

show time

To display the current time of day setting for the system clock, use the **show time** command.

show time

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 current time:

```
Console> show time
Thu Apr 15 1999, 02:54:50
Console>
```

Related Commands

show timezone

To display the current time zone and any offset that has been configured, use the **show timezone**

show timezone

show timezone

Timezone set to 'pst', offset from UTC is -8 hours
Console>

clear timezone
set timezone

show top

To start the TopN process, use the **show top**

show top [*N*] [*metric* **interval** *interval* *port_type* **background**

<i>N</i>	(Optional) Number of ports displayed; valid values are from 1 to a maximum number of physical ports.
	(Optional) Port statistic to sort on; valid values are as follows: <ul style="list-style-type: none">—utilizationbytes—in/out bytes<ul style="list-style-type: none">—in/out packets—in/out broadcast packets—in/out multicast packets—in errorsoverflow
interval	(Optional) Duration of sample (in seconds).
	(Optional) Number of seconds for sample. Valid values include 0 , 10...999 seconds. If the value is 0, the N topmost ports by absolute counter values are displayed.
	(Optional) Type of switch ports to use for report. Valid values are as follows: <ul style="list-style-type: none">—all port types are used—All Ethernet port types are used10e—10 Mbps Ethernet ports types are used<ul style="list-style-type: none">—Fast Ethernet port types are used—Gigabit Ethernet port types are used
	(Optional) TopN report not to print to the screen when the task is done. Instead, send a notification out when the reports are ready.

- Number of ports displayed is 20
- Port statistics to report on is
- Sample duration is 30 seconds
- Switch port types is

Switch command

Normal

Usage Guidelines

You can terminate TopN processes with the
[report_num

option specified only by using the
Ctrl-C

background
show top report

background

background
clear top

Ctrl-C

background

show top 10 util interval 10 background

03/21/1999,14:05:38:MGMT-5: TopN report 2 started by telnet/172.20.22.7/.
Console>
03/21/1999,14:15:38:MGMT-5: TopN report 2 available.

Console>
Start Time: 04/09/1999,01:12:48
End Time: 04/09/1999,01:12:58
PortType: all
Metric: util

Port	Band- width	Uti %	Bytes (Tx + Rx)	Pkts (Tx + Rx)	Bcst (Tx + Rx)	Mcst (Tx + Rx)	Error (Rx)	Over flow
3/1	100	0	13824	9	0	0	11	0
6/48	10	0	0	0	0	0	0	0
6/47	10	0	0	0	0	0	0	0
6/46	10	0	0	0	0	0	0	0
6/45	10	0	0	0	0	0	0	0

Console>

show top report

Syntax Description

Defaults

Command Types

Command Modes

Usage Guidelines

TopN reports for the switch. Each process is associated with a unique report number. All TopN processes (both with and without background option) are shown in the list.

An asterisk displayed after the pending status field indicates that it is not a background TopN and the results are not saved.

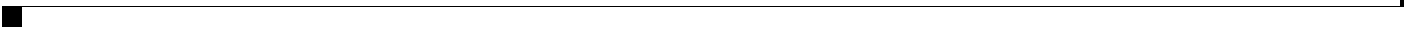
This example shows how to display all the active TopN processes and all the available TopN reports for the switch:

```
Rpt  Start time          Int N  Metric      Status  Owner (type/machine/user)
-----
  1  03/21/1999,11:34:00  60  20  Tx/Rx-Bytes  done    telnet/172.20.22.7/
  2  03/21/1999,11:34:08  600 10  Util         done    telnet/172.34.39.6/
  4  03/21/1999,11:35:17  300 20  In-Errors   pending Console//
  5  03/21/1999,11:34:26  60  20  In-Errors   pending* Console//
Console>
```

