP or AES.
  - Wireless password - You can enter ASCII or Hexadecimal characters. For Hexadecimal, the length should be between 8 and 64 characters; for ASCII, the length should be between 8 and 63 characters.
  - Group Key Update Period - Specify the group key update interval in seconds. The value can be either 0 or at least 30. Enter 0 to disable the update.
- WEP - Select 802.11 WEP security.
  - Type - You can select one of following types.
    - Automatic - Select Shared Key or Open System authentication type automatically based on the wireless station's capability and request.
    - Shared Key - Select 802.11 Shared Key authentication type.
    - Open System - Select 802.11 Open System authentication.
  - WEP Key Format - You can select ASCII or Hexadecimal format. ASCII format stands for any combination of keyboard characters in the specified length. Hexadecimal format stands for any combination of hexadecimal digits (0-9, a-f, A-F) in the specified length.
  - WEP Key - Select which of the four keys will be used and enter the matching WEP key information for your network in the selected key radio button. These values must be identical on all wireless stations in your network.
  - Key Type - You can select the WEP key length (64-bit, or 128-bit, or 152-bit.) for encryption. "Disabled" means this WEP key entry is invalid.
    - For 64-bit encryption - You can enter 10 hexadecimal digits (any combination of 0-9, a-f, A-F, zero key is not permitted) or 5 ASCII characters.
    - For 128-bit encryption - You can enter 26 hexadecimal digits (any combination of 0-9, a-f, A-F, zero key is not permitted) or 13 ASCII characters.
    - For 152-bit encryption - You can enter 32 hexadecimal digits (any combination of 0-9, a-f, A-F, zero key is not permitted) or 16 ASCII characters.

Note:

- If you do not set the key, the wireless security function is still disabled even if you have selected Shared Key as Authentication Type.
- You will be reminded to reboot the device after clicking the Save button.

4. 4. 3. Wireless MAC Filtering

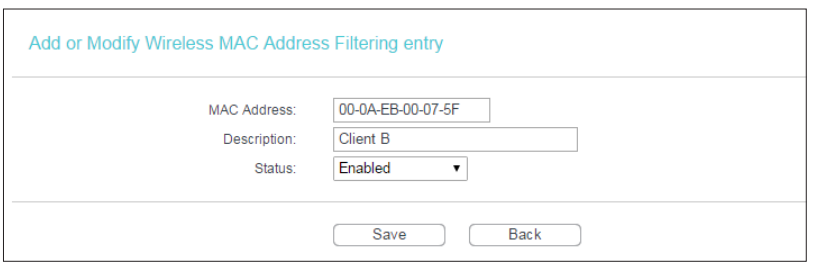
Wireless MAC Filtering is used to deny or allow specific wireless client devices to access your network by their MAC addresses. This function is not available when the operation is set to Client. As the configuration is the same in each operation mode, here we just take the Access Point for example.

I want to:

Deny or allow specific wireless client devices to access my network by their MAC addresses.

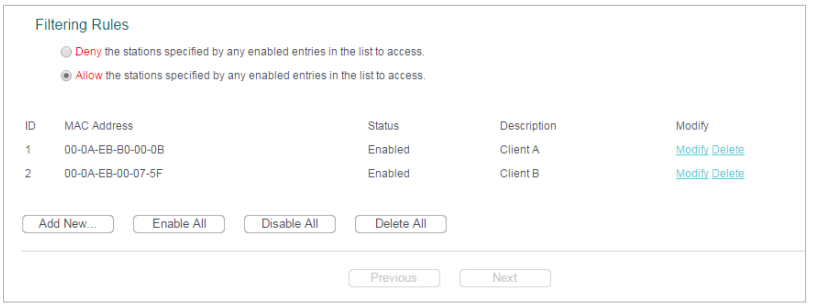
For example, you want the wireless client A with the MAC address 00-0A-EB-B0-00-0B and the wireless client B with the MAC address 00-0A-EB-00-07-5F to access the access point, but other wireless clients cannot access the access point.

1. Visit http://tplinkap.net, and log in using admin (all lowercase) for both username and password.
2. Go to Wireless > Wireless MAC Filtering.
3. Click Enable to enable the Wireless MAC Filtering function.
4. Select Allow the stations specified by any enabled entries in the list to access as the filtering rule.
5. Delete all or disable all entries if there are any entries already.
6. Click Add New and fill in the blank.



