show vmps vlanports

Use the **show vmps vlanports** command to display ports belonging to a restricted VLAN.

show vmps vlanports *vlan_name*

Syntax Description

vlan_name	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 the VLAN ports in the Engineering VLAN:

```
Console> show vmps vlanports Engineering

VLAN Name       Device ID       Port ID
--------------- --------------- ----------
Engineering     172.20.220.110  2/4
Console>
```

Table 2-93 describes the fields in the **show vmps vlanports** command output.

Table 2-93 show vmps vlanports Command Output Fields

Field	Description
VLAN Name	Restricted VLAN name.
Device ID	IP address of the client on which this VLAN is allowed.
Port ID	ID of the port on the client on which this VLAN is allowed.

Related Commands

show vmps vlanports

show vtp domain

Use the **show vtp domain** command to display VTP domain information.

show vtp domain

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 VTP domain information:

```
Console> show vtp domain
Domain Name                      Domain Index VTP Version Local Mode  Password
-------------------------------- ------------ ----------- ----------- ----------
                                 1            2           server      -

Vlan-count Max-vlan-storage Config Revision Notifications
---------- ---------------- --------------- -------------
15         1023             5               disabled

Last Updater    V2 Mode Pruning  PruneEligible on Vlans
--------------- ------- -------- --------------------------
172.20.44.30    enabled disabled 2-1000
Console>
```

Table 2-94 describes the fields in the **show vtp domain** command output.

Table 2-94 show vtp domain Command Output Fields

Field	Description
Domain Name	Name of the VTP domain.
Domain Index	Domain index number of the domain.
VTP Version	VTP version number.
Local Mode	VTP mode (server, client, or transparent).
Password	Password required or not.
Vlan-count	Total number of VLANs in the domain.

Table 2-94 show vtp domain Command Output Fields (continued)

Field	Description
Max-vlan-storage	Maximum number of VLANs allowed on the device.
Config Revision	VTP revision number used to exchange VLAN information.
Notifications	Notifications to SNMP (enabled or disabled).
Last Updater	IP address through which VTP was last updated.
V2 Mode	Status of whether VTP V2 mode is enabled or disabled.
Pruning	Status of whether VTP pruning is enabled or disabled.
PruneEligible on Vlans	VLANs on which pruning is allowed.

Related Commands set vtp

show vtp statistics

Use the **show vtp statistics** command to display VTP statistics.

show vtp statistics

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 VTP statistics:

```
Console> show vtp statistics
VTP statistics:
summary advts received          0
subset  advts received          0
request advts received          0
summary advts transmitted       1
subset  advts transmitted       1
request advts transmitted       0
No of config revision errors    0
No of config digest errors      0


VTP pruning statistics:

Trunk     Join Transmitted  Join Received  Summary advts received from
                                           non-pruning-capable device
--------  ---------------  -------------  --------------------------
 5/1-2
Console>
```

Table 2-95 describes the fields in the **show vtp statistics** command output.

Table 2-95 show vtp statistics Command Output Fields

Field	Description
summary advts received	Total number of summary advertisements received.
subset advts received	Total number of subset advertisements received.
request advts received	Total number of request advertisements received.
summary advts transmitted	Total number of summary advertisements transmitted.
subset advts transmitted	Total number of subset advertisements transmitted.

Table 2-95 show vtp statistics Command Output Fields (continued)

Field	Description
request advts transmitted	Total number of request advertisements transmitted.
No of config revision errors	Number of configuration revision errors that have occurred.
No of config digest errors	Number of configuration revision digest errors that have occurred.
Trunk	Trunk port participating in VTP pruning.
Join Trasmitted	Number of VTP-Pruning Joins transmitted.
Join Received	Number of VTP-Pruning Joins received.
Summary advts received from nonpruning-capable device	Number of summary advertisements received from nonpruning-capable devices.

Related Commands

clear vtp statistics
set vtp

slip

Use the **slip** command to attach or detach SLIP for the console port.

slip {**attach** | **detach**}

Syntax Description

attach	Keyword to enable the UDLD feature.
detach	Keyword to deactivate SLIP for the console port.

Defaults

By default, SLIP is not active (detached).

Command Types

Switch command.

Command Modes

Privileged.

Usage Guidelines

You can enter the **slip** command from a console port session or a Telnet session.

Examples

This example shows how to enable SLIP for a console port during a console port session:

```
Console> (enable) slip attach
Console port now running SLIP.
<console port running SLIP>
```

This example shows how to disable SLIP for a console port during a Telnet session:

```
Console> (enable) slip detach
SLIP detached on Console port.
<console port back to RS-232 Console>
Console> (enable)
```

Related Commands

set interface

squeeze

Use the **squeeze** command to delete Flash files permanently.

squeeze [*m*/]*device*:

Syntax Description

m/	(Optional) Module number of the supervisor engine containing the Flash device.
device:	Device where the Flash device resides.

