

show platform feature-manager consistency-check

To display platform-specific feature manager consistency checker configuration details, use the **show platform feature-manager consistency-check** command.

```
show platform feature-manager consistency-check {all | log | now {all | default-in | default-out  
| dynamic | rbacl | static}}
```

Syntax Description		
all		Displays all of the logs in memory from the consistency checker.
log		Displays logs from the most recent operation of consistency checker.
now		Processes the consistency checker now and displays the logs.
default-in		Processes it for the default non-permit results ingress direction.
default-out		Processes it for the default non-permit results egress direction.
dynamic		Processes it for the dynamic features.
rbacl		Processes it for the RBACL feature.
static		Processes it for the static features.

Defaults None.

Command Modes Privileged EXEC mode.

Command History	Release	Modification
	12.2(50)SY	Support for this command was introduced.

Usage Guidelines There are no usage guidelines for this command.

Examples This example shows how to display the all of the platform-specific feature manager consistency checker configurations:

```
Router# show platform feature-manager consistency-check all
```

Related Commands	Command	Description
	clear platform feature-manager consistency-check all	Clears platform-specific feature manager consistency checker configurations.

show platform flow

To display NetFlow usage on the platform, use the **show platform flow usage** command.

```
show platform flow {aging | export {instance number | module number} | ip {count {instance
number | module number} | destination ip address | instance number | module number |
multicast | protocol number | source ip address} | ipv6 {count {instance number | module
number} | destination ip address | instance number | module number | multicast | protocol
number | source ip address} | layer2 {count {instance number | module number} | instance
number | module number} | multicast | protocol number | source ip address} | mpls {count
{instance number | module number} | instance number | module number} | table-contention
{aggregate {instance number | module number} | detailed {instance number | module
number} | summary {instance number | module number}} | usage {instance number | module
number}}
```

Syntax Description

aging	Specifies aging parameters.
export	Specifies export parameters.
ip	Specifies IP NetFlow entries.
ipv6	Specifies IPv6 NetFlow entries.
layer2	Specifies Layer 2 NetFlow entries.
mpls	Specifies MPLS NetFlow entries.
table-contention	Specifies NetFlow table contention.
aggregate	Provides information on aggregate NetFlow table contention.
detailed	Provides detailed information on NetFlow table contention.
summary	Provides a summary of NetFlow table contention.
usage	Specifies NetFlow table usage.
destination ip address	Specifies the destination IP address.
source ip address	Specifies the source IP address.
count	Specifies total number of NetFlow entries.
instance number	Specifies EARL instance number.
module number	Specifies module number. Range is 1–6.

Command Default

None

Command Modes

Privileged EXEC mode

Command History

Release	Modification
12.2(50)SY	Support for this command was introduced.

Usage Guidelines

There are no usage guidelines for this command.

Examples

This example shows how to display the NetFlow usage on module 4:

```
Router# show platform flow usage module 4
```

Related Commands

Command	Description
platform flow	Enables NetFlow usage on the platform.

show platform flow export

To display the Yielding Netflow Data Export (NDE) parameters, use the **show platform flow export** command in Privileged EXEC mode.

show platform flow export module *module*

Syntax Description

module <i>module</i>	Module and module number.
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Command Default

This command has no default settings.

Command Modes

Privileged EXEC mode

Command History

Release	Modification
12.2(50)SY	Support for this command was introduced.

Examples

The following example displays the feature-related information for NDE:

```
Router(config)# show platform flow export module 4
Yielding NDE is enabled.
Supervisor CPU threshold = 50
Linecard CPU threshold   = 70
```

```
Module/Instance 1 :
-----
No of flows read and exported = 1802384
No of flows discarded        = 5230
No of capture+purge requests = 23049
No of purge-only requests    = 120
```

```
Module/Instance 5 :
-----
No of flows read and exported = 1
No of flows discarded        = 0
No of capture+purge requests = 13481
No of purge-only requests    = 11
l1on1#
l1on1#
l1on1#sh pla flow exp mod 1
Yielding NDE is enabled.
Supervisor CPU threshold = 50
Linecard CPU threshold   = 70
```

```
Module/Instance 1 :
-----
No of flows read and exported = 1802384
No of flows discarded        = 5230

No of capture+purge requests = 23049
No of purge-only requests    = 120
```

Related Commands

Command	Description
flow hardware export	Configures NDE parameters.

show platform hardware acl accounting

To display ACL accounting statistics, use the **show platform hardware acl accounting** command.

```
show platform hardware acl accounting {index {number | range number}} | interface {async
number | auto-template number | ctunnel number | dialer number | esconphy number | filter
number | filtergroup number | gigabitethernet number | longreachethernet number |
loopback number | mfr number | multilink number | null number | port-channel number |
portgroup number | pos-channel number | sysclock number | tengigabitethernet number |
tunnel number | vif number | virtual-template number | virtual-tokenring number | vlan
vlan_id | fcpa number | voabypassin number | voabypassout number | voafilterin number |
voafilterout number | voain number | voaout number}}
```

Syntax Description

index	Displays the accounting statistics.
number	Displays the accounting entry index. Range is 0–4095.
range number	Displays the particular accounting entry statistics. Range is 0–4095.
interface	Lists the various interfaces to choose ACL statistics for.
async number	Specifies the asynchronous interface number. Range is 1–999.
auto-template number	Specifies the auto-template interface number. Range is 1–999.
ctunnel number	Specifies the channel tunnel interface number. Range is 0–2147483647.
dialer number	Specifies the dialer interface number. Range is 0–255.
esconphy number	Specifies the EsconPhy interface number. Range is 1–6.
filter number	Specifies the filter interface number. Range is 1–6.
filtergroup number	Specifies the filter group interface number. Range is 1–6.
gigabitethernet number	Specifies the Gigabit Ethernet interface number. Range is 1–6.
longreachethernet number	Specifies the long-reach Ethernet interface number. Range is 1–6.
loopback number	Specifies the loopback interface number. Range is 1–2147483647.
mfr number	Specifies the multilink Frame Relay bundle interface number. Range is 1–2147483647.
multilink number	Specifies the multilink group interface number. Range is 1–2147483647.
null number	Specifies the null interface number. Range is 0–0.
port-channel number	Specifies the Ethernet channel of interfaces. Range is 1–496.
portgroup number	Specifies the port group interface number. Range is 1–6.
pos-channel number	Specifies the PoS channel of interfaces. Range is 1–4094.
sysclock number	Specifies the telecom bus clock controller interface number. Range is 1–6.
tengigabitethernet number	Specifies the 10-Gigabit Ethernet interface number. Range is 1–6.
tunnel number	Specifies the tunnel interface number. Range is 1–2147483647.
vif number	Specifies the PGM multicast host interface number. Range is 1–1.
virtual-template number	Specifies the virtual template interface number. Range is 1–200.

virtual-tokenring <i>number</i>	Specifies the virtual Token Ring interface number. Range is 1–2147483647.
vlan <i>vlan_id</i>	Specifies the VLAN interface number. Range is 1–4094.
fcpa <i>number</i>	Specifies the Fibre Channel interface number. Range is 1–6.
voabypassin <i>number</i>	Specifies the VOA bypass-in interface number. Range is 1–6.
voabypassout <i>number</i>	Specifies the VOA bypass-out interface number. Range is 1–6.
voafilterin <i>number</i>	Specifies the VOA filter-in interface number. Range is 1–6.
voafilterout <i>number</i>	Specifies the VOA filter-out interface number. Range is 1–6.
voain <i>number</i>	Specifies the VOA in interface number. Range is 1–6.
voaout <i>number</i>	Specifies the VOA out interface number. Range is 1–6.

Defaults

None

Command Modes

Privileged EXEC mode

Command History

Release	Modification
12.2(50)SY	Support for this command was introduced.

Usage Guidelines

There are no usage guidelines for this command.

Examples

This example shows how to display the ACL accounting statistics for VOA bypass-out interface number 4:

```
Router# show platform hardware acl accounting interface voabypassout 4
```

Related Commands

Command	Description
platform hardware acl accounting	Configures platform hardware ACL accounting statistics for the available interfaces.

show platform hardware acl acct-xlt-tbl

To display ACL accounting tables, use the **show platform hardware acl acct-xlt-tbl** command.

```
show platform hardware acl acct-xlt-tbl {in {index {number | range number}} | out {index {number | range number}}}
```

Syntax Description

in	Displays the accounting table entries that are available inside the ACL.
index	Displays the accounting table.
number	Displays the accounting table index.
range <i>number</i>	Displays the particular accounting table. Range is 0–255.
out	Displays the accounting table entries that are sent outside the ACL.

Defaults

None

Command Modes

Privileged EXEC mode

Command History

Release	Modification
12.2(50)SY	Support for this command was introduced.

Usage Guidelines

There are no usage guidelines for this command.

Examples

This example shows how to display the accounting XLT entries that are sent outside the ACL:

```
Router# show platform hardware acl acct-xlt-tbl out index
```

Related Commands

Command	Description
platform hardware acl acct-xlt-tbl	Configures platform hardware ACL accounting tables.

show platform hardware acl adj-rit

To display ACL TCAM adjacency entry information for various interfaces, use the **show platform hardware acl adj-rit** command.

```
show platform hardware acl adj-rit {interface {async number | auto-template number | ctunnel
number | dialer number | esconphy number | filter number | filtergroup number |
gigabitethernet number | longreachethernet number | loopback number | mfr number |
multilink number | null number | port-channel number | portgroup number | pos-channel
number | sysclock number | tengigabitethernet number | tunnel number | vif number |
virtual-template number | virtual-tokenring number | vlan vlan_id | control-plane number |
fcpa number | voabypassin number | voabypassout number | voafilterin number | voafilterout
number | voain number | voaout number}}
```

Syntax	Description
interface	Specifies the type of interface.
async number	Specifies the asynchronous interface number. Range is 1–999.
auto-template number	Specifies the auto-template interface number. Range is 1–999.
ctunnel number	Specifies the channel tunnel interface number. Range is 0–2147483647.
dialer number	Specifies the dialer interface number. Range is 0–255.
esconphy number	Specifies the EsconPhy interface number.
filter number	Specifies the filter interface number.
filtergroup number	Specifies the filter group interface number.
gigabitethernet number	Specifies the Gigabit Ethernet interface number.
longreachethernet number	Specifies the long-reach Ethernet interface number.
loopback number	Specifies the loopback interface number. Range is 1–2147483647.
mfr number	Specifies the multilink Frame Relay bundle interface number. Range is 1–2147483647.
multilink number	Specifies the multilink group interface number. Range is 1–2147483647.
null number	Specifies the null interface number. Range is 0–0.
port-channel number	Specifies the Ethernet channel of interfaces. Range is 1–496.
portgroup number	Specifies the port group interface number.
pos-channel number	Specifies the PoS channel of interfaces. Range is 1–4094.
sysclock number	Specifies the telecom bus clock controller interface number.
tengigabitethernet number	Specifies the 10-Gigabit Ethernet interface number.
tunnel number	Specifies the tunnel interface number. Range is 1–2147483647.
vif number	Specifies the PGM multicast host interface number. Range is 1–1.
virtual-template number	Specifies the virtual template interface number. Range is 1–200.
virtual-tokenring number	Specifies the virtual Token Ring interface number. Range is 1–2147483647.
vlan vlan_id	Specifies the VLAN interface number. Range is 1–4094.

control-plane <i>number</i>	Specifies the control plane interface number.
fcpa <i>number</i>	Specifies the Fibre Channel interface number.
voabypassin <i>number</i>	Specifies the VOA bypass-in interface number.
voabypassout <i>number</i>	Specifies the VOA bypass-out interface number.
voafilterin <i>number</i>	Specifies the VOA filter-in interface number.
voafilterout <i>number</i>	Specifies the VOA filter-out interface number.
voain <i>number</i>	Specifies the VOA in interface number.
voaout <i>number</i>	Specifies the VOA out interface number.

Defaults

None

Command Modes

Privileged EXEC mode

Command History

Release	Modification
12.2(50)SY	Support for this command was introduced.

Usage Guidelines

There are no usage guidelines for this command.

Examples

This example shows how to display the adjacency entries for ACL asynchronous interface 4:

```
Router# show platform hardware acl adj-rit interface async 4
```

Related Commands

Command	Description
platform hardware acl adj-rit	Configures ACL TCAM adjacency entry information for various interfaces.

show platform hardware acl capmap tcam

To display hardware ACL cap map entries for TCAM, use the **show platform hardware acl capmap tcam** command.

show platform hardware acl capmap tcam {**A** {*index number* | *module number*} | **B** {*index number* | *module number*}}

Syntax Description	A	Specifies entries in TCAM A.
	B	Specifies entries in TCAM B.
	index number	Specifies the cap map entry index number. Range is 0–2047.
	module number	Specifies the module number.

Defaults	None
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Command Modes	Privileged EXEC mode
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Command History	Release	Modification
	12.2(50)SY	Support for this command was introduced.

Usage Guidelines	There are no usage guidelines for this command.
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Examples	This example shows how to display the TCAM A cap map entry index number 20:
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Router# **show platform hardware acl capmap tcam A Index 20**

Related Commands	Command	Description
	platform hardware acl capmap tcam	Configures platform hardware ACL cap map entries for TCAM.

show platform hardware acl config-registers

To display hardware classify block registers by module number, use the **show platform hardware acl config-registers** command.

show platform hardware acl config-registers {*module number*}

Syntax Description

module number	Specifies the module number.
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Defaults

None

Command Modes

Privileged EXEC mode

Command History

Release	Modification
12.2(50)SY	Support for this command was introduced.

Usage Guidelines

There are no usage guidelines for this command.

Examples

This example shows how to display the hardware classify block register for module 4:

```
Router# show platform hardware acl config-registers module 4
```

Related Commands

Command	Description
platform hardware acl config-registers	Configures platform hardware ACL classify block registers by module number.

show platform hardware acl destinfo

To display hardware ACL destination information, use the **show platform hardware acl destinfo** command.

show platform hardware acl destinfo { **in** { *index number* | *module number* } | **out** { *index number* | *module number* } | *module number* }

Syntax Description	in	Specifies the inbound entries.
	<i>index number</i>	Displays the entry index number. Range is 0–511.
	<i>module number</i>	Displays the module number.
	out	Specifies the outbound entries.

Defaults None

Command Modes Privileged EXEC mode

Command History	Release	Modification
	12.2(50)SY	Support for this command was introduced.

Usage Guidelines There are no usage guidelines for this command.

Examples This example shows how to display the ACL destination information for inbound entries in module 4:

```
Router# show platform hardware acl destinfo in module 4
```

Related Commands	Command	Description
	platform hardware acl destinfo	Configures platform hardware ACL destination information.

show platform hardware acl diagnostics

To display hardware ACL diagnostics reserved labels and indices by module number, use the **show platform hardware acl diagnostics** command.

show platform hardware acl diagnostics {*module number*}

Syntax Description

module number	Specifies the module number.
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Defaults

None

Command Modes

Privileged EXEC mode

Command History

Release	Modification
12.2(50)SY	Support for this command was introduced.

Usage Guidelines

There are no usage guidelines for this command.

Examples

This example shows how to display the hardware ACL diagnostics for module 4:

```
Router# show platform hardware acl diagnostics module 4
```

Related Commands

Command	Description
platform hardware acl diagnostics	Configures platform hardware ACL diagnostics by module number.

show platform hardware acl entry

To display various ACL entries, use the **show platform hardware acl entry** command.

```
show platform hardware acl entry { compaction { module number } } | global-qos { in { arp { detail
| module number } | ip { detail | module number } | ipv6 { detail | module number } | mac { detail
| module number } | mpls { detail | module number } } | out { arp { detail | module number } | ip
{ detail | module number } | ipv6 { detail | module number } | mac { detail | module number } |
mpls { detail | module number } } | interface { async number | auto-template number | ctunnel
number | dialer number | esconphy number | filter number | filtergroup number |
gigabitethernet number | longreachethernet number | loopback number | mfr number |
multilink number | null number | port-channel number | portgroup number | pos-channel
number | sysclock number | tengigabitethernet number | tunnel number | vif number |
virtual-template number | virtual-tokenring number | vlan vlan_id | control-plane number |
cts-reflector number | fcpa number | voabypassin number | voabypassout number |
voafilterin number | voafilterout number | voain number | voaout number } } | rbacl { all
{ module number } | default { ip { module number } | ipv6 { module number } } | tcam { A { all
{ module number } | index number } | B { all { module number } | index number } } }
```

Syntax Description

compaction	Displays compaction entries.
module number	Specifies the module number.
global-qos	Displays global QoS entries.
in	Specifies inbound entries.
arp	Specifies the ARP protocol.
detail	Specifies the entry details.
ip	Specifies the IP protocol.
ipv6	Specifies the IPv6 protocol.
mac	Specifies the MAC protocol.
mpls	Specifies the MPLS protocol.
out	Specifies outbound entries.
interface	Lists the various interfaces to choose ACL statistics for.
async number	Specifies the asynchronous interface number. Range is 1–999.
auto-template number	Specifies the auto-template interface number. Range is 1–999.
ctunnel number	Specifies the channel tunnel interface number. Range is 0–2147483647.
dialer number	Specifies the dialer interface number. Range is 0–255.
esconphy number	Specifies the EsconPhy interface number.
filter number	Specifies the filter interface number.
filtergroup number	Specifies the filter group interface number.
gigabitethernet number	Specifies the Gigabit Ethernet interface number.
longreachethernet number	Specifies the long-reach Ethernet interface number.
loopback number	Specifies the loopback interface number. Range is 1–2147483647.

mfr <i>number</i>	Specifies the multilink Frame Relay bundle interface number. Range is 1–2147483647.
multilink <i>number</i>	Specifies the multilink group interface number. Range is 1–2147483647.
null <i>number</i>	Specifies the null interface number. Range is 0–0.
port-channel <i>number</i>	Specifies the Ethernet channel of interfaces. Range is 1–496.
portgroup <i>number</i>	Specifies the port group interface number.
pos-channel <i>number</i>	Specifies the PoS channel of interfaces. Range is 1–4094.
sysclock <i>number</i>	Specifies the telecom bus clock controller interface number.
tengigabitethernet <i>number</i>	Specifies the 10-Gigabit Ethernet interface number.
tunnel <i>number</i>	Specifies the tunnel interface number. Range is 1–2147483647.
vif <i>number</i>	Specifies the PGM multicast host interface number. Range is 1–1.
virtual-template <i>number</i>	Specifies the virtual template interface number. Range is 1–200.
virtual-tokenring <i>number</i>	Specifies the virtual Token Ring interface number. Range is 1–2147483647.
vlan <i>vlan_id</i>	Specifies the VLAN interface number. Range is 1–4094.
control-plane <i>number</i>	Specifies the control plane interface number.
cts-reflector <i>number</i>	Specifies the CTS reflector interface number.
fcpa <i>number</i>	Specifies the Fibre Channel interface number.
voabypassin <i>number</i>	Specifies the VOA bypass-in interface number.
voabypassout <i>number</i>	Specifies the VOA bypass-out interface number.
voafilterin <i>number</i>	Specifies the VOA filter-in interface number.
voafilterout <i>number</i>	Specifies the VOA filter-out interface number.
voain <i>number</i>	Specifies the VOA in interface number.
voaout <i>number</i>	Specifies the VOA out interface number.
rbacl	Displays RBACL entries.
all	Specifies all RBACL entries.
default	Specifies the default RBACL entry.
tcam A, tcam B	Displays entries by index for TCAM A, TCAM B.
index <i>number</i>	Specifies the TCAM index number. Range is 0–131071.

