

Tunnel 6to4

IPv6 WAN

Enable IPv6: ☒

Connection Type: Tunnel 6to4 ▼

WAN Connection: No available interface

Save

- **WAN Connection** - Display the available wan connection.

4.15.3. IPv6 LAN

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to **IPv6 > IPv6 LAN** and configure the IPv6 LAN settings as needed.

IPv6 LAN Settings

The parameters of IPv6 LAN can be configured on this page when IPv6 enabled.
Note: Only the default group will support IPv6 at this moment.

Group: **Default**

Address Auto-Configuration Type: ☒ RADVD ☐ DHCPv6 Server

Enable RDNS: ☐

Enable ULA Prefix: ☐

Site Prefix Configuration Type: ☒ Delegated ☐ Static

Prefix Delegated WAN Connection: No available interface

Save

- **Address Auto-Configuration Type** - Select a type to assign IPv6 addresses to the computers in your LAN. RADVD and DHCPv6 Server are provided. I
- **Site Prefix Configuration Type** - The type of IPv6 address prefix.
 - **Delegated** - Get the IPv6 address prefix from the ISP automatically, and the device will delegate it to the LAN.
 - **Static** - Configure the **Site Prefix** and **Site Prefix Length** manually. Please contact your ISP to get more information before you configure them.

Note:

If your IPv6 wan connection type is "Tunnel 6to4", the Site Prefix Configuration Type should be "Static" to make sure "Tunnel 6to4" works properly.

4. 16. System Tools

4. 16. 1. Time Settings

This page allows you to set the time manually or to configure automatic time synchronization. The router can automatically update the time from an NTP server via the internet.

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [System Tools > Time Settings](#).

The screenshot shows the 'Time Settings' page. At the top, there's a title 'Time Settings' in blue. Below it, the section is labeled 'Time Settings:'. The form includes a 'Time Zone' dropdown menu currently set to '(GMT-08:00) Pacific Time (US & Canada); Tijuana'. Below this is a 'Date' section with input fields for Year (1970), Month (1), and Day (1). The 'Time' section has input fields for Hour (0), Minute (42), and Second (40), along with a 'Get from PC' button. There are two 'NTP Server' fields, both labeled '(optional)'. At the bottom left is a 'Get GMT' button with a note '(Only when the Internet connection is active)'. At the bottom right is a 'Save' button.

- **To set time manually:**

1. Select your local [Time Zone](#).
2. Enter the [Date](#) in Month/Day/Year format.
3. Enter the [Time](#) in Hour/Minute/Second format.
4. Click [Save](#).

- **To set time automatically:**

5. Select your local [Time Zone](#).
6. Enter the address or domain of the [NTP Server 1](#) or [NTP Server 2](#).
7. Click [Get GMT](#) to get time from the internet if you have connected to the internet.

- **To set Daylight Saving Time:**

1. Select [Enable Daylight Saving](#).
2. Select the start time from the drop-down list in the [Start](#) fields.
3. Select the end time from the drop-down list in the [End](#) fields.
4. Click [Save](#).

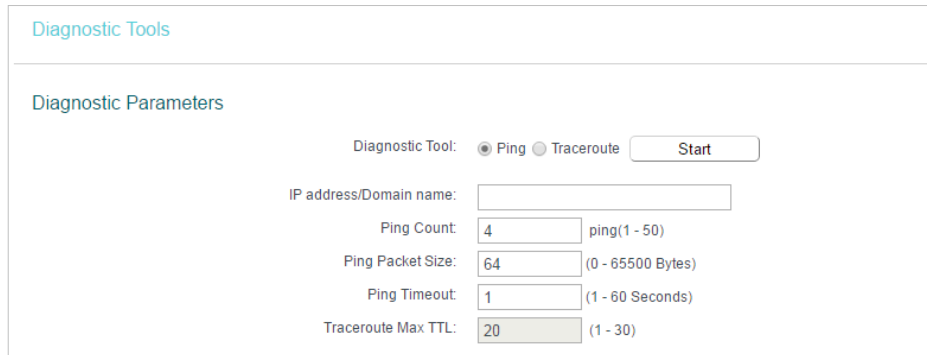
Note:

This setting will be used for some time-based functions such as firewall. You must specify your time zone once you log in to the router successfully; otherwise, time-based functions will not take effect.

4. 16. 2. Diagnostic

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

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to **System Tools > Diagnostic**.



Diagnostic Tools

Diagnostic Parameters

Diagnostic Tool: ☒ Ping ☐ Traceroute

IP address/Domain name:

Ping Count: ping(1 - 50)

Ping Packet Size: (0 - 65500 Bytes)

Ping Timeout: (1 - 60 Seconds)

Traceroute Max TTL: (1 - 30)

- **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 192.168.0.1) 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.

```

Diagnostic Results

Pinging 192.168.0.1 with 64 bytes of data:

Reply from 192.168.0.1: bytes=64 time=1 TTL=64 seq=1
Reply from 192.168.0.1: bytes=64 time=1 TTL=64 seq=2
Reply from 192.168.0.1: bytes=64 time=1 TTL=64 seq=3
Reply from 192.168.0.1: bytes=64 time=1 TTL=64 seq=4

Ping statistics for 192.168.0.1
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss)
Approximate round trip times in milliseconds:
Minimum = 1, Maximum = 1, Average = 1

```

4. 16. 3. Firmware Upgrade

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

1. Download the latest firmware file for the router from our website www.tp-link.com.
2. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
3. Go to [System Tools > Firmware Upgrade](#).
4. Click [Choose File](#) to locate the downloaded firmware file, and click [Upgrade](#).

Firmware Upgrade

Firmware File Path: [Choose File](#) No file chosen
Firmware version:
Hardware version:

Upgrade

4. 16. 4. Factory Defaults

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [System Tools > Factory Defaults](#). Click [Restore](#) to reset all settings to the default values.

Factory Defaults

Click to restore all settings within this device back to factory defaults. It is strongly recommended that you back up your current configurations before you restore factory defaults.

Restore

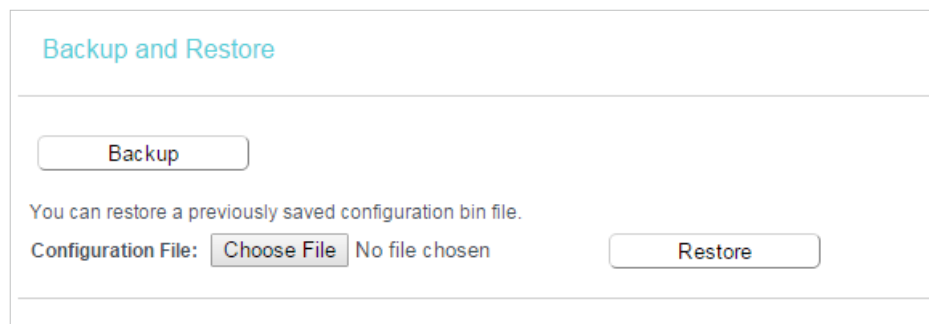
- Default [Username](#): admin
- Default [Password](#): admin

- Default **IP Address**: 192.168.0.1
- Default **Subnet Mask**: 255.255.255.0

4. 16. 5. Backup & Restore

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

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

4. 16. 6. Reboot

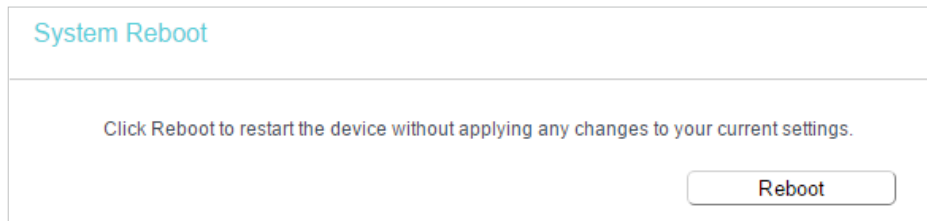
Some settings of the router will take effect only after rebooting, including:

- 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 router (system will reboot automatically).
- Restore the router to its factory defaults (system will reboot automatically).
- Update the configuration with the file (system will reboot automatically).

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [System Tools > Reboot](#).

- **To reboot manually**

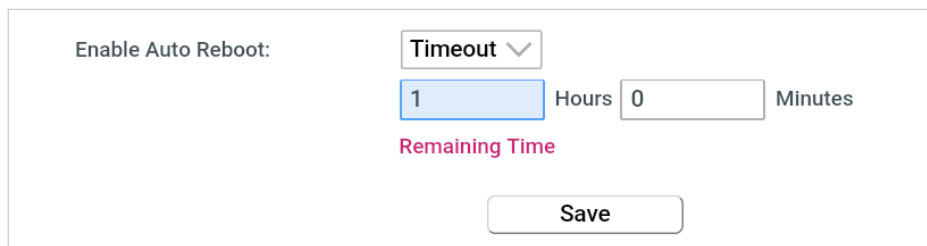
Click [Reboot](#), and wait a few minutes for the router to rebooting.



The screenshot shows the 'System Reboot' page. At the top, it says 'System Reboot'. Below that, a message states: 'Click Reboot to restart the device without applying any changes to your current settings.' At the bottom right, there is a 'Reboot' button.

