



Packet truncation

Packet truncation is a software feature that allows a Cisco Nexus 9000 Series switch to shorten packets to a user-defined size as they exit an interface. You can control the Cyclic Redundancy Check (CRC) value of truncated packets, streamline monitoring by truncating packets at the egress port, and save resources.

Packet truncation lets you perform truncation directly on the egress port that connects to your monitoring tool. This approach simplifies your workflow and saves resources.

For more information, see [Packet Truncation](#).

In typical Network Data Broker (NDB) environments, monitoring tools receive traffic using SPAN (Switched Port Analyzer) sessions. When full packet payloads are not required, SPAN truncation is often used. However, this method requires redirecting traffic through additional ports configured with a Port Access Control List (PACL), consuming the port capacity.

The packet truncation feature enables you to truncate packets at the egress port. This optimizes network monitoring traffic, reduces infrastructure costs, and addresses the operational overhead associated with traditional packet capture methods.

Components of packet truncation

Packet truncation includes three main components:

- **Egress Port Level Truncation:** This function is available on CloudScale switches. Administrators can define a maximum size for packets on a specific egress port. Packets larger than this size are truncated. The configuration is managed using the CLI and is integrated into the Cisco NX-OS Device Management Engine (DME).
- **CRC Stomping Control:** On the Cisco Nexus switches, packet truncation invalidates the original CRC value. The switch replaces the packet with a bad CRC causing the receiving peer or monitoring tool to discard the packet. This feature provides a CLI command to disable CRC stomping.
- **CRC Check Control (Legacy Hardware):** On the Cisco Nexus FX, FX2, and FX3 Series switches, a system-level command is available to disable the CRC check for truncated packets. This allows packets with CRC anomalies after truncation, to be forwarded successfully to monitoring tools.

Configure and manage the egress packet truncation

Use these commands to configure and manage packet truncation at the egress port.

Command	Description
packet-truncation size <i>size_in_bytes</i>	Enable packet truncation on an egress interface and set the maximum packet size in bytes.
no packet-truncationcrc-stomp	Disable CRC stomping on truncated packets to ensure the peer device receives a valid CRC.
no system packet-truncation crc-check	Disable the CRC check for truncated packets across the system. Applicable on Cisco Nexus FX, FX2 and FX3 Series switches.

Guidelines

Follow these guidelines when you use packet truncation.

- The packet truncation feature can be enabled only after enabling feature tap-aggregation feature.
- The **packet-truncation size** command is configurable only under physical interface and port-channel interfaces. It is *not* configurable on the host interfaces and SVI interfaces.
- The **no packet-truncation crc-stomp** is configurable only under physical interface and port-channel interfaces. It is *not* configurable on the host interfaces and SVI interfaces.

It is *not* configurable on Cisco Nexus FX, FX2 and FX3 Series switches.

- The **no system packet-truncation crc-check** command is configurable at the global level. It allows crc-stomped packets from the previous hop and forwards the packets to next hop.
- Packet truncation is supported on the Cisco Nexus CloudScale switches.

Packet truncation is *not* supported on these Cisco Nexus switches.

- Cisco Nexus 9500 Series switches
- Cisco Nexus SiliconOne switches
- [Configuration examples, on page 2](#)
- [Verification examples for packet truncation configuration, on page 3](#)

Configuration examples

Configure packet truncation at the egress ports using these commands..

Configuration example for packet truncation

To configure an interface to truncate all egress packets to 128 bytes:

```
Switch# configure terminal
Switch(config)# interface ethernet 1/1
Switch(config-if)# packet-truncation size 128
Switch(config-if)# end
```

Configuration example for packet truncation with CRC stomping disabled

To truncate packets to 256 bytes on an interface and ensure the packets are sent with a valid CRC:



Note If the Cisco Nexus GX, GX2, and HX Series switches receives a truncated packet with a bad CRC from the previous hop, the packet must be further truncated on this switch to a smaller size to utilize the functionality of this command and avoid CRC stomping.

```
Switch# configure terminal
Switch(config)# interface ethernet 1/2
Switch(config-if)# packet-truncation size 256
Switch(config-if)# no packet-truncation crc-stomp
Switch(config-if)# end
```

Configuration example for packet truncation on Cisco Nexus Series switches

Truncated packets fail the Cyclic Redundancy Check (CRC). When a Cisco Nexus Series switch receives a truncated packet, it identifies the packet as having a bad CRC and drops it by default.

To forward these packets in network monitoring environments for analysis, disable the system-wide CRC check.

```
Switch# configure terminal
! First, disable the CRC check at the system level
Switch(config)# no system packet-truncation crc-check
! Next, configure truncation on the specific interface
Switch(config)# interface ethernet 1/3
Switch(config-if)# packet-truncation size 128
Switch(config-if)# end
```

Verification examples for packet truncation configuration

To verify packet truncation settings on Cisco Nexus 9000 switches, use these commands and review the outputs.

Interface verification

Use the **show running-config interface** command to verify packet truncation settings on a specific interface:

```
Switch# show running-config interface ethernet 1/2
...
interface Ethernet1/2
packet-truncation size 256
no packet-truncation crc-stomp
```

This command displays the packet truncation size and indicates if CRC stomp is disabled for the selected interface.

System verification

Use the **show running-config** command to check global packet truncation CRC settings on the Cisco Nexus 9000 FX, FX2 and FX3 Series switches:

```
Switch# show running-config | include crc-check
no system packet-truncation crc-check
```

This command disables the system level check for bad CRC packets and forwards it to networking monitoring tool for analysis.