



NetFlow PXF Timers

First Published: June 8, 2006

This feature module describes how to configure the timers for active and inactive flow entries in the Cisco IOS NetFlow cache on the Parallel eXpress Forwarding (PXF) processor of the Cisco 10000 series router.

Finding Feature Information in This Module

Your Cisco IOS software release may not support all of the features documented in this module. To reach links to specific feature documentation in this module and to see a list of the releases in which each feature is supported, use the [“Feature Information for NetFlow PXF Timers”](#) section on page 5.

Finding Support Information for Platforms and Cisco IOS Software Images

Use Cisco Feature Navigator to find information about platform support and Cisco IOS software image support. Access Cisco Feature Navigator at <http://www.cisco.com/go/fn>. You must have an account on Cisco.com. If you do not have an account or have forgotten your username or password, click Cancel at the login dialog box and follow the instructions that appear.

Contents

- [Restrictions for NetFlow PXF Timers, page 2](#)
- [Information About NetFlow PXF Timers, page 2](#)
- [How to Configure NetFlow PXF Timers, page 2](#)
- [Configuration Examples for NetFlow PXF Timers, page 4](#)
- [Additional References, page 4](#)
- [Command Reference, page 5](#)
- [Feature Information for NetFlow PXF Timers, page 5](#)



Corporate Headquarters:
Cisco Systems, Inc., 170 West Tasman Drive, San Jose, CA 95134-1706 USA

© 2006 Cisco Systems, Inc. All rights reserved.

Restrictions for NetFlow PXF Timers

Configuration of the NetFlow PXF timers is not supported for customer use without Cisco Technical Assistance Center (TAC) authorization.

Information About NetFlow PXF Timers

NetFlow identifies packet flows for both ingress and egress IP packets. It does not involve any connection-setup protocol, either between routers or to any other networking device or end station. NetFlow does not require any change externally to the packets themselves or to any networking device. NetFlow is completely transparent to the existing network, including end stations and application software and network devices such as LAN switches.

The NetFlow PXF timers are used to ensure that there is a constant flow record in the live Cisco IOS NetFlow cache to view using the command-line interface (CLI). The NetFlow PXF timers are aging timers. If the router does not receive packets belonging to a packet flow for a configured period of seconds, the flow expires and is removed from the live Cisco IOS NetFlow cache.

To configure the NetFlow PXF timers, use the **service netflow timeout** command in global configuration mode. If you configure the timers, the router does not retain your settings on PXF or Performance Routing Engine (PRE) reloads. On PXF and PRE reloads, the active timeout reverts to 60 seconds and the inactive timeout to 15 seconds.

We recommend that the active timeout value be larger than the inactive timeout value. Also, we recommend that you do not configure the inactive timeout lower than 15 seconds to prevent the sending of excessive flow records from the PXF to the Route Processor (RP).

How to Configure NetFlow PXF Timers

To configure NetFlow PXF timers, perform the following configuration task:

- [Configuring NetFlow PXF Timers](#)

Configuring NetFlow PXF Timers

Use the procedure below to configure the timeout settings for active and inactive flow entries in the NetFlow cache on the Cisco 10000 series router. The **service netflow timeout** command has no default behavior or values.

**Note**

Configuration of the NetFlow PXF timers is not supported for customer use without Cisco Technical Assistance Center (TAC) authorization.

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **service internal**
4. **service netflow timeout [active | inactive] *value***
5. **end**

DETAILED STEPS

	Command or Action	Purpose
Step 1	enable Example: Router> enable	Enables privileged EXEC mode. <ul style="list-style-type: none"> • Enter your password if prompted.
Step 2	configure terminal Example: Router# configure terminal	Enters global configuration mode.
Step 3	service internal Example: Router(config)# service internal	Enables modification of NetFlow PXF timers.
Step 4	service netflow timeout [active inactive] <i>value</i> Example: Router(config)# service netflow timeout active 90	Configures the NetFlow PXF timers for flow entries in the Cisco IOS NetFlow cache. <ul style="list-style-type: none"> • active—Specifies active flow entries. • inactive—Specifies inactive flow entries. • <i>value</i>—Timeout value, in seconds. Range is from 0 to 4292967295.
Step 5	end Example: Router(config)# end	Exits global configuration mode.

