



# Archer C2600

## User Guide

AC2600 Wireless Dual Band Gigabit Router

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## FCC STATEMENT



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

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

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

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

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

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

## FCC RF Radiation Exposure Statement

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

"To comply with FCC RF exposure compliance requirements, this grant is applicable to only Mobile Configurations. The antennas used for this transmitter must be installed to provide a separation distance of at least 39 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter."

Note: Operations are restricted to indoor usage only.

## CE Mark Warning



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

## National Restrictions

This device is intended for home and office use in all EU countries (and other countries following the EU directive 1999/5/EC) without any limitation except for the countries mentioned below:

Country	Restriction	Reason/remark
Bulgaria	None	General authorization required for outdoor use and public service
France	Outdoor use limited to 10 mW e.i.r.p. within the band 2454-2483.5 MHz	Military Radiolocation use. Refarming of the 2.4 GHz band has been ongoing in recent years to allow current relaxed regulation. Full implementation planned 2012
Italy	None	If used outside of own premises, general authorization is required
Luxembourg	None	General authorization required for network and service supply(not for spectrum)
Norway	Implemented	This subsection does not apply for the geographical area within a radius of 20 km from the centre of Ny-Ålesund
Russian Federation	None	Only for indoor applications

Note: Please don't use the product outdoors in France.

## 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, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

This device has been designed to operate with omni-directional dipole antennas, and having a maximum gain of 3.04dBi for 2.4G, 4.15dBi for 5G Band 4, and 4.95dBi for 5G Band 1. Antennas not included in this list or having a gain greater than 3.04dBi for 2.4G, 4.15dBi for 5G Band 4, and 4.95dBi for 5G Band 1, are strictly prohibited for use with this device. The required antenna impedance is 50 ohms.

To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that permitted for successful communication.

This radio transmitter (IC: 8853A-C2600 / Model: Archer C2600) has been approved by Industry Canada to operate with the antenna type listed below with maximum permissible gain indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

Le présent émetteur radio (IC: 8853A-C2600/ Model: Archer C2600) a été approuvé par Industrie Canada pour fonctionner avec les types d'antenne énumérés ci-dessous et ayant un gain admissible maximal. Les types d'antenne non inclus dans cette liste, et dont le gain est supérieur au gain maximal indiqué, sont strictement interdits pour l'exploitation de l'émetteur.

### **Approved antenna(s) list**

Antenna Type: External omni-directional antenna  
Gain: 2412-2462MHz: 3.04dBi  
5150-5250MHz: 4.95dBi  
5745-5825MHz: 4.15dBi

## **Industry Canada Statement**

Complies with the Canadian ICES-003 Class B specifications.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

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

### **Caution :**

- (i) the device for operation in the band 5 180-5 240 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;
- (ii) high-power radars are allocated as primary users (i.e. priority users) of the bands 5 745-5 850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

### **Avertissement:**

- (i) les dispositifs fonctionnant dans la bande 5 180-5 240 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;
- (ii) De plus, les utilisateurs devraient aussi être avisés que les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu'ils ont la priorité) pour les bandes 5 745-5 850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

## **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 45 cm 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 45 cm de distance entre la source de rayonnement et votre corps.

## **Korea Warning Statements:**

당해 무선설비는 운용중 전파혼신 가능성이 있음.

## **NCC Notice & BSMI Notice:**

注意！

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

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

減少電磁波影響，請妥適使用。

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- 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。
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## 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.

This product can be used in the following countries:

AT	BG	BY	CA	CZ	DE	DK	EE
ES	FI	FR	GB	GR	HU	IE	IT
LT	LV	MT	NL	NO	PL	PT	RO
RU	SE	SK	TR	UA	US		

## DECLARATION OF CONFORMITY

For the following equipment:

Product Description: AC2600 Wireless Dual Band Gigabit Router

Model No.: Archer C2600

Trademark: TP-LINK

We declare under our own responsibility that the above products satisfy all the technical regulations applicable to the product within the scope of Council Directives:

Directives 1999/5/EC, Directives 2004/108/EC, Directives 2006/95/EC, Directives 1999/519/EC, Directives 2011/65/EU

The above product is in conformity with the following standards or other normative documents

EN 300 328 V1.8.1

EN 301 489-1 V1.9.2 & EN 301 489-17 V2.2.1

EN 55022: 2010 + AC: 2011

EN 55024: 2010

EN 61000-3-2: 2006 + A1: 2009 + A2: 2009

EN 61000-3-3: 2013

EN 60950-1: 2006 + A11: 2009 + A1: 2010 + A12: 2011

EN 50385: 2002

EN 301 893 V1.7.1

*The product carries the CE Mark:*

**CE 1588** 

Person responsible for making this declaration:



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Date of issue: 2015

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# Chapter 1. Get to Know About Your Router

This chapter introduces what the router can do and shows its main features and appearance.

This chapter contains the following sections:

- [\*Product Overview\*](#)
- [\*Main Features\*](#)
- [\*Panel Layout\*](#)

## 1.1 Product Overview

### What This Product Does

TP-LINK's Archer C2600 AC2600 Wireless Dual Band Gigabit Router is a combined wired/wireless network connection device with integrated wireless router, reducing hassle of configuration and saving space. Featuring a variety of features and rich functionality, Archer C2600 is the perfect hub of your home or business network.

### 802.11ac - The Next Generation of Wi-Fi

TP-LINK's Archer C2600 comes with the next generation Wi-Fi standard – 802.11ac, backward compatible with 802.11n and 3 times faster than wireless N speeds. With higher power efficiency and robust security, 802.11ac is the perfect way to accelerate a home multimedia network and solve congestion that multiple devices may cause.

### 2600Mbps Concurrent Dual Band - More Bandwidth, Less Interference

With 1800Mbps wireless speeds over the crystal clear 5GHz band and 800Mbps over the 2.4GHz band, Archer C2600 offers you the flexibility of two dedicated networks and ensures amazing wireless performance. Simple tasks such as sending e-mails or web browsing can be handled by the 2.4GHz band while bandwidth intensive tasks like online gaming or HD video streaming can be processed by the 5GHz band – all at the same time.

### Broad Wi-Fi Coverage

Featuring four fixed external antennas and high power amplifiers, Archer C2600 is able to boost Wi-Fi coverage throughout your home.

### Multifunctional USB Port – Easy Storage and Sharing

Using the Archer C2600's multi-functional USB 2.0 port, you can share a printer with multiple computers and devices on your network and can also share files & media at home or via the FTP server while away from home.

### Interchangeable LAN/WAN Port - Versatile Connectivity

The Archer C2600 supports Ethernet WAN connections (EWAN), which allows users to have the flexibility of different Internet connections among cable using its interchangeable LAN/WAN port. This unique feature makes it easier when users need to change to fiber or cable services when necessary.

### Guest Network

Guest Network Access provides secure Wi-Fi access for guests sharing your home or office network in a controlled manner without needing to expose private Wi-Fi access codes or other personal data.

### IPv6 Supported

Archer C2600 supports IPv6, which is the foundation of the next generation of the Internet and enables a range of new services and improved user experience.

## 1.2 Main Features

- Supports 802.11ac - The next generation of Wi-Fi, compatible with 802.11n
- Simultaneous 2.4GHz 800Mbps and 5GHz 1800Mbps connections for 2600Mbps of total available bandwidth

- 2 dual band fixed external antennas and high power amplifiers provide stable signals and optimal wireless coverage
- Supports USB Storage Sharing, Print Server, FTP Server, Media Server. Share a printer locally and files & media with networked devices or remotely via FTP server
- Ethernet WAN (EWAN) offers another broadband connectivity option for connecting VDSL, cable or fiber modems
- Adopts Advanced DMT modulation and demodulation technology.
- Supports long transfers, the max line length can reach to 6.5Km.
- Built-in DHCP server.
- High speed and asymmetrical data transmit mode, provides safe and exclusive bandwidth.
- Compatible with all mainstreams DSLAM (CO).
- Provides integrated access of internet and route function which face to SOHO user.
- Guest Network Access provides secure Wi-Fi access for guests sharing your home or office network
- Parental Controls allow parents or administrators to establish restricted access policies for children or staff
- IP-based Bandwidth Control makes it easier for you to manage the bandwidth of devices connected to the router
- Supports IP/MAC filter and URL filter, Access Control list
- SPI and NAT firewall protects end-user devices from potential attacks from the Internet
- WPA-PSK/WPA2-PSK encryptions provide user networks with active defense against security threats
- Supports remote configuration and management through SNMP and CWMP.
- Easy one-touch WPA wireless security encryption with the WPS button
- Wi-Fi On/Off Button allows users to turn their wireless radio on or off
- Supports firmware upgrade and Web management
- Supports Virtual Server, DMZ host and Port Triggering
- Supports Dynamic DNS, UPnP and Static Routing
- Supports system log and flow Statistics
- Supports IPv6
- Supports firmware upgrade and Web management

## 1.3 Panel Layout

### 1.3.1 Top View



The router's LEDs are located on the top panel (view from top to bottom). You can check the router's working status by following the LED Explanation table.

#### LED Explanation:

Name	Status	Indication
 (Power)	On	System initialization complete.
	Flash	System initializing or firmware upgrading is in process. Do not disconnect or power off the router.
	Off	Power is off. Please ensure that the power adapter is connected correctly.
 (Internet)	White	The network is available with a successful Internet connection.
	Orange	The router connect to the Internet, but you can not access the Internet.
	Off	There is no successful Internet connection or the router is operating in Bridge

mode. Please refer to [Note 2](#) for troubleshooting.

 (Wireless)	On	The wireless 2.4GHz band is working properly.
	Off	The wireless 2.4 GHz band is disabled.
 (Wireless)	On	The wireless 5GHz band is working properly.
	Off	The wireless 5GHz band is disabled.
 (LAN)	On	At least one LAN port is connected.
	Off	No LAN port is connected.
 (WPS)	On	A wireless device has been successfully added to the network by WPS function.
	Flash	WPS handshaking is in process and will continue for about 2 minutes. Please press the WPS button on other wireless devices that you want to add to the network while the LED is flashing.
	Off	A wireless device has failed to be added to the network by WPS function.
 (USB)	On	The USB device is identified and ready to use.
	Flash	The USB device is being identified.
	Off	No USB device is plugged into the USB port.

**Note:**

1. After a device is successfully added to the network by WPS function, the WPS LED will keep on for about 5 minutes and then turn off.

### 1.3.2 The Back Panel



The router's back panel shows the connection ports, buttons and antennas (view from left to right). Refer to the following for detailed instructions.

Item	Description
LAN1, LAN2, LAN3, LAN4/WAN	These ports (1, 2, 3, 4) connect the router to the local PC(s).
Internet	This port is where you will connect the DSL/cable Modem, or Ethernet.
POWER	For connecting the router to power socket via the provided power adapter.
POWER ON/OFF	The switch for the power. Press it to power on or off the router.
Antennas	Used for wireless operation and data transmit. Upright them for the best Wi-Fi performance.

### 1.3.3 The Side Panel



The router's side panel shows the connection ports, buttons (view from left to right). Refer to the following for detailed instructions.

Item	Description
USB	For connecting to a USB storage device or a USB printer.
WiFi ON/OFF	For turning on/off the WiFi function.
WPS	The switch for the WPS function. Pressing this button for less than 5 seconds enables the WPS function. If your client devices, such as wireless adapters, that support Wi-Fi Protected Setup, then you can press this button to quickly establish a connection between the router and client devices and automatically configure wireless security for your wireless network.
RESET	The switch for the RESET function. There are two ways to reset the router's factory defaults. <a href="#">Method one</a> : With the router powered on, use a pin to press and hold the RESET button for at least 8-10 seconds. And the router will reboot to its factory default settings. <a href="#">Method two</a> : Restore the default setting from <a href="#">Backup &amp; Restore</a> of the router's Web-based Management.

# Chapter 2. Connect the Hardware

This chapter contains the following sections:

- [\*Requirements for Operation\*](#)
- [\*Position Your Router\*](#)
- [\*Connect Your Router\*](#)

## 2.1 Requirements for Operation

To connect and use the router for Internet sharing, you must have the following:

- Broadband Internet Access Service (DSL/Cable/Ethernet).
- PCs with an active Ethernet Adapter and an Ethernet cable with RJ45 connectors.
- TCP/IP protocol on each PC.
- Web browser, such as Microsoft Internet Explorer, Mozilla Firefox and Apple Safari.

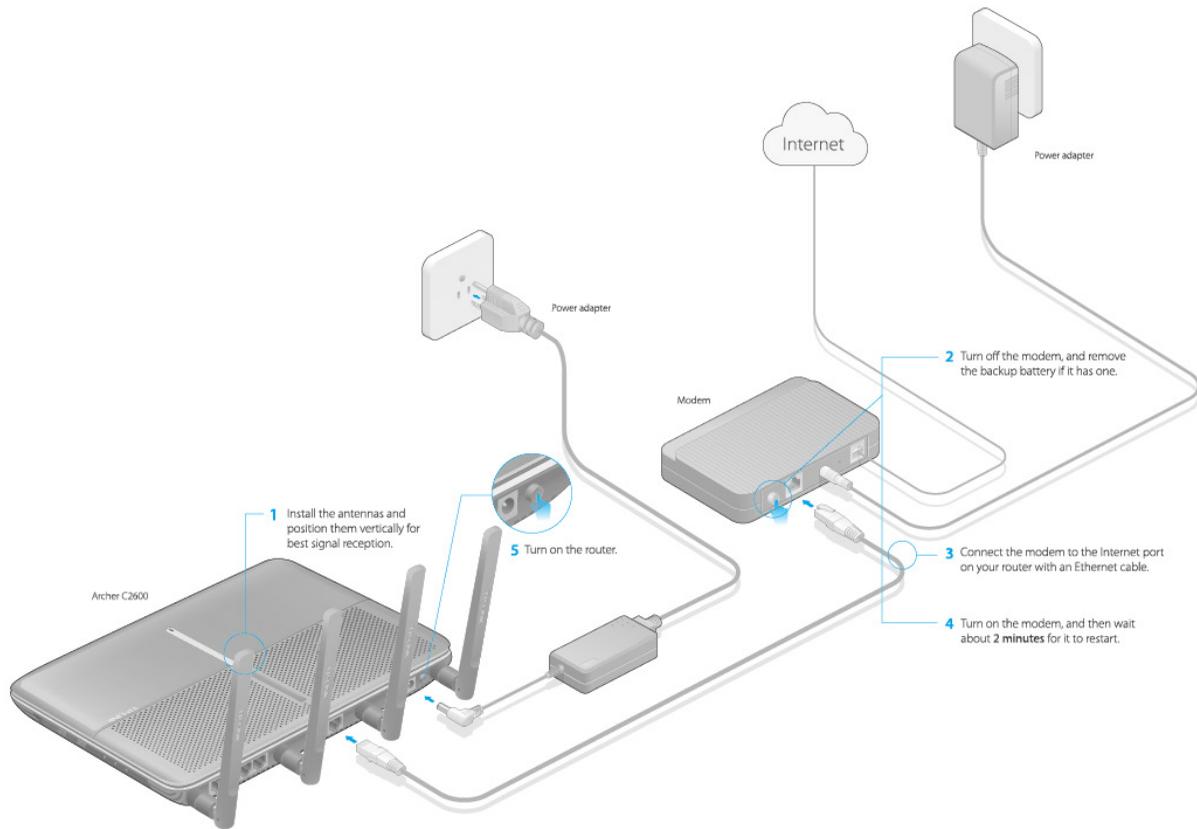
## 2.2 Position Your Router

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

## 2.3 Connect Your Router

Follow the steps below to connect your router.

1. If your Internet connection is through an Ethernet cable from the wall instead of through a DSL / Cable / Satellite modem, connect the Ethernet cable directly to the router's Internet port, then follow steps 5 and 6 to complete the hardware connection.



- 1) Install the antennas and position them vertically for best signal reception.
- 2) Turn off the modem, and remove the backup battery if it has one.
- 3) Connect the modem to the Internet port on your router with an Ethernet cable.
- 4) Turn on the modem, and then wait about 2 minutes for it to restart.
- 5) Turn on the router.
- 6) Verify that the following LEDs are on and solid before continuing with the configuration.



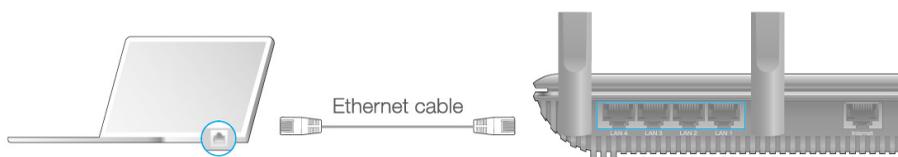
**Note:**

If the 2.4G LED  and 5G LED  are off, please press the Wi-Fi On/Off button on the side panel for 2 seconds and check the LEDs again in a few seconds later.

2. Connect your computer to the router.

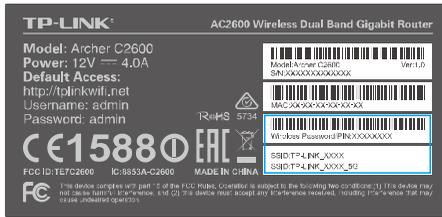
**Option 1: Wired**

Turn off the Wi-Fi on your computer and connect the devices as shown below.



## Option 2: Wirelessly

Connect wirelessly by using the SSID (Network Name) and Wireless Password/PIN printed on the product label at the bottom of the router.



## Option 3: Use the WPS button

If your computer or wireless adapter has a physical WPS button, you can use the WPS button to quickly connect the router.

