

Configure IPv4 or IPv6 Settings on the WAP125 or WAP581 Access Point

Objective

The Local Area Network (LAN) settings page on the WAP125 or WAP581 Access Point allows you to configure the type of connection that you want the WAP to use in the network including its Internet Protocol (IP) addresses and other settings.

Why do we need to configure IP on a device?

Configuring IP on a device enables its interfaces and allows communication with the host and other devices in the network through those interfaces.

This configuration helps the Dynamic Host Configuration Protocol (DHCP) server to assign an IP address via DHCP or manually. By default, the WAP automatically requests for network information through a broadcast. In the absence of a DHCP server on the network, the WAP uses its default IP address. If you want the WAP to use a static IP address, you must manually assign the IP address and other network information.

Internet Protocol version 4 (IPv4) is the commonly used form of IP addressing used to identify hosts on a network and uses a 32-bit format. Internet Protocol version 6 (IPv6) is the next-generation IP address standard intended to replace the IPv4 format. IPv6 solves the address scarcity problem with the use of 128-bit addressing instead of 32-bit addressing which was used in IPv4.

The objective of this document is to show how to configure IPv4 or IPv6 settings on the WAP581.

Applicable Devices

- WAP125
- WAP581

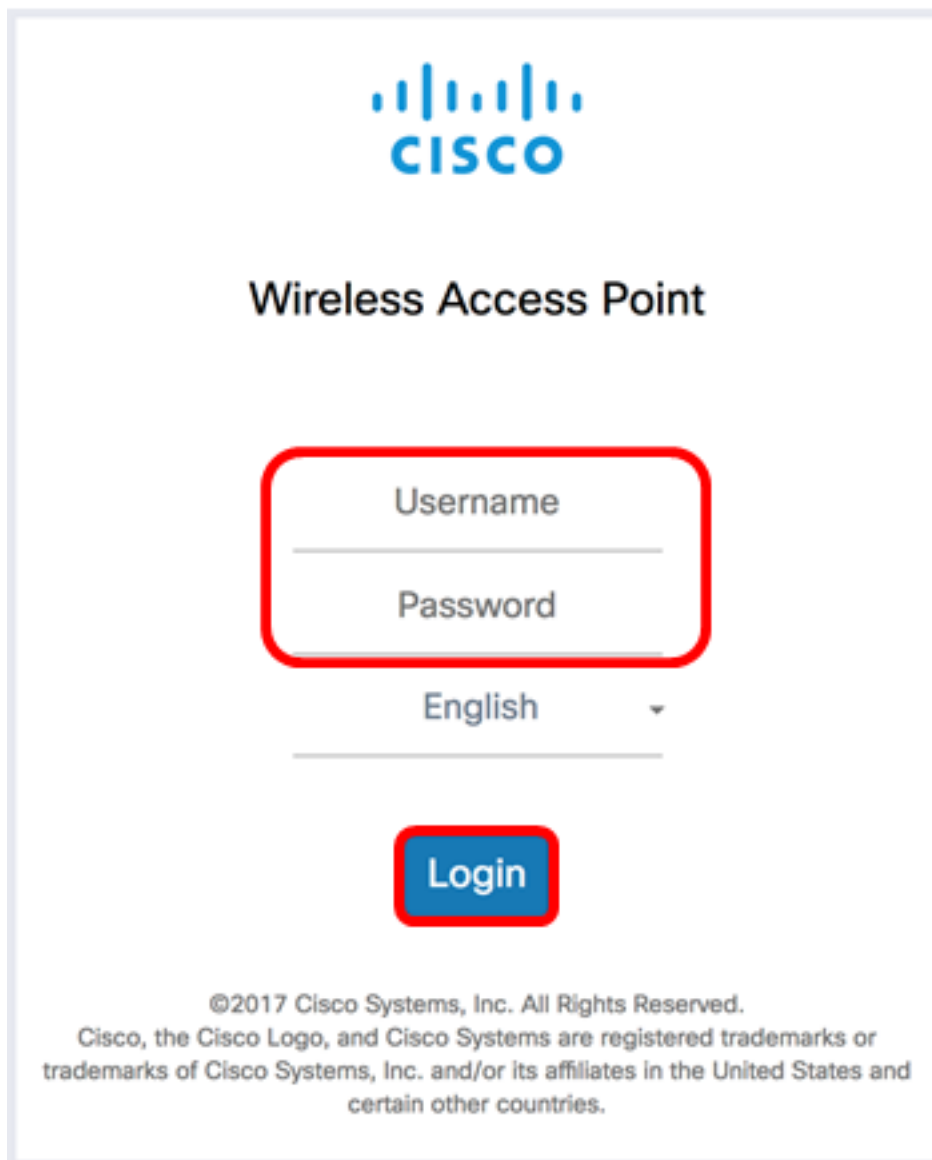
Software Version

- 1.0.0.5 — WAP125
- 1.0.0.4 — WAP581

Configure IPv4 or IPv6 Settings

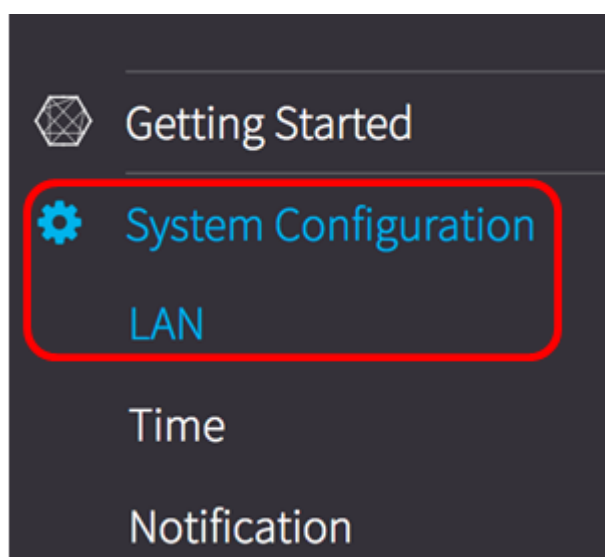
IPv4 Settings

Step 1. Log in to the access point web-based utility by entering your Username and Password in the fields provided and then click **Login**.



Note: The default username/password is cisco/cisco.

Step 2. Choose **System Configuration > LAN**.



Step 3. Under IPv4 Configuration, click a radio button in the Connection Type to choose the type of connection you want the WAP to use in the network. The options are:

- DHCP — This option allows the WAP to get its IP settings from the DHCP server on the network. If you choose this option, skip to [Step 6](#).
