

show crypto key

To display RSA key pair information, use the **show crypto key** command.

show crypto key

Syntax Description This command has no arguments or keywords.

Defaults This command has no default settings.

Command Types Switch command

Command Modes Normal

Examples This example shows how to display key pair information:

```
Console> (enable) show crypto key
RSA keys was generated at: Tue Dec 14 1999, 14:22:48
1024 37 1120518394839901301166714853840995094745037456682394891249441779951543727187159999
643683033910964386179342272044371326668692894898498425705315929789724607692104535472010393
868648783669579338660482094092720514951237657028608860832162809370173090068651870589350241
85402826063185974102411558894697025607154868421
Console> (enable)
```

Related Commands [clear crypto key rsa](#)
[set crypto key rsa](#)

show dot1q-all-tagged

To display dot1q tagging status, use the **show dot1q-all-tagged** command.

show dot1q-all-tagged

Syntax Description This command has no keywords or arguments.

Defaults This command has no default settings.

Command Types Switch command

Command Modes Privileged

Examples This example shows how to display dot1q tagging status:

```
Console> (enable) show dot1q-all-tagged  
Dot1q all tagged mode disabled  
Console> (enable)
```

Related Commands [set dot1q-all-tagged](#)

show dot1x

To display the system dot1x capabilities, protocol version, and timer values, use the **show dot1x** command.

show dot1x

Syntax Description This command has no keywords or arguments.

Defaults This command has no default settings.

Command Types Switch command

Command Modes Normal

Examples This example shows how to display the dot1x information of the system:

```
Console> show dot1x
PAE Capability           Authenticator Only
Protocol Version         1
system-auth-control      enabled
max-req                  2
quiet-period             60 seconds
re-authperiod            3600 seconds
server-timeout           30 seconds
supp-timeout             30 seconds
tx-period                 30 seconds
guest-vlan                69

Console>
```

Related Commands [clear dot1x config](#)
[set dot1x](#)

show dvlan statistics

To display DVLAN statistics, use the **show dvlan statistics** command.

show dvlan statistics

Syntax Description This command has no arguments or keywords.

Defaults This command has no default settings.

Command Types Switch command

Command Modes Normal

Examples This example shows how to display the DVLAN statistical information:

```
Console> show dvlan statistics
VMPS Client Statistics
-----
VQP Queries:                0
VQP Responses:              0
Vmps Changes:               0
VQP Shutdowns:             0
VQP Denied:                 0
VQP Wrong Domain:          0
VQP Wrong Version:          0
VQP Insufficient Resource: 0
Console>
```

show environment

To display system status information, use the **show environment** command.

show environment {all | power}

Syntax Description	all	power
	Displays information about the environmental status of the system (for example, power supply, fan status, and temperature) and about the power available to the system.	Displays only the status of the power allocation.

Defaults This command has no default settings.

Command Types Switch command

Command Modes Normal

Examples This example shows how to display environmental status information:

```

Console> show environment all
Environmental Status (. = Pass, F = Fail, U = Unknown)
  Temperature:.          Chassis Temperature:39 degC (103 degF)
                    Over Temperature Threshold:75 degC (167 degF)
                    Critical Temperature Threshold:95 degC (203 degF)

Total Inline Power Available:1600.00 Watts (32.00 Amps @50V)
Total Inline Power Drawn From the System:0 Watt
Remaining Inline Power in the System:1600.00 Watts (32.00 Amps @50V)
Default Inline Power allocation per port:6.00 Watts (0.12 Amps @50V)

Module      Inline Power Allocated(mA)      Operating default inlinepower allocation(mW)
-----
1           0                               0

Power Budget is :1 supply
Power Available to the System (excluding voice power):400 Watts (33.33 Amps @12V)
Power Drawn from the System (excluding voice power):135 Watts (11.25 Amps @12V)
Remaining Power (excluding voice power):265 Watts (22.08 Amps @12V)
Console>

```

This example shows how to display the current power configuration for the switch.

```

Console> show environment power
Total Inline Power Available:0 Watt
Total Inline Power Drawn From the System:0 Watt
Remaining Inline Power in the System:0 Watt
Default Inline Power allocation per port:6.00 Watts (0.11 Amps @51V)

Module      Inline Power Allocated(mA)      Operating default inlinepower allocation(mW)
-----      -
1            0                                0
2            0                                0
3            0                                0

Power Budget is :2 supplies
Power Available to the System (excluding voice power):750 Watts (62.06 Amps @12V)
Power Drawn from the System (excluding voice power):265 Watts (22.01 Amps @12V)
Remaining Power (excluding voice power):485 Watts (40.05 Amps @12V)
Console>

```

This example shows how to display the current power configuration on a Catalyst 4500 series switch:

```

Console> show environment power
Total Inline Power Available:4340.00 Watts (86.80 Amps @50V)
Total Inline Power Drawn From the System:769.00 Watts (15.38 Amps @50V)
Remaining Inline Power in the System:3571.00 Watts (71.42 Amps @50V)
Default Inline Power allocation per port:6.00 Watts (0.12 Amps @50V)

Module      Inline Power Allocated(mA)      Operating default inlinepower allocation(mW)
-----      -
1            0                                0
2            5560                             6000
3            1120                             6000
4            2960                             6000
5            3500                             6000
6            2240                             6000

DC Power supplies are configured for 5000Watts DC input

Power Budget is :1 supply
Power Available to the System (excluding voice power):1360 Watts (113.33 Amps @12V)
Power Drawn from the System (excluding voice power):485 Watts (40.42 Amps @12V)
Remaining Power (excluding voice power):875 Watts (72.92 Amps @12V)
Console>

```

Related Commands

[set inlinepower defaultallocation](#)
[set power budget](#)
[show config](#)
[show system](#)

show errdisable-timeout

To display the configuration and status of the errdisable timeout, use the **show errdisable-timeout** command.

show errdisable-timeout

Syntax Description This command has no arguments or keywords.

Defaults This command has no default settings.

Command Types Switch command

Command Modes Privileged

Usage Guidelines If your system is configured with a Supervisor Engine 2, a crossbar-fallback error may be displayed in the ErrDisable Reason field.

Examples This example shows how to display the errdisable timeout configuration and status:

```

Console> (enable) show errdisable-timeout
ErrDisable Reason   Timeout Status
-----
bpdu-guard          Disable
channel-misconfig  Disable
duplex-mismatch    Disable
udld                Enable
crossbar-fallback  Disable
other               Disable

Interval: 300 seconds

Ports that will be enabled at the next timeout:
Port  Errdisable Reason  Port ErrDisableTimeout  Action on Timeout
----  -
3/3   udld                Disable                 Remain Disabled
3/4   udld                Enable                  Enabled
Console> (enable)

```

Related Commands [set errdisable-timeout](#)

show errordetection

To display error detection settings, use the **show errordetection** command.

show errordetection

Syntax Description This command has no arguments or keywords.

Defaults This command has no default settings.

Command Types Switch command

Command Modes Privileged

Examples This example shows how to display the error detection settings:

```
Console> (enable) show errordetection  
Inband error detection:      disabled  
Memory error detection:     enabled  
Port counter error detection: disabled  
Console> (enable)
```

Related Commands [set errordetection](#)

show file

To display the contents of a file, use the **show file** command.

show file [*device:*] *filename* [**dump**]

Syntax Description	<i>device:</i> (Optional) Name of the device; the valid device is bootflash .
	<i>filename</i> Name of the file.
	dump (Optional) Displays the hex dump of the specified file.

Defaults This command has no default settings.

Command Types Switch command

Command Modes Privileged

Usage Guidelines A colon (:) is required after the specified device.

