

show context

To display information stored in NVRAM when an unexpected system reload (system exception) occurs, use the **show context** command in user EXEC or privileged EXEC mode.

show context [**summary** | **all** | **slot** *slot-number* [*crash-index*] [**all**] [**debug**]]

Syntax Description		
	summary	Displays a summary of all the crashes recorded.
	all	Displays all crashes for all the slots. When optionally used with the slot keyword, displays crash information for the specified slot.
	slot <i>slot-number</i> [<i>crash-index</i>]	Displays information for a particular line card. Slot numbers range from 0 to 11 for the Cisco 12012 router and from 0 to 7 for the Cisco 12008. The index number allows you to look at previous crash contexts. Contexts from the last 24 line card crashes are saved on the GRP card. If the GRP reloads, the last 24 line card crash contexts are lost. For example, show context slot 3 2 shows the second most recent crash for line card in slot 3. Index numbers are displayed by the show context summary command.
	debug	(Optional) Displays crash information as a hex record dump in addition to one of the options listed.

Command Modes	
	User EXEC
	Privileged EXEC

Command History	Release	Modification
	10.3	This command was introduced.
	11.2 GS	The slot <i>slot-number</i> [<i>crash-index</i>] [all] [debug] syntax was added for Cisco 12000 series routers.

Usage Guidelines The display from the **show context** command includes the following information:

- Reason for the system reboot
- Stack trace
- Software version
- The signal number, code, and router uptime information
- All the register contents at the time of the crash



Note

This command is primarily for use by Cisco technical support representatives for analyzing unexpected system reloads.

Output for this command will vary by platform. Context information is specific to processors and architectures. For example, context information for the Cisco 2600 series router differs from that for other router types because the Cisco 2600 runs with an M860 processor.

Examples

The following is sample output from the **show context** command following a system failure:

```
Router> show context

System was restarted by error - a Software forced crash, PC 0x60189354
GS Software (RSP-PV-M), Experimental Version 11.1(2033) [ganesh 111]
Compiled Mon 31-Mar-97 13:21 by ganesh
Image text-base: 0x60010900, data-base: 0x6073E000
Stack trace from system failure:
FP: 0x60AEA798, RA: 0x60189354
FP: 0x60AEA798, RA: 0x601853CC
FP: 0x60AEA7C0, RA: 0x6015E98C
FP: 0x60AEA7F8, RA: 0x6011AB3C
FP: 0x60AEA828, RA: 0x601706CC
FP: 0x60AEA878, RA: 0x60116340
FP: 0x60AEA890, RA: 0x6011632C
Fault History Buffer:
GS Software (RSP-PV-M), Experimental Version 11.1(2033) [ganesh 111]
Compiled Mon 31-Mar-97 13:21 by ganesh
Signal = 23, Code = 0x24, Uptime 00:04:19
$0 : 00000000, AT : 60930120, v0 : 00000032, v1 : 00000120
a0 : 60170110, a1 : 6097F22C, a2 : 00000000, a3 : 00000000
t0 : 60AE02A0, t1 : 8000FD80, t2 : 34008F00, t3 : FFFF00FF
t4 : 00000083, t5 : 3E840024, t6 : 00000000, t7 : 11010132
s0 : 00000006, s1 : 607A25F8, s2 : 00000001, s3 : 00000000
s4 : 00000000, s5 : 00000000, s6 : 00000000, s7 : 6097F755
t8 : 600FABBC, t9 : 00000000, k0 : 30408401, k1 : 30410000
gp : 608B9860, sp : 60AEA798, s8 : 00000000, ra : 601853CC
EPC : 60189354, SREG : 3400EF03, Cause : 00000024
Router>
```