This example shows an attempt to display a TopN report 5 (shown in the first example) that is still in pending status:

```
Console> show top report 5
```

```
show top report 2
```



show trace

Syntax Description

Defaults

Command Types

Command Modes

Examples

```
Trace Category  Level
-----
HTTP           3
SYNFIG        5
Console>
```

```
Console>
Trace monitor is enabled for this session.
```

```
Trace Category  Level
-----
ACCT            off
ACL             off
BDD             off
CDP             off
CONFIG          off
COPS            off
DHCP            off
DIAG            off
DNS             off
DRIP            off
DTP             off
DUPFLASH        off
DUPNVRAM        off
DYNVLAN         off
EARL            off
ENVMON          off
EOBC            off
EPLD            off
ESSR            off
EVMGR           off
FCP             off
FDDI            off
```

show traffic

Syntax Description

Defaults

Command Types

Command Modes

Examples

```
Console> show traffic
```

show trunk

mod port

Syntax Description	<i>mod/port</i>
--------------------	-----------------

Defaults

Command Types

Command Modes

Usage Guidelines Using the `show trunk` command without 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.

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

```

Switch# show trunk
Port      Port      Mode      Prio  Oper  Prun  Prot  Trk  Stp
-----  -
4/9      auto      dot1q     1     1     0     1     1   1
4/9      auto      isl       1     1     0     1     1   1
4/10     desirable isl       1     1     0     1     1   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)

```

show trunk 4/5

Table 2-67 describes the fields in the command output.

Table 2-67 show trunk Command Output Fields

Field	Description
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).
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.

show uddl

(

Syntax Description

Defaults

Command Types

Command Modes

Examples

```
show uddl port 3
```


_____ |
_____ |

_____ |

_____ |

_____ |

_____ |

_____ |

show version—switch

Syntax Description

Defaults

Command Types

Command Modes

Examples

```
Hardware Version: 1.0 Model: WS-C4403 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)
```

```

Console> (enable)
Mod Port Model                Serial #    Versions
-----
2   1   WS-X4003-                JAB0343055Y Hw : 0.201
                                       Fw : 4.2(0.24)DAY68
                                       Sw : 6.1(0.24)FTL

Console> (enable)

```

Table 2-69 show version Command Output Fields

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 ¹	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 ¹	Version of the gigabit switching platform.
Nmp ¹	Version of the supervisor engine software.
Module	Module number.
DRAM Total	Total dynamic RAM installed on the module.
Used	Amount of DRAM in use.
Free	Amount of available DRAM.
FLASH Total	Total Flash memory installed on the module.
Used	Amount of Flash memory in use.

show version Command Output Fields (continued)

Free	Amount of available Flash memory.
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.

1. This field is not supported on the Catalyst 4000 family and 2948G switches.

vlan

type

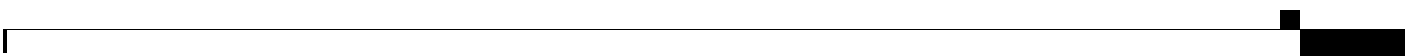
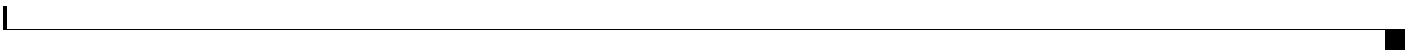
1025 4094

notrunk

mapping

ethernet fddi fddinet trbrf trcrf

Console>



This example shows how to display information for nontrunk ports only on a specific VLAN:

This example shows how to display extended-range VLANs:

[Table 2-70](#) describes the fields in the `show vlan` command output.

Table 2-70 *show vlan Command Output Fields*

VLAN	VLAN number.
Name	Name, if configured, of the VLAN.
Status	Status of the VLAN (active or suspend).
IfIndex	Number of the ifIndex.

Table 2-70 show vlan Command Output Fields (continued)

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; the default is SRB.
Inst	Instance number.
DynCreated	Status of whether the VLAN is created statically or dynamically.
RSPAN	Status of whether RSPAN is enabled or disabled.
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.
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.
Primary	Number of the primary VLAN in a private VLAN.
Secondary	Number of the secondary VLAN in a private VLAN.
Secondary-Type	Type of secondary VLAN port. Possible values are isolated, community, or -.
Ports	Number of the module and ports associated to a specific private VLAN pair.

To display VLAN Membership Policy Server (VMPS) configuration information, use the command.

[]

(Optional) Forces the display to show IP addresses, not IP aliases.

This command has no default settings.