Defaults

None

Command Modes

Privileged EXEC mode

Command History

Release	Modification
12.2(50)SY	Support for this command was introduced.

Usage Guidelines

There are no usage guidelines for this command.

Examples

This example shows how to display the global QoS inbound ACL detailed entries for ARP protocol module 4:

```
Router# show platform hardware acl entry global-qos in arp detail module 4
```

Related Commands

Command	Description
platform hardware acl entry	Configures ACL entries.

show platform hardware acl ethertype-cam

To display hardware ACL Ethertype CAM table by module number, use the **show platform hardware acl ethertype-cam** command.

show platform hardware acl ethertype-cam {*module number*}

Syntax Description

module number	Specifies the module number.
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Defaults

None

Command Modes

Privileged EXEC mode

Command History

Release	Modification
12.2(50)SY	Support for this command was introduced.

Usage Guidelines

There are no usage guidelines for this command.

Examples

This example shows how to display the hardware ACL Ethertype CAM table for module 4:

```
Router# show platform hardware acl ethertype-cam module 4
```

Related Commands

Command	Description
platform hardware acl ethertype-cam	Configures platform hardware ACL Ethertype CAM table by module number.

show platform hardware acl hardware-hits

To display the TCAM hardware hits count, use the **show platform hardware acl hardware-hits** command.

show platform hardware acl hardware-hits { **clear** { *module number* } | **show** { *module number* } }

Syntax Description	clear	Displays the cleared hardware hits.
	show	Displays the hardware hits since last clear.
	module <i>number</i>	Specifies the module number.

Defaults None

Command Modes Privileged EXEC mode

Command History	Release	Modification
	12.2(50)SY	Support for this command was introduced.

Usage Guidelines There are no usage guidelines for this command.

Examples This example shows how to display the TCAM hardware hits cleared for module 4:

```
Router# show platform hardware acl hardware-hits clear 4
```

Related Commands	Command	Description
	platform hardware acl hardware-hits	Configures the TCAM hardware hits count.

show platform hardware acl initiate-lookup

To display ACL TCAM entries matching a pattern on available labels and interfaces, use the **show platform hardware acl initiate-lookup** command.

```
show platform hardware acl initiate-lookup { interface { async number | auto-template number
| ctunnel number | dialer number | esconphy number | filter number | filtergroup number |
gigabitethernet number | longreachethernet number | loopback number | mfr number |
multilink number | null number | port-channel number | portgroup number | pos-channel
number | sysclock number | tengigabitethernet number | tunnel number | vif number |
virtual-template number | virtual-tokenring number | vlan vlan_id | fcpa number |
voabypassin number | voabypassout number | voafilterin number | voafilterout number |
voain number | voaout number } | label value tcam { A { arp { arp-rarp | arp_rarp_vld |
global_acl_fmt_match | l2_miss | mac_da_bcast | mac_sa | ofe mode | req-rpl | sender_ip |
src_snd_mac_same | src_tar_mac_same | target_ip | test } | ipv4 { acos | dst_port | first_seen
[ rp_bit ] | frag_flag | ip_da | ip_frag | ip_sa | l4_proto | l4op | module | src_dst_as_num |
src_port } | ipv6 { acos | dst_port | first_seen [ rp_bit ] | frag_flag | ip_da | ip_frag | ip_sa |
l4_proto | l4op | module | src_dst_as_num | src_port } | l2 { acos | ce_vlan | dscpl enc |
first_seen [ rp_bit ] | gpid | l2_miss | mac_da | mac_sa | module | vlan vlan_id } | mpls { acos |
acos_gpid | exception | first_seen [ rp_bit ] | gpid_present | ip_hdr_vld | l2_miss | l4op |
module | mpls_exp | mpls_exp_from_null | mpls_exp_of_null | mpls_label | mpls_mcast |
mpls_stack | mpls_subtype | mpls_valid | u_key } } | B { arp { arp-rarp | arp_rarp_vld |
global_acl_fmt_match | l2_miss | mac_da_bcast | mac_sa | ofe mode | req-rpl | sender_ip |
src_snd_mac_same | src_tar_mac_same | target_ip | test } | ipv4 { acos | dst_port | first_seen
[ rp_bit ] | frag_flag | ip_da | ip_frag | ip_sa | l4_proto | l4op | module | src_dst_as_num |
src_port } | ipv6 { acos | dst_port | first_seen [ rp_bit ] | frag_flag | ip_da | ip_frag | ip_sa |
l4_proto | l4op | module | src_dst_as_num | src_port } | l2 { acos | ce_vlan | dscpl enc |
first_seen [ rp_bit ] | gpid | l2_miss | mac_da | mac_sa | module | vlan vlan_id } | mpls { acos |
acos_gpid | exception | first_seen [ rp_bit ] | gpid_present | ip_hdr_vld | l2_miss | l4op |
module | mpls_exp | mpls_exp_from_null | mpls_exp_of_null | mpls_label | mpls_mcast |
mpls_stack | mpls_subtype | mpls_valid | u_key } } }
```

Syntax Description

interface	Lists the various interfaces to choose ACL statistics for.
async number	Specifies the asynchronous interface number. Range is 1–999.
auto-template number	Specifies the auto-template interface number. Range is 1–999.
ctunnel number	Specifies the channel tunnel interface number. Range is 0–2147483647.
dialer number	Specifies the dialer interface number. Range is 0–255.
esconphy number	Specifies the EsconPhy interface number.
filter number	Specifies the filter interface number.
filtergroup number	Specifies the filter group interface number.
gigabitethernet number	Specifies the Gigabit Ethernet interface number.
longreachethernet number	Specifies the long-reach Ethernet interface number.
loopback number	Specifies the loopback interface number. Range is 1–2147483647.
mfr number	Specifies the multilink Frame Relay bundle interface number. Range is 1–2147483647.

multilink number	Specifies the multilink group interface number. Range is 1–2147483647.
null number	Specifies the null interface number. Range is 0–0.
port-channel number	Specifies the Ethernet channel of interfaces. Range is 1–496.
portgroup number	Specifies the port group interface number.
pos-channel number	Specifies the PoS channel of interfaces. Range is 1–4094.
sysclock number	Specifies the telecom bus clock controller interface number.
tengigabitethernet number	Specifies the 10-Gigabit Ethernet interface number.
tunnel number	Specifies the tunnel interface number. Range is 1–2147483647.
vif number	Specifies the PGM multicast host interface number. Range is 1–1.
virtual-template number	Specifies the virtual template interface number. Range is 1–200.
virtual-tokenring number	Specifies the virtual Token Ring interface number. Range is 1–2147483647.
vlan vlan_id	Specifies the VLAN interface number. Range is 1–4094.
fcpa number	Specifies the Fibre Channel interface number.
voabypassin number	Specifies the VOA bypass-in interface number.
voabypassout number	Specifies the VOA bypass-out interface number.
voafilterin number	Specifies the VOA filter-in interface number.
voafilterout number	Specifies the VOA filter-out interface number.
voain number	Specifies the VOA in interface number.
voaout number	Specifies the VOA out interface number.
label value	Specifies the label value. Range is 1–8191.
tcam A, tcam B	Specifies TCAM A or TCAM B.
arp	Specifies the ARP protocol.
arp-rarp	Specifies ARP or RARP.
arp_rarp_vld	Specifies whether ARP or RARP is valid or not.
global acl fmt match	Specifies whether global ACL format matches or not.
l2_miss	Specifies whether the Layer 2 is missed.
mac_da_bcast	Specifies whether MAC destination address is broadcast.
mac_sa	Specifies the MAC source address.
ofe-mode	Specifies whether it is OFE mode.
req-rpl	Specifies whether it is reply or response.
sender_ip	Specifies the sender IP address.
src_snd_mac_same	Specifies whether the sender MAC is equal to Hbus source MAC.
src_tar_mac_same	Specifies whether the sender MAC is equal to Hbus target MAC.
target_ip	Specifies the target IP address.
test	Specifies test looping.
ipv4	Specifies the IPv4 protocol.
acos	Specifies the exception cause.
dst_port	Specifies the destination port.

first_seen	Specifies the first-seen bit for IFE.
rp_bit	(Optional) Specifies the from rp bit for OFE.
frag_flag	Specifies the fragmentation flag.
ip_da	Specifies the IP destination address.
ip_frag	Specifies the fragmentation bit for trailing fragments.
ip_sa	Specifies the IP source address.
l4_proto	Specifies the Layer 4 protocol code.
l4op	Specifies the Layer 4 op bits.
module	Specifies the module.
src_dst_as_num	Specifies the source or destination as number for OFE.
src_port	Specifies the source port number.
ipv6	Specifies the IPv6 protocol.
l2	Specifies the Layer 2 protocol.
ce_vlan	Specifies whether the CE VLAN is valid.
dscp	Specifies the DSCP.
enc	Specifies the encoding type.
gp_id	Specifies whether the GPid is present.
mac_da	Specifies the MAC destination address.
mac_sa	Specifies the MAC source address.
mpls	Specifies the MPLS protocol.
acos_gp_id	Specifies the GPid.
exception	Specifies if an exception exists.
gp_id_present	Specifies whether the GPid is present.
ip_hdr_vld	Specifies whether the IP header is valid.
mpls_exp	Specifies the MPLS experimental value.
mpls_exp_from_null	Specifies whether the MPLS experimental value is from null label.
mpls_exp_of_null	Specifies whether the MPLS experimental value is of null label.
mpls_label	Specifies whether the MPLS label value exists.
mpls_mcast	Specifies MPLS multicast.
mpls_stack	Specifies whether the MPLS stack exists.
mpls_subtype	Specifies the MPLS subtype.
mpls_valid	Specifies whether the MPLS is valid.
u_key	Specifies the u key.

Defaults

None

Command Modes

Privileged EXEC mode

Command History

Release	Modification
12.2(50)SY	Support for this command was introduced.

Usage Guidelines

There are no usage guidelines for this command.

Examples

This example shows how to display the ACL TCAM entries matching a pattern on the asynchronous interface 4:

```
Router# show platform hardware acl initiate-lookup interface async 4
```

Related Commands

Command	Description
platform hardware acl initiate-lookup	Configures ACL TCAM entries matching a pattern on available labels and interfaces.

show platform hardware acl label2sel tcam

To display label Layer 2 select entries for TCAM, use the **show platform hardware acl label2sel tcam** command.

show platform hardware acl label2sel tcam {A {*index number*} | B {*index number*}}

Syntax Description

A	Specifies label Layer 2 entries in TCAM A.
B	Specifies label Layer 2 entries in TCAM B.
index number	Specifies the TCAM index number. Range is 0–8191.

Defaults

None

Command Modes

Privileged EXEC mode

Command History

Release	Modification
12.2(50)SY	Support for this command was introduced.

Usage Guidelines

There are no usage guidelines for this command.

Examples

This example shows how to display the TCAM A capmap entry index number 20:

```
Router# show platform hardware acl capmap tcam A Index 20
```

Related Commands

Command	Description
platform hardware acl capmap tcam	Configures platform hardware ACL capmap entries for TCAM.

show platform hardware acl lou

To display the content of ACL logical operator units, use the **show platform hardware acl lou** command.

show platform hardware acl lou {*index number* | *module number*}

Syntax Description	index number	Specifies the LOU index number. Range is 0–103.
	module number	Specifies the module number.

Defaults	None
-----------------	------

Command Modes	Privileged EXEC mode
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Command History	Release	Modification
	12.2(50)SY	Support for this command was introduced.

Usage Guidelines	There are no usage guidelines for this command.
-------------------------	---

Examples	This example shows how to display the ACL logical operator units for module 4:
	Router# show platform hardware acl lou module 4

Related Commands	Command	Description
	platform hardware acl lou	Configures hardware logical operator units for ACLs.

show platform hardware acl status

To display hardware ACL status by module number, use the **show platform hardware acl status** command.

```
show platform hardware acl status {module number}
```

Syntax Description	module number	Specifies the module number.
--------------------	---------------	------------------------------

Defaults	None
----------	------

Command Modes	Privileged EXEC mode
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Command History	Release	Modification
	12.2(50)SY	Support for this command was introduced.

Usage Guidelines	There are no usage guidelines for this command.
------------------	---

Examples	This example shows how to display the hardware ACL status for module 4: Router# show platform hardware acl status module 4
----------	--

Related Commands	Command	Description
	platform hardware acl status	Configures platform hardware ACL status by module number.

show platform hardware acl tcam

To display hardware ACL TCAM-related information, use the **show platform hardware acl tcam** command.

```
show platform hardware acl tcam { A { arp { accounting { module number } | module number | qos
{ module number } | security { module number } } | index number | ip { accounting { module
number } | module number | qos { module number } | security { module number } } | ipv6
{ accounting { module number } | module number | qos { module number } | security { module
number } } | l2v4 { accounting { module number } | module number | qos { module number } |
security { module number } } | mac { accounting { module number } | module number | qos
{ module number } | security { module number } } | module number | mpls { accounting
{ module number } | module number | qos { module number } | security { module number } } }
```

```
show platform hardware acl tcam { B { arp { accounting { module number } | module number | qos
{ module number } | security { module number } } | index number | ip { accounting { module
number } | module number | qos { module number } | security { module number } } | ipv6
{ accounting { module number } | module number | qos { module number } | security { module
number } } | l2v4 { accounting { module number } | module number | qos { module number } |
security { module number } } | mac { accounting { module number } | module number | qos
{ module number } | security { module number } } | module number | mpls { accounting
{ module number } | module number | qos { module number } | security { module number } } }
```

```
show platform hardware acl tcam { module number | result }
```

Syntax Description	A, B	Specifies TCAM A, TCAM B.
	arp	Specifies the ARP protocol.
	accounting	Specifies accounting entries.
	module number	Specifies the module number.
	qos	Specifies QoS entries.
	security	Specifies security entries.
	index number	Specifies entry index. Range is 0–131071.
	ip	Specifies the IP protocol.
	ipv6	Specifies the IPv6 protocol.
	l2v4	Specifies the L2v4 protocol.
	mac	Specifies the MAC protocol.
	mpls	Specifies the MPLS protocol.
	result	Specifies the result value.

Defaults None

Command Modes Privileged EXEC mode

Command History

Release	Modification
12.2(50)SY	Support for this command was introduced.

Usage Guidelines

There are no usage guidelines for this command.

Examples

This example shows how to display the TCAM A ARP accounting entries for module 4:

```
Router# show platform hardware acl tcam A arp accounting module 4
```

Related Commands

Command	Description
platform hardware acl tcam	Configures platform hardware ACL TCAM.

show platform hardware acl tcp-flags-tbl

To display information about hardware ACL TCP flags, use the **show platform hardware acl tcp-flags-tbl** command.

show platform hardware acl tcp-flags-tbl {*detail* | *index number* | *module number*}

Syntax Description	detail	Displays TCP flags table details.
	index number	Specifies the TCP flag index number. Range is 0–255.
	module number	Specifies the TCP flag module number.

Defaults None

Command Modes Privileged EXEC mode

Command History	Release	Modification
	12.2(50)SY	Support for this command was introduced.

Usage Guidelines There are no usage guidelines for this command.

Examples This example shows how to display the ACL TCP flags for module 4:

```
Router# show platform hardware acl tcp-flags-tbl module 4
```

Related Commands	Command	Description
	clear platform hardware acl tcp-flags-tbl	Clears hardware ACL TCP flags.

show platform hardware acl v6-extnhdr-tbl

To display information about hardware ACL v6 extension header table, use the **show platform hardware acl v6-extnhdr-tbl** command.

show platform hardware acl v6-extnhdr-tbl { **detail** | **index** *number* | **module** *number* }

Syntax Description

detail	Displays extension header table details.
index <i>number</i>	Specifies the extension header table index number. Range is 0–127.
module <i>number</i>	Specifies the extension header table module number.

Defaults

None

Command Modes

Privileged EXEC mode

Command History

Release	Modification
12.2(50)SY	Support for this command was introduced.

Usage Guidelines

There are no usage guidelines for this command.

Examples

This example shows how to display the hardware ACL v6 extension header table information for module 4:

```
Router# show platform hardware acl v6-extnhdr-tbl module 4
```

Related Commands

Command	Description
platform hardware acl v6-extnhdr-tbl	Configures hardware ACL v6 extension header tables.

show platform hardware asicreg

To display hardware ASIC register-related information, use the **show platform hardware asicreg** command.

```
show platform hardware asicreg { dhanush {slot number} | hyperion | medusa | mii-phy |
palladium {get virtual_address | set virtual_address | all} | pentamak | ppc {all} | qchip |
rchip | revati | santa-ana | sculptor | scuti | solano | supersantaana | vishakha }
```

Syntax Description		
dhanush		Specifies the Dhanush ASIC.
slot number		Specifies the slot number.
hyperion		Specifies the Hyperion ASIC.
medusa		Specifies the Medusa ASIC.
mii-phy		Specifies the Mii-phy ASIC.
palladium		Specifies the Palladium I/O registers.
get virtual_address		Read Palladium I/O registers. Range is 0–4294967295.
set virtual_address		Write Palladium I/O registers. Range is 0–4294967295.
pentamak		Specifies the Pentamak ASIC.
ppc		Specifies the PPC I/O registers.
all		Specifies all I/O registers.
qchip		Specifies the Qchip ASIC.
rchip		Specifies the Rchip ASIC.
revati		Specifies the Revati ASIC.
santa-ana		Specifies the Santa-ana ASIC.
sculptor		Specifies the Sculptor ASIC.
scuti		Specifies the Scuti ASIC.
solano		Specifies the Solano ASIC.
supersantaana		Specifies the Supersantaana ASIC.
vishakha		Specifies the Vishakha ASIC.