1) Enter the MAC address 00-0A-EB-B0-00-0B/00-0A-EB-00-07-5F in the MAC Address field.
2) Enter wireless client A/B in the Description field.
3) Select Enabled in the Status drop-down list.
4) Click Save and click Back.

7. The configured filtering rules should be listed as the picture shows below.



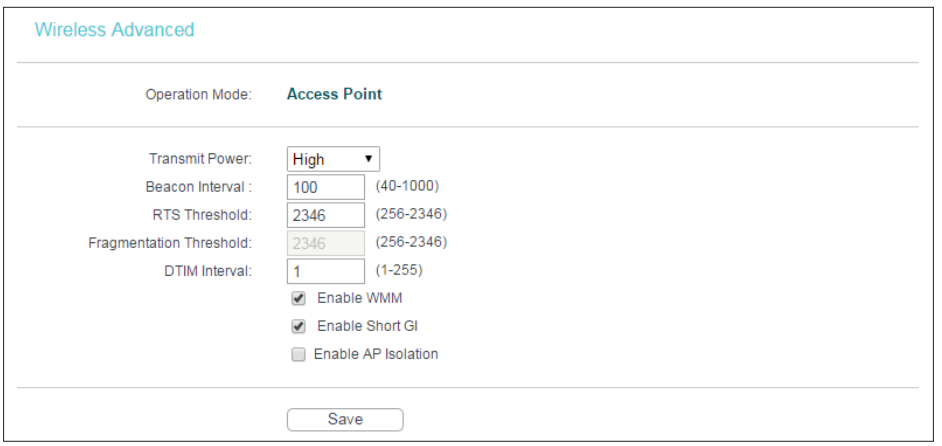
Done! Now only client A and client B can access your network.

4. 4. 4. Wireless Advanced

The configuration for each operation mode is almost the same, we take Access Point mode for example here.

1. Visit http://tplinkap.net, and log in using admin (all lowercase) for both username and password.
2. Go to Wireless > Wireless Advanced.
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.



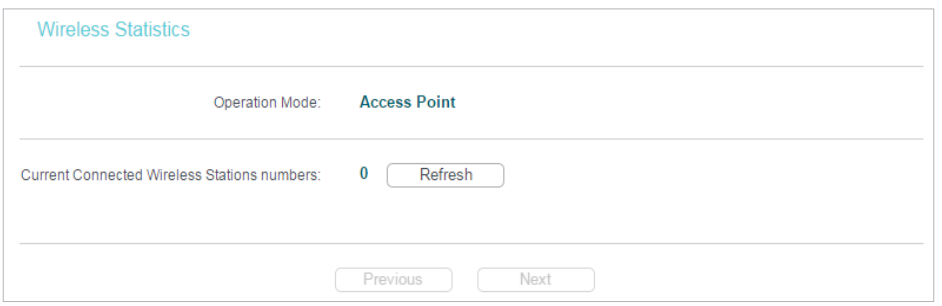
- Transmit Power - Select High, Middle or Low which you would like to specify for the access point. High is the default setting and recommended.
- Beacon Interval - Enter a value between 40-1000 milliseconds for Beacon Interval here. Beacon Interval value determines the time interval of the beacons. The beacons are the packets sent by the access point 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 access point will send RTS frames to a particular receiving station and negotiate the sending of a data frame. The default value is 2346.

- Fragmentation Threshold - This value is the maximum size determining whether packets will be fragmented. Setting a low value for the Fragmentation Threshold may result in poor network performance because of excessive packets. 2346 is the default setting and is recommended.
- 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 access point 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.
- Enable WMM - WMM function can guarantee the packets with high-priority messages being transmitted preferentially. It is strongly recommended to enable this function.
- Enable Short GI - It is recommended to enable this function, for it will increase the data capacity by reducing the guard interval time.
- Enable AP Isolation - This function isolates all connected wireless stations so that wireless stations cannot access each other through WLAN. This function will be disabled if WDS/Bridge is enabled.

4. 4. 5. Wireless Statistics

The configuration for each operation mode is almost the same, we take Access Point mode for example here.

1. Visit http://tplinkap.net, and log in using admin (all lowercase) for both username and password.
2. Go to Wireless > Wireless Statistics to check the data packets sent and received by each client device connected to the access point.