Examples This example shows how to view the file `cfg2`:

```
Console> (enable) show file cfg2

begin
!
# ***** NON-DEFAULT CONFIGURATION *****
!
!
# Wed Apr 21 1999, 22:55:10
!
#version 5.3(0.53-Eng)ASP
!
set prompt test>
!
#frame distribution method
set port channel all distribution mac both
!
#ip
set interface sc0 1 172.20.25.145/255.255.0.0 172.20.255.255

set ip route 0.0.0.0/0.0.0.0          172.20.25.201
!
#set boot command
set boot auto-config non-recurring
!
```

■ show file

```
#qos
set qos map 1q4t 0 0 cos 0
set qos map 1q4t 0 0 cos 1
set qos map 1q4t 0 0 cos 2
set qos map 1q4t 0 0 cos 4
set qos map 1q4t 0 0 cos 5
set qos map 1q4t 0 0 cos 6
set qos map 1q4t 0 0 cos 7
set qos wred-threshold 1q4t tx queue 1 0 0 0 0
!
#module 1 : 4-port 10/100BaseTX Supervisor
!
#module 2 : 24-port 10BaseF Ethernet
!
#module 3 : 12-port 10/100BaseTX Ethernet
!
#module 4 empty
!
#module 5 empty
end
Console> (enable)
```

show flash

To display Flash information, including file code names, version numbers, and sizes, use the **show flash** command.

```
show flash [[m/]device:] [all | chips | fileys]
```

Syntax Description	
<i>m/</i>	(Optional) Supervisor Engine III and Catalyst 4000 family and 2948G switch supervisor engine modules only; module number of the supervisor engine containing the Flash device.
<i>device:</i>	(Optional) Supervisor Engine III only: valid devices are bootflash , slot0 , and slot1 ; Catalyst 4000 family and 2948G switch supervisor engine module: valid value is bootflash .
all	(Optional) Supervisor Engine III and Catalyst 4000 family and 2948G switch supervisor engine module only: keyword that specifies to list deleted files, undeleted files, and files with errors on a Flash memory device.
chips	(Optional) Supervisor Engine III and Catalyst 4000 family and 2948G switch supervisor engine modules only: keyword that shows information about the Flash chip.
fileys	(Optional) Supervisor Engine III and Catalyst 4000 family and 2948G switch supervisor engine modules only: keyword that shows the Device Info Block, the Status Info, and the Usage Information.

Defaults

This command has no default settings.

Command Types

Switch command

Command Modes

Normal

Usage Guidelines

A colon (:) is required after the specified device.

Examples

The following examples show how to list Flash information:

```
Console> show flash
-#- ED --type-- --crc--- -seek-- nlen -length- -----date/time----- name
1  .D 2          2D6B310A 100fc0 15  1052123  Aug 26 1998 15:43:50 cat5k_r47_1.cbi
2  .. 2          43B312DF 201ed8 15  1052608  Aug 27 1998 10:23:30 cat5k_r47_1.cbi

6283877 bytes available (2104731 bytes used)
```

```

Console> show flash chips
***** Intel Series 2+ Status/Register Dump *****

ATTRIBUTE MEMORY REGISTERS:
  Config Option Reg (4000): 2
  Config Status Reg (4002): 0
  Card Status Reg (4100): 1
  Write Protect Reg (4104): 4
  Voltage Cntrl Reg (410C): 0
  Rdy/Busy Mode Reg (4140): 2

COMMON MEMORY REGISTERS: Bank 0
  Intelligent ID Code : 8989A0A0
  Compatible Status Reg: 8080
  Global Status Reg: B0B0
  Block Status Regs:
    0 : B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0
    8 : B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0
   16 : B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0
   24 : B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0

COMMON MEMORY REGISTERS: Bank 1
  Intelligent ID Code : 8989A0A0
  Compatible Status Reg: 8080
  Global Status Reg: B0B0
  Block Status Regs:
    0 : B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0
    8 : B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0
   16 : B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0
   24 : B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0

COMMON MEMORY REGISTERS: Bank 2
  Intelligent ID Code : FF00FF
  IID Not Intel -- assuming bank not populated
COMMON MEMORY REGISTERS: Bank 3
  Intelligent ID Code : FF00FF
  IID Not Intel -- assuming bank not populated

COMMON MEMORY REGISTERS: Bank 4
  Intelligent ID Code : FF00FF
  IID Not Intel -- assuming bank not populated

```

```

Console> show flash filesystems

```

```

----- F I L E   S Y S T E M   S T A T U S -----
  Device Number = 0
DEVICE INFO BLOCK:
  Magic Number          = 6887635   File System Vers = 10000   (1.0)
  Length                = 800000    Sector Size      = 20000
  Programming Algorithm = 4         Erased State     = FFFFFFFF
  File System Offset    = 20000     Length = 7A0000
  MONLIB Offset        = 100        Length = C730
  Bad Sector Map Offset = 1FFF8     Length = 8
  Squeeze Log Offset   = 7C0000    Length = 20000
  Squeeze Buffer Offset = 7E0000    Length = 20000
  Num Spare Sectors    = 0
  Spares:
STATUS INFO:
  Writable
  NO File Open for Write
  Complete Stats
  No Unrecovered Errors

```

```

USAGE INFO:
  Bytes Used      = 201D9B  Bytes Available = 5FE265
  Bad Sectors     = 0        Spared Sectors  = 0
  OK Files        = 1        Bytes           = 100FC0
  Deleted Files   = 1        Bytes           = 100DDB
  Files w/Errors  = 0        Bytes           = 0

Console> show flash all
-#- ED --type-- --crc--- -seek-- nlen -length- -----date/time----- name
1  .D 2          2D6B310A 100fc0 15  1052123  Aug 26 1998 15:43:50 cat5k_r47_1.cbi
2  .. 2          43B312DF 201ed8 15  1052608  Aug 27 1998 10:23:30 cat5k_r47_1.cbi

6283877 bytes available (2104731 bytes used)

----- F I L E   S Y S T E M   S T A T U S -----
  Device Number = 0
DEVICE INFO BLOCK:
  Magic Number      = 6887635  File System Vers = 10000  (1.0)
  Length            = 800000   Sector Size      = 20000
  Programming Algorithm = 4      Erased State     = FFFFFFFF
  File System Offset = 20000    Length           = 7A0000
  MONLIB Offset     = 100       Length           = C730
  Bad Sector Map Offset = 1FFF8  Length           = 8
  Squeeze Log Offset = 7C0000   Length           = 20000
  Squeeze Buffer Offset = 7E0000  Length           = 20000
  Num Spare Sectors = 0
  Spares:
STATUS INFO:
  Writable
  NO File Open for Write
  Complete Stats
  No Unrecovered Errors
USAGE INFO:
  Bytes Used      = 201D9B  Bytes Available = 5FE265
  Bad Sectors     = 0        Spared Sectors  = 0
  OK Files        = 1        Bytes           = 100FC0
  Deleted Files   = 1        Bytes           = 100DDB
  Files w/Errors  = 0        Bytes           = 0

***** Intel Series 2+ Status/Register Dump *****

ATTRIBUTE MEMORY REGISTERS:
  Config Option Reg (4000): 2
  Config Status Reg (4002): 0
  Card Status Reg (4100): 1
  Write Protect Reg (4104): 4
  Voltage Cntrl Reg (410C): 0
  Rdy/Busy Mode Reg (4140): 2

COMMON MEMORY REGISTERS: Bank 0
  Intelligent ID Code : 8989A0A0
  Compatible Status Reg: 8080
  Global Status Reg: B0B0
  Block Status Regs:
    0 : B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0
    8 : B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0
   16 : B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0
   24 : B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0

COMMON MEMORY REGISTERS: Bank 1
  Intelligent ID Code : 8989A0A0
  Compatible Status Reg: 8080
  Global Status Reg: B0B0
  Block Status Regs:

```

show flash

```
0 : B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0
8 : B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0
16 : B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0
24 : B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0
```

```
COMMON MEMORY REGISTERS: Bank 2
Intelligent ID Code : FF00FF
IID Not Intel -- assuming bank not populated
```

```
COMMON MEMORY REGISTERS: Bank 3
Intelligent ID Code : FF00FF
IID Not Intel -- assuming bank not populated
```

```
COMMON MEMORY REGISTERS: Bank 4
Intelligent ID Code : FF00FF
IID Not Intel -- assuming bank not populated
```

Related Commands[reset—switch](#)[show version—switch](#)

show garp timer

To display all values for all GARP timers, use the **show garp timer** command.

show garp timer

Syntax Description This command has no arguments or keywords.

Defaults This command has no default settings.

Command Types Switch command

Command Modes Normal

Usage Guidelines You must maintain the following relationship for the various timer values:

- Leave time must be greater than or equal to three times the join time.
- Leaveall time must be greater than the leave time.



Caution

Set the same GARP application (for example, GMRP and GVRP) timer values on all Layer 2-connected devices. If the GARP timers are set differently on such devices, GARP applications will not operate successfully.



Note

The modified timer values are applied to all GARP application (for example, GMRP and GVRP) timer values.

Examples This example shows how to display all the values of the GARP timers:

```
Console> (enable) show garp timer
Timer      Timer Value (milliseconds)
-----
Join       200
Leave       600
LeaveAll    10000
Console> (enable)
```

Related Commands [set garp timer](#)
[set gmrp timer](#)
[set gvrp timer](#)

show gmrp configuration

To display complete GMRP-related configuration information, use the **show gmrp configuration** command.

show gmrp configuration

Syntax Description This command has no arguments or keywords.

