

IPv6 Support

- IPv6 Support, on page 1
- IPv6 address types, on page 1
- IPv6 limitations on the AP, on page 2
- Enable or disable IPv6 using CLI, on page 2
- Enable or disable IPv6 RA autoconfig using CLI, on page 2
- Configure static IPv6 address with eui-64, gateway, and DNS server address, on page 3
- Verify static IPv6 address with eui-64, gateway, and DNS server address, on page 3
- Configure static IPv6 address without eui-64, gateway, and DNS server address, on page 4
- Verify static IPv6 address without eui-64, gateway, and DNS server address, on page 4
- Configure static IPv6 address with EUI-64, on page 4
- Verify static IPv6 address with eui-64, on page 5
- Configure static IPv6 address without eui-64, on page 5
- Verify static IPv6 address without eui-64, on page 5
- Clear the IPv6 gateway and DNS servers configuration, on page 5
- Verify the cleared IPv6 gateway and DNS servers configuration, on page 6
- Enable and configure static IPv6 using GUI, on page 6
- Verify static IPv6 using GUI, on page 8

IPv6 Support

From UIW Release 17.15.1, APs support IPv6 addresses. By default, the IPv6 service is disabled on the AP. You can enable and configure the IPv6 address on the AP using either the CLI or GUI.

IPv6 address types

You can configure the AP with these IPv6 address types:

- **Link-Local**: Used within the scope of a single link and cannot be routed. These addresses refer specifically to a particular physical link and are used for addresses on a single link for purposes such as automatic address configuration and the neighbor discovery protocol. Link-local addresses can be used to reach the neighboring nodes attached to the same link.

- **Unique-Local**: Can be routed within a private organization, but not through the public internet. It is not expected to be routable on the global Internet. However, it is routable inside a limited area, such as a site, and it may route between a limited set of sites.
- **Global Unicast**: A routable address in the IPv6 Internet, similar to the public IPv4 address space.

IPv6 limitations on the AP

- The IPv6 support is limited only to host functionality.
- The Fluidity Layer 3 network does not support IPv6.

Enable or disable IPv6 using CLI

This task enables or disables IPv6 support on the access point (AP) to control IPv6 addressing functionality.

By default, IPv6 support is disabled on the AP. When IPv6 is enabled, a link-local address is automatically assigned to the AP.

Procedure

Use the **configure ipv6** {**enable** | **disable**} command to enable or disable the IPv6 address on the AP.

Example:

```
Device# configure ipv6 enable
```

Enable or disable IPv6 RA autoconfig using CLI

This task enables or disables IPv6 Router Advertisement (RA) autoconfiguration on the access point to control automatic IPv6 address assignment from router advertisements.

IPv6 RA autoconfig allows access points to automatically configure IPv6 addresses based on router advertisements received from the network. You may need to enable or disable this feature depending on your network's IPv6 configuration requirements.

Follow these steps to enable or disable IPv6 RA autoconfig on the access point:

Procedure

Use the **configure ipv6 enable autoconfig-ra** {**enable** | **disable**} command to enable or disable the IPv6 RA Autoconfig on the AP.

Example:

```
Device# configure ipv6 enable autoconfig-ra enable
```

Note

- Enable: Enables the autoconfiguration from router advertisement.
- Disable: Disables the autoconfiguration from router advertisement.

Configure static IPv6 address with eui-64, gateway, and DNS server address

Configure a static IPv6 address with eui-64, gateway, and DNS server address on the AP.

Static IPv6 configuration allows you to manually assign network parameters to an access point, providing predictable addressing while using EUI-64 for automatic interface identifier generation.

Procedure

Configure the static IPv6 address with eui-64, gateway, and DNS server address on the AP.

Example:

```
Device#configure ap address ipv6 static fc00::4236:5aff:xxxx:168/64 eui-64 fc00::1 2001:4860:4860::xxxx
 2001:4860:4860::xxxx
```

Verify static IPv6 address with eui-64, gateway, and DNS server address

To verify the static IPv6 address with eui-64, gateway, and DNS server address on the AP, use this **show** command:

```
Device#show ipv6
IPv6: Enabled
Router Advertisment auto-configuration: Disabled
Static IPv6 config:
Address: fc00::4236:5aff:xxxx:168/64
Gateway: fc00::1
DNS1: 2001:4860:4860::xxxx
DNS2: 2001:4860:4860::xxxx
Currently assigned addresses:
fc00::4236:5aff:xxxx:168/64 global
fe80::4236:5aff:xxxx:168/64 link
```

Configure static IPv6 address without eui-64, gateway, and DNS server address

This task configures a static IPv6 address without eui-64, gateway, and DNS server address on the access point.