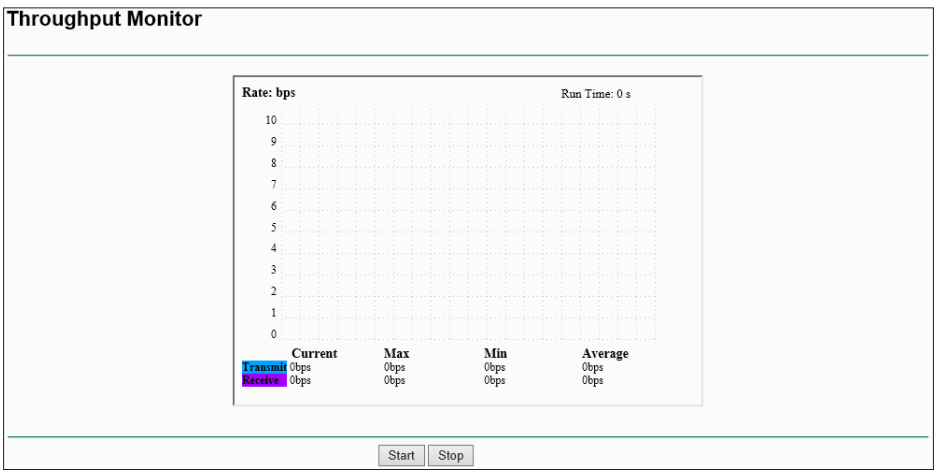


- MAC Address - The MAC address of the connected wireless client.
- Current Status - The running status of the connected wireless client.
- Received Packets - Packets received by the wireless client.
- Sent Packets - Packets sent by the wireless client.
- Configure - The button is used for loading the item to the Wireless MAC Filtering list.

- Allow - If the Wireless MAC Filtering function is enabled, click this button to allow the client to access your network.
- Deny - If the Wireless MAC Filtering function is enabled, click this button to deny the client to access your network.

4. 4. 6. Throughput Monitor

1. Visit http://tplinkap.net, and log in using admin (all lowercase) for both username and password.
2. Go to Wireless > Throughput Monitor to view the wireless throughput information.



- Rate - The Throughput unit.
- Run Time - How long this function is running.
- Transmit - Wireless transmit rate information.
- Receive - Wireless receive rate information.

Click Start/Stop to start or stop wireless throughput monitor.

4. 5. System Tools

4. 5. 1. SNMP

Simple Network Management Protocol (SNMP) is a popular network monitoring and management protocol.

1. Visit http://tplinkap.net, and log in using admin (all lowercase) for both username and password.
2. Go to System Tools > SNMP.

- SNMP Agent - Select the radio button before Enable will enable this function if you want to have remote control through SNMPv1/v2 agent with MIB-II. Select the radio button before Disable will disable this function. The default setting is Disable.
- SysContact - The textual identification of the contact person for this managed node.
- SysName - An administratively-assigned name for this managed node.
- SysLocation - The physical location of this node.

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.

