

stack

To dump a stack trace of frames, use the **stack** command.

[-d | -m] [num

Syntax Description

(Optional)	Dumps the ROM monitor stack.
-	(Optional) Specifies addresses to dump.
	(Optional) Number of frames.

Defaults

The default for `num` is five frames.

Command Types

ROM monitor command.

Command Modes

Normal.

Usage Guidelines

The frames are dumped from the kernel stack and the process stack (if one is available) of a booted image. Use the **frame** command to display an individual stack frame.

The minus sign (-) is required with the `-d` and `-m` options.

Examples

This example shows how to use the `stack` command to dump a stack trace of eight frames:

```
rommon 5 > stack 8
Kernel Level Stack Trace:
Initial SP = 0x60276a98, Initial PC = 0x60033054, RA = 0x6006d380
Frame 0 : FP= 0x60276a98, PC= 0x60033054, 0 bytes
Frame 1 : FP= 0x60276a98, PC= 0x6006d380, 24 bytes
Frame 2 : FP= 0x60276ab0, PC= 0x600e5218, 40 bytes
Frame 3 : FP= 0x60276ad8, PC= 0x600dcd48, 32 bytes
Frame 4 : FP= 0x60276af8, PC= 0x60033fdc, 0 bytes

Process Level Stack Trace:
Initial SP = 0x80007ce8, Initial PC = 0x600dfd38, RA = 0x600dfd20
Frame 0 : FP= 0x80007ce8, PC= 0x600dfd38, 24 bytes
Frame 1 : FP= 0x80007d00, PC= 0x6005b260, 32 bytes
Frame 2 : FP= 0x80007d20, PC= 0x6005c05c, 192 bytes
Frame 3 : FP= 0x80007de0, PC= 0x6005b54c, 24 bytes
Frame 4 : FP= 0x80007df8, PC= 0x600e82e0, 56 bytes
Frame 5 : FP= 0x80007e30, PC= 0x600e9484, 40 bytes
Frame 6 : FP= 0x80007e58, PC= 0x600e8b28, 24 bytes
Frame 7 : FP= 0x80007e70, PC= 0x600de224, 72 bytes
```

Related Commands

switch

switch

switch {clock supervisor}

This command has no default settings.

Switch command.

Privileged.

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)
```

```
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)
```

switch console

To switch the console connection physically to the MSFC on the active supervisor engine, use the **console**

```
switch console mNo
```

If you place the MSFC on a supervisor engine installed in slot 1, the MSFC is recognized as module 15. If you install the supervisor engine in slot 2, the MSFC is recognized as module 16. If the optional argument is excluded, the console will switch to MSFC on the active supervisor engine.

To exit from the router CLI back to the switch CLI, press **Ctrl-C** three times at the Router> prompt.

This example shows how to switch the console connection to the MSFC on the active supervisor engine:

```
switch console 15
Trying Router-15...
Connected to Router-15.
Type ^C^C to switch back...
```

switch fabric

switch fabric

switch fabric

Syntax Description

Defaults

Command Types

Command Modes

Usage Guidelines

Examples

```
switch fabric
```

sync

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

sync

This command has no arguments or keywords.

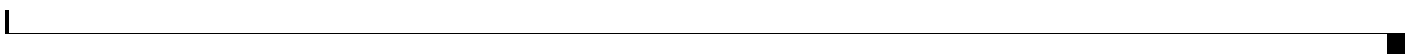
This command has no default settings.

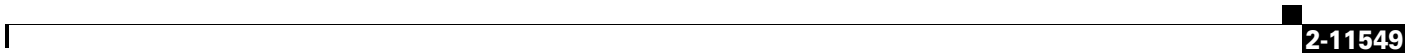
ROM monitor command.

Normal.

This example shows how to use the **sync** command:

sync





tclquit

tclquit

tclquit

Syntax Description

Defaults

Command Types

Command Modes

Usage Guidelines

For more information about TCL, refer to the “Administering the Switch” chapter of the *Catalyst 6500 Series Switch Software Configuration Guide*

tclquit

When you start a TCL shell, the switch prompt changes from Console> (enable) to Console> (tclsh)(enable).

All TCL commands and constructions are available once the TCL shell is active.

For a list of TCL commands and constructions, refer to the “Administering the Switch” chapter of the

This example shows how to start a TCL shell:

To start a Telnet connection to a remote host or to encrypt a Telnet session, use the `telnet` command.

[port]

host

Encrypts the Telnet session.

After you authenticate to a switch using Kerberos and you make a Telnet connection to another switch or host, that connection might not be authenticated by Kerberos. Whether or not the Telnet connection is authenticated by Kerberos depends on the authentication method that the Telnet server uses. If the Telnet server uses Kerberos for authentication, you can encrypt all application data packets for the duration of the Telnet session by using the `telnet encrypt` command.

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

