Configure IPv4 and IPv6 Settings on the WAP371

Objective

An IP address can be assigned in two ways, via Dynamic Host Configuration Protocol (DHCP) or by manual static IP address configuration.The default setting on the WAP371 is DHCP, however, you can also choose to use a static IP address, in which case you must disable the DHCP client and manually assign the IP address and other network information. You can configure the IPv4 and IPv6 settings to make such changes.

The objective of this document is to show you how to configure IPv4 and IPv6 settings on the WAP371. If you prefer a version of this article with images, click here.

Applicable Devices

WAP371

Software Version

1.2.0.2

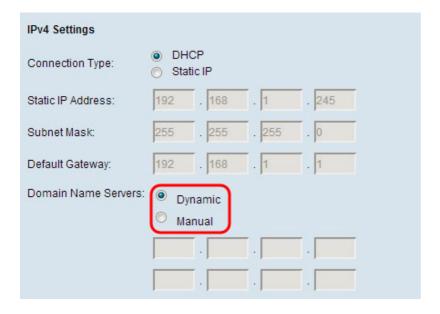## Automatic IPv4 Settings by Dynamic Host Configuration Protocol (DHCP)

Step 1. Log in to the web configuration utility and choose **LAN > VLAN and IPv4 Address**. The *VLAN and IPv4 Address* page opens:

Step 2. Under *IPv4 Settings*, click the **DHCP** radio button in the *Connection Type* field. This enables the WAP to automatically get values for the Local IP Address, Subnet Mask, and Default Gateway fields from the DHCP server. This option is already selected by default.

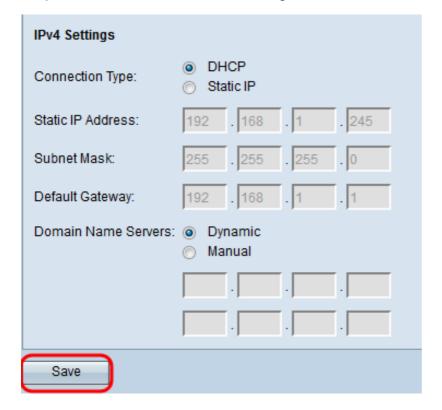Step 3. Click the desired radio button in the *Domain Name Servers* field.

The available options are described as follows:

Dynamic — Acquire Primary and Secondary DNS server addresses from a DHCP server in the LAN.

Manual — Manually configure one or more DNS server addresses. Enter up to two IP addresses in the text boxes that follow. The second address is optional.

Step 4. Click **Save** to save the settings.

Static IPv4 Settings

Note: Only select one connection type to configure the IPv4 settings. If you have chosen to do the DHCP configuration above, it is not necessary to do the manual configuration described below.

Step 1. Log in to the web configuration utility and choose **LAN > VLAN and IPv4 Address**. The *VLAN and IPv4 Address* page opens:

Step 2. Under *IPv4 Settings*, click **Static IP** in the *Connection Type* field. This requires you to manually assign an IP address to the access point.

Step 3. Enter an IP address for the access point in the *Static IP Address* field. This IP address

should be unique for this network.

Step 4. Enter the subnet mask of the network in the *Subnet Mask* field. The default mask is 255.255.255.0.

Step 5. Enter the default gateway IP address in the *Default Gateway* field. The default gateway is the router that connects a network to an outside network, like the Internet. When the destination IP address of a packet is not known, it is sent to the default gateway.

Step 6. Enter the IP address of the Domain Name System (DNS) server in the *Domain Name Servers* fields manually. The Internet Service Provider (ISP) typically provides this address. The second DNS server IP address is optional.

Note: When the **Static IP** connection type is selected in Step 2, the Domain Name Server is automatically set to Manual.

Step 7. Click **Save** to save the settings.