Defaults	None
-----------------	------

Command Modes	Privileged EXEC mode
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Command History	Release	Modification
	12.2(50)SY	Support for this command was introduced.

Usage Guidelines	There are no usage guidelines for this command.
-------------------------	---

Examples

This example shows how to display ASIC register information for the Dhanush ASIC, slot 4:

```
Router# show platform hardware asicreg dhanush slot 4
```

Related Commands

Command	Description
platform hardware asicreg	Configures platform hardware ASIC registers.

show platform hardware asic-versions

To display hardware ASIC versions by slot number, use the **show platform hardware asic-versions** command.

show platform hardware asic-versions {*slot number*}

Syntax Description	<i>slot number</i>	Specifies the slot number.
--------------------	--------------------	----------------------------

Defaults	None	
----------	------	--

Command Modes	Privileged EXEC mode	
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Command History	Release	Modification
	12.2(50)SY	Support for this command was introduced.

Usage Guidelines	There are no usage guidelines for this command.	
------------------	---	--

Examples	This example shows how to display the hardware ASIC version for slot number 4:	
	Router# show platform hardware asic-versions slot 4	

Related Commands	Command	Description
	platform hardware asic-versions	Configures platform hardware ASIC versions by slot number.

show platform hardware capacity

To display the capacities and utilizations for the hardware resources, use the **show platform hardware capacity** command in privileged EXEC mode.

show platform hardware capacity [*resource-type*]

Syntax Description	<i>resource-type</i>	(Optional) Hardware resource type; see the “Usage Guidelines” section for the valid values.
--------------------	----------------------	---

Defaults	None
----------	------

Command Modes	Privileged EXEC mode
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Command History	Release	Modification
	12.2(50)SY	Support for this command was introduced.

Usage Guidelines

The valid values for *resource-type* are as follows:

- **acl**—Displays the capacities and utilizations for ACL or QoS TCAM resources.
- **cpu**—Displays the capacities and utilizations for CPU resources.
- **eobc**—Displays the capacities and utilizations for Ethernet out-of-band channel resources.
- **fabric**—Displays the capacities and utilizations for switch fabric resources.
- **flash**—Displays the capacities and utilizations for flash or NVRAM resources.
- **forwarding**—Displays the capacities and utilizations for Layer 2 and Layer 3 forwarding resources.
- **ibc**—Displays the capacities and utilizations for interboard communication resources.
- **interface**—Displays the capacities and utilizations for interface resources.
- **monitor**—Displays the capacities and utilizations for SPAN resources.
- **multicast**—Displays the capacities and utilizations for Layer 3 multicast resources.
- **netflow**—Displays the capacities and utilizations for NetFlow resources.
- **pfc**—Displays the capacities and utilizations for all the PFC resources including Layer 2 and Layer 3 forwarding, NetFlow, CPU rate limiters, and ACL or QoS TCAM resources.
- **power**—Displays the capacities and utilizations for power resources.
- **qos**—Displays the capacities and utilizations for QoS policer resources.
- **rate-limit**—Displays the capacities and utilizations for CPU rate-limiter resources.
- **rewrite-engine**—Displays the packet drop and performance counters of the central rewrite engine on supervisor engines and line cards. For detailed information, see the **show platform hardware capacity rewrite-engine** command documentation.

- **system**—Displays the capacities and utilizations for system resources.
- **vlan**—Displays the capacities and utilizations for VLAN resources.

The **show platform hardware capacity cpu** command displays the following information:

- CPU utilization for the last 5 seconds (busy time and interrupt time), the percentage of the last 1-minute average busy time, and the percentage of the last 5-minute average busy time.
- Processor memory total available bytes, used bytes, and percentage used.
- I/O memory total available bytes, used bytes, and percentage used.

The **show platform hardware capacity eobc** command displays the following information:

- Transmit and receive rate
- Packets received and packets sent
- Dropped received packets and dropped transmitted packets

The **show platform hardware capacity forwarding** command displays the following information:

- The total available entries, used entries, and used percentage for the MAC tables.
- The total available entries, used entries, and used percentage for the FIB TCAM tables. The display is done per-protocol base.
- The total available entries, used entries, and used percentage for the adjacency tables. The display is done for each region in which the adjacency table is divided.
- The created entries, failures, and resource usage percentage for the NetFlow TCAM and ICAM tables.
- The total available entries and mask, used entries and mask, reserved entries and mask, and entries and mask used percentage for the ACL/QoS TCAM tables. The output displays the available, used, reserved, and used percentage of the labels. The output displays the resource of other hardware resources that are related to the ACL/QoS TCAMs (such as available, used, reserved, and used percentage of the LOU, ANDOR, and ORAND).
- The available, used, reserved, and used percentage for the CPU rate limiters.

The **show platform hardware capacity interface** command displays the following information:

- Tx/Rx drops—Displays the sum of transmit and receive drop counters on each online module (aggregate for all ports) and provides the port number that has the highest drop count on the module.
- Tx/Rx per port buffer size—Summarizes the port-buffer size on a per-module basis for modules where there is a consistent buffer size across the module.

The **show platform hardware capacity monitor** command displays the following SPAN information:

- The maximum local SPAN sessions, maximum RSPAN sessions, maximum ERSPAN sessions, and maximum service module sessions.
- The local SPAN sessions used or available, RSPAN sessions used or available, ERSPAN sessions used or available, and service module sessions used or available.

The **show platform hardware capacity multicast** command displays the following information:

- Multicast Replication Mode – Ingress and egress IPv4 and IPv6 modes.
- The MET table usage that indicates the total used and the percentage used for each module in the system.
- The bidirectional PIM DF table usage that indicates the total used and the percentage used.

The **show platform hardware capacity system** command displays the following information:

- PFC operating mode (PFC version: PFC3A, PFC3B, unknown, and so forth)
- Supervisor engine redundancy mode (RPR, RPR+, SSO, none, and so forth)
- Module-specific switching information, including the following information:
 - Part number (WS-SUP720-BASE, WS-X6548-RJ-45, and so forth)
 - Series (supervisor engine, fabric, CEF720, CEF256, dCEF256, or classic)
 - CEF mode (central CEF, dCEF)

The **show platform hardware capacity vlan** command displays the following VLAN information:

- Total VLANs
- VTP VLANs that are used
- External VLANs that are used
- Internal VLANs that are used
- Free VLANs

Examples

This example shows how to display CPU capacity and utilization information for the route processor, the switch processor, and the LAN module in the Cisco 7600 series router:

```
Router# show platform hardware capacity cpu
CPU Resources
  CPU utilization: Module           5 seconds      1 minute      5 minutes
                   1  RP             0% /  0%          1%           1%
                   1  SP             5% /  0%          5%           4%
                   7                   69% /  0%        69%          69%
                   8                   78% /  0%        74%          74%
  Processor memory: Module  Bytes:      Total      Used      %Used
                   1  RP      176730048    51774704    29%
                   1  SP      192825092    51978936    27%
                   7          195111584    35769704    18%
                   8          195111584    35798632    18%
  I/O memory: Module  Bytes:      Total      Used      %Used
                   1  RP      35651584     12226672    34%
                   1  SP      35651584      9747952    27%
                   7          35651584      9616816    27%
                   8          35651584      9616816    27%

Router#
```

This example shows how to display EOBC-related statistics for the route processor, the switch processor, and the DFCs in the Cisco 7600 series router:

```
Router# show platform hardware capacity eoebc
EOBC Resources
  Module           Packets/sec      Total packets      Dropped packets
  1  RP      Rx:             61          108982              0
              Tx:             37           77298              0
  1  SP      Rx:             34          101627              0
              Tx:             39          115417              0
  7          Rx:              5           10358              0
              Tx:              8           18543              0
  8          Rx:              5           12130              0
              Tx:             10           20317              0

Router#
```

This example shows how to display the current and peak switching utilization:

```
Router# show platform hardware capacity fabric
Switch Fabric Resources
  Bus utilization: current is 100%, peak was 100% at 12:34 12mar45
  Fabric utilization:
    ingress
      Module channel speed current peak
      1      0      20G  100%  100% 12:34 12mar45
      1      1      20G  12%   80% 12:34 12mar45
      4      0      20G  12%   80% 12:34 12mar45
      13     0       8G  12%   80% 12:34 12mar45
    egress
      current peak
      100%  100% 12:34 12mar45
      12%   80% 12:34 12mar45
      12%   80% 12:34 12mar45
      12%   80% 12:34 12mar45
Router#
```

This example shows how to display information about the total capacity, the bytes used, and the percentage that is used for the flash or NVRAM resources present in the system:

```
Router# show platform hardware capacity flash
Flash/NVRAM Resources
  Usage: Module Device          Bytes:      Total      Used      %Used
        1  RP  bootflash:          31981568    15688048    49%
        1  SP  disk0:             128577536    105621504    82%
        1  SP  sup-bootflash:      31981568    29700644    93%
        1  SP  const_nvram:         129004      856         1%
        1  SP  nvram:              391160     22065        6%
        7      dfc#7-bootflash:    15204352    616540       4%
        8      dfc#8-bootflash:    15204352         0         0%
Router#
```

This example shows how to display the capacity and utilization of the EARLs present in the system:

```
Router# show platform hardware capacity forwarding
L2 Forwarding Resources
  MAC Table usage:  Module Collisions Total      Used      %Used
                   6              0  65536     11         1%
  VPN CAM usage:   Total      Used      %Used
                   512         0         0%

L3 Forwarding Resources
  FIB TCAM usage:  Total      Used      %Used
    72 bits (IPv4, MPLS, EoM)  196608     36         1%
    144 bits (IP mcast, IPv6)  32768       7         1%
  detail:          Protocol      Used      %Used
                   IPv4         36         1%
                   MPLS         0         0%
                   EoM         0         0%
                   IPv6         4         1%
                   IPv4 mcast    3         1%
                   IPv6 mcast    0         0%
  Adjacency usage: Total      Used      %Used
                   1048576     175         1%

  Forwarding engine load:
    Module      pps  peak-pps      peak-time
    6           8    1972  02:02:17 UTC Thu Apr 21 2005

Netflow Resources
  TCAM utilization:  Module      Created      Failed      %Used
                   6              1          0         0%
  ICAM utilization:  Module      Created      Failed      %Used
                   6              0          0         0%

  Flowmasks:  Mask#  Type      Features
    IPv4:     0    reserved  none
    IPv4:     1    Intf FulNAT_INGRESS NAT_EGRESS FM_GUARDIAN
    IPv4:     2    unused     none
    IPv4:     3    reserved  none
    IPv6:     0    reserved  none
    IPv6:     1    unused     none
```

```

IPv6:      2   unused   none
IPv6:      3   reserved none

CPU Rate Limiters Resources
      Rate limiters:      Total      Used      Reserved      %Used
      Layer 3              9         4         1         44%
      Layer 2              4         2         2         50%

ACL/QoS TCAM Resources
Key: ACLent - ACL TCAM entries, ACLmsk - ACL TCAM masks, AND - ANDOR,
     QoSent - QoS TCAM entries, QoSmsk - QoS TCAM masks, OR - ORAND,
     Lbl-in - ingress label, Lbl-eg - egress label, LOUsrc - LOU source,
     LOUdst - LOU destination, ADJ - ACL adjacency
Module ACLent ACLmsk QoSent QoSmsk Lbl-in Lbl-eg LOUsrc LOUdst AND OR ADJ
6         1%      1%      1%      1%      1%      1%      0%      0%  0%  0%  1%
Router#

```

This example shows how to display the interboard communication resources:

```

Router# show platform hardware capacity ibc
IBC Resources
Module      Packets/sec      Total packets      Dropped packets
1  RP      Rx:              3          5001419             0
           Tx:              1          1943884             0
Router#

```

This example shows how to display the interface resources:

```

Router# show platform hardware capacity interface
Interface Resources
Interface drops:
Module      Total drops:      Tx      Rx      Highest drop port:      Tx      Rx
9           0              0        2           0              0      48

Interface buffer sizes:
Module      Bytes:      Tx buffer      Rx buffer
1           12345      12345
5           12345      12345
Router#

```

This example shows how to display SPAN information:

```

Router# show platform hardware capacity monitor
SPAN Resources
Source sessions: 2 maximum, 0 used
Type      Used
Local      0
RSPAN source 0
ERSPAN source 0
Service module 0
Destination sessions: 64 maximum, 0 used
Type      Used
RSPAN destination 0
ERSPAN destination (max 24) 0
Router#

```

This example shows how to display the capacity and utilization of resources for Layer 3 multicast functionality:

```

Router# show platform hardware capacity multicast
L3 Multicast Resources
IPv4 replication mode: ingress
IPv6 replication mode: ingress
Bi-directional PIM Designated Forwarder Table usage: 4 total, 0 (0%) used
Replication capability: Module      IPv4      IPv6
                        5          egress    egress
                        9          ingress    ingress
MET table Entries: Module      Total      Used      %Used

```

```

Router#                                     5                               65526       6       0%

```

This example shows how to display information about the system power capacities and utilizations:

```

Router# show platform hardware capacity power
Power Resources
  Power supply redundancy mode: administratively combined
                                operationally combined
  System power: 1922W, 0W (0%) inline, 1289W (67%) total allocated
  Powered devices: 0 total
Router#

```

This example shows how to display the capacity and utilization of QoS policer resources per EARL in the Cisco 7600 series router:

```

Router# show platform hardware capacity qos
QoS Policer Resources
  Aggregate policers: Module          Total      Used      %Used
                     1                1024      102       10%
                     5                1024        1        1%
  Microflow policer configurations: Module  Total      Used      %Used
                                      1         64       32       50%
                                      5         64        1        1%
Router#

```

This example shows how to display information about the key system resources:

```

Router# show platform hardware capacity system
System Resources
  PFC operating mode: PFC3BXL
  Supervisor redundancy mode: administratively rpr-plus, operationally rpr-plus
  Switching Resources: Module  Part number      Series      CEF mode
                        5      WS-SUP720-BASE  supervisor  CEF
                        9      WS-X6548-RJ-45  CEF256     CEF
Router#

```

This example shows how to display VLAN information:

```

Router# show platform hardware capacity vlan
VLAN Resources
  VLANs: 4094 total, 10 VTP, 0 extended, 0 internal, 4084 free
Router#

```

Related Commands

Command	Description
show msfc	Displays MSFC information.
show platform	Displays platform information.
show platform hardware capacity rewrite-engine	Displays the packet drop and performance counters of the central rewrite engine on supervisor engines and line cards.

show platform hardware capacity rewrite-engine

To display the packet drop and performance counters of the central rewrite engine on supervisor engines and line cards, use the **show platform hardware capacity rewrite-engine** command in privileged EXEC mode.

```
show platform hardware capacity rewrite-engine {drop | performance} [slot number]
[rate [sample_interval]] [details]
```

Syntax Description	drop	Displays the central rewrite engine drop counter values.
	performance	Displays the central rewrite engine current performance counter values or the performance rate.
	slot number	(Optional) Displays the counter values for the module in the specified slot. If no slot is specified, the counters are displayed for each slot.
	rate sample_interval	(Optional) Displays the drop rate or rewrite rate for a sample interval in msec between 1 and 1000. The default interval is 50 msec.
	details	(Optional) Displays each individual drop counter with its name and register ID number. This keyword is not available with the performance keyword.

Defaults	If the sample interval is not specified, the default interval is 50 msec.
----------	---

Command Modes	Privileged EXEC
---------------	-----------------

Command History	Release	Modification
	12.2(50)SY	Support for this command was introduced.

Usage Guidelines	In the show platform hardware capacity rewrite-engine performance command output, a value of N/A indicates that the slot or channel has a rewrite engine, but does not support performance counters.
------------------	---

Examples	This example shows how to display the packet drop counters of the central rewrite engine in all installed supervisor engines and line cards:
----------	--

```
Router# show platform hardware capacity rewrite-engine drop
```

slot	channel	packet drops	total overruns
1	0	0	0
5	0	15440040	22
7	0	44	0
7	1	0	0

This example shows how to display a detailed report of the packet drop counters of the module in slot 1:

Router# **show platform hardware capacity rewrite-engine drop slot 1 details**

slot	channel	drop_id	description	packet drops	total overruns
1	0	0x5ED	DROP NON BPDU	0	0
1	0	0x5EB	DROP BPDU	0	0
1	1	0x5ED	DROP NON BPDU	0	0
1	1	0x5EB	DROP BPDU	0	0

This example shows how to display the packet drop counters of the module in slot 5 over the default sample interval of 50 msec:

Router# **show platform hardware capacity rewrite-engine drop slot 5 rate**

slot	channel	drop rate [pps]	overrun [Y/N]
5	0	120079	Y

This example shows how to display the packet drop counters of the module in slot 5 over a sample interval of 20 msec:

Router# **show platform hardware capacity rewrite-engine drop slot 5 rate 20**

slot	channel	drop rate [pps]	overrun [Y/N]
5	0	180000	N

This example shows how to display the performance counters of the central rewrite engine in all installed supervisor engines and line cards:

Router# **show platform hardware capacity rewrite-engine performance**

slot	channel	perf_id	description	packets	total overruns
1	0	0x235	FAB RX 0	12870	0
1	0	0x237	FAB RX 1	0	0
1	0	0x27B	FAB TX 0	164	0
1	0	0x27F	FAB TX 1	0	0
1	0	0x350	REPLICATION ML3	0	0
1	0	0x351	REPLICATION ML2	0	0
1	0	0x352	RECIRC L2	0	0
1	0	0x353	RECIRC L3	0	0
1	0	0x34C	SPAN TX 0	0	0
1	0	0x34D	SPAN TX 1	0	0
1	0	0x34E	SPAN RX 0	0	0
1	0	0x34F	SPAN RX 1	0	0
1	0	0x354	SPAN TERMINATION	0	0
1	1	0x235	FAB RX 0	106065	0
1	1	0x237	FAB RX 1	0	0
1	1	0x27B	FAB TX 0	180806	0
1	1	0x27F	FAB TX 1	0	0
1	1	0x350	REPLICATION ML3	0	0
1	1	0x351	REPLICATION ML2	0	0
1	1	0x352	RECIRC L2	0	0
1	1	0x353	RECIRC L3	0	0
1	1	0x34C	SPAN TX 0	0	0
1	1	0x34D	SPAN TX 1	0	0
1	1	0x34E	SPAN RX 0	201	0
1	1	0x34F	SPAN RX 1	90201	0
1	1	0x354	SPAN TERMINATION	0	0
4	0	N/A			
5	0	0xBE	FAB RX 0	181496	0

```

5 0 0xC0 FAB RX 1 0 0
5 0 0x112 FAB TX 0 992089 0
5 0 0x116 FAB TX 1 0 0
5 0 0x299 REPLICATION ML3 0 0
5 0 0x29A REPLICATION ML2 0 0
5 0 0x29B RECIRC L2 0 0
5 0 0x29C RECIRC L3 0 0
5 0 0x295 SPAN TX 0 91166 0
5 0 0x296 SPAN TX 1 91313 0
5 0 0x297 SPAN RX 0 1 0
5 0 0x298 SPAN RX 1 1 0
5 0 0x29D SPAN TERMINATION 0 0

