

IPv6 to IPv4 Tunnel Interface Configuration Mode Commands

The IPv6 to IPv4 Tunnel Interface Configuration Mode is used to create and manage the IP interface for addresses, address resolution options, etc.

Command Modes

Exec > Global Configuration > Context Configuration > Tunnel Interface Configuration > IPv6 to IPv4 Tunnel Interface Configuration

configure > context *context_name* **> interface** *interface_name* **tunnel > tunnel-mode ipv6ip**

Entering the above command sequence results in the following prompt:

`[context_name]host_name(config-if-tunnel-ipv6ip)#`

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

Important For information on common commands available in this configuration mode, refer to the Common Commands chapter.

- destination address, on page 1
- mode, on page 2
- source, on page 3
- tos, on page 4
- ttl, on page 5

destination address

Configures the destination of the tunnelled packets for a manual tunnel.

Product All

Privilege Administrator

Command Modes Exec > Global Configuration > Context Configuration > Tunnel Interface Configuration > IPv6 to IPv4 Tunnel Interface Configuration

configure > context *context_name* **> interface** *interface_name* **tunnel > tunnel-mode ipv6ip**

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-if-tunnel-ipv6ip)#
```

Syntax Description **destination address** *address*

no destination address

no

Removes configuration for the specified keyword.

address

Specifies the IP address of the destination device. *address* must be specified in IPv4 dotted decimal or IPv6 colon-separated-hexadecimal notation.

Usage Guidelines Use this command to configure the IP address of the destination end of the tunnel.

Example

The following command sets the destination address for packets on this tunnelled interface to *209.165.200.228*:

```
destination address 209.165.200.228
```

mode

Configures the mode of IPv6 to IPv4 tunneling. The default is set to manual mode.

Product All

Privilege Security Administrator, Administrator

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configure > context *context_name* **> interface** *interface_name* **tunnel > tunnel-mode ipv6ip**

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-if-tunnel-ipv6ip)#
```

Syntax Description **mode { 6to4 | manual }**

default mode

6to4

Configures automatic IPv6-to-IPv4 (6to4) tunnels as specified in RFC 3056.

manual

Configures point-to-point manual IPv6-to-IPv4 tunnels by specifying the IPv4 address of the tunnel remote end.

default

Resets the mode of IPv6-to-IPv4 tunneling to manual mode.

Usage Guidelines

There can be only one IPv6-to-IPv4 tunnel possible in a context. Once an IPv6-to-IPv4 tunnel is configured, all subsequent tunnels will be configured as manual tunnels.

Example

The following command configures the mode to IPv6-to-IPv4 (*6to4*).

```
mode 6to4
```

The following command configures the mode to *6to4*.

```
mode manual
```

source

Configures the source of tunneled packets.

Product

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Command Modes

Exec > Global Configuration > Context Configuration > Tunnel Interface Configuration > IPv6 to IPv4 Tunnel Interface Configuration

configure > context *context_name* **> interface** *interface_name* **tunnel > tunnel-mode ipv6ip**

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-if-tunnel-ipv6ip)#
```

Syntax Description

```
source { address ip_address | interface interface_name }
no source { address | interface }
```

address *ip_address*

Specifies the IPv4 address to use as the source address of the tunnel.

ip_address must be expressed in IPv4 dotted-decimal notation.

interface *interface_name*

Specifies the name of a non-tunnel IPv4 interface, whose address is used as the source address of the tunnel. *interface* must be an alphanumeric string of 1 through 79 characters.

no source { address | interface }

Removes configuration for the specified keyword.

Usage Guidelines

Configures the source IPv4 address of the tunnel by either specifying the IP address (host address) or by specifying another configured non-tunnel IPv4 interface. The source address must be an existing interface address before it is used. State of source address will affect the operational state of the tunnel.

Example

The following command configures the source address of the tunnel.

```
source address 209.165.200.228
```

The following command specifies the source interface as *testsource1*.

```
source interface testsource1
```

tos

Configures the type of service (TOS) settings of the outer IPv4 header of the tunneled packets.

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Command Modes

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configure > context *context_name* **> interface** *interface_name* **tunnel > tunnel-mode ipv6ip**

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-if-tunnel-ipv6ip)#
```

Syntax Description

```
tos { copy | value tos_value }
default tos
```

copy

Copies the DC octet of the IPv6 packet to the TOS octet of IPv4 packet.

default

Configures default setting for the specified keyword.

value *tos_value*

Configures the raw TOS value ranging from 0 to 255. The default is 0.

Usage Guidelines

Sets the TOS parameter to be used in the tunnel transport protocol or copies the TOS value from the original IPv6 DC byte to the TOS value of the encapsulating IPv4 header.

Example

The following command sets the tos value to *1*:

```
tos value 1
```

ttl

Configures the TTL (Time to live) value of the outer IPv4 header of the tunneled packets.

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Command Modes

Exec > Global Configuration > Context Configuration > Tunnel Interface Configuration > IPv6 to IPv4 Tunnel Interface Configuration

configure > context *context_name* **> interface** *interface_name* **tunnel > tunnel-mode ipv6ip**

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-if-tunnel-ipv6ip)#
```

Syntax Description

ttl value *ttl_value*

default

Configures default setting for the specified keyword.

value *ttl_value*

ttl_value is an integer from 1 through 255. The default is 16.

Usage Guidelines

Configures the TTL parameter to be used in the tunnel transport protocol.

Example

The following command sets the TTL value to *25*.

```
ttl value 25
```