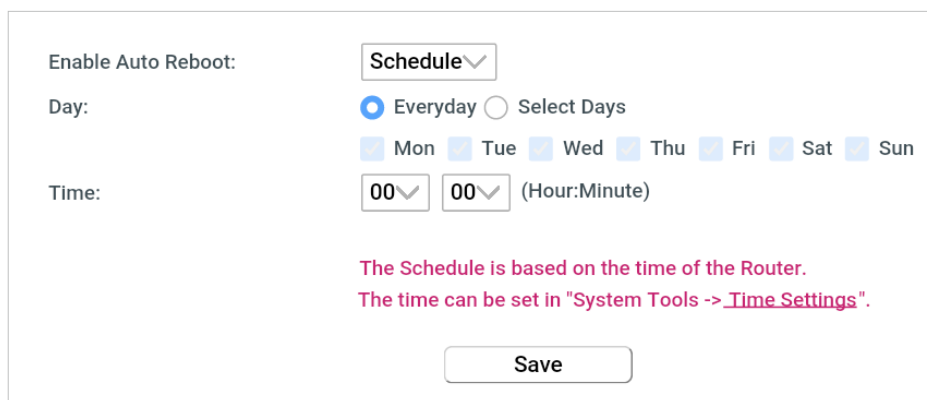
- **To reboot automatically**

- Select [Timeout](#) in the drop-down list of [Enable Auto Reboot](#) and specify a time period (1-72hours), then the router will reboot automatically after every this interval.



The screenshot shows the 'Enable Auto Reboot' section with the 'Timeout' dropdown selected. The 'Remaining Time' is displayed as 1 hour and 0 minutes. A 'Save' button is at the bottom.

- Select [Schedule](#) in the drop-down list of [Enable Auto Reboot](#) and specify the [Time](#) when the router reboots and [Day](#) which to decide how often it reboots.



The screenshot shows the 'Enable Auto Reboot' section with the 'Schedule' dropdown selected. The 'Day' is set to 'Everyday' (radio button selected). The 'Time' is set to 00:00 (Hour:Minute). A note states: 'The Schedule is based on the time of the Router. The time can be set in "System Tools -> Time Settings".' A 'Save' button is at the bottom.

4. 16. 7. Account Management

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [System Tools > Administrator](#), and focus on the [Account Management](#) section. You can change the factory default username and password of the router.

Account Management

The username and password must not exceed 15 characters in length!

Old Password:

New User Name:

New Password:

Confirm password:

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

Note:

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

3. Click [Save](#).

4. 16. 8. Local Management

This feature allows you to block computers on the LAN from accessing the router by using the MAC/IP-based authentication.

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [System Tools](#) > [Administrator](#), and focus on the [Service Configuration](#) section.

Service Configuration			
	HTTP Service	HTTPS Service	Available Host (IP/MAC)
Local Management	Port 80	Enable ☐ Port 443	
Remote Management	Enable ☐ Port 80	Enable ☐ Port 443	

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

1. Keep the [Available Host \(IP/MAC\)](#) empty, which means you don't specify any host to manage the router.
2. If you want to access the router via both HTTPS and HTTP, please tick the [Enable](#) checkbox in [HTTPS Service](#) column. Otherwise, keep it disabled.
3. Keep the local management port as default if you don't know which port to use.
4. Click [Save](#).

Note:

If the web management port conflicts with the one used for [Virtual Server](#) entry, the entry will be automatically disabled after the setting is saved.

- **Allow a specific device to manage the router locally**

1. Enter the IP or MAC address of the host that you want to manage the router in the [Available Host \(IP/MAC\)](#) entry. The format of the MAC address is XX:XX:XX:XX:XX:XX (X is any hexadecimal digit).
2. If you want to access the router via both HTTPS and HTTP, please tick the [Enable](#) box in [HTTPS Service](#) column. Otherwise, keep it disabled.
3. Keep the Port as default if you don't know which port to use.
4. Click [Save](#).

Note:

If your PC is blocked but you want to access the router again, press and hold the [Reset](#) button to reset the router to the factory defaults.

- **Certificate**

Download and install the certificate for management via HTTPS if you need it. Once the certificate is installed, warnings will not pop up when you access the router via HTTPS.

Certificate Download

[Certificate Download](#)

4. 16. 9. Remote Management

This feature allows you to manage your router from a remote location via the internet.

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [System Tools](#) > [Administrator](#), and focus on the [Service Configuration](#) section.

Service Configuration			
	HTTP Service	HTTPS Service	Available Host (IP/MAC)
Local Management	Port 80	Enable ☐ Port 443	
Remote Management	Enable ☐ Port 80	Enable ☐ Port 443	

- **Forbid all devices to manage the router remotely**

Do not tick the [Enable](#) checkbox in both [HTTP Service](#) and [HTTPS Service](#).

- **Allow all devices to manage the router remotely**

1. Tick the [Enable](#) checkbox in [HTTP Service](#).
2. If you want to access the router via both HTTPS and HTTP, please tick the [Enable](#) checkbox in [HTTPS Service](#) column. Otherwise, keep it disabled.
3. For higher security, you can change the remote management web port by entering a number between 1024 and 65534.
4. Click [Save](#).

- **Allow a specific device to manage the router remotely**

1. Tick the **Enable** checkbox in **HTTP Service**.
2. If you want to access the router via both HTTPS and HTTP, please tick the **Enable** checkbox in **HTTPS Service** column. Otherwise, keep it disabled.
3. For higher security, you can change the remote management web port by entering a number between 1024 and 65534.
4. Enter the IP or MAC address of the host that you want to manage the router in the **Available Host (IP/MAC)** entry. The format of the MAC address is XX:XX:XX:XX:XX:XX (X is any hexadecimal digit).
5. Click **Save**.

- **Certificate**

Download and install the certificate for management via HTTPS if you need it. Once the certificate is installed, warnings will not pop up when you access the router via HTTPS.

Certificate Download

Certificate Download

Note:

- To access the router, enter your router's WAN IP address in your browser's address bar, followed by a colon and the custom port number. For example, if your router's WAN address is 202.96.12.8, and the port number used is 8080, please enter <http://202.96.12.8:8080> in your browser. Later, you may be asked for the router's password. After successfully entering the username and password, you will be able to access the router's web management page.
- Be sure to change the router's default password for security purposes.

4. 16. 10. System Log

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to **System Tools > System Log**, and you can view the logs of the router.

System Log

Log Type: ALL Log Level: Debug

Index	Time	Type	Level	Content
1	1970-01-01 00:00:08	DHCPD	Notice	Send ACK to 192.168.0.100
2	1970-01-01 00:00:08	DHCPD	Notice	Recv REQUEST from 40:8D:5C:89:74:B5

Refresh
Clear Log
Save Log
Log Settings

- **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.
- **Clear Log** - All the logs will be deleted from the router permanently, not just from the page.

4. 16. 11. Statistics

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [System Tools > Traffic Statistics](#).
3. Select [Enable](#) and click [Save](#). You can view the network traffic of each PC on the LAN, including total traffic and the value of the last Packets Statistic interval in seconds.

Traffic Statistics

Traffic Statistics--LAN

Traffic Statistics: ☒ Enable ☐ Disable

Statistics Interval: seconds

Statistics List

IP Address MAC Address	Total		Current				Operation
	Packets	Bytes	Packets	Bytes	ICMP Tx	UDP Tx	SYN Tx
Current list is blank							

4. 17. Log out

Click [Logout](#) at the bottom of the main menu, and you will log out of the web management page and return to the login window.

Chapter 5

Configure the Router in WISP Mode (Hotspot Mode)

This chapter presents how to configure the various features of the router working as a WISP router (Hotspot router).

It contains the following sections:

- [Status](#)
- [Operation Mode](#)
- [Network](#)
- [Wireless](#)
- [Guest Network](#)
- [DHCP](#)
- [Forwarding](#)
- [Security](#)
- [Parental Controls](#)
- [Access Control](#)
- [Advanced Routing](#)
- [Bandwidth Control](#)
- [IP&MAC Binding](#)
- [Dynamic DNS](#)
- [IPv6](#)
- [System Tools](#)
- [Log out](#)

5.1. Status

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Status](#). You can view the current status information of the router.

Status

Firmware Version:

6.9.3 Build 190321 (2019.03.21)

Hardware Version:

V1.0

LAN

MAC Address:

68:FF:7B:06:1A:F0

IP Address:

192.168.0.1

Subnet Mask:

255.255.255.0

Wireless 2.4GHz

Operation Mode:

WISP

Wireless Radio:

Enabled

Name(SSID):

TP-Link_1AF0

Mode:

11bgn mixed

Channel:

8

Channel Width:

Auto

MAC Address:

68:FF:7B:06:1A:F0

WAN

MAC Address:

68:FF:7B:06:1A:F1

IP Address:

192.168.1.1 (Dynamic IP)

Subnet Mask:

255.255.255.0

Default Gateway:

192.168.1.1

DNS Server:

192.168.1.1 0.0.0.0

System Up Time:

0 day(s) 00:16:00

Refresh

- [Firmware Version](#) - The version information of the router's firmware.
- [Hardware Version](#) - The version information of the router'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 router.

- **IP address** - The LAN IP address of the router.
- **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 > Basic Settings** page.
 - **Operation Mode** - The current wireless working mode in use.
 - **Wireless Radio** - Indicates whether the wireless radio feature of the router is enabled or disabled.
 - **Name(SSID)** - The SSID of the router.
 - **Mode** - The current wireless mode which the router 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 router.
- **WAN** - This field displays the current settings of the WAN, and you can configure them on the **Network > WAN** page.
 - **MAC Address** - The physical address of the WAN port.
 - **IP Address** - The current WAN (Internet) IP Address. This field will be blank or 0.0.0.0 if the IP Address is assigned dynamically and there is no internet connection.
 - **Subnet Mask** - The subnet mask associated with the WAN IP Address.
 - **Default Gateway** - The Gateway currently used is shown here. When you use Dynamic IP as the internet connection type, click **Renew** or **Release** here to obtain new IP parameters dynamically from the ISP or release them.
 - **DNS Server** - The IP addresses of DNS (Domain Name System) server.
- **System Up Time** - The length of the time since the router was last powered on or reset.