```

This example shows how to display the performance counters of the module in slot 5:

```
Router# show platform hardware capacity rewrite-engine performance slot 5
```

slot	channel	perf_id	description	packets	total overruns
5	0	0xBE	FAB RX 0	1330	0
5	0	0xC0	FAB RX 1	0	0
5	0	0x112	FAB TX 0	715253	0
5	0	0x116	FAB TX 1	0	0
5	0	0x299	REPLICATION ML3	0	0
5	0	0x29A	REPLICATION ML2	0	0
5	0	0x29B	RECIRC L2	0	0
5	0	0x29C	RECIRC L3	0	0
5	0	0x295	SPAN TX 0	1022	0
5	0	0x296	SPAN TX 1	1152	0
5	0	0x297	SPAN RX 0	1	0
5	0	0x298	SPAN RX 1	1	0
5	0	0x29D	SPAN TERMINATION	0	0

This example shows how to display the performance counters of the module in slot 5 over the default sample interval of 50 msec:

```
Router# show platform hardware capacity rewrite-engine performance slot 5 rate
```

slot	channel	perf_id	description	packet rate[pps]	overrun [Y/N]
5	0	0xBE	FAB RX 0	11680	N
5	0	0xC0	FAB RX 1	0	N
5	0	0x112	FAB TX 0	11680	N
5	0	0x116	FAB TX 1	0	N
5	0	0x299	REPLICATION ML3	0	N
5	0	0x29A	REPLICATION ML2	0	N
5	0	0x29B	RECIRC L2	0	N
5	0	0x29C	RECIRC L3	0	N
5	0	0x295	SPAN TX 0	5840	N
5	0	0x296	SPAN TX 1	5840	N
5	0	0x297	SPAN RX 0	0	N
5	0	0x298	SPAN RX 1	0	N
5	0	0x29D	SPAN TERMINATION	0	N

Related Commands

Command	Description
clear platform hardware capacity rewrite-engine counter	Clears the packet drop and performance counters of the central rewrite engine on supervisor engines and line cards.

show platform hardware cbl

To display hardware CBL by slot number, use the **show platform hardware cbl** command.

show platform hardware cbl {*slot number*}

Syntax Description	slot number Specifies the module number.
---------------------------	---

Defaults	None
-----------------	------

Command Modes	Privileged EXEC mode
----------------------	----------------------

Command History	Release	Modification
	12.2(50)SY	Support for this command was introduced.

Usage Guidelines	There are no usage guidelines for this command.
-------------------------	---

Examples	This example shows how to display the hardware CBL for slot 4: Router# show platform hardware cbl slot 4
-----------------	--

Related Commands	Command	Description
	platform hardware cbl	Configures platform hardware CBL by slot number.

show platform hardware cef mpls detail

To display MPLS CEF detail information use the **show platform hardware cef mpls detail** command in privileged EXEC mode.

show platform hardware cef mpls detail [*earl earl-id* | **module** *mod-num*] **group** {*ip-addr* [**detail** | **verbose**]}

Syntax Description	earl <i>earl-id</i>	(Optional) Displays the CEF detail for the EARL; valid values are 1 or 2.
	module <i>mod-num</i>	(Optional) Displays the CEF detail for a module; valid values are 1 through 6.
	group	Shows the hardware entries for a group.
	<i>ip-addr</i> detail	Shows the hardware entry details.
	<i>ip-addr</i> verbose	Shows the hardware entry verbose details.

Defaults None

Command Modes Privileged EXEC mode

Command History	Release	Modification
	15.1(1)SY	Support for this command was introduced.

Usage Guidelines The **show platform hardware cef mpls detail** command displays detailed information about MPLS adjacency entries. For each adjacency, use the **show platform hardware cef adjacencies entry** command to display the MPLS adjacency information.

Examples This example shows how to display the MPLS CEF hardware details for EARL 1:

```
Router# show platform hardware multicast routing ip group 226.1.1.1 detail
show platform hardware cef mpls detail earl 1
Codes: M - mask entry, V - value entry, A - adjacency index, NR- no_route bit
      LS - load sharing count, RI - router_ip bit, DF: default bit
      CP - copy_to_cpu bit, AS: dest_AS_number, DGTv - dgt_valid bit
      DGT: dgt/others value, LS: load sharing count on eos condition
      EE: EOS enable, NW: num swap paths, NP: num push paths

Format:MPLS (valid class vpn_tbid  vpn_vld Label0 M  EoS  Lif/Label1
M(52740 ):  1    F   3FFF          1    FFFFF 0   1   0
V(52740 ):  1    2    0           1     1    0   0   0
                        (A:213012, LS:0, NR:0, RI:0, DF:0 CP:0 DGTv:0, DGT:0)
M(52742 ):  1    F   3FFF          1    FFFFF 0   1   0
V(52742 ):  1    2    0           1     1    0   1   0
                        (A:78089 , LS:0, NR:0, RI:0, DF:0 CP:0 DGTv:0, DGT:0)
M(52822 ):  1    F   3FFF          1    FFFFF 0   1   0
V(52822 ):  1    2    0           1     21   0   1   0
```

```

(A:213013, LS:0, NR:0, RI:0, DF:0 CP:0 DGTv:0, DGT:0)
M(52830 ): 1 F 3FFF 1 FFFF 0 1 0
V(52830 ): 1 2 0 1 23 0 1 0
(A:213017, LS:0, NR:0, RI:0, DF:0 CP:0 DGTv:0, DGT:0)
M(52834 ): 1 F 3FFF 1 FFFF 0 1 0
V(52834 ): 1 2 0 1 24 0 1 0
Router#

```

Related Commands

Command	Description
debug platform software multicast routing	Displays information about multicast errors.
platform software met profile	Configures the number of blocks for each block size of your MET profile.
show platform hardware multicast routing	Matches and displays multicast routing group IP addresses.
show platform hardware cef adjacencies entry	Displays a single adjacency entry index.
show platform hardware met read	Displays platform hardware MET table entries.
show platform software met detail	Displays software routing for the MET.

show platform hardware cef adjacencies entry

To display a single adjacency entry index, use the **show platform hardware cef adjacencies entry** command in privileged EXEC mode

show platform hardware cef adjacencies entry *entry-num*

Syntax Description	<i>entry-num</i>	Displays the adjacency index; valid values are 0 through 1048575.
--------------------	------------------	---

Defaults	None
----------	------

Command Modes	Privileged EXEC mode
---------------	----------------------

Command History	Release	Modification
	15.1(1)SY	Support for this command was introduced.

Examples

This example shows how to display the index for CEF adjacency 45:

```
Router# show platform hardware cef adjacencies entry 45
Index: 45 -- Valid entry (valid = 1) --
```

Adjacency fields:

adj_stats = EN	fwd_stats = EN	format = IP
rdt = OFF	elif = 0x2D	vpn = 0x3FFF

RIT fields: The entry has a Recirc. Format

decr_ttl=NO	l2_fwd=YES	ccc = 4	add_shim_hdr = NO
-------------	------------	---------	-------------------

Statistics: Packets = 0
Bytes = 0

```
Router#
```

Related Commands	Command	Description
	debug platform software multicast routing	Displays information about multicast errors.
	platform software met profile	Configures the number of blocks for each block size of your MET profile.
	show platform hardware cef mpls detail	Displays MPLS CEF detail information.

Command	Description
show platform hardware met read	Displays platform hardware MET table entries.
show platform hardware multicast routing	Matches and displays multicast routing group IP addresses.
show platform software met detail	Displays software routing for the MET.

show platform hardware cef tcam

To display platform hardware Cisco Express Forwarding (CEF) Forwarding Information Base (FIB) Ternary Content Addressable Memory (TCAM), use the **show platform hardware cef** command.

```
show platform hardware cef tcam {ecc [detail [earl earl-id] | module module-num]| earl earl-id]|  
  module module-num]| hit [detail [earl earl-id] | module module-num]| earl earl-id]| module  
  module-num]| keys [count | exception ]| memory usage | segment [detail [earl earl-id] |  
  module module-num]| earl earl-id]| module module-num] | select [detail [earl earl-id] |  
  module module-num]| earl earl-id]| module module-num] | shadow [detail [earl earl-id] |  
  module module-num]| earl earl-id]| module module-num] | timing [detail [earl earl-id] |  
  module module-num]| earl earl-id]| module module-num] | utilization [detail [earl earl-id] |  
  module module-num]| earl earl-id]| module module-num]| earl earl-id] | module module-num]
```

Syntax Description

ecc	Displays error checking and correction (ECC) information.
detail	(Optional) Displays detailed information.
earl <i>earl-id</i>	(Optional) Displays earl-id content.
module <i>module-num</i>	(Optional) Displays information for a specific module.
hit	Displays last hit on the FIB TCAM information.
keys	Displays keys information.
count	(Optional) Displays keys count information.
exception	(Optional) Displays keys exception information.
memory usage	Displays memory usage.
segment	Displays segment distribution.
select	Displays bit-select information.
shadow	Displays the shadow copy.
timing	Displays timing utilization.
utilization	Displays segment utilization.

Defaults

None

Command Modes

Privileged EXEC mode

Command History

Release	Modification
12.2(33)SX	Support for this command was introduced.
15.1(1)SY	Added ecc , key , memory , segment , select , shadow , timing , and utilization keywords.

Examples

This example shows how to display the hardware CEF TCAM key exception:

```
Router(config)# show platform hardware cef tcam keys exception
```

Priorities in exception:

Class	ID	Pri (>=)	Max	Key-Cnt	Pri-Cnt
IPv4	0	16	35	35085	
IPv4-Mcast	1	68	68	0	
MPLS	2	17	17	0	
EOMPLS	3	19	19	0	
MPLS-VPN	4	9	9	0	
Diags	5	5	5	0	
IPv6-Local	6	390	390	0	
IPv6-Mcast	7	261	261	0	
IPv6-Global	8	244	390	1051	
VPLSv4-Mcast	9	69	69	0	
VPLSv6-Mcast	10	261	261	0	

Keys in each Pri in exception:

Class	ID	Pri	XCP	Pri-Cnt
IPv4	0	16		4096
.	.	17		15507
.	.	18		7753
.	.	19		3876
.	.	20		1939
.	.	21		969
.	.	22		484
.	.	23		243
.	.	24		121
.	.	25		60
.	.	26		34
.	.	30		2
.	.	34		1
IPv6-Global	8	244		129
.	.	245		126
.	.	246		118
.	.	247		114
.	.	248		111
.	.	249		109

.	.	250	109
.	.	251	107
.	.	252	64
.	.	253	32
.	.	254	16
.	.	255	8
.	.	256	4
.	.	257	2
.	.	389	1
.	.	390	1

Spanslogic#show platform hardware cef tcam memory usage

Buffer allocation summary:

	Data	Page	Total	Total	Used	Used	Free	Free	
Id	Size	Size	Count	Size	Count	Size	Count	Size	Type
0	0	0	0	0	0	0	0	0	Void
1	80	80	0	0	0	0	0	0	Bsort
2	2076	65536	279	576K	0	0	279	565K	Bsort Node
3	3456	65536	288	1.00M	20	39744	268	904K	Bsort Stat
4	60	65536	2184	128K	1697	99.4K	487	29220	Wsort Seg
5	104	65536	630	65536	17	1768	613	63752	Wsort Win
6	1024	65536	384	384K	17	17408	367	367K	Wsort Avail
7	3644	3644	3	10932	3	10932	0	0	Group
8	324	8192	25	8192	20	6480	5	1620	Group Entry
9	0	0	2	20480	2	20480	0	0	SE Block
10	4104	65536	3660	15.2M	2814	11.1M	846	3.31M	SE Slice
11	52	65536	2520	128K	1697	88244	823	42796	SE Seg
12	68	65536	18297	1.18M	0	0	18297	1.18M	SE Rec
13	0	0	0	0	0	0	0	0	SE Pri
14	48	65536	619k	28.3M	587k	26.8M	32320	1.47M	Key
15	8	65536	0	0	0	0	0	0	Bit 64
16	12	65536	1.20m	13.7M	1.13m	13.2M	63352	742K	Bit 96
17	16	65536	0	0	0	0	0	0	Bit 128
18	20	65536	39312	768K	36634	715K	2678	53560	Bit 160
19	24	24	0	0	0	0	0	0	Bit 192
20	28	28	0	0	0	0	0	0	Bit 224
21	32	65536	8192	256K	5628	175K	2564	82048	Bit 256

```

22  36  65536  0    0    0    0    0    0    Bit 288
23  40  65536 1638 65536 98   3920 1540 61600  Bit 320
24  44  44      0    0    0    0    0    0    Bit 352
25  48  48      0    0    0    0    0    0    Bit 384
26  52  52      0    0    0    0    0    0    Bit 416
27  56  56      0    0    0    0    0    0    Bit 448
28  60  65536  0    0    0    0    0    0    Bit 480
29  64  64      0    0    0    0    0    0    Bit 512
30  68  68      0    0    0    0    0    0    Bit 544
31  72  72      0    0    0    0    0    0    Bit 576
32  76  76      0    0    0    0    0    0    Bit 608
33  80  65536  0    0    0    0    0    0    Bit 640
34  84  84      0    0    0    0    0    0    Bit 672
35  88  88      0    0    0    0    0    0    Bit 704
*   *   *      1.89m 61.9M 1.77m 52.7M 124k 8.81M Total

```

Router(config)#

This example shows how to display the hardware CEF TCAM timing information:

Router(config)# **show platform hardware cef tcam timing**

```

(0) Groom Clock: 182us (Min) << 71ms (Avg) << 404ms (Max) = 09.19s (Tot)
  5.28ms   1.16ms   10ms    38ms    3.43ms   10ms    166ms   223ms
  5.06ms   960us    9.34ms   37ms    1.79ms   96ms    110ms   155ms
  4.72ms   1.06ms   8.90ms   34ms    813us    4.14ms  110ms   138ms
  4.12ms   755us    6.81ms   32ms    305us    75ms    28ms    237ms
  3.90ms   690us    6.13ms   30ms    228us    50ms    247ms   199ms
  3.67ms   529us    5.81ms   28ms    274us    94ms    217ms   63ms
  3.38ms   506us    3.68ms   25ms    1.73ms   269ms   218ms   96ms
  3.14ms   400us    2.94ms   23ms    279us    119ms   277ms   66ms
  2.94ms   351us    3.63ms   20ms    115ms    163ms   346ms   94ms
  2.87ms   306us    2.75ms   18ms    46ms     404ms   316ms   35ms
  2.76ms   291us    1.18ms   16ms    156ms    351ms   154ms   84ms
  3.30ms   275us    794us    13ms    87ms     319ms   220ms   5.51ms
  5.20ms   202us    736us    11ms    8.52ms   85ms    220ms   203ms
  2.77ms   190us    39ms     9.58ms  112ms    229ms   189ms   191ms
  1.58ms   182us    39ms     7.52ms  73ms     180ms   172ms   216ms
  1.84ms   11ms     38ms     5.63ms  90ms     188ms   227ms   1.27ms

(1) Add Clock: 11us (Min) << 13us (Avg) << 107us (Max) = 1.78ms (Tot)
  11us     11us     11us     12us     11us     12us     12us     12us
  11us     12us     12us     11us     11us     11us     11us     12us
  12us     11us     12us     12us     11us     12us     12us     12us
  12us     12us     12us     12us     11us     12us     12us     13us

```

```

11us      12us      12us      12us      11us      11us      11us      12us
12us      12us      12us      12us      11us      12us      12us      12us
12us      12us      11us      12us      11us      11us      11us      12us
11us      11us      12us      11us      11us      12us      12us      12us
11us      12us      11us      11us      11us      12us      11us      11us
12us      12us      12us      11us      11us      11us      11us      40us
107us     12us      12us      12us      12us      12us      12us      41us
12us      11us      11us      12us      12us      12us      11us      40us
12us      12us      11us      12us      12us      11us      11us      40us
11us      11us      12us      12us      12us      12us      11us      40us
12us      12us      12us      12us      12us      11us      12us      40us
12us      12us      11us      11us      11us      12us      12us      40us
Router(config)#

```

This example shows how to display the hardware CEF TCAM utilization information:

```
Router(config)# show platform hardware cef tcam utilization
```

Util summary for Pool 0: 524288 keys, 1024 segs, 36 Mb

Type	KeyCnt	KeyUse	SegCnt	SegUse	Util	Free
0	463704	463704	909	909	99	115
1	0	0	0	0	0	115
2	0	0	0	0	0	57
3	0	0	0	0	0	29
4	0	0	0	0	0	28
Tot	463704	463704	909	909	99	115

Util summary for Pool 1: 524288 keys, 1024 segs, 36 Mb

Type	KeyCnt	KeyUse	SegCnt	SegUse	Util	Free
0	105327	105327	208	208	98	803
1	9	18	7	7	0	803
2	46	184	3	6	5	391
3	0	0	0	0	0	191
4	0	0	0	0	0	189
Tot	105382	105529	218	221	93	803

Util summary for Pool 8: 1048576 keys, 2048 segs, 72 Mb

Type	KeyCnt	KeyUse	SegCnt	SegUse	Util	Free
0	569031	569031	1117	1117	99	918
1	9	18	7	7	0	918
2	46	184	3	6	5	448
3	0	0	0	0	0	220
4	0	0	0	0	0	217
Tot	569086	569233	1127	1130	98	918

Related Commands

Command	Description
clear platform hardware cef adjacencies	Clears platform hardware CEF adjacencies.

show platform hardware cef adjacencies

To display platform hardware Cisco Express Forwarding CEF adjacencies, use the **show platform hardware cef adjacencies** command.

```

show platform hardware cef adjacencies all {detail {module {module number}}

show platform hardware cef adjacencies allocation-map {number | module {module number}}

show platform hardware cef adjacencies decap-tunnel {detail {module {module number}}}

show platform hardware cef adjacencies earl {earl-id}

show platform hardware cef adjacencies encap-tunnel {A.B.C.D | {detail {module {module number}}}

show platform hardware cef adjacencies entry number | errors {module}

show platform hardware cef adjacencies mac-address {h.h.h.}

show platform hardware cef adjacencies mac-rewrite {detail | module}

show platform hardware cef adjacencies module

show platform hardware cef adjacencies mpls {detail | module}

show platform hardware cef adjacencies multicast {detail | module}

show platform hardware cef adjacencies nat {detail | module}

show platform hardware cef adjacencies recirculation {detail | module}

show platform hardware cef adjacencies resource-level

show platform hardware cef adjacencies special {module}

show platform hardware cef adjacencies status {number | module}

show platform hardware cef adjacencies tcp-intercept {detail | module}

show platform hardware cef adjacencies usage {decap-tunnel | encap-tunnel | mac-rewrite | module | mpls | multicast | nat | recirculation | tcp-intercept}

```

Syntax	Description
all	Specifies all adjacencies.
detail	Specifies detailed information.
module	Specifies all the modules.
module <i>number</i>	Specifies module number.
allocation-map	Specifies the adjacency current allocation map.
allocation-map <i>number</i>	Specifies the starting entry. Range is 0–1048576.
decap-tunnel	Specifies the decap tunnel rewrite adjacencies.
earl <i>earl-id</i>	Specifies the earl-id content.

encap-tunnel	Specifies the encap tunnel rewrite adjacencies.
A.B.C.D	Specifies the IP source address.
entry number	Specifies the single adjacency entry details and the adjacency entry index. Range is 0–1048575.
errors	Specifies the adjacency application errors.
mac-address	Specifies the matched mac address adjacency.
h.h.h	Specifies the 48-bit hardware address.
mac-rewrite	Specifies the MAC rewrite adjacencies.
module module-num	Specifies the module number.
mpls	Specifies the MPLS rewrite adjacencies.
multicast	Specifies the multicast rewrite adjacencies.
nat	Specifies the NAT rewrite adjacencies.
recirculation	Specifies the recirculation rewrite adjacency.
resource-level	Specifies the adjacency watermark level and usage.
special	Specifies the special adjacencies.
status number	Shows the entries allocated or used and their owner and the starting entry. Range is 0–1048576.
tcp-intercept	Specifies the TCP-Intercept rewrite adjacency.
usage	Specifies the adjacencies usage.