Defaults This command has no default settings.

Command Types Switch command

Command Modes Normal

Usage Guidelines If the port list exceeds the line spaces available, the list wraps to the next line.

Examples This example shows the display when GMRP is enabled:

```

Console> (enable) show gmrp configuration
Global GMRP Configuration:
GMRP Feature is currently enabled on this switch.
GMRP Timers (milliseconds):
Join = 200
Leave = 600
LeaveAll = 10000
Port based GMRP Configuration:
GMRP Status      Registration      Forward All      Port
-----
Enabled          Fixed            Disabled         2/1,3/1-2
Console> (enable)

```

Related Commands [set gmrp registration](#)

show gmrp statistics

To display GMRP-related statistics for a specified VLAN, use the **show gmrp statistics** command.

show gmrp statistics [*vlan*]

Syntax Description	<i>vlan</i> (Optional) VLAN for which to show GMRP statistics.
---------------------------	--

Defaults	Statistics for VLAN 1 are shown, if no VLAN is specified.
-----------------	---

Command Types	Switch command
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Command Modes	Normal
----------------------	--------

Examples	This example shows the display for all the GMRP-related statistics for VLAN 23:
-----------------	---

```

Console> show gmrp statistics 23
GMRP Statistics for vlan <23>:
Total valid GMRP Packets Received:          500
Join Emptys:                                200
Join INs:                                    250
Leaves:                                      10
Leave Alls:                                   35
Emptys:                                       5
Fwd Alls:                                     0
Fwd Unregistered:                           0
Total valid GMRP Packets Transmitted:       600
Join Emptys:                                200
Join INs:                                    150
Leaves:                                      45
Leave Alls:                                   200
Emptys:                                       5
Fwd Alls:                                     0
Fwd Unregistered:                           0
Total valid GMRP Packets Received:          0
Total GMRP packets dropped:                 0
Total GMRP Registrations Failed:            0
Console>

```

Related Commands	clear gmrp statistics set gmrp
-------------------------	---

show gmrp timer

To display all of the GMRP timers values, use the **show gmrp timer** command.

show gmrp timer

Syntax Description This command has no arguments or keywords.

Defaults This command has no default settings.

Command Types Switch command

Command Modes Normal

Usage Guidelines You can enter the **show multicast group** command to display GMRP configuration values.

Examples This example shows how to display all the GMRP timer values:

```

Console> (enable) show gmrp timer
Timer                Timer Value(milliseconds)
-----
Join                  200
Leave                  600
Leave All              10000
Console> (enable)

```

Related Commands

- [set garp timer](#)
- [set gmrp timer](#)
- [set gvrp timer](#)
- [show multicast group](#)

show gvrp configuration

To display GARP VLAN Registration Protocol (GVRP) configuration information, including timer values, use the **show gvrp configuration** command.

show gvrp configuration

Syntax Description

This command has no arguments or keywords.

Defaults

This command has no default settings.

Command Types

Switch command

Command Modes

Normal

Usage Guidelines

If the port list exceeds the available line spaces, the list wraps to the next line.

If no ports are GVRP participants, the message output changes from “GVRP Participants running on port_list” to “GVRP Participants running on no ports.”

Examples

This example shows how to view GVRP configuration information:

```
Console> show gvrp configuration
```

```
Global GVRP Configuration:
GVRP Feature is currently enabled on the switch.
GVRP dynamic VLAN creation is enabled.
GVRP Timers(milliseconds)
Join = 200
Leave = 600
LeaveAll = 10000
```

```
Port based GVRP Configuration:
GVRP Status Registration Port
```

```
-----
Enabled      Normal      2/1-2,3/1-8,7/1-24,8/1-24
GVRP Participants running on 3/7-8.
Console>
```

Related Commands

[clear gvrp statistics](#)
[set gvrp](#)
[set gvrp dynamic-vlan-creation](#)
[set gvrp registration](#)
[set gvrp timer](#)
[show gvrp statistics](#)

show gvrp statistics

To view GARP VLAN Registration Protocol (GVRP) statistics for a port, use the **show gvrp statistics** command.

```
show gvrp statistics [mod/port]
```

Syntax Description	<i>mod/port</i> (Optional) Number of the module and the port.
---------------------------	---

Defaults	This command has no default settings.
-----------------	---------------------------------------

Command Types	Switch command
----------------------	----------------

Command Modes	Normal
----------------------	--------

Examples	This example shows how to view GVRP statistics for module 2, port 1:
-----------------	--

```
Console> show gvrp statistics 2/1
GVRP enabled

GVRP statistics for port 2/1:
Total valid pkts rcvd:      18951
Total invalid pkts rcvd    0
General Queries rcvd      377
Group Specific Queries rcvd 0
MAC-Based General Queries rcvd 0
Leaves rcvd                14
Reports rcvd               16741
Queries Xmitted            0
GS Queries Xmitted         16
Reports Xmitted            0
Leaves Xmitted             0
Failures to add GDA to EARL 0
Topology Notifications rcvd 10
GVRP packets dropped      0
Console>
```

Table 2-18 describes the fields in the **show gvrp statistics** output.

Table 2-18 show gvrp statistics Command Output Fields

Field	Description
GVRP enabled	Status of whether GVRP is enabled or disabled
Total valid pkts rcvcd	Total number of valid GVRP packets received
Total invalid pkts rcvcd	Total number of invalid GVRP packets received
General Queries rcvcd	Total number of GVRP general queries received
Group Specific Queries rcvcd	Total number of GVRP group-specific queries received
MAC-Based General Queries rcvcd	Total number of MAC-based general queries received
Leaves rcvcd	Total number of GVRP leaves received
Reports rcvcd	Total number of GVRP reports received
Queries Xmited	Total number of GVRP general queries transmitted by the switch
GS Queries Xmited	Total number of GVRP group specific-equivalent queries transmitted by the switch
Reports Xmited	Total number of GVRP reports transmitted by the switch
Leaves Xmited	Total number of GVRP leaves transmitted by the switch
Failures to add GDA to EARL	Total number of times the switch failed to add a multicast entry (GDA) to the EARL table
Topology Notifications rcvd	Total number of topology change notifications received by the switch
GVRP packets dropped	Total number of GVRP packets dropped by the switch

Related Commands

[clear gvrp statistics](#)
[set gvrp](#)
[set gvrp dynamic-vlan-creation](#)
[set gvrp registration](#)
[set gvrp timer](#)
[show gvrp configuration](#)

show igmp filter

To display IGMP multicast filtering on the switch, use the **show igmp filter** command set.

show igmp filter

To display the acceptance or denial status of IP addresses by an IGMP multicast filter profile on the switch, use the **show igmp filter profile *profile_id* match-action** command.

show igmp filter profile *profile_id* match-action

To list an IP address, or range of addresses, for a specific IGMP multicast filter profile, use the **show igmp filter profile** command.

show igmp filter profile *profile_id*

To show all IGMP multicast filter profiles, use the **show igmp filter all** command.

show igmp filter all

To display the association of IGMP multicast filter profiles with a port, a list of ports, or all ports, use the **show igmp filter map** command.

show igmp filter map {*port_list* | all}

Syntax Description	profile <i>profile_id</i>	Arbitrary number assigned to a profile.
	match-action	Displays matching profiles.
	all	Displays all profiles.
	map	Maps profiles to specific ports.
	<i>port_list</i>	Module/port value, or range of values.

Defaults All IGMP multicast filters are displayed.