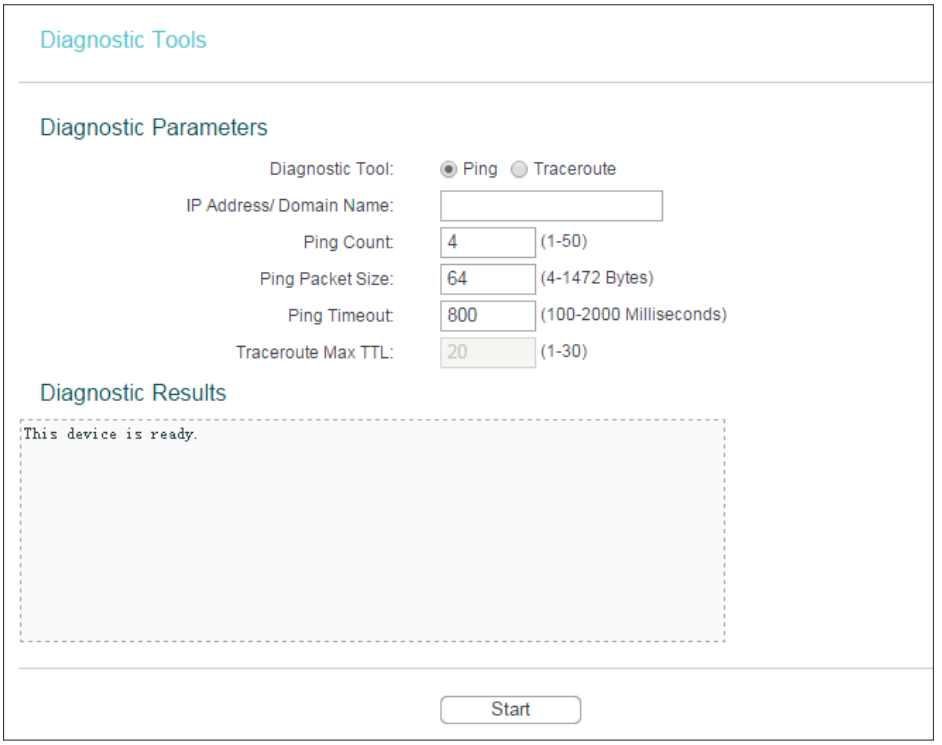
- Get Community - Enter the community name that allows Read-Only access to the Device's SNMP information. The community name can be considered a group password. The default setting is "public".
- Get Source - Get source defines the IP address or subnet for management systems that can read information from this 'get' community device.
- Set Community - Enter the community name that allows Read/Write access to the Device's SNMP information. The community name can be considered a group password. The default setting is "private".
- Set Source - Set source defines the IP address or subnet for management systems that can control this 'set' community device.

Note:
A restricted source can be a specific IP address (e.g. 10.10.10.1), or a subnet - represented as IP/BITS (e.g. 10.10.10.0/24). If an IP Address of 0.0.0.0 is specified, the agent will accept all requests under the corresponding community name.

4. 5. 2. Diagnostic

Diagnostic is used to test the connectivity between the access point and the host or other network devices.

1. Visit http://tplinkap.net, and log in using admin (all lowercase) for both username and password.
2. Go to System Tools > Diagnostic.



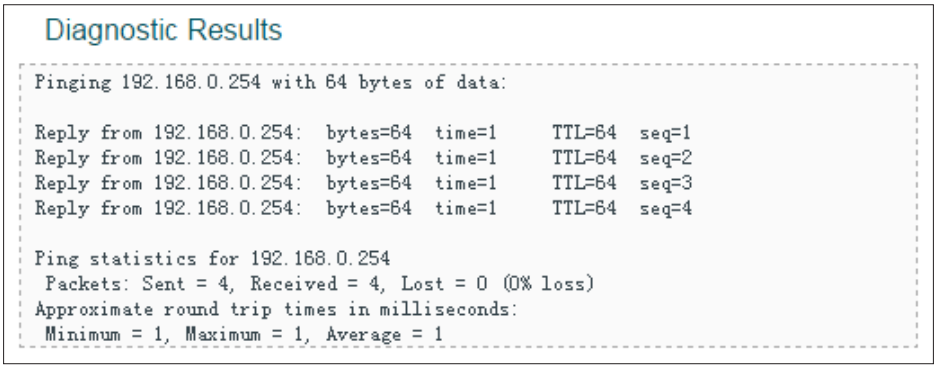
- Diagnostic Tool - Select one diagnostic tool.
  - Ping - This diagnostic tool troubleshoots connectivity, reachability, and name resolution to a given host or gateway.
  - Tracerouter - This diagnostic tool tests the performance of a connection.

Note:

You can use ping/traceroute to test both numeric IP address or domain name. If pinging/tracerouting the IP address is successful, but pinging/tracerouting the domain name is not, you might have a name resolution problem. In this case, ensure that the domain name you are specifying can be resolved by using Domain Name System (DNS) queries.

- IP Address/Domain Name - Enter the destination IP address (such as 192.168.0.254) or Domain name (such as www.tp-link.com).
- Pings Count - The number of Ping packets for a Ping connection.
- Ping Packet Size - The size of Ping packet.
- Ping Timeout - Set the waiting time for the reply of each Ping packet. If there is no reply in the specified time, the connection is overtime.
- Traceroute Max TTL - The max number of hops for a Traceroute connection.

3. Click Start to check the connectivity of the Internet.
4. The Diagnostic Results page displays the diagnosis result. If the result is similar to the following figure, the connectivity of the Internet is fine.

