

APPENDIX C

# **Cisco ME 2400 Ethernet Access Switch Show Platform Commands**

This appendix describes the **show platform** privileged EXEC commands that have been created or changed for use with the Cisco ME 2400 Ethernet Access switch. These commands display information helpful in diagnosing and resolving internetworking problems and should be used only under the guidance of Cisco technical support staff.

# show platform acl

Use the **show platform acl** privileged EXEC command to display platform-dependent access control list (ACL) manager information.

show platform acl {interface interface-id | label label-number [detail] | statistics asic-number | usage asic-number [summary] | vlan vlan-id} [ | {begin | exclude | include} | expression]

#### **Syntax Description**

interface interface-id	Display per-interface ACL manager information for the specified interface. The interface can be a physical interface or a VLAN.
label label-number [detail]	Display per-label ACL manager information. The <i>label-number</i> range is 0 to 255. The keyword has this meaning:
	• <b>detail</b> —(Optional) Display detailed ACL manager label information.
statistics asic-number	Display per-ASIC ACL statistics. The <i>asic-number</i> is the port ASIC number, always 0.
usage asic-number [summary]	Display per-ASIC ACL usage. The <i>asic-number</i> is the port ASIC number, always 0. The keyword has this meaning:
	• summary—(Optional) Display brief usage information.
vlan vlan-id	Display per-VLAN ACL manager information. The <i>vlan-id</i> range is from 1 to 4094.
begin	(Optional) Display begins with the line that matches the <i>expression</i> .
exclude	(Optional) Display excludes lines that match the expression.
include	(Optional) Display includes lines that match the specified expression.
expression	Expression in the output to use as a reference point.

# **Command Modes**

Privileged EXEC

### **Command History**

Release	Modification
12.2(25)EX	This command was introduced.

#### **Usage Guidelines**

You should use this command only when you are working directly with a technical support representative while troubleshooting a problem. Do not use this command unless a technical support representative asks you to do so.

# show platform configuration

Use the **show platform configuration** privileged EXEC command to display platform-dependent configuration-manager related information.

show platform configuration {config-output | default | running | startup} [ | {begin | exclude | include} | expression]

#### **Syntax Description**

config-output	Display the output of the last auto-configuration application.
default	Display whether or not the system is running the default configuration.
running	Display a snapshot of the backed-up running configuration on the local switch.
startup	Display a snapshot of the backed-up startup configuration on the local switch.
begin	(Optional) Display begins with the line that matches the expression.
exclude	(Optional) Display excludes lines that match the expression.
include	(Optional) Display includes lines that match the specified expression.
expression	Expression in the output to use as a reference point.

#### **Command Modes**

Privileged EXEC

#### **Command History**

Release	Modification
12.2(25)EX	This command was introduced.

#### **Usage Guidelines**

You should use this command only when you are working directly with a technical support representative while troubleshooting a problem. Do not use this command unless a technical support representative asks you to do so.

# show platform etherchannel

Use the **show platform etherchannel** privileged EXEC command to display platform-dependent EtherChannel information.

show platform etherchannel {flags | time-stamps} [ | {begin | exclude | include} | expression]

# **Syntax Description**

flags	Display EtherChannel port flags.
time-stamps	Display EtherChannel time stamps.
begin	(Optional) Display begins with the line that matches the <i>expression</i> .
exclude	(Optional) Display excludes lines that match the <i>expression</i> .
include	(Optional) Display includes lines that match the specified <i>expression</i> .
expression	Expression in the output to use as a reference point.

#### **Command Modes**

Privileged EXEC

#### **Command History**

Release	Modification
12.2(25)EX	This command was introduced.

#### **Usage Guidelines**

You should use this command only when you are working directly with a technical support representative while troubleshooting a problem. Do not use this command unless a technical support representative asks you to do so.

# show platform forward

Use the **show platform forward** privileged EXEC command for an interface to specify how the hardware would forward a frame that matches the specified parameters.

show platform forward interface-id [vlan vlan-id] src-mac dst-mac [l3protocol-id] [sap | snap] [cos cos] [ip src-ip dst-ip [frag field] [dscp dscp] {l4protocol-id | icmp icmp-type icmp-code | igmp igmp-version igmp-type | tcp src-port dst-port flags | udp src-port dst-port} [ | {begin | exclude | include} expression]

### **Syntax Description**

interface-id	The input physical interface, the port on which the packet comes in to the switch (including type and port number).
vlan vlan-id	(Optional) Input VLAN ID. The range is 1 to 4094. If not specified, and the input interface is not a routed port, the default is 1.
src-mac	48-bit source MAC address.
dst-mac	48-bit destination MAC address.
l3protocol-id	(Optional) The Layer 3 protocol used in the packet. The number is a value 0 to 65535.
sap	(Optional) Service access point (SAP) encapsulation type.
snap	(Optional) Subnetwork Access Protocol (SNAP) encapsulation type.
cos cos	(Optional) Class of service (CoS) value of the frame. The range is 0 to 7.
ip src-ip dst-ip	(Optional, but required for IP packets) Source and destination IP addresses in dotted decimal notation.
frag field	(Optional) The IP fragment field for a fragmented IP packet. The range is 0 to 65535.
dscp dscp	(Optional) Differentiated Services Code Point (DSCP) field in the IP header. The range is 0 to 63.
l4protocol-id	The numeric value of the Layer 4 protocol field in the IP header. The range is 0 to 255. For example, 47 is generic routing encapsulation (GRE), and 89 is Open Shortest Path First (OSPF). If the protocol is TCP, UDP, ICMP, or IGMP, you should use the appropriate keyword instead of a numeric value.
icmp icmp-type icmp-code	Internet Control Message Protocol (ICMP) parameters. The <i>icmp-type</i> and <i>icmp-code</i> ranges are 0 to 255.
<b>igmp</b> igmp-version igmp-type	Internet Group Management Protocol (IGMP) parameters. The <i>igmp-version</i> range is 1 to 15; the <i>igmp-type</i> range is 0 to 15.
tcp src-port dst-port flags	TCP parameters: TCP source port, destination port, and the numeric value of the TCP flags byte in the header. The <i>src-port</i> and <i>dst-port</i> ranges are 0 to 65535. The flag range is from 0 to 1024.
udp src-port dst-port	User Datagram Protocol (UDP) parameters. The <i>src-port</i> and <i>dst-port</i> ranges are 0 to 65535.
begin	(Optional) Display begins with the line that matches the expression.
exclude	(Optional) Display excludes lines that match the expression.
include	(Optional) Display includes lines that match the specified expression.