Use this configuration when you need to manually assign IPv6 network settings to an access point without using the eui-64 interface identifier format.

Procedure

Use the **configure ap address ipv6 static** *ip* command to configure the static IPv6 address without eui-64, gateway, and DNS server address on the AP.

Example:

```
Device# configure ap address ipv6 static fc00::1234:5678:xxxx:def/64 fc00::1 2001:4860:4860::xxxx
2001:4860:4860::xxxx
```

Verify static IPv6 address without eui-64, gateway, and DNS server address

To verify the static IPv6 address without eui-64, gateway, and DNS server address on the AP, use the **show** command.

```
Device#show ipv6
IPv6: Enabled
Router Advertisment auto-configuration: Disabled
Static IPv6 config:
Address: fc00::1234:5678:xxxx:def/64
Gateway: fc00::1
DNS1: 2001:4860:4860::xxxx
DNS2: 2001:4860:4860::xxxx
Currently assigned addresses:
fc00::1234:5678:xxxx:def/64 global
fe80::4236:5aff:xxxx:168/64 link
```

Configure static IPv6 address with EUI-64

Configure the static IPv6 address with EUI-64 on the access point.

Procedure

Use the **configure ap address ipv6 static** *ip* command to configure the static IPv6 address with eui-64 on the AP.

Example:

```
Device# configure ap address ipv6 static fc00::4236:5aff:xxxx:168/64 eui-64
```

Verify static IPv6 address with eui-64

To verify the static IPv6 address with eui-64 on the AP, use the **show** command.

```
Device#show ipv6
IPv6: Enabled
Router Advertisment auto-configuration: Disabled
Static IPv6 config:
Address: fc00::4236:5aff:xxxx:168/64
Currently assigned addresses:
fc00::4236:5aff:xxxx:168/64 global
fe80::4236:5aff:xxxx:168/64 link
```

Configure static IPv6 address without eui-64

Configure the static IPv6 address on the access point.

Procedure

Use the **configure ap address ipv6 static** *ip* command to configure the static IPv6 address without eui-64 on the AP.

Example:

```
Device# configure ap address ipv6 static fc00::1234:5678:xxxx:def
```

Verify static IPv6 address without eui-64

To verify the static IPv6 address without eui-64 on the AP, use this **show** command:

```
Device#show ipv6
IPv6: Enabled
Router Advertisement auto-configuration: Disabled
Static IPv6 config:
Address: fc00::1234:5678:xxxx:def/128
Currently assigned addresses:
fc00::1234:5678:xxxx:def/128 global
fe80::4236:5aff:xxxx:168/64 link
```

Clear the IPv6 gateway and DNS servers configuration

Clear the IPv6 gateway and DNS servers addresses configuration on the AP.

This task removes existing IPv6 gateway and DNS server configurations from an access point.

Procedure

Use the **configure ap address ipv6 static** *ip* command to clear the IPv6 gateway and DNS servers addresses configuration on the AP.

Example:

```
Device# configure ap address ipv6 static fc00::1234:5678:xxxx:def/64 :: :: ::
```

Verify the cleared IPv6 gateway and DNS servers configuration

Verify the cleared IPv6 gateway and DNS server addresses configuration on the AP using the show command.

To verify the cleared IPv6 gateway and DNS server addresses configuration on the AP, use this **show** command:

```
Device#show ipv6
IPv6: Enabled
Router Advertisment auto-configuration: Disabled
Static IPv6 config:
Address: fc00::1234:5678:xxxx:def/64
Currently assigned addresses:
fc00::1234:5678:xxxx:def/64 global
fe80::4236:5aff:xxxx:168/64 link
```

Note While adapting services to work with IPv6, such as TFTP, you must consider that link-local IP addresses might require network interface specifications.

Enable and configure static IPv6 using GUI

Enable and configure static IPv6 addressing to provide manual control over the device's IPv6 network configuration instead of relying on automatic configuration methods.

Static IPv6 configuration allows you to manually set the device's IPv6 address, gateway, and DNS servers. This is useful when you need specific network SETTINGS that differ from automatically assigned addresses.