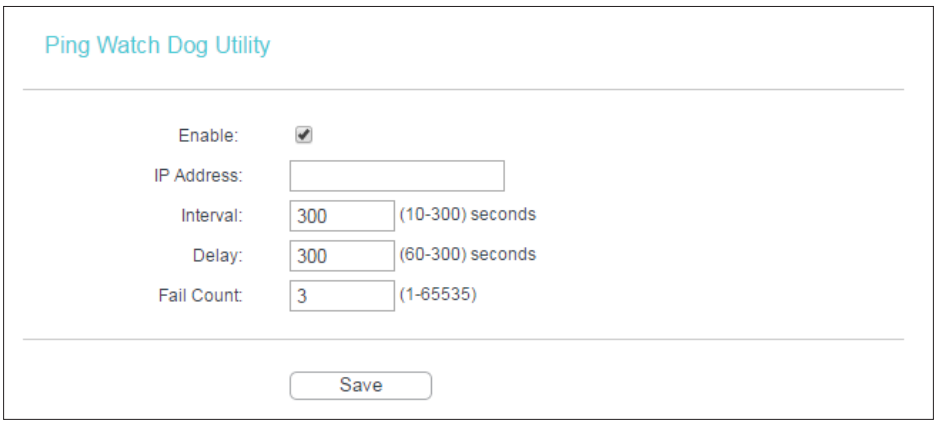


Note:
Only one user can use this tool at one time. Options "Number of Pings", "Ping Size" and "Ping Timeout" are used for the Ping function. Option "Tracert Hops" is used for the Tracert function.

4. 5. 3. Ping Watch Dog

The Ping Watch Dog is dedicated for continuous monitoring of the particular connection to remote host using the Ping tool. It makes the access point continuously ping a user defined IP address (it can be the Internet gateway for example). If it is unable to ping under the user defined constraints, the access point will automatically reboot.

1. Visit http://tplinkap.net, and log in using admin (all lowercase) for both username and password.
2. Go to System Tools > Ping Watch Dog. Configure the settings and click Save.

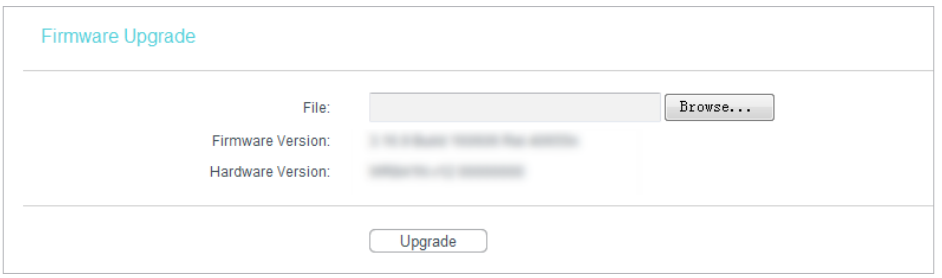


- Enable - Turn on/off Ping Watch Dog.
- IP Address - The IP address of the target host where the Ping Watch Dog Utility is sending ping packets.
- Interval - Time interval between two ping packets which are sent out continuously.
- Delay - Time delay before first ping packet is sent out when the access point is restarted.
- Fail Count - Upper limit of the ping packets the access point can drop continuously. If this value is overrun, the access point will restart automatically.

4. 5. 4. Firmware Upgrade

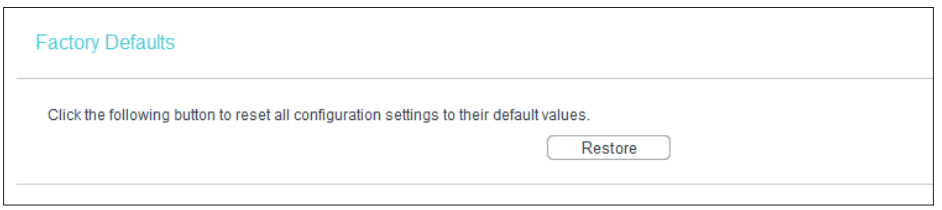
TP-Link is dedicated to improving and richening the product features, giving users a better network experience. We will release the latest firmware at TP-Link official website. You can download the latest firmware file from the Support page of our website www.tp-link.com and upgrade the firmware to the latest version.