Defaults

This command has no default settings.

Command Types

Switch command.

Command Modes

Privileged.

Usage Guidelines

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

This command applies only to the Supervisor Engine III. If you attempt to run this command on a Supervisor Engine I or II, you will receive an error message.

Examples

These examples show how to use the **squeeze** command to delete the slot0 Flash files and then use the **show flash** command to confirm the deletion:

```
Console> squeeze slot0:
All deleted files will be removed, proceed (y/n) [n]?y
Squeeze operation may take a while, proceed (y/n) [n]?y
.....................................................
Console> (enable) show flash
-#- ED --type-- --crc--- -seek-- nlen -length- -----date/time------ name
  1 .. ffffffff 1f65a4dd   45050    8    20429 Apr 01 1999 15:38:42 5500.cfg
  2 .. ffffffff 13c368fe  4e9aa0   29  4868557 Mar 02 2000 12:06:18 cat5000-sup3
.6-1-0-30-FTL.bin

2712928 bytes available (4889248 bytes used)
Console>
```

Related Commands

dir—switch
show flash
undelete

switch

Use the **switch** command to switch the clock from the supervisor engine clock to the internal clock or from the active supervisor engine to the redundant supervisor engine.

switch {**clock** | **supervisor**}

Syntax Description

clock	Keyword to switch the clock from the supervisor engine clock to the internal clock.
supervisor	Keyword to switch from the active supervisor engine to the redundant supervisor engine (Catalyst 5500 and Catalyst 5505 switches only).

Defaults

This command has no default settings.

Command Types

Switch command.

Command Modes

Privileged.

Usage Guidelines

The **switch** command is supported only on Catalyst 5500 and Catalyst 5505 switches.

Examples

This example shows how to switch the clock:

```
Console> (enable) switch clock
This command will reset system and force a clock switch-over.
Do you want to continue (y/n) [n]?
Console> (enable)
```

This example shows how to switch to the redundant supervisor engine:

```
Console> (enable) switch supervisor
This command will force a switch-over to the standby Supervisor module.
Do you want to continue (y/n) [n]?
Console> (enable)
```

sync

Use the **sync** command to write the working in-core copy of environment variables and the aliases to NVRAM so they are read on the next reset.

sync

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 use the **sync** command:

```
rommon 10 > sync
rommon 11 >
```

telnet

Use the **telnet** command to start a Telnet connection to a remote host.

telnet *host* [*port_num*]

Syntax Description

host	Name or IP address of the remote host to which you want to connect.
port_num	(Optional) Specific port connection on the remote host.

Defaults

This command has no default settings.

Command Types

Switch command.

Command Modes

Privileged.

Examples

This example shows how to open and close a Telnet session with the host elvis:

```
Console> (enable) telnet elvis
Trying 192.122.174.11...
Connected to elvis.
Escape character is '^]'.

UNIX(r) System V Release 4.0 (elvis)

login: fred
Password:
Last login: Thu Jun 11 09:25:01 from forster.cisc.rum
Sun Microsystems Inc.   SunOS 5.4       Generic July 1994
You have new mail.
% logout

Console> (enable)
```

Related Commands

disconnect

test packetbuffer

Use the **test packetbuffer** command to run packet buffer testing immediately.

test packetbuffer {*mod/port...*} [**complement** | [**fixed** {*pattern*}]]

test packetbuffer cancel

Syntax Description

mod/port..	Number of the module and the port on the module.
complement	(Optional) Keyword to complement the pattern for each write operation, for example, a pattern of 0x550000555555 is complemented by the pattern 0xaaffffaaaaaa in the next write operation.
fixed	(Optional) Keyword to specify the pattern in the command will be the same as the one written to the packet buffer.
pattern	(Optional) Pattern value; valid values are 0 to 0xFFFFFFFFFFFF.
cancel	Keyword to cancel the packet buffer test.

Defaults

A default pattern value of 0x55aa55aa55aa is used for the complement.

Command Types

Switch command.

Command Modes

Privileged.

Usage Guidelines

You can run immediate packet buffer testing on disabled ports (in other words, ports that do not have user traffic running through them). You can not run immediate packet buffer testing on enabled ports (in other words, ports that have user traffic running through them).

Immediate packet buffer testing on a disabled port takes up to one minute.

Note To run scheduled packet buffer testing on disabled and enabled ports, use the **set test packetbuffer** command.