Click **Refresh** to get the latest status and settings of the router.

5.2. Operation Mode

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to **Operation Mode**.
3. Select the working mode as needed and click **Save**.

Operation Mode

Select an Operation Mode:

☐ Wireless Router

☒ WISP

☐ Access Point

☐ Range Extender

☐ Client

5.3. Network

5.3.1. WAN

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Network](#) > [WAN](#).
3. Configure the IP parameters of the WAN and click [Save](#).

Dynamic IP

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

Click [Renew](#) to renew the IP parameters from your ISP.

Click [Release](#) to release the IP parameters.

WAN Settings

Connection Type: Dynamic IP

IP Address: 0.0.0.0

Subnet Mask: 0.0.0.0

Gateway: 0.0.0.0

MTU(Bytes): 1500 (1500 as default, do not change unless necessary) Hide

Enable IGMP Proxy: ☒

IGMP Version: ☐ v2 ☒ v3

Get IP with Unicast: ☐ (It is usually not required)

Set DNS server manually: ☐

Host Name:

- **MTU(Bytes)** - The normal MTU (Maximum Transmission Unit) value for most Ethernet networks is 1500 Bytes. It is not recommended that you change the default MTU size unless required by your ISP.
- **Enable IGMP Proxy** - IGMP (Internet Group Management Protocol) is used to manage multicasting on TCP/IP networks. Some ISPs use IGMP to perform remote configuration for client devices, such as the modem router. The default value is enabled, and if you are not sure, please contact your ISP or just leave it.
- **Get IP with Unicast** - A few ISPs' DHCP servers do not support the broadcast applications. If you cannot get the IP address normally, you can choose this option. (It is rarely required.)
- **Set DNS server manually** - If your ISP gives you one or two DNS addresses, select Set DNS server manually and enter the primary and secondary addresses into the correct fields. Otherwise, the DNS servers will be assigned automatically from your ISP.
- **Host Name** - This option specifies the name of the router.

Static IP

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

The screenshot shows the 'WAN Settings' configuration page. The 'Connection Type' is set to 'Static IP'. Below this, there are input fields for 'IP Address', 'Subnet Mask', 'Gateway', 'Primary DNS Server', and 'Secondary DNS Server', all containing '0.0.0.0'. A 'Detect' button is next to the 'Connection Type' dropdown. Below the DNS fields, there is a section for 'MTU(Bytes)' set to '1500' with a note '(1500 as default, do not change unless necessary)' and a 'Hide' button. Below that, 'Enable IGMP Proxy' is checked, and 'IGMP Version' is set to 'v3'. A 'Save' button is at the bottom.

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

- **Enable IGMP Proxy** - IGMP (Internet Group Management Protocol) is used to manage multicasting on TCP/IP networks. Some ISPs use IGMP to perform remote configuration for client devices, such as the modem router. The default value is enabled, and if you are not sure, please contact your ISP or just leave it.

PPPoE

If your ISP provides PPPoE connection, select **PPPoE**.

The screenshot shows the 'WAN Settings' page. At the top, 'Connection Type' is set to 'PPPoE' with a 'Detect' button. Below are fields for 'PPP Username', 'PPP Password', and 'Confirm password'. The 'Secondary Connection' section has radio buttons for 'Disabled' (selected), 'Dynamic IP', and 'Static IP (For Dual Access)'. The 'Connection Mode' section has radio buttons for 'Always on' (selected), 'Connect on demand', and 'Connect manually'. The 'Max Idle Time' is set to '15' minutes. The 'Authentication Type' is set to 'AUTO_AUTH'. There are 'Connect' and 'Disconnect' buttons. A 'Hide' button is on the right. Below a horizontal line, there are fields for 'Service Name', 'Server Name', and 'MTU(Bytes)' (set to 1480). The 'Enable IGMP Proxy' checkbox is checked. The 'IGMP Version' has radio buttons for 'v2' and 'v3' (selected). There are checkboxes for 'Use IP address specified by ISP', 'Echo request interval' (set to 0), and 'Set DNS server manually'.

- **PPP Username/Password** - Enter the user name and password provided by your ISP. These fields are case-sensitive.
- **Confirm Password** - Enter the Password provided by your ISP again to ensure the password you entered is correct.
- **Secondary Connection** - It's available only for PPPoE connection. If your ISP provides an extra connection type, select **Dynamic IP** or **Static IP** to activate the secondary connection.
- **Connection Mode**
 - **Always On** - In this mode, the internet connection will be active all the time.
 - **Connect on Demand** - In this mode, the internet connection can be terminated automatically after a specified inactivity period (Max Idle Time) and be re-established when you attempt to access the internet again. If you want to keep your internet connection active all the time, please enter 0 in the **Max Idle Time**

field. Otherwise, enter the number of minutes you want to have elapsed before your internet access disconnects.

- **Connect Manually** - You can click **Connect/Disconnect** to connect/disconnect immediately. This mode also supports the **Max Idle Time** function as **Connect on Demand** mode. The internet connection can be disconnected automatically after a specified inactivity period (Max Idle Time) and not be able to re-establish when you attempt to access the internet again.
- **Authentication Type** - Choose an authentication type.

 Note:

Sometimes the connection cannot be terminated although you have specified the **Max Idle Time** because some applications are visiting the internet continually in the background.

- **Service Name/Server Name** - The service name and server name should not be configured unless you are sure it is necessary for your ISP. In most cases, leaving these fields blank will work.
- **MTU(Bytes)** - The default MTU size is 1480 bytes. It is not recommended that you change the default MTU size unless required by your ISP.
- **Enable IGMP Proxy** - IGMP (Internet Group Management Protocol) is used to manage multicasting on TCP/IP networks. Some ISPs use IGMP to perform remote configuration for client devices, such as the modem router. The default value is enabled, and if you are not sure, please contact your ISP or just leave it.
- **ISP Specified IP Address** - If your ISP does not automatically assign IP addresses to the router, please select **Use IP address specified by ISP** and enter the IP address provided by your ISP in dotted-decimal notation.
- **Echo Request Interval** - The router will detect Access Concentrator online at every interval. The default value is 0. You can input the value between 0 and 120. The value 0 means no detect.
- **DNS Server/Secondary DNS Server** - If your ISP does not automatically assign DNS addresses to the router, please select **Set DNS server manually** and enter the IP address in dotted-decimal notation of your ISP's primary DNS server. If a secondary DNS server address is available, enter it as well.

L2TP

If your ISP provides L2TP connection, please select [L2TP](#).

The screenshot shows the 'WAN Settings' configuration page. At the top, 'Connection Type' is set to 'L2TP' with a 'Detect' button. Below are fields for 'Username' and 'Password', followed by 'Connect' and 'Disconnect' buttons. The 'Addressing Type' section has radio buttons for 'Dynamic IP' (selected) and 'Static IP'. Below this are fields for 'Server IP Address/Name', 'IP Address' (0.0.0.0), 'Subnet Mask' (0.0.0.0), 'Gateway' (0.0.0.0), and 'DNS Server' (0.0.0.0, 0.0.0.0). Further down are 'Internet IP Address' (0.0.0.0) and 'Internet DNS' (0.0.0.0, 0.0.0.0). The 'MTU(Bytes)' field is set to 1460, with a note '(1460 as default, do not change unless necessary)'. The 'Enable IGMP Proxy' checkbox is checked. The 'IGMP Version' has radio buttons for 'v2' and 'v3' (selected). The 'Connection Mode' has radio buttons for 'Always on' (selected), 'Connect on demand', and 'Connect manually'. The 'Max Idle Time' is set to 15 minutes, with a note '(0 meaning connection remains active at all times)'. A 'Save' button is at the bottom.

- [Username/Password](#) - Enter the username and password provided by your ISP. These fields are case-sensitive.
- [Addressing Type](#) - Choose the addressing type given by your ISP, either Dynamic IP or Static IP. Click the [Connect](#) button to connect immediately. Click the [Disconnect](#) button to disconnect immediately.
- [MTU\(Bytes\)](#) - The default MTU size is "1460" bytes, which is usually fine. It is not recommended that you change the default MTU Size unless required by your ISP.
- [Enable IGMP Proxy](#) - IGMP (Internet Group Management Protocol) is used to manage multicasting on TCP/IP networks. Some ISPs use IGMP to perform remote configuration for client devices, such as the modem router. The default value is enabled, and if you are not sure, please contact your ISP or just leave it.
- [Connection Mode](#)
 - [Always On](#) - In this mode, the internet connection will be active all the time.
 - [Connect on Demand](#) - In this mode, the internet connection can be terminated automatically after a specified inactivity period (Max Idle Time) and be re-established when you attempt to access the internet again. If you want to keep your internet connection active all the time, please enter 0 in the [Max Idle Time](#) field. Otherwise, enter the number of minutes you want to have elapsed before your internet access disconnects.

- **Connect Manually** - You can click **Connect/Disconnect** to connect/disconnect immediately. This mode also supports the **Max Idle Time** function as **Connect on Demand** mode. The internet connection can be disconnected automatically after a specified inactivity period (Max Idle Time) and not be able to re-establish when you attempt to access the internet again.

Note:

Sometimes the connection cannot be terminated although you have specified the **Max Idle Time** because some applications are visiting the internet continually in the background.

PPTP

If your ISP provides PPTP connection, please select **PPTP**.