1. Download the latest firmware file for the access point from our website www.tp-link.com.
2. Visit http://tplinkap.net, and log in using admin (all lowercase) for both username and password.
3. Go to System Tools > Firmware Upgrade.
4. Click Browse to locate the downloaded firmware file, and click Upgrade.



4. 5. 5. Factory Defaults

1. Visit http://tplinkap.net, and log in using admin (all lowercase) for both username and password.
2. Go to System Tools > Factory Defaults. Click Restore to reset all settings to the default values.

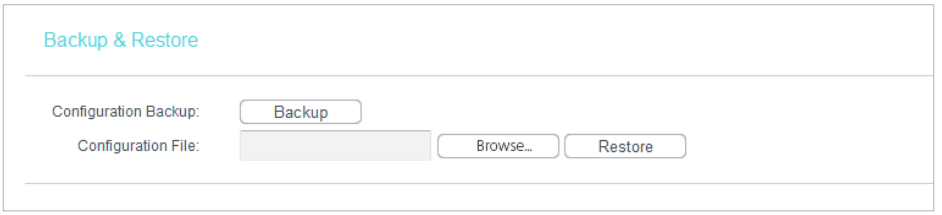


- The default username: admin
- The default password: admin
- The default IP Address: 192.168.0.254
- The default Subnet Mask: 255.255.255.0

4. 5. 6. Backup & Restore

The configuration settings are stored as a configuration file in the access point. You can backup the configuration file in your computer for future use and restore the access point to the previous settings from the backup file when needed.

1. Visit http://tplinkap.net, and log in using admin (all lowercase) for both username and password.
2. Go to System Tools > Backup & Restore.



- To backup configuration settings:

Click Backup to save a copy of the current settings in your local computer. A ".bin" file of the current settings will be stored in your computer.

- To restore configuration settings:

1. Click Choose File to locate the backup configuration file stored in your computer, and click Restore.
2. Wait a few minutes for the restoring and rebooting.

Note:

During the restoring process, do not power off or reset the access point.

4. 5. 7. Reboot

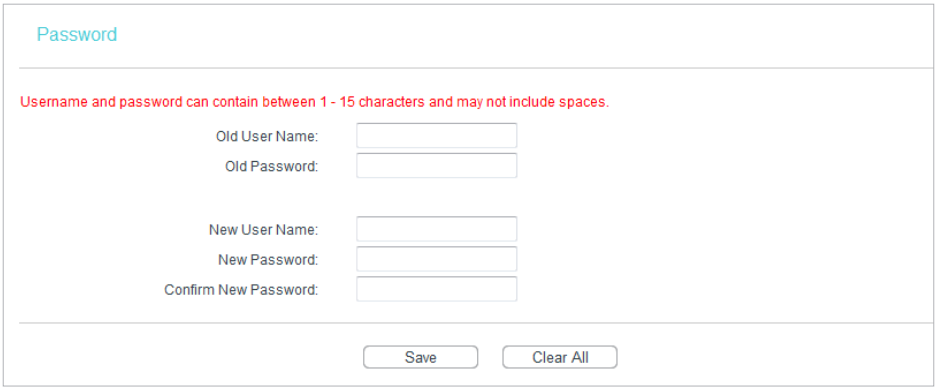
1. Visit http://tplinkap.net, and log in using admin (all lowercase) for both username and password.
2. Go to System Tools > Reboot, and you can restart your access point.

Some settings of the access point will take effect only after rebooting, including:

- Change the LAN IP Address (system will reboot automatically).
- Change the DHCP Settings.
- Change the Working Modes.
- Change the Web Management Port.
- Upgrade the firmware of the access point (system will reboot automatically).
- Restore the access point to its factory defaults (system will reboot automatically).
- Update the configuration with the file (system will reboot automatically).

4. 5. 8. password

1. Visit http://tplinkap.net, and log in using admin (all lowercase) for both username and password.
2. Go to System Tools > password, and you can change the factory default username and password of the access point.



It is strongly recommended that you change the default username and password of the access point, for all users that try to access the access point's web-based utility or Quick Setup will be prompted for the access point's username and password.