The following is sample output from the **show context summary** command on a Cisco 12012 router. The **show context summary** command displays a summary of all the crashes recorded for each slot (line card).

```
Router# show context summary

CRASH INFO SUMMARY
  Slot 0 : 0 crashes
  Slot 1 : 0 crashes
  Slot 2 : 0 crashes
  Slot 3 : 0 crashes
  Slot 4 : 0 crashes
  Slot 5 : 0 crashes
  Slot 6 : 0 crashes
  Slot 7 : 2 crashes
    1 - crash at 18:06:41 UTC Tue Nov 5 1996
    2 - crash at 12:14:55 UTC Mon Nov 4 1996
  Slot 8 : 0 crashes
  Slot 9 : 0 crashes
  Slot 10: 0 crashes
  Slot 11: 0 crashes
Router#
```

The following is sample output from the **show context** command following an unexpected system reload on a Cisco 2600 series router.

```
router# show context

S/W Version: Cisco IOS Software
Cisco IOS (tm) c2600 Software (c2600-JS-M), Released Version 11.3(19980115:184921)
Copyright (c) 1986-2003 by Cisco Systems, Inc.
Compiled Thu 15-Jan-98 13:49 by mmagno
Exception occurred at: 00:02:26 UTC Mon Mar 1 1993
```

```

Exception type: Data TLB Miss (0x1200)
CPU Register Context:
PC = 0x80109964 MSR = 0x00009030 CR = 0x55FFFD35 LR = 0x80109958
CTR = 0x800154E4 XER = 0xC000BB6F DAR = 0x00000088 DSISR = 0x00000249
DEC = 0x7FFFDFCA TBU = 0x00000000 TBL = 0x15433FCF IMMR = 0x68010020
R0 = 0x80000000 R1 = 0x80E80BD0 R2 = 0x80000000 R3 = 0x00000000
R4 = 0x80E80BC0 R5 = 0x40800000 R6 = 0x00000001 R7 = 0x68010000
R8 = 0x00000000 R9 = 0x00000060 R10 = 0x00001030 R11 = 0xFFFFFFFF
R12 = 0x00007CE6 R13 = 0xFFFF379E8 R14 = 0x80D50000 R15 = 0x00000000
R16 = 0x00000000 R17 = 0x00000000 R18 = 0x00000000 R19 = 0x00000000
R20 = 0x00000000 R21 = 0x00000001 R22 = 0x00000010 R23 = 0x00000000
R24 = 0x00000000 R25 = 0x80E91348 R26 = 0x01936010 R27 = 0x80E92A80
R28 = 0x00000001 R29 = 0x019BA920 R30 = 0x00000000 R31 = 0x00000018
Stack trace:
Frame 00: SP = 0x80E80BD0 PC = 0x80109958
Frame 01: SP = 0x80E80C28 PC = 0x8010A720
Frame 02: SP = 0x80E80C40 PC = 0x80271010
Frame 03: SP = 0x80E80C50 PC = 0x8025EE64
Frame 04: SP = 0x80DEE548 PC = 0x8026702C
Frame 05: SP = 0x80DEE558 PC = 0x8026702C

```

Table 51 describes the significant fields shown in the display.

Table 51 show context Field Descriptions

Field	Description
S/W Version	Standard Cisco IOS version string as displayed.
Exception occurred at	Router real time when exception occurred. The router must have the clock time properly configured for this to be accurate.
Exception type	Technical reason for exception. For engineering analysis.
CPU Register Context	Technical processor state information. For engineering analysis.
Stack trace	Technical processor state information. For engineering analysis.