Examples

This example shows how to test packet buffers on module 5 ports 1 through 24:

```
Console> (enable) test packetbuffer 5/1-24
Packet buffer test started. Estimated test time: 5 minutes.
Console> (enable) 2000 Jan 29 14:52:28 %SYS-3-PKTBUFBAD:Port 5/4 failed packet buffer test
2000 Jan 29 14:54:30 %SYS-5-PKTTESTDONE:Packet buffer test done.  Use 'show test' to see
test results
```

This example shows how to cancel a packet buffer test:

```
Console> (enable) test packetbuffer cancel
No on-demand packetbuffer tests running.
Use 'set test pacektbuffer disable' to stop scheduled or continuous tests.
Console> (enable)
```

Related Commands

set test diaglevel
set test packetbuffer
show test

test snmp trap

Use the **test snmp trap** command to send an SNMP trap message to the trap receivers.

test snmp trap *trap_num* [*specific_num*]

Syntax Description

trap_num	Number of the trap.
specific_num	(Optional) Number of a predefined trap.

Defaults

This command has no default settings.

Command Types

Switch command.

Command Modes

Privileged.

Examples

This example shows how to run trap 0:

```
Console> (enable) test snmp trap 0
SNMP trap message sent. (4)
Console> (enable)
```

Related Commands

set snmp trap

traceroute

Use the **traceroute** command to display a hop-by-hop path through an IP network from the switch to a specific destination host.

traceroute [**-n**] [**-w** *wait_time*] [**-i** *initial_ttl*] [**-m** *max_ttl*] [**-p** *dest_port*] [**-q** *nqueries*] [**-t** *tos*] *host* [*data_size*]

Syntax Description

-n	(Optional) Keyword and variable to prevent **traceroute** from performing a DNS lookup for each hop on the path. Only numerical IP addresses are printed.
-w *wait_time*	(Optional) Keyword and variable to specify the amount of time (in seconds) that **traceroute** will wait for an ICMP response message. The allowed range for *wait_time* is from **1** to **300** seconds; the default is 5 seconds.
-i *initial_ttl*	(Optional) Keyword and variable to cause **traceroute** to send ICMP datagrams with a TTL value equal to *initial_ttl* instead of the default TTL of 1. This causes **traceroute** to skip processing for hosts that are less than *initial_ttl* hops away.
-m *max_ttl*	(Optional) Keyword and variable to specify the maximum TTL value for outgoing ICMP datagrams. The allowed range for *max_ttl* is **1** to **255**; the default value is 30.
-p *dest_port*	(Optional) Keyword and variable to specify the base UDP destination port number used in **traceroute** datagrams. This value increments each time a datagram is sent. The allowed range for *dest_port* is **1** to **65535**; the default base port is 33434. Use this option in the unlikely event that the destination host is listening to a port in the default traceroute port range.
-q *nqueries*	(Optional) Keyword and variable to specify the number of datagrams to send for each TTL value. The allowed range for *nqueries* is **1** to **1000**; the default is 3.
-t *tos*	(Optional) Keyword and variable to specify the TOS to be set in the IP header of the outgoing datagrams. The allowed range for *tos* is **0** to **255**; the default is 0. Use this option to see if different types of service cause routes to change.
host	IP alias or IP address in dot notation (*a.b.c.d*) of the destination host.
data_size	(Optional) Number of bytes, in addition to the default of 40 bytes, of the outgoing datagrams. The allowed range is **0** to **1420**; the default is 0.

Defaults

Entering the **traceroute** *host* command without options sends three 40-byte ICMP datagrams with an initial TTL of 1, a maximum TTL of 30, a timeout period of 5 seconds, and a TOS specification of 0 to destination UDP port number 33434. For each host in the processed path, the initial TTL for each host and the destination UDP port number for each packet sent are incremented by one.

Command Types

Switch command.

Command Modes

Privileged.

Usage Guidelines

To interrupt **traceroute** after the command has been issued, press **Ctrl-C**.

The **traceroute** command uses the TTL field in the IP header to cause routers and servers to generate specific return messages. Traceroute starts by sending a UDP datagram to the destination host with the TTL field set to 1. If a router finds a TTL value of 1 or 0, it drops the datagram and sends back an ICMP "time exceeded" message to the sender. The traceroute facility determines the address of the first hop by examining the source address field of the ICMP time-exceeded message.

To identify the next hop, traceroute again sends a UDP packet but this time with a TTL value of 2. The first router decrements the TTL field by 1 and sends the datagram to the next router. The second router sees a TTL value of 1, discards the datagram, and returns the time-exceeded message to the source. This process continues until the TTL is incremented to a value large enough for the datagram to reach the destination host (or until the maximum TTL is reached).

