

Configuring the Interface Address

You assign an address to an interface by specifying the address when configuring the protocol family. For the **inet** family, configure the interface's IP address. For the **iso** family, configure one or more addresses for the loopback interface. For the **ccc**, **tcc**, **mpls**, **tnp**, and **vpls** families, you never configure an address.

To assign an address to an interface, include the **address** statement:

```
address address {  
    broadcast address;  
    [Unresolved xref] address;  
    destination-profile name;  
    eui-64;  
    preferred;  
    [Unresolved xref];  
}
```

You can include these statements at the following hierarchy levels:

- [edit interfaces *interface-name* unit *logical-unit-number* family *family*]
- [edit logical-systems *logical-system-name* interfaces *interface-name* unit *logical-unit-number* family *family*]

In the **address** statement, specify the network address of the interface.

For each address, you can optionally configure one or more of the following:

- Broadcast address for the interface's subnet—Specify this in the **broadcast** statement; this applies only to Ethernet interfaces, such as the management interface **fxp0**, the Fast Ethernet interface, and the Gigabit Ethernet interface.
- Address of the remote side of the connection (for point-to-point interfaces only)—Specify this in the **destination** statement.
- Assign PPP properties to the remote end—Specify this in the **destination-profile** statement. You define the profile at the [edit access group-profile *name* ppp] hierarchy level (for point-to-point interfaces only). For more information, see Configuring IPCP Options.
- Whether the routing platform automatically generates the host number portion of interface addresses—The **eui-64** statement applies only to interfaces that carry IPv6 traffic, where the prefix length of the address is 64 bits or less, and the low-order 64 bits of the address are zero. This option does not apply to the loopback interface (**lo0**) because IPv6 addresses configured on the loopback interface must have a 128-bit prefix length.
- Whether this address is the preferred address—Each subnet on an interface has a preferred local address. If you configure more than one address on the same subnet, the preferred local address is chosen by default as the source address when you originate packets to destinations on the subnet. For more information about preferred addresses, see Configuring Default, Primary, and Preferred Addresses and Interfaces.

By default, the preferred address is the lowest numbered address on the subnet. To override the default and explicitly configure the preferred address, include the **preferred** statement when configuring the address.

- Whether this address is the primary address—Each interface has a primary local address. If an interface has more than one address, the primary local address is used by default as the source address when you originate packets out the interface where the destination gives no hint about the subnet (for example, some **ping** commands). For more information about primary addresses, see *Configuring Default, Primary, and Preferred Addresses and Interfaces*.

By default, the primary address on an interface is the lowest numbered non-127 preferred address on the interface. To override the default and explicitly configure the preferred address, include the **primary** statement when configuring the address.

Configuring the Interface IPv6 Address

You represent IPv6 addresses in hexadecimal notation using a colon-separated list of 16-bit values.

You assign a 128-bit IPv6 address to an interface by including the **address** statement:

```
address aaaa:bbbb:....:zzzz/nn;
```

You can include this statement at the following hierarchy levels:

- [edit interfaces *interface-name* unit *logical-unit-number* family inet]
- [edit logical-systems *logical-system-name* interfaces *interface-name* unit *logical-unit-number* family inet]

The double colon (::) represents all bits set to 0, as shown in the following example:

```
interfaces fe-0/0/1 {
  unit 0 {
    family inet6 {
      address fec0:1:1:1::2/64;
    }
  }
}
```



NOTE: You must manually configure the router advertisement and advertise the default prefix for autoconfiguration to work on a specific interface.