Switch command

Normal

This example shows how to display VMPS configuration information:

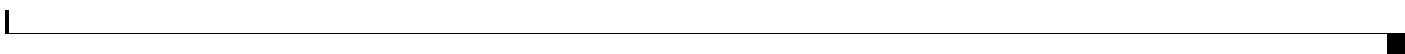


Table 2-72 show vmps mac Command Output Fields



Table 2-73 *show vmps statistics Command Output Fields*

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



VLAN0004

Table 2-75 *show vmps vlan Command Output Fields*

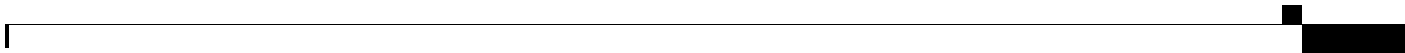
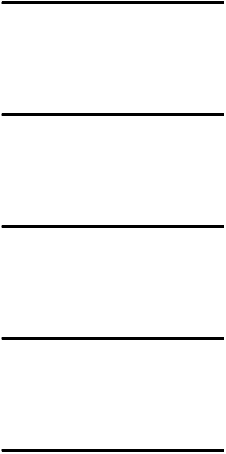


Table 2-76 show vtp domain Command Output Fields (continued)



`show vtp statistics`

Table 2-77 *show vtp statistics Command Output Fields*



Join Transmitted	Number of VTP-Pruning Joins transmitted.
Join Received	Number of VTP-Pruning Joins received.
Summary advts received from non-pruning-capable device	Number of summary advts received from nonpruning-capable devices.

To enable Serial Line Internet Protocol (SLIP) for the console port, use the `slip` command.

```
{ | }
```

Enables the Unidirectional Link Detection Protocol (UDLD) feature.

Disables SLIP for the console port.

SLIP is not active (detached)

Switch command

Privileged

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

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

```
<console port running SLIP>
```

This example shows how to detach SLIP from a console port during a Telnet session:

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

To display the contents of the SPROM, use the `rommon { } [] []` command.

`{ } [] []`

This command has no default settings.

ROM monitor command

Normal

This example shows how to display SPROM information on module 1:

```
rommon 1 >
Manipulating sprom at address 160.

Contents of Supervisor ID PROM:

Common ELB portion of ID PROM at address 160:

Block signature:      0xabab
Block version:       1
Block length:        144
Block checksum:      0xfb8
ID prom size:        256
Block count:         2
FRU major type:      0x4101
FRU minor type:      300
OEM string:          Cisco Systems, Inc.
Product number string: WS-X4012
Serial number string: JAB03130104
Part number string:  73-3188-04
Part revision string: A0
Mfg deviation string:
HW major revision:   1
HW minor revision:   5
Mfg bits:            0
Eng bits:            0
SNMP OID:            0.0.0.0.0.0.0.0
Power consumption:   0
RMA failure code:    0-0-0-0

Supervisor ID PROM Contents:

Block signature: 0x4101
```

```
Block version: 1
Block length: 24
Block checksum: 0x2c9
Feature bits: 0x0
Card index: 49
MAC addresses: 00:d0:58:70:a1:00 through 00:d0:58:70:a4:ff (1024 addresses)
rommon 2 >
```

```
rommon 3 >
Manipulating sprom at address 120.
```

Contents of Supervisor ID PROM:

Common ELB portion of ID PROM at address 120:

```
Block signature: 0xabab
Block version: 1
Block length: 144
Block checksum: 0xfb8
ID prom size: 256
Block count: 2
FRU major type: 0x4101
FRU minor type: 300
OEM string: Cisco Systems, Inc.
Product number string: WS-X4012
Serial number string: JAB03130104
Part number string: 73-3188-04
Part revision string: A0
Mfg deviation string:
HW major revision: 1
HW minor revision: 5
Mfg bits: 0
Eng bits: 0
SNMP OID: 0.0.0.0.0.0.0
Power consumption: 0
RMA failure code: 0-0-0-0
```