The screenshot shows the 'WAN Settings' configuration page. At the top, 'Connection Type' is set to 'PPTP' with a 'Detect' button. Below are fields for 'Username' and 'Password', followed by 'Connect' and 'Disconnect' buttons. The 'Addressing Type' section has 'Dynamic IP' selected. Below this are fields for 'Server IP Address/Name', 'IP Address', 'Subnet Mask', 'Gateway', and 'DNS Server', all with default values of 0.0.0.0. Further down are 'Internet IP Address' and 'Internet DNS' fields, also with default values. The 'MTU(Bytes)' is set to 1420. The 'Enable IGMP Proxy' checkbox is checked. 'IGMP Version' has 'v3' selected. 'Connection Mode' has 'Always on' selected. 'Max Idle Time' is set to 15 minutes. A 'Save' button is at the bottom.

- **Username/Password** - Enter the username and password provided by your ISP. These fields are case-sensitive.
- **Addressing Type** - Choose the addressing type given by your ISP, either Dynamic IP or Static IP. Click the **Connect** button to connect immediately. Click the **Disconnect** button to disconnect immediately.
- **MTU(Bytes)** - The default MTU size is "1420" bytes, which is usually fine. It is not recommended that you change the default MTU Size unless required by your ISP.
- **Enable IGMP Proxy** - IGMP (Internet Group Management Protocol) is used to manage multicasting on TCP/IP networks. Some ISPs use IGMP to perform remote configuration for client devices, such as the modem router. The default value is enabled, and if you are not sure, please contact your ISP or just leave it.

- **Connection Mode**

- **Always On** - In this mode, the internet connection will be active all the time.
- **Connect on Demand** - In this mode, the internet connection can be terminated automatically after a specified inactivity period (Max Idle Time) and be re-established when you attempt to access the internet again. If you want to keep your internet connection active all the time, please enter 0 in the **Max Idle Time** field. Otherwise, enter the number of minutes you want to have elapsed before your internet access disconnects.
- **Connect Manually** - You can click **Connect/Disconnect** to connect/disconnect immediately. This mode also supports the **Max Idle Time** function as **Connect on Demand** mode. The internet connection can be disconnected automatically after a specified inactivity period (Max Idle Time) and not be able to re-establish when you attempt to access the internet again.

■ **Note:**

Sometimes the connection cannot be terminated although you have specified the **Max Idle Time** because some applications are visiting the internet continually in the background.

BigPond Cable

If your ISP provides BigPond cable connection, please select **BigPond Cable**.

The screenshot shows the 'WAN Settings' configuration page. At the top, 'WAN Settings' is written in blue. Below it, the 'Connection Type' is set to 'BigPond Cable' with a dropdown arrow and a 'Detect' button. The 'Username' and 'Password' fields are empty. The 'Auth Server' and 'Auth Domain' fields are also empty. The 'MTU(Bytes)' is set to '1500' with a note '(1500 as default, do not change unless necessary)'. The 'Enable IGMP Proxy' checkbox is checked. The 'IGMP Version' has two radio buttons: 'v2' and 'v3', with 'v3' selected. The 'Connection Mode' has three radio buttons: 'Always on' (selected), 'Connect on demand', and 'Connect manually'. The 'Max Idle Time' is set to '15' minutes, with a note '(0 meaning connection remains active at all times)'. At the bottom, there are 'Connect' and 'Disconnect' buttons, and a 'Save' button at the very bottom.

- **Username/Password** - Enter the username and password provided by your ISP. These fields are case-sensitive.
- **Auth Server** - Enter the authenticating server IP address or host name.
- **Auth Domain** - Type in the domain suffix server name based on your location.

- **MTU(Bytes)** - The default MTU size is 1500 bytes. It is not recommended that you change the default MTU size unless required by your ISP.
- **Enable IGMP Proxy** - IGMP (Internet Group Management Protocol) is used to manage multicasting on TCP/IP networks. Some ISPs use IGMP to perform remote configuration for client devices, such as the modem router. The default value is enabled, and if you are not sure, please contact your ISP or just leave it.
- **Connection Mode**
 - **Always On** - In this mode, the internet connection will be active all the time.
 - **Connect on Demand** - In this mode, the internet connection can be terminated automatically after a specified inactivity period (Max Idle Time) and be re-established when you attempt to access the internet again. If you want to keep your internet connection active all the time, please enter 0 in the **Max Idle Time** field. Otherwise, enter the number of minutes you want to have elapsed before your internet access disconnects.
 - **Connect Manually** - You can click **Connect/Disconnect** to connect/disconnect immediately. This mode also supports the **Max Idle Time** function as **Connect on Demand** mode. The internet connection can be disconnected automatically after a specified inactivity period (Max Idle Time) and not be able to re-establish when you attempt to access the internet again.

5.3.2. LAN

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

LAN Settings

MAC Address: 68:FF:7B:06:1A:F0

IP Address: 192.168.0.1

Subnet Mask: 255.255.255.0

Save

- **MAC Address** - The physical address of the LAN ports. The value can not be changed.
- **IP Address** - Enter the IP address in dotted-decimal notation of your router (the default one is 192.168.0.1).

- **Subnet Mask** - An address code that determines the size of the network. Normally 255.255.255.0 is used as the subnet mask.

■ **Note:**

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

5.3.3. MAC Clone

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to **Network > MAC Clone**.
3. Configure the WAN MAC address and click **Save**.

MAC Clone	
WAN MAC Address:	00:0A:EB:13:09:6A <button>Restore Factory MAC</button>
Your PC's MAC Address:	40:8D:5C:89:74:B5 <button>Clone MAC Address</button>
Save	

- **WAN MAC Address** - This field displays the current MAC address of the WAN port. If your ISP requires you to register the MAC address, please enter the correct MAC address in this field. Click **Restore Factory MAC** to restore the MAC address of WAN port to the factory default value.
- **Your PC's MAC Address** - This field displays the MAC address of the PC that is managing the router. If the MAC address is required, you can click **Clone MAC Address** and this MAC address will be filled in the **WAN MAC Address** field.

■ **Note:**

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

5.4. Wireless

5.4.1. Basic Settings

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to **Wireless > Basic Settings**.
3. Configure the basic settings for the wireless network and click **Save**.

Wireless Settings

Client Setting

SSID(to be bridged):

MAC Address(to be bridged): e.g. 00:1D:0F:11:22:33 ☐ Lock to AP

Key Type:

WEP Index:

Authentication Type:

Encryption:

Wireless Password:

AP Setting

Wireless Network Name: (Also called SSID)

Mode:

Channel:

Channel Width:

☒ Enable SSID Broadcast

- **Client Settings** - The settings of the public Wi-Fi your router is going to connect to.
 - **SSID(to be bridged)** - The SSID of the public Wi-Fi your router is going to connect to as a client.
 - **MAC Address(to be bridged)** - The MAC address of the public Wi-Fi your router is going to connect to as a client.
 - **Lock to AP** - If selected, the device's connection will be restricted to only the network with this specific MAC address.
 - **Scan** - Click this button to search the public Wi-Fi.
 - **Key type** - Select the key type according to the public Wi-Fi's security configuration. It is recommended that the key type is the same as the public Wi-Fi's security type.
 - **WEP Index** - Select which of the four keys will be used if the key type is WEP (ASCII) or WEP (HEX).
 - **Authentication Type** - Select the authorization type if the key type is WEP (ASCII) or WEP(HEX).
 - **Encryption** - Select the encryption type is the key type is WPA-PSK or WPA2-PSK.
 - **Password** - Enter the public Wi-Fi's password if required.
- **AP Settings** - The wireless settings of your router.
 - **Local Wireless Network Name** - Enter a string of up to 32 characters. It is strongly recommended that you change your network name (SSID). This value is case-sensitive. For example, TEST is NOT the same as test.
 - **Mode** - You can choose the appropriate "Mixed" mode.

- **Channel** - This field determines which operating frequency will be used. The default channel is set to **Auto**. It is not necessary to change the wireless channel unless you notice interference problems with another nearby access point.
- **Channel Width** - 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. If you select auto, then AP will choose the best channel automatically.
- **Enable SSID Broadcast** - If enabled, the router will broadcast the wireless network name (SSID).

5.4.2. 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 router's network quickly via WPS.

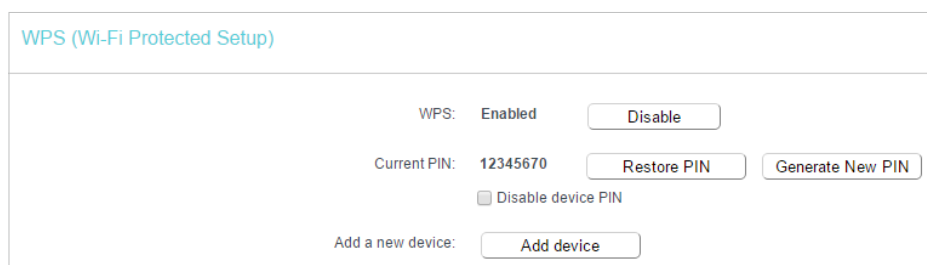
Note:

The WPS function cannot be configured if the wireless function of the router is disabled. Please make sure the wireless function is enabled before configuration.

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to **Wireless > WPS**.
3. Follow one of the following three methods to connect your client device to the router'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**.