Defaults

None

Command Modes

Privileged EXEC mode

Command History

Release	Modification
12.2(50)SY	Support for this command was introduced.

Usage Guidelines

There are no usage guidelines for this command.

Examples

This example shows how to display the CEF adjacencies allocation map module number:

```
Router# show platform hardware cef adjacencies allocation-map module 4
```

This example shows how to display the CEF adjacencies status allocated or used starting at entry 100:

```
Router# show platform hardware cef adjacencies status 100
```

```
Hardware Adjacencies used or allocated entries:
Users: "fib-ucast-v4" "fib-ucast-v6" "mpls" "vpls-ucast"
       "fib-mcast" "vpls-mcast" "acl-feature" "netflow-feat"
       "online-diag" "adjacency-mgr" "exceptions"
```

```
-----
```

Index	Owner	Status	Time
80128	netflow-feat	Allocated	*Jun 21 23:56:25.287
80129	netflow-feat	Allocated	*Jun 21 23:56:25.287
80130	netflow-feat	Allocated	*Jun 21 23:56:25.287
80131	netflow-feat	Allocated	*Jun 21 23:56:25.287
80132	netflow-feat	Allocated	*Jun 21 23:56:25.287
80133	netflow-feat	Allocated	*Jun 21 23:56:25.287
80134	netflow-feat	Allocated	*Jun 21 23:56:25.287
80135	netflow-feat	Allocated	*Jun 21 23:56:25.287
80136	netflow-feat	Allocated	*Jun 21 23:56:25.287
80137	netflow-feat	Allocated	*Jun 21 23:56:25.287
80138	netflow-feat	Allocated	*Jun 21 23:56:25.287
80139	netflow-feat	Allocated	*Jun 21 23:56:25.287
80140	netflow-feat	Allocated	*Jun 21 23:56:25.287
80141	netflow-feat	Allocated	*Jun 21 23:56:25.287
80142	netflow-feat	Allocated	*Jun 21 23:56:25.287
80143	netflow-feat	Allocated	*Jun 21 23:56:25.287
80144	netflow-feat	Allocated	*Jun 21 23:56:25.287
80145	netflow-feat	Allocated	*Jun 21 23:56:25.287
80146	netflow-feat	Allocated	*Jun 21 23:56:25.287
80147	netflow-feat	Allocated	*Jun 21 23:56:25.287
80148	netflow-feat	Allocated	*Jun 21 23:56:25.287
80149	netflow-feat	Allocated	*Jun 21 23:56:25.287
80150	netflow-feat	Allocated	*Jun 21 23:56:25.287
80151	netflow-feat	Allocated	*Jun 21 23:56:25.287
80152	netflow-feat	Allocated	*Jun 21 23:56:25.287
80153	netflow-feat	Allocated	*Jun 21 23:56:25.287
80154	netflow-feat	Allocated	*Jun 21 23:56:25.287
80155	netflow-feat	Allocated	*Jun 21 23:56:25.287
80156	netflow-feat	Allocated	*Jun 21 23:56:25.287
80157	netflow-feat	Allocated	*Jun 21 23:56:25.287
80158	netflow-feat	Allocated	*Jun 21 23:56:25.287
80159	netflow-feat	Allocated	*Jun 21 23:56:25.287
80160	netflow-feat	Allocated	*Jun 21 23:56:25.287
80161	netflow-feat	Allocated	*Jun 21 23:56:25.287
80162	netflow-feat	Allocated	*Jun 21 23:56:25.287
80163	netflow-feat	Allocated	*Jun 21 23:56:25.287
80164	netflow-feat	Allocated	*Jun 21 23:56:25.287
80165	netflow-feat	Allocated	*Jun 21 23:56:25.287
80166	netflow-feat	Allocated	*Jun 21 23:56:25.287
80167	netflow-feat	Allocated	*Jun 21 23:56:25.287
80168	netflow-feat	Allocated	*Jun 21 23:56:25.287
80169	netflow-feat	Allocated	*Jun 21 23:56:25.287
80170	netflow-feat	Allocated	*Jun 21 23:56:25.287
80171	netflow-feat	Allocated	*Jun 21 23:56:25.287
80172	netflow-feat	Allocated	*Jun 21 23:56:25.287

Router#

Related Commands**Command****Description**

**clear platform
hardware cef
adjacencies**

Clears platform hardware CEF adjacencies.

show platform hardware cef maximum-route

To display Cisco Express Forwarding (CEFv6) maximum routes, use the **show platform hardware cef maximum-routes** command in Privileged EXEC mode. This command displays both the maximum routes configuration and the current usage of entries within the dedicated area and the shared area.

show platform hardware cef maximum-routes {usage}

Syntax	Description
usage	Specifies the usage.

Defaults	None
----------	------

Command Modes	Privileged EXEC mode
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Command History	Release	Modification
	12.2(50)SY	Support for this command was introduced.

Examples This example shows how to display CEFv6 maximum routes configuration and the current usage of entries within the dedicated area and the shared area:

Router# **show platform hardware cef maximum-routes**

Fib-size: 256k (262144), shared-size: 25k (25600), shared-usage: 0k(0)

Protocol	Max-routes	Use-shared-region	Dedicated
-----	-----	-----	-----
IPV4	217 k	Yes	192k
IPV4-MCAST	4 k	No	4k
IPV6	35 k	Yes	10k
IPV6-MCAST	6 k	No	6k
MPLS	5 k	No	5k
MPLS-VPN	3 k	No	3k
EoMPLS	3 k	No	3k
VPLS-IPV4-MCAST	4 k	No	4k
VPLS-IPV6-MCAST	4 k	No	4k

This example shows how to display CEFv6 accounting prefix statistics:

```
Router(config)# show platform hardware cef maximum-routes usage
Fib-size: 256k (262144),      shared-size: 25k (25600), shared-usage: 0k(0)
```

Protocol	Max-routes	Usage	Usage-from-shared
-----	-----	-----	-----
IPv4	217 k	48 (0 k)	0 (0 k)
IPv4-MCAST	4 k	6 (0 k)	0 (0 k)
IPv6	35 k	2 (0 k)	0 (0 k)
IPv6-MCAST	6 k	4 (0 k)	0 (0 k)
MPLS	5 k	1 (0 k)	0 (0 k)
MPLS-VPN	3 k	0 (0 k)	0 (0 k)
EoMPLS	3 k	2 (0 k)	0 (0 k)
VPLS-IPv4-MCAST	4 k	0 (0 k)	0 (0 k)
VPLS-IPv6-MCAST	4 k	0 (0 k)	0 (0 k)

Router#

Related Commands

Command	Description
platform hardware cef maximum-route	Limits the maximum number of routes that can be programmed in the hardware.

show platform hardware database version

To display the platform hardware database version, use the **show platform hardware database** command.

show platform hardware database version [*slot slot_number*]

Syntax Description	slot slot_number Specifies the slot number of a module that has hardware abstraction layer (HAL) support.
--------------------	--

Defaults	None
----------	------

Command Modes	Privileged EXEC mode
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Command History	Release	Modification
	12.2(50)SY	Support for this command was introduced.
	15.0(1)SY1	The slot keyword and <i>slot_number</i> argument were added.

Usage Guidelines	The show platform hardware database command displays the following Supervisor Engine 2T platform hardware database version: • Bundled data • Data from flash • Currently used data • Data information stored in region 1 • Data information stored in region 2 • Data information stored in golden region The flash region has three states: • APPROVED—The region is verified and can be used for building the hardware database. • FIRST_RUN—The data in this region has not been verified yet, and reload is required to verify it. • INVALID—The region is not valid.
------------------	--



Note	It is normal for the command to display “INVALID” when the hardware database version has not been upgraded.
------	---

The **slot** keyword is supported only on modules that have hardware abstraction layer (HAL) support.

Examples

This example shows how to display the platform hardware database version:

```
Router# show platform hardware database version

Hardware database image bundle version: 2.1.0
Description: Hardware database release 2.1.0

Hardware database flash version from region S (Gold): 0.19.23

Hardware database runtime using image bundle version: 2.1.0

Region F1: INVALID
Region F2: INVALID

Region S (Golden): Version: 0.19.23
Description: change slot 7 from le_adaptive to le_gain (le_fixed)
```

Related Commands

Command	Description
upgrade hardware database	Upgrades the hardware database version.

show platform hardware earl

To display platform hardware EARL information, use the **show platform hardware earl** command.

```
show platform hardware earl {cc {table {agegrp {entry {entry number}} | bem {entry {entry number}} | bpm {entry {entry number}} | glblvlan {entry {entry number}}}} | earl_db | eureka | lamira | layer2 | wf-fpga}
```

Syntax Description

cc	Specifies the EARL consistency checker.
table	Specifies the table name.
agegrp	Specifies the Eureka age group table.
entry number	Specifies the entry in the table. Range is 0–16383.
bem	Specifies the Eureka bundle extension map table.
bpm	Specifies the Eureka bundle port map table.
glblvlan	Specifies the Eureka VLAN access mode memory.
earl_db	Specifies the EARL daughter board.
eureka	Specifies the Eureka ASIC.
lamira	Specifies the Lamira Layer 3 ASIC.
layer2	Specifies the EARL Layer2.
wf-fpga	Specifies the white field FPGA.

Defaults

None

Command Modes

Privileged EXEC mode

Command History

Release	Modification
12.2(50)SY	Support for this command was introduced.

Usage Guidelines

There are no usage guidelines for this command.

Examples

This example shows how to display the EARL consistency checker age group entry 4444:

```
Router(config)# show platform hardware earl cc table agegrp entry 4444
```

Related Commands

Command	Description
clear platform hardware earl	Clears platform hardware EARL information.

show platform hardware earl eureka

To display platform hardware EARL Eureka ASIC information, use the **show platform hardware earl eureka** command.

```
show platform hardware earl eureka config {all {file {word}} | module {ac {dbi | epp | ft | l2u
| l2ui | l3lu | l3lu312 | l3mg | lif | lm_rx | lm_tx | ntfy | pb1_rx | pb1_tx | pb2_rx | pb2_tx | pp
| rbi } | dbi | epp | ft | l2u | l2ui | l3lu | l3lu312 | l3mg | lif | lm_rx | lm_tx | ntfy | pb1_rx |
pb1_tx | pb2_rx | pb2_tx | pp | rbi}}
```

```
show platform hardware earl eureka ecc {configuration {all | table {eu-acl0 | eu-acl1 | ft | lb |
ldb | lifdb | lifstat | rbi}} | statistics {all | table {eu-acl0 | eu-acl1 | ft | lb | ldb | lifdb | lifstat
| rbi}}}
```

```
show platform hardware earl eureka interrupts {all {file {word}} | clear {all {file} | module} |
module {ac | epp | ft | l2u | l2ui | l3lu | l3lu312 | l3mg | lif | lm_rx | lm_tx | ntfy | pb1_rx |
pb1_tx | pb2_rx | pb2_tx | pp | rbi | se}}
```

```
show platform hardware earl eureka statistics {all {file} | clear {all | module} | module {ac |
epp | ft | l2u | l2ui | l3lu | l3lu312 | l3mg | lif | lm_rx | lm_tx | ntfy | pb1_rx | pb1_tx | pb2_rx
| pb2_tx | pp | rbi | se}}
```

```
show platform hardware earl eureka vsl {mapping-tables {pb1 {dst-post-map | dst-pre-map |
src-pre-map}} | pb2} | registers}
```

Syntax Description

config	Specifies the configuration register.
all	Specifies all modules.
file	Dumps the configuration registers that are not supported to a file in DFC.
word	Specifies the full name of the file. For example, disk0:/file.dat
module	Specifies modules.
ac	Specifies the AC module.
dbi	Specifies the DBI module.
epp	Specifies the epp module.
ft	Specifies the ft module.
l2u	Specifies the l2u module.
l2ui	Specifies the l2ui module.
l3lu	Specifies the l3lu module.
l3lu312	Specifies the l3lu312 module.
l3mg	Specifies the m3mg module.
lif	Specifies the LIF module.
lm_rx	Specifies the lm_rx module.
lm_tx	Specifies the lm-tx module.
ntfy	Specifies the NTFY module.
pb1_rx	Specifies the pb1_rx module.
pb1_tx	Specifies the pb1_tx module.
pb2_rx	Specifies the pb2_rx module.

pb2_tx	Specifies the pb2_tx module.
pp	Specifies the PP module.
rbi	Specifies the RBI module.
ecc	Specifies the ECC or parity error.
configuration	Specifies the ECC or parity configuration parameters.
all	Specifies all tables.
table	Specifes the memory ID.
eu_acl0	Specifies the Eureka ACL RAM 0 statistics.
eu_acl1	Specifies the Eureka ACL RAM 1 statistics.
ft	Specifies the Eureka forwarding table.
lb	Specifies the Eureka latency buffer.
ldb	Specifies the Eureka LDB port map table.
lifdb	Specifies the LIF DB.
lifstat	Specifies the LIF statistics.
rbi	Specifies the eureka RBI history FIFO.
interrupts	Specifies the interrupt statistics.
clear	Clears interrupt statistics.
statistics	Specifies the statistics.
vsl	Displays VSL configuration information.
mapping-tables	Displays VSL pre-mapping and post-mapping tables.
registers	Displays VSL control registers.
pb1	Displays PB1 mapping tables.
pb2	Displays PB2 mapping tables.
dst-post-map	Displays destination post-mapping table.
dst-pre-map	Displays destination pre-mapping table.
src-pre-map	Displays source pre-mapping table.

Defaults

None

Command Modes

Privileged EXEC mode

Command History

Release	Modification
12.2(50)SY	Support for this command was introduced.

