

# show test

To display the errors reported from the diagnostic tests, the diagnostic level, and the action that the supervisor engine takes after a diagnostics test failure, use the **show test** command.

**show test** [*mod*]

**show test diaglevel**

**show test diagfail-action**

Syntax Description	
<i>mod</i>	(Optional) Number of the module. If you do not specify a number, test statistics are given for the general system as well as for the supervisor engine.
<b>diaglevel</b>	Displays the diagnostic level.
<b>diagfail-action</b>	Displays the action that the supervisor engine takes after a diagnostics test failure.

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

**Command Types** Switch command.

**Command Modes** Normal.

**Usage Guidelines** Only error conditions are displayed. If there are no errors, PASS is displayed in the Line Card Status field.

**Examples** This example shows the error display for module 2:

```

Console> show test 2

Module 2 : 2-port 1000BaseX Supervisor
Network Management Processor (NMP) Status: (. = Pass, F = Fail, U = Unknown)
  ROM: .   Flash-EEPROM: .   Ser-EEPROM: .   NVRAM: .   EOBC Comm: .

Line Card Firmware Status for Module 2 : PASS

Port Status :
  Ports 1 2
  -----
  . .

Line Card Diag Status for Module 2 (. = Pass, F = Fail, N = N/A)

Module 2
  Cafe II Status :
    NewLearnTest:      .
    IndexLearnTest:   .
    DontForwardTest:  .

```

## ■ show test

```

DontLearnTest:          .
ConditionalLearnTest:   .
BadBpduTest:            .
TrapTest:               .
Loopback Status [Reported by Module 2] :
Ports 1 2
-----
. .

Channel Status :
Ports 1 2
-----
. .

```

This example shows the error display for module 3:

```

Console> show test 3

Module 3 : 12-port 1000BaseX Ethernet

Line Card Firmware Status for Module 3 : PASS

Port Status :
Ports 1 2 3 4 5 6 7 8 9 10 11 12
-----
. . . . . . . . . . . . . .

Line Card Diag Status for Module 3 (. = Pass, F = Fail, N = N/A)
Loopback Status [Reported by Module 3] :
Ports 1 2 3 4 5 6 7 8 9 10 11 12
-----
. . . . . . . . . . . . . .

Channel Status :
Ports 1 2 3 4 5 6 7 8 9 10 11 12
-----
. . . . . . . . . . . . . .

```

This example shows the display when errors are reported by the LCP for module 3:

```

Console> show test 3

Module 3 : 12-port 1000BaseX Ethernet

Line Card Firmware Status for Module 3 : FAIL
Error                                         Device Number
-----
Port asic error                             1,2,5,12
CPU error                                    0
Line Card Diag Status for Module 3 (. = Pass, F = Fail, N = N/A)
Loopback Status [Reported by Module 1] :
Ports 1 2 3 4 5 6 7 8 9 10 11 12
-----
. . . . . . . . . . . . . .

Channel Status :
Ports 1 2 3 4 5 6 7 8 9 10 11 12
-----
. . . . . . . . . . . . . .

```

This example shows the display if you do not specify a module:

```

Console> show test

Environmental Status (. = Pass, F = Fail, U = Unknown, N = Not Present)
PS1:..   PS2:N   PS1 Fan:.. PS2 Fan:N
Chassis-Ser-EEPROM:.. Fan:..
Clock(A/B):A      Clock A:..   Clock B:..
VTT1:..   VTT2:..   VTT3:..

Module 1 :2-port 1000BaseX Supervisor
Network Management Processor (NMP) Status:(. = Pass, F = Fail, U =
Unknown)
  ROM: .   Flash-EEPROM:.. Ser-EEPROM:.. NVRAM:.. EOBC Comm:..

Line Card Firmware Status for Module 1 :PASS

Port Status :
  Ports 1 2
  -----
  . .

Line Card Diag Status for Module 1 (. = Pass, F = Fail, N = N/A)

Module 1
  Earl IV Status :
    NewLearnTest:      .
    IndexLearnTest:   .
    DontForwardTest:  .
    DontLearnTest:    .
    ConditionalLearnTest: .
    BadBpduTest:      .
    TrapTest:         .
    MatchTest:        .
    SpanTest:         .
    CaptureTest:      .
Loopback Status [Reported by Module 1] :
  Ports 1 2
  -----
  . .

Channel Status :
  Ports 1 2
  -----
  . .

