- • 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.

- • RTSP ALG - To allow some media player clients to communicate with some streaming media servers across NAT, click Enable.

- • SIP ALG - To allow some multimedia clients to communicate across NAT, click Enable.

3. Click Save.

## 4. 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.



- • 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 Tool > Statistics is enabled.

- • Enable ICMP-FLOOD Attack Filtering -Check the box 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** - Check the box to enable or disable 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** -Check the box 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.

- **Forbid Ping Packet From WAN Port** - The default setting is enable. If disabled, the ping packet from the internet can 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.

## 4. 8. 3.    Local Management

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

2. Go to Security > Local Management, and you can block computers in LAN from accessing the router.



For example, if you want to allow PCs with specific MAC addresses to access the router's web management page locally from inside the network, please follow the instructions below:
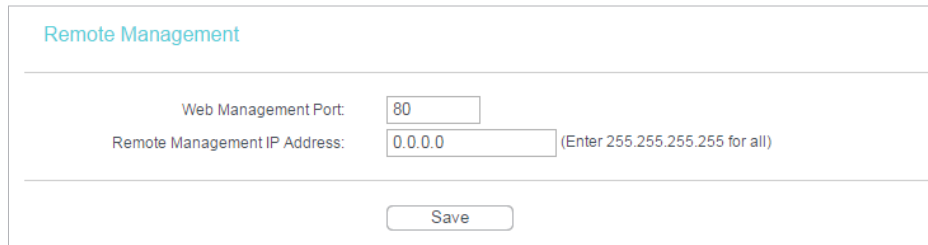
1 ) Select Only the PCs listed can browse the built-in web pages to perform Administrator tasks.

2 ) Enter the MAC address of each PC separately. The format of the MAC address is XX-XX-XX-XX-XX-XX (X is any hexadecimal digit). Only the PCs with the listed MAC addresses can use the password to browse the built-in web pages to perform administrator tasks.

3 ) Click Add, and your PC's MAC address will also be listed.

4 ) Click Save.

*Tips:*
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.

## 4. 8. 4.    Remote Management

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

2. Go to Security > Remote Management, and you can manage your router from a remote device via the internet.

Remote Management

| | |
|---|---|
| Web Management Port: | 80 |
| Remote Management IP Address: | 0.0.0.0    (Enter 255.255.255.255 for all) |

Save

- Web Management Port - Web browser access normally uses the standard HTTP service port 80. This router's default remote management web port number is 80. For higher security, you can change the remote management web port to a custom port by entering a number between 1 and 65534 but do not use the number of any common service port.

- Remote Management IP Address - This is the address you will use when accessing your router via a remote device. This function is disabled when the IP address is set to the default value of 0.0.0.0. To enable this function, change 0.0.0.0 to a valid IP address. If it is set to 255.255.255.255, then all the remote devices can access the router from the internet.

*Tips:*
- 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. 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. Check the Enable Parental Controls box and enter the MAC address 00:11:22:33:44:BB in the MAC Address of Parental PC field.

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

5. Create a new schedule with Day is Sat and Time is all day-24 hours. Click Add

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

7. Click Save.

Then you will see the page as shown in figure below.
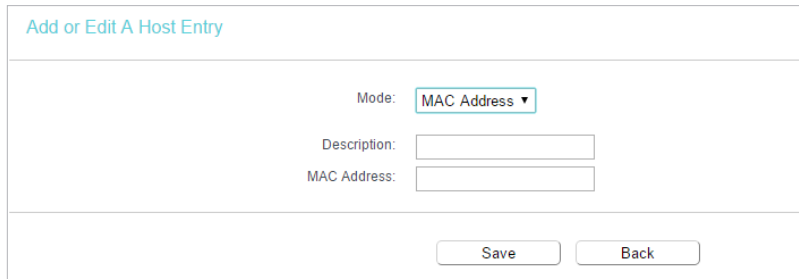
# 4. 10.  Access Control

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 tiem 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 filed.

   | Add or Edit A Host Entry |
   | --- |
   | Mode: MAC Address ▾ |
   | Description: |
   | MAC Address: |
   | Save     Back |

   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.

   **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.



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.

3 ) Leave the status as Enabled as click Save.

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.



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

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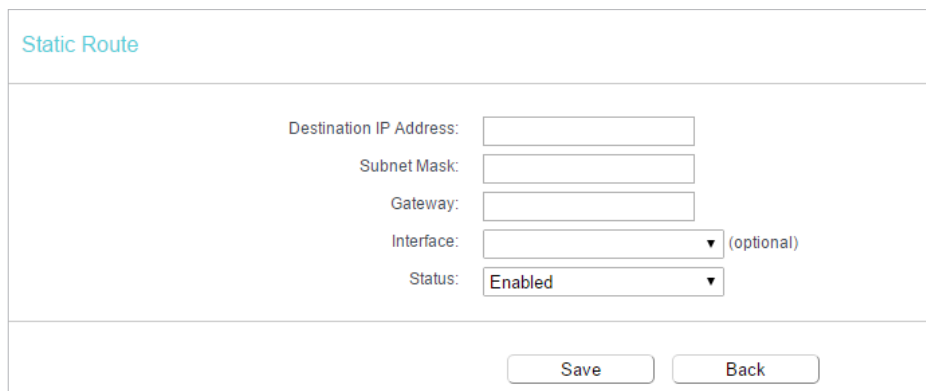
Static Routing is a form of routing that is configured manually by a network administrator or a user by adding entries into a routing table. The manually-configured routing information guides the router in forwarding data packets to the specific destination.

## 4. 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.

Static Route

|                          |                                |
|--------------------------|--------------------------------|
| Destination IP Address:  |                                |
| Subnet Mask:             |                                |
| Gateway:                 |                                |
| Interface:               | ▾ (optional)                   |
| Status:                  | Enabled ▾                      |

Save          Back

2. Enter the following information.

- 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.

You can also do the following operations to modify the current settings.

• Click Delete to delete the entry.

• Click Enable All to enable all the entries.

• Click Disable All to disable all the entries.

• Click Delete All to delete all the entries.

• Click Previous to view the information on the previous screen and Next to view the information on the next screen.

## 4. 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.

System Routing Table

| 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.

# 4. 12.  Bandwidth Control

## 4. 12. 1.  Control Settings

1. Visit http://tplinkwifi.net, and log in with the username and password you set for the router.
2. Go to Bandwidth Control.
3. Configure the bandwidth as needed and click Save.