IPv4 Settings

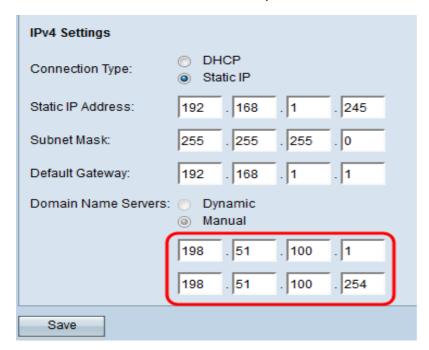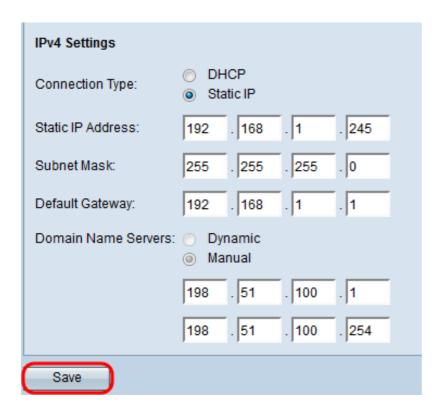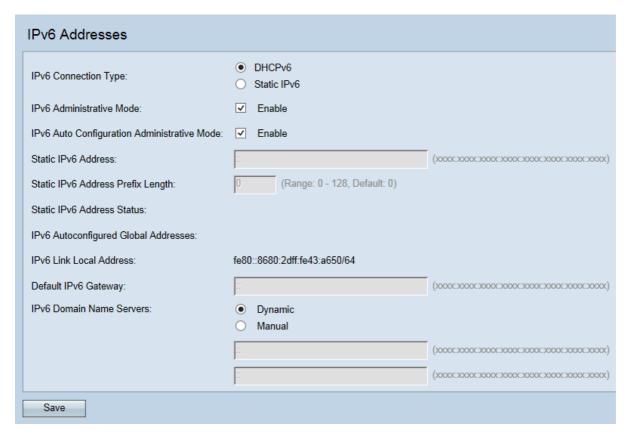|	
Connection Type:	○ DHCP ◉ Static IP
Static IP Address:	192 . 168 . 1 . 245
Subnet Mask:	255 . 255 . 255 . 0
Default Gateway:	192 . 168 . 1 . 1
Domain Name Servers:	○ Dynamic ◉ Manual
	198 . 51 . 100 . 1
	198 . 51 . 100 . 254

Save

Automatic IPv6 Settings by Dynamic Host Configuration Protocol (DHCP)

Step 1. Log in to the web configuration utility and choose **LAN > IPv6 Address**. The *IPv6 Address* page opens:

IPv6 Addresses

IPv6 Connection Type:	◉ DHCPv6 ○ Static IPv6
IPv6 Administrative Mode:	☑ Enable
IPv6 Auto Configuration Administrative Mode:	☑ Enable
Static IPv6 Address:	[::] (xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx)
Static IPv6 Address Prefix Length:	[0] (Range: 0 - 128, Default: 0)
Static IPv6 Address Status:	
IPv6 Autoconfigured Global Addresses:	
IPv6 Link Local Address:	fe80::8680:2dff:fe43:a650/64
Default IPv6 Gateway:	[::] (xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx)
IPv6 Domain Name Servers:	◉ Dynamic ○ Manual
	[::] (xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx)
	[::] (xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx)

Save

Step 2. Click the **DHCP** radio button in the *Connection Type* field. This allows the WAP to automatically get values for the Local IP Address, Subnet Mask, and Default Gateway fields from the DHCP server.

IPv6 Addresses

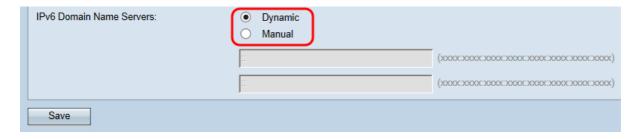|	
IPv6 Connection Type:	⦿ DHCPv6
	○ Static IPv6
IPv6 Administrative Mode:	☑ Enable
IPv6 Auto Configuration Administrative Mode:	☑ Enable

Step 3. Check the *IPv6 Administrative Mode* checkbox to enable or disable IPv6 management access. This allows the device's management interface to be accessed via an IPv6 address.

IPv6 Addresses

IPv6 Connection Type:	⦿ DHCPv6
	○ Static IPv6
IPv6 Administrative Mode:	☑ Enable
IPv6 Auto Configuration Administrative Mode:	☑ Enable

Step 4. Check the *IPv6 Auto Configuration Administrative Mode* checkbox to enable or disable IPv6 automatic address configuration on the device. This allows the devices to automatically generate an IPv6 address without a DHCP server or a statically assigned address.

IPv6 Addresses

IPv6 Connection Type:	⦿ DHCPv6
	○ Static IPv6
IPv6 Administrative Mode:	☑ Enable
IPv6 Auto Configuration Administrative Mode:	☑ Enable

Step 5. Click the desired radio button in the *IPv6 Domain Name Servers* field.

