



Excessive Punt Flow Trap Commands

This module describes the Cisco IOS XR software commands used to configure the Excessive Punt Flow Trap commands on the Cisco CRS Router. For details regarding the related configurations, refer to the *Cisco IOS XR IP Addresses and Services Configuration Guide for the Cisco CRS Router*.

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lpts punt excessive-flow-trap non-subscriber-interfaces

To enable the Excessive Punt Flow Trap feature on non-subscriber interfaces, use the **lpts punt excessive-flow-trap non-subscriber-interfaces** command in Global Configuration mode. To disable the Excessive Punt Flow Trap feature on subscriber interfaces, use the **no** form of this command.

```
lpts punt excessive-flow-trap non-subscriber-interfaces
no lpts punt excessive-flow-trap non-subscriber-interfaces
```

Command Default	None	
Command Modes	Global Configuration mode	
Command History	Release	Modification
	Release 5.3.1	This command was introduced.
Usage Guidelines	No specific guidelines impact the use of this command.	
Task ID	Task ID	Operations
	config-services	read, write

Examples

This example shows how to enable the Excessive Punt Flow Trap feature on the non-subscriber interfaces in the Global Configuration mode:

```
RP/0/RP0/CPU0:router(config)# lpts punt excessive-flow-trap non-subscriber-interfaces
```

lpts punt excessive-flow-trap penalty-rate

To set the penalty policing rate for a protocol, use the **lpts punt excessive-flow-trap penalty-rate** command in Global Configuration mode. To restore the default penalty-rate, use the **no** form of this command.

```
lpts punt excessive-flow-trap penalty-rate{default | arp} penalty_rate
no punt excessive-flow-trap penalty-rate{default | arp}
```

Syntax Description	default	Sets the default penalty policing rate for all protocols.
	arp	Sets the penalty policing rate for the ARP protocol.
	<i>penalty_rate</i>	Penalty rate in packets per second (pps). The range, in pps, is from 2 to 100; default is 10.

Command Default None

Command Modes Global Configuration mode

Command History	Release	Modification
	Release 5.3.1	This command was introduced.

Usage Guidelines No specific guidelines impact the use of this command.

Task ID	Task ID	Operations
	config-services	read, write

Examples

This example shows how to set the penalty policing rate of 4 pps for the ARP protocol in the Global Configuration mode:

```
RP/0/RP0/CPU0:router(config)# lpts punt excessive-flow-trap penalty-rate arp 4
```

lpts punt excessive-flow-trap penalty-timeout

To set the penalty timeout value for a protocol, use the **lpts punt excessive-flow-trap penalty-timeout** command in Global Configuration mode. To restore the default penalty timeout value, use the **no** form of this command.

```
lpts punt excessive-flow-trap penalty-timeout {default | arp} timeout
no lpts punt excessive-flow-trap penalty-timeout {default | arp}
```

Syntax Description	
default	Sets the default penalty timeout for all protocols.
arp	Sets the penalty timeout for the ARP protocol.

Command Default The default value in *minutes* is 15.

Command Modes Global Configuration mode

Command History	Release	Modification
	Release 5.3.1	This command was introduced.

Usage Guidelines No specific guidelines impact the use of this command.

Task ID	Task ID	Operations
	config-services	read, write

Examples This example shows how to set the penalty timeout value of 70 minutes for the ARP protocol in the Global Configuration mode:

```
RP/0/RP0/CPU0:router(config)# lpts punt excessive-flow-trap penalty-timeout arp 70
```

lpts punt excessive-flow-trap exclude interface

To exclude a specific interface from Excessive Punt Flow Trap processing, use the **lpts punt excessive-flow-trap exclude interface** command in Global Configuration mode. To re-enable Excessive Punt Flow Trap processing on the excluded interface, use the **no** form of this command.

```
lpts punt excessive-flow-trap exclude interface interface-name
no lpts punt excessive-flow-trap exclude interface interface-name
```

Syntax Description	exclude interface Excludes a specific interface from Excessive Punt Flow Trap processing.				
	<i>interface-name</i> Name of the interface to be excluded from Excessive Punt Flow Trap processing.				
Command Default	None				
Command Modes	Global Configuration mode				
Command History	<table border="1"> <thead> <tr> <th>Release</th> <th>Modification</th> </tr> </thead> <tbody> <tr> <td>Release 5.3.1</td> <td>This command was introduced.</td> </tr> </tbody> </table>	Release	Modification	Release 5.3.1	This command was introduced.
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Task ID	Operations				
config-services	read, write				

