DHCPv6 Server Configuration Mode Commands

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

Command Modes

Exec > Global Configuration > Context Configuration > DHCPv6 Service Configuration > DHCPv6 Server Configuration

configure > **context** *context_name* > **dhcpv6-service** *service_name* > **dhcpv6-server**

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-dhcpv6-server)#
```

Important

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

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.

Product

All

Privilege

Security Administrator, Administrator

Syntax Description

exit

Usage Guidelines

Use this command to return to the parent configuration mode.

ipv6

Configures M/O flag for neighbor discovery protocol.

Product

GGSN

P-GW

SAEGW

Privilege

Security Administrator, Administrator

Command Modes

Exec > Global Configuration > Context Configuration > DHCPv6 Service Configuration > DHCPv6 Server Configuration

configure > **context** *context_name* > **dhcpv6-service** *service_name* > **dhcpv6-server**

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-dhcpv6-server)#
```

Syntax Description

ipv6 nd { managed-config-flag | other-config-flag }

nd { managed-config-flag | other-config-flag }

Configure M/O flag for neighbor discovery protocol.

managed-config-flag: Configure M flag.

other-config-flag: Configure O flag.

Usage Guidelines

Use this command to specify the M/O flag for neighbor discovery protocol.

Example

The following command configures the M flag for neighbor discovery protocol:

ipv6 nd managed-config-flag

preferred-lifetime

Configures the preferred lifetime for prefixes assigned by the DHCPv6 service.

Product

GGSN

P-GW

SAEGW

Privilege

Security Administrator, Administrator

Command Modes

Exec > Global Configuration > Context Configuration > DHCPv6 Service Configuration > DHCPv6 Server Configuration

configure > **context** *context_name* > **dhcpv6-service** *service_name* > **dhcpv6-server**

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-dhcpv6-server)#
```

Syntax Description

```
preferred-lifetime pref_lifetime
default preferred-lifetime
```

default

Returns the command to its default setting of 900.

pref_lifetime

Specifies the preferred lifetime (in seconds) for prefixes assigned by the DHCPv6 service.

pref_lifetime must be an integer value from 1 through 1932100.

Default: 900

Usage Guidelines

Use this command to specify the preferred lifetime for prefixes assigned by the DHCPv6 service.

Example

The following command configures the preferred lifetime for *1001* seconds:

```
preferred-lifetime 1001
```

prefix-delegation

Configures the lifetime parameters that can be used by a particular DHCPv6 service to allocate delegated prefixes.

Product

GGSN

Privilege

Security Administrator, Administrator

Command Modes

Exec > Global Configuration > Context Configuration > DHCPv6 Service Configuration > DHCPv6 Server Configuration

configure > **context** *context_name* > **dhcpv6-service** *service_name* > **dhcpv6-server**

Entering the above command sequence results in the following prompt:

`[context_name]host_name(config-dhcpv6-server)#`

Syntax Description

prefix-delegation valid-lifetime *valid_lifetime* **preferred-lifetime** *pref_lifetime*

valid-lifetime *valid_lifetime*

Specifies the valid lifetime (in seconds) for prefixes for which the delegated prefix is valid. After this is exhausted, delegated prefix is deemed invalid.

pref_lifetime must be an integer value from 1 through 1932100.

Default: 900

preferred-lifetime *pref_lifetime*

Specifies the preferred lifetime (in seconds) for which new connections can be established by these delegated prefixes. Once it is exhausted, no new connections can be made.

pref_lifetime must be an integer value from 1 through 1932100.

Default: 900

Usage Guidelines

Use this command to specify the valid and preferred lifetime for prefixes assigned by the DHCPv6 service for prefix delegation.

Example

The following command configures the valid lifetime to *1500* seconds and preferred lifetime to *1200* seconds for prefix delegation:

```
prefix-delegation valid-lifetime 1500 preferred-lifetime 1200
```

rebind-time

Configures the rebind time for prefixes assigned by the DHCPv6 service.

Product

GGSN

P-GW

SAEGW

Privilege

Security Administrator, Administrator

Command Modes

Exec > Global Configuration > Context Configuration > DHCPv6 Service Configuration > DHCPv6 Server Configuration

configure > **context** *context_name* > **dhcpv6-service** *service_name* > **dhcpv6-server**

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-dhcpv6-server)#
```

Syntax Description

rebind-time *rebind_time*
default rebind-time

default

Returns the command to its default setting of 900.

rebind_time

Specifies the rebind time (in seconds) for prefixes assigned by the DHCPv6 service.

rebind_time must be an integer value from 1 through 1932100.

Default: 900

Usage Guidelines

Use this command to specify the rebind time for prefixes assigned by the DHCPv6 service.

Example

The following command configures the rebind time for *1001* seconds:

rebind-time 1001

renew-time

Configures the renewal time for prefixes assigned by the DHCPv6 service.

Product

GGSN

P-GW

SAEGW

Privilege

Security Administrator, Administrator

Command Modes

Exec > Global Configuration > Context Configuration > DHCPv6 Service Configuration > DHCPv6 Server Configuration

configure > **context** *context_name* > **dhcpv6-service** *service_name* > **dhcpv6-server**

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-dhcpv6-server)#
```

Syntax Description

renew-time *renewal_time*
default renew-time

default

Returns the command to its default setting of 900.

renewal_time

Specifies the renewal time (in seconds) for prefixes assigned by the DHCPv6 service.

renewal_time must be an integer value from 1 through 1932100.

Default: 900

Usage Guidelines

Use this command to specify the renewal time for prefixes assigned by the DHCPv6 service.

Example

The following command configures the renewal time for *1001* seconds:

```
renew-time 1001
```

valid-lifetime

Configures the valid lifetime for prefixes assigned by the DHCPv6 service.

Product

GGSN

P-GW

SAEGW

Privilege

Security Administrator, Administrator

Command Modes

Exec > Global Configuration > Context Configuration > DHCPv6 Service Configuration > DHCPv6 Server Configuration

configure > **context** *context_name* > **dhcpv6-service** *service_name* > **dhcpv6-server**

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-dhcpv6-server)#
```

Syntax Description

```
valid-lifetime valid_lifetime
default valid-lifetime
```

default

Returns the command to its default setting of 900.

valid_lifetime

Specifies the valid lifetime (in seconds) for prefixes assigned by the DHCPv6 service.

valid_lifetime must be an integer value from 1 through 1932100.

Default: 900

Usage Guidelines

Use this command to specify the valid lifetime for prefixes assigned by the DHCPv6 service.

Example

The following command configures the valid lifetime for *1001* seconds:

```
valid-lifetime 1001
```