WPS (Wi-Fi Protected Setup)

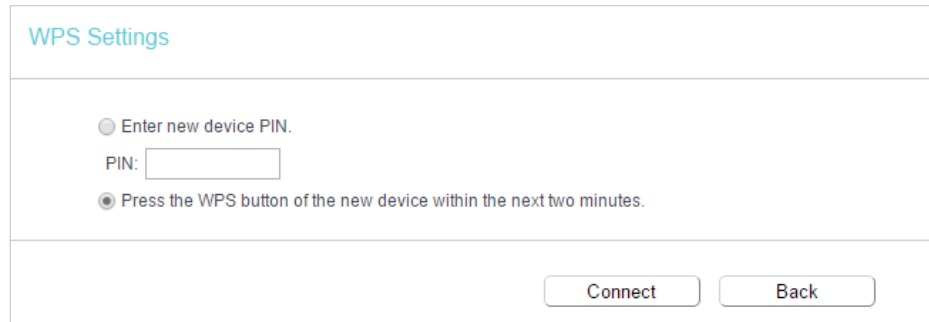
WPS: Enabled Disable

Current PIN: 12345670 Restore PIN Generate New PIN

☐ Disable device PIN

Add a new device: Add device

2. Select **Press the WPS button of the new device within the next two minutes** and click **Connect**.



WPS Settings

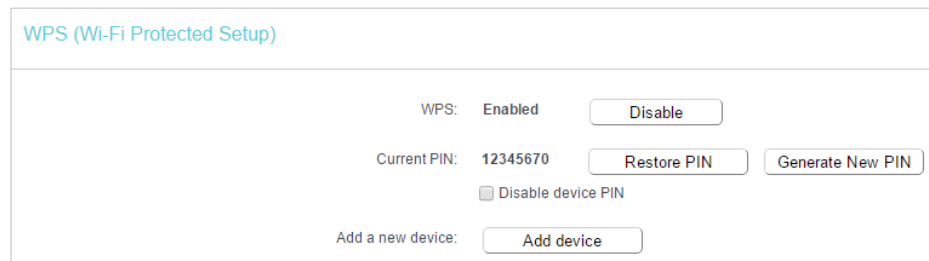
☐ Enter new device PIN.
PIN:

☒ Press the WPS button of the new device within the next two minutes.

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 router's network.

Method TWO: Enter the Client's PIN

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



WPS (Wi-Fi Protected Setup)

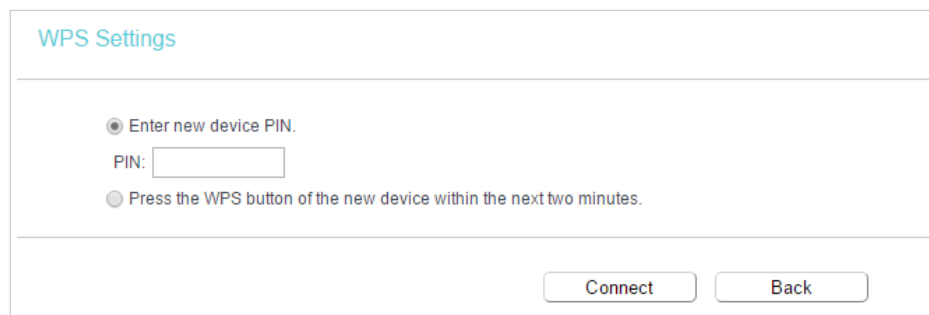
WPS: **Enabled**

Current PIN: **12345670**

☐ Disable device PIN

Add a new device:

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



WPS Settings

☒ Enter new device PIN.
PIN:

☐ Press the WPS button of the new device within the next two minutes.

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

Method Three: Enter the Router's PIN

1. Keep the WPS Status as **Enabled** and get the **Current PIN** of the router.

WPS (Wi-Fi Protected Setup)

WPS: **Enabled**

Current PIN: **12345670**

☐ Disable device PIN

Add a new device:

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

5.4.3. Wireless Security

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to **Wireless > Wireless Security**.
3. Configure the security settings of your wireless network and click **Save**.

Wireless Security Settings

Note: WEP security, WPA/WPA2 - Enterprise authentication and TKIP encryption are not supported with WPS enabled.
For network security, it is strongly recommended to enable wireless security and select WPA2-PSK AES encryption.

☐ Disable Wireless Security

☒ WPA/WPA2 - Personal(Recommended)

Version: **WPA2-PSK**

Encryption: **AES**

Wireless Password: **87338003**

Group Key Update Period: **0**

☐ WPA/WPA2 - Enterprise

Version: **Auto**

Encryption: **Auto**

RADIUS Server IP:

RADIUS Server Port: **1812** (1-65535, 0 stands for default port 1812)

RADIUS Server Password:

Group Key Update Period: **0**

☐ WEP

Authentication Type: **Open System**

WEP Key Format: **Hexadecimal**

Selected Key: **WEP Key** **Key Type**

Key 1: ☐ **Disabled**

Key 2: ☐ **Disabled**

Key 3: ☐ **Disabled**

Key 4: ☐ **Disabled**

- **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.
 - **Version** - 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.
 - **Version** - 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** - 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.

5.4.4. Wireless MAC Filtering

Wireless MAC Filtering is used to deny or allow specific wireless client devices to access your network by their MAC addresses.

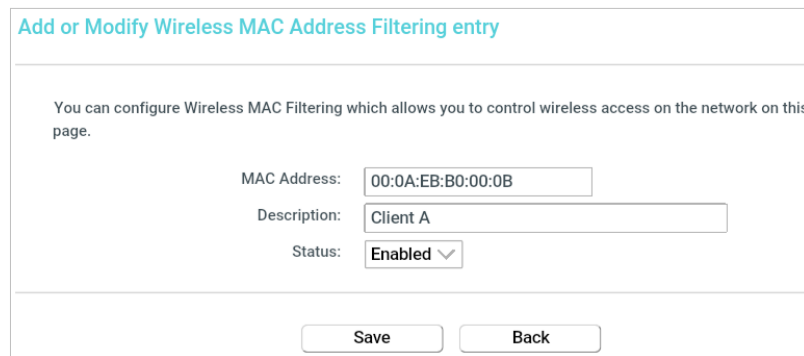
I want to:

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 router, but other wireless clients cannot access the router

How can I do that?

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



Add or Modify Wireless MAC Address Filtering entry

You can configure Wireless MAC Filtering which allows you to control wireless access on the network on this page.

MAC Address:

Description:

Status:

- 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.

Wireless MAC Filtering

You can configure Wireless MAC Filtering which allows you to control wireless access on the network on this page.

Wireless MAC Filtering: ☒ Enabled ☐ Disable

Filtering Rules

☐ Deny the stations specified by any enabled entries in the list to access.

☒ Allow the stations specified by any enabled entries in the list to access.

☐	MAC Address	Status	Host	Description	Edit
☐	00:0A:EB:80:00:0B	Enabled	TP-LINK_7AFF	client A	Edit
☐	00:0A:EB:00:07:5F	Enabled	TP-LINK_7AFF	Client B	Edit

Done!

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

5.4.5. Wireless Advanced

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

Wireless Advanced

Transmit Power:

Beacon Interval: (40-1000)

RTS Threshold: (1-2346)

Fragmentation Threshold: (256-2346)

DTIM Interval: (1-15)

☒ Enable Short GI
☐ Enable Client Isolation
☒ Enable WMM

- **Transmit Power** - Select **High**, **Middle** or **Low** which you would like to specify for the router. **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 router to synchronize a wireless network. The default value is 100.

- **RTS Threshold** - Here you can specify the RTS (Request to Send) Threshold. If the packet is larger than the specified RTS Threshold size, the router will send RTS frames to a particular receiving station and negotiate the sending of a data frame. The default value is 2346.
- **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 router has buffered broadcast or multicast messages for associated clients, it sends the next DTIM with a DTIM Interval value. You can specify the value between 1-255 Beacon Intervals. The default value is 1, which indicates the DTIM Interval is the same as Beacon Interval.
- **Enable Short GI** - It is recommended to enable this function, for it will increase the data capacity by reducing the guard interval time.
- **Enable Client 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.
- **Enable WMM** - WMM function can guarantee the packets with high-priority messages being transmitted preferentially. It is strongly recommended to enable this function.

5.4.6. Wireless Statistics

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to **Wireless > Wireless Statistics** to check the data packets sent and received by each client device connected to the router.

Wireless Stations Status					
Wireless Stations Currently Connected: 1 Refresh					
ID	MAC Address	Current Status	Received Packets	Sent Packets	SSID
1	44:00:10:BF:3B:A7	Associated	29	19	TP-LINK_XXXXXX

- **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.
- **SSID** - SSID that the station associates with.

5.5. Guest Network

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

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Guest Network](#).
3. Enable the [Guest Network](#) function.
4. Create a network name for your guest network.
5. Select the [Security](#) type and create the [Password](#) of the guest network.
6. Select [Schedule](#) from the [Access Time](#) drop-down list and customize it for the guest network.
7. Click [Save](#).

Guest Network

Allow Guests To Access My Local Network: Disable

Guest Network Isolation: Disable

Guest Network Bandwidth Control: Disable

Guest Network: ☒ Enable ☐ Disable

Network Name:

Max Guests number:

Security: WPA/WPA2 - Personal

Authentication Type: Auto

Encryption: Auto

Wireless Password:
(Enter ASCII characters between 8 and 63 or Hexadecimal characters between 8 and 64.)

Group Key Update Period: (seconds, minimum is 30, 0 means no update)

Access Time: Schedule

Click the schedule table or use the 'Add' button to choose the period on which you need the guest network off automatically!

The Schedule is based on the time of the Router. The time can be set in "System Tools -> Time Settings".

Wireless Schedule: ☐ Enable ☒ Disable

Apply To: Each Day

Start Time: 00:00

End Time: 24:00

Add

Time	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00
Sun.															
Mon.															
Tues.															
Wed.															
Thur.															
Fri.															
Sat.															

