IP Switching Commands

cef table consistency-check

To enable Cisco Express Forwarding table consistency checker types and parameters, use the **cef table consistency-check** command in global configuration mode. To disable consistency checkers, use the **no** form of this command.

> **cef table consistency-check** {**ipv4** | **ipv6**} [**type** {**lc-detect** | **scan-lc-rp** | **scan-rp-lc** | **scan-rib-ios** | **scan-ios-rib**} [**count** *count-number* [**period** *seconds*] | **period** *seconds*] | **error-message** | **auto-repair** [**delay** *seconds* [**holddown** *seconds*] | **holddown** *seconds*] | **data-checking**]

> **no cef table consistency-check** {**ipv4** | **ipv6**} [**type** {**lc-detect** | **scan-lc-rp** | **scan-rp-lc** | **scan-rib-ios** | **scan-ios-rib**} [**count** *count-number* [**period** *seconds*] | **period** *seconds*] | **error-message** | **auto-repair** | **data-checking**]

Syntax Description

ipv4	Checks IPv4 addresses.
ipv6	Checks IPv6 addresses.
	Note On the Cisco 10000 series routers, IPv6 is supported on Cisco IOS Release 12.2(28)SB and later releases.
type	(Optional) Specifies the type of consistency check to enable.
lc-detect	(Optional) (Distributed platforms such as the Cisco 7500 series only) Detects missing prefixes on the line card. The information is confirmed by the Route Switch Processor (RSP).
	This consistency checker operates on the line card by retrieving IP prefixes that are missing from its Forwarding Information Base (FIB) table. If IP prefixes are missing, the line card cannot forward packets for these addresses. This consistency checker then sends IP prefixes to the RSP for confirmation. If the RSP detects that it has the relevant entry, an inconsistency is detected, and an error message is displayed. Finally, the RSP sends a signal back to the line card confirming that the IP prefix is an inconsistency.
scan-lc-rp	(Optional) (Distributed platforms only) Performs a passive scan check of tables on the line card.
	This consistency checker operates on the line card by examining the FIB table for a configurable time period and sending the next *x* prefixes to the RSP. The RSP does an exact lookup, and if it finds the prefix missing, it reports an inconsistency. Finally, the RSP sends a signal back to the line card for confirmation.
scan-rp-lc	(Optional) Operates on the RSP (opposite of the **scan-lc-rp** consistency checker) by examining the FIB table for a configurable time period and sending the next *x* prefixes to the line card.
	The line card does an exact lookup. If it finds the prefix missing, the line card reports an inconsistency and signals the RSP for confirmation.
scan-rib-ios	(Optional) Compares the Routing Information Base (RIB) to the FIB table and provides the number of entries missing from the FIB table.
scan-ios-rib	(Optional) Compares the FIB table to the RIB and provides the number of entries missing from the RIB.

count *count-number*	(Optional) Specifies the maximum number of prefixes to check per scan. The range is from 2 to 10000. The default count number is 1000 prefixes per scan for the **scan-rib-ios** and **scan-ios-rib** keywords. The default count number is 0 for the **lc-detect**, **scan-lc-rp**, and **scan-rp-lc** keywords.
period *seconds*	(Optional) Period between scans. Valid values are from 30 to 3600 seconds. The default is 60 seconds.
error-message	(Optional) Enables the consistency checker to generate an error message when it detects an inconsistency. By default, this function is disabled.
auto-repair	(Optional) Enables the auto repair function. By default, this function is enabled. You can enter the **no** form of the command to disable auto repair or enter the default form of the command to return the auto repair settings to a 10-second delay and 300-second holddown.
delay *seconds*	(Optional) Specifies how long the consistency checker waits to fix an inconsistency. The range is 10 to 300 seconds. The default delay is 10 seconds.
holddown *seconds*	(Optional) Specifies how long the consistency checker waits to reenable auto repair after auto repair runs. The range is from 300 to 3000 seconds. The default delay is 300 seconds.
data-checking	(Optional) Enables the consistency checker data-checking utility. By default, this function is disabled.

Command Default   All consistency checkers are disabled.

Command Modes   Global configuration (config)

Command History

Release	Modification
12.2(25)S	This command was introduced. This command replaces the **ip cef table consistency-check** command.
12.2(28)SB	This command was integrated into Cisco IOS Release 12.2(28)SB.
12.2(33)SRA	This command was integrated into Cisco IOS Release 12.2(33)SRA.
12.2(33)SXH	This command was integrated into Cisco IOS Release 12.2(33)SXH.
12.4(20)T	This command was integrated into Cisco IOS Release 12.4(20)T.
Cisco IOS XE Release 2.1	This command was integrated into Cisco IOS XE Release 2.1 and implemented on the Cisco ASR 1000 Series Aggregation Services Router.

Examples   The following example enables the Cisco Express Forwarding consistency checker to check IPv4 addresses:

```
Router(config)# cef table consistency-check ipv4
```

The following example enables the Cisco Express Forwarding consistency checker to check IPv4 addresses and specifies the scan-rp-lc checker to run every 60 seconds for 5000 prefixes:

```
Router(config)# cef table consistency-check ipv4 type scan-rp-lc count 5000 period 60
```

Cisco IOS IP Switching Command Reference ■

The following example enables the Cisco Express Forwarding consistency checker to check IPv4 addresses and display an error message when it finds an inconsistency:

```
Router(config)# cef table consistency-check ipv4 error-message
```

Related Commands	Command	Description
	clear cef table	Clears the Cisco Express Forwarding tables.
	clear ip cef inconsistency	Clears Cisco Express Forwarding inconsistency statistics and records found by the Cisco Express Forwarding consistency checkers.
	debug cef	Enables the display of information about Cisco Express Forwarding events.
	debug ip cef table	Enables the collection of events that affect entries in the Cisco Express Forwarding tables.
	show cef table consistency-check	Displays Cisco Express Forwarding consistency checker table values.
	show ip cef inconsistency	Displays Cisco Express Forwarding IP prefix inconsistencies.

cef table download

To set download characteristics for prefixes or routes in the Cisco Express Forwarding table, use the **cef table download** command in global configuration mode. To return to the default download characteristics, use the **no** form of this command.