Though visible in the command-line help strings, the ipv6 keyword is not supported.

#### **Command Modes**

Privileged EXEC

#### **Command History**

Release	Modification
12.2(25)EX	This command was introduced.

### **Usage Guidelines**

You should use this command only when you are working directly with a technical support representative while troubleshooting a problem. Do not use this command unless a technical support representative asks you to do so.

Expressions are case sensitive. For example, if you enter | **exclude output**, the lines that contain *output* do not appear, but the lines that contain *Output* appear.

### Examples

See the "Troubleshooting" chapter of the software configuration guide for this release for examples of the **show platform forward** command output displays and what they mean.

# show platform ip igmp snooping

Use the **show platform ip igmp snooping** privileged EXEC command to display platform-dependent Internet Group Management Protocol (IGMP) snooping information.

show platform ip igmp snooping {all | control [di] | counters | flood [vlan vlan-id] | group
ip-address | hardware | retry [count | local [count] | remote [count]]} [ | {begin | exclude |
include} expression]

# **Syntax Description**

all	Display all IGMP snooping platform IP multicast information.
control [di]	Display IGMP snooping control entries. The keyword has this meaning:
	• <b>di</b> —(Optional) Display IGMP snooping control destination index entries.
counters	Display IGMP snooping counters.
flood [vlan vlan-id]	Display IGMP snooping flood information. The keyword has this meaning:
	• <b>vlan</b> <i>vlan-id</i> —(Optional) Display flood information for the specified VLAN. The range is 1 to 4094.
group ip-address	Display the IGMP snooping multicast group information, where <i>ip-address</i> is the IP address of the group.
hardware	Display IGMP snooping information loaded into hardware.
retry [count   local [count]	Display IGMP snooping retry information. The keywords have these meanings:
	• count—(Optional) Display only the retry count.
	• local—(Optional) Display local retry entries.
remote [count]	Display remote entries. The keyword has this meaning:
	• <b>count</b> —(Optional) Display only the remote count.
l begin	(Optional) Display begins with the line that matches the expression.
l exclude	(Optional) Display excludes lines that match the expression.
include	(Optional) Display includes lines that match the specified expression.
expression	Expression in the output to use as a reference point.

#### **Command Modes**

Privileged EXEC

### **Command History**

Release	Modification	
12.2(25)EX	This command was introduced.	

### **Usage Guidelines**

You should use this command only when you are working directly with a technical support representative while troubleshooting a problem. Do not use this command unless a technical support representative asks you to do so.

# show platform layer4op

Use the **show platform layer4op** privileged EXEC command to display platform-dependent Layer 4 operator information.

show platform layer4op {acl | qos [port-asic]} {and-or | map | or-and | vcu} [ | {begin | exclude | include} | expression]

#### **Syntax Description**

acl	Display access control list (ACL) Layer 4 operators information.
qos [port-asic]	Display quality of service (QoS) Layer 4 operators information. The keyword has this meaning:
	• port-asic—(Optional) QoS port ASIC number. The value can be 0 or 1.
and-or	Display AND-OR registers information.
map	Display select map information.
or-and	Display OR-AND registers information.
vcu	Display value compare unit (VCU) register information.
begin	(Optional) Display begins with the line that matches the <i>expression</i> .
exclude	(Optional) Display excludes lines that match the <i>expression</i> .
include	(Optional) Display includes lines that match the specified expression.
expression	Expression in the output to use as a reference point.

### **Command Modes**

Privileged EXEC

#### **Command History**

Release	Modification
12.2(25)EX	This command was introduced.

### **Usage Guidelines**

You should use this command only when you are working directly with a technical support representative while troubleshooting a problem. Do not use this command unless a technical support representative asks you to do so.

# show platform mac-address-table

Use the **show platform mac-address-table** privileged EXEC command to display platform-dependent MAC address table information.

show platform mac-address-table [aging-array | hash-table | mac-address mac-address] [vlan vlan-id]] [ | {begin | exclude | include} | expression]

#### **Syntax Description**

aging-array	(Optional) Display the MAC address table aging array.
hash-table	(Optional) Display the MAC address table hash table.
mac-address mac-address	(Optional) Display the MAC address table MAC address information, where <i>mac-address</i> is the 48-bit hardware address.
vlan vlan-id	(Optional) Display information for the specified VLAN. The range is 1 to 4094.
begin	(Optional) Display begins with the line that matches the <i>expression</i> .
exclude	(Optional) Display excludes lines that match the expression.
include	(Optional) Display includes lines that match the specified expression.
expression	Expression in the output to use as a reference point.

#### **Command Modes**

Privileged EXEC

#### **Command History**

Release	Modification
12.2(25)EX	This command was introduced.

