

# show traffic

Use the **show traffic** command to display traffic and peak information for each switching bus.

**show traffic**

---

**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 traffic and peak information for each switching bus on Catalyst 5500 and Catalyst 5505 switches:

```
Console> show traffic
Threshold: 80%
Switching-Bus Traffic Peak Peak-Time
-----
A                5%    10% Thu May 11 2000, 22:45:20
B                4%    15% Fri May 19 2000, 09:59:31
C                6%     8% Fri Mar 19 2000, 11:30:13
Console>
```

---

**Related Commands** [set traffic monitor](#)  
[show system](#)

# show trunk

Use the **show trunk** command to display trunking information for the switch.

**show trunk** [*mod*[/*port*]] [**detail**]

Syntax Description	
<i>mod</i>	(Optional) Number of the module.
<i>/port</i>	(Optional) Number of the port.
<b>detail</b>	(Optional) Keyword to show detailed information about the specified trunk port.

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

**Command Types** Switch command.

**Command Modes** Normal.

**Usage Guidelines** Entering the **show trunk** command without specifying a module or port number displays the actively trunking ports.

To display the trunking configuration for a port that is not actively trunking, specify the module and port number of the port you want to display.

The RSM port displays as a port that is always trunking, with allowed and active VLANs for each VLAN configured on the RSM.

**Examples** This example shows how to display trunking information for the switch:

```

Console> (enable) show trunk
* - indicates vtp domain mismatch
Port      Mode           Encapsulation  Status      Native vlan
-----
2/1       auto           dot1q          trunking    1
4/9       auto           isl            trunking    1
4/10      desirable     isl            trunking    1

Port      Vlans allowed on trunk
-----
2/1       1-1005
4/9       1-1005
4/10      1-1005

```

```

Port      Vlans allowed and active in management domain
-----
2/1      1-5,10,50,152,500,521-524,570
4/9      1,4-5,1003,1005
4/10     1,4-5,1003,1005

Port      Vlans in spanning tree forwarding state and not pruned
-----
2/1      1-5,10,50,152,500,521-524,570
4/9      1005
4/10     1005
Console> (enable)

```

This example shows how to display trunking information for a specific port:

```

Console> (enable) show trunk 4/5
* - indicates vtp domain mismatch

Port      Mode           Encapsulation  Status      Native vlan
-----
4/5      nonegotiate    dot1q          trunking    1

Port      Vlans allowed on trunk
-----
4/5      1-1005

Port      Vlans allowed and active in management domain
-----
4/5      1-3,1003,1005

Port      Vlans in spanning tree forwarding state and not pruned
-----
4/5      1005
Console> (enable)

```

Table 2-84 describes the fields in the **show trunk** command output.

**Table 2-84 show trunk Command Output Fields**

Field	Description
Port	Module and port numbers.
Mode	Trunk administrative status of the port (on, off, auto, or desirable).
Encapsulation	Trunking type configured by administration.
Status	Status of whether the port is trunking or nontrunking.
Native VLAN	Number of the native VLAN for the trunk link (for 802.1Q trunks, the VLAN for which untagged traffic can be transmitted and received over the trunk; for ISL trunks, packets are tagged on all VLANs, including the native VLAN).
Vlans allowed on trunk	Range of VLANs allowed to go on the trunk (default is 1 to 1000).

**show trunk****Table 2-84 show trunk Command Output Fields (continued)**

<b>Field</b>	<b>Description</b>
Vlans allowed and active in management domain	Range of active VLANs within the allowed range.
Vlans in spanning tree forwarding state and not pruned	Range of VLANs that actually go on the trunk with Spanning Tree Protocol forwarding state.

**Related Commands** [set trunk](#)

# show uddl

Use the **show uddl** command to display UDLD information.

**show uddl**

**show uddl port** [*mod*[/*port*]]

Syntax Description	port	Keyword to specify module or ports.
	<i>mod</i>	(Optional) Number of the module for which UDLD information is displayed.
	<i>/port</i>	(Optional) Number of the port for which UDLD information is displayed.