> **cef table download** {**catch-all** | **connected-route** | **default-route** | **receive-route** | **recursive-dependents** | **route-in-vrf**} **priority** *priority-number*

> **no cef table download** {**catch-all** | **connected-route** | **default-route** | **receive-route** | **recursive-dependents** | **route-in-vrf**} **priority** *priority-number*

Syntax Description

catch-all	Any route not matched, which include Internet routes. The default priority is 4.
connected-route	Route directly connected to the router. The default priority is 2.
default-route	Default route, 0.0.0.0/0 or ::/0. The default priority is 1.
receive-route	Receive route, local address on router. The default priority is 2.
recursive-dependents	Route with recursive dependents, matches next-hop of other recursive routes. The default priority is 1.
route-in-vrf	Route in a Virtual Private Network (VPN) routing and forwarding (VRF) table. The default priority is 3.
priority	Sets the table download priority.
priority-number	Select one of the following as the priority number: • **1**—1st priority • **2**—2nd priority • **3**—3rd priority • **4**—4th priority

Command Default

The default download characteristics apply to routes and prefixes downloaded from the Route Processor (RP) to the line cards.

Command Modes

Global configuration (config)

Command History

Release	Modification
12.2(33)SRE	This command was introduced.

Usage Guidelines

Use this command to change the priority of how prefixes and routes in the Cisco Express Forwarding table are downloaded from the RP to the line cards.

Default download priorities are set up to improve convergence when topology changes occur in networks of distributed platform, such as the Cisco 7600 series routers and the Cisco Catalyst 6000 series switches.

Cisco IOS IP Switching Command Reference

Prefixes and routes are categorized and downloaded at four different priorities. Table 1 lists the download priority and the associated prefix or route type.

Table 1   Download Priorities and Associated Prefix or Route Category

Download Priority	Prefix or Route Type
Priority 1 (P1)	• Default routes • Routes with recursive dependents, typically Interior Gateway Protocol (IGP) prefixes that are the next hop of internal Border Gateway Protocol (iBGP) learned routes
Priority 2 (P2)	• Directly connected routes • Receive routes; that is, the host routes for the interface address of the router
Priority 3 (P3)	• Any route in a VRF table
Priority 4 (P4)	• Any other route

In a typical network, a small number of IGP prefixes have many iBGP prefixes recursing through them. When an IGP topology change occurs, the key to updating the forwarding of the iBGP prefixes is to update the IGP prefix through which they recurse. If these prefixes with recursing dependents are downloaded before other prefixes, convergence will be faster. Therefore, the default priority for routes with recursive dependents is P1.

Prioritizing the download of directly connected prefixes and their associated local interface address allows for faster and more deterministic failure detection when an interface goes down. In addition, traffic is received at the local interface addresses as soon as possible, which allows for faster Layer 3 protocol convergence. The default priority for directly connected and receive routes is set at P2.

VRF routes over global table routes or Internet routes have a default priority of P3, and all other routes are prioritized at P4.

The **cef table download** command allows you to override a default priority so you can customize prefix and route downloads from the RP to the line cards. To display the configured download priority, use the **show cef table download priority** command.

Examples   The following example shows how to change the download priority of the default route from P1 to P2:

```
Router(config)# cef table download default-route priority 2
```

Related Commands

Command	Description
show cef table download priority	Displays the configured download priority of Cisco Express Forwarding routes.

cef table output-chain build

To configure characteristics for Cisco Express Forwarding table output chain building for the forwarding of packets through the network, use the **cef table output-chain build** command in global configuration mode. To disable Cisco Express Forwarding table output chain-building characteristics, use the **no** form of this command. To restore the general Cisco Express Forwarding table output chain-building characteristics to their default values, use either the **default** form of this command.

General Characteristics

cef table output-chain build favor {**convergence-speed** | **memory-utilization**}

no cef table output-chain build favor

default cef table output-chain build favor

Individual Overrides

cef table output-chain build {**indirection** [**non-recursive-prefix**] [**recursive-prefix**] |
　　inplace-modify [**load-sharing**] [**push-counter**]}

no cef table output-chain build {**indirection** [**non-recursive-prefix**] [**recursive-prefix**] |
　　inplace-modify [**load-sharing**] [**push-counter**]}

default cef table output-chain build {**indirection** [**non-recursive-prefix**] [**recursive-prefix**] |
　　inplace-modify [**load-sharing**] [**push-counter**]}

Syntax Description		
	convergence-speed	Configures a faster convergence speed for table output chain building.
	memory-utilization	Configures less memory use for table output chain building.
	default	Removes any table output chain building characteristic.
	indirection	Enables insertion of indirection objects for table output chain building.
	non-recursive-prefix	(Optional) Enables insertion of indirection objects for nonrecursive prefixes.
	recursive-prefix	(Optional) Enables insertion of indirection objects for recursive prefixes.
	inplace-modify	Enables in-place modification of objects in the forwarding chain.
	load-sharing	(Optional) Enables in-place modification of load-balancing objects in the forwarding chain.
	push-counter	(Optional) Enables in-place modification of packet counters in the output chain.

Command Default　Convergence speed and indirection characteristics are enabled by default for the building of Cisco Express Forwarding table output chains.

Command Modes　Global configuration (config)

	Release	Modification
Command History	12.2(33)SRA	This command was introduced.
	12.2(33)SB	This command was integrated into Cisco IOS Release 12.2(33)SB.
	12.2(33)SXH	This command was integrated into Cis IOS Release 12.2(33)SXH.
	12.4(20)T	This command was integrated into Cisco IOS Release 12.4(20)T.

Usage Guidelines

General Characteristics

Use the **cef table output-chain build favor** command to override the Cisco Express Forwarding table default operational behavior used to build output chains for forwarding of network traffic.

The default behavior for output chain building favors convergence, if this behavior is permitted by the platform. (See your platform documentation for information on the convergence of recursive and nonrecursive prefixes.) Depending on your network requirements and resources, you might choose to do one of the following:

- Use the **convergence-speed** keyword to increase convergence speed, which requires additional system resources, especially additional memory.

- Use the **memory-utilization** keyword to decrease memory use, which decreases convergence speed and uses fewer system resources.

The default is platform-specific and usually sufficient. The default falls between the options provided for your use with this command.

For all **cef table output-chain build** commands, the state is enabled, disabled, or use the system defaults. To remove any configuration you must enter the **default** keyword with the command instead of the **no** keyword. To disable an output chain-building characteristic, enter the **no** keyword.

The output of the **show cef table** command displays the current configuration and operational state of the Cisco Express Forwarding table.

Individual Overrides

This command is used for troubleshooting purposes only.

Note Use this command only on the advice of field personnel from Cisco.

The use of the **cef table output-chain build** command with either the **indirection** or **inplace-modify** keyword overrides specific Cisco Express Forwarding table output chain-building behavior. Indirection characteristics are installed by default if the platform supports or permits their use.