Examples

This example shows how to exclude a specific interface from Excessive Punt Flow Trap processing in the Global Configuration mode:

```
RP/0/RP0/CPU0:router(config)# lpts punt excessive-flow-trap exclude interface
GigabitEthernet0/6/0/6.111
RP/0/RP0/CPU0:router(config-control-plane-policer)#
```

show lpts punt excessive-flow-trap

To display the bad actor flows trapped by Excessive Punt Flow Trap (EPFT), use the **show lpts punt excessive-flow-trap** command in the EXEC mode.

show lpts punt excessive-flow-trap {*protocol* | **interface** *interface-type interface-path-id* | **information**} [**location**]

Syntax Description

<i>protocol</i>	Enter the protocol type. arp—Displays ARP bad actors.
interface	Displays the bad actors on an interface. For more information on the interface types, use the question mark (?) online help function.
<i>type</i>	Specifies the interface type. For more information, use the question mark (?) online help function.
<i>interface-path-id</i>	Either a physical interface instance or a virtual interface instance as follows: <ul style="list-style-type: none"> Physical interface instance. Naming notation is <i>rack/slot/module/port</i> and a slash between values is required as part of the notation. <ul style="list-style-type: none"> <i>rack</i>: Chassis number of the rack. <i>slot</i>: Physical slot number of the modular services card or line card. <i>module</i>: Module number. A physical layer interface module (PLIM) is always 0. <i>port</i>: Physical port number of the interface. <p>Note In references to a Management Ethernet interface located on a route processor card, the physical slot number is alphanumeric (RP0 or RP1) and the module is CPU0. Example: interface MgmtEth0/ RP1 /CPU0/0.</p> Virtual interface instance. Number range varies depending on interface type. <p>For more information about the syntax for the router, use the question mark (?) online help function.</p>
information	Displays the Excessive Punt Flow Trap feature information.
location	Displays bad actors on a line card.

Command Default

None

Command Modes

EXEC mode

Command History	Release	Modification
	Release 5.3.1	This command was introduced.

Usage Guidelines No specific guidelines impact the use of this command.

Task ID	Task ID	Operation
	lpts	read
	basic-services	read, write

The **show running-config** output for the above **show lpts punt excessive-flow-trap** command is:

```
RP/0/RP0/CPU0:router# show running-config lpts punt excessive-flow-trap
lpts punt excessive-flow-trap
penalty-rate arp 15
penalty-timeout arp 2
```

show lpts punt excessive-flow-trap information

To display the Excessive Punt Flow Trap feature information, use the **show lpts punt excessive-flow-trap information** command in the EXEC mode.

show lpts punt excessive-flow-trap information

Syntax Description This command has no keywords or arguments.

Command Default None

Command Modes EXEC mode

Command History	Release	Modification
	Release 5.3.1	This command was introduced.

Usage Guidelines No specific guidelines impact the use of this command.

Task ID	Task ID	Operation
	lpts	read
	basic-services	read, write

This is an example of **show lpts punt excessive-flow-trap information** command with ARP configured with non-default values:

```
RP/0/RP0/CPU0:router# show lpts punt excessive-flow-trap information
```

```
-----
                Police           Penalty
                Rate (pps)       Timeout (mins)
Protocol  Default Config  Default Config  Punt Reasons
-----  -
ARP      10      15          15      2      ARP
                                   Reverse ARP
```

The corresponding **show running-config** output for the above **show lpts punt excessive-flow-trap information** command is:

```
RP/0/RP0/CPU0:router# show running-config lpts punt excessive-flow-trap information
lpts punt excessive-flow-trap
penalty-rate arp 15
penalty-timeout arp 2
```

This table describes the significant fields shown in the display.