Related Commands

Command	Description
show processes	Displays information about the active processes.
show stacks	Monitors the stack usage of processes and interrupt routines.

show controllers (GRP image)

To display information that is specific to the hardware, use the **show controllers** command in privileged EXEC mode.

show controllers [**atm** *slot-number* | **clock** | **csar** [**register**] | **csc-fpga** | **dp83800** | **fab-clk** | **fia** [**register**] | **pos** [*slot-number*] [**details**] | **queues** [*slot-number*] | **sca** | **xbar**]

Syntax	Description
atm <i>slot-number</i>	(Optional) Displays the ATM controllers. Number is slot-number/port-number (for example, 4/0). Slot numbers range from 0 to 11 for the Cisco 12012 router and from 0 to 7 for the Cisco 12008 router.
clock	(Optional) Displays the clock card configuration.
csar [register]	(Optional) Displays the Cisco Cell Segmentation and Reassembly (CSAR) information. CSAR is the name of the chip on the card that handles traffic between the GRP and the switch fabric interface ASICs.
csc-fpga	(Optional) Displays the clock and scheduler card register information in the field programmable gate array (FPGA).
dp83800	(Optional) Displays the Ethernet information on the GRP card.
fab-clk	(Optional) Display the switch fabric clock register information. The switch fabric clock FPGA is a chip that monitors the incoming fabric clock generated by the switch fabric. This clock is needed by each card connecting to the switch fabric to properly communicate with it. Two switch fabric clocks arrive at each card; only one can be used. The FPGA monitors both clocks and selects which one to use if only one of them is running.
fia [register]	(Optional) Displays the fabric interface ASIC information and optionally displays the register information.
pos [<i>slot-number</i>] [details]	(Optional) Displays the POS framer state and optionally displays all the details for the interface. Number is slot-number/port-number (for example, 4/0). Slot numbers range from 0 to 11 for the Cisco 12012 router and from 0 to 7 for the Cisco 12008 router.
queues [<i>slot-number</i>]	(Optional) Displays the SDRAM buffer carve information and optionally displays the information for a specific line card. The SDRAM buffer carve information displayed is suggested carve information from the GRP card to the line card. Line cards might change the shown percentages based on SDRAM available. Slot numbers range from 0 to 11 for the Cisco 12012 router and from 0 to 7 for the Cisco 12008.
sca	(Optional) Displays the SCA register information. The SCA is an ASIC that arbitrates among the line cards requests to use the switch fabric.
xbar	(Optional) Displays the crossbar register information. The XBAR is an ASIC that switches the data as it passes through the switch fabric.

Command Modes Privileged EXEC

Command History

Release	Modification
11.2 GS	This command was introduced to support the Cisco 12000 series routers.

Usage Guidelines

This information provided by this command is intended for use only by technical support representatives in analyzing system failures in the field.

Examples

The following is sample output from the **show controllers pos** command for a Cisco 12012:

```
Router# show controllers pos 7/0

POS7/0
SECTION
  LOF = 2          LOS = 0          BIP(B1) = 5889
  Active Alarms: None
LINE
  AIS = 2          RDI = 2          FEBE = 146          BIP(B2) = 2106453
  Active Alarms: None
PATH
  AIS = 2          RDI = 4          FEBE = 63          BIP(B3) = 3216
  LOP = 0          PSE = 8          NSE = 3          NEWPTR = 2
  Active Alarms: None
APS
  COAPS = 3          PSBF = 2
  State: PSBF_state = False
  Rx(K1/K2): F0/15 Tx(K1/K2): 00/00
  S1S0 = 00, C2 = 64
PATH TRACE BUFFER : STABLE
  Remote hostname : GSR-C
  Remote interface: POS10/0
  Remote IP addr  : 10.201.101.2
  Remote Rx(K1/K2): F0/15 Tx(K1/K2): 00/00
Router#
```

Related Commands

Command	Description
clear controllers	Resets the T1 or E1 controller.
show controllers (line card image)	Displays information that is specific to the hardware on a line card.

show controllers (line card image)

To display information that is specific to the hardware on a line card, use the **attach** command in privileged EXEC mode to connect to the line card and then use the **show controllers** command in privileged EXEC mode or the **execute-on** command in privileged EXEC mode.

```
show controllers atm [[port-number] [all | sar | summary]]
```

```
show controllers fia [register]
```

```
show controllers {frfab | tofab} {bma {microcode | ms-inst | register} | qelem
  start-queue-element [end-queue-element] | qnum start-queue-number [end-queue-number] |
  queues | statistics}
```

```
show controllers io
```

```
show controllers l3
```

```
show controllers pos {framers | queues | registers | rxsrpm port-number queue-start-address
  [queue-length] | txsrpm port-number queue-start-address [queue-length]}
```