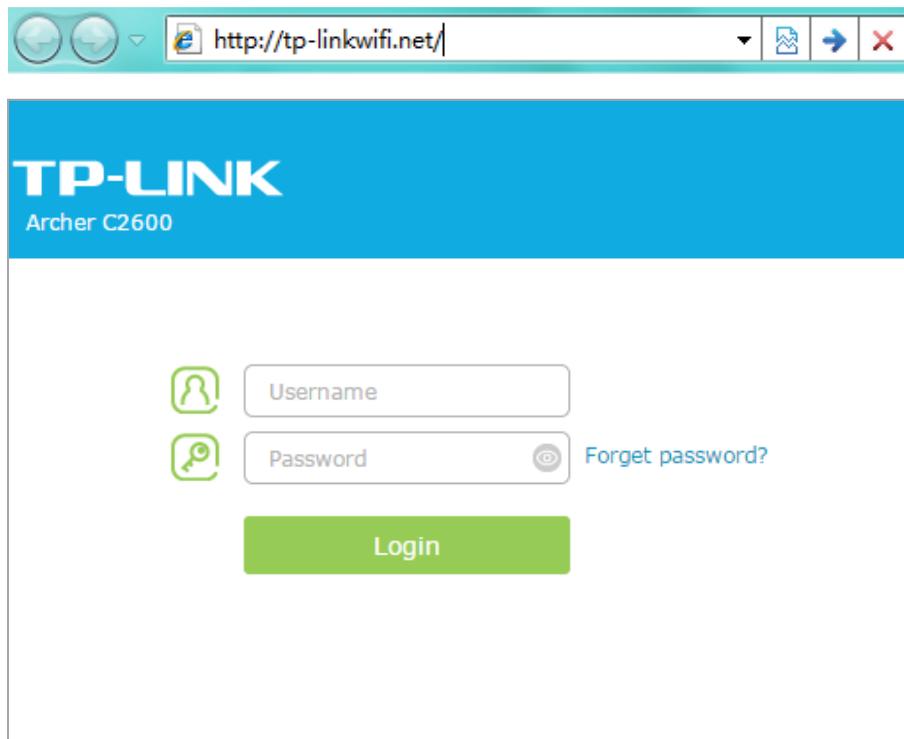
- 1) Press the WPS button on the router for 1 seconds.
- 2) Within 2 minutes, press the WPS button on your adapter for 2 seconds.
- 3) The WPS LED flashes for two minutes during the WPS process.
- 4) When the WPS LED is on, the client device has successfully connected to the router.

## Chapter 3. Log into Your Router

With a Web-based utility, it is easy to configure and manage the Archer C2600 AC2600 Wireless Dual Band Gigabit Router AC2600 Wireless Dual Band Gigabit Router. The Web-based utility can be used on any Windows, Macintosh or UNIX OS with a Web browser, such as Microsoft Internet Explorer, Mozilla Firefox or Apple Safari.

Follow the steps below to log into your router.

1. If the TCP/IP Protocol on your computer is set to the static (fixed) IP address, you need to change it to obtain an IP address automatically. Refer to [Appendix C: Configure the PC](#) to configure your computer.
2. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.



**Note:** If the login window does not appear, please refer to FAQ > Q1.

# Chapter 4. Set Up Internet Connection

This chapter introduces how to connect your router to the Internet. The router is equipped with a web-based Quick Setup wizard. It has many ISP information built in, automates many of the steps and verifies that those steps have been successfully completed. Furthermore, you can set up IPv6 connection if your ISP provided IPv6 service.

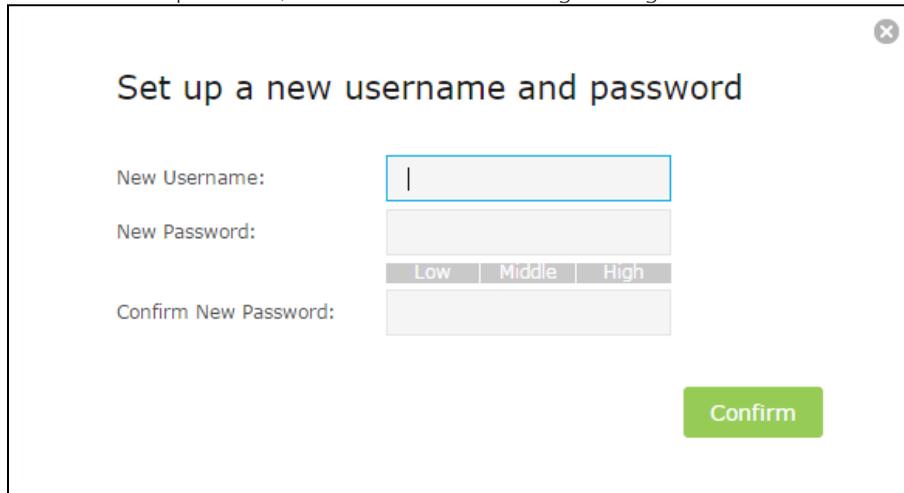
This chapter includes the following sections:

- [\*Use Quick Setup Wizard\*](#)
- [\*Manually Set up an Internet Connection\*](#)
- [\*Set up IPv6 Connection\*](#)
- [\*Test Internet Connectivity\*](#)

## 4.1 Use Quick Setup Wizard

To set up my router with several easy steps quickly:

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Create a new username and password, then click Confirm. Re-login using the new credentials.



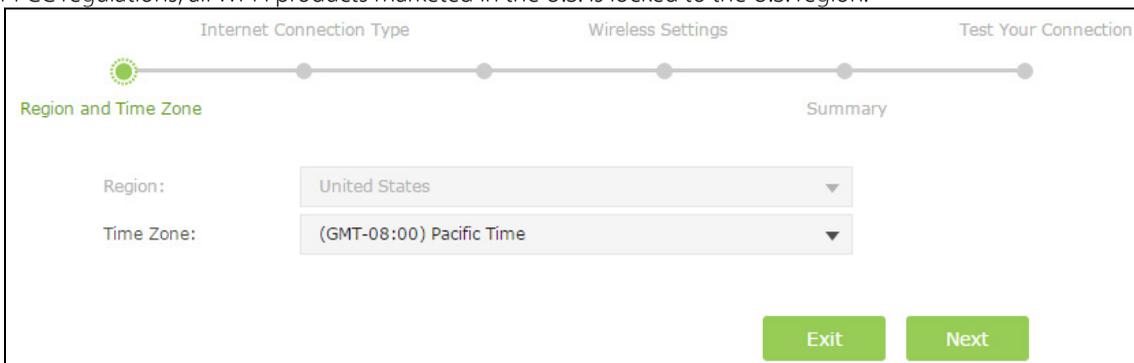
The screenshot shows a web form titled "Set up a new username and password". It includes the following fields and elements:

- New Username:** A text input field with a cursor.
- New Password:** A password input field with a strength indicator below it showing "Low", "Middle", and "High" levels.
- Confirm New Password:** A second password input field.
- Confirm:** A green button at the bottom right.

3. Click [Quick Setup](#), Select your region and time zone, and click [Next](#).

**Note:**

Per FCC regulations, all Wi-Fi products marketed in the U.S. is locked to the U.S. region.

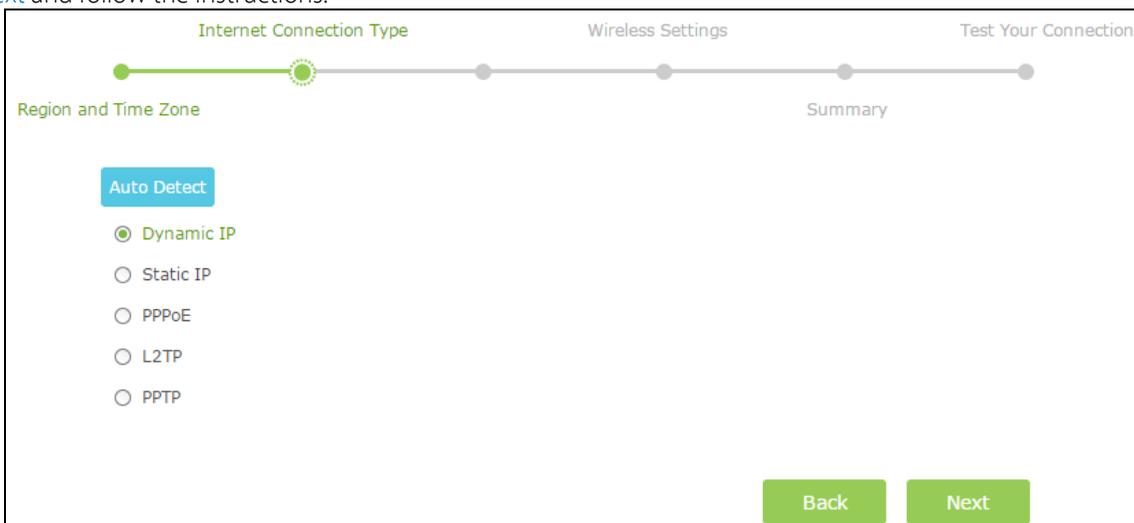


The screenshot shows a progress bar with four steps: "Internet Connection Type", "Wireless Settings", "Test Your Connection", and "Summary". The "Region and Time Zone" step is currently active. Below the progress bar, there are two dropdown menus:

- Region:** Set to "United States".
- Time Zone:** Set to "(GMT-08:00) Pacific Time".

At the bottom right, there are two green buttons: "Exit" and "Next".

4. Select your [WAN Connection Type](#), or click [Auto Detect](#) if you are unsure of what your connection type is. Click [Next](#) and follow the instructions.



The screenshot shows the same progress bar as the previous screen, but now the "Internet Connection Type" step is active. Below the progress bar, there is a blue "Auto Detect" button and a list of radio button options:

- Dynamic IP
- Static IP
- PPPoE
- L2TP
- PPTP

At the bottom right, there are two green buttons: "Back" and "Next".

5. Use the default or change the wireless settings, and click Next.

Note: If you change the default SSID and password, write down the new wireless settings.

Internet Connection Type      Wireless Settings      Test Your Connection

Region and Time Zone      Summary

Wireless 2.4GHz:       Enable Wireless Radio

Wireless Network Name (SSID):      TP-LINK\_263F       Hide SSID

Password:      09897717

Wireless 5GHz:       Enable Wireless Radio

Wireless Network Name (SSID):      TP-LINK\_263E\_5G       Hide SSID

Password:      09897717

Back      Next

6. Confirm your settings, and then click Save to continue or Back to make changes.

Internet Connection Type      Wireless Settings      Test Your Connection

Region and Time Zone      Summary

Region:      United States

Time Zone:      (GMT-08:00) Pacific Time

Internet Connection Type:      Dynamic IP

Wireless 2.4GHz:      On

Wireless Network Name (SSID):      TP-LINK\_263F

Password:      09897717

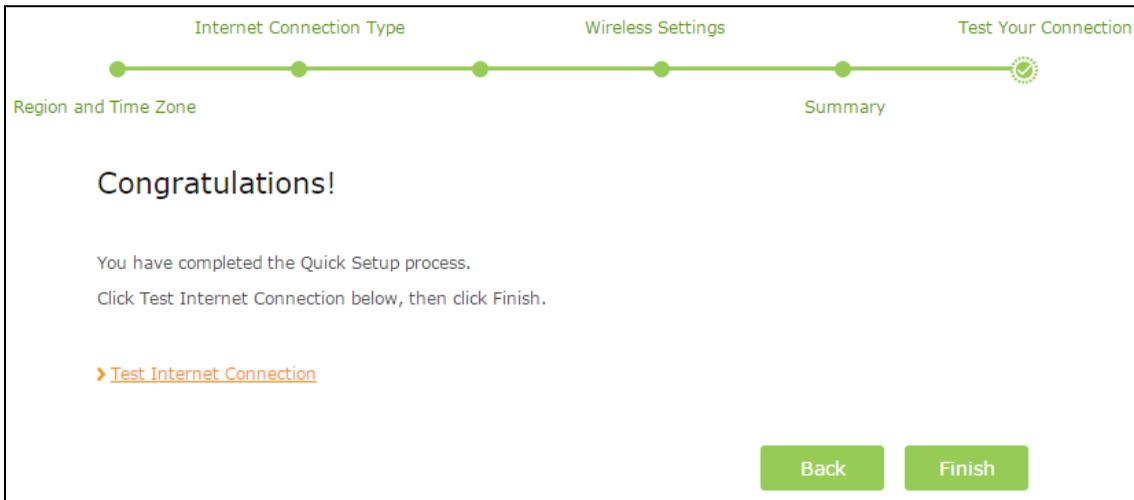
Wireless 5GHz:      On

Wireless Network Name (SSID):      TP-LINK\_263E\_5G

Password:      09897717

Back      Save

7. Test your Internet connection, then click Finish to quit the Quick Setup.



Note:

1. If you don't find your ISP in the ISP list, please select Other and then enter the information provided by your ISP.
2. During the quick setup process, you can change the preset wireless network name (SSID) and wireless password. Once done, all your wireless devices must use the new SSID and password to connect to the router.

## 4.2 Manually Set up an Internet Connection

To manually add an Internet connection without following the instructions of the Quick Setup wizard:

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to *Basic > Internet* page.
3. Select your Internet Connect Type. Enter the information provided by your ISP for the Connection Type.

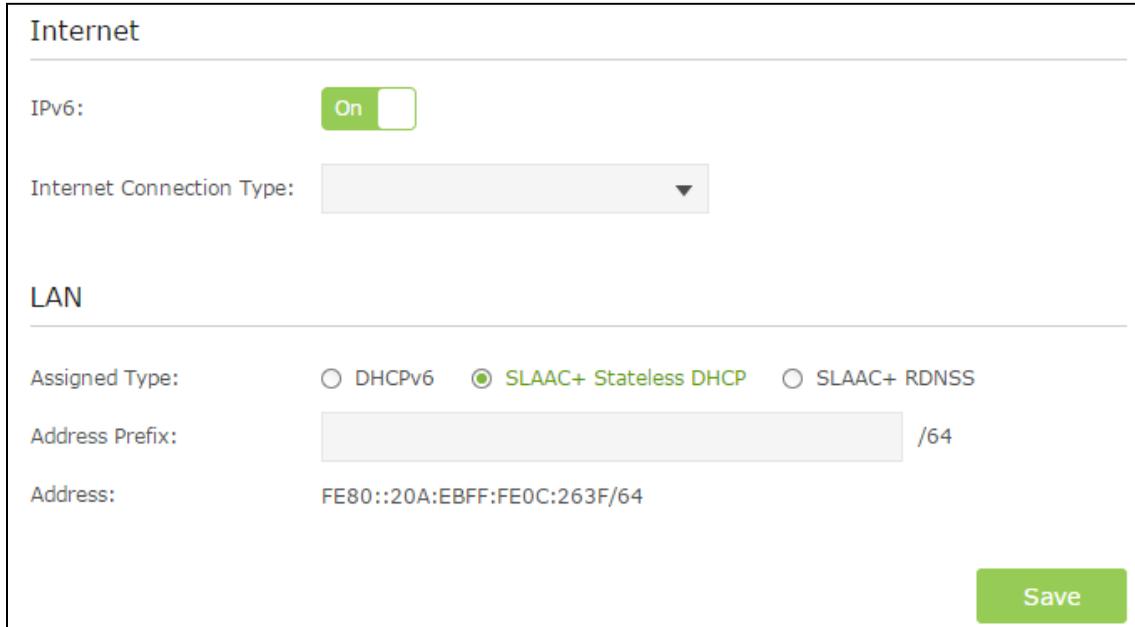
4. Click [Save](#) to make the settings effective and you can refer to [Test Internet Connectivity](#) to test the Internet connection.

Note: You can view and edit all Internet connections on *Advanced > Network > Internet* page.

## 4.3 Set up IPv6 Connection

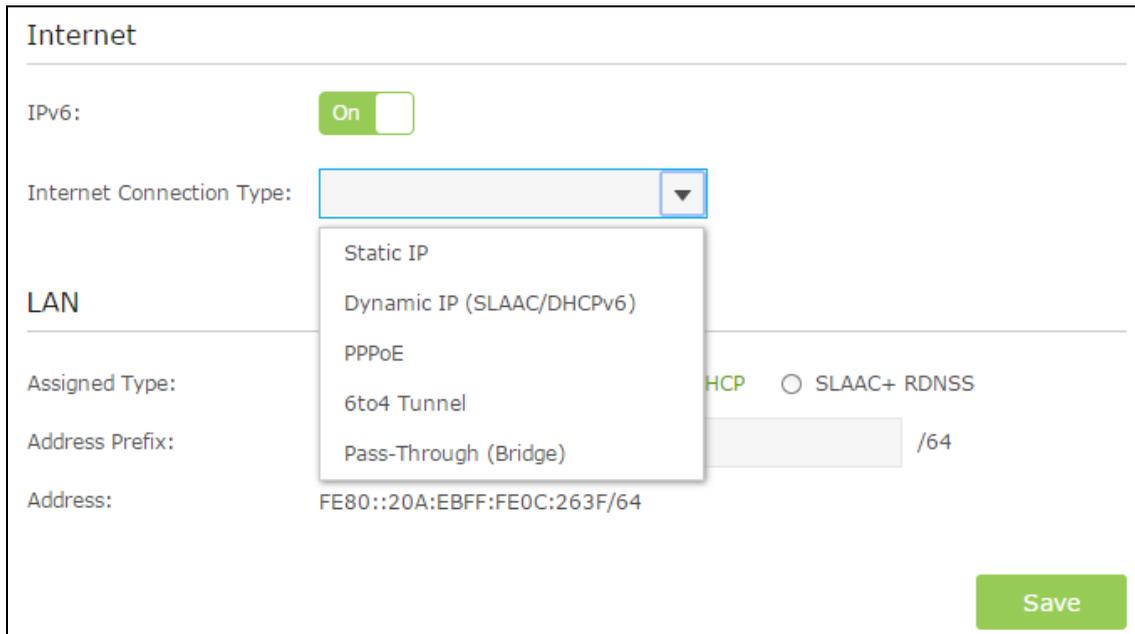
If your ISP provided also supports IPv6 connection and your ISP has provided some detailed IPv6 parameters, you can configure the router to permit IPv6 connection.

1. Configure the WAN settings.
2. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
  - 1) Go to *Advanced > IPv6* page.



The screenshot shows the 'Internet' configuration page. At the top, there is a section for 'Internet' with a toggle switch for 'IPv6' set to 'On'. Below it is a dropdown menu for 'Internet Connection Type'. The 'LAN' section below has 'Assigned Type' with three radio buttons: 'DHCPv6', 'SLAAC+ Stateless DHCP' (which is selected), and 'SLAAC+ RDNSS'. There are input fields for 'Address Prefix' and 'Address', with the address field containing 'FE80::20A:EBFF:FE0C:263F/64'. A green 'Save' button is at the bottom right.

- 2) In the Internet Connection Type list, select the IPv6 connection type. Your Internet service provider (ISP) can provide this information.



This screenshot is similar to the previous one, but the 'Internet Connection Type' dropdown menu is open, showing a list of options: 'Static IP', 'Dynamic IP (SLAAC/DHCPv6)', 'PPPoE', '6to4 Tunnel', and 'Pass-Through (Bridge)'. The 'LAN' section and 'Save' button are also visible.

- 3) Fill in information as required by different connection type. (Red blanks must be filled.)
  - Static IP: Fill in blanks and click **Save**.

- Dynamic IP: Click **Advanced** to have more configuration if ISP requires. Click **Save** to save the settings and then click **Renew** to finish the configuration.

