



# 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, on page 1](#)
- [exit, on page 2](#)
- [ipv6, on page 2](#)
- [preferred-lifetime, on page 3](#)
- [prefix-delegation, on page 3](#)
- [rebind-time, on page 4](#)
- [renew-time, on page 5](#)
- [valid-lifetime, on page 6](#)

## 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
```

valid-lifetime