Bandwidth Control

☑ Enable Bandwidth Control

Egress Bandwidth:     512         Kbps
Ingress Bandwidth:    2048        Kbps

Save

The values you configure for the Egress Bandwidth and Ingress Bandwidth should be less than 100,000Kbps. For optimal control of the bandwidth, please select the right Line Type and consult your ISP for the total egress and ingress bandwidth.

- Enable Bandwidth Control - Check this box so that the Bandwidth Control settings can take effect.
- Egress Bandwidth - The upload speed through the WAN port.
- Ingress Bandwidth - The download speed through the WAN port.

## 4. 12. 2.   Rule List

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

2. Go to Bandwidth Control and you can view and configure the Bandwidth Control rules.

| | Description | Priority | Egress Bandwidth | | Ingress Bandwidth | | Status | Edit |
|---|---|---|---|---|---|---|---|---|
| | | | Min | Max | Min | Max | | |

Add New    Enable Selected    Disable Selected    Delete Selected

- Description - This is the information about the rules such as address range.
- Egress Bandwidth - This field displays the max and min upload bandwidth through the WAN port. The default is 0.
- Ingress Bandwidth - This field displays the max and min download bandwidth through the WAN port. The default is 0.
- Status - This field displays the status of the rule.
- Modify - Click Modify/Delete to edit/delete the rule.

➢   **To add a Bandwidth control rule:**

1. Click Add New.

2. Enter the information as the figure shown below.

**Bandwidth Control**

| | |
|---|---|
| Enable: | ☑ |
| IP Range: | [        ] -- [        ] |
| Port Range: | [        ] -- [        ] |
| Protocol: | ALL ▼ |
| Priority: | 5 ▼ (1 meaning highest priority) |

| | Min Bandwidth(Kbps) | Max Bandwidth(Kbps) |
|---|---|---|
| Egress Bandwidth: | [        ] | [        ] |
| Ingress Bandwidth: | [        ] | [        ] |

Save    Back
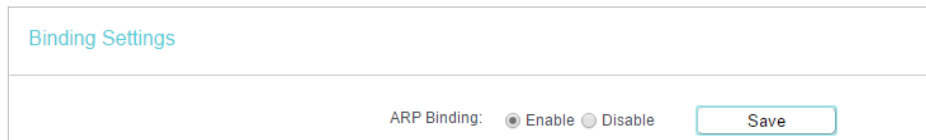
3. Click Save.

# 4. 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.

## 4. 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.
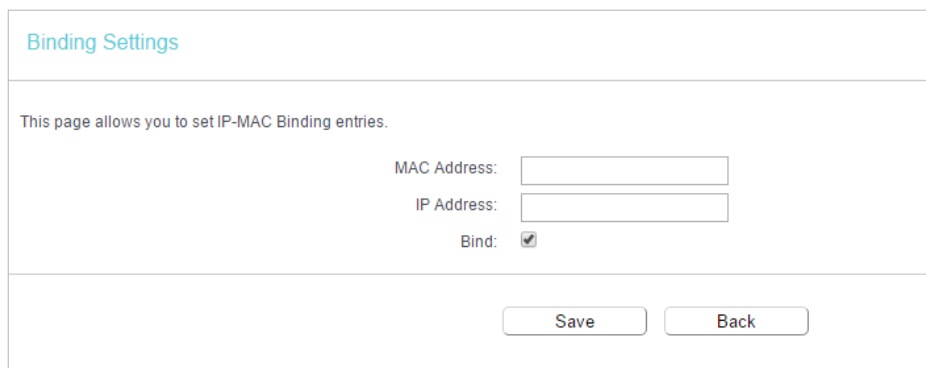
Binding Settings

ARP Binding:   ⦿ Enable  ◯ Disable        Save

4. Click Save.

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

1. Click Add New.

2. Select the Bind checkbox.

Binding Settings

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

MAC Address: _____

IP Address: _____

Bind:   ☑

Save        Back

3. Enter the MAC address and IP address.

4. Click Save.

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

1. Select the desired entry in the table.

2. Click Edit or Delete Selected.

## 4. 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.

| | 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 |

ARP List

[ Load Selected ]   [ Delete Selected ]

[ Refresh ]

- MAC Address - The MAC address of the listed computer on the LAN.
- IP Address - The assigned IP address of the listed computer on the LAN.
- Status - Indicates whether or not the MAC and IP addresses are bound.
- Configure - Load or delete an item.
    - Load - Load the item to the IP & MAC Binding list.
    - Delete - Delete the item.
- Click the Load Selected button to load the selected items to the IP & MAC Binding list.
- Click the Delete Selected button to delete the selected items to the IP & MAC Binding list.
- Click the Refresh button to refresh all items.

⚑ Note:
An item can not be loaded to the IP & MAC Binding list if the IP address of the item has been loaded before. Error warning will prompt as well. Likewise, Load All only loads the items without interference to the IP & MAC Binding list.
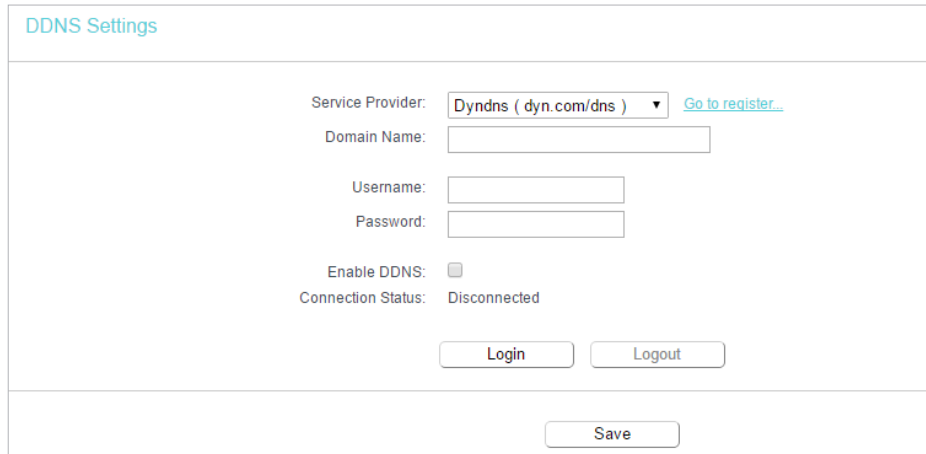
# 4. 14.  Dynamic DNS

The router offers the DDNS (Dynamic Domain Name System) feature, which allows the hosting of a website, FTP server, or e-mail server with a fixed domain name (named by yourself) and a dynamic IP address. Thus your friends can connect to your server by entering your domain name no matter what your IP address is. Before using this feature, you need to sign up for DDNS service providers such as www.comexe.cn,

www.dyndns.org, or www.noip.com. The Dynamic DNS client service provider will give you a password or key.