### Internet

IPv6:  On

Internet Connection Type: Dynamic IP (SLAAC/DHCPv6) ▼

IPv6 Address: ::

Primary DNS: ::

Secondary DNS: ::

Renew Release

Advanced

Save

- PPPoE: Fill in the Username and Password. Click **Advanced** to have more configuration if ISP requires. Click **Save** to save the settings and then click **Connect** to finish the configuration.

### Internet

IPv6:  On

Internet Connection Type: PPPoE ▼

Username:

Password:

IPv6 Address: ::

Advanced

Connect Disconnect

Save

- 6to4 Tunnel: An IPv4 Internet connection type is a prerequisite for this connection type. (Go to ...for more information.) Click **Advanced** to have more configuration if ISP requires. Click **Save** to save the settings and then click **Connect** to finish the configuration.

**Internet**

IPv6:  On

Internet Connection Type: 6to4 Tunnel ▼

IPv4 Address: 0.0.0.0

IPv4 Subnet Mask: 0.0.0.0

IPv4 Default Gateway: 0.0.0.0

Tunnel Address: ::

⌵ Advanced

- Pass-Through (Bridge): The screen adjusts, but no additional fields display. Click the Save button.

**Internet**

IPv6:  On

Internet Connection Type: Pass-Through (Bridge) ▼

- 4) Configure the IPv6 LAN settings. Windows users are recommended to choose from the first two types. Fill in Address Prefix provided by ISP, and click Save to save the settings.

**LAN**

Assigned Type:  DHCPv6  SLAAC+ Stateless DHCP  SLAAC+ RDNSS

Address Prefix:  /64

Address: FE80::20A:EBFF:FE0C:263F/64

- 5) Click **Status** to check whether you succeed or not. The following figure is an example of a successful PPPoE

configuration.

Internet <span>✓</span>		IPv4   IPv6
MAC Address:	00-0A-EB-AC-25-01	
IP Address:	2001:c68:202:2111::120/64	
Default Gateway:	fe80::edd0:80d2:7f5e:6be7	
Primary DNS:	2001:c68:202:2111::1	
Secondary DNS:	2001:c68:202:2111::2	
Connection Type:	PPPoE	

6) Completed. IPv6 service is available for your network.

## MAC Clone

Your ISP allows only one Ethernet MAC address to connect to Internet and might check for your computer's MAC address. In this case, do one of the following:

- Inform your ISP that you have bought a new network device, and ask them to use the router's MAC address.
- Configure your router to clone your computer's MAC address.

### MAC Clone

Use Default MAC Address

Use Current Computer MAC Address

Use Custom MAC Address

# Chapter 5. Guest Network

This function allows you to provide Wi-Fi access for guests without disclosing your main network. When you have guests in your house, apartment, or workplace, you can create a guest network for them. In addition, you can limit the network authorities and bandwidth for guests to ensure network security, privacy, and fluency.

Create a Network for Guests

**I want to:** Provide Wi-Fi access for guests without disclosing my main network.

- 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 *Advanced > Guest Network*.

**Settings**

Allow guests to see each other

Allow guests to access my local network

Save

**Wireless** 2.4GHz | 5GHz

Wireless 2.4GHz:  Enable Guest Network

Wireless Network Name (SSID): TP-LINK\_Guest\_263F  Hide SSID

Security:  No Security  WPA/WPA2-Personal

Save

3. Select any of the following wireless settings:
  - Allow guest to see each other:** If this check box is selected, anyone who connects to this SSID can see each other.
  - Allow guest to access my local network:** If this check box is selected, anyone who connects to this SSID has access to your local network, not just Internet access.
4. Set the guest network name. You can check the hide SSID check box to hide SSID.

The guest network name is case-sensitive and can be up to 32 characters. You then manually configure the wireless devices in your network to use the guest network name in addition to the main SSID.
5. Select security options.

The security options use the newest standard for the strongest security, but some older computers and wireless devices cannot use it. TP-LINK recommends that you select the WPA/WPA2-Personal button. This setting protects your WiFi network and lets computers and wireless devices can connect to the WiFi network.

### Wireless 2.4GHz | 5GHz

---

Wireless 2.4GHz:  Enable Guest Network

Wireless Network Name (SSID):   Hide SSID

Security:  No Security  WPA/WPA2-Personal

6. Click **Save**.

Now users in your guest network can enjoy only the network authorities and bandwidth you assigned.

**Completed!** Now users in your guest network can enjoy only the network authorities and bandwidth you assigned.

# Chapter 6. USB Application

This chapter describes how to share and access USB devices connected to the router among different clients.

There are three submenus under the USB Settings menu (shown in Figure 5-44): **Device Settings**, **File Sharing**, and **Print Server**. Click any of them, and you will be able to configure the corresponding functions.

This chapter contains the following sections:

- [\*Device Settings\*](#)
- [\*Sharing Access\*](#)
- [\*Printer Sever\*](#)

## 6.1 Device Settings

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Select *Advanced > USB Settings > Device Settings*, you can configure the USB disk drive attached to the router and view the information.
3. Click the Scan button to scan the USB drive connected to the router.
  - Volume - The volume name of the USB drive the users have access to. Volume 1-8 is mapping to USB port1, and Volume 9-16 is mapping to USB port2.
  - Capacity - The storage capacity of the USB driver.
  - Free Space- The available space of the USB driver.
  - Active - Select the checkbox to active the USB driver.

Click the **Safely Remove** button to safely remove the USB storage device that is connected to USB port. This takes the drive offline.

## 6.2 Sharing Access

### Sharing Account

Network clients will be required to enter the username and password you set when accessing the USB disk.

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Select *Advanced > USB Settings > Sharing Access*.
  - **Use Default Account** - Select this radio button, and the sharing account is the same with the login account.
  - **Use New Account** - Select this radio button, then you have to specify the new username and password in the **Username** and **Password** fields for sharing account.

### Sharing Account

---

Prepare an account for sharing contents. You can use the login account or create a new one.

Account:  Use Default Account  Use New Account

Username:

Password:

Confirm Password:

3. Choose to use the default Account (admin) or use a new account and click [Save](#).

### Sharing Settings

You can customize the server name and use the name to access your USB disk.

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Select *Advanced > USB Settings > Sharing Access*.
3. Make sure **Network Neighborhood** is ticked, and enter a Network/Media Server Name as you like, such as **MyShare**, then click **Save**.

### Sharing Settings

Network/Media Server Name:

Enable	Access Method	Link	Port
<input checked="" type="checkbox"/>	Network Neighborhood	\\C2600-Share	---
<input checked="" type="checkbox"/>	FTP	ftp://192.168.0.74:21	21
<input type="checkbox"/>	FTP (Via Internet)	ftp://0.0.0.0:21 <a href="#">Edit</a>	<input type="text" value="21"/>

**Save**

4. Now you can access the USB disk with **\\MyShare** (**smb://MyShare** for Mac).

## Folder Sharing

By default, **Share All** is enabled so all content on the USB disk is shared. If you want to only share specific folders, follow the steps below:

1. Visit <http://tplinkwifi.net>, then log in with the user name and password you set for the router.
2. Select *Basic > USB Settings > Sharing Access*. Focus on the **Folder Sharing** section. Click the button to disable **Share All**, then click **Refresh** to add a new sharing folder.

### Folder Sharing

Share All:  **On** Toggle On to share all files and folders or keep it Off to only share the specified folders.

Enable Authentication:  **On**

[Refresh](#)

ID	Folder Name	Folder Path	Volume Name
--	--	--	--

3. Select the **Volume Name** and **Folder Path**, then enter a **Folder Name** as you like.
4. Decide the way you share the folder:  
**Enable Authentication:** Tick to enable authentication for this folder sharing, and you will be required to use a username and password to access the USB disk. Refer to [To Set up Authentication for Data Security](#) to learn more.

**Enable Write Access:** If you tick this check box, network clients can modify this folder.

**Enable Media Sharing:** Tick to enable media sharing for this folder, and you can view photos, play music and watch movies stored on the USB disk directly from DLNA-supported devices. Click [Media Sharing](#) to learn more.

Note:

The router can share eight volumes at most. You can click  on the page to detach the corresponding volume you do not need to share.

## 6.3 Printer Sever

The feature of Printer Sharing helps you share a printer with different computers connected to the router.

### Print Server

Print Server:  On

Printer Name: None

**Note:**

**Step1:** Install the printer driver on your computer.

**Step2:** Connect the USB printer to the USB port of the router via a USB cable.

**Step3:** Install the TP-LINK USB Printer Controller Utility. Please download it from our official website: <http://www.tp-link.us/Support/>.

### 1. Connect the Printer

Cable a printer to the USB port with the USB cable. Wait several seconds until the USB LED becomes solid on.

**Note:** You can check [Printer Compatibility List](#) to verify whether your printer is supported by the Router. Printers unlisted may be incompatible with the router. To get the list, visit <http://www.tp-link.com/app/usb/>.

### 2. Install the Driver of the Printer

Make sure you have installed the driver of the printer on each computer that needs printer service.

If you do not have the driver, contact the printer manufacturer.

### 3. Install the TP-LINK USB Printer Controller Utility

TP-LINK USB Printer Controller Utility helps you access the shared printer. Download and Install the utility on each computer that needs printer service.

You can get the utility from <http://www.tp-link.com/app/usb/>. PC Utility is for Windows computer and Mac Utility is for Mac computer.

## Printer Sharing

Enjoy wireless printing with multiple devices in your home or office network.

- ➡ [How to Set-up?](#)
- ➡ [Printer Compatibility List](#)
- ➡ [PC Utility](#)
- ➡ [Mac Utility](#)

Supported Routers: Archer C9, Archer C8, Archer C7, Archer C5, Archer C2, Archer C20i, TL-WDR4900, TL-WDR3500, TL-WDR4300, TL-WDR3600, TL-WR2543ND, TL-WR1043ND, TL-WR1042ND, TL-WR842ND  
Supported ADSL Modem Routers: Archer D7, TD-W8980, TD-W8970, TD-VG3631, TD-W8968



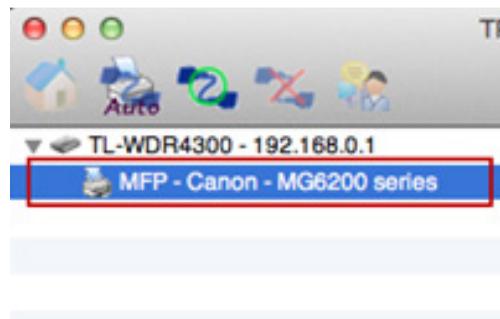
#### 4. Access the Printer

You should set the shared printer as Auto-Connect Printer on every computer that needs printer service.

1. Double-click the icon  on your desktop to launch the USB Printer Controller.
2. Highlight the printer you share.

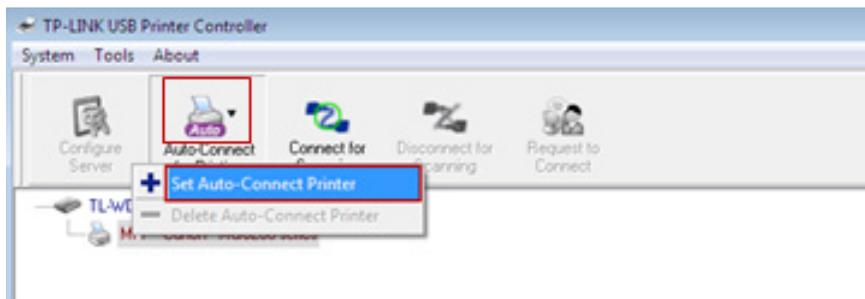


Windows

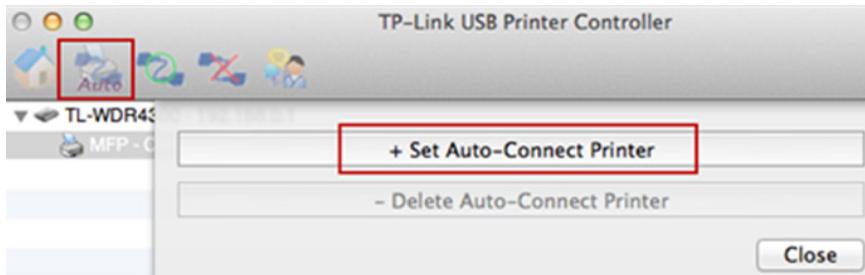


Mac

3. Click the [Auto-Connect](#) for printing tab to pull down a list, then select [Set Auto-Connect Printer](#).

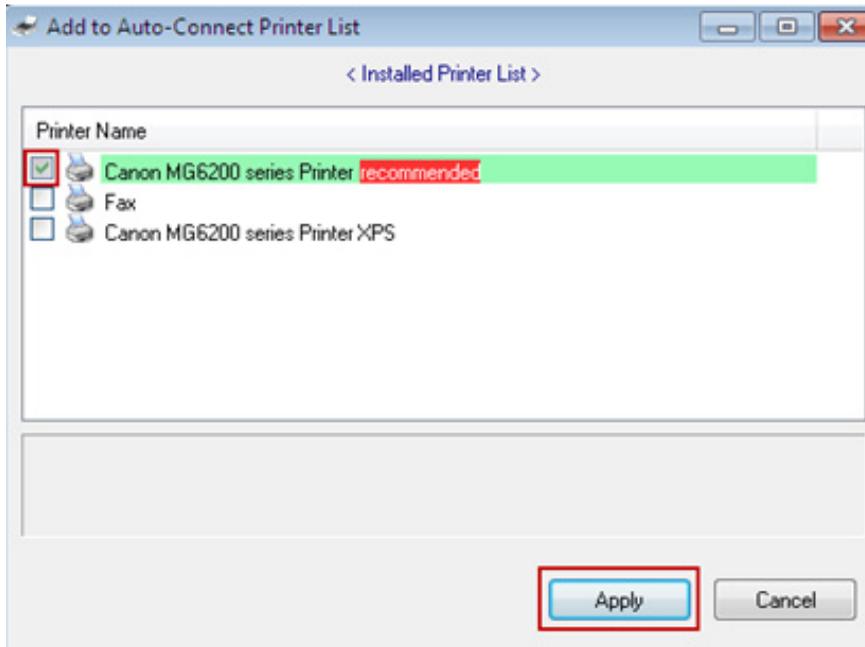


Windows

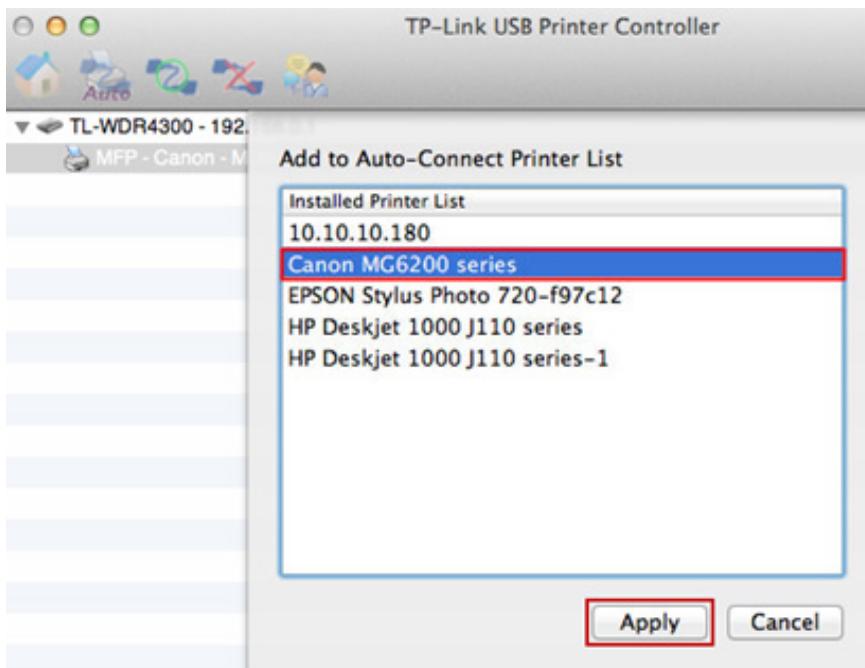


Mac

4. Select the printer you share, then click [Apply](#).

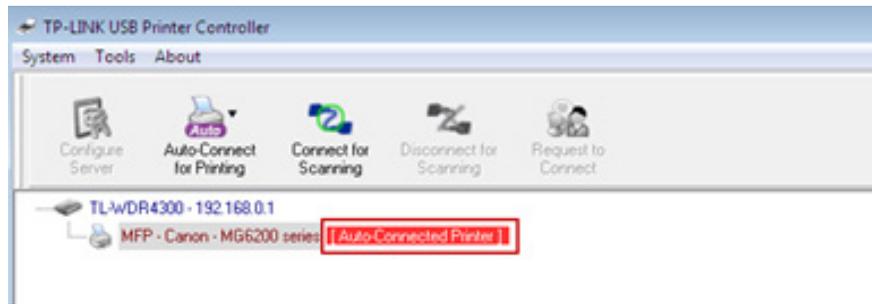


Windows



Mac

5. You will see the printer marked as [Auto-Connect Printer](#). Now you can print with this printer.



Windows



Mac

**Note:** The Print Server also allows different clients to share the scan feature of MFPs (Multi-Function Printers). To scan with [TP-LINK USB Printer Controller](#), right-click the printer and select [Network Scanner](#). Then, a scanning window will pop up. Finish the scanning process following on-screen instructions.

# Chapter 7. Parental Controls

This function allows you to block inappropriate, explicit and malicious websites; restrict access by certain times of day (for example, client devices can only visit www.tp-link.com during office hours); and at the same time it protects every device on your home network against malware and phishing through one central control point.

**I want to:** Control what types of websites my children or other home network users can visit and even the times of day they are allowed to access the Internet.

*For example,* I want to allow my children's devices (e.g. a computer or a tablet) to access only the following websites, www.tp-link.com and Wikipedia.org, from 18:00 (6PM) to 22:00 (10PM) on weekdays and not other times.

- How can I do that?**
1. Visit <http://tplinkwifi.net>, then log in with the user name and password you set for the router.
  2. Go to *Basic* or *Advanced* > *Parental Controls*. Switch on *On/Off* to enable *Parental Controls*.
  3. Click **Add** to add a device under parental controls.

**Parental Controls**

Parental Controls:  On

**Devices Under Parental Controls**

[+ Add](#) [- Delete](#)

<input type="checkbox"/>	ID	Device Name	MAC Address	Internet Access Time	Description	Status	Modify
--	--	--	--	--	--	--	--

Device Name:  [View Existing Devices](#)

MAC Address:

Internet Access Time:

Description:  (Optional)

Enable this entry

4. Click [View Existing Devices](#), and click choose to select the device to be controlled in the new window. Or, enter the [Device Name](#) and [MAC Address](#) manually.
5. Click the icon to set the Internet Access Time. Drag the cursor over the appropriate cell(s) and click [OK](#).