The **indirection** keyword enables or disables the insertion of indirection objects for recursive or nonrecursive prefixes or for both recursive and nonrecursive prefixes. Inserting an indirection object into the forwarding chain allows the handling of any aggregate event that affects multiple prefixes by the modification of the indirection object. For example, if a number of recursive prefixes all share the same recursive nexthop, and the route to the recursive nexthop changes, a single update to an indirection object can restore forwarding for those recursive prefixes.

If you configure the **cef table output-chain build indirection** command without a prefix type, recursive and nonrecursive prefixes are explicitly enabled. This command would override any preference configured with the existing **cef table output-chain build favor** command.

The **inplace-modify** keyword enables or disables the ability to modify certain objects in the forwarding chain by modifying the data that an object holds. The alternative is a complete replacement of the object and the relinking of all links to the object.

To return to system default settings for Cisco Express Forwarding table output chain building, use the **default** form of the command.

The output of the **show cef table** command displays the current configuration and operational state of the Cisco Express Forwarding table.

Examples

The following example shows how to configure the use of less memory for table output chain building:

```
Router(config)# cef table output-chain build favor memory
```

Use this command if your priority is to save memory and your network does not require a faster convergence speed for table output chain building for forwarding of network traffic.

Related Commands

Command	Description
show cef table	Displays the configuration and operational state of the FIB.
show ip cef switching statistics	Displays switching statistics in the FIB.
show ipv6 cef switching statistics	Displays switching statistics in the IPv6 FIB.

cef table rate-monitor-period

To set a time period over which to calculate the rate of route updates from the Routing Information Base (RIB) to the Cisco Express Forwarding Forwarding Information Base (FIB) tables, use the **cef table rate-monitor-period** command in global configuration mode. To return to the default time period, use the **no** form of this command.

cef table rate-monitor-period *minutes*

no cef table rate-monitor-period *minutes*

Syntax Description		
minutes	The time period, in minutes, over which to calculate the rate of route updates to Cisco Express Forwarding tables. The range is from 1 to 60. The default is 5.	

Command Default If the command is not configured, the sampling rate is every 5 minutes.

Command Modes Global configuration (config)

Command History

Release	Modification
12.2(25)S	This command was introduced.
12.2(28)SB	This command was integrated into Cisco IOS Release 12.2(28)SB.
12.2(33)SRA	This command was integrated into Cisco IOS Release 12.2(33)SRA.
12.2(33)SXH	This command was integrated into Cisco IOS Release 12.2(33)SXH.
12.4(20)T	This command was integrated into Cisco IOS Release 12.4(20)T.

Usage Guidelines Use this command to change the sampling rate period over which to monitor route updates from the RIB to the Cisco Express Forwarding IPv4 and IPv6 FIB tables. Changing the sampling period allows you to calculate the rate of route insertion into the FIB at any interval length from 1 minute to 60 minutes.

Examples The following example shows how to set the time period to 1 minute over which to calculate the rate of route updates from the RIB to the IPv4 FIB and IPv6 FIB:

```
Router(config)# cef table rate-monitor-period 1
```

Related Commands

Command	Description
show cef table	Displays the configuration and operational state of the Cisco Express Forwarding FIB table.

clear adjacency

To clear the Cisco Express Forwarding adjacency table, use the **clear adjacency** command in privileged EXEC mode.

      clear adjacency

Syntax Description   This command has no arguments or keywords.

Command Modes   Privileged EXEC (#)

Command History

Release	Modification
11.2GS	This command was introduced to support the Cisco 12012 Internet router.
11.1CC	Support was added for multiple platforms.
12.2(25)S	This command was integrated into Cisco IOS Release 12.2(25)S.
12.2(28)SB	This command was integrated into Cisco IOS Release 12.2(28)SB and implemented on the Cisco 10000 series routers.
12.2(33)SRA	This command was integrated into Cisco IOS Release 12.2(33)SRA.
12.2(33)SXH	This command was integrated into Cisco IOS Release 12.2(33)SXH.
12.4(20)T	This command was integrated into Cisco IOS Release 12.4(20)T.

Usage Guidelines   Using the **clear adjacency** command repopulates adjacencies from sources. Any remaining stale adjacencies (meaning those that fail to repopulate on request) are then purged. Layer 2 next hop information is reevaluated.

Clearing adjacencies cause the adjacency table to repopulate from the Layer 2 to Layer 3 mapping tables. To reevaluate the mappings, clear the source information by using a Cisco IOS command, such as the **clear arp-cache** command.

For Cisco 7500 Routers

On a distributed system, the adjacency tables that reside on line cards are always synchronized to the adjacency table that resides on the Route/Switch Processor (RSP). Refreshing the adjacencies also refreshes adjacencies on line cards and purges stale entries. (Entering the **clear adjacency** command on a line card has no effect.)

Examples   The following example clears the adjacency table:

```
Router# clear adjacency
```

Related Commands

Command	Description
clear arp-cache	Deletes all dynamic entries from the ARP cache.
debug adjacency	Enables the display of information about the adjacency database.
show adjacency	Displays Cisco Express Forwarding adjacency table information.
show mls cef adjacency	Displays information about the hardware Layer 3 switching adjacency node.

clear adjacency epoch

✎

Note The **clear adjacency epoch** command is not available in Cisco IOS Releases 12.2(25)S, 12.2(28)SB, 12.2(33)SRA, 12.2(33)SXH, 12.4(20)T and later releases.

To begin a new epoch and increment the epoch number of the Cisco Express Forwarding adjacency table, use the **clear adjacency epoch** command in privileged EXEC mode.

clear adjacency epoch

Syntax Description This command has no arguments or keywords.

Command Modes Privileged EXEC (#)

Command History

Release	Modification
12.2(8)T	This command was introduced.
12.2(25)S	This command was removed. It is not available in Cisco IOS Release 12.2(25)S and later Cisco IOS 12.2S releases.
12.2(28)SB	This command was removed. It is not available in Cisco IOS Release 12.2(28)SB and later Cisco IOS 12.2SB releases.
12.2(33)SRA	This command was removed. It is not available in Cisco IOS Release 12.2(33)SRAand later Cisco IOS 12.2SR releases.
12.2(33)SXH	This command was removed. It is not available in Cisco IOS Release 12.2(33)SXH and later Cisco IOS 12.2S releases.
12.4(20)T	This command was removed. It is not available in Cisco IOS Release 12.4(20)T and later Cisco IOS 12.4T releases.