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

2. Go to Dynamic DNS.

## Dyndns DDNS

If the dynamic DNS Service Provider you select is www.dyn.com, the following page will appear.

| DDNS Settings |
|---|
| Service Provider: Dyndns ( dyn.com/dns ) ▾   Go to register... |
| Domain Name: |
| Username: |
| Password: |
| Enable DDNS: ☐ |
| Connection Status: Disconnected |
| Login    Logout |
| Save |

To set up for DDNS, follow these instructions:

1. Enter the Domain Name you received from dynamic DNS service provider here.

2. Enter the User Name for your DDNS account.

3. Enter the Password for your DDNS account.

4. Click Login.

5. Click Save.

• Connection Status - The status of the DDNS service connection is displayed here.

• Logout - Click Logout to log out of the DDNS service.

## No-ip DDNS

If the dynamic DNS Service Provider you select is www.noip.com, the following page will appear.

| DDNS Settings |
|---|
| Service Provider: No-IP ( www.noip.com ) ▾   Go to register... |
| Domain Name: |
| Username: |
| Password: |
| Enable DDNS: ☐ |
| Connection Status: Disconnected |
| Login    Logout |
| Save |

To set up for DDNS, follow these instructions:

1. Enter the Domain Name you received from dynamic DNS service provider.

2. Enter the User Name for your DDNS account.

3. Enter the Password for your DDNS account.

4. Click Login.

5. Click Save.

• Connection Status - The status of the DDNS service connection is displayed here.

• Logout - Click Logout to log out of the DDNS service.

## Comexe DDNS

If the dynamic DNS Service Provider you select is www.comexe.cn, the following page will appear.

DDNS Settings

| | |
|---|---|
| Service Provider: | Comexe ( www.comexe.cr ▼ )    Go to register... |
| Domain Name1: | |
| Domain Name2: | |
| Domain Name3: | |
| Domain Name4: | |
| Domain Name5: | |
| Username: | |
| Password: | |
| Enable DDNS: | ☐ |
| Connection Status: | Disconnected |

Login          Logout

Save
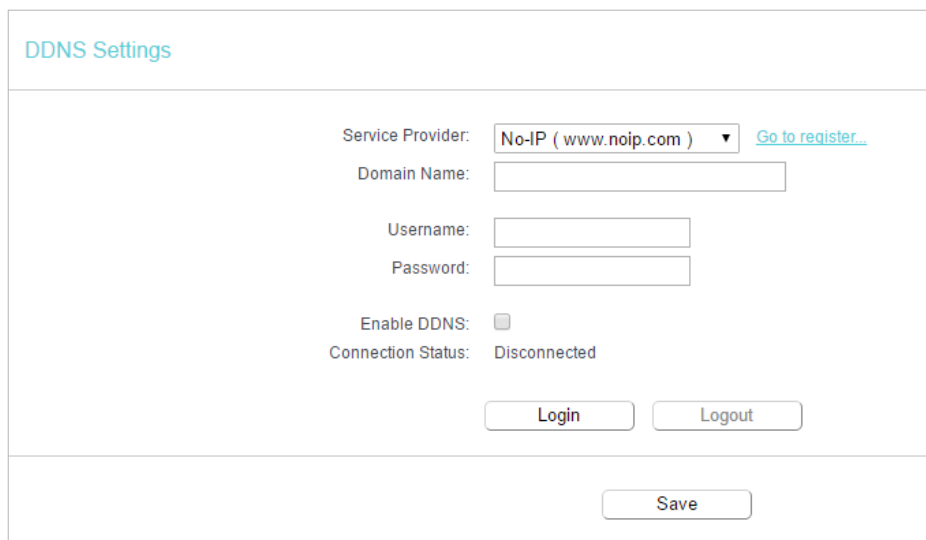
To set up for DDNS, follow these instructions:

1. Enter the Domain Name received from your dynamic DNS service provider.

2. Enter the User Name for your DDNS account.

3. Enter the Password for your DDNS account.

4. Click Login.

5. Click Save.

• Connection Status - The status of the DDNS service connection is displayed here.

• Logout - Click Logout to log out of the DDNS service.

## 4. 15.   IPv6

This function allows you to enable IPv6 function and set up the parameters of the router's Wide Area Network (WAN) and Local Area Network (LAN).

### 4. 15. 1.   IPv6 Status

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

2.  Go to IPv6 > IPv6 Status, and you can view the current IPv6 status information of the router.

IPv6 Status

**WAN**

| | |
|---|---|
| Connection Type: | DHCPv6 |
| IPv6 Address: | |
| IPv6 Default Gateway: | |
| Primary IPv6 DNS: | |
| Secondary IPv6 DNS: | |

**LAN**

| | |
|---|---|
| IPv6 Address Assign Type: | RADVD |
| IPv6 Address: | |
| Link-local Address: | fe80::e4a:8ff:fe45:f360/64 |

• WAN - This section shows the current IPv6 information of the router's WAN port, including Connection Type, IPv6 Address information, IPv6 Default Gateway, Primary IPv6 DNS and Secondary IPv6 DNS.

• LAN - This section shows the current IPv6 information of the router's LAN port, including IPv6 Address Assign Type, IPv6 Address and Link-local Address.

### 4. 15. 2.   IPv6 WAN

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

2.  Go to IPv6 > IPv6 WAN.

3.  Select the WAN Connection Type according to your ISP network topolopy:

    •   Dynamic IPv6 - Connections which use dynamic IPv6 address assignment.

    •   Static IPv6 - Connections which use static IPv6 address assignment.

    •   PPPoEv6 - Connections which use PPPoEV6 that requires a username and password.

    •   Tunnel 6to4 - Connections which use 6to4 address assignment.

## Dynamic IPv6



    •   IPv6 Address - The IPv6 address assigned by your ISP dynamically.

    •   Prefix Length - The length of IPv6 address prefix.

    •   IPv6 Gateway - Enter the default gateway provided by your ISP.