System Time: Thu. 1st Jan. 2015 00:48:95 GMT-08:00

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
00:00							
01:00							
02:00							
03:00							
04:00							
05:00							
06:00							
07:00							
08:00							
09:00							
10:00							
11:00							
12:00							
13:00							
14:00							
15:00							
16:00							
17:00							
18:00	Time	Time	Time	Time	Time		
19:00	Time	Time	Time	Time	Time		
20:00	Time	Time	Time	Time	Time		
21:00	Time	Time	Time	Time	Time		
22:00	Time	Time	Time	Time	Time		
23:00							
24:00							

Note: To reset the Internet Access Time, click [Reset](#).

6. Enter the [Description](#). Select the check box enable this entry and click [OK](#).

<input type="checkbox"/>	ID	Device Name	MAC Address	Internet Access Time	Description	Status	Modify
<input type="checkbox"/>	--	--	--	--	--	--	--

Device Name:

MAC Address:

Internet Access Time:

Description:  (Optional)

Enable this entry

Specify the Content Restriction

Content Restriction

Restriction Policy:  Blacklist  Whitelist

+ Add a New Domain Name to Access

www.tp-link.net -

Save

7. Select the restriction mode.
  - In [Blacklist](#) mode, the controlled devices cannot access any websites containing the specified keywords during the Internet Access Time period.
  - In [Whitelist](#) mode, the controlled devices can only access websites containing the specified keywords during the Internet Access Time period.
8. Click [Add a new keyword](#).

You can add up to 200 keywords for both Blacklist and Whitelist. Below are some sample entries to allow access.

  - 1) Enter a web address (e.g. [www.tp-link.com](#)) or a web address keyword (e.g. [wikipedia](#)) to only allow or block access to the websites containing that keyword.
  - 2) Specify the domain suffix (eg. [.edu](#) or [.org](#)) to allow access only to the websites with that suffix.
  - 3) If you wish to block all Internet browsing access, do not add any keyword to the [Whitelist](#).
9. Enter a keyword or a website and click [Save](#).

**Completed!** Now you can control your children’s Internet access according to your needs.

# Chapter 8. Security

This chapter contains three functions to protect your home network security from intruders. It allows you to block or allow some specific client devices to access your wireless network, or both wired and wireless network (Access Control). It also can prevent ARP Spoofing and ARP Attacks (IP & MAC Binding).

- [Settings](#)
- [Access Control](#)
- [IP & MAC Binding](#)

## 8.1 Settings

This function exploits the uniqueness of the MAC (Medium Access Control) address, a unique 12-digit hexadecimal address (for example, D8:5D:4C:B4:46:EA) of every network device, to determine if the device can or cannot access your wireless network.

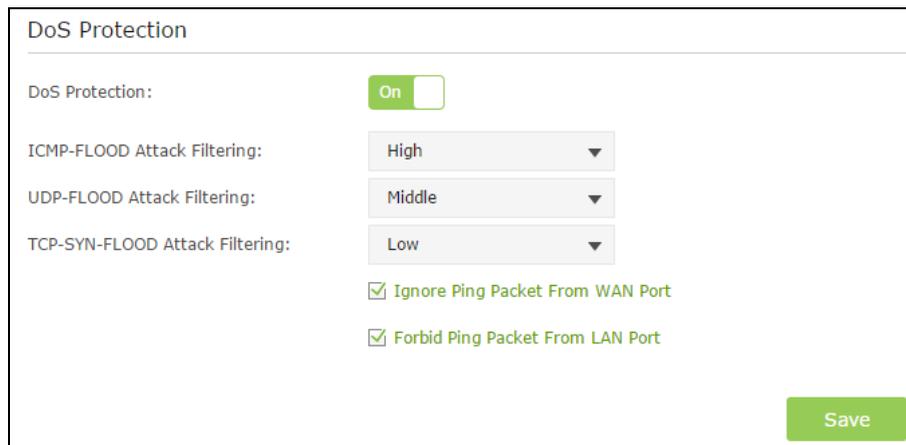
**I want to:** Prevent unauthorized users from accessing my wireless network by utilizing the network device's MAC address and IP address.

*For example,* I have a computer that is connected to my wireless network. Now, an unknown device (an intruder) is also using my wireless network, which affects my Internet speed. I need the following capabilities to control my wireless network:

1. My computer is always allowed to access the wireless network.
2. The unknown device is not allowed to access the wireless network.
3. When there are guests, they can use the wireless network with my permission.
4. I don't need to change my network's password.

**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 *Advanced>Security>Settings*. Enable SPI Firewall.
3. Switch on the DoS Protection on/off button. Setting the priority to protect the router from being attacked by TCP-SYN Flood, UDP Flood and ICMP-Flood in the screen. Click Save.



4. The blocked dos host list will display in the screen below.



	ID	IP Address	MAC Address
<input type="checkbox"/>	--	--	--

**Completed!** Now the intruder can no longer access your wireless network.

## 8.2 Access Control

**I want to:** Block or allow some specific client devices to access my network (wired or wireless) using a list of blocked devices or a list of allowed devices.

- How can I do that?**
1. Visit <http://tplinkwifi.net>, and log in with the user name and password you set for the router.
  2. Go to *Advanced > Security > Access Control*. Enable *Access Control*.

**Access Control**

Access Control:  On

**Access Mode**

Default Access Mode:  Blacklist  Whitelist

[Save](#)

**Devices Online**

[Refresh](#) [Block](#)

<input type="checkbox"/>	ID	Device Name	IP Address	MAC Address	Connection Type	Modify
--	1	CHH	192.168.0.119	D8-CB-8A-4F-E5-5F	Wired	<a href="#">Block</a>

**Devices in Blacklist**

[+ Add](#) [- Delete](#)

<input type="checkbox"/>	ID	Device Name	MAC Address	Modify
--	--	--	--	--

3. Select the [Blacklist](#) or [Whitelist](#) access mode to control the access and click [Save](#).
  - **Blacklist mode (Recommended):** any device (wired or wireless) added to the Devices in Blacklist will be blocked from accessing your network. It is recommended to select this mode if you only want to block specific devices. For specific configurations under this mode, go to Blacklist Mode.

**Access Control**

Access Control:  On

**Access Mode**

Default Access Mode:  Blacklist  Whitelist

[Save](#)

**Devices Online**

[Refresh](#) [Block](#)

<input type="checkbox"/>	ID	Device Name	IP Address	MAC Address	Connection Type	Modify
--	1	CHH	192.168.0.119	D8-CB-8A-4F-E5-5F	Wired	<a href="#">Block</a>

**Devices in Blacklist**

[Add](#) [Delete](#)

<input type="checkbox"/>	ID	Device Name	MAC Address	Modify
--	--	--	--	--

- 1) Select the device(s) to be blocked.
- 2) Click [Block](#). The selected device(s) will be added to Devices in Blacklist automatically.

<input type="checkbox"/>	2	64en	192.168.1.101	94:DE:80:C1:DB:EF	Wired
<input type="checkbox"/>	3	NC250	192.168.1.103	06:18:78:00:00:07	Wired

- **Whitelist mode:** only devices (wired or wireless) added to the Devices in Whitelist will be allowed to access the network. It is recommended to select this mode if you want to grant exclusive access to specific devices. For specific configurations under this mode, go to Whitelist Mode.

Devices in Whitelist

+ Add - Delete

<input type="checkbox"/>	ID	Device Name	MAC Address	Modify
--	--	--	--	--

Device Name:

MAC Address:

--	1	CHH	D8-CB-8A-4F-E5-5F	<input type="checkbox"/> <input type="checkbox"/>
----	---	-----	-------------------	---

- 1) Click [Add](#) to add a new entry.
- 2) Enter the [Device Name](#) and [MAC address](#) (You can copy and paste the information from [Devices Online](#) list if the device is connected to your network). Click [OK](#) to save the settings.

**Completed!** Now you can block or allow specific client devices to access your network (wired or wireless) using the [Blacklist](#) or [Whitelist](#).

## 8.3 IP & MAC Binding

IP & MAC Binding, namely, ARP (Address Resolution Protocol) Binding, is used to map network device's IP address to its MAC address. This will prevent ARP Spoofing and ARP Attacks by denying any other device other than the bound one to access the network using the bound IP address.

**I want to:** Prevent ARP Spoofing and ARP Attacks.

**How can I do that?**

1. Visit <http://tplinkmodem.net>, and log in with the password you set for the router.
2. Go to *Advanced > Security > IP & MAC Binding*. Enable IP & MAC Binding.
3. Use method 1 or method 2 to bind device (s).
  - [Method 1: bind the connected device\(s\)](#)
    - 1) Select the device to be bound in the [ARP List](#).

ARP List				
ARP Entry Number: 1				 Refresh
ID	MAC Address	IP Address	Bound	Modify
1	D8-CB-8A-4F-E5-5F	192.168.0.119	Unbound	 

- 2) Click Add to add a new binding entry.

Binding List							
						 Add	 Delete
<input type="checkbox"/>	ID	MAC Address	IP Address	Description	Status	Modify	
<input type="checkbox"/>	--	--	--	--	--	--	

MAC Address:	<input type="text"/>
IP Address:	<input type="text"/>
Description:	<input type="text"/> (Optional)
<input checked="" type="checkbox"/> Enable this entry	
<input type="button" value="Cancel"/> <input type="button" value="OK"/>	

- [Method 2: bind the unconnected device\(s\)](#)
  - 1) Click [Add](#) to add a new entry.

Binding List

+ Add - Delete

<input type="checkbox"/>	ID	MAC Address	IP Address	Status	Enable	Modify
--	--	--	--	--	--	--

MAC Address:

IP Address:

Enable

- 2) Enter the [MAC address](#) and [IP address](#) that you want to bind.
- 3) Select the checkbox to enable the entry.
- 4) Click [OK](#).

**Completed!** Now you don't need to worry about ARP Spoofing and ARP Attacks.

# Chapter 9. NAT Forwarding

Router's NAT (Network Address Translation) feature makes the devices in the LAN use the same public IP address to communicate in the Internet, which protect the local network by hiding IP addresses of the devices. However, it also brings about the problem that external host cannot initiatively communicate with the specified device in the local network.

With forwarding feature the router can penetrate the isolation of NAT and allows the external hosts in the Internet to initiatively communicate with the devices in the local network, thus to realize some special functions.

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.

This chapter contains the following sections:

- [ALG](#)
- [Virtual Sever](#)
- [Port Triggering](#)
- [DMZ](#)
- [UPnP](#)

## 9.1 Share Local Resources in the Internet by 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, click Enable.
- TFTP ALG - To allow TFTP clients and servers to transfer data across NAT, click Enable.
- H323 ALG - To allow Microsoft NetMeeting 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.

Click the **Save** button to save your settings.



Application Layer Gateway (ALG)

- Enable FTP ALG
- Enable TFTP ALG
- Enable H323 ALG
- Enable RTSP ALG
- Enable PPTP Passthrough
- Enable L2TP Passthrough
- Enable IPSec Passthrough

Save

## 9.2 Share Local Resources in the Internet by Virtual Server

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

Virtual server can be used for setting 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 in the Internet can visit my website in some way. The PC is connected to the router with the WAN IP address 218.18.232.154.

How can I do that?

1. Visit <http://tplinkmodem.net>, and log in with the password you set for the router.
2. Go to *Advanced > NAT Forwarding > Virtual Server*. Click *Add*.

The screenshot shows the 'Virtual Servers' configuration page. At the top right, there are '+ Add' and '- Delete' buttons. Below is a table with the following columns: ID, Service Type, External Port, Internal IP, Internal Port, Protocol, Status, and Modify. The table is currently empty. Below the table is a form for adding a new service. The form has the following fields: Service Type (with a 'View Existing Services' button), External Port (with a hint '(XX-XX or XX)'), Internal IP, Internal Port (with a hint '(XX or Blank ,1-65535)'), and Protocol (a dropdown menu currently set to 'ALL'). There is a checkbox labeled 'Enable this entry' which is checked. At the bottom right of the form are 'Cancel' and 'OK' buttons.

3. Click *View Existing Services*, and select HTTP in the prompt page. The external port, internal port and protocol will be automatically filled with contents. Keep the default setting of Internal Port and Protocol. Fill in PC's IP address 192.168.0.100 in the IP Address field.

**Note:** If you don't find your service type in the Service Name field, Please fill in the parameters manually. Verify the port that the service type should use. The following steps based on the environment mentioned at the beginning.

- 1) **External Port** is provided by router for Internet users. They browse the website through the WAN IP address and the external port. This field can be filled with a single port or a ports range. Here we use 8000.
  - 2) **Internal Port** is used by the server. The data received by External Port will be forwarded to Internal Port. You can leave it blank if the Internal Port is the same as the External Port. Here we use 80.
  - 3) Enter the server PC's IP Address into the IP Address field. Here we use 192.168.0.100.
  - 4) Protocol is the protocol used by the virtual service. Please select ALL if you aren't clear which protocol to be used. Here we use TCP.
4. Click *OK* to save the settings.

**Completed!** The Internet users can enter `http:// WAN IP: External Port` (in this example: `http:// 218.18.232.154: 8000`) to browse your personal website.

**Tips** WAN IP must be a public IP address. As the WAN IP address is dynamic, you are suggested to register a domain name for your router, then visit the website using `http:// domain name: External Port`.

## 9.3 Open Ports Dynamically by 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 and video players. Common applications include MSN Gaming Zone, Dialpad and Quick Time 4 players, etc.

Follow the steps below to configure the port triggering rules:

1. Visit <http://tplinkmodem.net>, and log in with the password you set for the router.
2. Go to [Advanced > NAT Forwarding > Port Triggering](#) and click [Add](#).
3. Click [View Existing Applications](#), and select the desired application. The external port, internal port and protocol will be automatically filled with contents. The following picture takes application [MSN Gaming Zone](#) as an example.
4. Click [OK](#) to save the settings.

**Port Triggering**

+ Add - Delete

<input type="checkbox"/>	ID	Application	Triggering Port	Triggering Protocol	External Port	External Protocol	Status	Modify
<input type="checkbox"/>	--	--	--	--	--	--	--	--

Application:  [View Existing Applications](#)

Triggering Port:  (XX,1-65535)

Triggering Protocol:  ▼

External Port:  (XX or XX-XX,1-65535,at most 5 pairs)

External Protocol:  ▼

Enable this entry

[Cancel](#) [OK](#)

Note:

1. You can add multiple port triggering rules according to your network need.
2. The external ports of different rules cannot be overlapped.
3. One rule can only be used by one host at one time. Other hosts' request at the same time will be rejected.
4. At any time, one host can only use one Port Triggering rule.
5. If the application you need is not listed in the Existing Applications list, please enter the parameters manually. You should verify the external ports the application uses first and enter them into [External Port](#) field according to the format the page displays.

## 9.4 Make Applications Free from Port Restriction by 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, like IP camera and database software, you can set the PC to be a DMZ host.

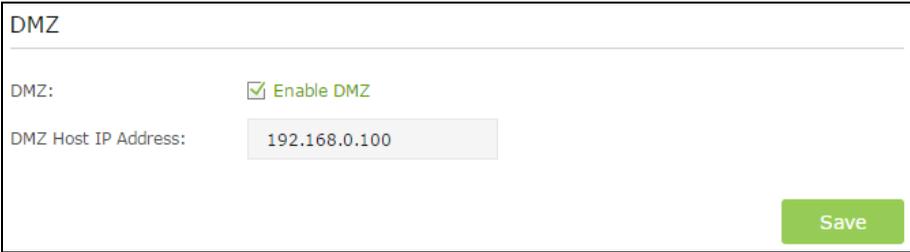
**Tips:** DMZ is more applicable in the situation that users are not clear about which ports to open. When it is enabled, the DMZ host is totally exposed to the Internet, which may bring some potential safety hazard. If DMZ is not in use, please disable it in time.

**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 login normally but cannot join a team with other players. To solve this problem, set your PC (192.168.0.100) as a DMZ with all ports opened.

**How can I do that?**

1. Visit <http://tplinkmodem.net>, and log in with the password you set for the router.
2. Go to *Advanced > NAT Forwarding > DMZ*. Tick the checkbox to enable the DMZ feature.
3. Enter your PC' IP address and click *Save* to make the settings effective.



DMZ

DMZ:  Enable DMZ

DMZ Host IP Address:

Save

**Completed!** The configuration is completed. You've set your PC to a DMZ host and now you can make a team to game with other players.

## 9.5 Make Xbox Online Games Run Smoothly by UPnP

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 in the both sides of NAT device 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.

**Note:**

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

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

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

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Advanced > NAT Forwarding > UPnP](#) and toggle on or off according to your needs.

### UPnP

UPnP:  On

#### UPnP Service List

Client Number: 0  Refresh

ID	Service Description	External Port	Protocol	Internal IP Address	Internal Port
--	--	--	--	--	--

# Chapter 10. QoS

By default, the Internet bandwidth is shared by connected devices and applications, which means that the bandwidth of each device or application is uncontrollable while they are sharing the Internet. When some device is streaming video on Internet or downloading with P2P software, it will affect the Internet experience of other applications. Quality of Service (QoS) can help avoid the situation.

## Prioritize Internet Traffic with Quality of Service

Specify priority levels for some devices or applications.

- Set your ftp server with faster surfing speed;
- Set your phone an intermediate speed on the Internet;
- Set the WIFI-GUEST with slower surfing speed.

### 1 Enable QoS and set bandwidth allocation

- 1) Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
- 2) Select Advanced > QoS > Settings.
- 3) Select the Enable QoS check box.
- 4) Enter the maximum upload and download bandwidth provided by your service provider. 1Mbps is equal to 1024Kbps.
- 5) Click the Advanced arrow to display the priority setting scrolling bar.
- 6) Drag the scroll bar to set the bandwidth priority percentage.

Note:

- Add each priority up no more than 100%.
- High priority is greater than Middle priority, and middle priority is greater than Low priority.

The screenshot shows the QoS configuration interface. At the top, the title 'QoS' is displayed. Below it, the 'QoS' section has a checked checkbox for 'Enable QoS'. Underneath, there are two input fields: 'Upload Bandwidth' and 'Download Bandwidth', both set to '100' with a unit dropdown menu set to 'Mbps'. An 'Advanced' section is expanded, showing three sliders for priority levels: 'High Priority' is set to 60%, 'Middle Priority' is set to 30%, and 'Low Priority' is set to 10%. A green 'Save' button is located at the bottom right of the form.

- 7) Click Save.