#### **Usage Guidelines**

You should use this command only when you are working directly with a technical support representative while troubleshooting a problem. Do not use this command unless a technical support representative asks you to do so.

# show platform messaging

Use the **show platform messaging** privileged EXEC command to display platform-dependent application and performance message information.

show platform messaging {application [incoming | outgoing | summary] | hiperf
[class-number]} [ | {begin | exclude | include} | expression]

#### **Syntax Description**

application [incoming   outgoing   summary]	Display application message information. The keywords have these meanings:
	• <b>incoming</b> —(Optional) Display only information about incoming application messaging requests.
	<ul> <li>outgoing—(Optional) Display only information about incoming application messaging requests.</li> </ul>
	<ul> <li>summary—(Optional) Display summary information about all application messaging requests.</li> </ul>
hiperf [class-number]	Display outgoing high-performance message information. Specify the <i>class-number</i> option to display information about high-performance messages for this class number. The range is 0 to 36.
begin	(Optional) Display begins with the line that matches the <i>expression</i> .
exclude	(Optional) Display excludes lines that match the expression.
include	(Optional) Display includes lines that match the specified expression.
expression	Expression in the output to use as a reference point.

#### **Command Modes**

Privileged EXEC

#### **Command History**

Release	Modification
12.2(25)EX	This command was introduced.

#### **Usage Guidelines**

You should use this command only when you are working directly with a technical support representative while troubleshooting a problem. Do not use this command unless a technical support representative asks you to do so.

# show platform monitor

Use the **show platform monitor** privileged EXEC command to display platform-dependent Switched Port Analyzer (SPAN) information.

**show platform monitor** [session session-number] [ | {begin | exclude | include} | expression]

#### **Syntax Description**

session session-number	(Optional) Display SPAN information for the specified SPAN session. The range is 1 to 66.
begin	(Optional) Display begins with the line that matches the <i>expression</i> .
exclude	(Optional) Display excludes lines that match the <i>expression</i> .
include	(Optional) Display includes lines that match the specified <i>expression</i> .
expression	Expression in the output to use as a reference point.

#### **Command Modes**

Privileged EXEC

#### **Command History**

Release	Modification
12.2(25)EX	This command was introduced.

# **Usage Guidelines**

You should use this command only when you are working directly with a technical support representative while troubleshooting a problem. Do not use this command unless a technical support representative asks you to do so.

# show platform mvr table

Use the **show platform mvr table** privileged EXEC command to display the platform-dependent Multicast VLAN Registration (MVR) multi-expansion descriptor (MED) group mapping table.

show platform mvr table [ | {begin | exclude | include} | expression]

#### **Syntax Description**

begin	(Optional) Display begins with the line that matches the expression.
exclude	(Optional) Display excludes lines that match the expression.
include	(Optional) Display includes lines that match the specified expression.
expression	Expression in the output to use as a reference point.

#### **Command Modes**

Privileged EXEC

### **Command History**

Release	Modification
12.2(25)EX	This command was introduced.

#### **Usage Guidelines**

You should use this command only when you are working directly with a technical support representative while troubleshooting a problem. Do not use this command unless a technical support representative asks you to do so.

# show platform pm

Use the **show platform pm** privileged EXEC command to display platform-dependent port-manager information.

show platform pm {counters | group-masks | idbs {active-idbs | deleted-idbs} | if-numbers | link-status | platform-block | port-info interface-id | vlan {info | line-state} | [ | {begin | exclude | include} | expression]

### **Syntax Description**

counters	Display module counters information.
group-masks	Display EtherChannel group masks information.
idbs {active-idbs   deleted-idbs}	Display interface data block (IDB) information. The keywords have these meanings:
	• active-idbs—Display active IDB information.
	• <b>deleted-idbs</b> —Display deleted and leaked IDB information.
if-numbers	Display interface numbers information.
link-status	Display local port link status information.
platform-block	Display platform port block information.
port-info interface-id	Display port administrative and operation fields for the specified interface.
vlan {info   line-state}	Display platform VLAN information. The keywords have these meanings:
	• info—Display information for active VLANs.
	• line-state—Display line-state information.
begin	(Optional) Display begins with the line that matches the <i>expression</i> .
l exclude	(Optional) Display excludes lines that match the expression.
include	(Optional) Display includes lines that match the specified expression.
expression	Expression in the output to use as a reference point.



Though visible in the command-line help strings, the **stack-view** keyword is not supported.

## **Command Modes**

Privileged EXEC

### **Command History**

Release	Modification
12.2(25)EX	This command was introduced.

# **Usage Guidelines**

You should use this command only when you are working directly with your technical support representative while troubleshooting a problem. Do not use this command unless your technical support representative asks you to do so.

# show platform policer cpu

Use the **show platform policer cpu** privileged EXEC command to display CPU control-plane policer statistics per feature or the indexes and the corresponding feature for the specified port.

show platform policer cpu {classification | interface interface - id} [ | {begin | exclude | include} expression]

#### **Syntax Description**

classification	Displays policer statistics per feature.
interface interface-id	Display the policer indexes for a specific interface.
begin	(Optional) Display begins with the line that matches the <i>expression</i> .
l exclude	(Optional) Display excludes lines that match the <i>expression</i> .
include	(Optional) Display includes lines that match the specified expression.
expression	Expression in the output to use as a reference point.

#### **Command Modes**

Privileged EXEC

#### **Command History**

Release	Modification
12.2(25)EX	This command was introduced.