Syntax Description

atm	Displays the ATM controller information.
<i>port-number</i>	(Optional) Displays request for the physical interface on the ATM card. The range of choices is from 0 to 3.
all	(Optional) Lists all details.
sar	(Optional) Lists SAR interactive command.
summary	(Optional) Lists SAR status summary.
fia	Displays the fabric interface ASIC information.
register	(Optional) Displays the register information.
frfab	(Optional) Displays the "from" (transmit) fabric information.
tofab	(Optional) Displays the "to" (receive) fabric information.
bma	For the frfab or tofab keywords, displays microcode, micro sequencer, or register information for the silicon queuing engine (SQE), also known as the buffer management ASIC (BMA).
microcode	Displays SQE information for the microcode bundled in the line card and currently running version.
mis-inst	Displays SQE information for the micro sequencer instruction.
register	Displays silicon queuing engine (SQE) information for the register.
qelem	For the frfab or tofab keywords, displays the SDRAM buffer pool queue element summary information.
<i>start-queue-element</i>	Specifies the start queue element number from 0 to 65535.
<i>end-queue-element</i>	(Optional) Specifies the end queue element number from 0 to 65535.
qnum	For the frfab or tofab keywords, displays the SDRAM buffer pool queue detail information.

<i>start-queue-number</i>	Specifies the start free queue number (from 0 to 127).
<i>end-queue-number</i>	(Optional) Specifies the end free queue number (from 0 to 127).
queues	For the frfab or tofab keywords, displays the SDRAM buffer pool information.
statistics	For the frfab or tofab keywords, displays the BMA counters.
io	Displays input/output registers.
l3	Displays Layer 3 ASIC information.
pos	Displays packet-over-sonic (POS) information for framer registers, framer queues, and ASIC registers.
framers	Displays the POS framer registers.
queues	Displays the POS framer queue information.
registers	Displays the ASIC registers.
rxsram	Displays the receive queue SRAM.
<i>port-number</i>	Specifies a port number (valid range is from 0 to 3).
<i>queue-start-address</i>	Specifies the queue SRAM logical starting address.
<i>queue-length</i>	(Optional) Specifies the queue SRAM length.
txsram	Displays the transmit queue SRAM.

Command Modes Privileged EXEC

Command History	Release	Modification
	11.2 GS	This command was added to support the Cisco 12000 series Gigabit Switch Routers.

Usage Guidelines This information displayed by this command is of use only to technical support representatives in analyzing unexpected system failures in the field. It is documented here in case you need to provide the displayed statistics to a technical support engineer.

Examples Because you are executing this command on the line card, you must use the **execute-on** command to use the **show** command, or you must connect to the card using the **attach** command. All examples in this section use the **execute-on** command

The following is partial sample output from the **show controllers atm** command:

```
Router# execute-on slot 4 show controllers atm 0

TX SAR (Beta 1.0.0) is Operational;
RX SAR (Beta 1.0.0) is Operational;

Interface Configuration Mode:
    STS-12c

Active Maker Channels: total # 6
VCID ChnnIID Type OutputInfo InPkts InOAMs MacString
```

```

1  0888  UBR  0C010010      0      0  08882000AAAA030000000800
2  0988  VBR  04010020      0      0  09882000
3  8BC8  UBR  0C010030      0      0  8BC82000AAAA030000000800
4  0E08  UBR  0C010040      0      0  0E082000AAAA030000000800
10 1288  VBR  040100A0      0      0  12882000
11 8BE8  VBR  0C0100B0      0      0  8BE82000AAAA030000000800