Usage Guidelines The **clear adjacency epoch** command increments the epoch and flushes entries with the old epoch. This command clears inconsistencies.

Use the **clear adjacency epoch** command when you want to rebuild the adjacency table. A new adjacency table might be required because the user wants to remove inconsistencies from the table.

Examples The following example shows how to begin a new epoch and increments the epoch number of the adjacency table:

```
Router# clear adjacency epoch
```

clear cef interface

To clear the Cisco Express Forwarding per-interface traffic policy statistics for an interface, use the **clear cef interface** command in privileged EXEC mode.

> **clear cef interface** [*interface-type interface-number*] **policy-statistics**

Syntax Description

interface-type	Type of interface to clear the policy statistics for
interface-number	Port, connector, or interface card number
policy-statistics	Policy statistics for the specified interface.

Command Modes   Privileged EXEC (#)

Command History

Release	Modification
12.0(9)S	This command was introduced to support the Cisco 12000 series Internet routers.
12.0(17)ST	This command was introduced to support the Cisco 12000 series Internet routers.
12.2(13)T	This command was integrated into Cisco IOS Release 12.2(13)T.
12.4(20)T	This command was integrated into Cisco IOS Release 12.4(20)T.

Usage Guidelines   This command clears the Cisco Express Forwarding Border Gateway Protocol (BGP) traffic policy statistics counters for an interface.

If you do not specify an interface type and interface number the policy statistics for all interfaces are cleared.

Examples   The following example clears the Cisco Express Forwarding BGP traffic policy statistics counters:

```
Router# clear cef interface ethernet 0/0 policy-statistics
Router#
```

Related Commands

Command	Description
bgp-policy	Enables BGP policy accounting or policy propagation on an interface.
show cef interface policy-statistics	Displays detailed Cisco Express Forwarding policy statistical information for all interfaces.

clear cef linecard

To clear Cisco Express Forwarding information from line cards, use the **clear cef linecard** command in privileged EXEC mode.

clear cef linecard [*slot-number*] [**adjacency** | **interface** | **prefix**]

Syntax Description

slot-number	(Optional) Line card slot number to clear. When you omit this argument, all line card slots are cleared.
adjacency	(Optional) Clears line card adjacency tables and rebuilds adjacency for the specified line card.
interface	(Optional) Clears line card interface information and recreates the interface information for the specified line card.
prefix	(Optional) Clears line card prefix tables and starts rebuilding the Forwarding Information Base (FIB) table.

Command Modes Privileged EXEC (#)

Command History

Release	Modification
11.2GS	This command was introduced to support the Cisco 12012 Internet router.
11.1CC	Support was added for multiple platforms.
12.2(25)S	This command was integrated into Cisco IOS Release 12.2(25)S.
12.2(28)SB	This command was integrated into Cisco IOS Release 12.2(28)SB and implemented on the Cisco 7000 series router. This command is not supported on the Cisco 10000 series router.
12.2(33)SRA	This command was integrated into Cisco IOS Release 12.2(33)SRA.
12.2(33)SXH	This command was integrated into Cisco IOS Release 12.2(33)SXH.

Usage Guidelines This command is available only on distributed platforms (such as the Cisco 7500 series) running distributed Cisco Express Forwarding.

Cisco Express Forwarding information on the line cards is cleared; however, Cisco Express Forwarding information on the Route Processor (RP) is not affected.

After you clear Cisco Express Forwarding information from line cards, the corresponding information from the RSP is propagated to the line cards. Interprocess communications (IPC) ensures that Cisco Express Forwarding information on the Route Switch Processor (RSP) matches the Cisco Express Forwarding information on the line cards.

Because this command might require significant processing resources and can cause dropped traffic or system error messages about excessive CPU use, its use is recommended only as a last resort for debugging or mitigating serious problems.

Note Cisco 10000 series routers do not support the **clear cef linecard** command.

■ **clear cef linecard**

Examples   The following example clears the Cisco Express Forwarding information from the line cards:

```
clear cef linecard
```

Related Commands

Command	Description
show cef linecard	Displays Cisco Express Forwarding-related interface information by line card.

clear cef load-balance statistics

To clear Cisco Express Forwarding (CEF) load balancing information, use the **clear cef load-balance statistics** command in privileged EXEC mode.

clear cef load-balance statistics

Syntax Description   This command has no arguments or keywords.

Command Default   Cisco Express Forwarding load balancing information is not cleared.

Command Modes   Privileged EXEC (#)

Command History

Release	Modification
15.0(1)M	This command was introduced in a release earlier than Cisco IOS Release 15.0(1)M.
12.2(33)SRC	This command was integrated into a release earlier than Cisco IOS Release 12.2(33)SRC.
12.2(33)SXI	This command was integrated into a release earlier than Cisco IOS Release 12.2(33)SXI.
Cisco IOS XE Release 2.1	This command was integrated into Cisco IOS XE Release 2.1.

Usage Guidelines   Cisco Express Forwarding load balancing is based on a combination of source and destination packet information; it allows you to optimize resources by distributing traffic over multiple paths for transferring data to a destination. You can use the **clear cef load-balance statistics** command to clear Cisco Express Forwarding load balancing information. To select and configure the load balancing algorithm and to record the statistics, use the **ip cef load-sharing algorithm** command.

Examples   The following example shows how to clear CEF load balancing information:

```
Router# clear cef load-balance statistics
```

Related Commands

Command	Description
ip cef load-sharing algorithm	Selects a Cisco Express Forwarding load-balancing algorithm.
show cef	Displays information about packets forwarded by Cisco Express Forwarding.

clear cef table

To clear the Cisco Express Forwarding tables, use the **clear cef table** command in privileged EXEC mode.

> **clear cef table** {**ipv4** | **ipv6**} [**vrf** {*vrf-name* | ***** }]

Syntax Description

ipv4	Clears the Cisco Express Forwarding tables for IPv4 addresses.
ipv6	Clears the Cisco Express Forwarding tables for IPv6 addresses.
	Note On the Cisco 10000 series routers IPv6 is supported on Cisco IOS Release 12.2(28)SB and later releases.
vrf	(Optional) Specifies all VPN routing and forwarding (VRF) instance tables or a specific VRF table for an IPv4 or IPv6 address.
vrf-name	(Optional) Clears the specific VRF table for IPv4 or IPv6 addresses.
*	(Optional) Clears all the VRF tables for IPv4 or IPv6 addresses.