    •   Addressing Type - There are two types of assignation for IPv6 address: SLAAC (Stateless address auto-configuration) and DHCPv6 (Dynamic Host Configuration Protocol for IPv6) Server.

- **MTU(Bytes)** - The normal MTU (Maximum Transmission Unit) value for most Ethernet networks is 1500 Bytes. For some ISPs, you may need to modify the MTU. But this is rarely required, and should not be done unless you are sure it is necessary for your ISP connection.
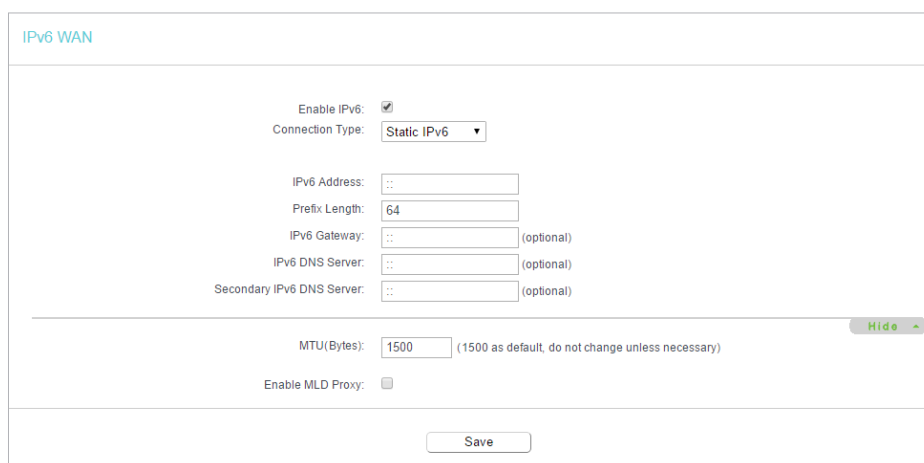
If your ISP gives you one or two DNS IPv6 addresses, select Set IPv6 DNS Server manually and enter the IPv6 DNS Server and Secondary IPv6 DNS Server into the correct fields. Otherwise, the DNS servers will be assigned from ISP dynamically.

- **Enable MLD Proxy** - Enable the Multicast Listener Discovery (MLD) Proxy function if you need.

- **IPv6 DNS Server** - Enter the DNS IPv6 address provided by your ISP.

- **Secondary IPv6 DNS Server** - Enter another DNS IPv6 address provided by your ISP.

✎ Tips:

If you get Address not found error when you access a website, it is likely that your DNS servers are set up improperly. You should contact your ISP to get DNS server addresses.

## Static IPv6

IPv6 WAN

| | |
|---|---|
| Enable IPv6: | ☑ |
| Connection Type: | Static IPv6 ▾ |
| IPv6 Address: | :: |
| Prefix Length: | 64 |
| IPv6 Gateway: | :: (optional) |
| IPv6 DNS Server: | :: (optional) |
| Secondary IPv6 DNS Server: | :: (optional) |
| | Hide ▲ |
| MTU(Bytes): | 1500 (1500 as default, do not change unless necessary) |
| Enable MLD Proxy: | ☐ |
| | Save |

- **IPv6 Address** - Enter the IPv6 address provided by your ISP.

- **Prefix Length** - The length of IPv6 address prefix.

- **IPv6 Gateway** - Enter the default gateway provided by your ISP.

- **IPv6 DNS Server**- Enter the DNS IPv6 address provided by your ISP.

- **Secondary IPv6 DNS Server** - Enter another DNS IPv6 address provided by your ISP.

- **MTU(Bytes)** - The normal MTU (Maximum Transmission Unit) value for most Ethernet networks is 1500 Bytes. For some ISPs, you may need to modify the MTU. But this is rarely required, and should not be done unless you are sure it is necessary for your ISP connection.

- **Enable MLD Proxy** - Enable the Multicast Listener Discovery (MLD) Proxy function if you need.

## PPPoEv6



- **PPP Username/Password** - Enter the User Name and Password provided by your ISP. These fields are case-sensitive.

- **Authentication Type** – Choose one authentication type from AUTO-AUTH, PAP, CHAP and MS-CHAP.

- **Addressing Type** - There are two types of assignation for IPv6 address: SLAAC (Stateless address auto-configuration) and DHCPv6 (Dynamic Host Configuration Protocol for IPv6) Server.

- **MTU(Bytes)** - The normal MTU (Maximum Transmission Unit) value for most Ethernet networks is 1480 Bytes. It is not recommended that you change the default MTU size unless required by your ISP.

- **Enable MLD Proxy** - Enable the Multicast Listener Discovery (MLD) Proxy function if you need.

- **Use IPv6 address specified by ISP** - Input a static IPv6 address from the ISP.

- **Set IPv6 DNS Server manually** - Enter the IP address of the IPv6 DNS server and secondary IPv6 DNS server.

## Tunnel 6to4

IPv6 WAN

|  |  |
| --- | --- |
| Enable IPv6: | ☑ |
| Connection Type: | Tunnel 6to4 ▼ |
| WAN Connection: | |

Save

- WAN Connection - Display the available WAN connection.

4. Click Save.

## 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.

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 RDNSS: | ☐ |
| Enable ULA Prefix: | ☐ |
| Site Prefix Configuration Type: | ◉ Delegated ⚪ Static |
| Prefix Delegated WAN Connection: | ewan_ipoev6_d |

3. Select the Address Autoconfiguration Type which determines the way how the router assigns IPv6 address for PCs on the LAN:

- Address Autoconfiguration Type - RADAD (Router Advertisement Daemon) and DHCPv6 (Dynamic Host Configuration Protocol for IPv6) Server.

- 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.

*Tips:* 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. Click Save.

# 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.

Time Settings

Time Settings:

| | |
|---|---|
| Time Zone: | (GMT-08:00) Pacific Time (US & Canada); Tijuana ▼ |
| Date: | 1970 Year  1 Month  1 Day |
| Time | 0 Hour  42 Minute  40 Second  Get from PC |
| NTP Server 1: | (optional) |
| NTP Server 2: | (optional) |
| Get GMT | (Only when the Internet connection is active). |
| | Save |

➢ **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 I or NTP Server II.