```

This example shows how to display diagnostic level status:

```

Console> show test diaglevel
Diagnostic mode at last bootup : minimal
Diagnostic mode at next reset  : bypass
Console>

```

This example shows how to display the action that the supervisor engine takes after a diagnostics test failure:

```

Console> show test diagfail-action
Diagnostic failure action for SUP at last bootup : offline
Diagnostic failure action for SUP at next reset  : ignore
Console>

```

Table 2-93 describes the possible fields in the **show test** command output. The fields shown depend on the module type queried.

**Table 2-93 show test Command Output Fields**

Field	Description
Environmental Status	Test results that apply to the general system environment.
PS (3.3V)	Test results for the 3.3 V power supply.
PS (12V)	Test results for the 12 V power supply.
PS (24V)	Test results for the 24 V power supply.
PS1	Test results for power supply 1.
PS2	Test results for power supply 2.
Temperature	Test results for the temperature.
Fan	Test results for the fan.
Module #	Test results that apply to the module #. The module type is indicated as well.
Network Management Processor (NMP) Status	Test results that apply to the NMP on the supervisor engine module.
ROM	Test results for the ROM.
Flash-EEPROM	Test results for the Flash EEPROM.
Ser-EEPROM	Test results for the serial EEPROM.
NVRAM	Test results for the NVRAM.
EARL Status	Fields that display the EARL status information.
NewLearnTest	Test results for the NewLearn test (EARL).
IndexLearnTest	Test results for the IndexLearn test (EARL).
DontForwardTest	Test results for the DontForward test (EARL).
MonitorTest	Test results for the Monitor test (EARL).
DontLearn	Test results for the DontLearn test (EARL).
FlushPacket	Test results for the FlushPacket test (EARL).
ConditionalLearn	Test results for the ConditionalLearn test (EARL).
EarlLearnDiscard	Test results for the EarlLearnDiscard test (EARL).
EarlTrapTest	Test results for the EarlTrap test (EARL).
LCP Diag Status for Module 1	Test results for the specified module.
CPU	Test results for the CPU.
Sprom	Test results for the serial PROM.
Bootsum	Test results for the Boot ROM checksum.
Archsum	Test results for the archive Flash checksum.
RAM	Test results for the RAM.
LTL	Test results for the local-target logic.
CBL	Test results for the color-blocking logic.

**Table 2-93** *show test Command Output Fields (continued)*

Field	Description
DPRAM	Test results for the dual-port RAM.
SAMBA	Test results for the SAMBA chip.
Saints	Test results for the SAINT chips.
Pkt Bufs	Test results for the packet buffers.
Repeater	Test results for the repeater module.
FLASH	Test results for the Flash memory.
EOBC	Channel through which a module exchanges control messages with the other modules in the system.
Local Power	Status of the DC converter on a module that supplies power to the entire module except the power management block on the module.
Phoenix	Test results for the Phoenix.
TrafficMeter	Test results for the TrafficMeter.
UplinkSprom	Test results for the Uplink SPROM.
PhoenixSprom	Test results for the Phoenix SPROM.
MII Status	Test results for the MII ports.
SAINT/SAGE Status	Test results for the individual SAINT/SAGE chip.
Phoenix Port Status	Test results for the Phoenix ports.
Packet Buffer Status	Test results for the individual packet buffer.
Phoenix Packet Buffer Status	Test results for the Phoenix packet buffer.
Loopback Status	Test results for the loopback test.
Channel Status	Test results for the channel test.