#### **Usage Guidelines**

For CPU protection of user network interfaces (UNIs) and enhanced network interfaces (ENIs), the switch pre-allocates the 27 CPU protection policers, numbered 0 to 26. A policer of 26 means a drop policer; any traffic type shown as 26 on any port is dropped. A policer of a value of 0 to 25 means that a rate-limiting policer is assigned to the port for the control protocol. A policer value of 255 means that no policer is assigned to a control protocol. Network node interfaces (NNIs) have no policers assigned.

Expressions are case sensitive. For example, if you enter I **exclude output**, the lines that contain *output* are not displayed, but the lines that contain *Output* are displayed.

#### **Examples**

This is an example of output from the **show platform policer cpu classification** command:

Switch#	show	platform	policer	cpu	classification
======	=====	=======	=======		
SWITCH	1				
======	=====	-======			==============

	=========	=======
Feature	Bytes	Frames
=======================================	=========	=======
STP	3912792	61278
LACP	0	0
8021X	0	0
RSVD_STP	0	0
PVST_PLUS	0	0
CDP	1012542	2552
DTP	131264	2051
UDLD	0	0
PAGP	0	0

VTP	0	0
CISCO_L2	0	0
KEEPALIVE	0	0
CFM	0	0
SWITCH_MAC	0	0
SWITCH_ROUTER_MAC	896	14
SWITCH_IGMP	289408	4522
SWITCH L2PT	0	0

This example of the output from the **show platform policer cpu interface** command shows the default policer configuration for a UNI. Because the port is Fast Ethernet 1, the identifier for rate-limited protocols is 0; a display for Fast Ethernet port 5 would display an identifier of 4. The *Policer Index* refers to the specific protocol. The ASIC number indicates when the policer is on a different ASIC.

Because UNIs do not support STP, CDP, LLDP, LACP, and PAgP, these packets are dropped (physical policer of 26). These protocols are disabled by default on ENIs as well, but you can enable them. When enabled on ENIs, the control packets are rate-limited and a rate-limiting policers is assigned to the port for these protocols (physical policer of 22).

Switch# show platform policer cpu interface fastethernet 0/3 Policers assigned for CPU protection

Feature	Policer	Physical	Asic
	Index	Policer	Num
=======================================		==========	======
Fa0/1			
STP	1	26	0
LACP	2	26	0
8021X	3	26	0
RSVD_STP	4	26	0
PVST_PLUS	5	26	0
CDP	6	26	0
LLDP	7	26	0
DTP	8	26	0
UDLD	9	26	0
PAGP	10	26	0
VTP	11	26	0
CISCO_L2	12	26	0
KEEPALIVE	13	0	0
CFM	14	255	0
SWITCH_MAC	15	26	0
SWITCH_ROUTER_MAC	16	26	0
SWITCH_IGMP	17	0	0
SWITCH_L2PT	18	26	0

This example shows the policers assigned to a ENI when control protocols are enabled on the interface. A value of 22 indicates that protocol packets are rate-limited for that protocol. When the protocol is not enabled, the defaults are the same as for a UNI.

Switch# show platform policer cpu interface fastethernet0/23

Policers	assigned	for	CPU	protection
----------	----------	-----	-----	------------

=======================================	=========	========	======
Feature	Policer	Physical	Asic
	Index	Policer	Num
=======================================			======
Fa0/23			
STP	1	26	0
LACP	2	22	0
8021X	3	26	0
RSVD_STP	4	26	0
PVST_PLUS	5	26	0
CDP	6	22	0
LLDP	7	26	0

DTP	8	26	0
UDLD	9	26	0
PAGP	10	26	0
VTP	11	26	0
CISCO_L2	12	22	0
KEEPALIVE	13	22	0
CFM	14	255	0
SWITCH_MAC	15	26	0
SWITCH_ROUTER_MAC	16	26	0
SWITCH_IGMP	17	22	0
SWITCH L2PT	18	22	0

This example shows the default policers assigned to NNIs. Most protocols have no policers assigned to NNIs. A value of 255 means that no policer is assigned to the port for the protocol.

Switch #show platform policer cpu interface gigabitethernet 0/1 Policers assigned for CPU protection

=======================================	=======================================			
Feature	Policer Index	Physical Policer	Asic Num	
Gi0/1	===========	=========	======	
STP	1	255	0	
LACP	2	255	0	
8021X	3	255	0	
RSVD_STP	4	255	0	
PVST_PLUS	5	255	0	
CDP	6	255	0	
LLDP	7	255	0	
DTP	8	255	0	
UDLD	9	255	0	
PAGP	10	255	0	
VTP	11	255	0	
CISCO_L2	12	255	0	
KEEPALIVE	13	255	0	
CFM	14	255	0	
SWITCH_MAC	15	255	0	
SWITCH_ROUTER_MAC	16	255	0	
SWITCH_IGMP	17	255	0	
SWITCH_L2PT	18	255	0	

### **Related CommandsS**

Command	Description
show policer cpu uni-eni	Displays control-plane policer information for the switch.