Supervisor ID PROM Contents:

```
Block signature: 0x4101
Block version: 1
Block length: 24
Block checksum: 0x2c9
Feature bits: 0x0
Card index: 49
MAC addresses: 00:d0:58:70:a1:00 through 00:d0:58:70:a4:ff (1024 addresses)
rommon 4 >
```

```
rommon 5 >
Manipulating sprom at address 160.
```

Contents of Chassis ID PROM:

Common ELB portion of ID PROM at address 160:

```
Block signature: 0xabab
Block version: 1
Block length: 144
Block checksum: 0x10bf
ID prom size: 256
```

Block count: 2
FRU major type: 0x4001
FRU minor type: 24
OEM string: Cisco Systems, Inc.
Product number string: WS-C4006
Serial number string: FOX03499057
Part number string: 73-4289-02
Part revision string: 02
Mfg deviation string: 0x00
HW major revision: 0
HW minor revision: 2
Mfg bits: 0
Eng bits: 0
SNMP OID: 0.0.0.0.0.0.0.0
Power consumption: 0
RMA failure code: 0-0-0-0

Chassis ID PROM Contents:

Block signature: 0x4001
Block version: 1
Block length: 22
Block checksum: 0x28a
Feature bits: 0x0
MAC addresses: 00:30:94:fc:6e:00 through 00:30:94:fc:71:ff (1024 addresses)
rommon 6 >

squeeze—ROM monitor

squeeze

squeeze *device*:

squeeze bootflash:



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> **show flash**

-#-	ED	--type--	--crc---	-seek--	nlen	-length-	-----date/time-----	name
1	..	2	43B312DF	100fc0	15	1052608	Aug 12 1998 10:23:30	cat5k_r47_1.cbi

7336000 bytes available (1052608 bytes used)

Console>

dir—switch
show flash
undelete—switch

sync

Syntax Description

Defaults

Command Types

Command Modes

Examples

telnet

host port

```
Escape character is '^]'.
```

```
UNIX(r) System V Release 4.0 (elvis)
```

```
login:
```

```
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.
```

```
%
```

```
Console> (enable)
```

specific_num

trap_num

specific_num

Console> (enable)
SNMP trap message sent. (4)
Console> (enable)

host data_size wait_time initial_ttl max_ttl dest_port nqueries tos

wait_time

initial_ttl

initial_ttl

max_ttl

dest_port

nqueries

nqueries

tos

tos

host

a.b.c.d

data_size

host

wait_time

initial_ttl
initial_ttl
max_ttl
dest_port

tos

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.

instead of the round-trip time or an asterisk (*).

traceroute Error Messages

ICMP Error Code	Meaning
?	Unknown error occurred.

To delete an alias name and its associated value from an alias list, use the `rommon` command.

This command has no default settings.

ROM monitor command

Normal

This example shows how to use the `rommon` command to delete the alias and then check to ensure it was deleted:

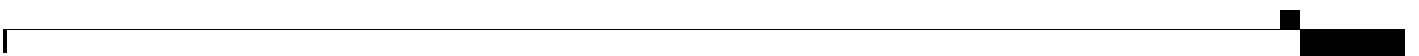
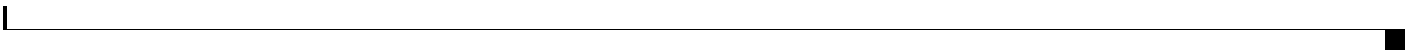
```
r=repeat
h=history
?=help
b=boot
ls=dir
i=reset
k=stack
s=set
rommon 2 >
rommon 3 >
r=repeat
h=history
?=help
b=boot
ls=dir
i=reset
k=stack
rmmon 4 >
monitor: command "s" not found
=====
```

```
rommon 1 > undelete bootflash:cat4000.6-1-1.bin
```



```
undelete 1 bootflash:  
show flash
```