Command Types Switch command

Command Modes Privileged

Usage Guidelines A profile ID value must be established in the **show igmp filter profile**.
Configuring IGMP traffic filtering is performed by the switch administrator using CLI and SNMP interfaces.
The following command is an IGMP filter activation command:

show igmp filter

The following commands are port IP multicast filter commands:

```
show igmp filter profile profile_id match-action
```

```
show igmp filter profile profile_id
```

```
show igmp filter map {port_list | all }
```

Examples

This example shows the status of enabled IGMP multicast filtering on a switch:

```
Console> (enable) show igmp filter
igmp filter is enabled
Console> (enable)
```

This example shows the status of disabled IGMP multicast filtering on a switch:

```
Console> (enable) show igmp filter
igmp filter is disabled
Console> (enable)
```

This example shows the status of an IGMP multicast filter profile to accept IP addresses:

```
Console> (enable) show igmp filter profile 1 match-action
igmp filter match action is permit
Console> (enable)
```

This example shows the status of an IGMP multicast filter profile to deny IP addresses:

```
Console> (enable) show igmp filter profile 1 match-action
igmp filter match action is denied
Console> (enable)
```

This example shows how to list an accepted IP address, or range of addresses, by a specific IGMP multicast filter profile:

```
Console> (enable) show igmp filter profile 1
ProfileId 1: FilterMode permit, IP Range
-----
226.1.1.1
Console> (enable)
```

This example shows how to list a denied IP address, or range of addresses, by a specific IGMP multicast filter profile:

```
Console> (enable) show igmp filter profile 1
ProfileId 1: FilterMode deny, IP Range
-----
226.1.1.1
Console> (enable)
```

This example shows how to list all IP addresses for all IGMP multicast filter profiles:

```
Console> (enable) show igmp filter all
ProfileId 1: FilterMode deny, IP Range
-----
226.1.1.1
Console> (enable)
```

show igmp filter

This example shows how to display the association of IGMP multicast filter profiles with module 2/port 48.

```
Console> (enable) show igmp filter map 2/48
Port      Profile
----      -
2/48      -
Console> (enable)
```

This example shows how to display the association of IGMP multicast filter profiles for all ports.

```
Console> (enable) show igmp filter map all
Port      Profile
----      -
2/1       1
2/2       -
2/3       -
2/4       -
2/5       -
2/6       -
2/7       -
2/8       -
2/9       -
2/10      -
2/11      -
...(truncated)
2/40      -
2/41      -
2/42      -
2/43      -
2/44      -
2/45      -
2/46      -
2/47      -
2/48      -
Console> (enable)
```

Related Commands

[set igmp filter](#)
[clear igmp filter](#)

show imagemib

To display image information in the CISCO-IMAGE-MIB for a particular image, use the **show imagemib** command.

show imagemib *filename*

Syntax Description	<i>filename</i> Name of the Flash device.
---------------------------	---

Defaults	This command has no default settings.
-----------------	---------------------------------------

Command Types	Switch command
----------------------	----------------

Command Modes	Normal
----------------------	--------

Examples	This example shows how to display CISCO-IMAGE-MIB information for the Flash device on the supervisor engine module:
-----------------	---

```
Console> show imagemib cat4000.4-4-0-14.bin
show mib info for file cat4000.4-4-0-14.bin
show_presto_nmp_image_header : open file cat4000.4-4-0-14.bin error code = -3, )
Console>
```

show interface—ROM monitor

To display information about network interfaces, use the **show interface** command.

show interface

Syntax Description This command has no arguments or keywords.

Defaults This command has no default settings.

Command Types ROM monitor command

Command Modes Normal

Examples This example shows how to display information on all network interfaces:

```
rommon 1 > show interface  
me1: inet 172.20.52.37 netmask 255.255.255.248 broadcast 172.20.52.39  
rommon 2 >
```

Related Commands [set interface](#)

show interface—switch

To display information about network interfaces and standard SNMP link trap operation, use the **show interface** command.

show interface

show interface trap

Syntax Description	trap	Displays status information about the trap interface.
--------------------	------	---

Defaults	This command has no default settings.
----------	---------------------------------------

Command Types	Switch command
---------------	----------------

Command Modes	Normal
---------------	--------

Examples	This example shows how to display information on all network interfaces:
----------	--

```
Console> show interface
s10: flags=50<DOWN, POINTOPOINT, RUNNING>
      slip 0.0.0.0 dest 0.0.0.0
sc0: flags=63<UP, BROADCAST, RUNNING>
      vlan 100 inet 172.20.52.37 netmask 255.255.255.248 broadcast 172.20.52.39
me1: flags=62<DOWN, BROADCAST, RUNNING>
      inet 172.20.52.37 netmask 255.255.255.224 broadcast 172.20.52.63
Console>
```

This example shows how to display whether the trap interface is enabled or disabled:

```
Console> (enable) show interface trap
Interface Trap
-----
sc0          enabled
me1          disabled
s10          disabled
Console> (enable)
```

Table 2-19 describes the fields in the **show interface** command output.

Table 2-19 show interface Command Output Fields

Field	Description
me1	Information on the me1 interface
flags	Flags indicating the interface state (decoded in the subsequent field).
<UP,BROADCAST, RUNNING>	Interface state (UP, DOWN, BROADCAST, LOOPBACK, POINTOPOINT, or RUNNING)
inet	IP address of the interface
netmask	Network mask for the interface
broadcast	Broadcast address for the interface
sl0	Information on the SLIP interface
<UP,POINTOPOINT, RUNNING>	Interface state (UP, DOWN, BROADCAST, LOOPBACK, POINTOPOINT, or RUNNING)
slip	IP address of the SLIP interface
dest	IP address of the host to which the console port will be connected
sc0	Information on the in-band interface
vlan	Number of the VLAN to which the sc0 interface has been assigned (known as the management VLAN)
Interface	Type of interface
Trap	Status of whether the trap is enabled or disabled

Related Commands

[set interface](#)

show ip alias

To show a listing of defined IP aliases, use the **show ip alias** command.

```
show ip alias [name]
```

Syntax Description	<i>name</i> (Optional) Alias for a specific host.
---------------------------	---

Defaults	This command has no default settings.
-----------------	---------------------------------------

Command Types	Switch command
----------------------	----------------

Command Modes	Normal
----------------------	--------

Examples	This example shows how to display a listing of all IP aliases:
-----------------	--

```
Console> show ip alias  
default          0.0.0.0  
sparc20          192.168.10.69  
cat5500-1        172.16.169.16  
cat5500-2        172.16.169.20  
Console>
```

Related Commands	clear ip alias set ip alias
-------------------------	--

show ip dns

To show the DNS name servers and the default DNS domain name, use the **show ip dns** command.

show ip dns

Syntax Description This command has no arguments or keywords.

Defaults This command has no default settings.

Command Types Switch command

Command Modes Normal

Examples This example shows how to display the DNS name servers and the default DNS domain name:

```
Console> show ip dns
DNS is currently enabled.
The default DNS domain name is: cisco.com

DNS name server          status
-----
172.16.30.32
192.168.2.132           primary
172.31.128.70
Console>
```

Table 2-20 describes the fields in the **show ip dns** command output.

Table 2-20 show ip dns Command Output Fields

Field	Description
DNS is currently enabled	Status of whether DNS is enabled or disabled.
default DNS domain name	Default DNS domain name.
DNS name server	IP addresses or IP aliases of the configured DNS servers.
status	Primary DNS server.

Related Commands

- clear ip dns domain**
- clear ip dns server**
- set ip dns**
- set ip dns domain**
- set ip dns server**

show ip http

To view the HTTP configuration and switch web interface information, use the **show ip http** command.

show ip http

Syntax Description This command has no arguments or keywords.

Defaults This command has no default settings.

Command Types Switch command

Command Modes Normal

Examples This example shows how to display the HTTP configuration and web interface information if the web interface is supported:

```
Console> show ip http
HTTP Configuration Information:
-----
HTTP Server: enabled
HTTP port: 80
Web Interface: Supported

Switch Information:
-----
File:  applet.html
      size: 912 bytes
      version: 5.0(0.26)
      date: 10/9/99
File:  cvembopt.jar
      size: 3500000 bytes
      version: 5.0(0.26)
      date: 10/9/99

Active Web Interface Session: 1
-----
Client IP Address: 192.20.20.45
Request Type: GET
Request URI: /all-engine.jar
Console>
```

■ show ip http

This example shows the HTTP configuration and web interface information if the web interface is not supported:

```
Console> show ip http
HTTP Configuration Information:
-----
HTTP Server: disabled
HTTP port: 80
Web Interface: Not Supported
Console>
```

Related Commands

[set ip http port](#)
[set ip http server](#)

show ip permit

To display the IP permit list information, use the **show ip permit** command.

show ip permit [noalias]

Syntax Description	noalias	(Optional) Displays IP addresses, not IP aliases.
--------------------	---------	---

Defaults	This command has no default settings.
----------	---------------------------------------

Command Types	Switch command
---------------	----------------

Command Modes	Normal
---------------	--------

Examples This example shows how to display IP permit list information:

```
Console> (enable) show ip permit
Telnet permit list feature enabled.
Snmp permit list feature disabled.
```

Permit List	Mask	Access-Type
172.16.0.0	255.255.0.0	telnet
172.20.52.3		snmp telnet
172.20.52.32	255.255.255.224	ssh

Denied IP Address	Last Accessed Time	Type	Telnet Count	SNMP Count
172.100.101.104	01/20/97,07:45:20	SNMP	14	1430
172.187.206.222	01/21/97,14:23:05	Telnet	7	236

```
Console> (enable)
```

Table 2-21 describes the fields in the **show ip permit** command output.

