Enabling and Disabling Insertion of Option 82 Information

You can enable or disable support for the DHCP relay agent information option (option 82) in packets destined for a DHCP server. To enable support for the DHCP relay agent information option you use the `relay-option-82` statement.

You can configure option 82 support globally or for a named group of interfaces.

To enable support for DHCP relay agent information option 82:

1. Specify that you want to configure option 82 support.

   ```
   [edit forwarding-options dhcp-relay]
   user@host# edit relay-option-82
   ```

2. Insert the option 82 information in DHCP packets.

3. (Optional) Include an option 82 prefix with the base option 82 information.

4. (Optional) Include the textual description for the interface in the option 82 suboption.

5. (Optional) To restore the default behavior (option 82 information is not inserted into DHCP packets), delete the `relay-option-82` statement.

   ```
   [edit forwarding-options dhcp-relay]
   user@host# delete relay-option-82
   ```

This topic includes the following sections:

- Configuring Agent Circuit ID Information on page 1
- Configuring an Option 82 Prefix on page 2
- Using a Textual Description in Option 82 on page 3

Configuring Agent Circuit ID Information

You use the `relay-option-82` statement to enable insertion of option 82 information in DHCP packets. You must also specify at least the `circuit-id` statement to include the Agent Circuit ID suboption (suboption 1) of the DHCP relay agent information option.

If you specify the `circuit-id` statement, the format of the Agent Circuit ID information for Fast Ethernet (`fe`) or Gigabit Ethernet (`ge`) interfaces is one of the following, depending on your network configuration:

- For Fast Ethernet or Gigabit Ethernet interfaces that do not use virtual local area networks (VLANs) or stacked VLANs (S-VLANs):

  `(fe | ge)-fpc/pic/port`

- For Fast Ethernet or Gigabit Ethernet interfaces that use VLANs:

  `(fe | ge)-fpc/pic/port:vlan-id`
For Fast Ethernet or Gigabit Ethernet interfaces that use S-VLANs:

```
(fe | ge)-fpc/pic/port:svlan-id-vlan-id
```

To enable insertion of option 82 information:

1. Specify that you want to configure option 82 support.

   ```
   [edit forwarding-options dhcp-relay]
   user@host# edit relay-option-82
   ```

2. Specify insertion of the Agent Circuit ID suboption.

   ```
   [edit forwarding-options dhcp-relay relay-option-82]
   user@host# set circuit-id
   ```

### Configuring an Option 82 Prefix

You can include an optional prefix to the base option 82 information in DHCP packets destined for a DHCP server.

The prefix is separated from the option 82 Agent Circuit ID information by a colon (:), and can include any combination of the `host-name`, `logical-system-name`, and `routing-instance-name` options. The DHCP relay agent obtains the values for the `host-name`, `logical-system-name`, and `routing-instance-name` as follows:

- If you include the `host-name` option, the DHCP relay agent uses the hostname of the router configured with the `host-name` statement at the `[edit system]` hierarchy level.
- If you include the `logical-system-name` option, the DHCP relay agent uses the logical system name configured with the `logical-system` statement at the `[edit logical-system]` hierarchy level.
- If you include the `routing-instance-name` option, the DHCP relay agent uses the routing instance name configured with the `routing-instance` statement at the `[edit routing-instances]` hierarchy level or at the `[edit logical-system logical-system-name routing-instances]` hierarchy level.

If you include the hostname and either or both of the logical system name and the routing instance name in the prefix, the hostname is followed by a forward slash (/). If you include both the logical system name and the routing instance name in the prefix, these values are separated by a semicolon (;).

The following examples show several possible formats for the Agent Circuit ID information when you specify the `prefix` statement for Fast Ethernet (fe) or Gigabit Ethernet (ge) interfaces with S-VLANs:

- If you include only the hostname in the prefix for Fast Ethernet or Gigabit Ethernet interfaces with S-VLANs:

  ```
  hostname: (fe | ge)-fpc/pic/port:svlan-id-vlan-id
  ```
If you include only the logical system name in the prefix for Fast Ethernet or Gigabit Ethernet interfaces with S-VLANs:

```
logical-system-name:(fe | ge)-fpc/pic/port:svlan-id-vlan-id
```

If you include only the routing instance name in the prefix for Fast Ethernet or Gigabit Ethernet interfaces with S-VLANs:

```
routing-instance-name:(fe | ge)-fpc/pic/port:svlan-id-vlan-id
```

If you include both the hostname and the logical system name in the prefix for Fast Ethernet or Gigabit Ethernet interfaces with S-VLANs:

```
host-name/logical-system-name:(fe | ge)-fpc/pic/port:svlan-id-vlan-id
```

If you include both the logical system name and the routing instance name in the prefix for Fast Ethernet or Gigabit Ethernet interfaces with S-VLANs:

```
logical-system-name:routing-instance-name:(fe | ge)-fpc/pic/port:svlan-id-vlan-id
```

If you include the hostname, logical system name, and routing instance name in the prefix for Fast Ethernet or Gigabit Ethernet interfaces with S-VLANs:

```
host-name/logical-system-name:routing-instance-name:(fe | ge)-fpc/pic/port:svlan-id-vlan-id
```

For Fast Ethernet or Gigabit Ethernet interfaces that use VLANs but not S-VLANs, only the `vlan-id` value appears in the Agent Circuit ID format. For Fast Ethernet or Gigabit Ethernet interfaces that do not use VLANs or S-VLANs, neither the `vlan-id` value nor the `svlan-id` value appears.

To configure an optional prefix with the option 82 information:

1. Specify that you want to configure option 82 support.

   ```
   [edit forwarding-options dhcp-relay]
   user@host# edit relay-option-82
   ```

2. Specify insertion of the Agent Circuit ID information.

   ```
   [edit forwarding-options dhcp-relay relay-option-82]
   user@host# edit circuit-id
   ```

3. Specify that the prefix is included in the option 82 information. In this example, the prefix includes the hostname and logical system name.

   ```
   [edit forwarding-options dhcp-relay relay-option-82 circuit-id]
   user@host# set prefix host-name logical-system-name
   ```

### Using a Textual Description in Option 82

By default, when DHCP option 82 is inserted into client packets, the Agent Circuit ID suboption includes the interface identifier. You can optionally configure that the Agent Circuit ID suboption include the textual description that is configured for the
interface instead of the interface identifier. You can use the textual description for either the logical interface or the device interface.

You can include the textual interface description in the Agent Circuit ID suboption for static interfaces. The textual description is configured using the `description` statement at the `[edit interfaces interface-name]` hierarchy level. If you specify that the textual description is used and no description is configured for the interface, DHCP relay defaults to using the interface identifier.

To configure the DHCP relay option 82 suboption to include the textual interface description:

1. Specify that you want to configure option 82 support.
   
   ```
   [edit forwarding-options dhcp-relay]
   user@host# edit relay-option-82
   ```

2. Specify insertion of the Agent Circuit ID information.
   
   ```
   [edit forwarding-options dhcp-relay relay-option-82]
   user@host# edit circuit-id
   ```

3. Specify that the textual description is included in the option 82 information. In this example, the option 82 information includes the description used for the device interface.
   
   ```
   [edit forwarding-options dhcp-relay relay-option-82 circuit-id]
   user@host# set use-interface-description device
   ```

Published: 2010-04-15