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

**Command Types** Switch command.

**Command Modes** Normal.

**Examples** This example shows how to find out whether or not UDLD is enabled:

```
Console> show uddl
UDLD      : enabled
Console>
```

This example shows how to display UDLD information for a specific module and port:

```
Console> show uddl port 2/1
UDLD      :enabled
Port      Admin Status  Link State
-----  -
2/1      enabled           undetermined
Console>
```

This example shows how to display UDLD information for all ports on a specific module:

```
Console> (enable) show uddl port 3
UDLD      : enabled
Port      Admin Status  Link State
-----  -
3/1      enabled           undetermined
3/2      enabled           undetermined
3/3      enabled           undetermined
3/4      enabled           undetermined
3/5      enabled           undetermined
3/6      disabled          not applicable
3/7      disabled          not applicable
3/8      disabled          not applicable
```

Table 2-85 describes the fields in the **show udd** command output.

**Table 2-85 show udd Command Output Fields**

Field	Description
UDLD	Status of whether UDLD is globally enabled or disabled.
Port	Module and port numbers.
Admin Status	Status of whether UDLD is enabled or disabled on a per-port basis.
Link State	Status of the link: undetermined (detection in progress, UDLD has been disabled on the neighbors), not applicable (UDLD is not supported on the port, UDLD has been disabled on the port, or the port is disabled), shutdown (unidirectional link has been detected and the port disabled), bidirectional (bidirectional link has been detected).

**Related Commands** [set udd](#)

# show users

Use the **show users** command to show if the console port is active and to list all active Telnet sessions with the IP address or IP alias of the originating host.

**show users [noalias]**

## Syntax Description

**noalias** (Optional) Keyword to force the display to show IP addresses, not IP aliases.

## Defaults

This command has no default settings.

## Command Types

Switch command.

## Command Modes

Normal.

## Usage Guidelines

When you enter the **show users** command, the output displays the session type and the IP address or IP alias of the active Telnet session.

## Examples

This example shows how to display the users of the active Telnet sessions:

```
Console> (enable) show users
  Session  User                Location
  -----  -
  console
* ssh      171.69.194.227
  telnet   171.69.194.227
Console> (enable)
```

## Related Commands

[disconnect](#)

# show version

Use the **show version** command to display software and hardware version information for switching and supervisor engine modules only.

**show version** [*mod*]

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

<b>Defaults</b>	This command has no default settings.
-----------------	---------------------------------------

<b>Command Types</b>	Switch command.
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<b>Command Modes</b>	Normal.
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<b>Examples</b>	This example shows how to display the software and hardware versions:
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```

Console> show version
WS-C5509 Software, Version NmpSW: 6.1(0.24)FTL
Copyright (c) 1995-1999 by Cisco Systems
NMP S/W compiled on Aug 31 1999, 12:59:28

System Bootstrap Version: 5.2(1)
System Web Interface Version: 5.0(0.25)

Hardware Version: 1.0 Model: WS-C5509 Serial #: SCA032100T8

Mod Port Model                Serial #    Versions
-----
1   2   WS-X5K-SUP1-2GE             SAD03232101 Hw : 4.0
                                       Fw : 5.2(1)
                                       Fw1: 4.2(0.24)VAI78
                                       Sw  : 5.3(0.74)MIA7-Eng
                                       Sw1: 5.3(0.74)MIA7
3   48  WS-X5223-RJ-45             SAD03257164 Hw : 1.1
                                       Fw : 4.2(0.24)VAI78
                                       Sw  : 5.3(0.74)MIA7
5   48  WS-X5223-RJ-45             SAD03257171 Hw : 1.1
                                       Fw : 4.2(0.24)VAI78
                                       Sw  : 5.3(0.74)MIA7

          DRAM                FLASH                NVRAM
Module Total  Used    Free    Total  Used    Free    Total Used    Free
-----
1          65408K  24747K  40661K  16384K  14543K  1841K  512K  203K  309K

Uptime is 2 days, 0 hour, 41 minutes
Console> (enable)

```

This example show how to display version information for a specific module:

```

Console> (enable) show version 2
Mod Port Model                Serial #    Versions
-----
2   1   WS-X5403-NAM                JAB0343055Y Hw : 0.201
                                       Fw : 4.2(0.24)DAY68
                                       Sw : 6.1(0.24)FTL

Console> (enable)

```

Table 2-86 describes the fields in the **show version** command output.

**Table 2-86 show version Command Output Fields**

Field	Description
McpSW	Version number of the MCP software.
NmpSW	Version number of the NMP software.
NMP S/W compiled on	Date and time that the NMP software was compiled.
MCP S/W compiled on	Date and time that the MCP software was compiled.
System Bootstrap Version	System bootstrap version number.
Web Interface Version	Web interface version number.
Hardware Version	Hardware version number.
Model	Switch model number.
Serial #	Switch serial number.
Module	Module number.
Ports	Number of ports on the module.
Model	Model number of the module.
Serial #	Serial number of the module.
Hw	Hardware version of the module.
Fw	Version of the firmware installed on the module. If this is a supervisor engine module, the Fw version number is the NMP boot ROM version level.
Fw1	Version of the second firmware image on the module, if present. If this is a supervisor engine module, the Fw1 version number is the MCP boot ROM version level.
Sw	Version of the software installed on the module.
Gsp	Version of the gigabit switching platform.
Nmp	Version of the supervisor engine software.
Module	Module number.
DRAM Total	Total dynamic RAM installed on the module.

**Table 2-86** *show version Command Output Fields (continued)*

<b>Field</b>	<b>Description</b>
Used	Amount of DRAM in use.
Free	Amount of available DRAM.
FLASH Total	Total Flash memory installed on the module.
Used	Amount of Flash in use.
Free	Amount of available Flash.
NVRAM Total	Total NVRAM installed on the module.
Used	Amount of NVRAM in use.
Free	Amount of available NVRAM.
Used	Amount of NVRAM in use.
Available	Amount of NVRAM available.
Uptime is	Number of uninterrupted days, hours, minutes, and seconds the system has been up and running.

# show vlan

Use the **show vlan** command to display VLAN information.

**show vlan** [**trunk**]

**show vlan** *vlan* [**notrunk**]

**show vlan** *type*

## Syntax Description

<b>trunk</b>	(Optional) Keyword to force the display to show information on trunk ports only.
<i>vlan</i>	Number of the VLAN. If the VLAN number is not specified, all VLANs are displayed; valid values are from <b>1</b> to <b>1005</b> .
<b>notrunk</b>	(Optional) Keyword to force the display to show information only on nontrunk ports.
<i>type</i>	Type of VLAN; valid values are <b>ethernet</b> , <b>fddi</b> , <b>fddinet</b> , <b>trbrf</b> , and <b>trcrf</b> .

## Defaults

This command has no default settings.

## Command Types

Switch command.

## Command Modes

Normal.

## Usage Guidelines

Each Ethernet switch port and Ethernet repeater group belong to only one VLAN. Trunk, FDDI/CDDI, and ATM ports can be on multiple VLANs.

## Examples

This example shows how to display information for all VLANs:

```
Console> show vlan
```

VLAN Name	Status	IfIndex	Mod/Ports, Vlans
1 default	active	5	1/2 6/1-48 7/2-24
2 VLAN0002	active	339	
5 VLAN0005	active	342	
50 VLAN0050	active	346	
100 VLAN0100	active	347	
152 VLAN0152	active	348	
200 VLAN0200	active	349	
300 VLAN0300	active	350	
305 VLAN0305	active	354	
801 VLAN0801	active	338	338 802

## ■ show vlan

```

VLAN Type SAID MTU Parent RingNo BrdgNo Stp BrdgMode Trans1 Trans2
-----
1 enet 100001 1500 - - - - - 0 0
10 enet 100010 1500 - - - - - 0 0
901 enet 100901 1500 - - - - - 0 0
999 trbrf 100999 4472 - - 0xe ieee - 0 0
1002 fddi 101002 1500 - 0x0 - - - 0 0
1003 trcrf 101003 1500 0 0x0 - - - 0 0
1004 fdnet 101004 1500 - - 0x0 ieee - 0 0
1005 trbrf 101005 1500 - - 0x0 ibm - 0 0