Table 2-21 show ip permit Command Output Fields

Field	Description
Permit List	IP addresses and IP aliases that are allowed to access the switch
Mask	Subnet masks of permitted IP addresses
Denied IP Address	IP addresses and IP aliases that are not allowed to access the switch
Access-Type	The type of access the IP address has: telnet, snmp, ssh, or a combination of these.
Last Accessed Time	Date and time of the last attempt to log in to the switch from the address
Type	Login-attempt type
Telnet Count	The number of times the IP address attempted a Telnet access
SNMP Count	The number of times the IP address attempted an SNMP access

Related Commands

[clear ip permit](#)
[set ip permit](#)
[set snmp trap](#)

show ip route—ROM monitor

To display IP routing table entries, use the **show ip route** command.

show ip route

Syntax Description This command has no arguments or keywords.

Defaults This command has no default settings.

Command Types ROM monitor command

Command Modes Normal

Examples This example shows how to display IP routing table entries:

```
rommon 1 > show ip route
Destination          Gateway              Interface
-----
default             172.20.52.33       me1
rommon 2 >
```

Related Commands [clear ip route—ROM monitor](#)
[set ip route—ROM monitor](#)

show ip route—switch

To display IP routing table entries, use the **show ip route** command.

show ip route [**noalias**]

Syntax Description	noalias (Optional) Displays the IP addresses, not IP aliases.
---------------------------	--

Defaults This command has no default settings.

Command Types Switch command

Command Modes Normal

Examples This example shows how to display the IP route table:

```

Console> (enable) show ip route
Fragmentation   Redirect   Unreachable
-----
enabled         enabled   enabled

Destination      Gateway      RouteMask    Flags    Use      Interface
-----
default          172.20.52.1  0x0          UG       73439   sc0
172.20.52.0     172.20.52.5  0xffffffffe0 U        4       sc0
default         default     0xff000000  UH       0       s10
Console> (enable)

```

[Table 2-22](#) describes the fields in the **show ip route** command output.

Table 2-22 show ip route Command Output Fields

Field	Description
Fragmentation	Current setting of IP fragmentation
Redirect	Current setting of ICMP redirect
Unreachable	Current setting of ICMP unreachable messages
Destination	Destination address IP route mask
Gateway	IP address or IP alias of the gateway router
RouteMask	Path that is closer to the destination
Flags	Route status; possible values are U=up, G=route to a Gateway, H=route to a Host, and Dynamically created by a redirect
Use	Number of times a route entry was used to route packets
Interface	Type of interface

Related Commands

[clear ip route—switch](#)
[set ip route—switch](#)

show kerberos

To display information about a Kerberos configuration, use the **show kerberos** command.

show kerberos

Syntax Description This command has no arguments or keywords.

Defaults This command has no default settings.

Command Types Switch command

Command Modes Normal

Examples This example shows how to display Kerberos configuration information:

```

kerberos> (enable) show kerberos
Kerberos Local Realm:CISCO.COM
Kerberos server entries:
Realm:CISCO.COM, Server:187.0.2.1, Port:750

Kerberos Domain<->Realm entries:
Domain:cisco.com, Realm:CISCO.COM

Kerberos Clients NOT Mandatory
Kerberos Credentials Forwarding Enabled
Kerberos Pre Authentication Method set to None
Kerberos config key:
Kerberos SRVTAB Entries
Srvtab Entry 1:host/niners.cisco.com@CISCO.COM 0 932423923 1 1 8 01;;8>00>50;0=0=0
kerberos> (enable)

```

[Table 2-23](#) describes the fields in the **show kerberos** command output.

Table 2-23 show kerberos Command Output Fields

Field	Description
Kerberos Local Realm	Shows whether local realm is configured
Kerberos server entries	Shows servers entered into the switch
Kerberos Pre Authentication Method	Shows whether preauthentication is enabled or disabled
Kerberos config key	Shows whether a DES key has been configured
Kerberos SRVTAB entries	Shows the SRVTAB entries

Related Commands [show kerberos creds](#)

show kerberos creds

To display the Kerberos credentials on a switch, use the **show kerberos creds** command.

show kerberos creds

Syntax Description This command has no arguments or keywords.

Defaults This command has no default settings.

Command Types Switch command

Command Modes Normal

Examples This example shows how to display Kerberos credentials information:

```
Console> (enable) show kerberos creds  
No Kerberos credentials.  
Console> (enable)
```

Related Commands [show kerberos](#)

show lacp-channel

To display information about the LACP channel, use the **show lacp-channel** command set.

show lacp-channel

show lacp-channel sys-id

show lacp-channel group [*admin-key*] [**info** [*type*] | **statistics**]

show lacp-channel [*channel_id*] [**info** [*type*] | **statistics** | **mac**]

show lacp-channel hash *channel_id* {{*src_ip_addr* [*dest_ip_addr*]} | *dest_ip_addr* |
 {*src_mac_addr* [*dest_mac_addr*]} | *dest_mac_addr* | {*src_port* *dest_port*} | *dest_port*}

show lacp-channel traffic [*channel_id*]

Syntax Description

sys-id	Displays the system identifier adopted by LACP.
group	Displays all the ports that belong to a channel.
<i>admin-key</i>	(Optional) Number of the administrative key; valid values are from 1 to 65535.
info	(Optional) Displays detailed LACP channel information.
<i>type</i>	(Optional) Displays feature-related parameters; valid values are spantree , trunk , protocol , gmrp , gvrp , qos , rsvp , cops , dot1qtunnel , auxiliary , jumbo .
statistics	(Optional) Displays LACP statistics.
<i>channel_id</i>	(Optional) Number of the channel.
mac	(Optional) MAC information about the channel.
hash	Displays the outgoing port used in a channel for a specific address or Layer 4 port number.
<i>src_ip_addr</i>	Source IP address.
<i>dest_ip_addr</i>	(Optional) Destination IP address.
<i>src_mac_addr</i>	Source MAC address.
<i>dest_mac_addr</i>	(Optional) Destination MAC address.
<i>src_port</i>	Number of the source port; valid values are from 0 to 65,535.
<i>dest_port</i>	Number of the destination port; valid values are from 0 to 65,535.
traffic	Displays traffic utilization on channel ports.

Defaults

This command has no default settings.

Command Types

Switch command

Command Modes

Normal

Usage Guidelines

If you do not specify *admin-key*, information about all LACP channels is displayed.
 If you do not specify *channel_id*, information about all LACP channels is displayed.

Examples

This example shows how to display information about all LACP channels:

```
Console> show lacp-channel group
Admin Key      Ports
-----
69             4/1-2
70             4/5-6
143            2/1-2
151            4/3-4
152            4/7-8
Console>
```

This example shows how to display limited information about ports that are assigned to administrative key 152:

```
Console> show lacp-channel group 152
Port Channel Admin Ch Partner Oper Partner
      Mode Key   id   Sys ID          Port
-----
  4/7 active  152  770  8000,AC-12-24-56-78-90  4/3
  4/8 active  152  770  8000,AC-12-24-56-78-90  4/4
Console>
```

This example shows how to display detailed information about ports that are assigned to administrative key 152:

```
Console> show lacp-channel group 152 info
I = Isolated Port.  C = Channeling Port.  N = Not Connected.
H = Hot Stand-by Port.  S = Suspended Port.
```

Port	LACP Port Priority	Port Status	Speed	Duplex	VLANs	Trunk status	Port Cost	STP Port Priority	PortSecurity/Dynamic Port
4/7	130	C	1000	full	1-1005	not-trunking	4	32	
4/8	131	C	1000	full	1-1005	not-trunking	4	32	

```

Port Admin Channel if- Partner Oper Partner Partner Partner
      Key id      Index Sys ID          Port Prior Port Oper Key
-----
  4/7 152  770   31  800,AC-12-24-56-78-90  248      4/3  15768
  4/8 152  770   31  800,AC-12-24-56-78-90  249      4/4  15768
Console>
```

This example shows how to display LACP Tx and Rx statistics for ports that are assigned to administrative key 152:

```
Console> show lacp-channel group 152 statistics
Port Admin LACP Pkts LACP Pkts Marker Pkts Marker Pkts LACP Pkts
      Key   Transmitted Received Transmitted Received Errors
-----
  4/7  152         0         92         0         0         0
  4/8  152         0          0         0         0         0
Console>
```

■ show lacp-channel

This example shows how to display all ports that are assigned to an administrative key:

```
Console> show lacp-channel group info
```

I = Isolated Port. C = Channeling Port. N = Not Connected.

H = Hot Stand-by Port. S = Suspended Port.