Command Modes   Privileged EXEC (#)

Command History

Release	Modification
12.2(25)S	This command was introduced.
12.2(28)SB	This command was integrated into Cisco IOS Release 12.2(28)SB.
12.2(33)SRA	This command was integrated into Cisco IOS Release 12.2(33)SRA.
12.2(33)SXH	This command was integrated into Cisco IOS Release 12.2(33)SXH.
12.4(20)T	This command was integrated into Cisco IOS Release 12.4(20)T.

Usage Guidelines   The **clear cef table** command clears the selected table or address family of tables (for IPv4 or IPv6) and updates (refreshes) them throughout the router (including the Route Processor and line cards). The command increments the table epoch, updates the tables, distributes the updated information to the line cards, and performs a distributed purge of any stale entries in the tables based on the noncurrent epoch number. This ensures that any inconsistencies that occurred over time are removed.

Because this command might require significant processing resources and can cause dropped traffic or system error messages about excessive CPU use, it's use is recommended only as a last resort for debugging or mitigating serious problems.

Cisco Express Forwarding tables are also cleared automatically during bootup or online insertion and removal (OIR) of line cards.

> **Note** On the Cisco 10000 series routers, IPv6 is supported on Cisco IOS Release 12.2(28)SB or later releases.

Examples   The following example clears the Cisco Express Forwarding tables for the IPv6 address family:

```
Router# clear cef table ipv6 vrf *
```

The following example clears the Cisco Express Forwarding tables for a VRF table named vrf1 in the IPv4 address family:

```
Router# clear cef table ipv4 vrf vrf1
```

The following example clears the Cisco Express Forwarding tables for all VRF tables in the IPv4 address family. This example shows output with Cisco Express Forwarding table debugging enabled:

```
Router# clear cef table ipv4 vrf *

06:56:01: FIBtable: Refreshing table IPv4:Default
06:56:01: FIBtable: Invalidated 224.0.0.0/4 in IPv4:Default
06:56:01: FIBtable: Deleted 224.0.0.0/4 from IPv4:Default
06:56:01: FIBtable: Validated 224.0.0.0/4 in IPv4:Default
06:56:01: FIBtable: IPv4: Event up, 10.1.41.0/24, vrf Default, 1 path, flags 0100
0220
06:56:01: FIBtable: IPv4: Adding route for 10.1.41.0/24 but route already exists.
 Trying modify.
06:56:01: FIBtable: IPv4: Event up, 10.0.0.11/32, vrf Default, 1 path, flags 010
00000
06:56:01: FIBtable: IPv4: Adding route for 10.0.0.11/32 but route already exists
. Trying modify.
06:56:01: FIBtable: IPv4: Event up, 10.0.0.15/32, vrf Default, 1 path, flags 010
00000
06:56:01: FIBtable: IPv4: Adding route for 10.0.0.15/32 but route already exists
. Trying modify.
06:56:01: FIBtable: IPv4: Event up, 10.0.0.7/32, vrf Default, 1 path, flags 0100
0220
06:56:01: FIBtable: IPv4: Adding route for 10.0.0.7/32 but route already exists.
 Trying modify.
06:56:01: FIBtable: IPv4: Event up, 10.0.0.0/8, vrf Default, 1 path, flags 00000
220
06:56:01: FIBtable: IPv4: Adding route for 10.0.0.0/8 but route already exists.
Trying modify.
06:56:01: FIBtable: IPv4: Event up, 0.0.0.0/0, vrf Default, 1 path, flags 004200
05
06:56:01: FIBtable: IPv4: Adding route for 0.0.0.0/0 but route already exists. T
rying modify.
06:56:01: FIBtable: Starting purge of table IPv4:Default to epoch 13
06:56:01: FIBtable: Invalidated 10.1.41.1/32 in IPv4:Default
06:56:01: FIBtable: Deleted 10.1.41.1/32 from IPv4:Default
06:56:01: FIBtable: Purged 1 prefix from table IPv4:Default
06:56:01: FIBtable: Validated 10.1.41.1/32 in IPv4:Default
06:56:06: FIBtable: IPv4: Event modified, 0.0.0.0/0, vrf Default, 1 path, flags
00420005
06:56:06: FIBtable: IPv4: Event up, default, 0.0.0.0/0, vrf Default, 1 path, fla
gs 00420005
06:56:06: FIBtable: IPv4: Adding route for 0.0.0.0/0 but route already exists. T
rying modify.
```

Related Commands

Command	Description
clear ip cef inconsistency	Clears Cisco Express Forwarding inconsistency statistics and records found by the Cisco Express Forwarding consistency checkers.
debug cef	Enables the display of information about Cisco Express Forwarding events.
debug ip cef table	Enables the collection of events that affect entries in the Cisco Express Forwarding tables.
show cef table consistency-check	Displays Cisco Express Forwarding consistency checker table values.
show ip cef inconsistency	Displays Cisco Express Forwarding IP prefix inconsistencies.

clear ip cache

To delete entries in the routing table cache used to fast switch IP traffic, use the **clear ip cache** command in privileged EXEC mode.

> **clear ip cache** [*prefix mask*]

Syntax Description

prefix mask	(Optional) Deletes only the entries in the cache that match the prefix and mask combination.

Command Modes   Privileged EXEC (#)

Command History

Release	Modification
10.0	This command was introduced.
12.2(33)SRA	This command was integrated into Cisco IOS Release 12.2(33)SRA.
12.2SX	This command is supported in the Cisco IOS Release 12.2SX train. Support in a specific 12.2SX release of this train depends on your feature set, platform, and platform hardware.
12.4(20)T	This command was integrated into Cisco IOS Release 12.4(20)T.

Usage Guidelines   Use this command to clear routes from the routing table cache. You can remove all entries in the routing cache or you can remove only those entries associated with a specified prefix and mask.

> **Note**   IPv4 fast switching is not supported in Cisco IOS 12.4(20)T and later releases.

Examples   The following command shows how to delete the all of the entries in the routing table cache:

```
Router# clear ip cache
```

The following command show how to delete entries in the router table associated with the prefix and mask 192.168.32.0 255.255.255.0:

```
Router# clear ip cache 192.168.32.0 255.255.255.0
```

Related Commands

Command	Description
ip route-cache	Controls the use of high-speed switching caches for IP routing.
show ip cache	Displays the routing table cache used to fast switch IP traffic.

clear ip cef epoch

Note   The **clear ip cef epoch** command is not available in Cisco IOS Releases 12.2(25)S, 12.2(28)SB, 12.2(33)SRA, 12.2(33)SXH, 12.4(20)T, and later releases.

