



## Traffic Protection Commands

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This module describes the commands used to configure traffic protection.



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**Note** All commands applicable for the Cisco NCS 5500 Series Router are also supported on the Cisco NCS 540 Series Router that is introduced from Cisco IOS XR Release 6.3.2. References to earlier releases in Command History tables apply to only the Cisco NCS 5500 Series Router.

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- Note**
- Starting with Cisco IOS XR Release 6.6.25, all commands applicable for the Cisco NCS 5500 Series Router are also supported on the Cisco NCS 560 Series Routers.
  - Starting with Cisco IOS XR Release 6.3.2, all commands applicable for the Cisco NCS 5500 Series Router are also supported on the Cisco NCS 540 Series Router.
  - References to releases before Cisco IOS XR Release 6.3.2 apply to only the Cisco NCS 5500 Series Router.
  - Cisco IOS XR Software Release 7.0.1 specific updates are not applicable for the following variants of Cisco NCS 540 Series Routers:
    - N540-28Z4C-SYS-A
    - N540-28Z4C-SYS-D
    - N540X-16Z4G8Q2C-A
    - N540X-16Z4G8Q2C-D
    - N540X-16Z8Q2C-D
    - N540-12Z20G-SYS-A
    - N540-12Z20G-SYS-D
    - N540X-12Z16G-SYS-A
    - N540X-12Z16G-SYS-D
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For detailed information about traffic protection concepts, configuration tasks, and examples, see the *Traffic Protection for Third-Party Applications* chapter in the *System Security Configuration Guide for Cisco NCS 5500 Series Routers*.

- [allow](#), on page 3
- [tpa](#), on page 5

# allow

To configure a local port and third-party application protocols for traffic protection, use the **allow** command in protection mode. To disallow a protocol on an interface, use the **no** form of this command.

**allow protocol** {**tcp** | **udp**} **local-port** *port-number* [**interface** *interface-name* | **local-address** *local IP address* | **remote-address** *remote IP address*]

**no allow protocol** {**tcp** | **udp**} **local-port** *port-number* [**interface** *interface-name* | **local-address** *local IP address* | **remote-address** *remote IP address*]

Syntax Description	parameter	Description
	<b>protocol</b>	Specifies the L4 protocol to be configured for traffic protection. The supported protocols are TCP and UDP.
	<b>local-port</b>	Specifies local L4 port.
	<i>Port-number</i>	Specifies a port number in the range of 1 to 65535.
	<b>interface</b>	Specifies the interface on which the protocol has to be configured.
	<b>local-address</b>	Specifies the local IP address of the host or client.
	<b>remote-address</b>	Specifies the remote IP address of the host or client.

**Command Default** Not Applicable

**Command Modes** Protection

Command History	Release	Modification
	Release 6.5.2	This command was introduced.

**Usage Guidelines** If no allow command is used for a given local port and protocol, then by default, any ingress traffic is delivered to Third Party Applications. If one or more allow entries are added, only the ingress traffic matching an allow entry is delivered for that protocol and port. It is possible to configure multiple allow entries for the same protocol and port, for example, to allow traffic from multiple remote addresses.



**Note** If multiple allow entries are configured for the same protocol and port, the entries are expected to be non-overlapping. If overlapping entries are present, for example, multiple remote addresses in overlapping subnets, then the behaviour is platform-dependent.

Task ID	Task	Operation
	system	read, write

### Example

The following example shows how to configure a local port and third-party application protocols for traffic protection:

```
Router# configure
Router(config)# tpa
Router(config-tpa)# vrf default
Router(config-tpa-vrf)# address-family ipv4
Router(config-tpa-vrf-afi)# protection
Router(config-tpa-vrf-afi-prot)# allow protocol tcp local-port 6 remote-address 192.0.2.3
interface MgmtEth0 local-address 192.0.2.125
```

## tpa

To configure a third-party application protocol for traffic protection, use the **tpa** command in global configuration mode. To disable all configurations related to the third-party application, use the **no** form of this command.

**tpa vrf** *vrf-name* **address-family** [ **ipv4** | **ipv6** ] **protection**

**no tpa vrf** *vrf-name* **address-family** [ **ipv4** | **ipv6** ] **protection**

Syntax Description	
<b>vrf</b>	Configures a VPN routing and forwarding (VRF) reference.
<b>address-family</b>	Enables support for various address family configuration modes while configuring TPA.
<b>ipv4</b>	Specifies IP Version 4 address prefixes.
<b>ipv6</b>	Specifies IP Version 6 address prefixes.
<b>protection</b>	Enters the Traffic Protection submode.

**Command Default** Not Applicable

**Command Modes** Global configuration

Command History	Release	Modification
	Release 6.0	This command was introduced.

**Usage Guidelines** Some platforms do not support non-management traffic in any VRFs apart from default VRF.

### Example

The following example shows how to configure a third-party application protocol for traffic protection.

```
Router# configure
Router(config)# tpa
Router(config-tpa)# vrf vrf-name
Router(config-tpa-vrf)# address-family [ipv4 | ipv6]
Router(config-tpa-vrf-afi)# protection
```