To determine when a datagram has reached its destination, traceroute sets the UDP destination port in the datagram to a very large value that the destination host is unlikely to be using. When a host receives a datagram with an unrecognized port number, it sends an ICMP "port unreachable" error to the source. This message indicates to the traceroute facility that it has reached the destination.

Catalyst 5000 family switches can participate as the source or destination of the **traceroute** command. However, because they are Layer 2 devices, these switches do not examine the TTL field in the IP header and do not decrement the TTL field or send ICMP time-exceeded messages. A Catalyst 5000 family switch does not appear as a hop in the **traceroute** command output.

Examples

This example shows how to use the **traceroute** command to determine the path from the source to the destination host server10:

```
Console> (enable) traceroute server10
traceroute to server10.company.com (172.16.22.7), 30 hops max, 40 byte packets
 1  engineering-1.company.com (172.31.192.206)  2 ms  1 ms  1 ms
 2  engineering-2.company.com (172.31.196.204)  2 ms  3 ms  2 ms
 3  gateway_a.company.com (172.16.1.201)  6 ms  3 ms  3 ms
 4  server10.company.com (172.16.22.7)  3 ms  *  2 ms
Console> (enable)
```

Table 2-96 describes the fields in the **traceroute** command output.

Table 2-96 traceroute Command Output Fields

Field	Description
30 hops max, 40 byte packets	Maximum TTL value and the size of the ICMP datagrams being sent.
2 ms 1 ms 1 ms	Total time (in milliseconds) for each ICMP datagram to reach the router or host plus the time it took for the ICMP time-exceeded message to return to the host. An exclamation point following any of these values (for example, 20 ms !) indicates that the port-unreachable message returned by the destination had a TTL of 0 or 1. Typically, this occurs when the destination uses the TTL value from the arriving datagram as the TTL in its ICMP reply. The reply does not arrive at the source until the destination receives a traceroute datagram with a TTL equal to the number of hops between the source and destination.
3 ms * 2 ms	"*" indicates that the timeout period (default of 5 seconds) expired before an ICMP time-exceeded message was received for the datagram.

If **traceroute** receives an ICMP error message other than a time-exceeded or port-unreachable message, it prints one of the error codes shown in Table 2-97 instead of the round-trip time or an asterisk (*).

Table 2-97 traceroute Error Messages

ICMP Error Code	Meaning
!N	No route to host. The network is unreachable.
!H	No route to host. The host is unreachable.
!P	Connection refused. The protocol is unreachable.
!F	Fragmentation needed but do not fragment (DF) bit was set.
!S	Source route failed.
!A	Communication administratively prohibited.
?	Unknown error occurred.

Related Commands **ping**

unalias

Use the **unalias** command to remove the alias name and associated value from the alias list.

unalias *name*

Syntax Description

name	Name of the alias.

Defaults

This command has no default settings.

Command Types

ROM monitor command.

Command Modes

Normal.

Examples

This example shows how to use the **unalias** command to remove the **s** alias and then check to ensure it was removed:

```
rommon 5 > alias
r=repeat
h=history
?=help
b=boot
ls=dir
i=reset
k=stack
s=set
rommon 6 > unalias s
rommon 7 > alias
r=repeat
h=history
?=help
b=boot
ls=dir
i=reset
k=stack
rmmon 8 > s
monitor: command "s" not found
================================================================================
```

Related Commands

alias

undelete

Use the **undelete** command to recover a deleted file on a Flash memory device. The deleted file can be recovered using its index (because there could be multiple deleted files with the same name).

undelete *index* [[*m*/]*device*:]

Syntax Description

index	Index number of the deleted file.
m/	(Optional) Module number of the supervisor engine containing the Flash device.
device:	(Optional) Device where the Flash device resides.

Defaults

This command has no default settings.

Command Types

Switch command.

Command Modes

Privileged.

Usage Guidelines

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

Use the **dir** command to learn the index number of the file to be undeleted.

A file cannot be undeleted if a valid file with the same name exists. You must delete the existing file before you can undelete the target file.

A file can be deleted and undeleted up to 15 times.

To delete all deleted files permanently on a device, use the **squeeze** command.

Examples

This example shows how to recover the deleted file with index 1 and use the **show flash** command to confirm:

```
Console> (enable) undelete 1 bootflash:
Console> (enable)  show flash
-#- ED --type-- --crc--- -seek-- nlen -length- -----date/time------ name
  1 .. ffffffff a638976e  3627ec   23  3286891 Jan 01 1999 07:04:37 cat5000-supn
  2 .. ffffffff a6a84c93  365f74   17    14086 Jan 29 1999 02:33:56 switch_confg
  3 .. ffffffff 141a9127  70b7cc   29  3823575 Mar 09 1999 19:15:55 cat5000-supn

1428272 bytes available (6173904 bytes used)
Console> (enable)
```

Related Commands

delete
show flash
squeeze

unset=*varname*

Use the **unset=***varname* command to remove a variable name from the variable list.

unset=*varname*

Syntax Description

This command has no arguments or keywords.