Clear Schedule

Save

- [Allow Guest To Access My Local Network](#) - If enabled, guests can access the local network and manage it.
- [Guest Network Isolation](#) - If enabled, guests are isolated from each other.
- [Enable Guest Network Bandwidth Control](#) - If enabled, the Guest Network Bandwidth Control rules will take effect.

Note:

The range of bandwidth for guest network is calculated according to the setting of Bandwidth Control on the [Bandwidth Control](#) page.

5.6. DHCP

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

5.6.1. DHCP Settings

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [DHCP > DHCP Settings](#).
3. Specify DHCP server settings and click [Save](#).

DHCP Settings

DHCP Server: ☐ Disable ☒ Enable

Start IP Address:

End IP Address:

Lease Time: minutes (1~2880 minutes, the default value is 120)

Default Gateway: (optional)

Default Domain: (optional)

DNS Server: (optional)

Secondary DNS Server: (optional)

- [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 router 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 router. The default value is 192.168.0.1.
- **Default Domain (Optional)** - Input the domain name of your network.
- **DNS Server (Optional)** - Input the DNS IP address provided by your ISP.
- **Secondary DNS Server (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 router, you must configure all computers on the LAN as [Obtain an IP Address automatically](#).

5. 6. 2. DHCP Clients List

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to **DHCP > DHCP Clients List** to view the information of the clients connected to the router.

DHCP Clients List				
This page displays information of all DHCP clients on the network.				
ID	Client Name	MAC Address	Assigned IP	Lease Time
1	Camille	40:8D:5C:89:74:B5	192.168.0.100	00:00:32
2	iPhone	34:E2:FD:14:1D:0D	192.168.0.101	00:00:55
Refresh				

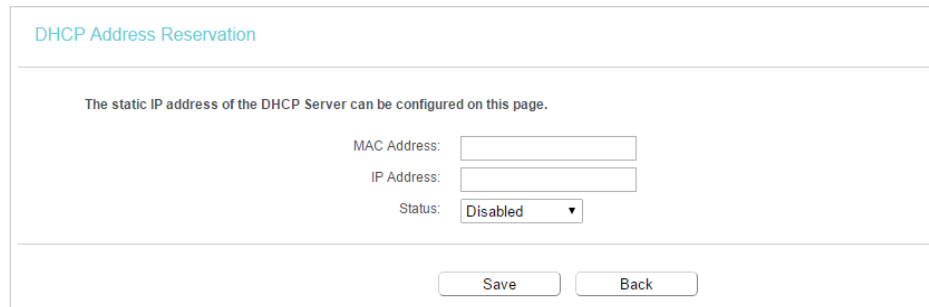
- **Client Name** - The name of the DHCP client.
- **MAC Address** - The MAC address of the DHCP client.
- **Assigned IP** - The IP address that the router has allocated to the DHCP client.
- **Lease Time** - The time of the DHCP client leased. After the dynamic IP address has expired, a new dynamic 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](#).

5. 6. 3. Address Reservation

You can reserve an IP address for a specific client. When you specify a reserved IP address for a PC on the LAN, this PC will always receive the same IP address each time when it accesses the DHCP server.

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to **DHCP > Address Reservation**.
3. Click **Add New** and fill in the blanks.



DHCP Address Reservation

The static IP address of the DHCP Server can be configured on this page.

MAC Address:

IP Address:

Status: Disabled ▼

- 1) Enter the MAC address (in XX:XX:XX:XX:XX:XX format.) of the client for which you want to reserve an IP address.
- 2) Enter the IP address (in dotted-decimal notation) which you want to reserve for the client.
- 3) Leave the **Status** as **Enabled**.
- 4) Click **Save**.

5.7. Forwarding

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

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

The TP-Link router includes four forwarding rules. If two or more rules are set, the priority of implementation from high to low is Virtual Servers, Port Triggering, UPNP and DMZ.

5.7.1. Virtual Server

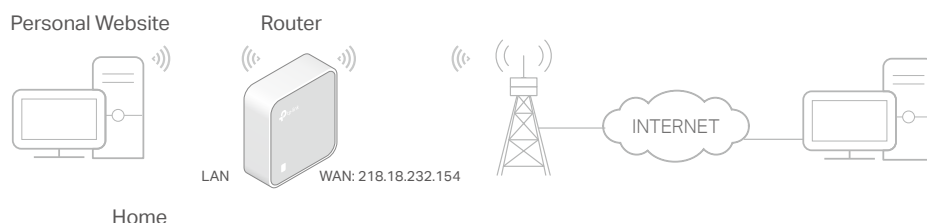
When you build up a server in the local network and want to share it on the internet, Virtual Servers can realize the service and provide it to internet users. At the same time virtual servers can keep the local network safe as other services are still invisible from the internet.

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

I want to:

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

For example, the personal website has been built in my home PC (192.168.0.100). I hope that my friends on the internet can visit my website in some way. My PC is connected to the router with the WAN IP address 218.18.232.154.



1. Set your PC to a static IP address, for example 192.168.0.100.
2. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
3. Go to **Forwarding > Virtual Server**.
4. Click **Add New**. Select **HTTP** from the **Common Service Port** list. The service port, internal port and protocol will be automatically filled in. Enter the PC's IP address 192.168.0.100 in the **IP Address** field.

Virtual Server	
Service Port:	80 (XX-XX or XX)
IP Address:	192.168.0.100
Internal Port:	80 (XX or keep empty. If it's empty, Internal port equals to Service port)
Protocol:	TCP
Status:	Enabled
Common Service Port:	HTTP
Save Back	

5. Leave the status as **Enabled** and click **Save**.

Note:

- It is recommended to keep the default settings of **Internal Port** and **Protocol** if you are not clear about which port and protocol to use.
- If the service you want to use is not in the **Common Service Port** list, you can enter the corresponding parameters manually. You should verify the port number that the service needs.
- You can add multiple virtual server rules if you want to provide several services in a router. Please note that the **Service Port** should not be overlapped.

Done!

Users on the internet can enter [http:// WAN IP](http://WAN IP) (in this example: [http:// 218.18.232.154](http://218.18.232.154))

to visit your personal website.

■ **Note:**

- If you have changed the default **Service Port**, you should use [http:// WAN IP: Service Port](http://WAN IP: Service Port) to visit the website.
- Some specific service ports are forbidden by the ISP, if you fail to visit the website, please use another service port.

5.7.2. Port Triggering

Port triggering can specify a triggering port and its corresponding external ports. When a host in the local network initiates a connection to the triggering port, all the external ports will be opened for subsequent connections. The router can record the IP address of the host. When the data from the internet return to the external ports, the router can forward them to the corresponding host. Port triggering is mainly applied to online games, VoIPs, video players and common applications including MSN Gaming Zone, Dialpad, Quick Time 4 players and more.

Follow the steps below to configure the port triggering rules:

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to **Forwarding > Port Triggering**.
3. Click **Add New**. Select the desired application from the **Common Applications** list. The trigger port and incoming ports will be automatically filled in. The following picture takes application **MSN Gaming Zone** as an example.

The screenshot shows the 'Port Trigger' configuration page. It contains the following fields and values:

Field	Value	Notes
Trigger Port	47624	(XX)
Trigger Protocol	ALL	Dropdown menu
Open Port	2300-2400,28800-29	(XX or XX-XX or XX-XX,XX)
Open Protocol	ALL	Dropdown menu
Status	Enabled	Dropdown menu
Common Service Port	MSN Gaming Zone	Dropdown menu

At the bottom of the form are two buttons: 'Save' and 'Back'.

4. Leave the status as **Enabled** and click **Save**.

■ **Note:**

- You can add multiple port triggering rules as needed.
- The triggering ports can not be overlapped.
- If the application you need is not listed in the **Common Service Port** list, please enter the parameters manually. You should verify the open ports the application uses first and enter them in **Open Port** field. You can input at most 5 groups of ports (or port sections). Every group of ports must be set apart with ",". For example, 2000-2038, 2050-2051, 2085, 3010-3030.

5.7.3. DMZ

When a PC is set to be a DMZ (Demilitarized Zone) host in the local network, it is totally exposed to the internet, which can realize the unlimited bidirectional communication between internal hosts and external hosts. The DMZ host becomes a virtual server with all ports opened. When you are not clear about which ports to open in some special applications, such as IP camera and database software, you can set the PC to be a DMZ host.

Note:

DMZ is more applicable in the situation that users are not clear about which ports to open. When it is enabled, the DMZ host is totally exposed to the internet, which may bring some potential safety hazards. If DMZ is not in use, please disable it in time.

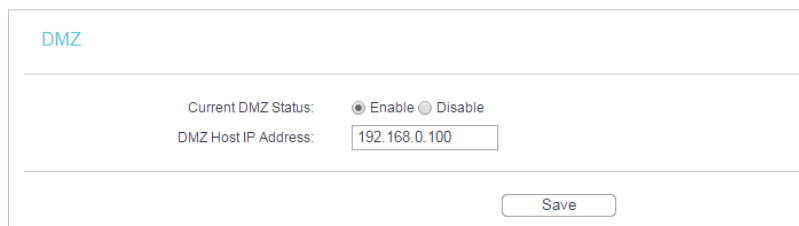
I want to:

Make the home PC join the internet online game without port restriction.

For example, due to some port restriction, when playing the online games, you can log in normally but cannot join a team with other players. To solve this problem, set your PC as a DMZ host with all ports opened.

How can I do that?