# show platform port-asic

Use the **show platform port-asic** privileged EXEC command to display platform-dependent port application-specific integrated circuit (ASIC) register information.

```
show platform port-asic {cpu-queue-map-table [asic number | port number [asic number]] |
dest-map index number | etherchannel-info [asic number | port number [asic number]] |
exception [asic number | port number [asic number]] | global-status [asic number |
port number [asic number]] | learning [asic number | port number [asic number]] |
mac-info [asic number | port number [asic number]] | mvid [asic number] |
packet-info-ram [asic number | index number [asic number]] |
port-info [asic number | port number [asic number]] |
prog-parser [asic number | port number [asic number]] |
receive {buffer-queue | port-fifo | supervisor-sram} [asic number | port number [asic number]] |
stats {drop | enqueue | miscellaneous | supervisor} [asic number | port number [asic number]] |
transmit {port-fifo | queue | supervisor-sram} [asic number | port number [asic number]]
vct [asic number | port number [asic number]]}
[| {begin | exclude | include} expression]
```

#### **Syntax Description**

cpu-queue-map-table [asic number   port number	Display the CPU queue-map table entries. The keywords have these meanings:  • asic number—(Optional) Display information for the specified ASIC. The range is 0 to 1.		
[asic number]]			
	• <b>port</b> <i>number</i> —(Optional) Display information for the specified port and ASIC number. The range is 0 to 27.		
dest-map index number	Display destination-map information for the specified index. The range is 0 to 65535.		
etherchannel-info [asic number   port number [asic number]]	Display the contents of the EtherChannel information register. The keywords have these meanings:		
	• <b>asic</b> <i>number</i> —(Optional) Display information for the specified ASIC. The number is always 0.		
	• <b>port</b> <i>number</i> —(Optional) Display information for the specified port and ASIC number. The range is 0 to 27, where 0 is the supervisor and 1 to 25 are the ports.		
exception [asic number   port number [asic number]]	Display the exception-index register information. The keywords have these meanings:		
	• <b>asic</b> <i>number</i> —(Optional) Display information for the specified ASIC. The number is always 0.		
	• <b>port</b> <i>number</i> —(Optional) Display information for the specified port and ASIC number. The range is 0 to 27, where 0 is the supervisor and 1 to 25 are the ports.		

global-status [asic number   port number [asic number]]	Display global and interrupt status. The keywords have these meanings:
	• <b>asic</b> <i>number</i> —(Optional) Display information for the specified ASIC. The number is always 0.
	• <b>port</b> <i>number</i> —(Optional) Display information for the specified port and ASIC number. The range is 0 to 27, where 0 is the supervisor and 1 to 25 are the ports.
learning [asic number   port number [asic number]]	Display entries in the learning cache. The keywords have these meanings:
	• <b>asic</b> <i>number</i> —(Optional) Display information for the specified ASIC. The number is always 0.
	• <b>port</b> <i>number</i> —(Optional) Display information for the specified port and ASIC number. The range is 0 to 27, where 0 is the supervisor and 1 to 25 are the ports.
mac-info [asic number   port number [asic number]]	Display the contents of the MAC information register. The keywords have these meanings:
	• <b>asic</b> <i>number</i> —(Optional) Display information for the specified ASIC. The number is always 0.
	• <b>port</b> <i>number</i> —(Optional) Display information for the specified port and ASIC number. The range is 0 to 27, where 0 is the supervisor and 1 to 25 are the ports.
mvid [asic number]	Display the mapped VLAN ID table. The keyword has this meaning:
	• <b>asic</b> <i>number</i> —(Optional) Display information for the specified ASIC. The number is always 0.
<pre>packet-info-ram [asic number   index number [asic number]]</pre>	Display the packet information RAM. The keywords have these meanings:
	• <b>asic</b> <i>number</i> —(Optional) Display information for the specified ASIC. The number is always 0.
	• <b>index</b> <i>number</i> —(Optional) Display information for the specified packet RAM index number and ASIC number. The range is 0 to 63.
port-info [asic number   port number [asic number]]	Display port information register values. The keywords have these meanings:
	• <b>asic</b> <i>number</i> —(Optional) Display information for the specified ASIC. The number is always 0.
	• <b>port</b> <i>number</i> —(Optional) Display information for the specified port and ASIC number. The range is 0 to 27, where 0 is the supervisor and 1 to 25 are the ports.

<pre>prog-parser [asic number   port number [asic number]]</pre>	Display the programmable parser tables. The keywords have these meanings:		
	• <b>asic</b> <i>number</i> —(Optional) Display information for the specified ASIC. The number is always 0.		
	• <b>port</b> <i>number</i> —(Optional) Display information for the specified port and ASIC number. The range is 0 to 27, where 0 is the supervisor and 1 to 25 are the ports.		
receive { buffer-queue   port-fifo	Display receive information. The keywords have these meanings:		
<pre>supervisor-sram { [asic number   port number [asic number]]</pre>	• <b>buffer-queue</b> —Display the buffer queue information.		
port number [asic number]]	• <b>port-fifo</b> —Display the port-FIFO information.		
	• <b>supervisor-sram</b> —Display the supervisor static RAM (SRAM) information.		
	• <b>asic</b> <i>number</i> —(Optional) Display information for the specified ASIC. The number is always 0.		
	• <b>port</b> <i>number</i> —(Optional) Display information for the specified port and ASIC number. The range is 0 to 27, where 0 is the supervisor and 1 to 25 are the ports.		
span [vlan-id   asic number]	Display the Switched Port Analyzer (SPAN)-related information. The keywords have these meanings:		
	• <i>vlan-id</i> —(Optional) Display information for the specified VLAN. The range is 0 to 1023.		
	• <b>asic</b> <i>number</i> —(Optional) Display information for the specified ASIC. The number is always 0.		
stats {drop   enqueue   miscellaneous   supervisor} [asic	Display raw statistics for the port ASIC. The keywords have these meanings:		
number   <b>port</b> number [ <b>asic</b> number]]	• drop—Display drop statistics.		
number]]	• enqueue—Display enqueue statistics.		
	• miscellaneous—Display miscellaneous statistics.		
	• <b>supervisor</b> —Display supervisor statistics.		
	• <b>asic</b> <i>number</i> —(Optional) Display information for the specified ASIC. The number is always 0.		
	• <b>port</b> <i>number</i> —(Optional) Display information for the specified port and ASIC number. The range is 0 to 27, where 0 is the supervisor and 1 to 25 are the ports.		