## 2 Add QoS Rules

Note: In the QoS Rule List field, displays three priority. In the QoS rule field, displays three rule.type: By device, By application and By physical port.

The image shows two parts of a network configuration interface. The top part is titled "QoS Rule List" and contains three columns representing different priority levels: "High Priority:60%", "Middle Priority:30%", and "Low Priority:10%". Each column is currently empty and has a blue "Add" button at the bottom. The bottom part is titled "QoS Rule" and shows the "Type:" field with three radio button options: "By Device" (which is selected), "By Application", and "By Physical Port".

- 1) Set a high priority rule for the ftp server:
  - a. Select By Application and then select ftp in the list. Click OK.

This screenshot shows the "QoS Rule" configuration dialog in more detail. The "Type:" field now has "By Application" selected and highlighted with a yellow box. Below this is a list of applications under the heading "Application". The "ftp" application is checked and highlighted with a yellow box. Other applications listed include SSH, telnet, vpn, dns, icmp, nntp, MSN, Skype, BT, Emule, Facebook, Vonage, netTalk, iTalkBB, GTalk, HTTP, https, smtp, pop3, PPTP, L2TP, IPSec, and Whatsapp. At the bottom of the dialog, there is a "Custom Application" field with a right-pointing arrow and two buttons: "Cancel" and "OK", with the "OK" button highlighted in yellow.

Note:

If your application isn't listed on the screen, click Custom Application to add application manually.

Custom Application

Name: ftp

Protocol: ALL

Port: 21

Cancel OK

Name: Type in a name for your application.

Protocol: Select the protocol for your application, if you are not sure, select ALL.

Port: Enter the destination port for your application, usually each application has a fixed port, please ensure you enter the correct the port. In this case, the destination port for ftp is 21.

- 2) Set a middle priority rule for the phone:
  - a. Select By Device and then click View Existing Devices.

QoS Rule

Type:  By Device  By Application  By Physical Port

Device Name:  View Existing Devices

MAC Address:

Cancel OK

- b. Choose the respective device from the list.

ID	Device Name	IP Address	MAC Address	Operation
1	phone	192.168.0.184	C8-85-50-5D-02-40	Choose
2	UNKNOWN	192.168.0.228	00-0A-EB-13-23-97	Choose
3	UNKNOWN	192.168.0.183	00-0A-EB-13-1B-7B	Choose
4	UNKNOWN	192.168.0.200	50-E5-49-1E-06-80	Choose
5	TP-SHARE	192.168.0.4	00-0A-EB-13-01-02	Choose

- c. Click OK.

**QoS Rule**

Type:  By Device  By Application  By Physical Port

Device Name:

MAC Address:

- 3) Set a low priority rule for the WIFI-GUEST:
- a. Select By Physical Port and then select WIFI-HOST. Click OK.

**QoS Rule**

Type:  By Device  By Application  By Physical Port

Port:  WIFI-HOST  LAN1  LAN3  
 WIFI-GUEST  LAN2  LAN4

- 4) The QoS rules list will display in the table.

**QoS Rule List**

High Priority:60%	Middle Priority:30%	Low Priority:10%
ftp 	phone > 	WIFI-HOST 
<input type="button" value="Add"/>	<input type="button" value="Add"/>	<input type="button" value="Add"/>

Note: If you want to delete a QoS rule, click  to remove the responding rule from the list.

## Update the Database

In the Application list, we may not list all of the applications, a new database version may contain more applications. New database versions are posted at [www.tp-link.com](http://www.tp-link.com) and can be downloaded for free. There is no need to upgrade the database unless the new database has a new application you need.

- 1) Download the latest upgrade database upgrade file from our website ([www.tp-link.com](http://www.tp-link.com)).

- 2) Select Advanced > QoS > Database. Click Browse to select your download database upgrade file, then click Upgrade. Wait until the upgrade is completed and do not operate during the process.

### Database Upgrade ?

---

New Database File:  [Browse](#)

Database Version: Qos database 1.5.0

[Upgrade](#)

# Chapter 11. Specify the Network Settings

This chapter introduces how to change the default settings or adjust the basic configuration of the router using the web-based management page.

This chapter contains the following sections:

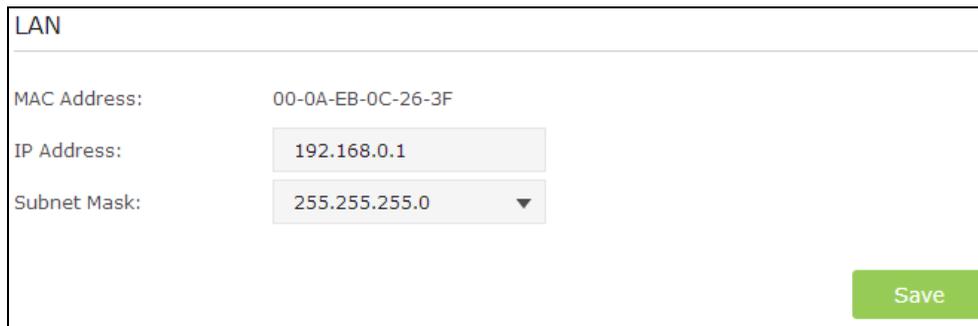
- [Change LAN Settings](#)
- [Wireless Settings](#)
- [Register a Domain Name for Your Router](#)
- [Interface Grouping](#)
- [Create Static Routes](#)
- [Set up VPN Connection](#)

## 11.1 Change LAN Settings

### 11.1.1 Change the LAN IP address

The router is preset with a default LAN IP 192.168.0.1, which you can use to log in to its web-based management page. The LAN IP address together with the Subnet Mask also defines the subnet that the connected devices are on. If the IP address conflicts with another device on your local network or your network requires a specific IP subnet, you can change it.

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to Advanced > Network > LAN page.



MAC Address:	00-0A-EB-0C-26-3F
IP Address:	192.168.0.1
Subnet Mask:	255.255.255.0 ▼

Save

3. Type in a new IP Address appropriate to your needs.
4. Leave the Subnet Mask as the default settings.
5. Click Save.

#### Note:

If the new LAN IP address is not in the same subnet with the old one, the IP Address Pool in the DHCP Server will be automatically configured. However, the Virtual Server and DMZ Host will not take effect until they are reconfigured.

#### In Addition:

Subnet Mask is an address code that determines the size of the network. Normally we use 255.255.255.0 as the subnet mask.

## 11.2 Configure to support IPTV service

I want to configure IPTV setup to enable Internet/IPTV/Phone service provided by my ISP (Internet service provider).

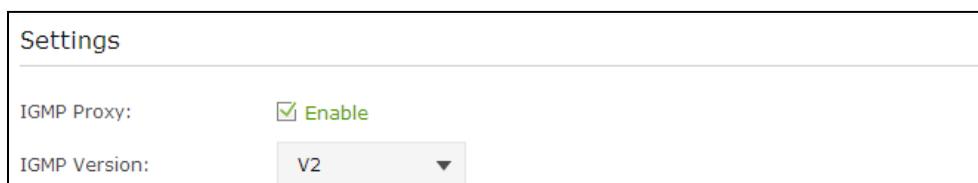
#### How can I do that?

Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router. Go to Advanced > Network > IPTV page.

If your ISP provide the networking service based on IGMP technology, e.g., BT (British Telecom) and Talk Talk in UK:

Tip: IGMP Proxy is to act as a multicast proxy for hosts on the LAN side.

1. Select the IGMP Proxy check box and choose the highest IGMP Version the system supports: V2 or V3.



IGMP Proxy:	<input checked="" type="checkbox"/> Enable
IGMP Version:	V2 ▼

2. Click Save.

- After configuring IGMP proxy, IPTV can work behind your router now. You can connect your set-top box to any of the router's LAN port.

If IGMP is not the technology your ISP apply to provide IPTV service, you can clear the IGMP Proxy check box and complete the following steps:

- Select the Enable IPTV check box.
- Select the appropriate Mode according to your ISP. Select Bridge if your ISP is not listed and no other parameters are required, skip to Step 4. Select Custom if your ISP is not listed but provides the necessary parameters.

Mode: Bridge ▼

- Bridge
- Russia
- Singapore-ExStream
- Malaysia-Unifi
- Malaysia-Maxis
- Custom

- After you have selected a mode, the necessary parameters are predetermined. You can perform other configuration, e.g. enter the IPTV Multicast VLAN ID and select the IPTV Multicast VLAN Priority in Russia mode according to your ISP.

Mode:	<span style="border: 1px solid gray; padding: 2px;">Russia ▼</span>		
Internet VLAN ID:	1257	Internet VLAN Priority:	0 ▼
			<input checked="" type="checkbox"/> 802.1Q Tag
IP-Phone VLAN ID:	263	IP-Phone VLAN Priority:	0 ▼
IPTV VLAN ID:	4000	IPTV VLAN Priority:	4 ▼
IPTV Multicast VLAN ID:	1110	IPTV Multicast VLAN Priority:	4 ▼
			<input checked="" type="checkbox"/> Enable

- For Russia, Singapore-ExStream, Malaysia-Unifi and Malaysia-Maxis mode, connect device to the predetermined LAN port.

For Bridge and Custom mode, select the LAN type and connect the set-top box to the corresponding port.

LAN1:	Internet ▼
LAN2:	Internet ▼
LAN3:	IPTV ▼
LAN4:	IP-Phone ▼

- Click the Save button.

Your IPTV setup is done now! You may need other configurations on your set-top box before enjoying your TV.

**Note:**

Qos and IPTV cannot be enabled at the same time.

**Completed!**

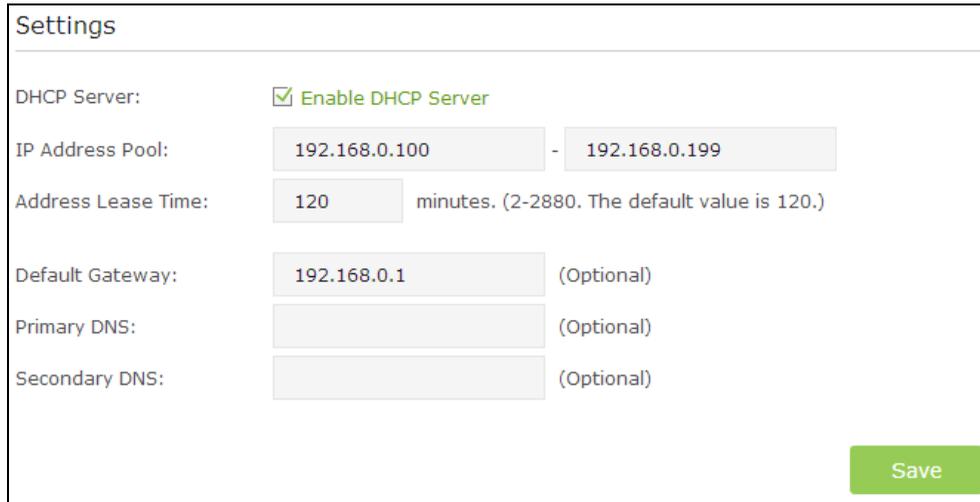
## 11.3 Specify DHCP Server Settings

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 address for specified client device.

Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router, and go to Advanced > Network > DHCP Server page.

To use the router as an AP:

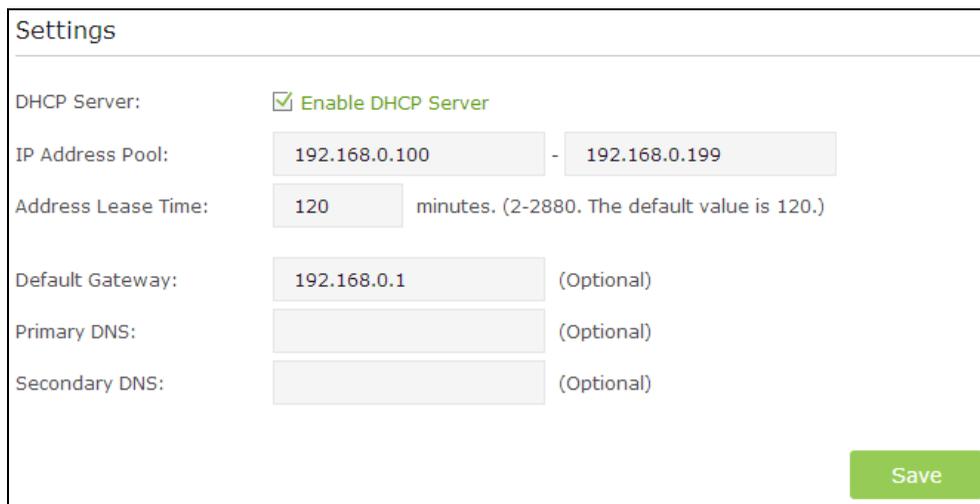
If you use another device on your network as the DHCP server, and the router act as an AP, you can disable the DHCP feature in the router.



The screenshot shows the 'Settings' page for the DHCP Server. The 'DHCP Server' checkbox is checked and labeled 'Enable DHCP Server'. The 'IP Address Pool' is set to '192.168.0.100 - 192.168.0.199'. The 'Address Lease Time' is set to '120 minutes. (2-2880. The default value is 120.)'. The 'Default Gateway' is set to '192.168.0.1 (Optional)'. The 'Primary DNS' and 'Secondary DNS' fields are empty and labeled '(Optional)'. A green 'Save' button is located at the bottom right.

1. Clear the Enable DHCP Server check box.
2. Click Save.

To specify the IP address that the router assigns:



The screenshot shows the 'Settings' page for the DHCP Server. The 'DHCP Server' checkbox is checked and labeled 'Enable DHCP Server'. The 'IP Address Pool' is set to '192.168.0.100 - 192.168.0.199'. The 'Address Lease Time' is set to '120 minutes. (2-2880. The default value is 120.)'. The 'Default Gateway' is set to '192.168.0.1 (Optional)'. The 'Primary DNS' and 'Secondary DNS' fields are empty and labeled '(Optional)'. A green 'Save' button is located at the bottom right.

3. Make sure that the Enable DHCP Server check box is selected.
4. Type in the starting and ending IP address in the IP Address Pool.
5. Type in other parameters if the ISP offers, the Default Gateway is automatically filled the same as the LAN IP address of the router.
6. Click Save.

To reserve an IP address for a specified client device:

### Address Reservation

+ Add - Delete

<input type="checkbox"/>	ID	MAC Address	Reserved IP Address	Description	Status	Modify
<input type="checkbox"/>	--	--	--	--	--	--

MAC Address:

IP Address:

Description:

Enable

Cancel OK

1. Click the + Add button.
2. Type in the MAC address of the client device.
3. Type in the IP address to set to the client device.
4. Enter the description for the rule.
5. Select the Enable check box.
6. Click OK.

The IP address reservation is configured successfully, and you can see the rule shown as below.

### Address Reservation

+ Add - Delete

<input type="checkbox"/>	ID	MAC Address	Reserved IP Address	Description	Status	Modify
<input type="checkbox"/>	1	74-D4-39-24-DA-E4	192.168.0.11	ingrid		

In addition:

Click + Add to add another address reservation rule.

Click to change the status of the rule.

Click to modify the settings of the rule.

Click to delete the rule.

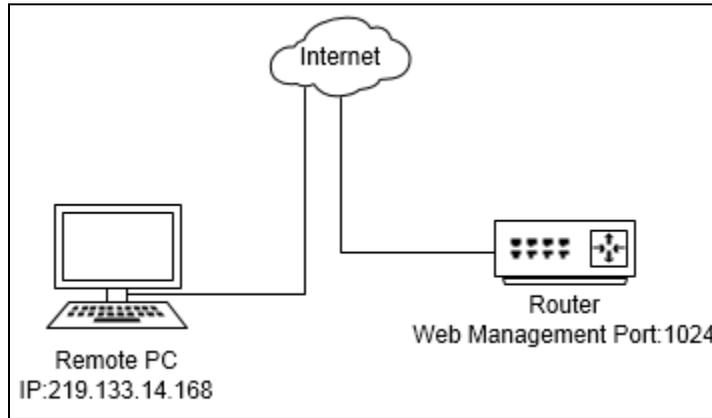
Select the check boxes of multiple rules before ID, and click - Delete to delete them at the same time.

## 11.4 Dynamic DNS

To manage the router remotely, the remote device needs to log in to `http://Router's WAN IP:port number`, which requires the remote user to know the router's WAN IP. The ISP (Internet Service Provider), however, usually assigns a dynamic IP to the router. When the WAN IP changes, the user needs to reconfirm the related information. The Dynamic DNS (DDNS) links the router's dynamic WAN IP with a domain name, allows the remote device to log in with the domain name and saves the trouble of reconfirming.

I want to: Manage the router remotely with Remote PC, whose authority to manage the router has been enabled, by logging in with the domain name.

For example:



TIPS:

1. DDNS does not work if the ISP assigns a private WAN IP address (such as 192.168.0.x) to the router.
2. To use this function, you have to have a NO-IP account or a DynDNS account.

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 Advanced → Network → Dynamic DNS.

The screenshot shows the 'Dynamic DNS' configuration page. At the top, there are two radio buttons: 'NO-IP' (selected) and 'DynDNS'. To the right of 'DynDNS' is a link 'Go to register...'. Below this are four input fields: 'Username: 2) e.g.' with the value 'lisaddns', 'Password:' with masked characters '.....', 'Domain Name:' with the value 'lisa.ddns.net', and 'Update Interval: 3)' with a dropdown menu set to '1 hour'. At the bottom, there are two buttons: 'Login and Save' (labeled with a red '4)') and 'Logout'.

3. Select a DDNS service provider (NO-IP or DynDNS).

TIPS: If you don't have a DDNS account, select a service provider and click Go to register to register.

4. Enter the username, password and domain name of the account (such as

lisadns.ddns.net).

5. Click Login and Save.

**Completed!**

Now on the PC that can manage the router remotely, log in to <http://domain name: port number> (such as <http://lisa.ddns.net:1024>) to manage the router.

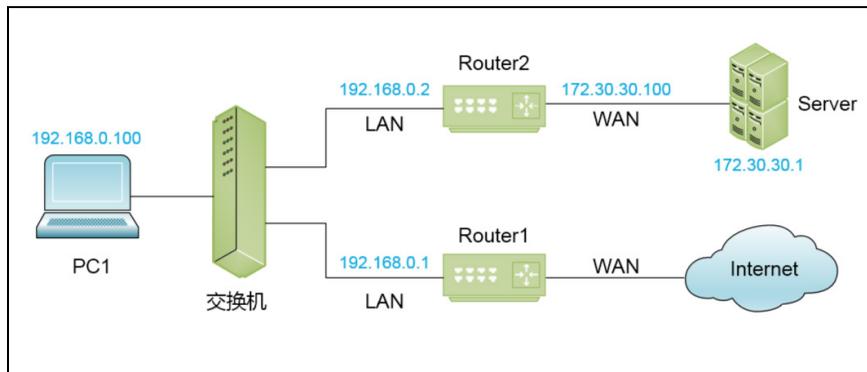
## 11.5 Static Routing

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

**I want to:**

Visit multiple networks and multiple servers at the same time.