Port	LACP Port Priority	Port Status	Speed	Duplex	VLANs	Trunk status	Port Cost	STP Port Priority	PortSecurity/Dynamic Port
4/1	50	I	1000	full	1-1005	not-trunking	4	32	
4/2	51	I	1000	full	1-1005	not-trunking	4	32	
4/5	27	I	1000	full	1-1005	not-trunking	4	32	
4/5	27	I	1000	full	1-1005	not-trunking	4	32	
2/1	133	C	1000	full	1-1005	not-trunking	4	32	
2/2	134	C	1000	full	1-1005	not-trunking	4	32	
4/3	200	C	1000	full	1-1005	not-trunking	4	32	
4/4	201	C	1000	full	1-1005	not-trunking	4	32	
4/7	130	C	1000	full	1-1005	not-trunking	4	32	
4/8	131	C	1000	full	1-1005	not-trunking	4	32	

Port	Admin Key	Channel id	if-Index	Partner Sys ID	Oper	Partner Port	Partner Prior	Partner Port	Partner Oper Key
4/1	69	0	-	0,00-00-00-00-00-00		0		3/1	0
4/2	69	0	-	0,00-00-00-00-00-00		0		4/5	0
4/5	70	0	-	0,00-00-00-00-00-00		0		7/3	0
4/6	70	0	-	0,00-00-00-00-00-00		0		7/4	0
2/1	143	768	29	1276,45-12-24-AC-78-90		34		5/1	5658
2/2	143	768	29	1276,45-12-24-AC-78-90		35		5/2	5658
4/3	151	769	30	13459,89-BC-24-56-78-90		200		1/1	9768
4/4	151	769	30	13459,89-BC-24-56-78-90		201		1/2	9768
4/7	152	770	31	8000,AC-12-24-56-78-90		248		4/3	15678
4/8	152	770	31	8000,AC-12-24-56-78-90		249		4/4	15768

```
Console>
```

This example shows how to display Tx and Rx statistics for all ports that are assigned to an administrative key:

```
Console> show lacp-channel group statistics
```

Port	Admin Key	LACP Pkts Transmitted	LACP Pkts Received	Marker Pkts Transmitted	Marker Pkts Received	LACP Pkts Errors
4/1	69	0	0	0	0	0
4/2	69	0	0	0	0	0
4/5	70	0	0	0	0	0
4/6	70	0	0	0	0	0
2/1	143	0	0	0	0	0
2/2	143	0	0	0	0	0
4/3	151	0	0	0	0	0
4/4	151	0	0	0	0	0
4/7	152	0	92	0	0	0
4/8	152	0	0	0	0	0

```
Console>
```

This example shows how to display the outgoing port for the specified source and destination IP addresses:

```
Console> (enable) show lacp-channel hash 808 172.20.32.10 172.20.32.66
Selected channel port:2/17
Console> (enable)
```

This example shows how to display traffic utilization on channel ports:

```
Console> (enable) show lacp-channel traffic
ChanId Port  Rx-Ucst Tx-Ucst Rx-Mcst Tx-Mcst Rx-Bcst Tx-Bcst
-----
   808  2/16   0.00%  0.00%  50.00%  75.75%  0.00%  0.00%
   808  2/17   0.00%  0.00%  50.00%  25.25%  0.00%  0.00%
   816  2/31   0.00%  0.00%  25.25%  50.50%  0.00%  0.00%
   816  2/32   0.00%  0.00%  75.75%  50.50%  0.00%  0.00%
Console> (enable)
```

Related Commands

- [clear lacp-channel statistics](#)
- [set channelprotocol](#)
- [set lacp-channel system-priority](#)
- [set port lacp-channel](#)
- [set spantree channelcost](#)
- [set spantree channelvlancost](#)
- [show port lacp-channel](#)

show localusers

To display the local user accounts for a switch, use the **show localusers** command.

show localusers [*username*]

Syntax Description	
	<i>username</i> (Optional) Local user account.

Defaults	
	This command has no default settings.

Command Types	
	Switch command

Command Modes	
	Privileged

Examples	
	This example shows how to display all local user accounts:

```

Console> (enable) show localusers
Local User Authentication: enabled
Username                               Privilege Level
-----                               -
picard                                  15
number1                                  0
worf                                     15
troy                                      0
Console> (enable)

```

This example shows how to display a specific local user account:

```

Console> (enable) show localusers troy
Local User Authentication: enabled
Username                               Privilege Level
-----                               -
troy                                      0
Console> (enable)

```

Related Commands	
	clear localusers set localuser

show log

To display the error log for a system or for a specific module, use the **show log** command.

```
show log [mod]
```

```
show log dump [-count]
```

Syntax Description	
<i>mod</i>	(Optional) Number of the module for which the log is displayed.
dump	Displays the contents of the dump log.
<i>-count</i>	(Optional) Number of dump log entries to display.

Defaults This command has no default settings.

Command Types Switch command

Command Modes Normal

Usage Guidelines To display the contents of ASIC error messages as soon as they are received from SLCP/LCP, use the [set logging server](#) command.

You can use the **dump** keyword to display log dump information generated when certain events occur, such as memory corruption.

Examples This example shows how to display the error log for the system:

```
Console> show log
Network Management Processor (ACTIVE NMP) Log:
  Reset count:      26
  Re-boot History:  Jan 05 2001 14:27:13 0, Jan 05 2001 14:20:50 0
                   Dec 27 2000 10:18:30 0, Nov 22 2000 15:03:15 0
                   Nov 21 2000 14:52:26 0, Nov 13 2000 09:13:20 0
  Bootrom Checksum Failures:      0   UART Failures:      0
  Flash Checksum Failures:      0   Flash Program Failures:      0
  Power Supply 1 Failures:      0   Power Supply 2 Failures:      2
  DRAM Failures:                  0
  Exceptions:                      0
  Loaded NMP version:             6.2(1)
  Reload same NMP version count:  0
  Last software reset by user:    1/5/2001,14:26:35
  MCP Exceptions/Hang:            0
  Heap Memory Log:
  Corrupted Block = none
```

```

NVRAM log:
01. 7/26/1999,15:57:51: convertCiscoMIB:PreSac(0) checksum failed: 0x0(0x4C5C)
02. 12/27/2000,10:18:30: convert_post_SAC_CiscoMIB:Block 0 converted from version 13 to 14
03. 12/27/2000,10:18:33: supVersion:Nmp version 6.2(0.57)KEY
04. 1/5/2001,14:27:17: supVersion:Nmp version 6.2(1)

```

```

Module 2 Log:
  Reset Count: 12
  Reset History: Fri Jan 5 2001, 14:27:23
                 Fri Jan 5 2001, 14:21:00
                 Wed Dec 27 2000, 10:18:40
                 Wed Nov 22 2000, 15:03:25

```

```

Module 3 Log:
  Reset Count: 12
  Reset History: Fri Jan 5 2001, 14:27:24
                 Fri Jan 5 2001, 14:21:01
                 Wed Dec 27 2000, 10:18:40
                 Wed Nov 22 2000, 15:03:25

```

NOTE: Use "show crashdump 1" to see the crashdump.
Console>

Table 2-24 describes the fields in the **show log** command output.

Table 2-24 show log Command Output Fields

Field	Description
Network Management Processor (ACTIVE NMP) Log	Log that applies to the NMP on the supervisor engine module
Reset count	Number of times that the system has reset
Re-boot History	Date and times that the system has rebooted
Bootrom Checksum Failures	Number of bootrom checksum failures
UART Failures	Number of times that the UART has failed
Flash Checksum Failures	Number of times that the Flash Checksum has failed
Flash Program Failures	Number of times that the Flash Program has failed
Power Supply 1 Failures	Number of times that Power Supply 1 has failed
Power Supply 2 Failures	Number of times that Power Supply 2 has failed
DRAM Failures	Number of times that the DRAM has failed
Exceptions:	Exceptions log
Loaded NMP version	Supervisor Engine software version loaded on the switch.
Reload same NMP version count	Number of times the current Supervisor Engine software has been loaded on the switch
NVRAM log	Number of times that NVRAM errors have occurred
Reset History	Date and times that the system has reset

This example shows how to display dump log information:

```
Console> show log dump
Total logs: 1
Console>
```

Related Commands

[clear log](#)
[set logging server](#)

show log command

To display command log entries, use the **show log command**.

show log command [*mod*]