transmit {port-fifo   queue	Display transmit information. The keywords have these meanings:
supervisor-sram   [asic number   port number [asic number]]	• <b>port-fifo</b> —Display the contents of the port-FIFO information register.
	• queue—Display the contents of the queue information register.
	• <b>supervisor-sram</b> —Display supervisor SRAM information.
	• <b>asic</b> <i>number</i> —(Optional) Display information for the specified ASIC. The range is 0 to 1.
	• <b>port</b> <i>number</i> —(Optional) Display information for the specified port and ASIC number. The range is 0 to 27, where 0 is the supervisor and 1 to 25 are the ports.
vct [asic number   port number [asic number]]	Display the VLAN compression table entries for the specified ASIC or for the specified port and ASIC. The keywords have these meanings:
	• <b>asic</b> <i>number</i> —(Optional) Display information for the specified ASIC. The range is 0 to 1.
	• <b>port</b> <i>number</i> —(Optional) Display information for the specified port and ASIC number. The range is 0 to 27, where 0 is the supervisor and 1 to 25 are the ports.
begin	(Optional) Display begins with the line that matches the <i>expression</i> .
l exclude	(Optional) Display excludes lines that match the expression.
linclude	(Optional) Display includes lines that match the specified <i>expression</i> .
expression	Expression in the output to use as a reference point.



Though visible in the command-line help strings, the **stack** {**control** | **dest-map** | **learning** | **messages** | **mvid** | **prog-parser** | **span** | **stats** [**asic** *number* | **port** *number* [**asic** *number*]] keywords are not supported.

### **Command Modes**

Privileged EXEC

# **Command History**

Release	Modification
12.2(25)EX	This command was introduced.

### **Usage Guidelines**

You should use this command only when you are working directly with your technical support representative while troubleshooting a problem. Do not use this command unless your technical support representative asks you to do so.

# show platform port-security

Use the **show platform port-security** privileged EXEC command to display platform-dependent port-security information.

show platform port-security [ | {begin | exclude | include}} expression]

#### **Syntax Description**

begin	(Optional) Display begins with the line that matches the expression.
exclude	(Optional) Display excludes lines that match the expression.
include	(Optional) Display includes lines that match the specified expression.
expression	Expression in the output to use as a reference point.

#### **Command Modes**

Privileged EXEC

### **Command History**

Release	Modification
12.2(25)EX	This command was introduced.

#### **Usage Guidelines**

You should use this command only when you are working directly with your technical support representative while troubleshooting a problem. Do not use this command unless your technical support representative asks you to do so.

# show platform qos

Use the **show platform qos** privileged EXEC command to display platform-dependent quality of service (QoS) information.

show platform qos debug [aggregate-policer aggregate-policer-name | global-config | input-queue | [interface [interface-id] [buffers | policers | queuing] ] | label-table [dynamic-label {dscp value cos value | label-number value | policy-map policy-map-name class-map class-map-name} [asic number] | policer {parameter-table | qos-table| selection-table} [asic number] | policy-map policy-map-name [asic number] | port-class [asic number] | port-config port-number [asic number] | port-info port-number [asic number] | table-map | vlan vlan-id] [ | {begin | exclude | include} expression]

show platform qos statistics [interface [interface-id]] [ | {begin | exclude | include}} expression]

# **Syntax Description**

debug	Display QoS debug messages for the switch or for the specified keyword.
aggregate-policer	(Optional) Display QoS aggregate policer information for the
aggregate-policer-name	specified aggregate policer.
global-config	(Optional) Display QoS global configuration information.
input-queue	(Optional) Display QoS input queue information.
interface [interface-id] [buffers   policers   queuing]	(Optional) Display QoS information for all interfaces or the specified interface. The keywords have these meanings:
	<ul> <li>buffers—(Optional) Display information about QoS buffers.</li> </ul>
	<ul> <li>policers—(Optional) Display information about QoS policers.</li> </ul>
	<ul> <li>queuing—(Optional) Display information about QoS output queues.</li> </ul>
label-table [dynamic-label {dscp value cos value   label-number value	(Optional) Display Qos label table information. The keywords have these meanings:
policy-map policy-map-name class-map class-map-name	<ul> <li>dynamic-label—(Optional) Display dynamic label information.</li> </ul>
	• <b>dscp</b> <i>value</i> <b>cos</b> <i>value</i> —Display information based on Differentiated Services Code Point (DSCP) value (0 to 63) and class of service (CoS) value (0 to 7).
	• <b>label-number</b> <i>value</i> —Display information based on the dynamic label number. The range is from 158 to 255.
	• policy-map policy-map-name class-map class-map-name—Display information for the specified policy map and class map.
	• <b>asic</b> <i>number</i> —(Optional) Display information based on the port ASIC number. The number is always 0.