To begin a new epoch and increment the epoch number for one or all Cisco Express Forwarding tables, use the **clear ip cef epoch** command in privileged EXEC mode.

clear ip cef epoch [**all-vrfs** | **full** | **vrf** [*table*]]

Syntax Description

all-vrfs	(Optional) Begins a new epoch for all Forwarding Information Base (FIB) tables.
full	(Optional) Begins a new epoch for all tables, including adjacency tables.
vrf	(Optional) Begins a new epoch for the specified FIB table.
table	(Optional) Virtual Private Network (VPN) routing and forwarding (VRF) instance name.

Command Modes   Privileged EXEC (#)

Command History

Release	Modification
12.2(8)T	This command was introduced.
12.2(14)S	This command was integrated into Cisco IOS Release 12.2(14)S.
12.2(25)S	This command was removed. It is not available in Cisco IOS Release 12.2(25)S and later Cisco IOS 12.2S releases.
12.2(28)SB	This command was removed. It is not available in Cisco IOS Release 12.2(28)SB and later Cisco IOS 12.2SB releases.
12.2(33)SRA	This command was removed. It is not available in Cisco IOS Release 12.2(33)SRAand later Cisco IOS 12.2SR releases.
12.2(33)SXH	This command was removed. It is not available in Cisco IOS Release 12.2(33)SXH and later Cisco IOS 12.2SX releases.
12.4(20)T	This command was removed. It is not available in Cisco IOS Release 12.4(20)T and later Cisco IOS 12.4T releases.

Usage Guidelines   Use the **clear ip cef epoch** command when you want to rebuild a table. This command increments the epoch number and flushes entries with the old epoch number. This command clears any inconsistencies that might exist, so if everything in the system is working correctly, this command does not affect the Cisco Express Forwarding forwarding tables other than changing the current epoch values.

Examples   The following example shows the output before and after you clear the epoch table and increment the epoch number:

```
Router# show ip cef epoch

CEF epoch information:

Table: Default-table
     Table epoch: 2 (43 entries at this epoch)

Adjacency table
     Table epoch: 2 (5 entries at this epoch)

Router# clear ip cef epoch full

Router# show ip cef epoch

CEF epoch information:
Table: Default-table
     Table epoch: 3 (43 entries at this epoch)

Adjacency table
     Table epoch: 3 (5 entries at this epoch)
```

Related Commands

Command	Description
show cef state	Displays the state of Cisco Express Forwarding.
show ip cef epoch	Displays the table epochs of the adjacency table and of all FIB tables.

clear ip cef epoch full

To begin a new epoch and increment the epoch number for all Cisco Express Forwarding tables (including the adjacency table), use the **clear ip cef epoch full** command in privileged EXEC mode.

clear ip cef epoch full

Syntax Description   This command has no arguments or keywords.

Command Modes   Privileged EXEC (#)

Command History

Release	Modification
12.2(14)SX	This command was introduced on the Supervisor Engine 720.
12.2(17d)SXB	Support for this command on the Supervisor Engine 2 was extended to Release 12.2(17d)SXB.
12.2(33)SRA	This command was integrated into Cisco IOS Release 12.2(33)SRA.
12.4(20)T	This command was integrated into Cisco IOS Release 12.4(20)T.

Usage Guidelines   Use the **clear ip cef epoch full** command when you want to rebuild a table. This command allows old and new table entries to be distinguished within the same data structure and allows you to retain the old Cisco Express Forwarding database table while constructing the new table.

These **show** commands display epoch information:

- **show ip cef summary**—Displays the table epoch for a specific Forwarding Information Base (FIB) table.

- **show ip cef detail**—Displays the epoch value for each entry of a specific FIB table.

- **show adjacency summary**—Displays the adjacency table epoch.

- **show adjacency detail**—Displays the epoch value for each entry of the adjacency table.

Examples   This example shows the output before and after you clear the epoch table and increment the epoch number:

```
Router# show ip cef epoch

CEF epoch information:

Table:Default-table
  Table epoch:2 (164 entries at this epoch)

Adjacency table
  Table epoch:1 (33 entries at this epoch)
```

```
Router# clear ip cef epoch full
Router# show ip cef epoch

CEF epoch information:

Table:Default-table
  Table epoch:3 (164 entries at this epoch)

Adjacency table
  Table epoch:2 (33 entries at this epoch)
```

Related Commands	Command	Description
	show adjacency detail	Displays the information about the protocol detail and timer.
	show adjacency summary	Displays a summary of Cisco Express Forwarding adjacency information.
	show ip cef detail	Displays detailed FIB entry information.
	show ip cef summary	Displays a summary of the FIB.

clear ip cef event-log

> ✎
>
> **Note** Effective with Cisco IOS 12.2(25)S, the **clear ip cef event-log** command is replaced by the **monitor event-trace cef ipv4 clear** command. See the **monitor event-trace** (EXEC) command for more information.

To clear the Cisco Express Forwarding event-log buffer, use the **clear ip cef event-log** command in privileged EXEC mode.

clear ip cef event-log

Syntax Description   This command has no arguments or keywords.

Command Modes   Privileged EXEC (#)

Command History

Release	Modification
12.0(15)S	This command was introduced.
12.2(2)T	This command was integrated into Cisco IOS Release 12.2(2)T.
12.2(25)S	This command was replaced by the **monitor event-trace cef ipv4 clear** command.
12.2(33)SRA	This command was replaced by the **monitor event-trace cef ipv4 clear** command.
12.2SX	This command is supported in the Cisco IOS Release 12.2SX train. Support in a specific 12.2SX release of this train depends on your feature set, platform, and platform hardware.
12.4(20)T	This command was replaced by the **monitor event-trace cef ipv4 clear** command.

Usage Guidelines   This command clears the entire Cisco Express Forwarding table event log that holds Forwarding Information Base (FIB) and adjacency events.

Examples   The following example shows how to clear the Cisco Express Forwarding event-log buffer:

```
Router# clear ip cef event-log
```

Related Commands	Command	Description
	cef table consistency-check	Enables Cisco Express Forwarding table consistency checker types and parameters.
	ip cef table event-log	Controls Cisco Express Forwarding table event-log characteristics.
	show ip cef events	Displays all recorded Cisco Express Forwarding FIB and adjacency events.

clear ip cef inconsistency

To clear the Cisco Express Forwarding inconsistency checker statistics and records found by the Cisco Express Forwarding consistency checkers, use the **clear ip cef inconsistency** command in privileged EXEC mode.

clear ip cef inconsistency

Syntax Description   This command has no arguments or keywords.