7. Click Get GMT to get time from the internet if you have connected to the internet.

60

➢   **To set Daylight Saving Time:**

1. Select Enable DaylightSaving.

2. Select the start time from the drop-down list in the Start field.

3. Select the end time from the drop-down list in the End field.

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      Start |
| IP address/Domain name: | |
| Ping Count: | 4     ping(1 - 50) |
| Ping Packet Size: | 64     (0 - 65500 Bytes) |
| Ping Timeout: | 1     (1 - 60 Seconds) |
| Traceroute Max TTL: | 20     (1 - 30) |

Diagnostic Results

- 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.
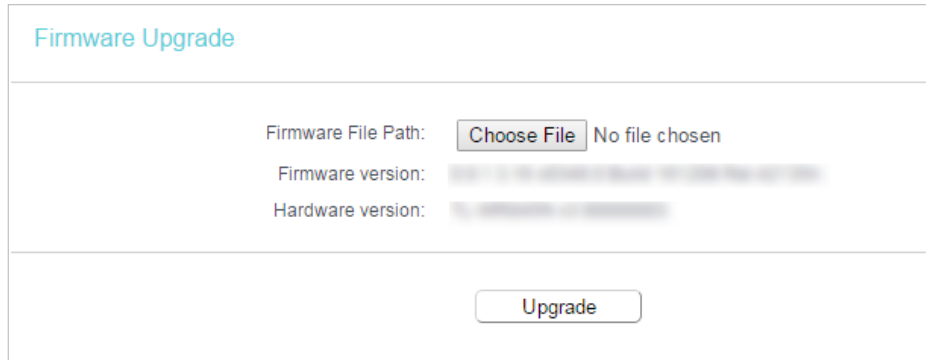


**Note:** Only one user can use this tool at one time. Options "Number of Pings", "Ping Size" and "Ping Timeout" are used for the Ping function. Option "Tracert Hops" is used for the Tracert function.

## 4. 16. 3.   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.
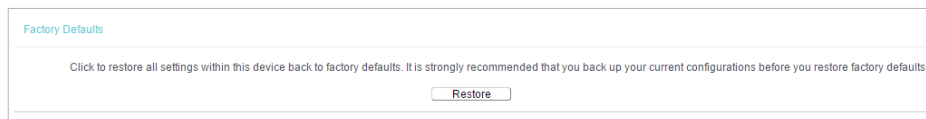
1. Download the latest firmware file for the router from our website www.tp-link.com.

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.
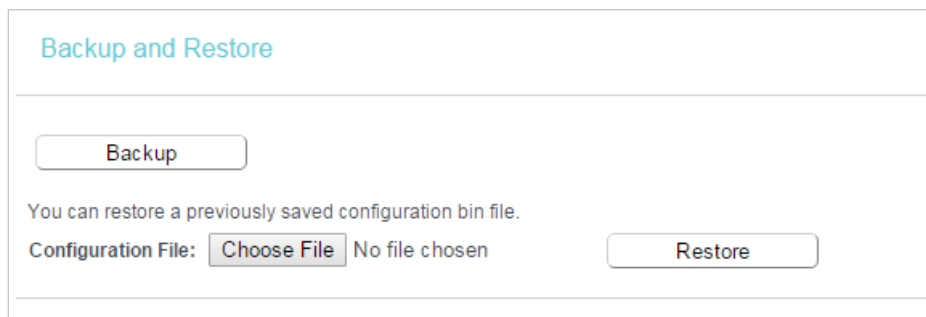
Factory Defaults

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]

- The default Username: admin
- The default Password: admin
- The default IP Address: 192.168.0.1
- The 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.

Backup and Restore

[Backup]

You can restore a previously saved configuration bin file.

Configuration File:    [Choose File] No file chosen                    [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

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

2. Go to System Tools > Reboot, and you can restart your router.

| System Reboot |
| --- |
| Click Reboot to restart the device without applying any changes to your current settings.<br><br>Reboot |
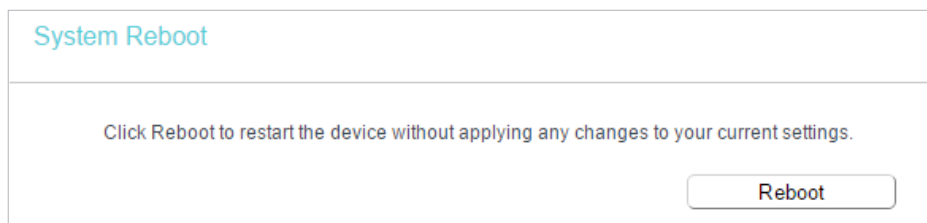
Some settings of the router will take effect only after rebooting, including:

• 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).

## 4. 16. 7.   Password

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

2. Go to System Tools > Password, and you can change the factory default username and password of the router.

Password

Username and password can contain between 1 - 15 characters and may not include spaces.

Old User Name:

Old Password:

New User Name:

New Password:

Confirm password:

Save          Clear All

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.  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

- Loge 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. 17.  Log Out

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

# FAQ

## Q1. What should I do if I forget my wireless password?

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

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

2. Go to Wireless > Wireless Security to retrieve or reset your wireless password.

## Q2. 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 router to factory default settings: press and hold the Reset button for about 7 seconds and then release;

2. Visit http://tplinkwifi.net, and enter admin (in lowercase) as both username and password to log in.

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

## Q3. What should I do if I cannot log in to the router's web management page?

1. This can happen for a variety of reasons. Please try the methods below to log in again.

• Make sure your computerthe has connected to the router correctly and the corresponding LED light up.

• Make sure the IP address of your computer is configured as Obtain an IP address automatically and Obtain DNS server address automatically.

2. Make sure  you enter the correct IP address to log in: http://tplinkwifi.net.

• Check your computer's settings:

3. Go to Start > Control Panel > Network and Internet, and click View network status and tasks.

   1 )  Click Internet Options on the bottom left.