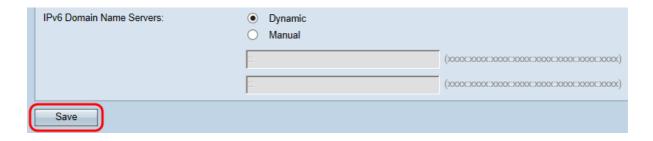|		
IPv6 Domain Name Servers:	⦿ Dynamic	
	○ Manual	
	::	(xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx)
	::	(xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx)

Save

The available options are:

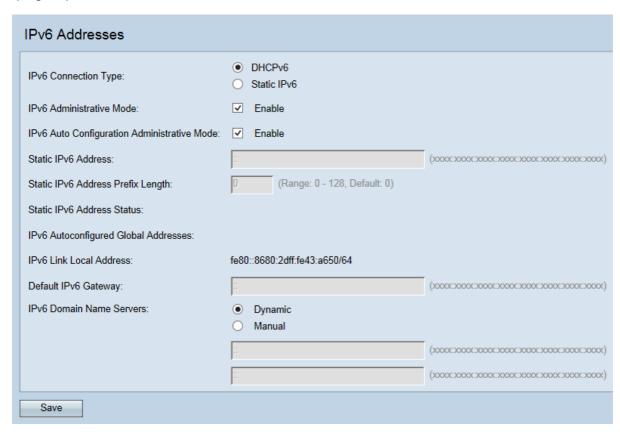Dynamic —The DNS name servers are learned dynamically through DHCPv6.

Manual —You specify up to two IPv6 DNS name servers in the fields provided.
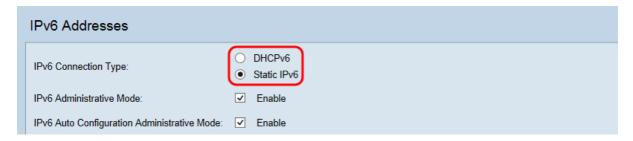
Step 6. Click **Save** to save the settings.

Static IPv6 Settings

Step 1. Log in to the web configuration utility and choose **LAN > IPv6 Address**. The *IPv6 Address* page opens:

Step 2. Under *IPv6 Settings*, click **Static IPv6** in the *IPv6 Connection Type* field. This requires you to manually assign an IP address to the access point.

Step 3. Check the *IPv6 Auto Configuration Administrative Mode* checkbox to enable or disable IPv6 automatic address configuration on the device. This allows the devices to automatically generate an IPv6 address without a DHCP server or a statically assigned address.

Step 4. Check the *IPv6 Auto Configuration Administrative Mode* checkbox to enable or disable IPv6 automatic address configuration on the device.

Step 5. Enter the device's desired static IPv6 address in the *Static IPv6 Address* field.

Note: The WAP device can have a static IPv6 address in addition to addresses configured automatically.

Step 6. Enter the prefix length of the static address in the *Static IPv6 Address Prefix Length* field. The range of values for the prefix length is 0 to 128 where the default is 0.
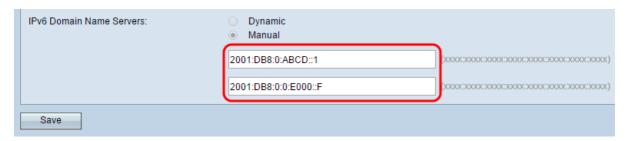

Note: The link local address is the IPv6 address used by the local physical link. The *IPv6 Link Local Address* field is automatically assigned and not configurable.

Step 7. Enter the default gateway IPv6 address in the *Default Gateway* field. The default gateway is the router that connects a network to an outside network, like the Internet. When the destination IP address of a packet is not known, it is sent to the default gateway.

Static IPv6 Address:	2001:DB8::1	(XXXX:XXXX:XXXX:XXXX:XXXX:XXXX:XXXX:XXXX)
Static IPv6 Address Prefix Length:	0	(Range: 0 - 128, Default: 0)
Static IPv6 Address Status:		
IPv6 Autoconfigured Global Addresses:		
IPv6 Link Local Address:	fe80::8680:2dff:fe43:a650/64	
Default IPv6 Gateway:	2001:DB8:0:1::1	(XXXX:XXXX:XXXX:XXXX:XXXX:XXXX:XXXX:XXXX)

Step 8. Enter the IPv6 address of the Domain Name System (DNS) server in the *IPv6 Domain Name Servers* fields. The Internet Service Provider (ISP) typically provides this address. The second DNS server IP address is optional.

IPv6 Domain Name Servers:	○ Dynamic	
	⦿ Manual	
	2001:DB8:0:ABCD::1	(XXXX:XXXX:XXXX:XXXX:XXXX:XXXX:XXXX:XXXX)
	2001:DB8:0:0:E000::F	(XXXX:XXXX:XXXX:XXXX:XXXX:XXXX:XXXX:XXXX)

Save

Note: When the **Static IPv6** connection type is selected in Step 2, the IPv6 Domain Name Server is automatically set to Manual.

Step 9. Click **Save** to save the settings.

IPv6 Domain Name Servers:	○ Dynamic	
	⦿ Manual	
	2001:DB8:0:ABCD::1	(XXXX:XXXX:XXXX:XXXX:XXXX:XXXX:XXXX:XXXX)
	2001:DB8:0:0:E000::F	(XXXX:XXXX:XXXX:XXXX:XXXX:XXXX:XXXX:XXXX)

Save