Defaults

This command has no defaults.

Command Types

ROM monitor command.

Command Modes

Normal.

Examples

This example shows how to use the **set** command to display the variable list, use the **unset** command to remove a variable name from the variable list, and then use the **set** command to display the variable list to verify:

```
rommon 2 > set
PS1=rommon ! >
BOOT=
?=0
rommon 3 > unset=0
rommon 4 > set
PS1=rommon ! >
BOOT=
```

Related Commands

varname=

upload

Use the **upload** command to upload a software image to a network host.

upload *host file* [*mod*] [**rcp** | **tftp**]

Syntax Description

host	IP address or IP alias of the host.
file	Name of the image file.
mod	(Optional) Number of the module from which to upload the image file. If no number is specified, the default is module 1.
rcp	(Optional) Keyword to upload a software image to a network host using rcp.
tftp	(Optional) Keyword that allows you to copy to or from a TFTP server.

Defaults

If you do not specify the type of upload method, TFTP is used.

Command Types

Switch command.

Command Modes

Privileged.

Usage Guidelines

This command is not supported by the three-port Gigabit Ethernet switching module (WS-X5403).

To upload a software image for the RSM, use the **session** command.

Examples

This example shows how to upload the supervisor engine image to the c5009_11.bin file on the mercury host:

```
Console> (enable) upload mercury c5009_11.bin 3
Upload Module 1 image to c5009_11.bin on mercury (y/n) [n]? y
/
Done.  Finished Network Upload.  (153908 bytes)
Console> (enable)
```

This example shows how to upload the c5000_spv11.bin file from the mercury host to the supervisor engine module:

```
Console> (enable) upload mercury c5000_spv11.bin rcp
Upload image c5000_spv11.bin from mercury to module 1FLASH (y/n) [n]? y
\
Finished network single module download. (2418396 bytes)
FLASH on Catalyst:

Type            Address             Location
Intel 28F008    20000000            NMP (P3) 4MB SIM

Erasing flash sector...done.
```

```
Programming flash sector...done.
Erasing flash sector...done.
Programming flash sector...done.
The system needs to be reset to run the new image.
Console> (enable)
```

Related Commands

download

varname=

Use the ***varname=*** command to set the variable *VARNAME* to *varvalue*. The syntax *varname***=** sets the variable to a NULL string.

varname=*value*

Syntax Description

*varname***=**	Name of the variable.
value	Any ROM monitor command.

Defaults

This command has no defaults.

Command Types

ROM monitor command.

Command Modes

Normal.

Usage Guidelines

Do not put a space before or after the equal (=) sign. If there are spaces, you must place the *value* in quotes. Spell out variable names in all caps to make them conspicuous.

Examples

This example shows how to assign a variable name to a value:

```
rommon 1 > s=set
rommon 2 > s
PS1=rommon ! >
BOOT=
?=0
```

Related Commands

unset=varname

verify

Use the **verify** command to confirm the checksum of a file on a Flash device.

verify [[*m*/]*device*:] *filename*

Syntax Description

m/	(Optional) Module number of the supervisor engine containing the Flash device.
device:	(Optional) Device where the Flash device resides.
filename	Name of the configuration 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 use the **verify** command:

```
Console> verify cat5k_r47_1.cbi
.....................................................
File cat5k_r47_1.cbi verified OK.
```

wait

Use the **wait** command to cause the CLI to pause for a specified number of seconds before executing the next command. This command might be included in a configuration file.

wait *seconds*

Syntax Description

seconds	Number of seconds for the CLI to wait.

Defaults

This command has no default settings.

Command Types

Switch command.

Command Modes

Normal.

Examples

This example shows how to pause the CLI for 5 seconds:

```
Console> wait 5
Console>
```

write

Use the **write** command to upload or display nondefault configurations to a host or terminal.

write {*host file* | **network** | **terminal**} [**rcp**] [**all**]

write memory

Syntax Description

host	IP address or IP alias of the host.
file	Name of the configuration file.
network	Keyword to specify interactive prompting for the IP address or IP alias of the host and the filename to upload.
terminal	Keyword to display the nondefault configuration file on the terminal.
rcp	(Optional) Keyword to upload a software image to a host using rcp.
all	(Optional) Keyword to specify all modules and system configuration information, including the IP address.
memory	Keyword to upload the current configuration to a specified location.

