1 DHCPv6 Client Commands

Command	Function
clear ipv6 dhcp client	Restart the Dynamic Host Configuration Protocol for IPv6 (DHCPv6) Client function on an interface.
ipv6 dhcp client ia	Enable the DHCPv6 Client function on an interface and request an identity association non-temporary address (IA_NA) address.
ipv6 dhcp client pd	Enable the DHCPv6 Client function on an interface and request an address prefix.
show ipv6 dhcp	Display the DHCP Unique Identifier (DUID) of a device.
show ipv6 dhcp interface	Display DHCPv6 interfaces.

1.1 clear ipv6 dhcp client

Function

Run the **clear ipv6 dhcp client** command to restart the Dynamic Host Configuration Protocol for IPv6 (DHCPv6) Client function on an interface.

Syntax

clear ipv6 dhcp client *interface-type interface-number*

Parameter Description

interface-type interface-number: Interface type and interface number.

Command Modes

Privileged EXEC mode

Default Level

14

Usage Guidelines

This command is used to restart the DHCPv6 Client function on an interface to request configurations from a DHCPv6 server again.

Examples

The following example restarts the DHCPv6 Client service on Switch Virtual Interface (SVI) 1.

```
Hostname> enable
Hostname# clear ipv6 dhcp client vlan 1
```

Notifications

N/A

Platform Description

N/A

Related Commands

N/A

1.2 ipv6 dhcp client ia

Function

Run the **ipv6 dhcp client ia** command to enable the DHCPv6 Client function on an interface and request an identity association non-temporary address (IA_NA) address.

Run the **no** form of this command to remove this configuration.

The DHCPv6 Client function and IA_NA address requesting are disabled by default.

Syntax

ipv6 dhcp client ia [**rapid-commit**]

no ipv6 dhcp client ia

Parameter Description

rapid-commit: Allows two-message exchange. If this keyword is configured, the SOLICIT message from the client contains the **Rapid-commit** option.

Command Modes

Interface configuration mode

Default Level

14

Usage Guidelines

If the DHCPv6 Client function is disabled on an interface, this command is used to enable the DHCPv6 Client function on the interface.

Examples

The following example enables the DHCPv6 Client function on GigabitEthernet 0/1 and requests an IA_NA address.

```
Hostname> enable
Hostname# configure terminal
Hostname(config)# interface gigabitethernet 0/1
Hostname(config-if-GigabitEthernet 0/1)# ipv6 dhcp client ia
```

Notifications

When the DHCPv6 Client function fails to be enabled, the following notification will be displayed:

```
Failed to configure DHCPv6 interface, please try again.
```

Common Errors

N/A

Platform Description

N/A

Related Commands

- **show ipv6 dhcp interface**

1.3 ipv6 dhcp client pd

Function

Run the **ipv6 dhcp client pd** command to enable the DHCPv6 Client function on an interface and request an address prefix.

Run the **no** form of this command to remove this configuration.

Address prefix requesting is not configured by default.

Syntax

ipv6 dhcp client pd *prefix-name* [**rapid-commit**]

no ipv6 dhcp client pd

Parameter Description

prefix-name: General IPv6 prefix.

rapid-commit: Allows two-message exchange. If this keyword is configured, the SOLICIT message from the client contains the **Rapid-commit** option.

Command Modes

Interface configuration mode

Default Level

14

Usage Guidelines

If the DHCPv6 Client function is disabled on an interface, this command is used to enable the DHCPv6 Client function on the interface.

After this command is executed, the device sends a prefix request to a DHCPv6 server. After receiving the prefix, the client saves the prefix to the general IPv6 prefix pool. In this way, other commands and applications can use this prefix.

Examples

The following example enables the DHCPv6 Client function on GigabitEthernet 0/1 and requests an address prefix.

```
Hostname> enable
Hostname(config)# interface gigabitethernet 0/1
Hostname(config-if-GigabitEthernet 0/1)# ipv6 dhcp client pd pd_name
```

Notifications

When the DHCPv6 Client function fails to be enabled, the following notification will be displayed:

```
Failed to configure DHCPv6 interface, please try again.
```

Common Errors

N/A

Platform Description

N/A

Related Commands

- **show ipv6 dhcp interface**

1.4 show ipv6 dhcp

Function

Run the **show ipv6 dhcp** command to display the DHCP Unique Identifier (DUID) of a device.

Syntax

show ipv6 dhcp

Parameter Description

N/A

Command Modes

All modes except the user EXEC mode

Default Level

14

Usage Guidelines

The DHCPv6 server, client, and relay on the same device share one DUID.

Examples

The following example displays the DUID of a device.

```
Hostname> enable
Hostname# show ipv6 dhcp
This device's DHCPv6 unique identifier(DUID): 00:03:00:01:00:d0:f8:22:33:b0
```

Table 1-1Output Fields of the show ipv6 dhcp interface Command

Field	Description
This device's DHCPv6 unique identifier (DUID)	Unique identifier of a DHCPv6 device

Notifications

N/A

Platform Description

N/A

Related Commands

N/A

1.5 show ipv6 dhcp interface

Function

Run the **show ipv6 dhcp interface** command to display DHCPv6 interfaces.

Syntax

show ipv6 dhcp interface [*interface-type interface-number*]

Parameter Description

interface-type interface-number: Interface type and interface number.

Command Modes

All modes except the user EXEC mode

Default Level

14

Usage Guidelines

If the *interface-type interface-number* parameter is not configured, information about all DHCPv6 interfaces is displayed. If the *interface-type interface-number* parameter is configured, only information about the specified DHCPv6 interface is displayed.

Examples

The following example displays interfaces on a DHCPv6 server.

```
Hostname> enable
Hostname# show ipv6 dhcp interface
VLAN 1 is in server mode
  Server pool: dhcp-pool
  Rapid-Commit: disable
```

Table 1-1Output Fields of the show ipv6 dhcp interface Command

Field	Description
xxx is in yyy mode	The xxx interface works in yyy mode. The values of yyy include: ● **Client**: The interface works in client mode. ● **Relay**: The interface works in relay mode. ● **Server**: The interface works in server mode.
Server pool	When the DHCPv6 Server function is enabled on an interface, the address pool name of the interface is displayed.
Rapid-Commit	Indicates whether the Rapid-Commit option is enabled. The values include: ● **enable**: Two-way message exchange is enabled. ● **disable**: Two-way message exchange is disabled.

2. The following example displays interfaces on a DHCPv6 client.

```
Hostname> enable
Hostname# show ipv6 dhcp interface
GigabitEthernet 0/1 is in client mode
  Rapid-Commit: disable
```

Table 1-2Output Fields of the show ipv6 dhcp interface Command

Field	Description
xxx is in yyy mode	The xxx interface works in yyy mode. The values of yyy include: ● **Client**: The interface works in client mode. ● **Relay**: The interface works in relay mode. ● **Server**: The interface works in server mode.
Rapid-Commit	Indicates whether the Rapid-Commit option is enabled. The values include: ● **enable**: Two-way message exchange is enabled. ● **disable**: Two-way message exchange is disabled.

Notifications

N/A

Platform Description

N/A

Related Commands

N/A