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



**How can I do that?**

1. Change the routers LAN IP addresses to two different IP addresses on the same subnet. Disable Router 2's DHCP function.
2. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router. Go to Network → Advanced Routing. Click Add to add a new static routing entry.

The screenshot shows the 'Static Routing' configuration page. At the top right, there is a green question mark icon. Below the title, there are '+ Add' and '- Delete' buttons. The main part of the page is a table with the following columns: ID, Destination Network, Subnet Mask, Default Gateway, Interface, Description, Status, and Modify. The table currently contains one row with dashes in all cells.

<input type="checkbox"/>	ID	Destination Network	Subnet Mask	Default Gateway	Interface	Description	Status	Modify
	--	--	--	--	--	--	--	--

3. Finish the settings according to the following explanations:

Destination Network: 172.30.30.1

Subnet Mask: 255.255.255.255

Default Gateway: 192.168.0.2

Interface: LAN

Description: 公司网络

Enable

Cancel OK

**Destination Network:** is the destination IP address that you want to assign to a static route. This IP address cannot be on the same subnet with the WAN IP or LAN IP of the router. In the example, the IP address of the company network is the destination IP address, so here enters 172.30.30.1.

**Subnet Mask:** determines the destination network with the destination IP address. If the destination is a single IP address, enter 255.255.255.255; otherwise, enter the subnet mask of the corresponding network IP. In the example, the destination network is a single IP, so here enters 255.255.255.255.

**Default Gateway:** is the IP address of the gateway device to which the data packets will be sent. This IP address must be on the same subnet with the router's IP which sends out the data. In the example, the data packets will be sent to the LAN port of Router 2 and then to the Server, so the default gateway should be 192.168.0.2.

**Interface:** is determined by the port (WAN/LAN) that sends out the data packets. In the example, the data is sent to the gateway through the LAN port, so LAN should be selected.

**Description:** (Optional) Enter a description for this static routing entry.

4. Click OK to save the settings.

Static Routing ?

+ Add - Delete

<input type="checkbox"/>	ID	Destination Network	Subnet Mask	Default Gateway	Interface	Description	Status	Modify
<input type="checkbox"/>	1	172.30.30.1	255.255.255.255	192.168.0.2	LAN	公司网络	💡	✎ 🗑️

5. Check the System Routing Table below. If you can find the entry you set in the System Routing Table, the static routing is set successfully.

System Routing Table				
Client Number: 5				 Refresh
ID	Destination Network	Subnet Mask	Gateway	Interface
1	0.0.0.0	0.0.0.0	192.168.1.1	wan
2	172.30.30.1	255.255.255.255	192.168.0.2	lan
3	192.168.0.0	255.255.255.0	0.0.0.0	lan
4	192.168.0.2	255.255.255.255	0.0.0.0	lan
5	192.168.1.0	255.255.255.0	0.0.0.0	wan

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

## 11.6 Specify Wireless Settings

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

Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router and go to **Advanced** > **Network** > **Wireless** page.

To change the working region for the router:

**Settings**

---

Region: United States ▼

Save

1. Select the region from the drop-down list.
2. Click Save.

To change the status of the wireless radio:

The wireless radio is enabled by default, if you want to disable the wireless function of the router, just clear the Enable Wireless Radio check box. In this case, all the wireless settings will be invalid.

To customize the wireless network name (SSID) and password:

Type in the new wireless network name (SSID)

Wireless
2.4GHz | 5GHz

---

Enable Wireless Radio

Wireless Network Name (SSID):   Hide SSID

Security:

Version:  Auto  WPA-PSK  WPA2-PSK

Encryption:  Auto  TKIP  AES

Password:

Mode:

Channel Width:

Channel:

Transmit Power:  Low  Middle  High

## 11.7 WPS

Wi-Fi Protected Setup (WPS) gives consumers an easier approach to set up a security-protected Wi-Fi connection. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router and go to Advanced > Network > Wireless page.

### Router's PIN

Router's PIN:  On

PIN:

### WPS Wizard

Select a setup method:  Push Button (Recommended)  PIN

Toggle on the Router's PIN (On by default) to allow wireless devices to connect to the router using the router's PIN.

If you want to enable/disable the WPS feature, go to System Tools > System

Parameters > WPS, select or clear the Enable WPS check box.

The PIN field displays the current PIN of the router. You can click Generate to get a new random

PIN or click Default to restore it.

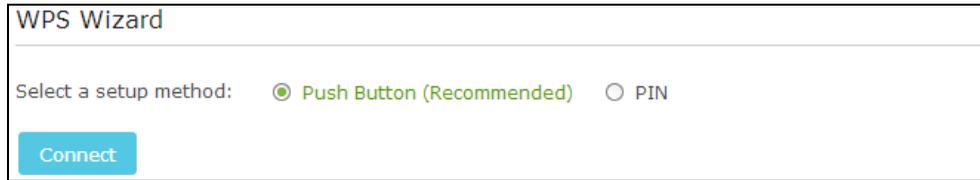
PIN (personal identification number) is the wireless password for the network by default, you can find it on the label of the router.

To use the WPS Wizard for Wi-Fi connections:

1. Select a setup method

Push Button (Recommended): Click the Connect button on the screen. Within two minutes, push the WPS button on the client device.

PIN: Enter the client's PIN, and click Connect.



The image shows a screenshot of a web interface titled "WPS Wizard". Below the title, there is a section labeled "Select a setup method:" followed by two radio button options: "Push Button (Recommended)" which is selected (indicated by a green dot), and "PIN". Below these options is a blue button labeled "Connect".

2. The router WPS screen displays confirmation message and the WPS LED on the router will keep on for five minutes if the client has been successfully added to the network.

**Completed!**

# Chapter 12. Administrate Your Network

This chapter introduces how to change the system settings and administrate your router's network.

This chapter contains the following sections:

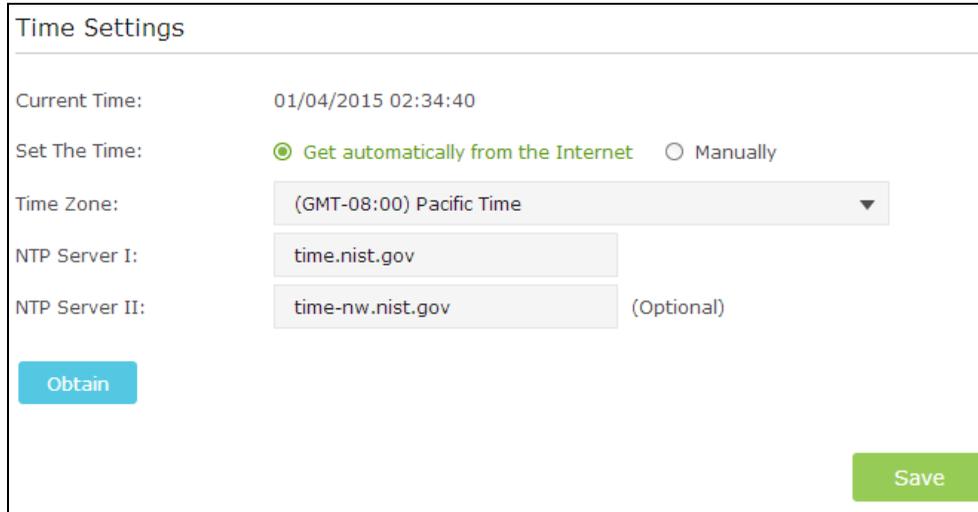
- [\*Set Up System Time\*](#)
- [\*Test the Network Connectivity\*](#)
- [\*Upgrade the Firmware\*](#)
- [\*Backup and Restore Configuration Settings\*](#)
- [\*Change the Administrator Account\*](#)
- [\*Password Recovery\*](#)
- [\*Local Management\*](#)
- [\*Remote Management\*](#)
- [\*System Log\*](#)
- [\*Reboot the Router\*](#)
- [\*Logout\*](#)

## 12.1 Set Up System Time

System time is the time displayed while the router is running. The system time you configure here will be used for other time-based functions like Parental Controls. You can manually set how to get the system time.

Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router. Go to **Advanced > System Tools > Time Settings** page.

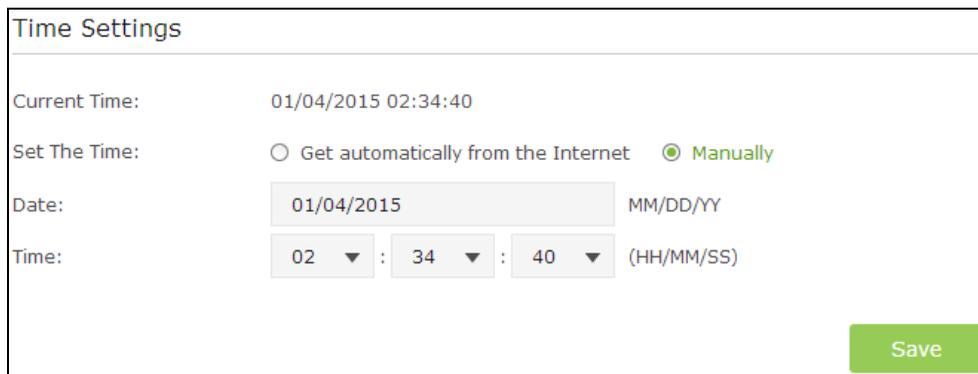
**To automatically synchronize the time:**



The screenshot shows the 'Time Settings' page. At the top, it displays the 'Current Time' as 01/04/2015 02:34:40. Under 'Set The Time', the 'Get automatically from the Internet' radio button is selected, while 'Manually' is unselected. The 'Time Zone' is set to '(GMT-08:00) Pacific Time'. The 'NTP Server I' field contains 'time.nist.gov' and the 'NTP Server II' field contains 'time-nw.nist.gov' with '(Optional)' next to it. There is a blue 'Obtain' button and a green 'Save' button.

1. In the **Set The Time** field, select Get automatically from the Internet.
2. Select your local **Time Zone** from the drop-down menu.
3. In the **NTP Server I** field, enter the IP address or domain name of your desired NTP Server.
4. In the **NTP Server II** field, enter the IP address or domain name of the second NTP Server. (Optional)
5. Click **Obtain**.
6. Click **Save**.

**To manually set the date and time:**



The screenshot shows the 'Time Settings' page with 'Manually' selected under 'Set The Time'. The 'Date' field is set to '01/04/2015' with 'MM/DD/YY' format. The 'Time' field is set to '02 : 34 : 40' with '(HH/MM/SS)' format. There is a green 'Save' button.

1. In the **Set The Time** field, select Manually.
2. Enter the current **Date**.
3. Set the current **Time** (In 24-hour clock format).
4. Click **Save**.

## To setup Daylight Saving time:

Daylight Saving

Daylight Saving:  Enable Daylight Saving

Start: 2015 Mar. 2nd Sun. 2a.m.

End: 2015 Nov. First Sun. 2a.m.

Running Status:

Save

1. Select **Enable Daylight Saving**.
2. Select the correct **Start** date and time when daylight saving time starts at your local time zone.
3. Select the correct **End** date and time when daylight saving time ends at your local time zone.
4. Click **Save**.

## 12.2 Test the Network Connectivity

I want to test the connectivity between the router and the host or other network devices.

**For example:** I want to test the connectivity between my router and the Yahoo server.

**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 **Advanced > System Tools > Diagnostics** page.
3. Fill in the information with the help of page tips:
  - 1) Choose **Ping** or **Traceroute** as the diagnostic tool to test the connectivity.

Ping is used to test the connectivity between the router and the tested host, and measure the round-trip time. Traceroute is used to display the route (path) your router has passed to reach the tested host, and measure transit delays of packets across an Internet Protocol network.

- 2) Input the IP address or domain name of the tested host.

Diagnostics

Diagnostic Tool:  Ping  Traceroute

IP Address/ Domain Name:

Start

Advanced

Ping Count: 4 (1-50)

Ping Packet Size: 64 (4-1472 Bytes)

4. Click **Start** to begin the diagnostics.

**Completed!**

Now you can learn the connectivity and reachability between the router and the tested host with the help of the testing results.

In addition:

Click **Advanced**, you can modify the ping count, ping packet size or the Traceroute Max TTL. It's recommended to keep the default value.

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

```
PING www.Yahoo.com (116.214.12.74): 64 data bytes
Reply from 116.214.12.74: bytes=64 ttl=50 seq=1 time=51.640 ms
Reply from 116.214.12.74: bytes=64 ttl=50 seq=2 time=53.671 ms
Reply from 116.214.12.74: bytes=64 ttl=50 seq=3 time=56.045 ms
Reply from 116.214.12.74: bytes=64 ttl=50 seq=4 time=57.857 ms

--- Ping Statistic "www.Yahoo.com" ---
Packets: Sent=4, Received=4, Lost=0 (0.00% loss)
Round-trip min/avg/max = 51.640/54.803/57.857 ms
```

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

```
traceroute to www.Yahoo.com (116.214.12.74), 20 hops max, 38 byte packets
 1 219.133.12.1 (219.133.12.1) 19.556 ms 22.274 ms 22.024 ms
 2 113.106.38.77 (113.106.38.77) 30.115 ms 22.649 ms 20.931 ms
 3 * * *
 4 183.56.65.14 (183.56.65.14) 26.210 ms 29.428 ms 28.272 ms
 5 * 202.97.60.25 (202.97.60.25) 29.272 ms 25.461 ms
 6 202.97.60.46 (202.97.60.46) 27.335 ms 27.616 ms 28.272 ms
 7 202.97.60.149 (202.97.60.149) 22.805 ms 24.024 ms 24.711 ms
 8 202.97.6.30 (202.97.6.30) 47.610 ms 54.452 ms 61.137 ms
 9 r4105-s2.tp.hinet.net (220.128.6.110) 51.171 ms 50.515 ms 56.107 ms
10 220.128.11.190 (220.128.11.190) 60.950 ms 60.200 ms 60.419 ms
```

## 12.3 Upgrade the Firmware

TP-LINK R&D is dedicated to improving and enriching the product features, giving you a better network experience. We will release the latest firmware at TP-LINK official website, you can download the latest firmware file from our website: [www.tp-link.com](http://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](http://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 **Advanced > System Tools > Firmware Upgrade** page.

Firmware Upgrade

New Firmware File:

Firmware Version:

Hardware Version:

4. Click **Browse** to locate the downloaded new firmware file, and click **Upgrade**.
5. Wait a few moments for the upgrading and rebooting.

Note:

1. Before upgrading the firmware, it's better to back up your current settings.
2. During the upgrading process, do not turn off or reset the router.
3. The upgraded firmware version must correspond to the hardware.

## 12.4 Backup and Restore Configuration Settings

The configuration settings are stored as a configuration file in the router. You can back up the configuration file to your computer for future use and restore the modem router to a previous settings from the backup file when needed. Moreover, if needed you can erase the current settings and reset the modem router to the default factory settings.

### To backup configuration settings:

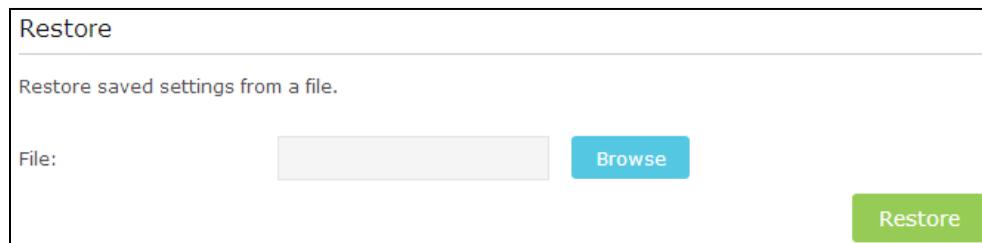
1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to **Advanced > System Tools > Backup & Restore** page.
3. Click **Backup** to save a copy of the current settings to your local computer. A conf.bin file will be stored to your computer.



The screenshot shows a web interface titled "Backup". Below the title, there is a horizontal line and the text "Save a copy of your current settings." In the bottom right corner, there is a green button labeled "Backup".

### To restore configuration settings:

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to **Advanced > System Tools > Backup & Restore** page.
3. Click **Browse** to locate the backup configuration file stored on your computer, and click **Restore**. The configuration file is conf.bin.
4. Wait a few moments for the restoring and rebooting.



The screenshot shows a web interface titled "Restore". Below the title, there is a horizontal line and the text "Restore saved settings from a file." Below this text, there is a label "File:" followed by a text input field and a blue button labeled "Browse". In the bottom right corner, there is a green button labeled "Restore".

Note: During the restoring process, do not turn off or reset the modem router.

### To reset the modem router to factory default settings:

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to **Advanced > System Tools > Backup & Restore** page.
3. Click **Factory Restore** to reset the modem router.
4. Wait a few moments for the resetting and rebooting.

Factory Default Restore

---

Revert all the configuration settings to their default values.

**Note:**

1. During the resetting process, do not turn off or reset the modem router.
2. We strongly recommend you back up the current configuration settings before resetting the modem router.

## 12.5 Change the Administrator Account

**I want to:** Change the login username and password of the web-based management page.

- How can I do that?**
1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router before.
  2. Go to **Advanced > System Tools > Administration**. Finish the settings in Account Management section.
  3. Enter the old username and old password. Enter the new username and enter the new password twice (both case-sensitive). Click **Save**.

Account Management

---

Old Username:  ✓

Old Password:  ✓

New Username:

New Password:

Confirm New Password:  ✓

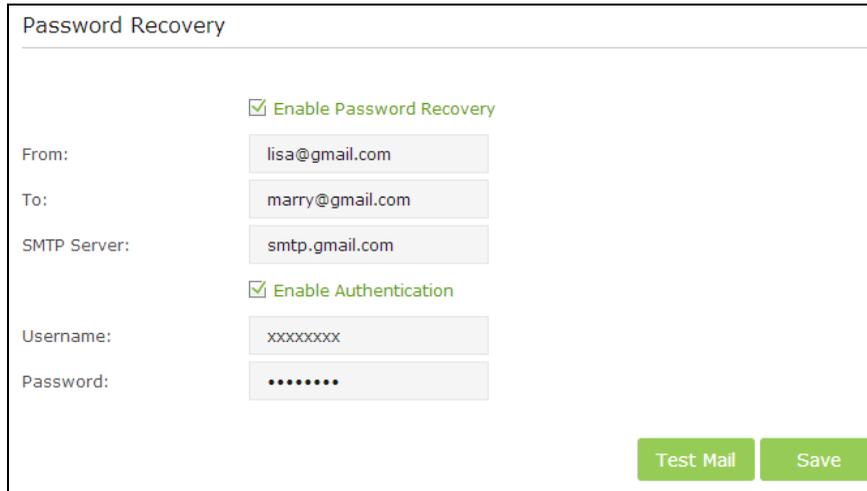
**Completed!** The following symbol indicates the configuration becomes effective. Use the new username and password for the following logins.