Table 1: show lpts punt excessive-flow-trap information Field Descriptions

Field	Description
penalty-rate	The penalty policing rate for a protocol. For ARP the value is 15.
penalty-timeout	The penalty timeout value for a protocol. For ARP the value is 2.

show lpts punt excessive-flow-trap interface

To display the penalty status of an interface for one or all protocols, use the **show lpts punt excessive-flow-trap interface** command in the EXEC mode.

show lpts punt excessive-flow-trap interface *type interface-path-id* [*protocol*]

Syntax Description	<p><i>type</i> Specifies the interface type. For more information, use the question mark (?) online help function.</p> <hr/> <p><i>interface-path-id</i> Either a physical interface instance or a virtual interface instance:</p> <ul style="list-style-type: none"> • Physical interface instance. Naming notation is <i>rack/slot/module/port</i> and a slash between values is required as part of the notation. <ul style="list-style-type: none"> • <i>rack</i>: Chassis number of the rack. • <i>slot</i>: Physical slot number of the modular services card or line card. • <i>module</i>: Module number. A physical layer interface module (PLIM) is always 0. • <i>port</i>: Physical port number of the interface. <p>Note In references to a Management Ethernet interface located on a route processor card, the physical slot number is alphanumeric (RP0 or RP1) and the module is CPU0. Example: interface MgmtEth0/ RP1 /CPU0/0.</p> <ul style="list-style-type: none"> • Virtual interface instance. Number range varies depending on interface type. <p>For more information about the syntax for the router, use the question mark (?) online help function.</p> <hr/> <p><i>protocol</i> Specifies the protocol type.</p> <p>arp—Displays ARP bad actors.</p>				
Command Default	None				
Command Modes	EXEC mode				
Command History	<table border="1"> <thead> <tr> <th>Release</th> <th>Modification</th> </tr> </thead> <tbody> <tr> <td>Release 5.3.1</td> <td>This command was introduced.</td> </tr> </tbody> </table>	Release	Modification	Release 5.3.1	This command was introduced.
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Task ID	Operation				
lpts	read				

Task ID	Operation
basic-services	read, write

The sample output for the **show lpts punt excessive-flow-trap ip** command is:

```
RP/0/RP0/CPU0:router# show lpts punt excessive-flow-trap arp
Interface: TenGigE0/2/0/4
      Intf Handle: 0x01280600          Location: 0/2/CPU0
      Protocol: ARP                    Punt Reason: ARP
      Penalty Rate: 10 pps             Penalty Timeout: 15 mins

      Time Remaining: 14 mins 46 secs
```

This table describes the significant fields shown in the display.

Table 2: show lpts punt excessive-flow-trap interface Field Descriptions

Field	Description
Intf Handle	The interface handler for the Bundle Ether interface.
location	The location of the interface.
protocol	Specifies the protocol.
punt reason	The reason to punt the excessive flow trap.
penalty-rate	The penalty policing rate for a protocol in pps.
penalty-timeout	The penalty timeout value for a protocol in minutes.

clear lpts punt excessive-flow-trap

To remove all bad actors that are trapped for "penalty box" policing during Excessive Punt Flow Trap (EPFT) processing, use the **clear lpts punt excessive-flow-trap** command in the EXEC mode.

clear lpts punt excessive-flow-trap

Syntax Description This command has no keywords or arguments.

Command Default None

Command Modes EXEC mode

Command History	Release	Modification
	Release 5.3.1	This command was introduced.

Usage Guidelines No specific guidelines impact the use of this command.

Task ID	Task ID	Operation
	lpts	read
	basic-services	read, write

This is an example of how to remove all bad actors from penalty box policing:

```
RP/0/RP0/CPU0:router# clear lpts punt excessive-flow-trap
```

clear lpts punt excessive-flow-trap interface

To remove a specific interface that is trapped for "penalty box" policing during Excessive Punt Flow Trap (EPFT) processing, use the **clear lpts punt excessive-flow-trap interface** command in the EXEC mode.

clear lpts punt excessive-flow-trap interface *interface-name*

Syntax Description	interface	Removes a specific interface from penalty box policing.
	<i>interface-name</i>	Name of the interface to be removed from penalty box policing.

Command Default None

Command Modes EXEC mode

Command History	Release	Modification
	Release 5.3.1	This command was introduced.

Usage Guidelines No specific guidelines impact the use of this command.

Task ID	Task ID	Operation
	lpts	read
	basic-services	read, write

This is an example of how to remove a specific interface from penalty box policing:

```
RP/0/RP0/CPU0:router# clear lpts punt excessive-flow-trap interface GigabitEthernet0/6/0/6.111
```

```
clear lpts punt excessive-flow-trap interface
```