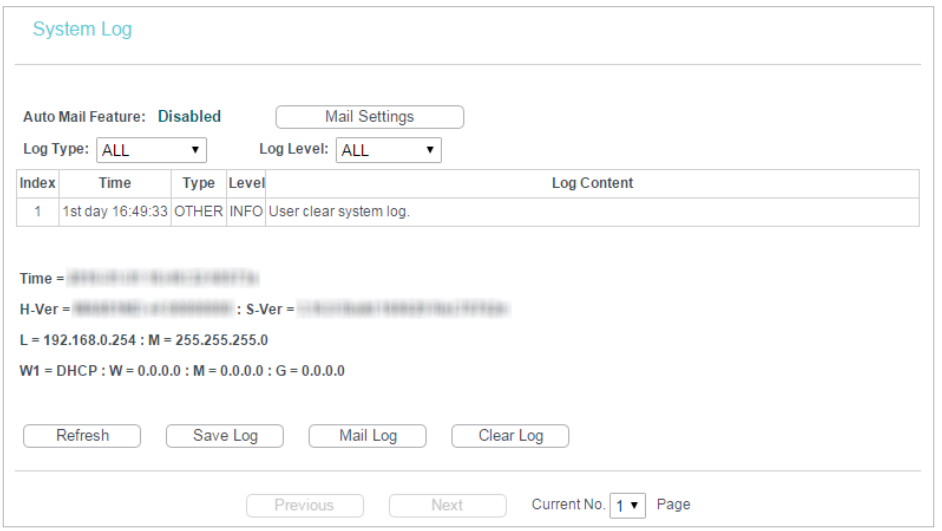
Note:

The new username and password must not exceed 15 characters and not include any spacing.

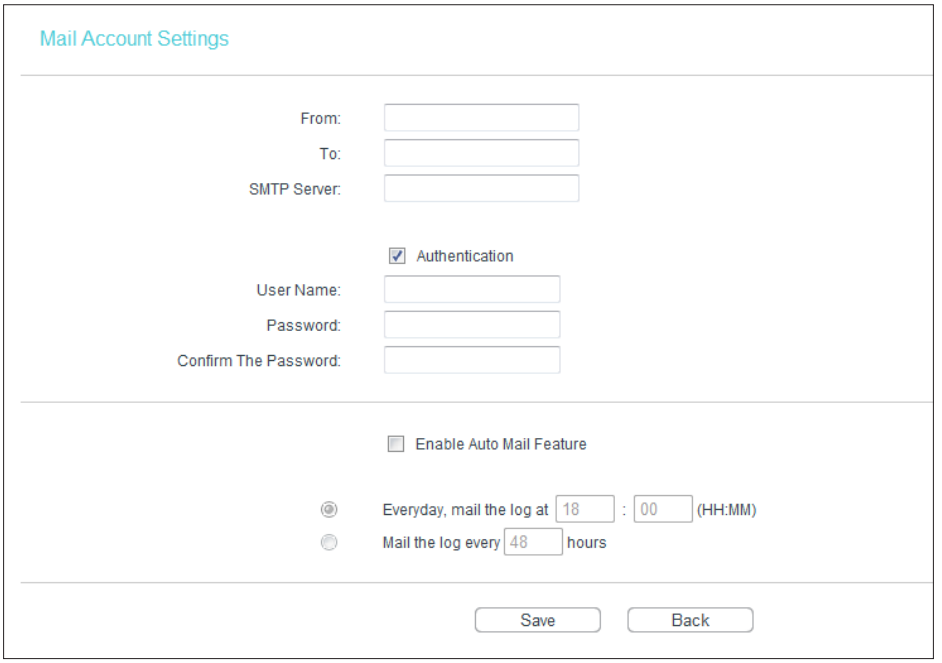
3. Click Save.

4. 5. 9. System Log

1. Visit http://tplinkap.net, and log in using admin (all lowercase) for both username and password.
2. Go to System Tools > System Log, and you can view the logs of the access point.



- Auto Mail Feature - Indicates whether the auto mail feature is enabled or not.
- Mail Settings - Set the receiving and sending mailbox address, server address, validation information as well as the timetable for Auto Mail Feature.



- From - Your mail box address. The access point will connect it to send logs.
- To - Recipient's mail address. The destination mailbox which will receive logs.
- SMTP Server - Your smtp server. It corresponds with the mailbox filled in the From field. You can log on the relevant website for help if you are not clear with the address.
- Authentication - Most SMTP Server requires Authentication. It is required by most mailboxes that need user name and password to log in.