**Related Commands**

[set test diagfail-action](#)  
[set test diaglevel](#)

# show time

To display the current time of day in 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  
Wed Jan 12 2000, 14:18:52  
Console>
```

The output shows the day of the week, month, day, year, hour, minutes, and seconds.

---

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

# show timezone

To display the current time zone and offset, use the **show timezone** command.

**show timezone**

---

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

---

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

---

**Command Types** Switch command.

---

**Command Modes** Normal.

---

**Examples** This example shows how to display the current time zone and offset:

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

---

**Related Commands** [clear timezone](#)  
[set timezone](#)

# show top

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

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

Syntax Description	
<i>N</i>	(Optional) Number of ports displayed; valid values are <b>1</b> to a maximum number of physical ports.
<i>metric</i>	(Optional) Port statistic to sort on; valid values are as follows: <b>util</b> —utilization <b>bytes</b> —in/out bytes <b>pkts</b> —in/out packets <b>bcst</b> —in/out broadcast packets <b>mcast</b> —in/out multicast packets <b>errors</b> —in errors <b>overflow</b> —buffer overflow
<b>interval</b>	(Optional) Specifies duration of sample (in seconds).
<i>interval</i>	(Optional) Number of seconds for sample; valid values are <b>0</b> and from 10 to 999 seconds. If the value is 0, the N topmost ports by absolute counter values are displayed.
<i>port_type</i>	(Optional) Type of switch ports to use for report; valid values are as follows: <b>all</b> —All port types are used <b>eth</b> —All Ethernet port types are used <b>10e</b> —10-Mbps Ethernet ports types are used <b>fe</b> —Fast Ethernet port types are used <b>ge</b> —Gigabit Ethernet port types are used <b>10ge</b> —10-Gigabit Ethernet port types are used
<b>background</b>	(Optional) Specifies the TopN report not to print to the screen when the task is done. Instead, a notification is sent out when the reports are ready.

## Defaults

The defaults are as follows:

- Number of ports displayed is **20**.
- Port statistics to report on is **util**.
- Sample duration is **30** seconds.
- Switch port type is **all**.

## Command Types

Switch command.

## Command Modes

Normal.

**Usage Guidelines**

You can terminate TopN processes with the **background** option specified only by using the **clear top** [*report\_num*] command.

TopN reports with the **background** option specified are not displayed on the screen unless you enter a **show top report** [*report\_num*] command.

If you do not specify the **background** option, the output TopN results are dumped to the screen when the task is done, and the results are printed one time only and are not saved.

You can terminate TopN processes (without the **background** option) by pressing **Ctrl-C** in the same Telnet or console session, or by entering a **clear top** [*report\_num*] command from a separate Telnet or console session. The prompt is not printed before the TopN report completely displays. Other commands are blocked until the report has displayed.

**Examples**

This example shows how to start the TopN process with the **background** option:

```
Console> show top 10 util interval 600 background
03/09/2000,14:05:38:MGMT-5: TopN report 2 started by telnet/172.20.22.7/.
Console>
03/09/2000,14:15:38:MGMT-5: TopN report 2 available.
```

This example shows how to start the TopN process without the **background** option:

```
Console> show top 10 util interval 600
Start Time:      03/19/2000,12:04:16
End Time:        03/19/2000,12:14:18
PortType:        all
Metric:          util
Port  Band-  Uti  Tx/Rx-bytes      Tx/Rx-pkts  Tx/Rx-bcst  Tx/Rx-mcst  In-  Buf-
      width %                               %           %           %           err  Ovflw
-----
 1/1  100    0  65433            824          0           719         0    0
 5/48 10    0  3543             45           0           34          0    0
 5/47 10    0  45367            124          0           219         0    0
 5/46 10    0  23456             49           0           108         0    0
Console>
```

This example shows how to start the TopN process for a specific port type:

```
Console> show top 5 10e interval 0
Start Time:      03/09/2000,11:03:21
End Time:        03/09/2000,11:03:21
PortType:        10Mbps Ethernet
Metric:          util
Port  Band-  Uti  Bytes           Pkts           Bcst           Mcst           Error Over
      width %  (Tx + Rx)      (Tx + Rx)      (Tx + Rx)      (Tx + Rx)      (Rx)  flow
-----
 2/1   10    0    0               0               0               0               0    0    0
 3/12 auto    0    0               0               0               0               0    0    0
 3/11 auto    0    0               0               0               0               0    0    0
 3/10 auto    0    0               0               0               0               0    0    0
 3/9   auto    0    0               0               0               0               0    0    0
Console>
```

**Related Commands**

[clear top](#)  
[show top report](#)

# show top report

To list all TopN processes and specific TopN reports, use the **show top report** command.

**show top report** [*report\_num*]

<b>Syntax Description</b>	<i>report_num</i> (Optional) TopN report number for each process.
---------------------------	---

<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 the <i>report_num</i> value, this command lists all the active TopN processes and all the available TopN reports for the switch. Each process is associated with a unique report number. All TopN processes (both with and without a 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.

<b>Examples</b>	This example shows how to display all the active TopN processes and all the available TopN reports for the switch:
-----------------	--

