Flexible NetFlow NetFlow V5 Export Protocol


Support for this feature was added for Cisco 7200 and 7300 Network Processing Engine (NPE) series routers in Cisco IOS Release 12.2(33)SRE.

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Finding Feature Information

Your software release may not support all the features documented in this module. For the latest caveats and feature information, see Bug Search Tool and the release notes for your platform and software release. To find information about the features documented in this module, and to see a list of the releases in which each feature is supported, see the feature information table at the end of this module.

Use Cisco Feature Navigator to find information about platform support and Cisco software image support. To access Cisco Feature Navigator, go to www.cisco.com/go/cfn. An account on Cisco.com is not required.

Restrictions for Flexible NetFlow NetFlow V5 Export Protocol

- The NetFlow Version 5 export protocol that was first shipped in Cisco IOS Release 12.4(22)T is supported for flow monitors that use only the following Flexible NetFlow predefined records: netflow-original, original input, and original output.
Information about Flexible NetFlow NetFlow V5 Export Protocol

Flexible NetFlow V5 Export Protocol Overview

This feature enables sending export packets using the Version 5 export protocol.

How to Configure Flexible NetFlow NetFlow V5 Export Protocol

Configuring the Flow Exporter

Perform this required task to configure the flow exporter.

**Note**

Each flow exporter supports only one destination. If you want to export the data to multiple destinations, you must configure multiple flow exporters and assign them to the flow monitor.

You can export to a destination using either an IPv4 or IPv6 address.

**SUMMARY STEPS**

1. enable
2. configure terminal
3. flow exporter exporter-name
4. description description
5. destination {ip-address | hostname} [vrf vrf-name]
6. export-protocol {netflow-v5 | netflow-v9 | ipfix}
7. dscp dscp
8. source interface-type interface-number
9. option {exporter-stats | interface-table | sampler-table | vrf-table} [timeout seconds]
10. output-features
11. template data timeout seconds
12. transport udp udp-port
13. ttl seconds
14. end
15. show flow exporter exporter-name
16. show running-config flow exporter exporter-name
### DETAILED STEPS

<table>
<thead>
<tr>
<th>Command or Action</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong> enable</td>
<td>Enables privileged EXEC mode.</td>
</tr>
<tr>
<td>Example:</td>
<td>· Enter your password if prompted.</td>
</tr>
<tr>
<td>Device&gt; enable</td>
<td></td>
</tr>
<tr>
<td><strong>Step 2</strong> configure terminal</td>
<td>Enters global configuration mode.</td>
</tr>
<tr>
<td>Example:</td>
<td></td>
</tr>
<tr>
<td>Device# configure terminal</td>
<td></td>
</tr>
<tr>
<td><strong>Step 3</strong> flow exporter exporter-name</td>
<td>Creates the flow exporter and enters Flexible NetFlow flow</td>
</tr>
<tr>
<td>Example:</td>
<td>· This command also allows you to modify an existing flow exporter.</td>
</tr>
<tr>
<td>Device(config)# flow exporter EXPORTER-1</td>
<td></td>
</tr>
<tr>
<td><strong>Step 4</strong> description description</td>
<td>(Optional) Configures a description to the exporter that will</td>
</tr>
<tr>
<td>Example:</td>
<td>· appear in the configuration and the display of the show flow</td>
</tr>
<tr>
<td></td>
<td>exporter command.</td>
</tr>
<tr>
<td>Device(config-flow-exporter)# description</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Exports to the datacenter</td>
</tr>
<tr>
<td><strong>Step 5</strong> destination {ip-address</td>
<td>hostname} [vrf vrf-name]</td>
</tr>
<tr>
<td>Example:</td>
<td>· for the exporter.</td>
</tr>
<tr>
<td>Device(config-flow-exporter)# destination</td>
<td>· You can export to a destination using either an IPv4 or IPv6 address.</td>
</tr>
<tr>
<td></td>
<td><strong>Note</strong></td>
</tr>
<tr>
<td><strong>Step 6</strong> export-protocol {netflow-v5</td>
<td>netflow-v9</td>
</tr>
<tr>
<td>Example:</td>
<td>· exporter. The export of extracted fields from NBAR is supported only over IPFIX.</td>
</tr>
<tr>
<td>Device(config-flow-exporter)# export-protocol netflow-v9</td>
<td>· Default: netflow-v9.</td>
</tr>
<tr>
<td><strong>Step 7</strong> dscp dscp</td>
<td>(Optional) Configures differentiated services code point (DSCP)</td>
</tr>
<tr>
<td>Example:</td>
<td>· parameters for datagrams sent by the exporter.</td>
</tr>
<tr>
<td>Device(config-flow-exporter)# dscp 63</td>
<td>· The range for the dscp argument is from 0 to 63. Default: 0.</td>
</tr>
<tr>
<td><strong>Step 8</strong> source interface-type interface-number</td>
<td>(Optional) Specifies the local interface from which the exporter will use the IP address as the source IP address for exported datagrams.</td>
</tr>
<tr>
<td>Example:</td>
<td></td>
</tr>
<tr>
<td>Device(config-flow-exporter)# source ethernet 0/0</td>
<td></td>
</tr>
</tbody>
</table>
### Command or Action

**Step 9**  
```
option {exporter-stats | interface-table | sampler-table | vrf-table} [timeout seconds]
```

**Purpose**  
(Optional) Configures options data parameters for the exporter.  
- You can configure all three options concurrently.  
- The range for the `seconds` argument is 1 to 86,400. Default: 600.