Syntax Description	<i>mod</i> (Optional) Number of the module.
Defaults	This command has no default settings.
Command Types	Switch command
Command Modes	Privileged
Usage Guidelines	The command log entry table is a history log of the commands to the switch from the console or from Telnet.
Examples	<p>This example shows how to display the command log for module 1:</p> <pre> Console> (enable) show log command 1 Active Command log: 001. Oct 04 09:44:35 Pid = 86 show mod 002. Oct 04 09:44:55 Pid = 86 clear log command 3 003. Oct 04 10:09:07 Pid = 86 show port membership 004. Oct 04 10:10:15 Pid = 86 enable 005. Oct 04 10:10:19 Pid = 86 clear port help 006. Oct 04 10:10:47 Pid = 86 clear spantree help 007. Oct 04 10:12:42 Pid = 86 show 008. Oct 04 10:12:57 Pid = 86 show qos help 009. Oct 04 10:14:46 Pid = 86 show log 5 010. Oct 04 10:14:53 Pid = 86 show log 1 011. Oct 04 10:15:04 Pid = 86 show log command 5 012. Oct 04 10:15:08 Pid = 86 show log command 1 Console> (enable) </pre>
Related Commands	clear log command

show logging

To display the system message log configuration, use the **show logging** command.

show logging [noalias]

Syntax Description	noalias (Optional) Forces the display to show IP addresses, not IP aliases.
--------------------	---

Defaults	This command has no default settings.
----------	---------------------------------------

Command Types	Switch command
---------------	----------------

Command Modes	Normal
---------------	--------

Examples	This example shows the default system message log configuration:
----------	--

```

Console <enable> show logging

Logging buffer size:      500
      timestamp option:  enabled
Logging history
Logging history
      size:                1
      severity:           notifications(5)
Logging console:         enabled
Logging telnet:          enabled
Logging server:          disabled
      server facility:    LOCAL7
      server severity:    warnings(4)

```

Facility	Default Severity	Current Session Severity
acl	7	7
cdp	6	6
cops	7	7
dtp	7	7
dvlan	7	7
earl	7	7
ethc	7	7
filesys	7	7
gvrp	7	7
ip	7	7
kernel	7	7
ld	7	7
mcast	7	7
mgmt	7	7
mls	7	7
protfilt	7	7
pruning	7	7
privatevlan	7	7

■ show logging

```

qos                7                7
radius             7                7
rsvp               7                7
security           7                7
snmp               7                7
spantree           7                7
sys                7                7
tac                7                7
tcp                7                7
telnet             7                7
tftp               7                7
udld               7                7
vmps               7                7
vtp                7                7

0 (emergencies)    1 (alerts)        2 (critical)
3 (errors)         4 (warnings)      5 (notifications)
6 (information)    7 (debugging)
Console> (enable)

```

Table 2-25 describes the fields in the **show logging** command output.

Table 2-25 show logging Command Output Fields

Field	Description
Logging buffer size	Capacity of the logging buffer
timestamp option	Status of whether the timestamp option is enabled or disabled
Logging history size	Capacity of the logging history
Logging history severity	Severity level at which point errors are logged to the history table
Logging console	Status of whether logging to the console is enabled or disabled
Logging telnet	Status of whether logging to telnet is enabled or disabled
Logging server	Status of whether logging to the logging server is enabled or disabled
Facility	Name of the facility to be logged
Server/Default Severity	Default severity level at which point an error from that facility is logged
Current Session Severity	Severity level at which point an error from that facility is logged during the current session
0 (emergencies), 1 (alerts)...	Key to the numeric severity level codes

Related Commands

```

clear logging server
set logging buffer
set logging console
set logging history
set logging level
set logging server
set logging session
show logging buffer

```

show logging buffer

To display system messages stored in the internal buffer, use the **show logging buffer** command.

show logging buffer [-] [*number_of_messages*]

Syntax Description	-	(Optional) Causes the system to display system messages starting at the end of the buffer and going forward to the most current message.
	<i>number_of_messages</i>	(Optional) Number of system messages to be displayed; valid values are from 1 to 1023.

Defaults The last 20 messages in the buffer are displayed.

Command Types Switch command

Command Modes Normal

Usage Guidelines

If the - keyword is not used, system messages are displayed from the beginning of the buffer. If *number_of_messages* is not specified, the last 20 messages in the buffer are displayed.

If the logging timestamp option is enabled, a timestamp is also included in the display. Use the [set logging timestamp](#) command to enable the timestamp option.

If the logging timestamp option is enabled, the +00:00 or -00:00 in the output indicates the hours and minutes offset from UTC.

Examples This example shows how to display all the system messages from the internal buffer; this example displays the output with the timestamp option enabled:

```
Console <enable> show logging buffer
1999 Mar 09 19:33:05 +00:00%SYS-5:Module 1 is online
1999 Mar 09 19:33:05 +00:00%SYS-5:Module 5 is online
1999 Mar 09 19:33:05 +00:00%SYS-5:Module 3 failed configuration
1999 Mar 09 19:33:05 +00:00%SYS-5:Module 3 failed configuration
1999 Mar 09 19:33:05 +00:00%SYS-5:Module 4 is online
1999 Mar 09 19:33:05 +00:00%SNMP-6:Subagent 2 connected
1999 Mar 09 19:33:05 +00:00%SNMP-5:Cold Start Trap
Console <enable>
```

This example shows how to display the first four system messages from the internal buffer; this example displays the output with the timestamp option disabled:

```
Console <enable> show logging buffer 4
%SYS-5:Module 1 is online
%SYS-5:Module 5 is online
%SYS-5:Module 3 failed configuration
Console <enable>
```

show logging buffer

This example shows how to display the last four system messages from the internal buffer; this example displays the output with the timestamp option enabled:

```
Console <enable> show logging buffer -4
1999 Mar 09 19:33:05 +00:00%SYS-5:Module 3 failed configuration
1999 Mar 09 19:33:05 +00:00%SYS-5:Module 4 is online
1999 Mar 09 19:33:05 +00:00%SNMP-6:Subagent 2 connected
1999 Mar 09 19:33:05 +00:00%SNMP-5:Cold Start Trap
Console <enable>
```

Related Commands

[set logging buffer](#)
[set logging timestamp](#)

show mac

To display the contents of the MAC counters, use the **show mac** command.

```
show mac [mod[/port]]
```

Syntax Description	<i>mod/port</i> (Optional) Number of the module and the port on the module.
---------------------------	---

Defaults	This command has no default settings.
-----------------	---------------------------------------

Command Types	Switch command
----------------------	----------------

Command Modes	Normal
----------------------	--------

Usage Guidelines	If you do not specify a module number, all modules are shown. If you do not specify a port number, all ports are shown.
-------------------------	--

Examples	This example shows how to display MAC information for port 4 on module 3:
-----------------	---

```
Console> show mac 3/4
MAC      Rcv-Frms  Xmit-Frms  Rcv-Multi  Xmit-Multi  Rcv-Broad  Xmit-Broad
-----
3/4      0         0         0         0         0         0

MAC      Dely-Exced  MTU-Exced  In-Discard  Lrn-Discrd  In-Lost    Out-Lost
-----
3/4      0         0         0         0         0         0

MAC      SMT-Address      Curr-Path  TReq      TNeg      TMax      TVX
-----
3/4      00:06:7c:b3:bc:98  primary    165000    165000    165004    2509
00-60-3e-cd-3d-19

MAC      Upstream-Nbr      Downstream-Nbr      Old-Upstrm-Nbr      Old-Downstrm-Nbr
-----
3/4      00:00:1f:00:00:00  00:00:1f:00:00:00  00:00:1f:00:00:00  00:00:1f:00:00:00
00-00-f8-00-00-00  00-00-f8-00-00-00  00-00-f8-00-00-00  00-00-f8-00-00-00

MAC      Rcv-Smt  Xmit-Smt  Rcv-llc  Xmit-llc  Tvx-Exp-Ct  RingOp-Ct
-----
3/4      0         0         1         61         0         1

Port      Rcv-Unicast      Rcv-Multicast      Rcv-Broadcast
-----
3/4      0         0         0
```

```

Port      Xmit-Unicast      Xmit-Multicast      Xmit-Broadcast
-----
3/4              0                    0                    0

Port      Rcv-Octet      Xmit-Octet
-----
3/4              0                    0

Last-Time-Cleared
-----
Tue Apr 13 1999, 08:31:20
Console>

```

Table 2-26 describes possible fields displayed in the **show mac** command output.