   2 )  Click Connections and select Never dial a connection.
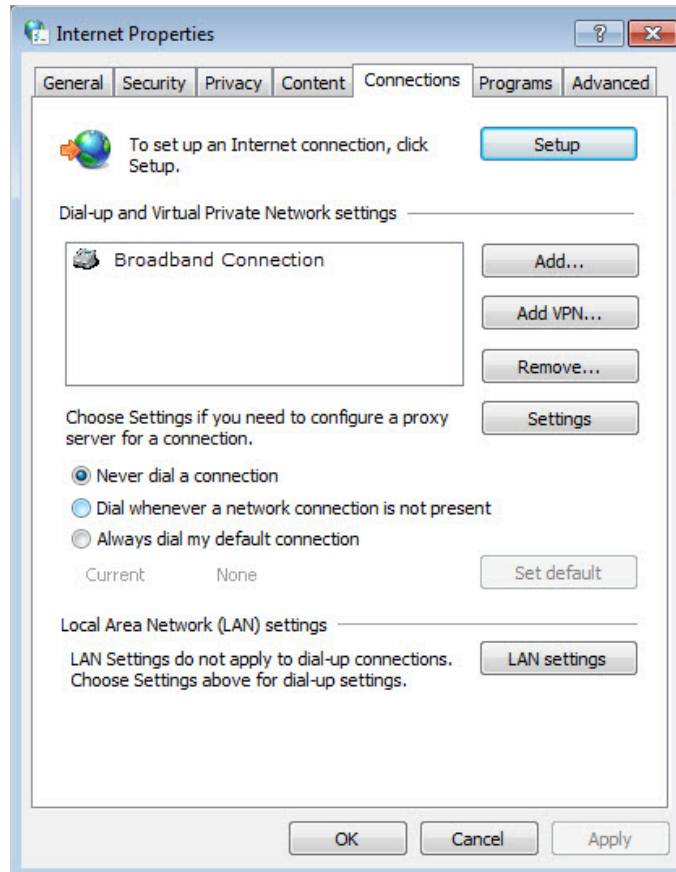
3 ) Click LAN settings and deselect the following three options, and click OK.
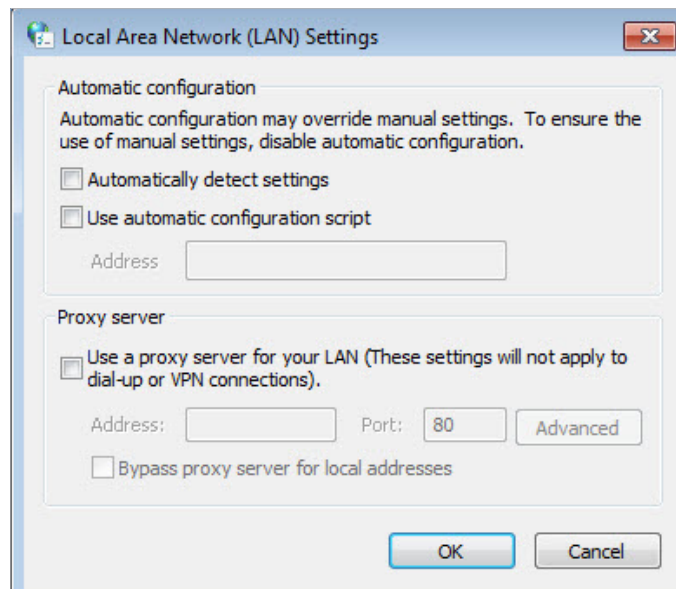
4 ) Go to Advanced > Restore advanced settings, and click OK to save the settings.
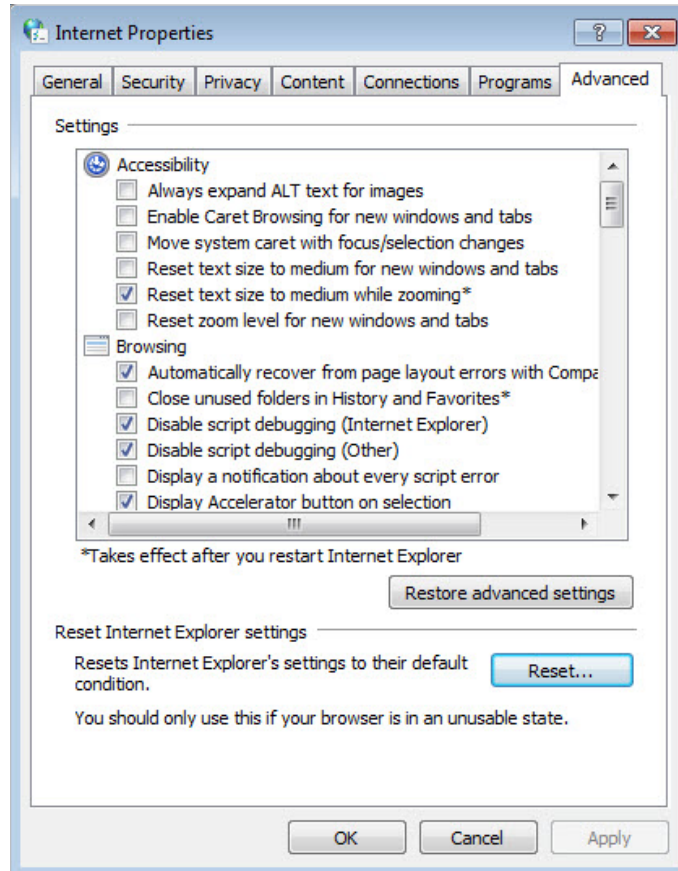


- Use another web browser or computer to log in again.
- Reset the router to factory default settings and try again. If the login still fails, please contact the technical support.

  🔖 Note: You'll need to reconfigure the router to surf the internet once the router is reset.

## Q4. How do I use the WDS Bridging function to extend my wireless network?

For example, my house covers a large area. The wireless coverage of the router I'm using (the root router) is limited. I want to use an extended router to extend the wireless network of the root router.

🔖 Note: WDS bridging only requires configuration on the extended router.

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

2. Configure the IP address of the router:

   1 ) Go to Network > LAN, configure the IP address of the extended router to be in the same subnet with the root router; (For example, the IP address of the root router is 192.168.0.1, the IP address of the extended router can be 192.168.0.2~192.168.0.254. We take 192.168.0.2 as example.)

2 ) Click Save.

**Note:** Log in to the web management page again if the IP address of the router is altered.

```
LAN

         MAC Address:    0C-4A-08-45-F3-60
          IP Address:    192.168.0.1
         Subnet Mask:    255.255.255.0 ▾
          IGMP Proxy:    Enable ▾
                         Note:IGMP(Internet Group Management Protocol) works for IPTV multicast stream.The device supports both IGMP proxy with
                         enabled/disabled option and IGMP snooping.

                                   Save
```

3. Survey the SSID to be bridged:

   1 ) Go to Wireless > Wireless Settings and click Enable WDS Bridging.

   2 ) Click Survey, locate the root router's SSID and click Choose (Here we take TP-Link_2512 as example).

   3 ) If the root router is set with a wireless password, you should enter the wireless password of the root router.