```

SAR Total Counters:

```

total_tx_idle_cells 215267 total_tx_paks 0 total_tx_abort_paks 0
total_rx_paks 0 total_rx_drop_paks 0 total_rx_discard_cells 15

```

Switching Code Counters:

```

total_rx_crc_err_paks 0 total_rx_giant_paks 0
total_rx_abort_paks 0 total_rx_crc10_cells 0
total_rx_tmout_paks 0 total_rx_unknown_paks 0
total_rx_out_buf_paks 0 total_rx_unknown_vc_paks 0

```

BATMAN Asic Register Values:

```

hi_addr_reg 0x8000, lo_addr_reg 0x000C, boot_msk_addr 0x0780,
rmcell_msk_addr 0x0724, rmcnt_msk_addr 0x07C2, txbuf_msk_addr 0x070C,
.
.
.

```

CM622 SAR Boot Configuration:

```

txind_q_addr 0x14000 txcmd_q_addr 0x20000
.
.
.

```

SUNI-622 Framer Register Values:

```

Master Rst and Ident/Load Meters Reg (#0x0): 0x10
Master Configuration Reg (#0x1): 0x1F
Master Interrupt Status Reg (#0x2): 0x00
PISO Interrupt Reg (#0x3): 0x04
Master Auto Alarm Reg (#0x4): 0x03
Master Auto Alarm Reg (#0x5): 0x07
Parallel Output Port Reg (#0x6): 0x02
.
.
.

```

```

BERM Line BIP Threshold LSB Reg (#0x74): 0x00

```

```

BERM Line BIP Threshold MSB Reg (#0x75): 0x00

```

```

Router#

```

The following is partial sample output from the **show controllers** command:

```

Router# execute-on slot 6 show controllers

```

```

Interface POS0
Hardware is BFLC POS
lcpos_instance struct 60311B40
RX POS ASIC addr space 12000000
TX POS ASIC addr space 12000100
SUNI framer addr space 12000400
SUNI rsop intr status 00
CRC32 enabled, HDLC enc, int clock
no loop

```

```

Interface POS1
Hardware is BFLC POS
lcpos_instance struct 603142E0
RX POS ASIC addr space 12000000
TX POS ASIC addr space 12000100
SUNI framer addr space 12000600
SUNI rsop intr status 00
CRC32 enabled, HDLC enc, int clock

```

```
no loop
.
.
Router#
```

The following is partial sample output from the **show controllers pos framers** command:

```
Router# execute-on slot 6 show controllers pos framers
```

```
Framer 0, addr=0x12000400:
master reset          C0
master config         1F          rrate sts3c trate sts3c fixptr
master control        00
clock rcv cntrl      D0
RACP control          84
RACP gfc control      0F
TACP control status   04          hcsadd
RACP intr enable      04
RSOP cntrl intr enable 00
RSOP intr status      00
TPOP path sig lbl (c2) 13
SPTB control          04          tnull
SPTB status           00

Framer 1, addr=0x12000600:
master reset          C0
master config         1F          rrate sts3c trate sts3c fixptr
master control        00
clock rcv cntrl      D0
RACP control          84
RACP gfc control      0F
TACP control status   04          hcsadd
RACP intr enable      04
RSOP cntrl intr enable 00
RSOP intr status      00
TPOP path sig lbl (c2) 13
SPTB control          04          tnull
SPTB status           00

Framer 2, addr=0x12000800:
master reset          C0
master config         1F          rrate sts3c trate sts3c fixptr
master control        00
clock rcv cntrl      D0
RACP control          84
RACP gfc control      0F
TACP control status   04          hcsadd
RACP intr enable      04
RSOP cntrl intr enable 00
RSOP intr status      00
TPOP path sig lbl (c2) 13
SPTB control          04          tnull
SPTB status           00
.
.
Router#
```