## 12.6 Password Recovery

**I want to:** Recover my login username and password in case I forget them.

- 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 **Advanced > System Tools > Administration**. Finish the settings in Password Recovery section.
  3. Select the **Enable Password Recovery** checkbox.



The screenshot shows the 'Password Recovery' configuration page. At the top, there is a title 'Password Recovery'. Below the title, there are two checked checkboxes: 'Enable Password Recovery' and 'Enable Authentication'. The 'From:' field is set to 'lisa@gmail.com', the 'To:' field is set to 'marry@gmail.com', and the 'SMTP Server:' field is set to 'smtp.gmail.com'. The 'Username:' field is set to 'xxxxxxxx' and the 'Password:' field is set to '.....'. At the bottom right, there are two buttons: 'Test Mail' and 'Save'.

4. Specify a mailbox (From) to send the recovery letter and enter its SMTP server address. Specify a mailbox (To) to receive the recovery letter. If the mailbox (From) to send the recovery letter requires login, select Enable Authentication and enter its username and password.
5. Click Test Mail to test whether the configuration is successful.
6. Click Save.
7. To recover your login username and password, please refer to "FAQ\_2. Recover the login username and password of the Web management page".

**Completed!** The following symbol indicates the configuration becomes effective.



## 12.7 Local Management

**I want to:** Control connected devices' authority to manage the router.

**How can I do that?** Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.

Go to **Advanced > System Tools > Administration**. In Local Management section, finish the settings according to your needs.

### Allow all LAN connected devices to manage the router

Local Management

Access for All LAN Connected Devices:  On

Toggle On to enable the management for all devices on LAN or keep it Off to enable the management for a specific device.

Toggle on **Access for All LAN Connected Devices**.

**TIPS:** This function is enabled by default.

### Allow specific devices to manage the router

Local Management

Access for All LAN Connected Devices:  Off 1)

Toggle On to enable the management for all devices on LAN or keep it Off to enable the management for a specific device.

2) + Add - Delete

<input type="checkbox"/>	ID	MAC Address	Description	Status	Modify
--	--	--	--	--	--

MAC Address:  View Existing Devices 3)

Description: 4)  View and Choose

5)  Enable

Cancel OK 6)

--	1	50-E5-49-1E-06-80	Your PC!		
----	---	-------------------	----------	--	--

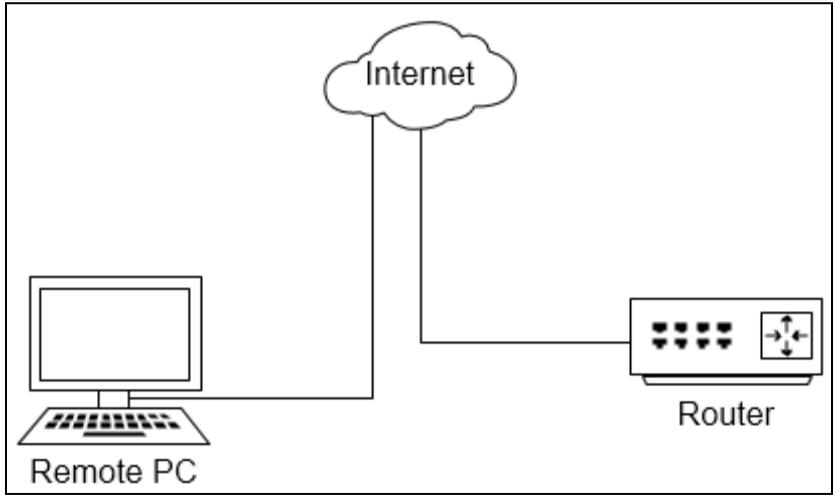
- 1) Toggle off **Access for All LAN Connected Devices**.
- 2) Click **Add**.
- 3) Click **View Existing Devices**. Select the device to manage the router from the **Existing Devices** list.
- 4) Specify a description for this entry.
- 5) Select the checkbox to enable this entry.
- 6) Click **OK**.

**Completed!** The devices you set can manage the router now.

## 12.8 Remote Management

**I want to:** Control remote devices' authority to manage the router.

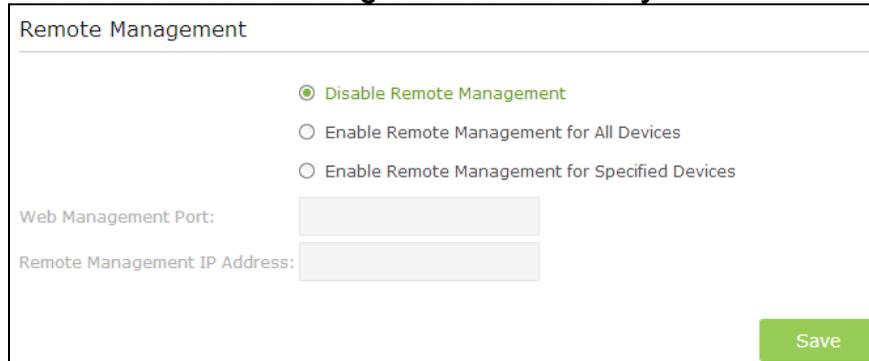
For example, allow Remote PC to manage the router from the Internet as shown below.



How can I do that?

Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router. Go to *Advanced > System Tools > Administration*. In **Remote Management** section, finish the settings according to your needs.

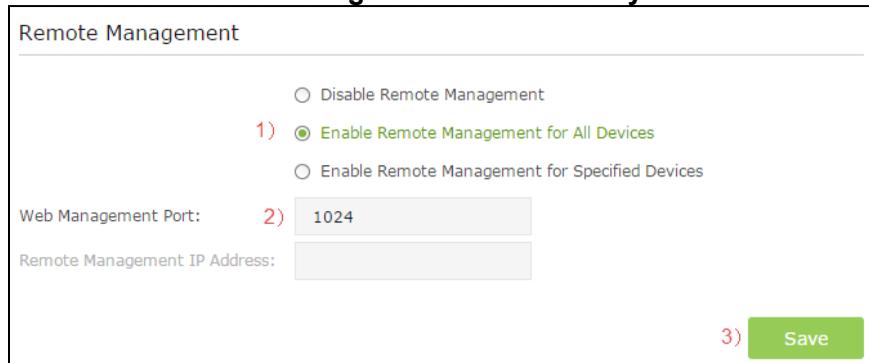
**Forbid all devices to manage the router remotely:**



The screenshot shows the 'Remote Management' configuration page. At the top, it says 'Remote Management'. There are three radio button options: 'Disable Remote Management' (which is selected and highlighted in green), 'Enable Remote Management for All Devices', and 'Enable Remote Management for Specified Devices'. Below these are two input fields: 'Web Management Port:' and 'Remote Management IP Address:'. A green 'Save' button is located at the bottom right.

Select **Disable Remote Management** and click **Save**.

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



The screenshot shows the 'Remote Management' configuration page. The 'Enable Remote Management for All Devices' option is selected and highlighted in green, with a red '1)' next to it. The 'Web Management Port:' field contains the number '1024', with a red '2)' next to it. A green 'Save' button is at the bottom right, with a red '3)' next to it.

- 1) Select **Enable Remote Management for All Devices**.
- 2) Enter **Web Management Port** (1024-65535 or 80).
- 3) Click **Save**.

Devices on the Internet can log in to <http://Router's WAN IP address:port number> (such as <http://113.116.60.229:1024>) to manage the router.

**TIPS:**

- You can find the WAN IP address of the router on **Basic > Network Maps > Internet** page.
- The router's WAN IP is usually a dynamic IP. Please refer to [Dynamic DNS](#) if you want to log in to the router through a domain name.

**Allow specific devices to manage the router remotely:**

Remote Management

---

Disable Remote Management  
 Enable Remote Management for All Devices  
 1)  **Enable Remote Management for Specified Devices**

Web Management Port: 2)

Remote Management IP Address: 3)

4)

- 1) Select **Enable Remote Management for Specified Devices**.
- 2) Enter **Web Management Port** (1024-65535 or 80).
- 3) In **Remote Management IP address**, enter the IP address of the remote device to manage the router.
- 4) Click **Save**.

Devices using this WAN IP can manage the router by logging in to [http://Router's WAN IP:port number](http://Router's_WAN_IP:port_number) (such as <http://113.116.60.229:1024>).

**TIPS:** The router's WAN IP is usually a dynamic IP. Please refer refer to [Dynamic DNS](#) if you want to log in to the router through a domain name.

**Completed!** The devices you set can manage the router remotely now.

## 12.9 System Log

When the router does not work properly, you can save the system log and send it to the technical support for troubleshooting.

### To Save the System Log in Local:

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Click **Advanced** > **System Tools** > **System Log** to enter the configuration page.
3. Choose the type and level of the system log to your need.
4. Click **Save Log** to save the system log to local.

System Log

Log Filter: Type= ALL and Level= ALL

Refresh Delete All

ID	Time	Type	Level	Log Content
--	--	--	--	--

Mail Settings

Mail Log Save Log

### Completed!

System log is saved successfully. Now you can send it to the technical support for troubleshooting.

### To Send the System Log at a Fixed Time:

**Forexample:** I want to check my router's working status at a fixed time every day. However, it's too much trouble to login to the web interface every time I want to go checking. It would be great if the system log could be sent to my mailbox at 8am every day.

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Click **Advanced** > **System Tools** > **System Log** to enter the configuration page.
3. Click **Mail Settings**.

Mail Settings

From:

To:

SMTP Server:

Enable Authentication

Enable Auto Mail

Save

4. Fill in the information with the help of page tips:
  - 1) From: input the email address used to send the system log;
  - 2) To: enter the recipient's email address, which can be the same to or different

from the sender's email address;

- 3) SMTP Server: enter the SMTP server address;

**Tip:** SMTP server is available for users in most webmail systems. For example, the SMTP server address of Hotmail is smtp-mail.outlook.com. You can refer to their Help page to learn the SMTP server address.

- 4) Select **Enable Authentication**;

**Tip:** Generally speaking, **Enable Authentication** should be selected if the login of the mailbox requires username and password. If authentication is enabled, you are required to enter Username and Password.

- 5) Enter **Username**: the email address used to send the system log.

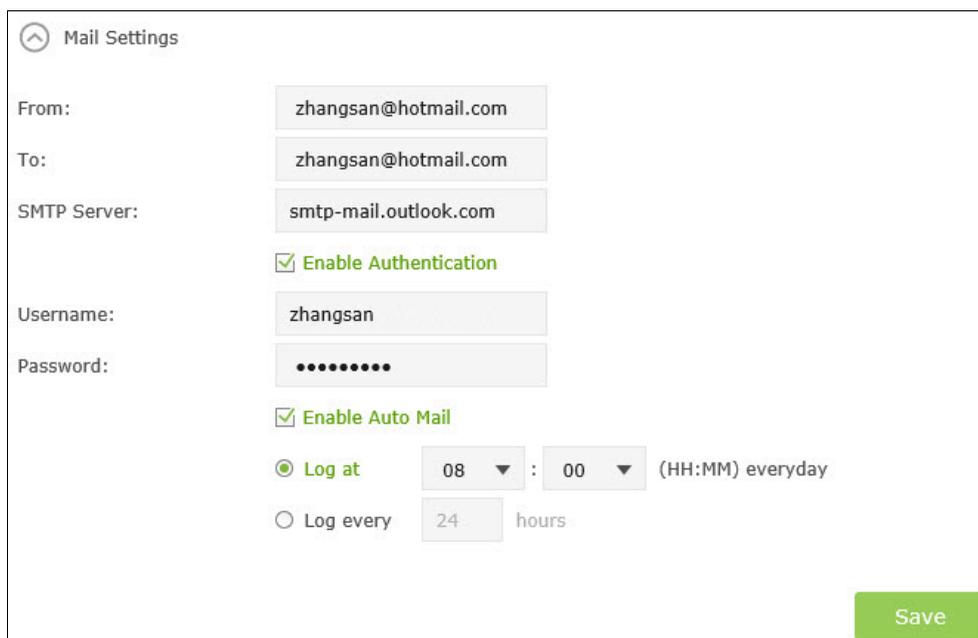
- 6) Enter **Password**: the password to login the sender's email address.

- 7) Select **Enable Auto Mail**;

**Tip:** The router will send the system log to the designated email address if this option is enabled.

- 8) Set a fixed time. The recipient will receive the system log sent at this time every day.

5. Click **Save**.



The screenshot shows a 'Mail Settings' configuration page. It includes the following fields and options:

- From:** zhangsan@hotmail.com
- To:** zhangsan@hotmail.com
- SMTP Server:** smtp-mail.outlook.com
- Enable Authentication**
- Username:** zhangsan
- Password:** [masked with dots]
- Enable Auto Mail**
- Log at** 08 : 00 (HH:MM) everyday
- Log every** 24 hours
- Save** button

**Completed!**

The configuration is complete. You will receive the system log automatically sent from the router at 8am every day.

## 12.10 Reboot the Router

When the

## 12.11 Logout

# Appendix A: Specifications

General	
Standards and Protocols	ANSI T1.413, ITU G.992.1, ITU G.992.3, ITU G.992.5, IEEE 802.11a, IEEE 802.11b, IEEE 802.11g, IEEE 802.11n, IEEE 802.11ac, IEEE 802.3, IEEE 802.3u, TCP/IP, PPPoA, PPPoE, SNTP, HTTP, DHCP, ICMP, NAT
Safety & Emission	FCC, CE
Ports	Four 10/100M Auto-Negotiation RJ45 ports (Auto MDI/MDIX) One RJ11 port One USB 2.0 port
Network Medium	10Base-T: UTP category 3, 4, 5 cable 100Base-TX: UTP category-5, 5e cable 1000Base-TX: UTP category-5, 5e cable Max line length: 6.5Km
Data Rates	Downstream: Up to 24Mbps Upstream: Up to 1Mbps
System Requirement	Windows 8/7/Vista/XP or Mac OS or Linux-based operating system Microsoft Internet Explorer, Firefox, Chrome or Safari browser for web-based configuration
Physical and Environment	
Working Temperature	0°C ~ 40°C
Working Humidity	10% ~ 90% RH (non-condensing)
Storage Temperature	-40°C ~ 70°C
Storage Humidity	5% ~ 90% RH (non-condensing)

# Appendix B: Troubleshooting Guide & FAQ

## T1. How do I restore my router's configuration to its factory default settings?

With the router powered on, press and hold the **RESET** button on the rear panel for 8 to 10 seconds before releasing it.

Note: Once the router is reset, the current configuration settings will be lost and you will need to re-configure the router.

## T2. What can I do if I don't know or forget my password?

- 1) Restore the router's configuration to its factory default settings. If you don't know how to do that, please refer to T1.
- 2) Use the default user name and password: **admin, admin**.
- 3) Try to configure your router once again by following the instructions in [4.1 Use Quick Setup wizard](#).

## T3. What can I do if I cannot access the web-based configuration page?

- 1) Configure your computer's IP Address.

### For Mac OS X

- 1) Click the **Apple** icon on the upper left corner of the screen.
- 2) Go to "**System Preferences -> Network**".
- 3) Select **Airport** on the left menu bar, and then click **Advanced** for wireless configuration; or select **Ethernet** for wired configuration.
- 4) In the **Configure IPv4** box under **TCP/IP**, select **Using DHCP**.
- 5) Click **Apply** to save the settings.

### For Windows 7

- 1) Click "**Start -> Control Panel -> Network and Internet -> View network status -> Change adapter settings**".
- 2) Right-click **Wireless Network Connection** (or **Local Area Connection**), and then click **Properties**.
- 3) Select **Internet Protocol Version 4 (TCP/IPv4)**, and then click **Properties**.
- 4) Select **Obtain an IP address automatically** and **Obtain DNS server address automatically**. Then click **OK**.