   4 ) Click Save.

```
Wireless Settings

       Wireless Network Name:    [          ]        (Also called the SSID)
                         Mode:   11bgn mixed        ▾
                Channel Width:   Auto    ▾
                      Channel:   Auto    ▾

                                 ☑  Enable Wireless Router Radio
                                 ☑  Enable SSID Broadcast
                                 ☑  Enable WDS Bridging

          SSID (to be bridged):  [                        ]
         BSSID (to be bridged):  [            ]  Example:00-1D-0F-11-22-33
                                       Survey
                    WDS Mode:    Auto    ▾
                     Key type:   None               ▾
                    WEP Index:   1                  ▾
                    Auth type:   open               ▾
                    Password:    [                ]

                                       Save
```

4. Disable DHCP:

   1 ) Go to DHCP, select Disable, and click Save.

Now you can go to Status to check the WDS status. When the WDS status is Run, it means WDS bridging is successfully built.

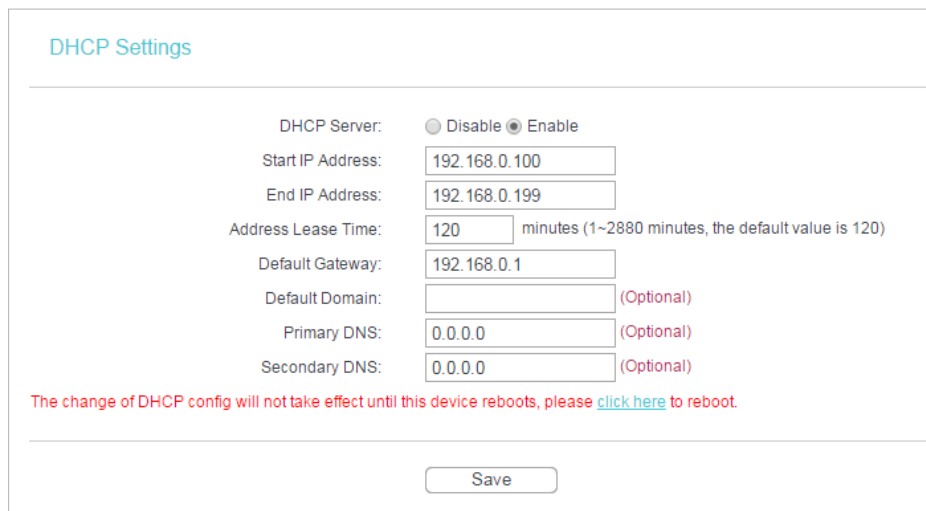## Q5. What should I do if I cannot access the internet even though the configuration is finished?

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

2.  Go to Status to check WAN status:

**If IP Address is a valid one, please try the methods below and try again:**

•  Your computer might not recognize any DNS server addresses, please manually configure DNS server.

   1 )  Go to DHCP.

   2 )  Enter 8.8.8.8 as Primary DNS, and click Save.

   > *Tips:* 8.8.8.8 is a safe and public DNS server operated by Google.

<div style="border:1px solid #ccc; padding:10px;">

**DHCP Settings**

| | |
|---|---|
| DHCP Server: | ◯ Disable ⦿ Enable |
| Start IP Address: | 192.168.0.100 |
| End IP Address: | 192.168.0.199 |
| Address Lease Time: | 120   minutes (1~2880 minutes, the default value is 120) |
| Default Gateway: | 192.168.0.1 |
| Default Domain: | (Optional) |
| Primary DNS: | 0.0.0.0   (Optional) |
| Secondary DNS: | 0.0.0.0   (Optional) |
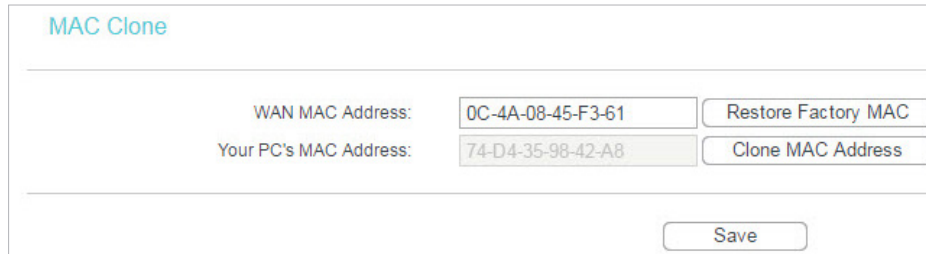
The change of DHCP config will not take effect until this device reboots, please click here to reboot.

Save

</div>

•  Restart the modem and the router.

   1 )  Power off your modem and the router, and leave them off for 1 minute.

   2 )  Power on your modem first, and wait about 2 minutes.

   3 )  Power on the router, and wait another 1 or 2 minutes and check the internet access.

•  Reset the router to factory default settings and reconfigure the router.

•  Upgrade the firmware of the router.

•  Check the TCP/IP settings on the particular device if all other devices can get internet from the router.

**If the IP Address is 0.0.0.0, please try the methods below and try again:**

•  Make sure the physical connection between the router and the modem is proper.

•  Clone the MAC address of your computer.

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

2 ) Go to Network > MAC Clone, select Clone MAC Address and click Save.

**MAC Clone**

| | | |
|---|---|---|
| WAN MAC Address: | 0C-4A-08-45-F3-61 | Restore Factory MAC |
| Your PC's MAC Address: | 74-D4-35-98-42-A8 | Clone MAC Address |

Save

🔖 Tips:
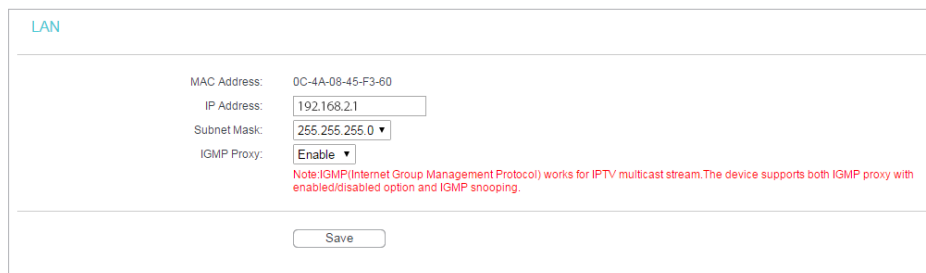- Some ISP will register the MAC address of your computer when you access the internet for the first time through their Cable modem, if you add a router into your network to share your internet connection, the ISP will not accept it as the MAC address is changed, so we need to clone your computer's MAC address to the router.
- The MAC addresses of a computer in wired connection and wireless connection are different.