Examples

This example shows how to display all of EARL Eureka ASIC configurations:

```
Router# show platform hardware earl eureka config all
```

Related Commands

Command	Description
clear platform hardware earl eureka	Clears platform hardware EARL Eureka ASIC information.

show platform hardware earl lamira

To display platform hardware EARL Lamira ASIC information, use the **show platform hardware earl lamira** command.

```
show platform hardware earl lamira {config {all {file {word}}} | module {ci | cl1 | cl1_2 | cl2 |
gv | if | l3 | la0 | la1 | nf | nf2 | nf_se | pl | pl2 | po | ri | rp}} | ecc {configuration {all | table
{acct | aclsram-a | aclsram-b | acltcam-a | acltcam-b | acosseli | adj-dram | adjstats | agdpp
| cmtbla | cmtblb | dagram | egmtmap | elifmap | fib-dram | fibtcam | ife_dstinfo | iferdtd |
ilifmap | infife | infofe | label2sela | label2selb | lcbent | nffl | nfhash0 | nfhash1 | nfstats |
nftable | nfvrar | ofe_dstinfo | ofeff | oferdtd | outff | plcbas | pmap | rit | rpfdrar | rwsel |
sagram | smpl | srcdstas | vidmap | vlanmap}}} | statistics {all | table {acct | aclsram-a |
aclsram-b | acltcam-a | acltcam-b | acosseli | adj-dram | adjstats | agdpp | cmtbla | cmtblb
| dagram | egmtmap | elifmap | fib-dram | fibtcam | ife_dstinfo | iferdtd | ilifmap | infife |
infofe | label2sela | label2selb | lcbent | nffl | nfhash0 | nfhash1 | nfstats | nftable | nfvrar |
ofe_dstinfo | ofeff | oferdtd | outff | plcbas | pmap | rit | rpfdrar | rwsel | sagram | smpl |
srcdstas | vidmap | vlanmap}}} | interrupts {all {file {word}}} | clear {all {file} | module
{cl1 | cl1_2 | cl2 | gv | if | l3 | la0 | la1 | nf | nf2 | nf_se | pl | pl2 | po | ri | rp}} | module} |
statistics {all {file {word}}} | clear {all | module {ci | cl1 | cl1_2 | cl2 | gv | if | l3 | la0 | la1 |
nf | nf2 | nf_se | pl | pl2 | po | ri | rp}} | module}}
```

Syntax Description

config	Specifies the configuration register.
all	Displays all modules.
file	Dumps the configuration registers to a file that are not supported in DFC.
word	Specifies the full name of the file.
module	Specifies modules.
ci	Specifies the module CI.
cl1	Specifies the module CL1.
cl1_2	Specifies the module CL1_2.
cl2	Specifies the module CL2.
gv	Specifies the module GV.
if	Specifies the module IF.
l3	Specifies the module L3.
la0	Specifies the module LA0.
la1	Specifies the module LA1.
nf	Specifies the module NF.
nf2	Specifies the module NF2.
nf_se	Specifies the module NF_SE.
pl	Specifies the module PL.
pl2	Specifies the module PL2.
po	Specifies the module PO.
ri	Specifies the module RI.
rp	Specifies the module RP.
ecc	Specifies the ECC or parity error.
configuration	Specifies the ECC or parity configuration parameters.

all	Specifies all tables.
table	Specifies the memory ID.
statistics	Specifies the ECC or parity error statistics.
table	Displays the memory ID.
acct	Specifies the Lamira ACCT_STATS_MEM.
aclsram-a	Specifies the Lamira ACL_SRAM_A.
aclsram-b	Specifies the Lamira ACL_SRAM_B.
acltcam-a	Specifies the Lamira ACL_TCAM_A.
acltcam-b	Specifies the Lamira ACL_TCAM_B.
acosseli	Specifies the Lamira ACOS_SELI_CTRL_TBL.
adj-dram	Specifies the Lamira ADJ_DRAM.
adjstats	Specifies the Lamira ADJ_STATS.
agdpp	Specifies the Lamira AG_DPP_TBL.
cmtbla	Specifies the Lamira CM TBL A.
cmtblb	Specifies the Lamira CM TBL B.
dagram	Specifies the Lamira D_AGRAM.
egmtmap	Specifies the Lamira EG_MT_MAP.
elifmap	Specifies the Lamira EGRESS_LIF_MAP.
fib-dram	Specifies the Lamira FIB_DRAM.
fibtcam	Specifies the Lamira FIB_TCAM.
ife_dstinfo	Specifies the Lamira IFE_DST_INFO_TBL.
iferdt	Specifies the Lamira IFE_RDT_TBL.
ilifmap	Specifies the Lamira INGRESS_LIF_MAP.
infife	Specifies the Lamira INF_FF_IFE.
infofe	Specifies the Lamira INF_FF_OFE.
label2sela	Specifies the Lamira LABEL2SEL_A.
label2selb	Specifies the Lamira LABEL2SEL_B.
lcbcnt	Specifies the Lamira LC_BCNT_TBL.
nffl	Specifies the Lamira NF_FL_TABLE.
nfhash0	Specifies the Lamira NF_HASH_0.
nfhash1	Specifies the Lamira NF_HASH_1.
nfstats	Specifies the Lamira NF_STATS.
nftable	Specifies the Lamira NF_TABLE.
nfvrsm	Specifies the Lamira NF_VRAM.
ofe_dstinfo	Specifies the Lamira OFE_DST_INFO_TBL.
ofeff	Specifies the Lamira OFE_FF.
oferdt	Specifies the Lamira OFE_RDT_TBL.
outff	Specifies the Lamira OUT_FF.
plcbas	Specifies the Lamira PLC_BAS_XLT_TBL.
pmap	Specifies the Lamira PMAP.
rit	Specifies the Lamira RIT.

rpf dram	Specifies the Lamira RPF_DRAM.
rw sel	Specifies the Lamira RW_SEL.
sag ram	Specifies the Lamira S_AGRAM.
smpl	Specifies the Lamira SMPL_TBL.
srcdstas L	Specifies the Lamira SRC_DST_AS_TB.
vid map	Specifies the Lamira VID MAP.
vlan map	Specifies the Lamira VLAN MAP.
interrupts	Specifies interrupts statistics.

Defaults

None

Command Modes

Privileged EXEC mode

Command History

Release	Modification
12.2(50)SY	Support for this command was introduced.

Usage Guidelines

There are no usage guidelines for this command.

Examples

This example shows how to display all of the EARL Lamira ASIC configuration:

```
Router# show platform hardware earl lamira config all
```

Related Commands

Command	Description
clear platform hardware earl lamira	Clears platform hardware EARL Lamira ASIC information.

show platform hardware earl layer2

To display platform hardware EARL Layer 2 information, use the **show platform hardware earl layer2** command.

```
show platform hardware earl layer2 {etherchannel {bem-table {number number} | bpm-table
{bridge-domain number} | config} | forwarding-table {dump {all | l2addr number} | l2addr
{H.H.H}} | redirections {protocol-filtering {dump {all | dot1ad | dot1q | vpls} |
profile-map}}}
```

Syntax Description		
etherchannel		Specifies the Layer 2 and Layer 3 EtherChannel forwarding-related parameters.
bem-table <i>number</i>	<i>number</i>	Specifies the Bundle Expansion Map table number. Range is 0–7.
bpm-table		Specifies the Bundle Port Map table.
bridge-domain <i>number</i>	<i>number</i>	Specifies the bridge domain number. Range is 0–16383.
config		Specifies all the EtherChannel-related hardware configuration.
forwarding-table		Specifies the Layer 2 forwarding table-related parameters.
dump		Specifies the valid entries to dump.
all		Specifies that all the entries need to be dumped.
l2addr <i>number</i>	<i>number</i>	Specifies the number of Layer 2 addresses that need to be dumped. Range is 0–131071.
l2addr		Specifies the computation of the Layer 2 table address.
H.H.H		Specifies the 48-bit MAC address.
redirections		Specifies the Layer 2, Layer 3, and Layer 4 redirections-related parameters.
protocol-filtering		Specifies the protocol filtering-related parameters.
dot1ad		Specifies that dot1ad profile needs to be dumped.
dot1q		Specifies that dot1q profile needs to be dumped.
vpls		Specifies that VPLS profile needs to be dumped.
profile-map		Specifies that the logical-to-physical (hardware) mapping of profiles needs to be printed.

Defaults None

Command Modes Privileged EXEC mode

Command History	Release	Modification
	12.2(50)SY	Support for this command was introduced.

Examples

This example shows how to display platform hardware EARL Layer 2 EtherChannel BPM table, bridge domain 4:

```
Router# show platform hardware earl layer2 etherchannel bpm-table bridge-domain 4
```

Related Commands

Command	Description
platform hardware earl layer2	Configures the platform hardware EARL for Layer 2.

show platform hardware efp

To display hardware EFP configuration, use the **show platform hardware efp** command.

```
show platform hardware efp {config {gigabitethernet number | port-channel number |
tengigabitethernet number} | datapath {gigabitethernet number | port-channel number |
tengigabitethernet number} | global}
```

Syntax Description	config	Specifies the EFP configuration information.
	gigabitethernet <i>number</i>	Specifies the Gigabit Ethernet by number.
	port-channel <i>number</i>	Specifies the Ethernet channel of interfaces by number. Range is 1–496.
	tengigabitethernet <i>number</i>	Specifies the 10-Gigabit Ethernet by number.
	datapath	Specifies the EFP datapath information.
	global	Specifies the EFP global information.

Defaults	None
----------	------

Command Modes	Privileged EXEC mode
---------------	----------------------

Command History	Release	Modification
	12.2(50)SY	Support for this command was introduced.

Usage Guidelines	There are no usage guidelines for this command.
------------------	---

Examples	This example shows how to display the hardware EFP configuration information for Gigabit Ethernet 4: <pre>Router# show platform hardware efp config gigabitethernet 4</pre>
----------	--

Related Commands	Command	Description
	platform hardware efp	Configures the platform hardware EFP.

show platform hardware fan-tray

To display hardware fan tray status or details by number, use the **show platform hardware fan-tray** command.

show platform hardware fan-tray {*number* | **status**}

Syntax Description

<i>number</i>	Specifies the fan tray number. Range is 1–1.
status	Specifies the fan tray status.

Defaults

None

Command Modes

Privileged EXEC mode

Command History

Release	Modification
12.2(50)SY	Support for this command was introduced.

Usage Guidelines

There are no usage guidelines for this command.

Examples

This example shows how to display the hardware details for fan tray 1:

```
Router# show platform hardware fan-tray 1
```

Related Commands

Command	Description
platform hardware fan-tray	Configures the platform hardware fan tray.

show platform hardware flow table

To display hardware flow table entries, use the **show platform hardware flow table** command.

```
show platform hardware flow table { copy-policy index | flowmask { index | ip index | ipv6 index | l2 index | mpls index } | mark-en-map index | profile { index | ip index | ipv6 index | l2 index | mpls index } | qos-ctrl index | redirect { ife index | ofe index | tcp index } | sampler index | sampler-copy index | shadow { copy-policy index | flowmask { index | ip index | ipv6 index | l2 index | mpls index } | mark-en-map index | profile { index | ip index | ipv6 index | l2 index | mpls index } | qos-ctrl index | redirect { ife index | ofe index | tcp index } | sampler index | sampler-copy index }
```

Syntax Description		
copy-policy <i>index</i>		Specifies the copy policy entries by index number. Range is 0–31.
flowmask <i>index</i>		Specifies the flow mask entries by index number. Range is 0–79.
ip <i>index</i>		Specifies the IP entries by index number. Range is 0–31.
ipv6 <i>index</i>		Specifies the IPv6 entries by index number. Range is 0–31.
l2 <i>index</i>		Specifies the Layer 2 entries by index number. Range is 0–7.
mpls <i>index</i>		Specifies the MPLS entries by index number. Range is 0–7.
mark-en-map <i>index</i>		Specifies the mark encapsulation map entries by index number. Range is 0–63.
profile <i>index</i>		Specifies the profile entries by index number. Range is 0–79.
qos-ctrl <i>index</i>		Specifies the QoS CTRL entries by index number. Range is 0–63.
redirect		Specifies the redirect tables.
ife <i>index</i>		Specifies the IFE redirect by index number. Range is 0–511.
ofe <i>index</i>		Specifies the OFE redirect by index number. Range is 0–511.
tcp <i>index</i>		Specifies the TCP redirect by index number. Range is 0–7.
sampler <i>index</i>		Specifies the sampler entry by index number. Range is 0–1023.
sampler-copy <i>index</i>		Specifies the sampler copy entry by index number. Range is 0–7.
shadow		Specifies the shadow extension tables.

Defaults None

Command Modes Privileged EXEC mode

Command History	Release	Modification
	12.2(50)SY	Support for this command was introduced.

Usage Guidelines There are no usage guidelines for this command.

Examples

This example shows how to display the hardware flow table entries for IFE redirect index 4:

```
Router# show platform hardware flow table redirect ife 4
```

Related Commands

Command	Description
platform hardware flow table	Configures the platform hardware flow table entries.

show platform hardware fpoe

To display hardware Fabric Port of Exit (FPoE) by slot number, use the **show platform hardware fpoe** command.

show platform hardware fpoe {*slot number*}

Syntax Description	<i>slot number</i>	Specifies the module number.
Defaults	None	
Command Modes	Privileged EXEC mode	
Command History	Release	Modification
	12.2(50)SY	Support for this command was introduced.
Usage Guidelines	There are no usage guidelines for this command.	
Examples	This example shows how to display the hardware FPoE for slot 4:	
	Router# show platform hardware fpoe slot 4	
Related Commands	Command	Description
	platform hardware fpoe	Configures platform hardware FPoE by slot number.

show platform hardware idprom

To display information on EEPROM for the platform hardware, use the **show platform hardware idprom** command.

```
show platform hardware idprom {backplane number | clock number | earl number |
    fabric-extension number | fan-tray number | module number | power-supply number | rp
    number | supervisor number | vdb number | vtt number}
```

Syntax Description	backplane number	Displays the backplane EEPROM number. Range is 1–2.
	clock number	Specifies the clock EEPROM number. Range is 1–2.
	earl number	Specifies the EARL EEPROM number.
	fabric-extension number	Specifies the fabric extension board’s EEPROM number.
	fan-tray number	Specifies the fan tray EEPROM number. Range is 1–1.
	module number	Specifies the module EEPROM number.
	power-supply number	Specifies the power supply EEPROM number. Range is 1–2.
	rp number	Specifies the RP EEPROM.
	supervisor number	Specifies the supervisor EEPROM.
	vdb number	Specifies the VDB EEPROM number.
	vtt number	Specifies the VTT EEPROM number. Range is 1–4.

Defaults None

Command Modes Privileged EXEC mode

Command History	Release	Modification
	12.2(50)SY	Support for this command was introduced.

Usage Guidelines There are no usage guidelines for this command.

Examples This example shows how to display the information on the EEPROM for backplane 1:
Router# **show platform hardware idprom backplane 1**

Related Commands	Command	Description
	platform hardware idprom	Configures the information on the EEPROM for the platform hardware.

show platform hardware image version slot

To display the hardware abstraction layer (HAL) image version information, use the **show platform hardware image version** command.

show platform hardware image version slot *number*

Syntax Description	slot <i>number</i>	Specifies the module slot number.
---------------------------	---------------------------	-----------------------------------

Defaults	None
-----------------	------

Command Modes	Privileged EXEC mode
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Command History	Release	Modification
	15.0(1)SY1	Support for this command was introduced.

Usage Guidelines	This command is useful only if a new hardware image version becomes available.
	This command is supported only on modules that have hardware abstraction layer (HAL) support.

Examples	This example shows how to display the HAL image version information for a module:
-----------------	---

```
Router# show platform hardware image version slot 3
Image bundle version: 1.1

Linecard image version from region S(Golden): INVALID

Image runtime using image bundle version: 1.1

Region F1: INVALID, version: INVALID
Region S (Golden): version: INVALID
```



Note

It is normal for the command to display “INVALID” when the version has not been upgraded.

Related Commands	Command	Description
	upgrade hardware image	Upgrades the HAL image.

show platform hardware lif l2

To display platform hardware Layer 2 LIF information, use the **show platform hardware lif l2** command.

```
show platform hardware lif l2 {globalcfg | memory {memory detail} | region {adjacency {dti
{adjacency number | config} | replicated {adjacency | config}} | egresslif {config | lif {lif
number}} | flood {config | ltl} | globalvlan {config | vlan} | negative-mn {config | ltl} |
portgroup {config | ltl} | shim {config | lif} | swltl {config | ltl} | vb {config | vlan}} | table
{global-vlan vlan | lif-db {all | entry number | key} | port-map {all | interface
{gigabitethernet | longreachethernet | multilink | port-channel | tengigabitethernet} |
ltl-index number}}}
```

Syntax Description

globalcfg	Specifies the global configuration.
memory	Specifies the free memory.
memory detail	Specifies the detailed memory list.
region	Specifies the region.
adjacency	Specifies the adjacency region.
dti	Specifies the DTI.
adjacency number	Specifies the valid adjacency. Range is 0–2047999.
config	Specifies the configuration.
replicated	Specifies the replication.
egresslif	Specifies the egress LIF region.
lif	Specifies the LIF keyword.
lif number	Specifies the valid LIF number. Range is 0–131071.
flood	Specifies the flood region.
ltl	Specifies the LTL index.
globalvlan vlan	Specifies the global VLAN region.
vlan	Specifies the VLAN keyword.
negative-mn	Specifies the negative MN region.
portgroup	Specifies the port group region.
shim	Specifies the SHIM/ SVC LIF region.
swltl	Specifies the SW LTL region.
vb	Specifies the VB region.
table	Specifies the Layer 2 LIF tables.
global-vlan	Specifies the global VLAN table.
lif-db	Specifies the LIF database.
all	Specifies that all uninitialized values need to be printed.
entry number	Specifies the LIF database entry, and the valid LIF database address. Range is 0–262143.
key	Specifies the LIF database table key.
port-map	Specifies the port map.
interface	Specifies the interface.

gigabitethernet	Specifies the Gigabit Ethernet IEEE 802.3z.
longreachethernet	Specifies the long-reach Ethernet interface.
multilink	Specifies the multilink group interface.
port-channel	Specifies the Ethernet channel interface.
tengigabitethernet	Specifies the 10-Gigabit Ethernet.
ltl-index <i>number</i>	Specifies the valid LTL index. Range is 0–16383.

Defaults

None

Command Modes

Privileged EXEC mode

Command History

Release	Modification
12.2(50)SY	Support for this command was introduced.

Examples

This example shows how to display platform hardware Layer 2 LIF global configuration:

```
Router# show platform hardware lif l2 globalcfg
```

Related Commands

Command	Description
platform hardware lif l2	Configures the platform hardware LIF for Layer 2.

show platform hardware lif l3

To display platform hardware Layer 3 LIF information, use the **show platform hardware lif l3** command.

```
show platform hardware lif l3 { egress { features | handle | hierarchy | index | interface | ipv4 |
                                ipv6 | misc | module | mpls | qos } | info number | ingress { features | handle | hierarchy |
                                index | interface | ipv4 | ipv6 | misc | module | mpls | qos } | mtu { table { dump | index } } |
                                port-map { index number | interface { gigabitethernet | port-channel | tengigabitethernet
                                tunnel | vlan } | module number } }
```

Syntax Description

egress	Specifies the egress entry information.
features	Displays the features-related fields.
handle	Specifies the LIF entry handle.
hierarchy	Displays the entry with inheritance hierarchy.
index	Specifies the LIF entry index.
interface	Specifies the interface name.
ipv4	Displays IPv4-related fields.
ipv6	Displays IPv6-related fields.
misc	Displays the miscellaneous fields.
module	Specifies the selected module for the command.
mpls	Displays the MPLS-related fields.
qos	Displays the QoS-related fields.
info <i>number</i>	Displays the LIF table-related information and specifies the LIF test number. Range is 0–4294967295.
ingress	Specifies the ingress entry information.
mtu	Specifies the MTU information.
table	Specifies the hardware MTU table information.
dump	Specifies the Layer 3 hardware LIF table that needs to be dumped.
index <i>number</i>	Specifies the hardware MTU table information.
port-map	Specifies the port map entry information.
index	Specifies the Layer 3 port map entry index.
gigabitethernet	Specifies the Gigabit Ethernet IEEE 802.3z.
port-channel	Specifies the Ethernet channel interface.
tengigabitethernet	Specifies the 10-Gigabit Ethernet.
tunnel	Specifies the tunnel interface.
vlan	Specifies the VLANs.
module <i>number</i>	Specifies the selected module for the command.

Defaults

None

Command Modes Privileged EXEC mode

Command History	Release	Modification
	12.2(50)SY	Support for this command was introduced.