·	
<pre>policer {parameter-table   qos-table   selection-table   [asic number]</pre>	(Optional) Display QoS policer information. The keywords have these meanings:
	• parameter-table—Display the policer parameter table.
	• qos-table—Display the policer QoS table.
	• selection-table—Display the port allocation table.
	• <b>asic</b> <i>number</i> —(Optional) Display information based on the port ASIC number. The number is always 0.
policy-map policy-map-name [asic number]	(Optional) Display QoS information for the specified policy map.
	• <b>asic</b> <i>number</i> —(Optional) Display information based on the port ASIC number. The number is always 0.
port-class [asic number]	(Optional) Display QoS port class tables.
	• <b>asic</b> <i>number</i> —(Optional) Display information based on the port ASIC number. The number is always 0.
<pre>port-config port-number [asic number]</pre>	(Optional) Display QoS port configuration information. The keywords have these meanings:
	<ul> <li>port-number—Display QoS configuration for the specified port number. The range is 0 to 25.</li> </ul>
	• <b>asic</b> <i>number</i> —(Optional) Display information based on the port ASIC number. The number is always 0.
port-info port-number [asic number]	(Optional) Display QoS port information. The keywords have these meanings:
	<ul> <li>port-number—Display QoS configuration for the specified port number. The range is 0 to 25.</li> </ul>
	• <b>asic</b> <i>number</i> —(Optional) Display information based on the port ASIC number. The number is always 0.
table-map table-map-name [asic number]	(Optional) Display QoS information for the specified table map.
	• <b>asic</b> <i>number</i> —(Optional) Display information based on the port ASIC number. The number is always 0.
vlan vlan-id	(Optional) Display QoS information for the specified VLAN. The range is 1 to 4094.
statistics	Display QoS interface statistics.
begin	(Optional) Display begins with the line that matches the <i>expression</i> .
l exclude	(Optional) Display excludes lines that match the <i>expression</i> .
include	(Optional) Display includes lines that match the specified <i>expression</i> .
expression	Expression in the output to use as a reference point.

**Command Modes** 

Privileged EXEC

### **Command History**

Release	Modification
12.2(25)EX	This command was introduced.

# **Usage Guidelines**

You should use this command only when you are working directly with your technical support representative while troubleshooting a problem. Do not use this command unless your technical support representative asks you to do so.

# show platform resource-manager

Use the **show platform resource-manager** privileged EXEC command to display platform-dependent resource-manager information.

Syntax Description	dm [index number]	Display the destination map. The keyword has this meaning:
		• <b>index</b> <i>number</i> —(Optional) Display the specified index. The range is 0 to 65535.
	erd [index number]	Display the equal-cost-route descriptor table for the specified index. The keyword has this meaning:
		• <b>index</b> <i>number</i> —(Optional) Display the specified index. The range is 0 to 65535.
	mad [index number]	Display the MAC-address descriptor table for the specified index. The keyword has this meaning:
		• <b>index</b> <i>number</i> —(Optional) Display the specified index. The range is 0 to 65535.
	med [index number]	Display the multi-expansion descriptor table for the specified index. The keyword has this meaning:
		• <b>index</b> <i>number</i> —(Optional) Display the specified index. The range is 0 to 65535.
	mod	Display the resource-manager module information.
	msm {hash-table [vlan vlan-id]   mac-address	Display the MAC-address station descriptor table. The keywords have these meanings:
	mac-address [vlan	<ul> <li>hash-table—Display the msm hash table.</li> </ul>
	vlan-id]}	<ul> <li>mac-address mac-address—Display the table for the specified MAC address.</li> </ul>
		• <b>vlan</b> <i>vlan-id</i> —(Optional) Display the table for the specified VLAN. The range is 1 to 4094.
	sd [index number]	Display the station descriptor table for the specified index. The keyword has this meaning:
		• <b>index</b> <i>number</i> —(Optional) Display the specified index. The range is 0 to 65535.
	vld [index number]	Display the VLAN-list descriptor table for the specified index. The keyword has this meaning:
		• <b>index</b> <i>number</i> —(Optional) Display the specified index. The range is 0 to 65535.
	begin	(Optional) Display begins with the line that matches the expression.
	exclude	(Optional) Display excludes lines that match the <i>expression</i> .

include	(Optional) Display includes lines that match the specified expression.
expression	Expression in the output to use as a reference point.

#### **Command Modes**

Privileged EXEC

# **Command History**

Release	Modification
12.2(25)EX	This command was introduced.

# **Usage Guidelines**

You should use this command only when you are working directly with your technical support representative while troubleshooting a problem. Do not use this command unless your technical support representative asks you to do so.

# show platform snmp counters

Use the **show platform snmp counters** privileged EXEC command to display platform-dependent Simple Network Management Protocol (SNMP) counter information.

**show platform snmp counters** [ | {begin | exclude | include} expression]

#### **Syntax Description**

begin	(Optional) Display begins with the line that matches the expression.
exclude	(Optional) Display excludes lines that match the expression.
include	(Optional) Display includes lines that match the specified expression.
expression	Expression in the output to use as a reference point.

### **Command Modes**

Privileged EXEC

### **Command History**

Release	Modification
12.2(25)EX	This command was introduced.

#### **Usage Guidelines**

You should use this command only when you are working directly with your technical support representative while troubleshooting a problem. Do not use this command unless your technical support representative asks you to do so.

# show platform spanning-tree synchronization

Use the **show platform spanning-tree synchronization** privileged EXEC command to display platform-dependent spanning-tree state synchronization information.

**show platform spanning-tree synchronization** [detail | vlan vlan-id] [ | {begin | exclude | include} expression]

#### **Syntax Description**

detail	(Optional) Display detailed spanning-tree synchronization information.
vlan vlan-id	(Optional) Display spanning-tree synchronization information for the specified VLAN. The range is 1 to 4094.
begin	(Optional) Display begins with the line that matches the expression.
l exclude	(Optional) Display excludes lines that match the expression.
l include	(Optional) Display includes lines that match the specified expression.
expression	Expression in the output to use as a reference point.

#### **Command Modes**

Privileged EXEC

#### **Command History**

Release	Modification
12.2(25)EX	This command was introduced.

#### **Usage Guidelines**

You should use this command only when you are working directly with your technical support representative while troubleshooting a problem. Do not use this command unless your technical support representative asks you to do so.

# show platform stp-instance

Use the **show platform stp-instance** privileged EXEC command to display platform-dependent spanning-tree instance information.