VLAN AREHops STEHops Backup CRF
-----
1003 7 7 off
Console>

```

Table 2-87 describes the fields in the **show vlan** command output.

**Table 2-87 show vlan Command Output Fields**

Field	Description
VLAN	VLAN number.
Name	Name, if configured, of the VLAN.
Status	Status of the VLAN (active or suspend).
IfIndex	Interface Index, assigned by SNMP.
Mod/Ports, VLANs	Ports that belong to the VLAN.
Type	Media type of the VLAN.
SAID	Security association ID value for the VLAN.
MTU	Maximum transmission unit size for the VLAN.
Parent	Parent VLAN, if one exists.
RingNo	Ring number for the VLAN, if applicable.
BrdgNo	Bridge number for the VLAN, if applicable.
Stp	Spanning Tree Protocol type used on the VLAN.
BrdgMode	Bridging mode for this VLAN. Possible values are SRB and SRT.
Trans1	First translational VLAN used to translate FDDI or Token Ring to Ethernet.
Trans2	Second translational VLAN used to translate FDDI or Token Ring to Ethernet.
AREHops	Maximum number of hops for All-Routes Explorer frames. Possible values are 1 through 13; the default is 7.
STEHops	Maximum number of hops for Spanning Tree Explorer frames. Possible values are 1 through 13; the default is 7.
Backup CRF	Status of whether the TrCRF is a backup path for traffic.

### Related Commands

[set trunk](#)  
[set vlan](#)  
[show trunk](#)

# show vlan mapping

Use the **show vlan mapping** command to display VLAN mapping table information.

## show vlan mapping

**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 VLAN mapping table information:

```
Console> show vlan mapping
802.1q vlan      ISL vlan      Effective
-----
1099             917           true
Console>
```

[Table 2-88](#) describes the fields in the **show vlan mapping** command output.

**Table 2-88 show vlan mapping Command Output Fields**

Field	Description
802.1Q Vlan	Number of the 802.1Q VLAN.
ISL Vlan	Number of the ISL VLAN.
Effective	Status of the VLAN. If the VLAN is active and its type is Ethernet, true is displayed, if not, false is displayed.

**Related Commands** [clear vlan mapping](#)  
[set vlan mapping](#)

# show vmps

Use the **show vmps** command to display VMPS configuration information.

**show vmps [noalias]**

<b>Syntax Description</b>	<b>noalias</b> (Optional) Keyword to force 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 how to display VMPS configuration information:

```

Console> show vmps
VMPS Server Status:
-----
Management Domain: (null)
State: disabled
Operational Status: inactive
TFTP Server: default
TFTP File: vmps-config-database.1
Fallback VLAN: (null)
Secure Mode: open
VMPS No Domain Req: allow

VMPS Client Status:
-----
VMPS VQP Version: 1
Reconfirm Interval: 60 min
Server Retry Count: 3
VMPS domain server:

No dynamic ports configured.
Console>

```

[Table 2-89](#) describes the fields in the **show vmps** command output.

**Table 2-89 show vmps Command Output Fields**

Field	Description
VMPS Server Status	Status of VMPS server.
Management Domain	Management domain supported by this server.
State	Status of whether VMPS is enabled or disabled.

**Table 2-89** *show vmips Command Output Fields (continued)*

Field	Description
Operational Status	VMPS status (active, inactive, or downloading).
TFTP Server	IP address of the VMPS server.
TFTP File	VMPS configuration filename.
Fallback VLAN	VLAN assigned if a VLAN is not assigned to a MAC address in the database.
Secure Mode	Secure mode status (open or secure).
VMPS No Domain Req	Status of whether the server accepts requests from clients with no domain name.
VMPS Client Status	Status of the VMPS client.
VMPS VQP Version	Version of VMPS VQP.
VMPS domain server	VMPS domain server name.

**Related Commands**

[download vmips](#)  
[set vtp](#)

# show vmps mac

Use the **show vmps mac** command to display the MAC-address-to-VLAN mapping table.

