



GRE Tunnel Interface Commands

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GRE Tunnel Interface Commands

This module describes the command line interface (CLI) commands for configuring GRE tunnel interfaces on the Cisco NCS 6000 Series Router.

For information on configuring GRE tunnels, see the *Interface and Hardware Component Configuration Guide for Cisco NCS 6000 Series Routers*.

interface tunnel-ip

Configures an IP-in-IP tunnel interface.

To remove this configuration, use the **no** prefix of the command.

```
interface tunnel-ip id
no interface tunnel-ip id
```

Syntax Description	<i>id</i> Specifies the tunnel interface identifier. Range is from 0 to 131070.
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Command Default	None
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Command Modes	XR Config mode
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Release	Modification
Release 7.2.1	This command was introduced.

Example

The following example shows how you can configure an IP-in-IP tunnel interface.

```
RP/0/RP0RSP0/CPU0:router(config)# interface tunnel-ip 10
RP/0/RP0RSP0/CPU0:router(config-if)# ipv4 unnumbered loopback 20
RP/0/RP0RSP0/CPU0:router(config-if)# tunnel mode ipv4 decap
RP/0/RP0RSP0/CPU0:router(config-if)# tunnel source loopback 0
RP/0/RP0RSP0/CPU0:router(config-if)# tunnel destination 50.10.1.2/32
```

tunnel mode

tunnel mode

Configures the mode of encapsulation for the tunnel interface.

To remove this configuration, use the **no** prefix of the command.

```
tunnel mode { gre { ipv4 | ipv6 } [ decap ] | ipv4 [ decap ] | ipv6 [ decap ] }
no tunnel mode { gre { ipv4 | ipv6 } [ decap ] | ipv4 [ decap ] | ipv6 [ decap ] }
```

Syntax Description	tunnel mode gre Configures IP-over-GRE encapsulation for the tunnel interface.
	tunnel mode ipv4 Configures generic packet tunneling over IPv4 encapsulation for the tunnel interface.
	tunnel mode ipv6 Configures generic packet tunneling over IPv6 encapsulation for the tunnel interface.
	tunnel mode gre ipv4 Configures GRE-over-IPv4 encapsulation for the tunnel interface.
	tunnel mode gre ipv6 Configures GRE-over-IPv6 encapsulation for the tunnel interface.
	decap Configures the IP-in-IP or GRE tunnel to be used only for decapsulation.

Command Default	None
Command Modes	Tunnel interface configuration mode

Release	Modification
Release 7.2.1	This command was introduced.

Usage Guidelines	No specific guidelines impact the use of this command.
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Example

The following example shows how you can configure the tunnel mode for an IP-in-IP tunnel interface.

```
RP/0/RP0/SP0/CPU0:router(config)# interface tunnel-ip 10
RP/0/RP0/SP0/CPU0:router(config-if)# ipv4 unnumbered loopback 20
RP/0/RP0/SP0/CPU0:router(config-if)# tunnel mode ipip decap
RP/0/RP0/SP0/CPU0:router(config-if)# tunnel source loopback 0
RP/0/RP0/SP0/CPU0:router(config-if)# tunnel destination 50.10.1.2/32
```

tunnel source

Configures the source IP address for a tunnel interface.

To remove this configuration, use the **no** prefix of the command.

```
tunnel source { ipv4-address | interface-type interface-number }
no tunnel source { ipv4-address | interface-type interface-number }
```

Syntax Description	<i>ipv4-address</i> Configures the specified IPv4 address as the source IP for the tunnel interface. <i>interface-type interface-number</i> Configures the specified interface type as the source for the tunnel interface.				
Command Default	None				
Command Modes	Tunnel interface configuration mode				
	<table border="1"> <thead> <tr> <th>Release</th><th>Modification</th></tr> </thead> <tbody> <tr> <td>7.2.1</td><td>This command was introduced.</td></tr> </tbody> </table>	Release	Modification	7.2.1	This command was introduced.
Release	Modification				
7.2.1	This command was introduced.				

Usage Guidelines No specific guidelines impact the use of this command.

Example

The following example shows how you can configure the Loopback 0 interface as the tunnel source for an IP-in-IP tunnel interface.

```
RP/0/RP0RSP0/CPU0:router(config)# interface tunnel-ip 10
RP/0/RP0RSP0/CPU0:router(config-if)# ipv4 unnumbered loopback 20
RP/0/RP0RSP0/CPU0:router(config-if)# tunnel mode ipv4 decap
RP/0/RP0RSP0/CPU0:router(config-if)# tunnel source loopback 0
RP/0/RP0RSP0/CPU0:router(config-if)# tunnel destination 50.10.1.2/32
```

tunnel destination

tunnel destination

Configures the tunnel destination for the tunnel interface.

To remove this configuration, use the **no** prefix of the command.

```
tunnel destination { ipv4-address | ipv4 address/subnet-mask | ipv6-address }
no tunnel destination { ipv4-address | ipv4 address/subnet-mask | ipv6-address }
```

Syntax Description	<i>ipv4-address</i> Configures the specified IPv4 address as the destination IP for the tunnel interface. <i>ipv4-address/subnet mask</i> Configures the specified IPv4 address with subnet mask as the destination IP for the tunnel interface. <i>ipv6-address</i> Configures the specified IPv6 address as the destination IP for the tunnel interface.				
Command Default	None				
Command Modes	Tunnel interface configuration mode				
	<table border="1"> <thead> <tr> <th>Release</th><th>Modification</th></tr> </thead> <tbody> <tr> <td>Release 7.2.1</td><td>This command was introduced.</td></tr> </tbody> </table>	Release	Modification	Release 7.2.1	This command was introduced.
Release	Modification				
Release 7.2.1	This command was introduced.				
Usage Guidelines	No specific guidelines impact the use of this command.				

Example

The following example shows how you can configure an IPv4 address with subnet mask as the tunnel destination for an IP-in-IP tunnel interface.

```
RP/0/RP0RSP0/CPU0:router(config)# interface tunnel-ip 10
RP/0/RP0RSP0/CPU0:router(config-if)# ipv4 unnumbered loopback 20
RP/0/RP0RSP0/CPU0:router(config-if)# tunnel mode ipv4 decap
RP/0/RP0RSP0/CPU0:router(config-if)# tunnel source loopback 0
RP/0/RP0RSP0/CPU0:router(config-if)# tunnel destination 50.10.1.2/32
```