- Static IP — This option allows you to manually assign IP settings to the WAP. If you choose this option, the Domain Name Servers settings will be automatically set to Manual.

IPv4 Configuration

Connection Type: DHCP Static IP

Note: In this example, Static IP is chosen.

Step 4. In the *Static IP Address* field, enter a permanent IP address for the WAP. This IP address should be unique and no other device in the network would be able to use it.

IPv4 Configuration

Connection Type: DHCP Static IP

Static IP Address:

Note: In this example, 192.168.1.248 is used.

Step 5. In the *Subnet Mask* field, enter a subnet mask for the WAP.

Connection Type: DHCP Static IP

Static IP Address:

Subnet Mask:

Note: In this example, 255.255.255.0 is used.

[Step 6](#). In the *Default Gateway* field, enter the IP address of the router or the DHCP server on the network.

Connection Type: DHCP Static IP

Static IP Address:

Subnet Mask:

Default Gateway:

Note: In this example, 192.168.1.254 is used.

Step 7. If you have chosen DHCP in Step 2, choose a radio button to set how the WAP

would acquire a DNS address in the Domain Name Servers area. The options are:

- Dynamic — This option allows the WAP to acquire the DNS server addresses from a DHCP server on the LAN. If you choose this option, skip to [Step 8](#).
- Manual — This option allows you to manually configure DNS server addresses. You can enter up to two addresses in the fields provided.

Domain Name Servers: Dynamic Manual

Note: In this example, Manual is chosen.

[Step 8](#). Enter a DNS Server address(es) in the field(s) provided.

Domain Name Servers: Dynamic Manual

Note: In this example, 192.168.1.254 is used.

Step 9. Click the  button.

You should now have successfully configured the IPv4 settings on the WAP125 or WAP581 Access Point.

IPv6 Settings

Step 1. Under IPv6 Configuration, click a radio button in the IPv6 Connection Type to choose the type of connection you want the WAP to use in the network. The options are:

- DHCPv6 — This option allows the WAP to get its IPv6 settings from the DHCP server on the network. If you choose this option, skip to [Step 7](#).
- Static IPv6 — This option allows you to manually assign IPv6 settings to the WAP. If you choose this option, the IPv6 Domain Name Servers settings will be automatically set to Manual.