**Example:**  
```
Device(config-flow-exporter)# option exporter-stats timeout 120
```

**Step 10**  
```
output-features
```

**Purpose**  
(Optional) Enables sending export packets using quality of service (QoS) and encryption.

**Example:**  
```
Device(config-flow-exporter)# output-features
```

**Step 11**  
```
template data timeout seconds
```

**Purpose**  
(Optional) Configures resending of templates based on a timeout.  
- The range for the `seconds` argument is 1 to 86400 (86400 seconds = 24 hours).

**Example:**  
```
Device(config-flow-exporter)# template data timeout 120
```

**Step 12**  
```
transport udp udp-port
```

**Purpose**  
Specifies the UDP port on which the destination system is listening for exported datagrams.  
- The range for the `udp-port` argument is from 1 to 65536.

**Example:**  
```
Device(config-flow-exporter)# transport udp 650
```

**Step 13**  
```
ttl seconds
```

**Purpose**  
(Optional) Configures the time-to-live (TTL) value for datagrams sent by the exporter.  
- The range for the `seconds` argument is from 1 to 255.

**Example:**  
```
Device(config-flow-exporter)# ttl 15
```

**Step 14**  
```
end
```

**Purpose**  
Exits flow exporter configuration mode and returns to privileged EXEC mode.

**Example:**  
```
Device(config-flow-exporter)# end
```

**Step 15**  
```
show flow exporter exporter-name
```

**Purpose**  
(Optional) Displays the current status of the specified flow exporter.

**Example:**  
```
Device# show flow exporter FLOW_EXPORTER-1
```

**Step 16**  
```
show running-config flow exporter exporter-name
```

**Purpose**  
(Optional) Displays the configuration of the specified flow exporter.

**Example:**  
```
Device# show running-config flow exporter FLOW_EXPORTER-1
```
Configuration Examples for Flexible NetFlow NetFlow V5 Export Protocol

Example: Configuring Version 5 Export

The following example shows how to configure version 5 export for Flexible NetFlow.

This sample starts in global configuration mode:

```
! flow exporter EXPORTER-1
  destination 172.16.10.2
  export-protocol netflow-v5
  transport udp 90
  exit
!
flow monitor FLOW-MONITOR-1
  record netflow ipv4 original-input
  exporter EXPORTER-1
!
ip cef
!
interface Ethernet 0/0
  ip address 172.16.6.2 255.255.255.0
  ip flow monitor FLOW-MONITOR-1 input
!```

Additional References

<table>
<thead>
<tr>
<th>Related Documents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Related Topic</td>
</tr>
<tr>
<td>Cisco IOS commands</td>
</tr>
<tr>
<td>Flexible NetFlow conceptual information and configuration tasks</td>
</tr>
<tr>
<td>Flexible NetFlow commands</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Standards/RFCs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard</td>
</tr>
<tr>
<td>No new or modified standards/RFCs are supported by this feature.</td>
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MIBs

<table>
<thead>
<tr>
<th>MIB</th>
<th>MIBs Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>To locate and download MIBs for selected platforms, Cisco software releases, and feature sets, use Cisco MIB Locator found at the following URL: <a href="http://www.cisco.com/go/mibs">http://www.cisco.com/go/mibs</a></td>
</tr>
</tbody>
</table>

Technical Assistance

<table>
<thead>
<tr>
<th>Description</th>
<th>Link</th>
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<tbody>
<tr>
<td>The Cisco Support and Documentation website provides online resources to download documentation, software, and tools. Use these resources to install and configure the software and to troubleshoot and resolve technical issues with Cisco products and technologies. Access to most tools on the Cisco Support and Documentation website requires a Cisco.com user ID and password.</td>
<td><a href="http://www.cisco.com/cisco/web/support/index.html">http://www.cisco.com/cisco/web/support/index.html</a></td>
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### Table 1: Feature Information for Flexible NetFlow NetFlow V5 Export Protocol

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<tr>
<th>Feature Name</th>
<th>Releases</th>
<th>Feature Information</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12.2(50)SY</td>
<td>Support for this feature was added for Cisco 7200 and 7300 Network Processing Engine (NPE) series routers in Cisco IOS Release 12.2(33)SRE.</td>
</tr>
<tr>
<td></td>
<td>12.4(22)T</td>
<td>The following command was introduced: export-protocol.</td>
</tr>
<tr>
<td></td>
<td>15.0(1)SY</td>
<td></td>
</tr>
<tr>
<td></td>
<td>15.0(1)SY1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cisco IOS XE Release 3.1S</td>
<td></td>
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