Command Modes   Privileged EXEC (#)

Command History

Release	Modification
12.0(15)S	This command was introduced.
12.2(2)T	This command was integrated into Cisco IOS Release 12.2(2)T.
12.2(25)S	This command was integrated into Cisco IOS Release 12.2(25)S.
12.2(14)SX	Support for this command was introduced on the Supervisor Engine 720.
12.2(17d)SXB	Support for this command on the Supervisor Engine 2 was extended to the 12.2(17d)SXB release.
12.2(28)SB	This command was integrated into Cisco IOS Release 12.2(28)SB and implemented on the Cisco 10000 series routers.
12.2(33)SRA	This command was integrated into Cisco IOS Release 12.2(33)SR.
12.2(33)SXH	This command was integrated into Cisco IOS Release 12.2(33)SXH.
12.4(20)T	This command was integrated into Cisco IOS Release 12.4(20)T.

Usage Guidelines   This command clears the Cisco Express Forwarding inconsistency checker statistics and records that accumulate when the **cef table consistency-check** command is enabled.

Examples   The following example shows how to clear all Cisco Express Forwarding inconsistency checker statistics and records:

```
Router# clear ip cef inconsistency
```

Related Commands	Command	Description
	cef table consistency-check	Enables Cisco Express Forwarding table consistency checker types and parameters.
	show ip cef inconsistency	Displays Cisco Express Forwarding IP prefix inconsistencies.

clear ip cef prefix-statistics

To clear Cisco Express Forwarding counters by resetting the packet and byte count to zero (0), use the **clear ip cef prefix-statistics** command in privileged EXEC mode.

clear ip cef *network* [*mask*] **prefix-statistics**

Syntax Description

network	Forwarding Information Base (FIB) entry specified by network.
mask	(Optional) FIB entry specified by network and mask.

Command Modes   Privileged EXEC (#)

Command History

Release	Modification
11.2GS	This command was introduced to support the Cisco 12012 Internet router.
11.1CC	Support for multiple platform was added.
12.2(25)S	The * (asterisk) keyword was removed.
12.2(33)SRA	This command was integrated into Cisco IOS Release 12.2(33)SRA.
12.2SX	This command is supported in the Cisco IOS Release 12.2SX train. Support in a specific 12.2SX release of this train depends on your feature set, platform, and platform hardware.
12.4(20)T	This command was integrated into Cisco IOS Release 12.4(20)T.

Usage Guidelines   When the clear statistics flag is set, statistics are cleared as the FIB table is scanned. The time period is up to 60 seconds for all statistics to clear. However, clearing a specific prefix is completed immediately.

Examples   The following example shows how to reset the packet and byte counts to zero for Cisco Express Forwarding entries on the 172.17.10.10 network:

```
Router# clear ip cef 172.17.10.10 prefix-statistics
```

Related Commands

Command	Description
ip cef accounting	Enables Cisco Express Forwarding network accounting.
show adjacency	Displays Cisco Express Forwarding adjacency table information.
show ip cef	Displays entries or a summary of the FIB table.

clear ip mds

To clear multicast distributed switching (MDS) information from the router, use the **clear ip mds** command in privileged EXEC mode.

clear ip mds {**all** | [**vrf** *vrf-name*] **forwarding**}

Syntax Description		
	all	Clear all IP MDS information.
	vrf	(Optional) A Virtual Private Network (VPN) routing and forwarding (VRF) instance.
	vrf-name	(Optional) Name assigned to the VRF.
	forwarding	Clears all linecard routes from a Multicast Forwarding Information Base (MFIB) table and resynchronizes it with the Route Processor (RP).

Command Modes   Privileged EXEC (#)

Command History	Release	Modification
	11.2(11)GS	This command was introduced.
	12.2(33)SRA	This command was integrated into Cisco IOS Release 12.2(33)SRA.
	12.2SX	This command is supported in the Cisco IOS Release 12.2SX train. Support in a specific 12.2SX release of this train depends on your feature set, platform, and platform hardware.

Usage Guidelines   **Cisco 12000 Series Internet Router**

On a Cisco 12000 series Internet router the **clear ip mds** command must be run in privileged EXEC mode on a linecard.

Examples   The following example clears all line card routes in an MFIB table on a Cisco 12000 series Internet router:

```
Router# attach 1
LC-Slot1> enable
LC-Slot1# clear ip mds forwarding
```

The following example clears all line card routes in an MFIB table on a Cisco 7500 series router:

```
Router# clear ip mds forwarding
```

Related Commands	Command	Description
	show ip mds interface	Displays the MFIB table and forwarding information for MDS on a line card.
	show ip mds stats	Display switching statistics or line card statistics for MDS.
	show ip mds summary	Displays a summary of the MFIB table for MDS.
	show ip mds forwarding	Displays MDS information for all the interfaces on the line card.

clear ip mds forwarding

The **forwarding** keyword for the **clear ip mds** command is no longer documented as a separate command.

The information for using the **forwarding** keyword for the **clear ip mds** command has been incorporated into the **clear ip mds** command documentation. See the **clear ip mds** command documentation for more information.

clear ip mds linecard

To reset multicast distributed switching (MDS) line card information on the router, use the **clear ip mds linecard** command in privileged EXEC mode.

clear ip mds linecard {*linecard-slot-number* | ***}

Syntax Description	*linecard-slot-number*	Slot number containing the line card to be reset.
	*	Indicates that the reset should be executed on all line cards.

Command Modes   Privileged EXEC (#)

Command History

Release	Modification
12.0(19.3)S	This command was introduced.
12.2(33)SRA	This command was integrated into Cisco IOS Release 12.2(33)SRA.
12.2SX	This command is supported in the Cisco IOS Release 12.2SX train. Support in a specific 12.2SX release of this train depends on your feature set, platform, and platform hardware.

Usage Guidelines   When the * keyword is specified instead of the *linecard-slot-number* argument, all MDS information on all line cards is cleared and reset.

Examples   The following example clears and resets all MDS line card information on the router:

```
Router# clear ip mds linecard *
```

Related Commands

Command	Description
show ip mds	Clears MDS information from the router.
show ip mds interface	Displays the MFIB table and forwarding information for MDS on a line card.
show ip mds stats	Display switching statistics or line card statistics for MDS.
show ip mds summary	Displays a summary of the MFIB table for MDS.
show ip mds forwarding	Displays MDS information for all the interfaces on the line card.

clear ip traffic

To clear the global or system-wide IP traffic statistics for one or more interfaces, use the **clear ip traffic** command in privileged EXEC mode.