Defaults

By default, the **write** command will upload or output only nondefault configurations. Use the keyword **all** to upload or output both default and nondefault configurations.

Command Types

Switch command.

Command Modes

Privileged.

Usage Guidelines

Caution Always back up the switch configuration file before upgrading or downgrading the switch software to avoid losing all or part of the configuration stored in NVRAM. Use the **write network** command (Supervisor Engine II, II G, or III G) or the **copy config tftp** command (Supervisor Engine III) to back up your configuration to a TFTP server. Use the **copy config flash** command on a Supervisor Engine III to back up the configuration to a Flash device.

The **write** *host file* command is a shorthand version of the **write network** command.

You cannot use the **write network** command to upload software to the ATM module. With the **write network** command, the file must already exist on the host (use the UNIX **touch** *filename* command to create the file).

The **write memory** command is only applicable when the switch is set to save its configuration to a text file.

Examples

This sample session assumes that module 1 is a 2-port supervisor engine, module 2 is a 12-port 10/100BASE-T switched Ethernet module, modules 3 and 5 are empty, and module 4 is an FDDI module. Details of the ATM configuration must be accessed through the special module mode.

This example shows how to upload the system5.cfg file to the mercury host using the **write network** command:

```
Console> (enable) write network
IP address or name of host? mercury
Name of configuration file to write? system5.cfg
Upload configuration to system5.cfg on mercury (y/n) [y]? y
/
Done.  Finished Network Upload.  (9003 bytes)
Console> (enable)
```

This example shows how to upload the system5.cfg file to the mercury host using the **write network rcp** command:

```
Console> (enable) write network rcp
IP address or name of host? mercury
Name of configuration file to write? system5.cfg
Upload configuration to system5.cfg on mercury (y/n) [y]? y
/
Done.  Finished Network Upload.  (9003 bytes)
Console> (enable)
```

This example shows how to upload the system5.cfg file to the mercury host using the **write** *host file* command as a shorthand method:

```
Console> (enable) write mercury system5.cfg
Upload configuration to system5.cfg on mercury (y/n) [y]? y
/
Done.  Finished Network Upload.  (9003 bytes)
Console> (enable)
```

This example shows how to use the **write terminal all** command to display the entire (default and non-default) configuration file on the terminal:

```
Console> (enable) write terminal all
begin
set password $1$FMFQ$HfZR5DUszVHIRhrz4h6V70
set enablepass $1$FMFQ$HfZR5DUszVHIRhrz4h6V70
set prompt Console>
!
#system
set system baud 9600
set system modem  disable
set system name
set system location
set system contact
!
#snmp
set snmp community read-only public
set snmp community read-write private
set snmp community read-write-all secret
set snmp trap  disable
!
#vlan/trunk
set vlan 1    1/1-2,4/1
set vlan 2    2/1-5
!
#trunks
!
#cam
```

```
set cam agingtime 1    300
set cam agingtime 2    300
!
#ip
set interface sc0 0.0.0.0 0.0.0.0 0.0.0.0
set interface sl0 0.0.0.0 0.0.0.0
set ip redirect      enable
set ip unreachable   disable
set ip fragmentation enable
set ip alias default         0.0.0.0
set arp agingtime 1200
!
#bridge
set bridge ipx snaptoether   8023raw
set bridge ipx 8022toether   8023
set bridge ipx 8023rawtofddi snap
!
#Command alias
!
#cdp
set cdp enable   1/1-2,2/1-5,4/1
set cdp interval 1/1  60
set cdp interval 1/2  60
set cdp interval 2/1  60
set cdp interval 2/2  60
set cdp interval 2/3  60
set cdp interval 2/4  60
set cdp interval 2/5  60
set cdp interval 4/1  60
!
#spantree
#vlan 1
set spantree enable         1
set spantree fwddelay 15    1
set spantree hello    2     1
set spantree maxage   20    1
set spantree priority 32768 1
set spantree portpri  1/1  32
set spantree portcost 1/1  10
set spantree portpri  1/2  32
set spantree portcost 1/2  10
set spantree portpri  4/1  32
set spantree portcost 4/1  10
#vlan 2
set spantree enable         2
set spantree fwddelay 15    2
set spantree hello    2     2
set spantree maxage   20    2
set spantree priority 32768 2
set spantree portpri  2/1  32
set spantree portcost 2/1  100
set spantree portpri  2/2  32
set spantree portcost 2/2  100
set spantree portpri  2/3  32
set spantree portcost 2/3  100
set spantree portpri  2/4  32
set spantree portcost 2/4  100
set spantree portpri  2/5  32
set spantree portcost 2/5  100
!
#trunk
!
#module 1
set module name    1
```

```
set port enable    1/1
set port name      1/1
set port duplex    1/1  half
set port level     1/1  normal
set port enable    1/2
set port name      1/2
set port duplex    1/2  half
set port level     1/2  normal
!
#module 2
set module name    2
set module enable  2
!
set port enable    2/1
set port name      2/1
set port duplex    2/1  half
set port level     2/1  normal
set port enable    2/2
set port name      2/2
set port duplex    2/2  half
set port level     2/2  normal
set port enable    2/3
set port name      2/3
set port duplex    2/3  half
set port level     2/3  normal
set port enable    2/4
set port name      2/4
set port duplex    2/4  half
set port level     2/4  normal
set port enable    2/5
set port name      2/5
set port duplex    2/5  half
set port level     2/5  normal
!
#module 3 empty
!
#module 4
set module name    4
set module enable  4
!
set fddi userdata  4 WorkGroup Stack
set fddi tnotify   4 30
set fddi treq      4 5000
set port enable    4/1
set port name      4/1
set port level     4/1  normal
set fddi tlmin     4/1  40
set port enable    4/2
set port name      4/2
set port level     4/2  normal
set fddi tlmin     4/2  40
!
#module 5 empty
end
Console> (enable)
```