```
show vmps mac [mac_addr]
```

<b>Syntax Description</b>	<i>mac_addr</i> (Optional) MAC address that allows you to see mapping information.
---------------------------	--

<b>Defaults</b>	This command has no default settings.
-----------------	---------------------------------------

<b>Command Types</b>	Switch command.
----------------------	-----------------

<b>Command Modes</b>	Normal.
----------------------	---------

<b>Usage Guidelines</b>	If you do not specify a MAC address, the entire mapping table is displayed.
-------------------------	---

<b>Examples</b>	This example shows the entire MAC-address-to-VLAN mapping table:
-----------------	--

```
Console> show vmps mac
MAC Address      VLAN Name Last Requestor  Port ID Last Accessed Last Response
-----
00-00-c0-23-c8-34 Hardware  198.4.222.111  3/5    0, 01:25:30  Success
00-00-c0-25-c9-42 --NONE--  198.4.222.111  2/1    0, 05:20:00  Denied
Console>
```

[Table 2-90](#) describes the fields in the **show vmps mac** command output.

**Table 2-90 show vmps mac Command Output Fields**

Field	Description
MAC Address	MAC address.
VLAN Name	VLAN name assigned to the MAC address.
Last Requestor	IP address of the client that last requested a VLAN assignment for this MAC address.
Port ID	Port ID in the last request.
Last Accessed	Time when the last request was processed for this MAC address.
Last Response	Response sent by the server for the last request.

<b>Related Commands</b>	<a href="#">show vmps</a>
-------------------------	---------------------------

# show vmpls statistics

Use the **show vmpls statistics** command to display the VMPS statistics.

## show vmpls statistics

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

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

**Command Types** Switch command.

**Command Modes** Normal.

**Usage Guidelines** The output of the **show vmpls statistics** command is based on the results of the **reconfirm vmpls** command.

**Examples** This example shows how to display the VMPS statistics:

```
Console> show vmpls statistics
VMPS Statistics:
Last Enabled At:                2,01:30:05
Config Requests:                20
Invalid Requests:              0
Status 'Error' Responses:      0
Status 'Deny' Responses:       5
MAC Address of Last Failed Request: 00-60-00-cc-01-02
Console>
```

[Table 2-91](#) describes the fields in the **show vmpls statistics** command output.

**Table 2-91 show vmpls statistics Command Output Fields**

Field	Description
Last Enabled At	Time when the VMPS was enabled.
Config Requests	Number of configuration requests.
Invalid Requests	Number of invalid requests.
Status 'Error' Responses	Number of error responses.
Status 'Deny' Responses	Number of "Access Denied" and "Port Shutdown" responses.
MAC Address of Last Failed Request	MAC address of the last request for which the response was not successful.

**Related Commands** [show vmpls](#)

# show vmps vlan

Use the **show vmps vlan** command to display all the MAC addresses assigned to a VLAN in the VMPS table.

```
show vmps vlan vlan_name
```

Syntax Description	<i>vlan_name</i> Name of the VLAN.
--------------------	------------------------------------

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

**Command Types** Switch command.

**Command Modes** Normal.

**Examples** This example shows how to display all MAC addresses assigned to the Hardware VLAN in the VMPS table:

```
Console> show vmps vlan Hardware
```

```
MAC Address      VLAN Name Last Requestor  Port ID Last Accessed Last Response
-----
00-00-c0-23-c8-34 Hardware  198.4.222.111  3/5    0, 01:25:30  Success
Console>
```

[Table 2-92](#) describes the fields in the **show vmps vlan** command output.

**Table 2-92 show vmps vlan Command Output Fields**

Field	Description
MAC Address	MAC address.
VLAN Name	VLAN name assigned to the MAC address.
Last Requestor	IP address of the client that last requested a VLAN assignment for this MAC address.
Port ID	Port ID in the last request.
Last Accessed	Time when the last request was processed for this MAC address.
Last Response	Response sent by the server for the last request.

**Related Commands** [show vmps](#)