> **clear ip traffic** [**interface** *type number*]

Syntax Description		
	interface *type number*	(Optional) Clears the global or system-wide IP traffic statistics for a specific interface. If the **interface** keyword is used, the *type* and *number* arguments are required.

Command Default
Using the **clear ip traffic** command with no keywords or arguments clears the global or system-wide IP traffic statistics for all interfaces.

Command Modes
Privileged EXEC (#)

Command History

Release	Modification
12.4(2)T	This command was introduced.
12.2(31)SB2	This command was integrated into Cisco IOS Release 12.2(31)SB2.
Cisco IOS XE Release 2.1	This command was integrated into Cisco IOS XE Release 2.1.
Cisco IOS XE Release 3.1S	This command was modified to include the optional **interface** keyword and associated *type* and *number* arguments. These modifications were made to provide support for the IPv4 MIBs as described in RFC 4293, *Management Information Base for the Internet Protocol (IP)*.
15.1(4)M	This command was modified. The optional **interface** keyword and associated *type* and *number* arguments were added. These modifications were made to provide support for the IPv4 MIBs as described in RFC 4293, *Management Information Base for the Internet Protocol (IP)*.

Usage Guidelines
Using the **clear ip traffic** command with the optional **interface** keyword clears the ipIfStatsTable counters displayed for the specified interface and also clears the counters displayed by the **show ip traffic interface** command.

Examples
The following example clears the global or system-wide IP traffic statistics on all interfaces:

```
Router# clear ip traffic
```

The following example shows how to clear the IP traffic statistics on Ethernet interface 0/0:

```
Router# clear ip traffic interface ethernet 0/0
```

The following is sample output from the **show ip traffic** command for Ethernet interface 0/0 after clearing the traffic using the **clear ip traffic** command:

```
Router# show ip traffic

Ethernet0/0 IP-IF statistics :
  Rcvd:  0 total, 0 total_bytes
         0 format errors, 0 hop count exceeded
         0 bad header, 0 no route
         0 bad destination, 0 not a router
         0 no protocol, 0 truncated
         0 forwarded
         0 fragments, 0 total reassembled
         0 reassembly timeouts, 0 reassembly failures
         0 discards, 0 delivers
  Sent:  0 total, 0 total_bytes 0 discards
         0 generated, 0 forwarded
         0 fragmented into, 0 fragments, 0 failed
  Mcast: 0 received, 0 received bytes
         0 sent, 0 sent bytes
  Bcast: 0 received, 0 sent
```

Related Commands	**Command**	**Description**
	show ip traffic	Displays the global or system-wide IP traffic statistics for one or more interfaces.

clear mls cef ip accounting per-prefix

To clear information about the IP per-prefix accounting statistics, use the **clear mls cef ip accounting per-prefix** command in privileged EXEC mode.

clear mls cef ip accounting per-prefix {**all** | {*prefix mask* [*instance*]}}

Syntax Description

all	Clears all per-prefix accounting statistics information.
prefix	Entry prefix in the format A.B.C.D.
mask	Entry prefix mask.
instance	(Optional) VPN routing and forwarding instance name.

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
12.2(17a)SX	Support for this command was introduced on the Supervisor Engine 720.
12.2(17d)SXB	Support for this command on the Supervisor Engine 2 was extended to Release 12.2(17d)SXB.
12.2(33)SRA	This command was integrated into Cisco IOS Release 12.2(33)SRA.

Examples

This example shows how to clear all information about the per-prefix accounting statistics:

```
Router# clear mls cef ip accounting per-prefix all
```

clear pxf

To clear Parallel eXpress Forwarding (PXF) counters and statistics, use the **clear pxf** command in privileged EXEC mode.

> **clear pxf** [**dma counters** | **interface** *interface* | **statistics** {**context** | **diversion** | **drop** | **ip** | **ipv6**} | **xcm counters**]

Syntax Description

dma counters	(Optional) Clears the direct memory access (DMA) PXF counters.
interface *interface*	(Optional) Clears the PXF counters on the specified interface.
statistics	(Optional) Type of PXF statistics to clear. The options are: • **context**—Current and historical loads on the PXF. • **diversion**—Traffic diverted from the PXF. • **drop**—Dropped packets and bytes. • **ip**— IP and ICMP statistics. • **ipv6**—IPv6 statistics.
xcm counters	Clears the PXF Error Code Correction (ECC) counters.

Command Modes   Privileged EXEC (#)

Command History

Release	Modification
12.0(22)S	This command was introduced on the Cisco 10000 series router.
12.2(1)XF1	This command was introduced on the Cisco uBR10012 router.
12.2(4)XF1	The **xcm counters** option was introduced to support the Performance Routing Engine (PRE1) module on the Cisco uBR10012 router.
12.3(7)XI1	This command was integrated into Cisco IOS Release 12.3(7)XI1.
12.3BC	This command was integrated into Cisco IOS Release 12.3BC. The **context** and **ipv6** keyword options are not supported.
12.2(31)SB	This command was integrated into Cisco IOS Release 12.2(31)SB.
12.2(33)SCA	This command was integrated into Cisco IOS Release 12.2(33)SCA. The **ipv6** keyword option is not supported.

Usage Guidelines   If no interface is specified, the command clears PXF counters on all interfaces. The **clear pxf** command clears counters associated with the **show pxf dma**, **show pxf interface**, **show pxf statistics**, and **show pxf xcm** commands.

Cisco uBR10012 Universal Broadband Router

Not all keyword options are supported in the Cisco IOS software for the Cisco uBR10012 universal broadband router. See the command history table for the unsupported keyword options by release.

The **clear pxf xcm counters** command is supported only on the PRE1 and later processors for the Cisco uBR10012 router. This command is not supported on the PRE processor.

Examples   The following example clears PXF statistics for serial interface 1/0/0:

```
Router# clear pxf interface serial 1/0/0
```

The following example clears PXF statistics on all interfaces:

```
Router# clear pxf interface
```

Related Commands

Command	Description
show pxf cpu statistics	Displays PXF CPU statistics.
show pxf dma	Displays the current state of DMA buffers, error counters, and registers on the PXF engine.
show pxf interface	Displays a summary of the statistics accumulated by column 0 of the PXF for an interface.
show pxf statistics	Displays chassis-wide, summary PXF statistics.
show pxf xcm	Displays PXF XCM information.