```

Console> show top report
Rpt  Start time          Int N  Metric          Status  Owner (type/machine/user)
---  -
  1  03/09/2000,11:34:00  60  20  Tx/Rx-Bytes  done   telnet/172.20.22.7/
  2  03/09/2000,11:34:08  600  10  Util         done   telnet/172.34.39.6/
  4  03/09/2000,11:35:17  300  20  In-Errors    pending Console//
  5  03/09/2000,11:34:26  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
Rpt  Start time          Int N  Metric          Status  Owner (type/machine/user)
---  -
  5  03/09/2000,11:34:26  60  20  In-Errors    pending* Console//
Console>

```

This example shows how to display the available TopN report 2 (shown in the first example) for the switch:

```

Console> show top report 2
Start Time:      03/09/2000,11:34:00
End Time:        03/09/2000,11:34:33
PortType:       all
Metric:         util
Port  Band-  Uti  Tx/Rx-bytes          Tx/Rx-pkts Tx/Rx-bcst Tx/Rx-mcst In-  Buf-
      width %                               -----
-----
 /15  100   88  98765432109876543210 9876543210 98765      12345      123  321
5/48  10    75  44532                5389       87         2         0     0
5/47  10    67  5432                 398        87         2         0     0
5/46  10    56  1432                 398        87         2         0     0
5/45  10    54  432                  398        87         2         0     0
5/44  10    48  3210                 65         10         10        15     5
5/43  10    45  432                  5398       87         2         2     0
5/42  10    37  5432                 398        87         2         0     0
5/41  10    36  1432                 398        87         2         0     0
5/40  10    14  2732                 398        87         2         0     0
Console>

```

#### Related Commands

[clear top](#)  
[show top](#)

# show traffic

To display traffic and peak information, use the **show traffic** command.

**show traffic**

---

**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 the traffic and peak information display on a system configured with the Supervisor Engine 1 with Layer 3 Switching Engine (WS-F6K-PFC):

```
Console> (enable) show traffic
Threshold: 100%
Traffic Peak Peak-Time
-----
0%          0% Tue Apr 25 2000, 12:07:32
Console> (enable)
```

This example shows the traffic and peak information display on a system configured with the Supervisor Engine 2 with Layer 3 Switching Engine II (PFC II):

```
Console> (enable) show traffic
Threshold:100%
Backplane-Traffic Peak Peak-Time
-----
0%          0% Thu Jul 27 2000, 14:03:27

Fab Chan Input Output
-----
      0    0%    0%
      1    0%    0%
      2    0%    0%
      3    0%    0%
      4    0%    0%
      .
      .
      .
     14    0%    0%
     15    0%    0%
     16    0%    0%
     17    0%    0%
```

---

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

# show trunk

To display trunking information for the switch, use the **show trunk** command.

```
show trunk [mod[/port]] [detail] [extended-range]
```

Syntax Description	
<i>mod</i>	(Optional) Number of the module.
<i>port</i>	(Optional) Number of the port on the module.
<b>detail</b>	(Optional) Shows detailed information about the specified trunk port.
<b>extended-range</b>	(Optional) Shows trunking information for extended-range VLANs.

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

Entering the **show trunk** command displays untagged traffic received over the dot1q trunk. For ISL trunks, packets are tagged on all VLANs (including native VLANs).

In the **show trunk detail** command output, the Peer-Port field displays either the module and port number of the peer connection or multiple or unknown. Multiple is displayed if connected to shared media, and unknown is displayed if DTP is not running on the other side.

If you enter the **show trunk** command on a trunk where a VTP domain mismatch exists, an asterisk is displayed after the trunk status and this message appears:

```
* - indicates vtp domain mismatch.
```

In the **show trunk** command output, the ports and VLANs listed in the spanning tree forward state and not pruned fields are the same regardless of whether or not VTP or GVRP is running.

**Examples**

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