### For Windows XP

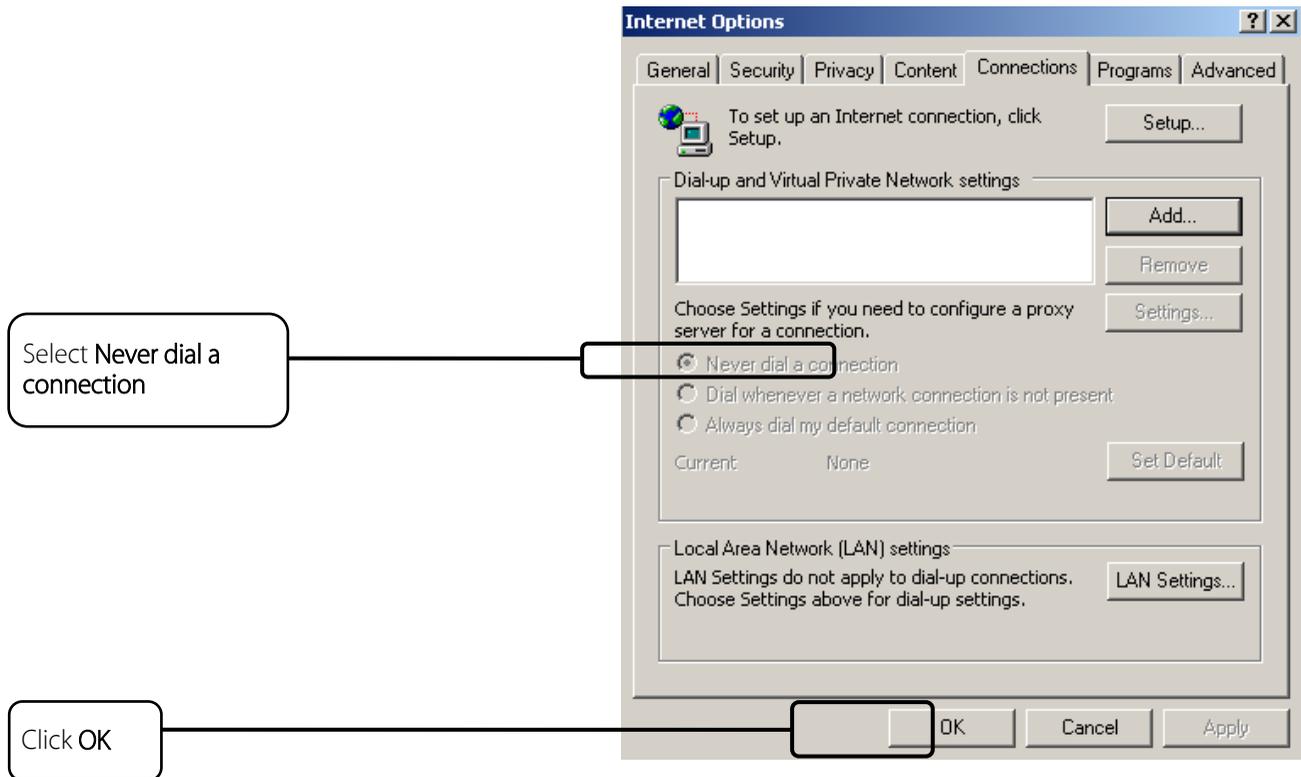
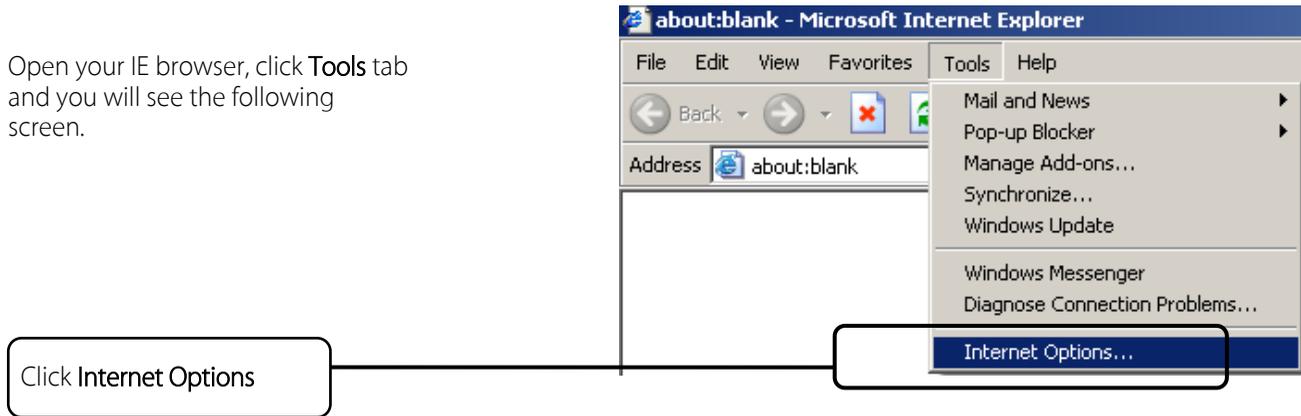
- 1) Click "**Start -> Control Panel -> Network and Internet Connections -> Network Connections**".
- 2) Right-click **Wireless Network Connection** (or **Local Area Connection**), and then click **Properties**.
- 3) Select **Internet Protocol (TCP/IP)**, and then click **Properties**.
- 4) Select **Obtain an IP address automatically** and **Obtain DNS server address automatically**. Then click **OK**.

### For Windows 8

- 1) Move your mouse to the lower right corner and you will see **Search** icon  in the Popups. Go to " -> Apps". Type **Control Panel** in the search box and press **Enter**, then you will go to **Control Panel**.
- 2) Click "**View network status and tasks > Change adapter settings**".
- 3) Right-click "**Ethernet**" and then select **Properties**.

- 4) Double-click **Internet Protocol Version 4 (TCP/IPv4)**. Select **Obtain an IP address automatically**, choose **Obtain DNS server address automatically** and then click **OK**.
- 2) Configure your IE browser.

Open your IE browser, click **Tools** tab and you will see the following screen.



Now, try to log on to the Web-based configuration page again after the above settings have been configured. If you still cannot access the configuration page, please restore your router's factory default settings and reconfigure your router following the instructions in . Please feel free to contact our Technical Support if the problem still exists.

#### T4. What can I do if I cannot access the Internet?

- 1) Check to see if all the connectors are connected well, including the telephone line, Ethernet cables and power adapter.

- 2) Check to see if you can log on to the web management page of the router. If you can, try the following steps. If you cannot, please set your computer referring to **T3** and then try to see if you can access the Internet. If the problem persists, please go to the next step.
- 3) Consult your ISP and make sure all the VPI/VCI, Connection Type, account username and password are correct. If there are any mistakes, please correct the settings and try again.
- 4) If you still cannot access the Internet, please restore your router to its factory default settings and reconfigure your router by following the instructions in
- 5) Please contact our Technical Support if the problem still exists.

Note: For more details about Troubleshooting and Technical Support contact information, please log on to our Technical Support Website: <http://www.tp-link.com/en/support>

## T5. How to configure MAC Clone?

You can manually change the MAC address of the router. It is helpful when your Internet access account provided by your ISP is bound to one specific MAC address, in other words, your ISP just permits only one computer with the authenticated MAC address to access the Internet. In this case, you can use MAC Clone to allow more computers to access the Internet via the same account.

1. Visit <http://tplinkmodem.net>, and log in with password you set for the router.
2. Go to *Advanced > Network > Internet* page. Click the  **Add** icon, and scroll down to get the MAC Clone tab.

### MAC Clone

Use Default MAC Address

Use Current Computer MAC Address

Use Custom MAC Address

Cancel

OK

- If you are using the computer with the authenticated MAC address to access the router, please select [Use Current Computer MAC Address](#).
  - If you know the authenticated MAC address, please select [Use Custom MAC Address](#) and then enter the address.
3. Click [OK](#) to make the settings effective.

## T6. How to change the operation mode?

The router support two operation modes, DSL Router Mode and Wireless Router mode. If you already have a modem or your Internet comes via an Ethernet cable from the wall, you can set up the router as a regular wireless router to share the Internet.

1. Connect your router's LAN4/WAN port to the modem or the network port.
2. Visit <http://tplinkmodem.net>, and log in with password you set for the router.
3. Go to *Advanced > Operation Mode* page.

## Operation Mode

Please select an operation mode:

- DSL Modem Router Mode
- Wireless Router Mode

Save

4. Select the Wireless Router Mode option and click Save to make the settings effective.

**Note:** IPTV function is not supported in wireless router mode.

## T7. How to change the connection mode?

If your connection type is PPPoE or PPPoA, you can control when to establish connection via the connection mode.

1. Visit <http://tplinkmodem.net>, and log in with password you set for the router.
2. Go to *Advanced > Network > Internet* page.

### WAN Interface

[Refresh](#) [Add](#) [Delete All](#)

WAN Interface Name	VPI/VCI	Status	Operation	Modify
pppoe_8_35_0_d	8/35	Connected	Disconnect	 

3. Click the  (Edit) icon and scroll down to configure the connection mode.

Connection Mode:

Always on

Connect on demand

Connect manually

Max Idle Time:  minutes

(0 means that connection is always on.)

- **Always on:** Select this option if you hope that the connection can be re-established automatically when it is down.
- **Connect on demand:** Select this option if you hope you connection can be automatically established when needed. This mode is dependent on the traffic. If there is no traffic (or Idle) for a pre-specified period of time (MAX Idle Time), the connection will drop down automatically. And once there is a request for Internet connection, it will be on automatically.
- **Connect manually:** Select this option if you want to manually control the status of a connection. 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 and re-established when you attempt to access the Internet again.

4. Click **OK** to make the settings effective.

## T8. How to use the WDS Bridging function to extend my wireless network?

My house covers a large area. The wireless network 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 primary router. Follow the steps to configure the router.

1. Visit <http://tplinkmodem.net>, and log in with password you set for the router.
2. Configure the LAN IP address of the router in the same subnet as the root router. For example, the IP address of the root router is 192.168.0.1, the IP address of the extended router should be from 192.168.0.2 to 192.168.0.254).
3. Go to *Advanced > Wireless > Wireless Settings* page and select the wireless network 5GHz. Locate the WDS (5GHz) section and select the check box to enable the WDS Bridging function.

### WDS (5GHz)

WDS Bridging:  Enable WDS Bridging

SSID (to be bridged):  [Survey](#)

MAC (to be bridged):

Security:  None  WPA/WPA2 Personal  WEP

[Save](#)

4. Click [Survey](#) to scan all the AP devices and choose the root AP to be bridged.

### AP List

[Refresh](#)

ID	MAC Address	SSID	Signal strength	Channel	Encryption	Connect
1	E0:05:C5:30:01:46	TP-LINK_0146_5G	14	36	Encrypted	
2	30:B5:C2:33:97:81	TP-LINK_5GHz_0000	6	36	Encrypted	
3	28:04:29:57:10:48	TP-LINK_Extender_5GHz	9	36	None	
4	00:0A:EB:13:7B:02	TP-LINK_Extender_5GHz	13	36	None	

[Back](#)

5. Click the connect icon and then the SSID and MAC will be automatically filled in. Configure the Security settings as the AP you choose to be bridged.

## WDS (5GHz)

---

WDS Bridging:	<input checked="" type="checkbox"/> Enable WDS Bridging
SSID (to be bridged):	<input type="text" value="TP-LINK_0146_5G"/> <input type="button" value="Survey"/>
MAC (to be bridged):	<input type="text" value="E0:05:C5:30:01:46"/>
Security:	<input type="radio"/> None <input checked="" type="radio"/> WPA/WPA2 Personal <input type="radio"/> WEP
Version:	<input type="radio"/> WPA-PSK <input checked="" type="radio"/> WPA2-PSK
Encryption:	<input type="radio"/> TKIP <input checked="" type="radio"/> AES
Password:	<input type="text" value="123456789"/>

6. Click [Save](#) to make the settings effective.
7. Go to [Advanced > Network > LAN Setting](#) page to disable DHCP.

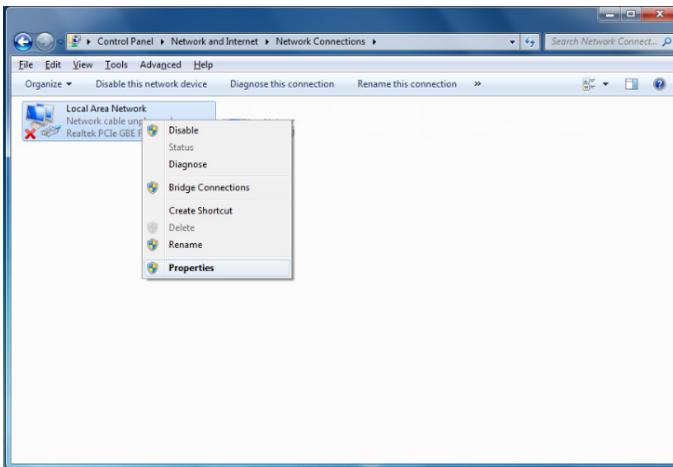
Now, the root's wireless network is extended and you can use the router's SSID and password to enjoy the network. The extended router (router) can have different SSID and password from the root router, you can change your router's SSID and password on [Basic > Wireless](#) page.

# Appendix C: Configure the PC

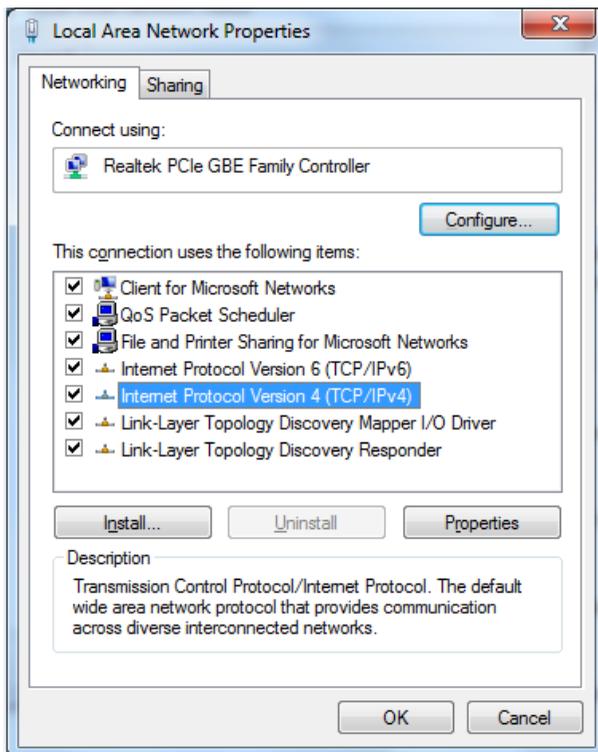
In this section, we'll introduce how to install and configure the TCP/IP correctly in Windows 7. First make sure your Ethernet Adapter is working, refer to the adapter's manual if needed.

## 1. Install TCP/IP component

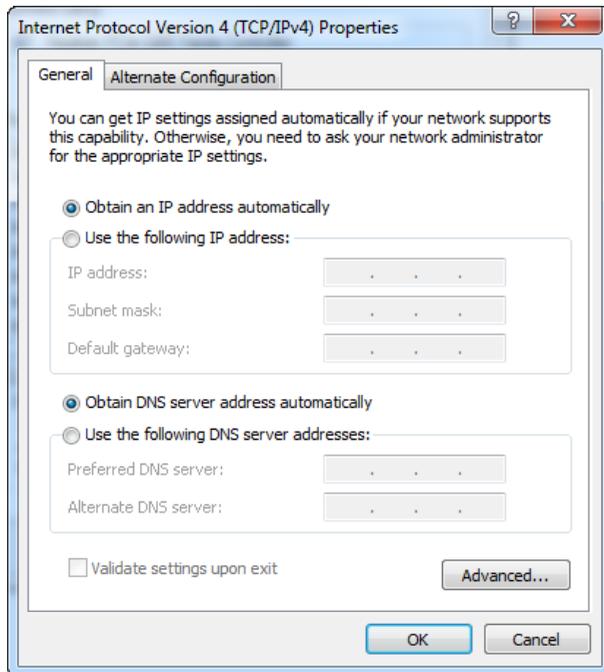
- 1) On the Windows taskbar, Right-click Network icon , and select Open Network and Sharing Center > Change adapter settings.
- 2) Right-click your wired network connection (Local Area Connection or Ethernet by default), and select Properties.



- 3) Double-click Internet Protocol Version 4 (TCP/IPv4).



- 4) Select Obtain an IP address automatically and Obtain DNS server address automatically.

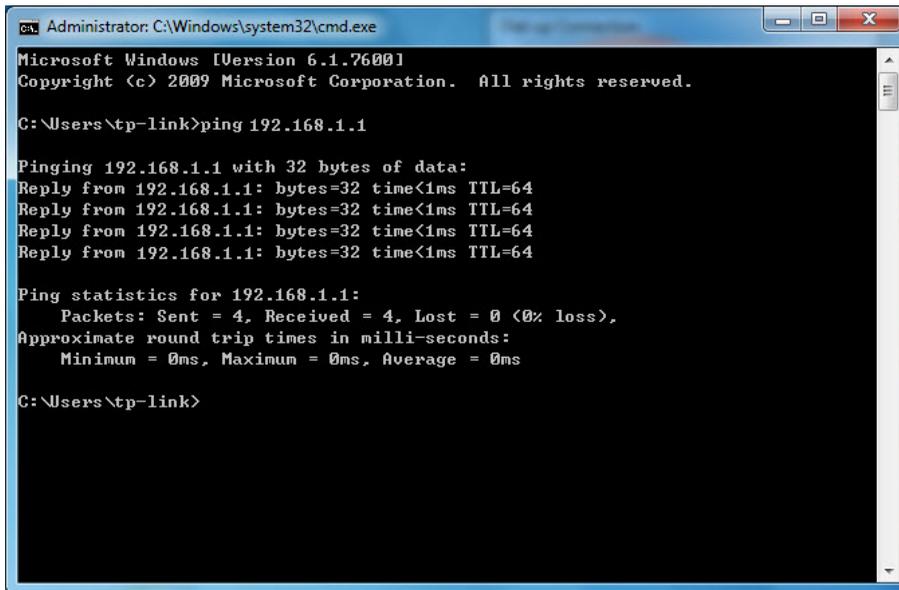


- 5) Click OK to save the settings.

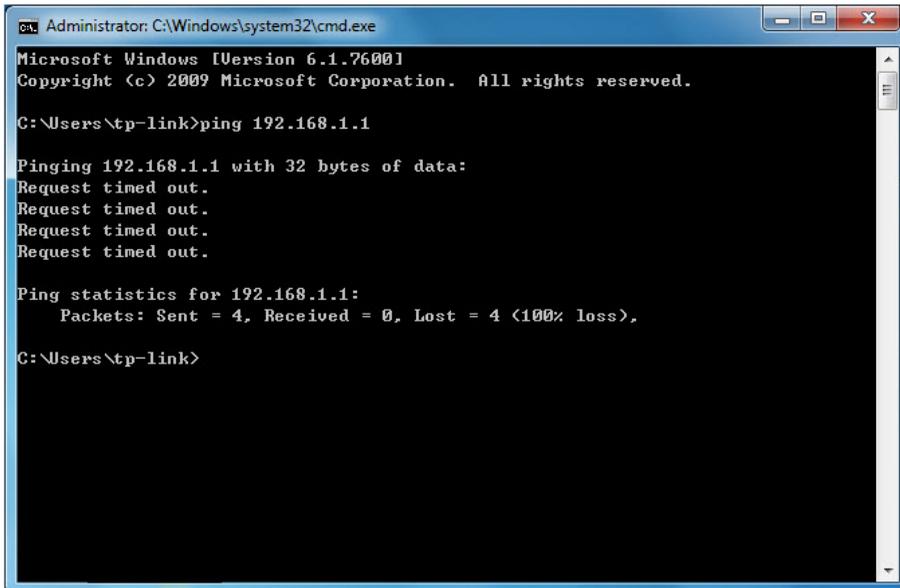
## 2. Verify the network connection between your PC and the router

Open a command prompt, and type `ping 192.168.1.1`, and then press **Enter**.

- If the result displayed is similar to the figure below, it means the connection between your PC and the router has been established well.



- If the result displayed is similar to the figure below, it means the connection between your PC and the router failed.



```
Administrator: C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7600]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\tp-link>ping 192.168.1.1

Pinging 192.168.1.1 with 32 bytes of data:
Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.168.1.1:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\Users\tp-link>
```

Please check the connection following these steps:

1. Is the connection between your PC and the router correct?

Note:

The 1/2/3/4 LEDs of Ethernet ports which you link to on the router and LEDs on your PC's adapter should be lit.

2. Is the TCP/IP configuration for your PC correct?

Note:

If the router's IP address is 192.168.1.1, your PC's IP address must be within the range of 192.168.1.2 ~ 192.168.1.254.