Examples

The following configuration shows how to set the NetFlow PXF active timeout to 90 seconds:

```
Router> enable
Router# configure terminal
Router(config)# service internal
Router(config)# service netflow timeout active 90
Router(config)# end
```

Configuration Examples for NetFlow PXF Timers

This section provides the following configuration examples:

- [Configuring the NetFlow PXF Active Timeout: Example, page 4](#)
- [Configuring the NetFlow PXF Inactive Timeout: Example, page 4](#)

Configuring the NetFlow PXF Active Timeout: Example

The following example shows how to set the NetFlow PXF active timeout to 90 seconds:

```
Router> enable
Router# configure terminal
Router(config)# service internal
Router(config)# service netflow timeout active 90
```

Configuring the NetFlow PXF Inactive Timeout: Example

The following example shows how to set the NetFlow PXF inactive timeout to 60 seconds:

```
Router> enable
Router# configure terminal
Router(config)# service internal
Router(config)# service netflow timeout inactive 60
```

Additional References

The following sections provide references related to configuring NetFlow PXF timers.

Related Documents

Related Topic	Document Title
PXF commands, NetFlow commands	Cisco 10000 Series Router Software Configuration Guide
Cisco 10000 series router line cards	Cisco 10000 Series Router Line Card Configuration Guide
QoS information and configuration tasks	Cisco 10000 Series Router Quality of Service Configuration Guide

Standards

Standard	Title
No new or modified standards are supported by this feature, and support for existing standards has not been modified by this feature.	—

MIBs

MIB	MIBs Link
No new or modified MIBs are supported by this feature, and support for existing MIBs has not been modified by this feature.	To locate and download MIBs for selected platforms, Cisco IOS releases, and feature sets, use Cisco MIB Locator found at the following URL: http://www.cisco.com/go/mibs

RFCs

RFC	Title
No new or modified RFCs are supported by this feature, and support for existing RFCs has not been modified by this feature.	—

Technical Assistance

Description	Link
The Cisco Technical Support & Documentation website contains thousands of pages of searchable technical content, including links to products, technologies, solutions, technical tips, and tools. Registered Cisco.com users can log in from this page to access even more content.	http://www.cisco.com/techsupport

Command Reference

This feature uses no new or modified commands.

Feature Information for NetFlow PXF Timers

[Table 1](#) lists the release history for this feature.

Not all commands may be available in your Cisco IOS software release. For release information about a specific command, see the command reference documentation.

Cisco IOS software images are specific to a Cisco IOS software release, a feature set, and a platform. Use Cisco Feature Navigator to find information about platform support and Cisco IOS software image support. Access Cisco Feature Navigator at <http://www.cisco.com/go/fn>. You must have an account on Cisco.com. If you do not have an account or have forgotten your username or password, click **Cancel** at the login dialog box and follow the instructions that appear.

**Note**

Table 1 lists only the Cisco IOS software release that introduced support for a given feature in a given Cisco IOS software release train. Unless noted otherwise, subsequent releases of that Cisco IOS software release train also support that feature.

Table 1 Feature Information for NetFlow PXF Timers

Feature Name	Releases	Feature Information
NetFlow PXF Timers	12.2(28)SB2	Configures the timers for active and inactive flow entries in the Cisco IOS NetFlow cache on the Cisco 10000 series router.

CCSP, CCVP, the Cisco Square Bridge logo, Follow Me Browsing, and StackWise are trademarks of Cisco Systems, Inc.; Changing the Way We Work, Live, Play, and Learn, and iQuick Study are service marks of Cisco Systems, Inc.; and Access Registrar, Aironet, BPX, Catalyst, CCDA, CCDP, CCIE, CCIP, CCNA, CCNP, Cisco, the Cisco Certified Internetwork Expert logo, Cisco IOS, Cisco Press, Cisco Systems, Cisco Systems Capital, the Cisco Systems logo, Cisco Unity, Enterprise/Solver, EtherChannel, EtherFast, EtherSwitch, Fast Step, FormShare, GigaDrive, GigaStack, HomeLink, Internet Quotient, IOS, IP/TV, iQ Expertise, the iQ logo, iQ Net Readiness Scorecard, LightStream, Linksys, MeetingPlace, MGX, the Networkers logo, Networking Academy, Network Registrar, Packet, PIX, Post-Routing, Pre-Routing, ProConnect, RateMUX, ScriptShare, SlideCast, SMARTnet, The Fastest Way to Increase Your Internet Quotient, and TransPath are registered trademarks of Cisco Systems, Inc. and/or its affiliates in the United States and certain other countries.

All other trademarks mentioned in this document or Website are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (0601R)

Any Internet Protocol (IP) addresses used in this document are not intended to be actual addresses. Any examples, command display output, and figures included in the document are shown for illustrative purposes only. Any use of actual IP addresses in illustrative content is unintentional and coincidental.

© 2006 Cisco Systems, Inc. All rights reserved.