Table 2-26 show mac Command Output Fields

Field	Description
MAC	Module and port
Rcv-Frms	Frames received on the port
Xmit-Frms	Frames transmitted on the port
Rcv-Multi	Multicast frames received on the port
Xmit-Multi	Multicast frames transmitted on the port
Rcv-Broad	Broadcast frames received on the port
Xmit-Broad	Broadcast frames transmitted on the port
Dely-Exced	Total transmit frames aborted due to excessive deferral
MTU-Exced	Frames for which the MTU size was exceeded
In-Discard	Incoming frames that were discarded because the frame did not need to be switched
Lrn-Discard	CAM entries discarded due to page full in EARL
In-Lost	Incoming frames that were lost before being forwarded (due to insufficient buffer space)
Out-Lost	Outgoing frames that were lost before being forwarded (due to insufficient buffer space)
SMT-Address	SMT address of the FDDI port
Curr-Path	Current path used (primary or secondary)
TReq	Token rotation time request value
TNeg	Negotiated token rotation time value
TMax	Maximum token rotation time value
TVX	Value of the valid transmission timer
Upstream-Nbr	MAC address of the current upstream neighbor
Downstream-Nbr	MAC address of the current downstream neighbor
Old-Upstrm-Nbr	MAC address of the previous upstream neighbor
Old-Downstrm-Nbr	MAC address of the previous downstream neighbor
Rcv-Smt	Number of SMT frames received by the port
Xmit-Smt	Number of NSMT frames transmitted by the port

Table 2-26 *show mac Command Output Fields (continued)*

Field	Description
Rcv-llc	Number of NLLC frames received by the port
Xmit-llc	Number of LLC frames transmitted by the port
Tvx-Exp-Ct	Number of times the TVX timer expired
RingOp-Ct	Number of times the ring became operational
Rcv-Unicast	Number of unicast frames received on the port
Rcv-Multicast	Number of multicast frames received on the port
Rcv-Broadcast	Number of broadcast frames received on the port
Xmit-Unicast	Number of unicast frames transmitted on the port
Xmit-Multicast	Number of multicast frames transmitted on the port
Xmit-Broadcast	Number of broadcast frames transmitted on the port
Rcv-Octet	Number of octet frames received on the port
Xmit-Octet	Number of octet frames transmitted on the port
Last-Time-Cleared	Date and time of the last clear counters command

show module

To display module status and information, use the **show module** command.

show module [*mod*]

Syntax Description	<i>mod</i>	(Optional) Number of the module. If a module number is not specified, all modules are displayed.
---------------------------	------------	--

Defaults This command has no default settings.

Command Types Switch command

Command Modes Normal

Usage Guidelines If you delete a module and replace it with a different type module, a message appears in the **show module** display that states that the module configuration is inconsistent with the current module type. To clear the message, you can either enter the **clear config mod_num** command for the module or set different parameters for the new module.

For Catalyst 4000 family switches, the **show module** command displays the supervisor engine as having “1” slot.

For Catalyst 4000 family switches, in the **show module** command display, the combination of the 32-port module (WS-X4502) and 4-port 100FX card results in an entry that reads 36 ports. If the uplink card is not installed, only ports 1 to 32 are listed.

Although me1 resides on the supervisor engine module for the Catalyst 4000 family switches, me1 port information is not displayed by the **show module** or **show port** commands.

Examples This example shows how to display status and information for module 3:

```

Console> show module 3
Mod Slot Ports Module-Type           Model           Sub Status
-----
3   3   9   Gigabit Ethernet   WS-X5410       no  ok

Mod Module-Name      Serial-Num
-----
3                   00007285650

Mod MAC-Address(es)           Hw   Fw   Sw
-----
3   00-e0-1e-38-48-cc to 00-e0-1e-38-48-d7 0.2   4.1(0.53-E 5.1(0.59))

Console>

```

This example shows how to display status and information for the Catalyst 4000 family switch:

```

Console> show module
Mod Slot Ports Module-Type           Model           Sub Status
-----
1   1   2   1000BaseX Supervisor   WS-X4013       no ok
4   4   48  Inline Power Module    WS-X4248-RJ45V no ok
6   6   48  Inline Power Module    WS-X4148-RJ45V no ok

Mod Module-Name      Serial-Num
-----
1                   JAB062600G2
4                   JAB063807S5
6                   JAB053805KS

Mod MAC-Address(es)      Hw   Fw   Sw
-----
1  00-01-96-1f-89-00 to 00-01-96-1f-8c-ff 3.2  5.4 (1)  7.5 (0.42-Eng)
4  00-03-6b-87-f9-90 to 00-03-6b-87-f9-bf 0.4
6  00-05-9a-71-91-a0 to 00-05-9a-71-91-cf 1.6
Console>

```

Table 2-27 describes the possible fields in the **show module** command output.

Table 2-27 show module Command Output Fields

Field	Description
Mod	Module number.
Slot	Slot number.
Module-Name	Name of the module (if configured).
Ports	Number of ports on the module.
Module-Type	Module type (such as 10BASE-T Ethernet or Token Ring).
Model	Model number of the module.
Serial-Num	Serial number of the module.
Status	Status of the module. Possible status strings are ok, disable, faulty, other, standby, and error.
MAC-Address(es)	MAC address or MAC address range for the module. Token Ring module MAC addresses appear in noncanonical format.
Hw	Hardware version of the module ¹ .
Fw	Firmware version of the module ² .
Sw	Software version on the module.
SMT User-Data	User-data string defined for the FDDI module.
T-Notify	T-Notify timer value configured for the FDDI module.
CF-St	Configuration management state of the FDDI module.
ECM-St	Entity Coordination Management state of the FDDI module.
Bypass	Status of whether an optical bypass switch is present.
Sub-Type ³	Submodule type.
Sub-Model ³	Model number of the submodule.

Table 2-27 *show module Command Output Fields (continued)*

Field	Description
Sub-Serial ³	Serial number of the submodule.
Sub-Hw ³	Hardware version of the submodule.

1. Hw for the supervisor engine module displays the supervisor engine module's EARL hardware version.
2. Fw for the supervisor engine module displays the supervisor engine module's boot version.
3. This field displays EARL information; this field is dd on the Catalyst 4000 family and Catalyst 2948G switches.

show multicast group

To display the multicast group configuration, use the **show multicast group** command.

```
show multicast group [mac_addr] [vlan_id]
```

Syntax Description	
<i>mac_addr</i>	(Optional) Destination MAC address.
<i>vlan_id</i>	(Optional) Number of the VLAN.

Defaults This command has no default settings.

Command Types Switch command

Command Modes Normal

Examples This example shows how to display the multicast group configuration for VLAN 1:

```
Console> show multicast group 1
VLAN  Dest MAC/Route Des      [CoS]  Destination Ports or VCs / [Protocol Type]
-----
1      01-00-5e-00-01-28*         3/1,12/9
1      01-00-5e-63-7f-6f*         3/1,12/5,12/9
Total Number of Entries = 2
Console>
```

This example shows how to display the multicast group configuration for a specific MAC address on VLAN 5:

```
Console> show multicast group 01-00-5E-00-00-5C 5
VLAN  Dest MAC/Route Des      [CoS]  Destination Ports or VCs / [Protocol Type]
-----
5      01-00-5E-00-00-5C         3/1, 3/9
Total Number of Entries = 1
Console>
```

The following table describes the fields in the **show multicast group** command output.

Field	Description
VLAN	VLAN number.
Dest MAC/Route Des	Group destination MAC address.
*	Status of whether the port was configured manually as a multicast router port.
CoS	CoS value.
Destination Ports or VCs	List of all the ports that belong to this multicast group. Traffic destined to this group address will be forwarded on all these ports.
Total Number of Entries	Total number of entries in the multicast group table that match the command criteria

■ show multicast group

Related Commands

[clear multicast router](#)
[set cgm](#)
[set multicast router](#)
[show multicast router](#)

show multicast group count

To show the total number of multicast addresses (groups) in a VLAN, use the **show multicast group count** command.

```
show multicast group count [vlan_id]
```

Syntax Description	<i>vlan_id</i> (Optional) Number of the VLAN.
Defaults	This command has no default settings.
Command Types	Switch command
Command Modes	Normal
Examples	<p>This example shows how to display the total count of multicast groups in VLAN 5:</p> <pre>Console> show multicast group count 5 Total Number of Entries = 2 Console></pre>
Related Commands	<ul style="list-style-type: none">clear multicast routerset egmpset multicast routershow multicast router

show multicast protocols status

To display multicast protocol configuration status, use the **show multicast protocols status** command.

show multicast protocols status

Syntax Description This command has no keywords or arguments.

Defaults This command has no default settings.

Command Types Switch command

Command Modes Normal

Examples This example show how to display the multicast protocol configuration:

```
Console> show multicast protocols status
CGMP disabled
IGMP enabled
IGMP fastleave disabled
RGMP enabled
GMRP disabled
Console> (enable)
```

Related Commands

- [clear multicast router](#)
- [set multicast router](#)
- [show multicast group count](#)
- [show multicast router](#)