unset=varname

unset=varname

varname

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

This example shows how to upload the supervisor image to the c4006_11.bin file from the host mercury:

```
upload mercury c4006_11.bin
```

```
y
```

```
upload mercury c4000_spv11.bin rcp
```

```
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)

, *varname*=

varname *value*

Name of the variable.

Any ROM monitor command

varname

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

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

To confirm the checksum of a file on a Flash device, use the `verify` command.

`[[/] :]`

This command has no default settings.

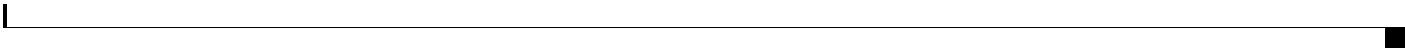
Switch command

Privileged

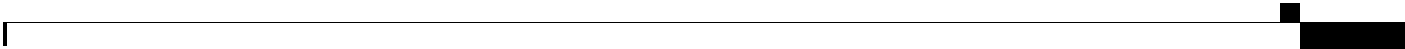
A colon (:) is required after the specified device.

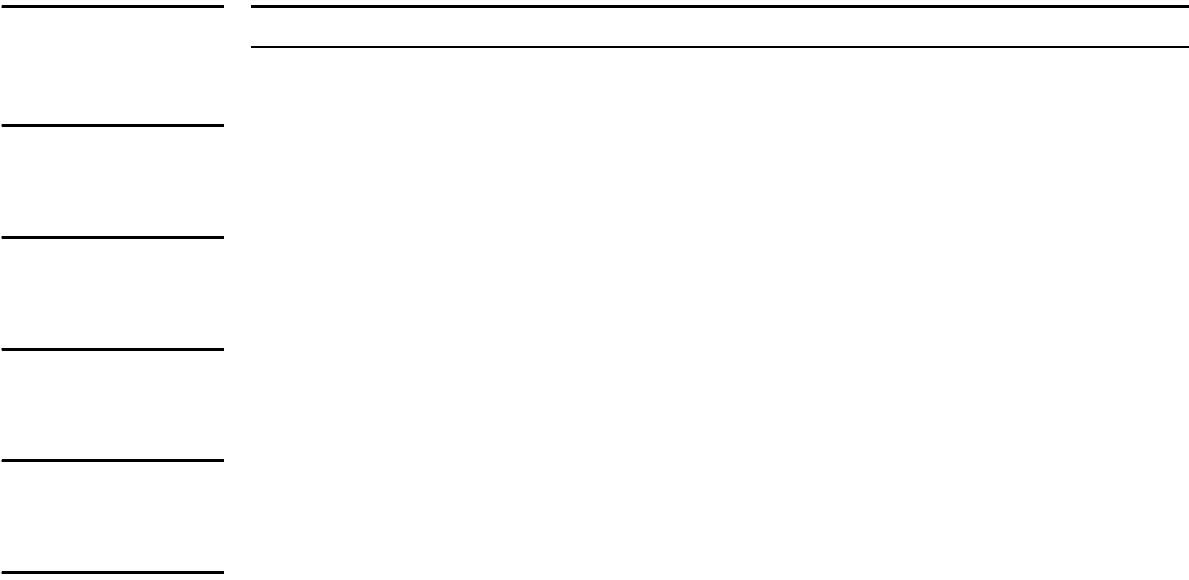
This example shows how to use the `verify` command:

```
verify cat4k_r47_1.cbi
```



version





wait 5



whichboot

Syntax Description

Defaults

Command Types

Command Modes

Examples

write

write network terminal rcp all

write memory

network

terminal

rcp

all

memory

all

write

write network

write network

write

network command, the file must already exist on the host (use the UNIX **touch**

write memory

write network

write network rep

write

write terminal all

```
set password $1$FMFQ$HfZR5DUzVHIRhrz4h6V70
set enablepass $1$FMFQ$HfZR5DUzVHIRhrz4h6V70
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
```

```
!
```

```
...
```

```
<<<<output truncated>>>>
```

```
Console> (enable)
```

```
Console> (enable)
```

```
Upload configuration to bootflash:switch.cfg
```

```
7165844 bytes available on device bootflash, proceed (y/n) [n]?
```

```
Console> (enable)
```

write tech-support

Syntax Description

Defaults



Note

Command Types

Command Modes

Usage Guidelines



Caution



Note

-
-
-
-
-

Examples

```
write tech-support 172.20.32.10 tech.txt
y
```

Related Commands

write terminal

Syntax Description

Defaults

Command Types

Command Modes

Examples

```
write terminal
```


■ write terminal