1. Assign a static IP address to your PC, for example 192.168.0.100.
2. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
3. Go to **Forwarding > DMZ**.
4. Select **Enable** and enter the IP address 192.168.0.100 in the **DMZ Host IP Address** field.



DMZ

Current DMZ Status: ☒ Enable ☐ Disable

DMZ Host IP Address:

Save

5. Click **Save**.

Done!

You've set your PC to a DMZ host and now you can make a team to game with other players.

5.7.4. UPnP

The UPnP (Universal Plug and Play) protocol allows the applications or host devices to automatically find the front-end NAT device and send request to it to open the

corresponding ports. With UPnP enabled, the applications or host devices on the local network and the internet can freely communicate with each other realizing the seamless connection of the network. You may need to enable the UPnP if you want to use applications for multiplayer gaming, peer-to-peer connections, real-time communication (such as VoIP or telephone conference) or remote assistance, etc.

☞ Tips:

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

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



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

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to **Forwarding > UPnP**.
3. Click **Disable** or **Enable** according to your needs.

UPnP

Current UPnP Status: Enabled Disable

Current UPnP Settings List

ID	App Description	External Port	Protocol	Internal Port	IP Address	Status
Refresh						

5.8. Security

This function allows you to protect your home network from cyber attacks and unauthorized users by implementing these network security functions.

5.8.1. Basic Security

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to **Security > Basic Security**, and you can enable or disable the security functions.

Basic Security

Firewall

Enable SPI Firewall: ☒

VPN

PPTP Pass-through: ☒ Enable ☐ Disable

L2TP Pass-through: ☒ Enable ☐ Disable

IPSec Pass-through: ☒ Enable ☐ Disable

ALG

FTP ALG: ☒ Enable ☐ Disable

TFTP ALG: ☒ Enable ☐ Disable

H323 ALG: ☒ Enable ☐ Disable

SIP ALG: ☒ Enable ☐ Disable

RTSP ALG: ☒ Enable ☐ Disable

Save

- **Firewall** - A firewall protects your network from internet attacks.
 - **Enable SPI Firewall** - SPI (Stateful Packet Inspection, also known as dynamic packet filtering) helps to prevent cyber attacks by tracking more state per session. It validates that the traffic passing through the session conforms to the protocol. SPI Firewall is enabled by default.
- **VPN** - VPN Passthrough must be enabled if you want to allow VPN tunnels using IPSec, PPTP or L2TP protocols to pass through the router's firewall.
 - **PPTP Pass-through** - Point-to-Point Tunneling Protocol (PPTP) allows the Point-to-Point Protocol (PPP) to be tunneled through an IP network. If you want to allow PPTP tunnels to pass through the router, you can keep the default (Enabled).
 - **L2TP Pass-through** - Layer 2 Tunneling Protocol (L2TP) is the method used to enable Point-to-Point sessions via the internet on the Layer 2 level. If you want to allow L2TP tunnels to pass through the router, you can keep the default (Enabled).
 - **IPSec Pass-through** - Internet Protocol Security (IPSec) is a suite of protocols for ensuring private, secure communications over Internet Protocol (IP) networks, through the use of cryptographic security services. If you want to allow IPSec tunnels to pass through the router, you can keep the default (Enabled).
- **ALG** - It is recommended to enable Application Layer Gateway (ALG) because ALG allows customized Network Address Translation (NAT) traversal filters to be plugged into the gateway to support address and port translation for certain application layer "control/data" protocols such as FTP, TFTP, H323 etc.

- **FTP ALG** - To allow FTP clients and servers to transfer data across NAT, keep the default **Enable**.
- **TFTP ALG** - To allow TFTP clients and servers to transfer data across NAT, keep the default **Enable**.
- **H323 ALG** - To allow Microsoft NetMeeting clients to communicate across NAT, keep the default **Enable**.
- **SIP ALG** - To allow some multimedia clients to communicate across NAT, click **Enable**.
- **RTSP ALG** - To allow some media player clients to communicate with some streaming media servers across NAT, click **Enable**.

3. Click **Save**.

5.8.2. Advanced Security

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to **Security** > **Advanced Security**, and you can protect the router from being attacked by ICMP-Flood, UDP Flood and TCP-SYN Flood.

Advanced Security

DoS Protection: ☐ Enable ☒ Disable

☐ Enable ICMP-Flood Attack Filtering
ICMP-Flood Packets Threshold (5~3600): packets/second

☐ Enable UDP-Flood Attack Filtering
UDP-Flood Packets Threshold (5~3600): packets/second

☐ Enable TCP-SYN-Flood Attack Filtering
TCP-SYN-Flood Packets Threshold (5~3600): packets/second

☒ Forbid Ping Packet From WAN Port
☐ Forbid Ping Packet From LAN Port

- **DoS Protection** - Denial of Service protection. Select Enable or Disable to enable or disable the DoS protection function. Only when it is enabled, will the flood filters be enabled.

Note:

Dos Protection will take effect only when the Statistics in **System Tools** > **Statistics** is enabled.

- **Enable ICMP-FLOOD Attack Filtering** - Tick the checkbox to enable or disable this function.

- **ICMP-FLOOD Packets Threshold (5~3600)** - The default value is 50. Enter a value between 5 ~ 3600. When the number of the current ICMP-FLOOD packets is beyond the set value, the router will startup the blocking function immediately.
 - **Enable UDP-FLOOD Filtering** - Tick the checkbox to enable this function.
 - **UDP-FLOOD Packets Threshold (5~3600)** - The default value is 500. Enter a value between 5 ~ 3600. When the number of the current UPD-FLOOD packets is beyond the set value, the router will startup the blocking function immediately.
 - **Enable TCP-SYN-FLOOD Attack Filtering** - Tick the checkbox to enable or disable this function.
 - **TCP-SYN-FLOOD Packets Threshold (5~3600)** - The default value is 50. Enter a value between 5 ~ 3600. When the number of the current TCP-SYN-FLOOD packets is beyond the set value, the router will startup the blocking function immediately.
 - **Ignore Ping Packet From WAN Port** - The default setting is disabled. If enabled, the ping packet from the internet cannot access the router.
 - **Forbid Ping Packet From LAN Port** - The default setting is disabled. If enabled, the ping packet from LAN cannot access the router. This function can be used to defend against some viruses.
3. Click **Save**.
 4. Click **Blocked DoS Host List** to display the DoS host table by blocking.

5.9. Parental Controls

Parental Controls allows you to block inappropriate and malicious websites, and control access to specific websites at specific time for your children's devices.

For example, you want the children's PC with the MAC address 00:11:22:33:44:AA can access www.tp-link.com on Saturday only while the parent PC with the MAC address 00:11:22:33:44:BB is without any restriction.

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to **Parental Controls**.
3. Tick the **Enable Parental Controls** checkbox, enter the MAC address 00:11:22:33:44:BB in the **MAC Address of Parental PC** field and then click **Save**.

Parental Controls

Parental Controls can be used to administer all Internet activity including limiting usage and/or access to specific websites to all clients on the network for a specified period of time. The Schedule is based on the time of the Router. The time can be set in "System Tools -> Time Settings".

☒ Enable Parental Controls

MAC Address Of Parental PC:

MAC Address of Current PC: [Copy to Above](#)

4. Enter 00:11:22:33:44:AA in the **MAC Address 1** field.

5. Select **Each Week** from the **Apply To** drop-down list, and select Sat. Select **00:00** as the **Start Time** and Select **24:00** as the **End Time**. And then click **Add**.

6. Enter **www.tp-link.com** in the **Add URL** field. Click **Add**.

7. Click **Save**.

5. 10. Access Control

Access Control is used to deny or allow specific client devices to access your network with access time and content restrictions.

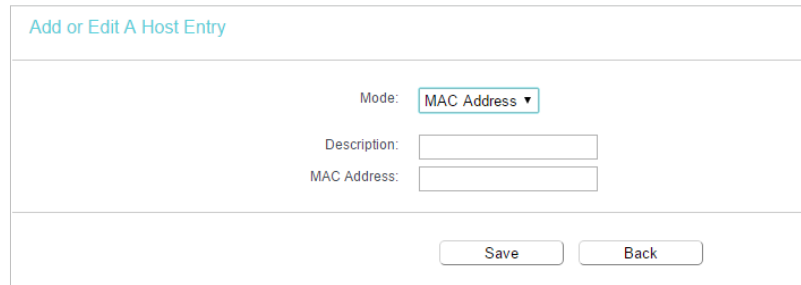
I want to:

Deny or allow specific client devices to access my network with access time and content restrictions.

For example, If you want to restrict the internet activities of host with MAC address 00:11:22:33:44:AA on the LAN to access www.tp-link.com only, please follow the steps below:

How can I do that?

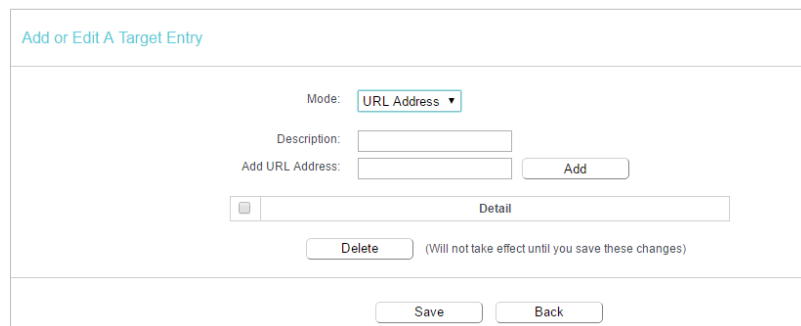
1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Access Control](#) > [Host](#) and configure the host settings:
 - 1) Click [Add New](#).
 - 2) Select [MAC Address](#) as the mode type. Create a unique description (e.g. [host_1](#)) for the host in the [Description](#) field and enter 00-11-22-33-44-AA in the [MAC Address](#) field.