```
Escape character is '^['.
UNIX(r) System V Release 4.0 (elvis)

login: fred
Password:
Last login: Thu Oct 15 09:25:01 from forster.cisc.rum
Sun Microsystems Inc. SunOS 5.4 Generic July 1994
You have new mail.
% logout

Console> (enable)
```

test cable-diagnostics

To test the condition of 10-Gigabit Ethernet links and copper cables on 48-port 10/100/1000 BASE-T modules, use the **test cable-diagnostics** command.

test cable-diagnostics prbs {start | stop} *mod/port*

mod/port

Specifies the Pseudo Random Binary Sequence (PRBS) test on a 10-Gigabit Ethernet link.

Activates the test.

Deactivates the test.

Number of the module and the port on the module.

Specifies the Time Domain Reflectometer (TDR) test. See the “Usage Guidelines” section for a list of modules that support this test.

(WS-X6502-10GE).

To run the PRBS test properly between two devices, you must start it on both ends of the cable. If the cable is looped back, a single end can generate the test sequence (on the Tx) as well as verify it and count the errors (on the Rx).

Before the PRBS test starts, the port is automatically put in errdisable state. The errdisable timeout is disabled for the port so that the port is not automatically reenabled after the timeout interval concludes. The errdisable timeout is automatically reenabled on the port after the PRBS test finishes.

When the PRBS test is running, the system will not you permit you to enter the _____ and _____ commands.

The TDR test is supported on these modules: WS-X6148-GE-TX, WS-X6148V-GE-TX, WS-X6548-GE-TX, WS-X6548V-GE-TX, WS-X6548-GE-45AF, WS-X6748-GE-TX, WS-X6148A-GE-TX, WS-X6148-GE-45AF, WS-X6148A-GE-45AF, WS-X6148A-RJ-45, and WS-X6148A-45AF.



Note

Examples

```
test cable-diagnostics prbs start 5/1
```

```
PRBS cable-diagnostic test started on port 5/1.  
Console> (enable)
```

```
Console> (enable)  
PRBS cable-diagnostic test stopped on port 5/1.  
Console> (enable)
```

```
Console> (enable) test cable-diagnostics prbs start 6/1
```

```
test cable-diagnostics tdr 8/1
```

```
TDR test started on port 8/1. Use show port tdr <m/p> to see the results  
Console> (enable)
```

test snmp trap

trap_num specific_num trap_name

Syntax Description

Defaults

Command Types

Command Modes

Usage Guidelines You must enable the SNMP trap before testing.

This example shows how to run trap 0:

```
test snmp trap 0
```

```
test snmp trap ciscoRFSwactNotif
```

```
test snmp trap ciscoFlashDeviceInsertedNotif
```

However, because they are Layer 2 devices, Catalyst 6500 series switches do not examine the TTL field in the IP header and do not decrement the TTL field or send ICMP time-exceeded messages. Thus, a Catalyst 6500 series switch does not appear as a hop in the `tracert` command output.

Use the `tos` option to see if different types of service cause routes to change.

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

```
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 2-119 describes the fields in the `tracert` command output.