Note:

Only when you select Authentication, do you have to enter the user name and password in the following fields.

- User Name - Your mail account name filled in the From field. The part behind @ is included.
- password - Your mail account password.
- Confirm The password - Enter the password again to confirm.
- Enable Auto Mail Feature - Select it to mail logs automatically. You could mail the current logs either at a specified time everyday or by intervals, but only one could be the current effective rule. Enter the desired time or intervals in the corresponding field.

Click Save to apply your settings.

Click Back to return to the previous page.

- Log Type - By selecting the log type, only logs of this type will be shown.
- Log Level - By selecting the log level, only logs of this level will be shown.
- Refresh - Refresh the page to show the latest log list.

- Save Log - Click to save all the logs in a txt file.
- Mail Log - Click to send an email of current logs manually according to the address and validation information set in Mail Settings.
- Clear Log - All the logs will be deleted from the access point permanently, not just from the page.

Click Next to go to the next page, or click Previous to return to the previous page.

4. 6. Logout

Click Logout at the bottom of the main menu, and you will log out of the web page and return to the login window.

FAQ

Q1. How do I restore the access point to its factory default settings?

With the access point powered on, use a pin to press and hold the Reset button until the Power LED starts blinking, then release the button.

Note:
Upon resetting, all previous configurations will be cleared, and the access point will reset to the default Access Point Mode.

Q2. What should I do if I forget my wireless password?

The default wireless password is printed on the label of the access point. If the password has been altered, please connect your computer to the access point using an Ethernet cable and follow the steps below:

1. Visit http://tplinkap.net, and log in using admin (all lowercase) for both username and password.
2. Go to Wireless > Wireless Security to retrieve or reset your wireless password.

Q3. What should I do if I forget my login password of the web management page?

The default username and password of the web management page are admin (in lowercase).

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

1. Reset the access point to its factory default settings: use a pin to press and hold the Reset button until the Power LED starts blinking, then release the button.
2. Visit http://tplinkap.net, and log in using admin (all lowercase) for both username and password.

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

Q4. What should I do if my wireless is not stable?

It may be caused by too much interference, you can try the following:

- Set your wireless channel to a different one.
- Move the AP device to a new location away from Bluetooth devices and other household electronics, such as cordless phones, microwaves, and baby monitors, to minimize signal interference.

Q5. What can I do to maximize my signal strength in Repeater/Bridge mode?

When choosing an ideal location to optimize wireless signal in Repeater/ Bridge mode, please refer to the following recommendations.

- The Best Way is Halfway

Generally, the ideal location for the repeater is about halfway between your wireless router and your wireless clients and make sure that the location you choose is within the range of the host router. If that is not possible, place it closer to your wireless router to ensure stable performance.

- Less Obstacles Ensure Better Performance

  Choose a location with less obstacles that may block the signal between the access point and the host network. An open corridor or a spacious location is ideal.

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FCC STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/ TV technician for help.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

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

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

FCC RF Radiation Exposure Statement

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

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

CE Mark Warning

CE1588

This is a class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

RF Exposure Information

This device meets the EU requirements (1999/5/EC 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.

Canadian Compliance Statement

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

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

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

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

This radio transmitter (IC: 8853A-WA801NDV5)
TL-WA801ND) has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain indicated. Antenna types not included in this list below, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

Le présent émetteur radio (IC: 8853A-WA801NDV5)
a été approuvé par Industrie Canada pour fonctionner avec
les types d'antenne énumérés ci-dessous et ayant un gain admissible maximal. Les types d'antenne non inclus dans cette liste ci-dessous et dont le gain est supérieur au gain maximal indiqué, sont strictement interdits pour l'exploitation de l'émetteur.

Antenna	Two deatachable antennas

Radiation Exposure Statement:

This equipment complies with ISED 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 ISED établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

Industry Canada Statement

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

Korea Warning Statements:

당해 무선설비는 운용중 전파혼신 가능성이 있음.

NCC Notice & BSMI Notice:

注意！

依據 低功率電波輻射性電機管理辦法

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

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

安全諮詢及注意事項

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

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

EAC

Safety Information

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

Explanations of the symbols on the product label

Symbol	Explanation
⎓	DC voltage
	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.
	Indoor use only