Examples This example shows how to display platform hardware EARL Layer 3 LIF test number 4:
Router# **show platform hardware lif l3 info 4**

Related Commands	Command	Description
	platform hardware lif l3	Configures the platform hardware LIF for Layer 3.

show platform hardware lif stats

To display hardware LIF statistics, use the **show platform hardware lif stats** command.

```
show platform hardware lif stats {index number | interface {gigabitethernet | port-channel |
tengigabitethernet | tunnel | vlan} | profile {choice {all {module} | id number} |
read{module} | write number} | table {config {module} | egress {module} | fop {module} |
ingress {module} | no-stat {module} | status {module}}}
```

Syntax Description

index <i>number</i>	Specifies the LIF statistics for a particular index. Range is 0–131071.
interface	Specifies the interface name.
gigabitethernet	Specifies the Gigabit Ethernet IEEE 802.3z.
port-channel	Specifies the Ethernet channel interface.
tengigabitethernet	Specifies the 10-Gigabit Ethernet.
tunnel	Specifies the tunnel interface.
vlan	Specifies the VLANs.
profile	Specifies the LIF statistic profile information.
choice	Specifies the choice of LIF statistics profiles.
all	Specifies that the summary of all the available LIF statistics profiles need to be printed.
module	Specifies the module selected for the command.
id <i>number</i>	Specifies that the details of the matching LIF statistics profile ID need to be printed. Range is 0–6.
read	Specifies that the current LIF statistics profile needs to be printed.
write <i>number</i>	Sets the LIF statistics profile according to the given valid profile index. Range is 0–6.
table	Specifies the LIF statistics input tables.
config	Specifies that the LIF statistics config register values needs to be printed.
egress	Specifies that the egress LIF statistics input table needs to be printed.
fop	Specifies that the forwarding operation memory table needs to be printed.
ingress	Specifies that the ingress LIF statistics input table needs to be printed.
no-stat	Specifies that the LIF no-statistics register values need to be printed.
status	Specifies that the status of the LIF statistics register values need to be printed.

Defaults

None

Command Modes

Privileged EXEC mode

Command History

Release	Modification
12.2(50)SY	Support for this command was introduced.

Examples

This example shows how to display platform hardware LIF statistics for index 4:

```
Router# show platform hardware lif stats index 4
```

Related Commands

Command	Description
platform hardware lif stats	Configures the platform hardware LIF statistics.

show platform hardware ltl

To display information on LTL for the platform hardware, use the **show platform hardware ltl** command.

```
show platform hardware ltl { index number | interface { gigabitethernet number |
tengigabitethernet number } | slot number | vlan vlan_id }
```

Syntax Description	index <i>number</i>	Displays the LTL hardware setting on an index. Range is 0–65535.
	interface	Specifies the type of interface.
	gigabitethernet <i>number</i>	Specifies the Gigabit Ethernet number.
	tengigabitethernet <i>number</i>	Specifies the 10-Gigabit Ethernet number.
	slot <i>number</i>	Specifies the slot number.
	vlan <i>vlan_id</i>	Specifies the VLAN number. Range is 0–4096.

Defaults	None
----------	------

Command Modes	Privileged EXEC mode
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Command History	Release	Modification
	12.2(50)SY	Support for this command was introduced.

Usage Guidelines	There are no usage guidelines for this command.
------------------	---

Examples	This example shows how to display the LTL information for Gigabit Ethernet 4: <pre>Router# show platform hardware ltl interface gigabitethernet 4</pre>
----------	--

Related Commands	Command	Description
	platform hardware ltl	Configures the LTL information.

show platform hardware multicast routing

To match and display multicast routing entries in hardware for multicast IPv4 and IPv6 addresses, use the **show platform hardware multicast routing** command in privileged EXEC mode.

show platform hardware multicast routing {ip | ipv6} group {ip-addr [detail | verbose]}

Syntax Description

ip	Shows the hardware entries for IPv4.
ipv6	Shows the hardware entries for IPv6.
group	Shows the hardware entries for a group.
ip-addr detail	Shows the hardware entry details.
ip-addr verbose	Shows the hardware entry verbose details.

Defaults

None

Command Modes

Privileged EXEC mode

Command History

Release	Modification
15.1(1)SY	Support for this command was introduced.

Usage Guidelines

The **show platform hardware multicast routing ip group** command displays multicast OIFs.

Examples

This example shows how to display the hardware detail entries:

```
Router# show platform hardware multicast routing ip group 226.1.1.1 detail
(10.1.1.1, 226.1.1.1/32)
  FIBAddr: 0xB00 IOSVPN: 0 RpfType: SglRpfChk SrcRpf: Gi1/1
  CPx: 0 s_star_pri: 1 non-rpf drop: 0

  PIAAdjPtr: 0x30002 Format: IP rdt: off elif: 0xC5408
  fltr_en: off idx_sel/bndl_en: 0 dec_ttl: on mtu_idx: 2(1518)
  PV: 1 rwtype: MCAST_L3_RWT_L2_EXPS
  met3: 0x19 met2: 0x18
  Packets: 0          Bytes: 0

  NPIAdjPtr: 0x30003 Format: IP rdt: on elif: 0xC5408
  fltr_en: off idx_sel/bndl_en: 0 dec_ttl: off
  PV: 0 rwtype: MCAST_L3_REWRITE
  met3: 0x20 met2: 0x0 DestNdx: 0x7FF3

  Packets: 0          Bytes: 0
  MET offset: 0x19
      OIF          AdjPtr          Elif          CR
  +-----+-----+-----+-----+
      EDT-50001      0x50001      0x8400A      1T1 5T1/T2
  MET offset: 0x20
```

```

      OIF      AdjPtr      Elif      CR
+-----+-----+-----+-----+
  Gi1/2      0xA8000      0xA4012      1T1
MET offset: 0x18
      LBL      IF      AdjPtr      Elif      CR
+-----+-----+-----+-----+
      20      Gi3/9      0xA8000      0xA4013      3T1/T2
Router#

```

This example shows how to display the hardware verbose entries:

```

Router# show platform hardware multicast routing ip group 226.1.1.1 verbose
(10.0.0.2, 226.1.1.1/32)
  FIBAddr: 0x2A04 IOSVPN: 0 RpfType: SglRpfChk SrcRpf: Po1
  CPx: 0 s_star_pri: 1 non-rpf drop: 0

  PIAAdjPtr: 0x30003 Format: IP rdt: off elif: 0xC5408
  fltr_en: off idx_sel/bndl_en: 0 dec_ttl: on mtu_idx: 2(1518)
  PV: 1 rwtype: MCAST_L3_RWT_L2_EXPS
  met3: 0x18 met2: 0x18
  Packets: 31912689      Bytes: 15956344500

  NPIAdjPtr: 0x30004 Format: IP rdt: on elif: 0xC5408
  fltr_en: off idx_sel/bndl_en: 0 dec_ttl: off
  PV: 0 rwtype: MCAST_L3_REWRITE
  met3: 0x5 met2: 0x0 DestNdx: 0x7FF3
  Packets: 1263      Bytes: 631500

  OIF: V19 OIFAdjPtr: 0x8009 Format: IP rdt: off elif: 0x9
  fltr_en: on idx_sel/bndl_en: 1 dec_ttl: off
  PV: 0 rwtype: L3_REWRITE
  smac_rwt: 1 smac: 000e.39c2.b540 ip_to_mac: 1

  OIF: EDT-50001 OIFAdjPtr: 0x50001 Format: MDT rdt: on elif: 0x8400A
  fltr_en: off idx_sel/bndl_en: 1 dec_ttl: off
  PV: 0 rwtype: L3_REWRITE add_shim: 1
  rec_shim_op: DTI_FROM_RIT rec_dti_type: RSVD3 rec_data: 0x701A0000 eg_mcast_dist: 1
  DestNdx: 0x80D RBH: 0x0
  DestNdx: 0x80D RBH: 0x1
  DestNdx: 0x80D RBH: 0x2
  DestNdx: 0x80D RBH: 0x3
  DestNdx: 0x80D RBH: 0x4
  DestNdx: 0x80D RBH: 0x5
  DestNdx: 0x80D RBH: 0x6
  DestNdx: 0x80D RBH: 0x7

  LBL: 20 OIFAdjPtr: 0xA8000 Format: MPLS rdt: on elif: 0xA4013
  LBL_OP: push dec_ttl: on
  PV: 0 rwtype: L3_REWRITE
  smac_rwt: 1 smac: 000e.39c2.b540 dmac_rwt: 1 dmac: 000e.39c2a123
Router#

```

Related Commands

Command	Description
debug platform software multicast routing	Displays information about multicast errors.
platform software met profile	Configures the number of blocks for each block size of your MET profile.
show platform hardware cef adjacencies entry	Displays a single adjacency entry index.

Command	Description
show platform hardware cef mpls detail	Displays MPLS CEF detail information.
show platform hardware met read	Displays platform hardware MET table entries.
show platform software met detail	Displays software routing for the MET.

show platform hardware met read

To display platform hardware MET table entries, use the **show platform hardware met read** command in privileged EXEC mode.

show platform hardware met read {**slot** *slot-num* | **port** *port-num* {**addr** *addr*}}

Syntax Description

slot <i>slot-num</i>	Displays the hardware MET table for the corresponding slot.
port <i>port-num</i>	Displays the hardware MET entries for a port.
addr <i>addr</i>	Displays the hardware MET information for the address of the slot or port.

Defaults

None

Command Modes

Privileged EXEC mode

Command History

Release	Modification
15.1(1)SY	Support for this command was introduced.

Usage Guidelines

The **show platform hardware met read** command displays MET table entry information. For each adjacency use the **show platform hardware cef adjacencies entry** command to display the MPLS adjacency information.

Examples

This example shows how to display the hardware MET table entries for slot 1 address 18:

```
Router# show platform hardware met read slot 1 addr 18
  Starting Offset: 0x0018
  V E C:3989 I:0x00000 (A: 0x0A8000)
Router#
```

Related Commands

Command	Description
debug platform software multicast routing	Displays information about multicast errors.
platform software met profile	Configures the number of blocks for each block size of your MET profile.
show platform hardware cef adjacencies entry	Displays a single adjacency entry index.
show platform hardware cef mpls detail	Displays MPLS CEF detail information.
show platform hardware multicast routing	Matches and displays multicast routing group IP addresses.
show platform software met detail	Displays software routing for the MET.

show platform hardware statistics

To display platform hardware statistics, use the **show platform hardware statistics** command.

show platform hardware statistics {**drop** | **exception** | **module** *number*}

Syntax Description	drop	Displays the dropped statistics.
	exception	Displays the statistics that have an exception.
	module <i>number</i>	Specifies the module number.

Defaults	None
-----------------	------

Command Modes	Privileged EXEC mode
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Command History	Release	Modification
	12.2(50)SY	Support for this command was introduced.

Usage Guidelines	There are no usage guidelines for this command.
-------------------------	---

Examples	This example shows how to display platform hardware statistics for module 4:
-----------------	--

```
Router# show platform hardware statistics module 4
```

Related Commands	Command	Description
	clear platform hardware statistics	Clears the statistics.

show platform hardware transceiver xml version

To display the hardware abstraction layer (HAL) transceiver XML version information, use the **show platform hardware transceiver xml version** command.

show platform hardware transceiver xml version

Syntax Description This command has no arguments or keywords.

Defaults None

Command Modes Privileged EXEC mode

Command History	Release	Modification
	15.0(1)SY1	Support for this command was introduced.

Usage Guidelines This command is useful only if a new transceiver XML version becomes available.

Examples This example shows how to display the HAL transceiver XML version information:

```
Router# show platform hardware transceiver xml version
Transceiver image bundle version: INVALID
Transceiver disk version : INVALID
Transceiver runtime using image bundle version: INVALID

region F1: INVALID
region F2: INVALID
```



Note It is normal for the command to display “INVALID” when the transceiver XML version has not been upgraded.

Related Commands	Command	Description
	upgrade hardware transceiver xml	Upgrades the XML version.

show platform hardware virtual-map

To display virtual map information, use the **show platform hardware virtual-map** command.

show platform hardware virtual-map

Syntax Description	This command has no arguments or keywords.
---------------------------	--

Defaults	None
-----------------	------

Command Modes	Privileged EXEC mode
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Command History	Release	Modification
	12.2(50)SY	Support for this command was introduced.

Usage Guidelines	There are no usage guidelines for this command.
-------------------------	---

Examples	This example shows how to display virtual map information:
	Router# show platform hardware virtual-map

Related Commands	Command	Description
	platform hardware virtual-map	Configures the virtual map.

show platform hardware xml version

To display the hardware abstraction layer (HAL) XML version information, use the **show platform hardware xml version** command.

show platform hardware xml version {*slot number* | *file name*}

Syntax Description

slot number	Specifies the module slot number.
file name	Specifies an XML file name.

Defaults

None

Command Modes

Privileged EXEC mode

Command History

Release	Modification
15.0(1)SY1	Support for this command was introduced.

Usage Guidelines

This command is useful only if a new XML version becomes available.

This command is supported only on modules that have hardware abstraction layer (HAL) support.

Examples

This example shows how to display the HAL XML version information for a module:

```
Router# show platform hardware xml version slot 4
XML image bundle version: 1.1

Linecard XML version from region S(Golden): INVALID

XML runtime using image bundle version: 1.1

Region F1: INVALID, version: INVALID
Region F2: INVALID, version: INVALID
Region S (Golden): version: INVALID
```



Note

It is normal for the command to display “INVALID” when the XML version has not been upgraded.

Related Commands

Command	Description
upgrade hardware xml	Upgrades the XML version.

show platform idbhal

To display information about platform interface detector block (IDB) management, use the **show platform idbhal** command.

```
show platform idbhal { applications detail | conversion { fib { lif number | ltl-index number | mih number } | lif number | mih number } | interface { gigabitethernet number | null | port-channel number | tengigabitethernet number | tunnel number | vlan vlan_id | detail } | process }
```

Syntax Description		
applications <i>detail</i>		Displays application-related information in detail.
conversion		Displays conversion database-related information.
fib		Displays FIB conversion database information.
lif <i>number</i>		Specifies the LIF number. Range is 0–1F3FF.
ltl-index <i>number</i>		Specifies the LTL index number. Range is 0–7FF.
mih <i>number</i>		Specifies the MIH number. Range is 0–FFFFFFFE.
interface		Displays interface-related information.
gigabitethernet <i>number</i>		Specifies the GigabitEthernet interface number.
null		Specifies the null interface.
port-channel <i>number</i>		Specifies the Ethernet channel of interfaces number. Range is 1–496.
tengigabitethernet <i>number</i>		Specifies the 10-Gigabit Ethernet interface number.
tunnel <i>number</i>		Specifies the tunnel interface number. Range is 0–2147483647.
vlan <i>vlan_id</i>		Specifies the VLAN number. Range is 1–4094.
detail		Displays detailed interface information.
process		Displays process-related information.

Command Default None

Command Modes Privileged EXEC mode

Command History	Release	Modification
	12.2(50)SY	Support for this command was introduced.

Usage Guidelines There are no usage guidelines for this command.

Examples This example shows how to display information for IDB interface tengigabitethernet 4:

```
Router# show platform idbhal interface tengigabitethernet 4
```

Related Commands	Command	Description
	platform idbhal	Configures platform IDB management.

show platform idbhal conversion

To view platform IDBHAL conversion information, use the **show platform idbhal conversion** command.

show platform idbhal conversion { **fib** { *lif number* | *ltl-index number* | *mih number* } | *lif number* | *mih number* }

Syntax Description		
fib		Specifies the FIB conversion database.
<i>lif number</i>		Specifies the LIF number in LIF to IDB conversion database. Range: 0–1F3FF.
<i>ltl-index number</i>		Specifies the LTL index number in LTL index to FIBIDB conversion database. Range: 0–7FF.
<i>mih number</i>		Specifies the MIH number in MIH to IDB conversion database. Range: 0–FFFFFFFE.

Defaults There are no defaults for this command.

Command Modes Privileged EXEC mode.

Command History	Release	Modification
	12.2(50)SY	Support for this command was introduced.

Examples This example shows how to view platform hardware IDBHAL conversion for LIF 4:

```
Router# show platform idbhal conversion lif 4
```

Related Commands	Command	Description
	platform idbhal conversion	Configures the platform IDBHAL conversion process.

show platform ip rsvp

To display RSVP information for the platform IP, use the **show platform ip rsvp** command.

```
show platform ip rsvp {interface {async number | auto-template number | ctunnel number |
dialer number | esconphy number | filter number | filtergroup number | gigabitethernet
number | group-async number | longreachethernet number | loopback number | mfr number
| multilink number | null number | port-channel number | portgroup number | pos-channel
number | sysclock number | tengigabitethernet number | tunnel number | vif number |
virtual-template number | virtual-tokenring number | vlan vlan_id | fcpa number | statistics
| voabypassin number | voabypassout number | voafilterin number | voafilterout number |
voain number | voaout number}} | netflow identity-string | statistics identity-string}
```

Syntax Description

interface	Displays the RSVP information for a particular interface.
async number	Specifies the asynchronous interface number. Range is 1–999.
auto-template number	Specifies the auto-template interface number. Range is 1–999.
ctunnel number	Specifies the Ctunnel interface number. Range is 0–2147483647.
dialer number	Specifies the dialer interface number. Range is 0–255.
esconphy number	Specifies the esconPhy interface number.
filter number	Specifies the filter interface number.
filtergroup number	Specifies the filter group interface number.
gigabitethernet number	Specifies the gigabit ethernet interface number.
longreachethernet number	Specifies the long-reach Ethernet interface number.
loopback number	Specifies the loopback interface number. Range is 1–2147483647.
mfr number	Specifies the multilink Frame Relay bundle interface number. Range is 1–2147483647.
multilink number	Specifies the multilink-group interface number. Range is 1–2147483647.
null number	Specifies the null interface number. Range is 0–0.
port-channel number	Specifies the ethernet channel of interfaces. Range is 1–496.
portgroup number	Specifies the portgroup interface number.
pos-channel number	Specifies the PoS channel of interfaces. Range is 1–4094.
sysclock number	Specifies the telecom-bus Clock Controller interface number.
tengigabitethernet number	Specifies the 10-Gigabit Ethernet interface number.
tunnel number	Specifies the tunnel interface number. Range is 1–2147483647.
vif number	Specifies the PGM multicast host interface number. Range is 1–1.
virtual-template number	Specifies the virtual template interface number. Range is 1–200.
virtual-tokenring number	Specifies the virtual token ring interface number. Range is 1–2147483647.
vlan vlan_id	Specifies the VLAN interface number. Range is 1–4094.

fcpa <i>number</i>	Specifies the fibre channel interface number.
control-plane <i>number</i>	Specifies the control plane interface number.
voabypassin <i>number</i>	Specifies the VOA bypass-in interface number.
voabypassout <i>number</i>	Specifies the VOA bypass-out interface number.
voafilterin <i>number</i>	Specifies the VOA filter-in interface number.
voafilterout <i>number</i>	Specifies the VOA filter-out interface number.
voain <i>number</i>	Specifies the VOA in interface number.
voaout <i>number</i>	Specifies the VOA out interface number.
netflow <i>identity-string</i>	Displays information related to NetFlow.
statistics <i>identity-string</i>	Displays statistics information related to NetFlow.