Table 2-119 *tracert Command Output Fields*

Field	Description
	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 `tracert` receives an ICMP error message other than a time-exceeded or port-unreachable message, it prints one of the error codes shown in Table 2-120 instead of the round-trip time or an asterisk (*).

Table 2-120 *tracert Error Messages*

ICMP Error Code	Meaning
?	Unknown error occurred.

To transmit Ethernet Connectivity Fault Management (CFM) traceroute messages to a specific destination MAC address, use the `tracert` command.

```

tracert dest-mac [domain-name] vlan
tracert dest-mac level vlan
tracert dest-mac vlan
tracert mpid mac-address mpid [domain-name] vlan-id
tracert mpid ttl-value fdbOnly

```

dest-mac

domain *domain-name*

vlan *vlan*

Specifies a VLAN for the traceroute; valid values are from 1 to 4094.

Specifies that all maintenance points at a specific maintenance level transmit the traceroute; valid values are from 0 to 7.

Destination MAC address for the traceroute messages.

Specifies the Maintenance Point Identifier (MPID).

Specifies VLANs with no IDs.

(Optional) Specifies the MPID for the source Maintenance End Point (MEP).

(Optional) Specifies the TTL (time to live) value or number of hops.

(Optional) Specifies that the search for the destination MAC address should be made only in the filtering database (fdb).

tracert ethernet

tracert ethernet

reset—ROM monitor

unalias

s

monitor: command "s" not found

=====

alias

undelete

undelete :

dir—switch

squeeze

show flash

undelete 1 bootflash:

show flash

```
-#- ED --type-- --crc--- -seek-- nlen -length- -----date/time----- name
  1 .. ffffffff fec05d7a 4b3a4c 25 4667849 Mar 03 2000 08:52:09 cat6000-sup.
5-3-4-CSX.bin
  2 .. ffffffff 4e5efc31 c0fadc 30 7716879 May 19 2000 06:50:55 cat6000-sup-
d.6-1-0.bin
```

```
3605796 bytes available (12384988 bytes used)
Console> (enable)
```

unset=varname

unset=

unset=

Syntax Description

Defaults

Command Types

Command Modes

Usage Guidelines

reset sync

Examples

set

```
unset=0
set
```

VARNAME varvalue varname= varname

varname value

<i>varname</i>	Name of the variable.
<i>value</i>	Any ROM monitor command.

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 uppercase 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.

`[[m/]device] filename`

device:

filename

This command has no default settings.

Switch command.

Privileged.

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

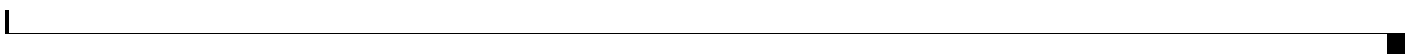
This example shows how to use the `verify` command:

```
verify cat6k_r47_1.cbi
```

seconds

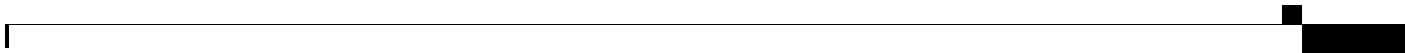
seconds

wait 5



whichboot

Boot image name is 'slot0:cat6000-sup.6-1-1.bin'.
Console>



write

write network all

write terminal all

write all rcp

write memory

network

all

terminal

rcp

memory

write terminal

show config

write

write network

write network

write network

touch

write memory

set config mode text

```
#version 4.2(0.24)VAI58 set password $1$FMFQ$HfZR5DUszVHIRhrz4h6V70
set enablepass $1$FMFQ$HfZR5DUszVHIRhrz4h6V70
set prompt Console>
set length 24 default
set logout 20
set banner motd ^C^C
!
#system
set system baud 9600
set system modem disable
set system name
set system location
set system contact
!
#power
set power redundancy enable
!
#snmp
set snmp community read-only public
set snmp community read-write private
set snmp community read-write-all secret
set snmp rmon disable
set snmp trap disable module

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

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

Command Types

Command Modes

Usage Guidelines


Caution


Note

-
-
-
-
-

Examples

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

Related Commands