This example shows how to upload the running system configuration to a prespecified location:

```
Console> (enable) write memory
Upload configuration to bootflash:switch.cfg
7165844 bytes available on device bootflash, proceed (y/n) [n]? y
```

Related Commands

copy
show config
show running-config

write tech-support

Use the **write tech-support** command set to generate a report that contains status information about your switch or upload the output of the command to a TFTP server, where you can send it to TAC.

write tech-support *host file* [**module** *mod*] [**vlan** *vlan*] [**memory**] [**config**]

write tech-support *host file* [**port** *mod/port*] [**vlan** *vlan*] [**memory**] [**config**]

Syntax Description

host	IP address or IP alias of the host.
file	Name of the configuration file.
module *mod*	(Optional) Keyword and variable to specify the module number.
vlan *vlan*	(Optional) Keyword and variable to specify the VLAN; valid values are from **1** to **1001**.
port *mod/port*	(Optional) Keyword and variables to specify the module and port on the module.
memory	Keyword to specify memory and processor state information.
config	Keyword to specify switch configuration information.

Defaults

By default, this command displays the output for technical-support-related **show** commands. Use keywords to specify the type of information to be displayed. If you do not specify any parameters, the system displays all configuration, memory, module, port, instance data, and VLAN data.

Command Types

Switch command.

Command Modes

Privileged.

Usage Guidelines

Caution Avoid running multiple **write tech-support** commands on a switch or multiple switches on the network segment. Doing so may cause spanning tree instability.

Note If you press **Ctrl-C** while the **write tech-support** is outputting, the output file to the TFTP server might be incomplete.

Note If you are uploading the information to a file, make sure the file already exists in the TFTP server and has appropriate permissions, and that network connections are good before you enter the **write tech-support** command.

If you specify the **config** keyword, the **write tech-support** command displays the output of these commands:

- **show config**
- **show flash**
- **show log**
- **show microcode**
- **show module**
- **show port**
- **show spantree active**
- **show spantree summary**
- **show system**
- **show test**
- **show trunk**
- **show version**
- **show vlan**

If you specify the **memory** keyword, the **write tech-support** command displays the output of these commands:

- **ps**
- **ps -c**
- **show cam static**
- **show cam system**
- **show flash**
- **show memory buffers**
- **show microcode**
- **show module**
- **show proc**
- **show proc cpu**
- **show proc mem**
- **show spantree active**
- **show system**
- **show version**

If you specify a module, port, or VLAN number, the system displays general system information and information for the component you specified.

Examples

This example shows how to upload the technical report:

```
Console> (enable) write tech-support 172.20.32.10 tech.txt
Upload tech-report to tech.txt on 172.20.32.10 (y/n) [n]? y
/
Finished network upload.  (67784 bytes)
Console> (enable)
```

Related Commands **show tech-support**

See the commands listed in the "Usage Guidelines" section.

write terminal

Use the **write terminal** command to display the configuration information currently in running memory.

write terminal [**all**]

Syntax Description

all	(Optional) Keyword to specify all configuration information.

Defaults

This command has no default settings.

Command Types

Switch command.

Command Modes

Privileged.

Usage Guidelines

You can also use this command in EXEC mode to display the current configuration information.