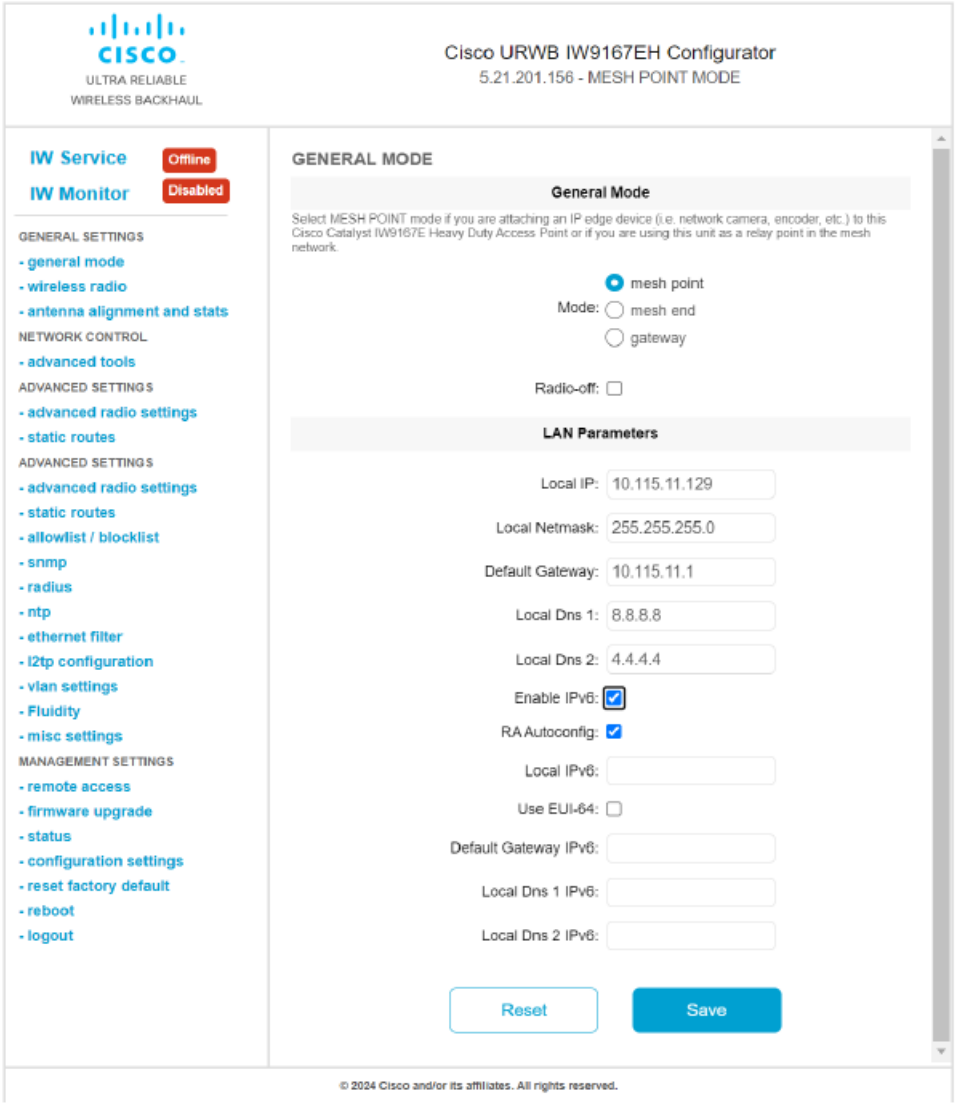
Before you begin

Follow these steps to enable and configure static IPv6 using the GUI:

Procedure

Step 1 Log in to the configurator by entering your credentials on the web login page.
Once you successfully log into the GUI, the URWB configurator displays.

Step 2 In the **GENERAL SETTINGS**, click **GENERAL mode** to open the **GENERAL Mode** window.



Note
In the GUI, the term "local" refers to the IPv4 or IPv6 addresses that are set up statically. Specifically, the **Local IPv6** accepts all type of IPv6 address, which allows for the static configuration of the device's IPv6 address.

Step 3 Check the **Enable IPv6** check box.
The system automatically enables the **RA Autoconfig**.

Step 4 Enter IPv6 address in the **Local IPv6** field.

Step 5 (Optional) Check the **Use EUI-64** check box.

Note
IPv6 addresses differ with and without the EUI-64 option.

Step 6 (Optional) Enter the gateway IP address in the **Default Gateway IPv6** field.

Step 7 (Optional) Enter the DNS server 1 IP address in the **Local DNS 1 IPv6** field.

Step 8 (Optional) Enter the DNS server 2 IP address in the **Local DNS 2 IPv6** field.

Step 9 Click **Save**.

Verify static IPv6 using GUI

Procedure

Step 1 In the **MANAGEMENT SETTINGS** , click **STATUS** .

Step 2 On the **STATUS** page, in the **DEVICE SETTINGS** section, view the IPv6 details.