IPv6 Configuration

IPv6 Connection Type: DHCPv6 Static IPv6

Note: In this example, Static IPv6 is chosen.

Step 2. (Optional) To permit IPv6 management access to the access point, check the **Enable IPv6 Administrative Mode** check box. This box is checked by default.

IPv6 Connection Type: DHCPv6 Static IPv6

IPv6 Administrative Mode: Enable

Step 3. (Optional) Check the **Enable** IPv6 Auto Configuration Administrative Mode check box. This would allow the WAP to learn its IPv6 settings through router advertisements received on the LAN port.

IPv6 Connection Type: DHCPv6 Static IPv6

IPv6 Administrative Mode: Enable

IPv6 Auto Configuration Administrative Mode: Enable

Step 4. In the *Static IPv6 Address* field, enter a permanent IP address for the WAP. This IP address should be unique and no other device in the network would be able to use it.

IPv6 Connection Type: DHCPv6 Static IPv6

IPv6 Administrative Mode: Enable

IPv6 Auto Configuration Administrative Mode: Enable

Static IPv6 Address:

Note: In this example, 2001:DB8:0:ABCD::1 is used.

Step 5. Enter the prefix length of the static address in the *Static IPv6 Address Prefix Length* field. The prefix length specifies the network portion of the IPv6 IP address and in the range of 0 to 128.

IPv6 Administrative Mode: Enable

IPv6 Auto Configuration Administrative Mode: Enable

Static IPv6 Address:

Static IPv6 Address Prefix Length:

Note: In this example, 48 is used.

Step 6. Enter the IPv6 address of the default gateway in the *Default IPv6 Gateway* field.

IPv6 Link Local Address: fe80::2eb:d5ff:fe60:a60/64

Default IPv6 Gateway:

Note: In this example, 2001:DB8:0:0:E000::F/64 is used. The IPv6 Link Local Address is the address used by the local physical link. This address is not configurable and is assigned by using the IPv6 Neighbor Discovery process.

[Step 7](#). If you have chosen DHCPv6 in Step 1, choose a radio button to set how the WAP would acquire an IPv6 DNS address in the IPv6 Domain Name Servers area. The options are:

- Dynamic — This option allows the WAP to acquire the DNS server addresses from a DHCP server on the LAN. If you choose this option, skip to [Step 9](#).
- Manual — This option allows you to manually configure DNS server addresses. You can enter up to two addresses in the fields provided.



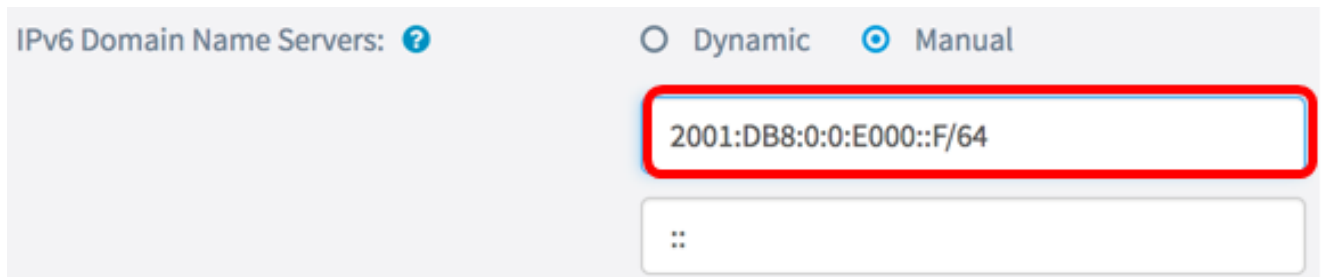
IPv6 Link Local Address: fe80::2eb:d5ff:fe60:a60/64

Default IPv6 Gateway:

IPv6 Domain Name Servers: Dynamic Manual

Note: In this example, Manual is chosen.

[Step 8](#). Enter an IPv6 DNS Server address(es) in the field(s) provided.



IPv6 Domain Name Servers: Dynamic Manual

Note: In this example, 2001:DB8:0:0:E000::F/64 is used.

[Step 9](#). Click the  button.

You should now have successfully configured the IPv6 on the WAP125 or WAP581 Access Point.