Examples

This example shows how to display the current system configuration information:

```
Console> (enable) write terminal
......

..............

..

begin
!
# ***** NON-DEFAULT CONFIGURATION *****
!
!
#Time: Tue Aug 3 1999, 07:32:26
!
#version 5.3(0.90)ASP
!
!
#frame distribution method
set port channel all distribution mac both
!
#vtp
set vtp domain Lab_Network
set vtp pruning enable
set vlan 1 name default type ethernet mtu 1500 said 100001 state active
set vlan 2 name VLAN0002 type ethernet mtu 1500 said 100002 state active
set vlan 3 name VLAN0003 type ethernet mtu 1500 said 100003 state active
set vlan 4 name VLAN0004 type ethernet mtu 1500 said 100004 state active
set vlan 5 name VLAN0005 type ethernet mtu 1500 said 100005 state active
set vlan 6 name VLAN0006 type ethernet mtu 1500 said 100006 state active
set vlan 10 name VLAN0010 type ethernet mtu 1500 said 100010 state active
set vlan 20 name VLAN0020 type ethernet mtu 1500 said 100020 state active
```

```
set vlan 50 name VLAN0050 type ethernet mtu 1500 said 100050 state active
set vlan 100 name VLAN0100 type ethernet mtu 1500 said 100100 state active
set vlan 152 name VLAN0152 type ethernet mtu 1500 said 100152 state active
set vlan 200 name VLAN0200 type ethernet mtu 1500 said 100200 state active
set vlan 300 name VLAN0300 type ethernet mtu 1500 said 100300 state active
set vlan 303 name VLAN0303 type fddi mtu 1500 said 100303 state active
set vlan 304 name VLAN0304 type fddi mtu 1500 said 100304 state active
set vlan 305 name VLAN0305 type fddi mtu 1500 said 100305 state active
set vlan 349 name VLAN0349 type fddi mtu 1500 said 100349 state active
set vlan 350 name VLAN0350 type fddi mtu 1500 said 100350 state active
set vlan 351 name VLAN0351 type fddi mtu 1500 said 100351 state active
set vlan 400 name VLAN0400 type ethernet mtu 1500 said 100400 state active
set vlan 500 name VLAN0500 type ethernet mtu 1500 said 100500 state active
set vlan 521 name VLAN0521 type ethernet mtu 1500 said 100521 state active
set vlan 524 name VLAN0524 type ethernet mtu 1500 said 100524 state active
set vlan 570 name VLAN0570 type ethernet mtu 1500 said 100570 state active
set vlan 801 name VLAN0801 type trbrf mtu 4472 said 100801 state active bridge
set vlan 850 name VLAN0850 type ethernet mtu 1500 said 100850 state active
set vlan 917 name VLAN0917 type ethernet mtu 1500 said 100917 state active
set vlan 999 name VLAN0999 type ethernet mtu 1500 said 100999 state active
set vlan 1002 name fddi-default type fddi mtu 1500 said 101002 state active
set vlan 1004 name fddinet-default type fddinet mtu 1500 said 101004 state acti
set vlan 1005 name trnet-default type trbrf mtu 1500 said 101005 state active b
set vlan 802 name VLAN0802 type trcrf mtu 4472 said 100802 state active parent
set vlan 1003 name token-ring-default type trcrf mtu 1500 said 101003 state act
set vlan 3 translation 303 translation 0
set vlan 4 translation 304 translation 0
set vlan 5 translation 305 translation 0
set vlan 303 translation 3 translation 0
set vlan 304 translation 4 translation 0
set vlan 305 translation 5 translation 0
set vlan 351 translation 524 translation 0
set vlan 524 translation 351 translation 0
!
#ip
set interface sc0 5 172.20.52.124/255.255.255.248 172.20.52.127

set ip route 0.0.0.0/0.0.0.0         172.20.52.125
!
#spantree
#vlan 801
set spantree fwddelay 4     801
set spantree maxage   10    801
#vlan 802
set spantree fwddelay 4     802
set spantree maxage   10    802
set spantree portstate 802 block 801
!
#set boot command
set boot auto-config non-recurring
!
#Port Channel
set port channel 7/7-8 3
set port channel 7/5-6 21
!
#module 1 : 2-port 1000BaseX Supervisor IIIG
!
#module 2 empty
!
#module 3 : 2-port DS3 Dual PHY ATM
!
```

```
#module 4 empty
!
#module 5 empty
!
#module 6 : 48-port 10BaseT Ethernet
!
#module 7 : 24-port 10/100BaseTX Ethernet
set trunk 7/1  desirable isl 1-1005
set trunk 7/2  desirable isl 1-1005
set trunk 7/3  desirable isl 1-1005
set trunk 7/4  desirable isl 1-1005
nt7/1-6 mode desirable silent
!
#module 8 empty
!
#module 9 empty
!
#module 15 empty
!
#module 16 empty
end
Console> (enable)
```