**show platform stp-instance** *vlan-id* [ | { **begin** | **exclude** | **include**} *expression*]

### **Syntax Description**

vlan-id	Display spanning-tree instance information for the specified VLAN. The range is 1 to 4094.
begin	(Optional) Display begins with the line that matches the expression.
l exclude	(Optional) Display excludes lines that match the expression.
include	(Optional) Display includes lines that match the specified expression.
expression	Expression in the output to use as a reference point.

#### **Command Modes**

Privileged EXEC

#### **Command History**

Release	Modification
12.2(25)EX	This command was introduced.

# **Usage Guidelines**

You should use this command only when you are working directly with your technical support representative while troubleshooting a problem. Do not use this command unless your technical support representative asks you to do so.

# show platform tcam

Use the **show platform tcam** privileged EXEC command to display platform-dependent ternary content addressable memory (TCAM) driver information.

- show platform tcam {handle number | log-results | table {acl | all | local | mac-address | qos | station | vlan-list} | usage} [asic number [detail [invalid]] | [index number [detail [invalid]] | invalid | num number [detail [invalid]] | invalid] | [invalid] | [num number [detail [invalid]] | invalid]] [ | {begin | exclude | include} | expression]
- show platform tcam table acl [asic number [detail [invalid]] | [index number [detail [invalid]] |
   invalid | num number [detail [invalid]] | invalid] | [invalid] | [num number [detail [invalid]]
   | invalid]] [ | {begin | exclude | include} expression]
- show platform tcam table all [asic number [detail [invalid]] | [index number [detail [invalid]] | invalid | num number [detail [invalid]] | invalid] | [invalid] | [num number [detail [invalid]] | invalid]] [ | {begin | exclude | include} | expression]
- show platform tcam table local [asic number [detail [invalid]] | [index number [detail [invalid]] | invalid | num number [detail [invalid]] | invalid] | [invalid] | [num number [detail [invalid]] | invalid]] [ | {begin | exclude | include} | expression]
- show platform tcam table qos [asic number [detail [invalid]] | [index number [detail [invalid]] | invalid | num number [detail [invalid]] | invalid] | [invalid] | [num number [detail [invalid]] | invalid]] [ | {begin | exclude | include} | expression]
- show platform tcam table station [asic number [detail [invalid]] | [index number [detail [invalid]] | invalid | num number [detail [invalid]] | invalid] | [invalid] | [num number [detail [invalid]] | invalid]] | | {begin | exclude | include} | expression]
- show platform tcam table vlan-list [[asic number [detail [invalid]] | [index number [detail [invalid]] | invalid] | [invalid] | [invalid]

### **Syntax Description**

handle number	Display the TCAM handle. The range is 0 to 4294967295.
log-results	Display the TCAM log results.
table {acl   all   local   mac-address   qos   station	Display lookup and forwarding table information. The keywords have these meanings:
vlan-list}	• acl—Display the access-control list (ACL) table.
	• all—Display all the TCAM tables.
	• local—Display the local table.
	• mac-address—Display the MAC-address table.
	• qos—Display the QoS table.
	• station—Display the station table.
	• vlan-list—Display the VLAN list table.

usage	Display the CAM and forwarding table usage.
[[asic number [detail [invalid]]   [index number [detail [invalid]]   invalid   num number [detail [invalid]]   invalid]   [invalid]	Display information. The keywords have these meanings:  • asic number—Display information for the specified ASIC device ID. The range is 0 to 15.
[num number [detail [invalid]]   invalid]]	<ul> <li>detail [invalid]—(Optional) Display valid or invalid details.</li> <li>index number—(Optional) Display information for the specified TCAM table index. The range is 0 to 32768.</li> </ul>
	• <b>num</b> <i>number</i> —(Optional) Display information for the specified TCAM table number. The range is 0 to 32768.
begin	(Optional) Display begins with the line that matches the <i>expression</i> .
exclude	(Optional) Display excludes lines that match the <i>expression</i> .
linclude	(Optional) Display includes lines that match the specified <i>expression</i> .
expression	Expression in the output to use as a reference point.



Though visible in the command-line help strings, the **ipv6**, **equal-cost-route**, **multicast-expansion**, **secondary**, and **usage** keywords are not supported.

#### **Command Modes**

Privileged EXEC

### **Command History**

Release	Modification
12.2(25)EX	This command was introduced.

### **Usage Guidelines**

You should use this command only when you are working directly with your technical support representative while troubleshooting a problem. Do not use this command unless your technical support representative asks you to do so.

# show platform vlan

Use the **show platform vlan** privileged EXEC command to display platform-dependent VLAN information.

show platform vlan {misc | mvid | refcount | rpc {receive | transmit}} [ | {begin | exclude | include} | expression]

#### **Syntax Description**

misc	Display miscellaneous VLAN module information.
mvid	Display the mapped VLAN ID (MVID) allocation information.
refcount	Display the VLAN lock module-wise reference counts.
rpc {receive   transmit}	Display remote procedure call (RPC) messages. The keywords have these meanings:
	• receive—Display received information.
	• transmit—Display sent information.
begin	(Optional) Display begins with the line that matches the <i>expression</i> .
begin   exclude	(Optional) Display begins with the line that matches the <i>expression</i> .  (Optional) Display excludes lines that match the <i>expression</i> .



Though visible in the command-line help strings, the **prune** keyword is not supported.

#### **Command Modes**

Privileged EXEC

#### **Command History**

Release	Modification
12.2(25)EX	This command was introduced.

#### **Usage Guidelines**

You should use this command only when you are working directly with your technical support representative while troubleshooting a problem. Do not use this command unless your technical support representative asks you to do so.

show platform vlan