Command Default None

Command Modes Privileged EXEC mode

Command History	Release	Modification
	12.2(50)SY	Support for this command was introduced.

Usage Guidelines There are no usage guidelines for this command.

Examples This example shows how to display the RSVP information for the platform IP with asynchronous interface 4:

```
Router# show platform ip rsvp interface async 4
```

Related Commands	Command	Description
	platform ip rsvp	Configures the platform IP RSVP keyword.

show platform l2transport gre

To display platform details of Layer 2 over generic routing encapsulation (GRE) tunnel, use the **show platform l2transport gre** command.

```
show platform l2transport gre { nodes | summary tunnel _if _number | vlan vlan_id <peerid>
                                clear-counter }
```

Syntax Description		
nodes		Specifies Layer 2 GRE nodes.
summary		Specifies Layer 2 GRE summary information.
<i>tunnel _if _number</i>		Specifies tunnel information by number. Range is 1–4294967295.
vlan <i>vlan_id</i>		Specifies VLAN information. Range is 1–4092.
<i>peerid</i> or <i>peerip</i>		Specifies the virtual connection information between the local node and remote peer, and the traffic statistics.
<i>clear-counter</i>		Clears the traffic statistics for the virtual connection; note the counters are updated every 10 seconds, sometimes you need to wait for 10 seconds for the updated counters.

Command Default	None
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Command Modes	Privileged EXEC mode
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Command History	Release	Modification
	12.2(50)SY	Support for this command was introduced.

Usage Guidelines	There are no usage guidelines for this command.
-------------------------	---

Examples	This example shows how to display platform details of Layer 2 over GRE tunnel 4:
-----------------	--

```
Router# show platform l2transport gre tunnel 4
```

Related Commands	Command	Description
	platform l2transport gre	Configures the platform details of Layer 2 over GRE tunnel.

show platform mrm info

To display platform Match Register Manager (MRM) usage, use the **show platform mrm info** command.

show platform mrm info

Command Default None

Command Modes Privileged EXEC mode

Command History	Release	Modification
	12.2(50)SY	Support for this command was introduced.

Usage Guidelines There are no usage guidelines for this command.

Examples This example shows how to display platform MRM usage:

```
Router# show platform mrm info
```

Related Commands	Command	Description
	platform mrm info	Configures the platform Match Register Manager (MRM) usage.

show platform multicast routing

To display multicast configuration in routing mode, use the **show platform multicast routing** command.

show platform multicast routing {replication}

Syntax Description

replication	Specifies replication mode configuration.
--------------------	---

Command Default

None

Command Modes

Privileged EXEC mode

Command History

Release	Modification
12.2(50)SY	Support for this command was introduced.

Usage Guidelines

There are no usage guidelines for this command.

Examples

This example shows how to display LTL-sharing across VLANs in multicast routing configuration:

```
Router# show platform multicast routing replication
```

Related Commands

Command	Description
platform multicast routing	Configures the multicast routing information for the platform.

show platform nvhmr

To display platform Non-Volatile Health Monitor Record (NVHMR), use the **show platform nvhmr** command.

```
show platform nvhmr { current { all | entry number | summary } | previous { all | entry number | summary } }
```

Syntax Description	current	Specifies NVHMR for the current running instance.
	all	Displays all information on specified NVHMR.
	entry number	Displays information on specified NVHMR for entry number. Range is 0–5.
	summary	Displays summary information for specified NVHMR.
	previous	Specifies NVHMR for the previously ran instance.

Command Default	None
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Command Modes	Privileged EXEC mode.
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Command History	Release	Modification
	12.2(50)SY	Support for this command was introduced.

Usage Guidelines	There are no usage guidelines for this command.
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Examples	This example shows how to display platform NVHMR of current entry number 4:
	Router# show platform nvhmr current entry 4

Related Commands	Command	Description
	platform nvhmr	Configures the platform NVHMR.

show platform qos aggregate policer

To display information about the aggregate policer for platform quality of service (QoS), use the **show platform qos aggregate policer** command in EXEC mode.

show platform qos aggregate policer [*aggregate-name*]

Syntax Description	<i>aggregate-name</i> (Optional) Name of the aggregate policer.	
Command Default	None	
Command Modes	EXEC	
Command History	Release	Modification
	12.2(50)SY	Support for this command was introduced.

Usage Guidelines

Aggregate policing works independently on each Distributed Forwarding Card (DFC)-equipped switching module and independently on the Policy Feature Card 2 (PFC2), which supports any non-DFC-equipped switching modules. Aggregate policing does not combine flow statistics from different DFC-equipped switching modules. You can display aggregate-policing statistics for each DFC-equipped switching module, the PFC2, and any non-DFC-equipped switching modules that are supported by the PFC2.

Examples

This example shows how to display information about the aggregate policer for platform QoS:

```
Router# show platform qos aggregate-policer

ag1 (undefined)
  AgId=0 [ pol1 pol2 ]
ag2 64000 64000 conform-action set-dscp-transmit 56 exceed-action drop
  AgId=0 [ pol3 ]
ag3 32000 32000 conform-action set-dscp-transmit 34 exceed-action drop
```

In the output, the following applies:

- The **AgId** parameter displays the hardware-policer ID and is nonzero if assigned.
- The policy maps using the policer, if any, are listed in the square brackets ([]).
- If there are no policies using the policer, no **AgId** line is displayed.
- If the policer is referred to in policy maps, but has not been defined, [**undefined**] is displayed.

Related Commands

Command	Description
platform qos aggregate-policer	Defines a named aggregate policer for use in policy maps.

show platform qos maps

To display platform quality of service (QoS) mapping information, use the **show platform qos maps** command in privileged EXEC mode.

Cisco 2600, 3660, 3700, 3845, 7200, 7400, and 7500 Series Routers

```
show platform qos maps [cos-dscp | dscp-cos]
```

Cisco 7600 Series Router and Catalyst 6500 Series Switch

```
show platform qos maps [cos-dscp | cos-mutation | dscp-cos | dscp-exp | dscp-mutation |  
exp-dscp | exp-mutation | ip-prec-dscp | policed-dscp]
```

Syntax Description	cos-dscp	(Optional) Displays the class of service (CoS)-to-differentiated services code point (DSCP) map.
	dscp-cos	(Optional) Displays the DSCP-to-CoS map.
	cos-mutation	(Optional) Displays the CoS-mutation map.
	dscp-exp	(Optional) Displays the DSCP-to-exp map.
	dscp-mutation	(Optional) Displays the DSCP-mutation map.
	exp-dscp	(Optional) Displays the exp-to-DSCP map.
	exp-mutation	(Optional) Displays the exp-mutation map.
	ip-prec-dscp	(Optional) Displays the IP-precedence-to-DSCP map.
	policed-dscp	(Optional) Displays the policed-DSCP map.

Command Default	All platform QoS maps are displayed.
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Command Modes	Privileged EXEC (#)
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Command History	Release	Modification
	12.2(50)SY	Support for this command was introduced.

Usage Guidelines	Maps are used to generate an internal DSCP value, which represents the priority of the traffic. Use the show platform qos maps command without keywords to display all maps.
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Examples

The following is sample output from the **show platform qos maps cos-dscp** command displaying the DSCP values to which each CoS value will be mapped:

```
Router# show platform qos maps cos-dscp
```

```
Cos-dscp map:
  cos:  0  1  2  3  4  5  6  7
-----
  dscp:  8  8  8  8 24 32 56 56
```

The following is sample output from the **show platform qos maps dscp-cos** command displaying the CoS values to which each DSCP value will be mapped:

```
Router# show platform qos maps dscp-cos
```

```
Dscp-cos map:
  dscp:  0  8 10 16 18 24 26 32 34 40 46 48 56
-----
  cos:  0  1  1  1  2  2  3  3  4  4  5  6  7
```

This example shows how to display the QoS-map settings:

```
Router# show platform qos maps
```

```
Policed-dscp map:
  0  1  2  3  4  5  6  7  8  9
-----
 00:  00 01 02 03 04 05 06 07 08 09
 10:  10 11 12 13 14 15 16 17 18 19
 20:  20 21 22 23 24 25 26 27 28 29
 30:  30 31 32 33 34 35 36 37 38 39
 40:  40 41 42 43 44 45 46 47 48 49
 50:  50 51 52 53 54 55 56 57 58 59
 60:  60 61 62 63
```

```
Dscp-cos map:
  0  1  2  3  4  5  6  7  8  9
-----
 00:  00 00 00 00 00 00 00 00 01 01
 10:  01 01 01 01 01 01 02 02 02 02
 20:  02 02 02 02 03 03 03 03 03 03
 30:  03 03 04 04 04 04 04 04 04 04
 40:  05 05 05 05 05 05 05 05 06 06
 50:  06 06 06 06 06 06 07 07 07 07
 60:  07 07 07 07
```

```
Cos-dscp map:
  cos:  0  1  2  3  4  5  6  7
-----
  dscp:  0  8 16 24 32 40 48 56
```

```
IpPrecedence-dscp map:
  ipprec:  0  1  2  3  4  5  6  7
-----
  dscp:  0  8 16 24 32 40 48 56
```

```
Router#
```

In the policed DSCP and DSCP-CoS map displays, the new DSCP or CoS values are shown in the body of the table. The decade of the original DSCP value is shown in the left-side vertical column, and the units digit is in the top row. For example, the DSCP-CoS map indicates that if the original DSCP value is between 32 and 39, the CoS will be set to 4.

The CoS-DSCP and IP precedence-DSCP maps display the DSCP values to which each CoS or IP precedence value will be mapped. For example, the IP precedence-DSCP map indicates that if the original IP precedence value is 3, the DSCP will be set to 24.

This example shows how to verify the configuration of DSCP-mutation mapping:

```
Router# show platform qos maps | begin DSCP mutation

DSCP mutation map mutmap1:                               (dscp= d1d2)
  d1 : d2 0  1  2  3  4  5  6  7  8  9
-----
  0 :    00 01 02 03 04 05 06 07 08 09
  1 :    10 11 12 13 14 15 16 17 18 19
  2 :    20 21 22 23 24 25 26 27 28 29
  3 :    08 31 32 33 34 35 36 37 38 39
  4 :    40 41 42 43 44 45 46 47 48 49
<...Output Truncated...>
Router#
```

In the DSCP mutation map display, the marked-down DSCP values are shown in the body of the table. The first digit (d1) of the original DSCP value is in the left-side vertical column labeled d1, and the second digit (d2) is in the top row. For example, a DSCP value of 30 maps to a new DSCP value of 08.

Related Commands

Command	Description
platform qos map	Defines the CoS-to-DSCP map and DSCP-to-CoS map.
platform qos map cos-dscp	Defines the ingress CoS-to-DSCP map for trusted interfaces.
platform qos map cos-mutation	Maps a packet's CoS to a new CoS value.
platform qos map dscp-cos	Defines an egress DSCP-to-CoS map.
platform qos map dscp-mutation	Defines a named DSCP mutation map.
platform qos map ip-prec-dscp	Defines an ingress IP precedence-to-DSCP map for trusted interfaces.
platform qos map policed-dscp	Sets the mapping of policed DSCP values to marked-down DSCP values.

show platform redundancy

To display platform-specific Constellation WAN (CWAN) redundancy information, use the **show platform redundancy** command in privileged EXEC mode.

```
show platform redundancy { atm | bias | ccb slot-number cpu-number | cwpa-ce3 | cwpa-ct3 |
cwpa-e1 | cwpa-stm1 | cwpa-t1 | frame-relay | hdlc | if-config { slot-number cpu-number
[bay-number] | default-retvals } | mlp | multilink-vc | osm-chocx | osm-ct3 | ppp | shadowstate
| spa-chocx | spa-ct3 | switchover }
```

Syntax Description		
atm		Displays CWAN ATM redundancy state information.
bias		Configures platform redundancy boot bias.
ccb		Displays the CWAN Configuration Control Block (CCB) list.
<i>slot-number</i>		Slot number.
<i>cpu-number</i>		CPU number.
cwpa-ce3		Displays CWAN port adapter (CWPA) Channelized E3 (CE3) redundancy state information.
cwpa-ct3		Displays CWPA-CT3 redundancy state information.
cwpa-e1		Displays CWPA-E1 redundancy state information.
cwpa-stm1		Displays CWPA Synchronous Transport Module level-1 (STM-1) virtual circuit (VC) information.
cwpa-t1		Displays CWPA-T1 redundancy state information.
frame-relay		Displays CWAN Frame Relay redundancy state information.
hdlc		Displays CWAN High-Level Data Link Control (HDLC) redundancy state information.
if-config		Displays the CWAN IF-configuration list.
<i>bay-number</i>		(Optional) Shared Port Adapter (SPA) bay number.
default-retvals		Displays default IF-configuration return values.
mlp		Displays CWAN Multilink Point-to-Point Protocol (MLP) redundancy state information.
multilink-vc		Displays CWAN Multilink VC information.
osm-chocx		Displays CWAN Optical Services Module (OSM) Channelized OC-12/OC-3 line card (CHOCX) redundancy state information.
osm-ct3		Displays CWAN OSM-CT3 redundancy state information.
ppp		Displays CWAN PPP redundancy state information.
shadowstate		Displays the CWAN interface descriptor block (IDB) shadow state.
spa-chocx		Displays CHOCX SPA VC information.
spa-ct3		Displays CT3 SPA VC information.
switchover		Displays CWAN switchover redundancy information.

Command Default None

Command Modes

Privileged EXEC (#)

Command History	Release	Modification
	12.2(50)SY	Support for this command was introduced.

Examples

The following is sample output from the **show platform redundancy** command with the **if-config** keyword. The fields are self-explanatory.

```
Router# show platform redundancy if-config 4 0

Current number of elements = 0
Current maximum elements = 128
List was grown = 0 times
Number of elements sorted = 0
List errors = 0
List flags = 0x1E
Current element pointer = 0x0
List pointer = 0x50A27438
+-----+-----+-----+-----+-----+-----+-----+-----+
| C=Command T=Type P=Port t=timedOut D=Dirty S=Sync      |
+-----+-----+-----+-----+-----+-----+-----+-----+
|  C  | T  | P  | key address | t  | D  | S  | value      |
+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+-----+-----+-----+-----+
```

Related Commands	Command	Description
	show platform	Displays platform information.

show platform software acl

To display platform software ACL, use the **show platform software acl** command.

```
show platform software acl { accounting-tbl { index number } | acct-xlt-tbl { in { index number } |
out { index number } } | appid { in number | out number } | capmap { tcam { A { index | module }
| B { index | module } } } | cm-readiness { module } | compaction { detail { module } | label
{ tcam { A | B } } | module number } | entry { module } | label { tcam { A | B } } | lou { index number
| module number } | tcam { count { module } } | tcp-flags-tbl { detail { module } | index number
| module number } | v6-extnhdr-tbl { detail | index | module } }
```

Syntax Description		
accounting-tbl		Specifies the accounting table.
index number		Specifies the accounting index. Range is 0–4095.
acct-xlt-tbl		Specifies the accounting table.
in		Specifies the in Acct Xlt entries. Index value Range is 0–255.
out		Specifies the out Acct Xlt entries. Index value Range is 0–255.
appid		Specifies the ACL application ID shadow show commands.
in number		Specifies the in application ID entries. Range is 1–4294967295.
out number		Specifies the out application ID entries. Range is 1–4294967295.
capmap		Specifies the software cap map entries.
tcam		Specifies the software cap map entries.
A		Specifies the entries in cap map A.
B		Specifies the entries in cap map B.
module		Specifies the module.
cm-readiness		Specifies the CM readiness for requests.
compaction		Specifies the software compaction contents.
detail		Specifies the software compaction contents in detail.
label		Specifies the software compaction contents for label.
entry		Specifies the ACL entry matching a pattern (CPU intensive).
lou		Specifies the software LOU contents. Index value range is 0–103.
count		Specifies the software TCAM count.
tcp-flags-tbl		Specifies the software tcp-flags table. Index value range is 0–15.
v6-extnhdr-tbl		Specifies the software v6-extn-hdr table.
detail		Specifies the v6 extension hdr table detail.

Defaults None

Command Modes Privileged EXEC mode

Command History

Release	Modification
12.2(50)SY	Support for this command was introduced.

Examples

This example shows how to display platform software ACL application ID Acct-Xlt in entry 4:

```
Router# show platform software acl appid in 4
```

Related Commands

Command	Description
platform software acl	Configures the platform software ACL.

show platform software debug

To display platform software debug logging details, use the **show platform software debug** command.

show platform software debug

Syntax Description	This command has no arguments or keywords.
---------------------------	--

Defaults	None
-----------------	------

Command Modes	Privileged EXEC mode
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Command History	Release	Modification
	12.2(50)SY	Support for this command was introduced.

Usage Guidelines	There are no usage guidelines for this command.
-------------------------	---

Examples	This example shows how to display the platform software debug logging details:
	Router# show platform software debug

Related Commands	Command	Description
	platform software debug	Configures the platform software debug logging details.

show platform software e8-recovery

To display platform software EARL8 print recovery patch settings and occurrences, use the **show platform software e8-recovery** command.

show platform software e8-recovery { config | counter | data | history }

Syntax Description

config	Specifies print recovery patch settings.
counter	Specifies print recovery patch occurrences traffic counter.
data	Specifies print recovery patch occurrences register data.
history	Specifies print recovery patch occurrences.

Defaults

None

Command Modes

Privileged EXEC mode

Command History

Release	Modification
12.2(50)SY	Support for this command was introduced.

Usage Guidelines

There are no usage guidelines for this command.

Examples

This example shows how to display the platform EARL8 software print recovery patch settings:

```
Router# show platform software e8-recovery config
```

Related Commands

Command	Description
platform software e8-recovery	Configures the platform EARL8 software print recovery patch settings and occurrences.