

# **DHCPv6 Client Configuration Mode Commands**

The Dynamic Host Configuration Protocol (DHCP) for Internet Protocol Version 6 (IPv6) Client Configuration Mode is used to create and manage DHCPv6 client parameters to support DHCPv6-based address assignment.

## **Command Modes**

Exec > Global Configuration > Context Configuration > DHCPv6 Service Configuration > DHCPv6 Client Configuration

configure > context context name > dhcpv6-service service name > dhcpv6-client

Entering the above command sequence results in the following prompt:

[context name]host name(config-dhcpv6-client)#



## **Important**

The commands or keywords/variables that are available are dependent on platform type, product version, and installed license(s).

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- exit, on page 2
- max-retransmissions, on page 2
- server-dead-time, on page 3
- server-ipv6-address, on page 4
- server-resurrect-time, on page 5

## end

Exits the current configuration mode and returns to the Exec mode.

**Product** 

All

**Privilege** 

Security Administrator, Administrator

**Syntax Description** 

end

**Usage Guidelines** 

Use this command to return to the Exec mode.

## exit

Exits the current mode and returns to the parent configuration mode.

All **Product** 

Security Administrator, Administrator **Privilege** 

exit **Syntax Description** 

**Usage Guidelines** 

Use this command to return to the parent configuration mode.

## max-retransmissions

Configures the maximum number of times that the system attempts to communicate with an unresponsive DHCPv6 server before it is considered a failure.

**GGSN Product** 

P-GW

**SAEGW** 

Security Administrator, Administrator **Privilege** 

Exec > Global Configuration > Context Configuration > DHCPv6 Service Configuration > DHCPv6 Client **Command Modes** 

Configuration

**configure** > **context** context name > **dhcpv6-service** service name > **dhcpv6-client** 

Entering the above command sequence results in the following prompt:

[context name]host name(config-dhcpv6-client)#

**Syntax Description** 

max-retransmissions max number default max-retransmissions

#### default

Returns the command to its default setting of 20.

## max\_number

Specifies the maximum number of re-attempts the system tries when no response is received from a DHCPv6 server. max number is an integer from 1 through 20. Default: 20

## **Usage Guidelines**

This command works in conjunction with the **detect-dead-server** DHCPv6 service command to set a limit to the number of communication failures that can occur with a configured DHCPv6 service.

When the value specified by this parameter is met, a failure is logged. The **detect-dead-server** DHCPv6 service parameter specifies the number of consecutive failures that could occur before the server is marked as down.

## **Example**

The following command configures the maximum number of times the system re-attempts communication with a DHCPv6 server that is unresponsive to 5:

max-retransmissions 5

## server-dead-time

Configures the amount of time that the client attempts to communicate with an unresponsive DHCPv6 server. DHCPv6 server is considered to be dead if it doesn't respond after given tries from client.

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### **Command Modes**

Exec > Global Configuration > Context Configuration > DHCPv6 Service Configuration > DHCPv6 Client Configuration

configure > context context name > dhcpv6-service service name > dhcpv6-client

Entering the above command sequence results in the following prompt:

[context\_name]host\_name(config-dhcpv6-client)#

## **Syntax Description**

server-dead-time dead\_time
default server-dead-time

## default

Returns the command to its default setting of 5.

## dead\_time

Specifies the maximum amount of time (in seconds) that the client attempts to communicate with an unresponsive DHCPv6 server.

dead time must be an integer value from 1 through 1932100.

Default: 5

## **Usage Guidelines**

Use this command to specify the maximum amount of time (in seconds) that the client attempts to communicate with an unresponsive DHCPv6 server.

This command works in conjunction with the **max-retransmissions** command to set a limit to the number of times that the system attempts to communicate with an unresponsive DHCPv6 server before it is considered a failure.

#### Example

The following command configures the client to continue trying to communicate with an unresponsive DHCPv6 server for no more than 10 seconds:

server-dead-time 10

# server-ipv6-address

Configures DHCPv6 server(s) with which the DHCPv6 client is to communicate.

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## **Privilege**

Security Administrator, Administrator

## **Command Modes**

Exec > Global Configuration > Context Configuration > DHCPv6 Service Configuration > DHCPv6 Client Configuration

configure > context context name > dhcpv6-service service name > dhcpv6-client

Entering the above command sequence results in the following prompt:

[context name]host name(config-dhcpv6-client)#

## **Syntax Description**

```
server-ipv6-address ipv6_address [ port port_number ] [ priority priority ] [
-noconfirm ]
no server-ipv6-address ipv6 address
```

### no

Deletes a previously configured DHCPv6 server.

## ipv6\_address

Specifies the IP address of the DHCPv6 server expressed in IPv6 colon-separated-hexadecimal notation.

Default: FF02::1:2

## port *port\_number*

Specifies the port used for communicating with the DHCPv6 server.

port number must be an integer from 1 through 65535. If unspecified, the default port is 547.

#### priority *priority*

Specifies the priority of the server if multiple servers are configured.

priority is an integer from 1 through 1000. 1 is the highest priority.

#### -noconfirm

Executes the command without prompting for further input from the user.

### **Usage Guidelines**

Use this command to configure the DHCPv6 server(s) that the client is to communicate with. Multiple servers can be configured, each with their own priority.

## **Example**

The following command configures a DHCPv6 server with an IP address of 1234:245:3456:4567:5678:6789:7890:8901, a port of 300, and a priority of 1:

server-ipv6-address 1234:245:3456:4567:5678:6789:7890:8901 port 300 priority 1

# server-resurrect-time

Configures the amount of time that a DHCPv6 client waits before considering a dead DHCPv6 server alive again.

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## **Privilege**

Security Administrator, Administrator

## **Command Modes**

Exec > Global Configuration > Context Configuration > DHCPv6 Service Configuration > DHCPv6 Client Configuration

**configure** > **context** context name > **dhcpv6-service** service name > **dhcpv6-client** 

Entering the above command sequence results in the following prompt:

[context\_name]host\_name(config-dhcpv6-client)#

#### **Syntax Description**

server-resurrect-time revive\_time
default server-resurrect-time

## default

Returns the command to its default setting of 20.

#### revive time

Specifies the maximum amount of time (in seconds) that a DHCPv6 client waits before considering a dead DHCPv6 server alive again.

revive timemust be an integer value from 1 through 1932100.

Default: 20

## **Usage Guidelines**

Use this command to specify the amount of time that a DHCPv6 client waits before considering a dead DHCPv6 server alive again.

## **Example**

The following command configures the client to wait 25 seconds before considering a dead DHCPv6 server alive again:

server-resurrect-time 25