```

Console> show trunk
* - indicates vtp domain mismatch
# - indicates dot1q-all-tagged enabled on the port
Port Mode Encapsulation Status Native vlan
-----
1/1 desirable dot1q trunking# 1
1/2 auto n-dot1q trunking 1
Console>

```

This example shows how to display detailed information about the specified trunk port:

```

Console> show trunk 1/1 detail
Port      Mode      Encapsulation  Status      Native vlan
-----
1/1      auto      negotiate      not-trunking 1

Port      Peer-Port  Mode      Encapsulation  Status
-----
1/1      2/3      auto      n-isl          not-trunking

Port      TrunkFramesTx      TrunkFramesRx      WrongEncap
-----
1/1      0                  0                  0          0

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

Port      Vlans allowed and active in management domain
-----
1/1      1

Port      Vlans in spanning tree forwarding state and not pruned
-----
1/1
Console>

```

This example shows how to display detailed information about the specified trunk port that has a VTP domain mismatch:

```

Console> show trunk 3/1 detail
Port      Mode      Encapsulation  Status      Native vlan
-----
3/1      auto      negotiate      not-trunking* 1

Port      Peer-Port  Mode      Encapsulation  Status
-----
3/1      2/3      auto      n-isl          not-trunking

Port      TrunkFramesTx      TrunkFramesRx      WrongEncap
-----
3/1      0                  0                  0          0

Port      Vlans allowed on trunk
-----
3/1      1-1005

```

```

Port      Vlans allowed and active in management domain
-----
 3/1      2

Port      Vlans in spanning tree forwarding state and not pruned
-----
 3/1
Console>

```

This example shows how to include information about extended-range VLANs:

```

Console> show trunk extended-range
Port      Status          Vlans allowed on trunk
-----
1/2      Trunking        1-1005, 2000-4094
2/2      Trunking        1-1005, 2100-4094
2/3      Non-Trunking    1-1005, 1025-2000, 3001-4094
.....
Console>

```

Table 2-94 describes the fields in the **show trunk** command outputs.

**Table 2-94 show trunk Command Output Fields**

Field	Description
Port	Module and port numbers.
Mode	Trunk administrative status of the port (on, off, auto, desirable, or nonegotiate).
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 (the VLAN for which untagged traffic can be transmitted and received over the dot1q trunk).
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.
Peer-Port	Peer connection information (module and port number of peer connection, multiple, or unknown).
TrunkFramesTx	Number of ISL/802.1Q frames transmitted on a port.
TrunkFramesRx	Number of ISL/802.1Q frames received on a port.
WrongEncap	Number of frames with the wrong encapsulation received on a port.

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

# show uddl

To display UDLD information, use the **show uddl** command.

**show uddl**

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

Syntax Description	port	Specifies module and ports or just modules.
	<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
Message Interval :15 seconds
Console>
```

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

```
Console> show uddl port 2/1
UDLD      :enabled
Message Interval :15 seconds
Port      Admin Status  Aggressive Mode  Link State
-----  -
2/1      enabled          disabled         undertermined
Console>
```

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

```
Console> (enable) show uddl port 1
UDLD      :enabled
Message Interval :15 seconds
Port      Admin Status  Aggressive Mode  Link State
-----  -
1/1      disabled        disabled         not applicable
1/2      disabled        enabled          not applicable
Console>
```

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

**Table 2-95 show udd Command Output Fields**

Field	Description
UDLD	Status of whether UDLD is enabled or disabled.
Port	Module and port numbers.
Admin Status	Status of whether administration status is enabled or disabled.
Aggressive Mode	Status of whether aggressive mode is enabled or disabled.
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](#)  
[set udd aggressive-mode](#)  
[set udd interval](#)

# show users

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, use the **show users** command.

**show users [noalias]**

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

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

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

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

<b>Examples</b>	This example shows how to display the users of the active Telnet sessions:
-----------------	--

```
Console> show users
```

```
Console Port
```

```
-----
```

```
Active
```

```
Telnet Sessions
```

```
User
```

```
-----
```

```
172.16.10.75
```

```
172.16.10.75
```

```
171.31.1.203
```

```
Console>
```

<b>Related Commands</b>	<a href="#">disconnect</a>
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