- Modify the LAN IP address of the router.

  🔖 Note:

  Most TP-Link routers use 192.168.0.1/192.168.1.1 as their default LAN IP address, it may conflict with the IP range of your existent ADSL modem/router. If so, the router is not able to communicate with your modem and cause you can't access the internet. To resolve this problem, we need to change the LAN IP address of the router to avoid such conflict, for example, 192.168.2.1.

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

  2 ) Go to Network > LAN.

  3 ) Modify the LAN IP address as the follow picture shows. Here we take 192.168.2.1 as an example.

  4 ) Click Save.

  **LAN**

  | | |
  |---|---|
  | MAC Address: | 0C-4A-08-45-F3-60 |
  | IP Address: | 192.168.2.1 |
  | Subnet Mask: | 255.255.255.0 ▾ |
  | IGMP Proxy: | Enable ▾ |

  Note:IGMP(Internet Group Management Protocol) works for IPTV multicast stream.The device supports both IGMP proxy with enabled/disabled option and IGMP snooping.

  Save

- Restart the modem and the router.

  1 ) Power off your modem and the router, and leave them off for 1 minute.

  2 ) Power on your modem first, and wait about 2 minutes.

  3 ) Power on the router, and wait another 1 or 2 minutes and check the internet access.

- Double check the internet Connection Type.

  1 ) Confirm your internet Connection Type, which can be learned from the ISP.

  2 ) Visit http://tplinkwifi.net, and log in with the username and password you set for the router.

  3 ) Go to Network > WAN.

  4 ) Select your WAN Connection Type and fill in other parameters.

  5 ) Click Save.

WAN

| | |
|---|---|
| WAN Connection Type: | Dynamic IP ▼  Detect |
| IP Address: | 0.0.0.0 |
| Subnet Mask: | 0.0.0.0 |
| Default Gateway: | 0.0.0.0 |
| | Renew    Release |
| MTU Size (in bytes): | 1500   (The default is 1500, do not change unless necessary.) |
| | ☐ Use These DNS Servers |
| Primary DNS: | 0.0.0.0 |
| Secondary DNS: | 0.0.0.0   (Optional) |
| Host Name: | TL-WR841N |
| | ☐ Get IP with Unicast DHCP (It is usually not required.) |
| | Save |

  6 ) Restart the modem and the router.

- Please upgrade the firmware of the router.

If you've tried every method above but cannot access the internet, please contact the technical support.

## Q6. What should I do if I cannot find my wireless network or I cannot connect the wireless network?

**If you fail to find any wireless network, please follow the steps below:**

- Make sure the wireless function of your device is enabled if you're using a laptop with a built-in wireless adapter. You can refer to the relevant document or contact the laptop manufacturer.

- Make sure the wireless adapter driver is installed successfully and the wireless adapter is enabled.

- **On Windows 7**

1 ) If you see the message No connections are available, it is usually because the wireless function is disabled or blocked somehow.

2 ) Clicking Troubleshoot and windows might be able to fix the problem by itself.

- **On Windows XP**

1 ) If you see the message Windows cannot configure this wireless connection, this is usually because windows configuration utility is disabled or you are running another wireless configuration tool to connect the wireless.

2 ) Exit the wireless configuration tool (the TP-Link Utility, for example).

3 ) Select and right click My Computer on Desktop, and select Manage to open Computer Management window.

4 ) Expand Services and Applications > Services, and find and locate Wireless Zero Configuration in the Services list on the right side.

5 ) Right click Wireless Zero Configuration, and then select Properties.

6 ) Change Startup type to Automatic, click Start and make sure the Service status is Started. And then click OK.

**If you can find other wireless network except your own, please follow the steps below:**

- Check the WLAN LED indicator on your wireless router/modem.

- Make sure your computer/device is still in the range of your router/modem. Move closer if it is currently too far away.

**If you can find your wireless network but fail to connect, please follow the steps below:**

- **Authenticating problem/password mismatch:**

1 ) Sometimes you will be asked to type in a PIN number when you connect to the wireless network for the first time. This PIN number is different from the Wireless Password/Network Security Key. Usually you can only find it on the label of your router.

2 ) If you cannot find the PIN or PIN failed, you may choose Connecting using a security key instead, and then type in the Wireless Password/Network Security Key.

3 ) If it continues to show note of Network Security Key Mismatch, it is suggested to confirm the wireless password of your wireless router.

🔖 **Note:** Wireless Password/Network Security Key is case sensitive.

• **Windows unable to connect to XXXX / Can not join this network / Taking longer than usual to connect to this network:**

- Check the wireless signal strength of your network, if it is weak (1~3 bars), please move the router closer and try again.

- Change the wireless Channel of the router to 1,6,or 11 to reduce interference from other networks.

- Re-install or update the driver for your wireless adapter of the computer.

## COPYRIGHT & TRADEMARKS

## 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

**CE 1588** (!)

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.

Restricted to indoor use.

## Caution:

1. The device for operation in the band 5150–5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;

## Avertissement:

1. Le dispositif fonctionnant dans la bande 5150-5250 MHz est réservé uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;

2. Le gain maximal d'antenne permis pour les dispositifs avec antenne(s) utilisant la bande 5725-5850 MHz doit se conformer à la limitation P.I.R.E spécifiée pour l'exploitation point à point et non point à point, selon le cas.

## 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.

## Radiation Exposure Statement:

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

## Déclaration d'exposition aux radiations:

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

## Industry Canada Statement

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

## Korea Warning Statements:

당해 무선설비는 운용중 전파혼신 가능성이 있음.

## NCC Notice & BSMI Notice:

注意！

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信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。前項合法通信，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.

## 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.

For EU/EFTA, this product can be used in the following countries:

| AT | BE | BG | CH | CY | CZ | DE | DK |
|----|----|----|----|----|----|----|----|
| EE | ES | FI | FR | GB | GR | HR | HU |
| IE | IS | IT | LI | LT | LU | MT | MT |
| NL | NO | PL | PT | RO | SE | SI | SK |

## Explanations of the symbols on the product label

| Symbol | Explanation |
|--------|-------------|
| --- | DC voltage |

| Symbol | Explanation |
| --- | --- |
| | RECYCLING<br>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.<br>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 |