- 3) Click [Save](#).
3. Go to [Access Control](#) > [Target](#) and configure the target settings:
 - 1) Click [Add New](#).
 - 2) Select [URL Address](#) as the mode type. Create a unique description (e.g. [target_1](#)) for the target in the [Target Description](#) field and enter the domain name, either the full name or the keywords (for example TP-Link) in the [Add URL Address](#) field. And then Click [Add](#).

Note:

Any URL address with keywords in it (e.g. [www.tp-link.com](#)) will be blocked or allowed.



- 3) Click [Save](#).
4. Go to [Access Control](#) > [Schedule](#) and configure the schedule settings:
 - 1) Click [Add New](#).
 - 2) Create a unique description (e.g. [schedule_1](#)) for the schedule in the [Schedule Description](#) field and set the day(s) and time period. And then click [Add](#).

Add or Edit A Schedule Entry

The Schedule is based on the time of the Router. The time can be set in "System Tools -> [Time Settings](#)".

Description:

Apply To: Start Time: End Time:

Time	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00
Sun.															
Mon.															
Tues.															
Wed.															
Thur.															
Fri.															
Sat.															

- 3) Click [Save](#).
5. Go to [Access Control](#) > [Rule](#) and add a new access control rule.
 - 1) Click [Add New](#).
 - 2) Give a name for the rule in the [Description](#) field. Select [host_1](#) from the LAN host drop-down list; select [target_1](#) from the target drop-down list; select [schedule_1](#) from the schedule drop-down list.

Add Internet Access Control Entry

Description:

LAN Host: [Add LAN Host](#)

Target: [Add Target](#)

Schedule: [Add Schedule](#)

Rule:

Status:

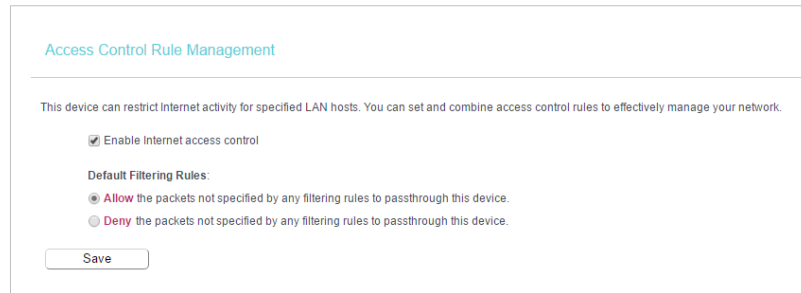
Direction:

- 3) Leave the status as [Enabled](#) as click [Save](#).

Note:

When [Target](#) is set to be [URL Address](#) mode, the [Direction](#) field is [OUT](#) and not editable, which means the host can only visit or is not allowed to visit the URL address you set.

6. Select [Enable Internet Access Control](#) to enable Access Control function.
7. Select [Allow the packets specified by any enabled access control policy to pass through the Router](#) as the default filter policy and click [Save](#).



Access Control Rule Management

This device can restrict Internet activity for specified LAN hosts. You can set and combine access control rules to effectively manage your network.

☒ Enable Internet access control

Default Filtering Rules:

☒ Allow the packets not specified by any filtering rules to passthrough this device.

☐ Deny the packets not specified by any filtering rules to passthrough this device.

Save

Done!

Now only the specific host(s) can visit the target(s) within the scheduled time period.

Note:

When **LAN Host** and **Target** are both set to be the MAC Address mode, you need to set **Protocol**: ALL, TCP, UDP, ICMP. The default setting is **ALL** and it is recommended to keep the default setting.

5. 11. Advanced Routing

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

5. 11. 1. Static Route List

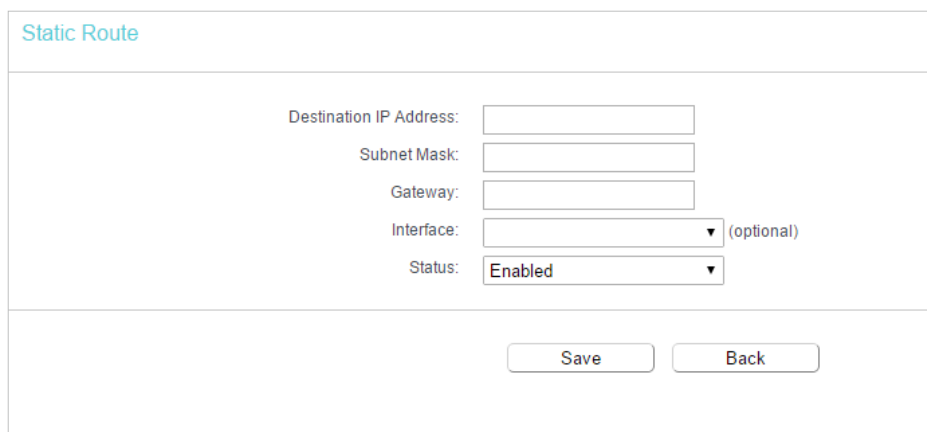
1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.

2. Go to **Advanced Routing > Static Route List**.

- To add static routing entries:**

1. Click **Add New**.

2. Enter the following information.



Static Route

Destination IP Address:

Subnet Mask:

Gateway:

Interface: (optional)

Status:

Save Back

- Destination IP Address** - The Destination Network is the address of the network or host that you want to assign to a static route.

- **Subnet Mask** - The Subnet Mask determines which portion of an IP address is the network portion, and which portion is the host portion.
 - **Gateway** - This is the IP address of the default gateway device that allows the contact between the router and the network or host.
3. Select **Enabled** or **Disabled** for this entry on the **Status** drop-down list.
 4. Click **Save**.

5. 11. 2. System Routing Table

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to **Advanced Routing > System Routing Table**, and you can view all the valid route entries in use.

ID	Destination Network	Subnet Mask	Gateway	Interface
1	192.168.0.0	255.255.255.0	0.0.0.0	LAN & WLAN

[Refresh](#)

- **Destination Network** - The Destination Network is the address of the network or host to which the static route is assigned.
- **Subnet Mask** - The Subnet Mask determines which portion of an IP address is the network portion, and which portion is the host portion.
- **Gateway** - This is the IP address of the gateway device that allows for contact between the Router and the network or host.
- **Interface** - This interface tells you whether the Destination IP Address is on the LAN & WLAN (internal wired and wireless networks), or the WAN (Internet).

Click **Refresh** to refresh the data displayed.

5. 12. Bandwidth Control

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to **Bandwidth Control**.
3. Tick the **Enable Bandwidth Control** checkbox, and configure the **Egress Bandwidth** and **Ingress Bandwidth**, and then click **Save**. The **Egress/Ingress Bandwidth** is the upload/download speed through the WAN port. The value should be less than 100,000Kbps.

Bandwidth Control

☒ Enable Bandwidth Control

Egress Bandwidth: Kbps

Ingress Bandwidth: Kbps

4. Click [Add New](#), fill in the blanks and click [Save](#).

Bandwidth Control

Enable: ☒

IP Range: --

Port Range: --

Protocol:

Priority: (1 meaning highest priority)

	Min Bandwidth(Kbps)	Max Bandwidth(Kbps)
Egress Bandwidth:		
Ingress Bandwidth:		

- **IP Range** - Interior PC address range. If both are blank or 0.0.0.0, the domain is noneffective.
- **Port Range** - The port range which the Interior PC access the outside PC. If all are blank or 0, the domain is noneffective.
- **Protocol** - Transport layer protocol, here there are ALL, TCP, UDP.
- **Priority** - Priority of Bandwidth Control rules. '1' stands for the highest priority while '8' stands for the lowest priority. The total Upstream/ Downstream Bandwidth is first allocated to guarantee all the Min Rate of Bandwidth Control rules. If there is any bandwidth left, it is first allocated to the rule with the highest priority, then to the rule with the second highest priority, and so on.
- **Egress Bandwidth** - The max and the min upload speed through the WAN port.
- **Ingress Bandwidth** - The max and the min download speed through the WAN port.

5. 13. IP & MAC Binding

IP & MAC Binding, namely, ARP (Address Resolution Protocol) Binding, is used to bind a network device's IP address to its MAC address. This will prevent ARP spoofing and other ARP attacks by denying network access to a device with a matching IP address in the ARP list, but with an unrecognized MAC address.

5.13.1. Binding Settings

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to **IP & MAC Binding > Binding Settings**.
3. Select **Enable** for ARP Binding and click **Save**.

Binding Settings

ARP Binding: ☒ Enable ☐ Disable Save

- **To add IP & MAC Binding entries:**

1. Click **Add New**.
2. Enter the MAC address and IP address.
3. Tick the **Bind** checkbox and click **Save**.

Binding Settings

This page allows you to set IP-MAC Binding entries.

MAC Address:

IP Address:

Bind: ☒

Save Back

- **To modify or delete an existing entry:**

1. Select the desired entry in the table.
2. Click **Edit** or **Delete Selected**.

5.13.2. ARP List

To manage a device, you can observe the device on the LAN by checking its MAC address and IP address on the ARP list, and you can also configure the items. This page displays the ARP list which shows all the existing IP & MAC Binding entries.

ARP List

☐	MAC Address	IP Address	Status
☐	00:E0:4C:00:07:BE	192.168.0.4	Bound
☐	40:8D:5C:89:74:B5	192.168.0.100	Unloaded

Load Selected Delete Selected

Refresh