The following is partial sample output from the **show controllers fia** command:

```
Router# execute-on slot 7 show controllers fia

===== Line Card (Slot 7) =====

Fabric configuration: Full bandwidth redundant
Master Scheduler: Slot 17

From Fabric FIA Errors
-----
redund fifo parity 0          redund overflow 0          cell drops 0
crc32 lkup parity 0          cell parity 0          crc32 0
          0          1          2          3          4
-----
los 0          0          0          0          0
crc16 0          0          0          0          0

To Fabric FIA Errors
-----
sca not pres 0          req error 0          uni fifo overflow 0
grant parity 0          multi req 0          uni fifo undrflow 0
cntrl parity 0          uni req 0          crc32 lkup parity 0
multi fifo 0          empty dst req 0          handshake error 0
```

Related Commands

Command	Description
clear controllers	Resets the T1 or E1 controller.

show controllers logging

To display logging information about a Versatile Interface Processor (VIP) card, use the **show controllers logging** command in privileged EXEC mode.

show controllers vip *slot-number* logging

Syntax Description	vip <i>slot-number</i> VIP slot number.
---------------------------	--

Command Modes	Privileged EXEC
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Command History	Release	Modification
	11.2	This command was introduced.

Usage Guidelines	This command displays the state of syslog error and event logging, including host addresses, and whether console logging is enabled.
-------------------------	--

Examples	<p>The following is sample output from the show controllers logging command:</p> <pre>Router# show controllers vip 4 logging Syslog logging: enabled Console logging: disabled Monitor logging: level debugging, 266 messages logged. Trap logging: level informational, 266 messages logged. Logging to 192.180.2.238</pre>
-----------------	--

[Table 52](#) describes the significant fields shown in the display.

Table 52 *show controllers logging Field Descriptions*

Field	Description
Syslog logging	When enabled, system logging messages are sent to a UNIX host that acts as a syslog server; that is, it captures and saves the messages.
Console logging	If enabled, states the level; otherwise, this field displays disabled.
Monitor logging	Minimum level of severity required for a log message to be sent to a monitor terminal (not the console).
Trap logging	Minimum level of severity required for a log message to be sent to a syslog server.

Related Commands	Command	Description
	show logging	Displays the state of logging (syslog).

show controllers tech-support

To display general information about a Versatile Interface Processor (VIP) card when reporting a problem, use the **show controllers tech-support** command in privileged EXEC mode.

show controllers vip *slot-number* tech-support

Syntax Description	vip <i>slot-number</i> VIP slot number.
---------------------------	--

Command Modes	Privileged EXEC
----------------------	-----------------

Command History	Release	Modification
	11.2	This command was introduced.

Usage Guidelines Use this command to help collect general information about a VIP card when you are reporting a problem. This command displays the equivalent of the following **show** commands for the VIP card:

- **more system:running-config**
- **show buffers**
- **show controllers**
- **show interfaces**
- **show processes cpu**
- **show processes memory**
- **show stacks**
- **show version**

For a sample display of the **show controllers tech-support** command output, refer to these **show** commands.

Related Commands	Command	Description
	more system:running-config	Displays the running configuration.
	show buffers	Displays statistics for the buffer pools on the network server.
	show controllers	Displays information that is specific to the hardware.
	show interfaces	Uses the show interfaces EXEC command to display ALC information.
	show processes	Displays information about the active processes.
	show processes memory	Displays memory used.
	show stacks	Monitors the stack usage of processes and interrupt routines.

Command	Description
show tech-support	Displays general information about the router when reporting a problem.
show version	Displays the configuration of the system hardware, the software version, the names and sources of configuration files, and the boot images.

show debugging

To display information about the types of debugging that are enabled for your router, use the **show debugging** command in privileged EXEC mode.

show debugging

Syntax Description This command has no arguments or keywords.

Command Modes Privileged EXEC

Command History	Release	Modification
	11.1	This command was introduced.

Examples The following is sample output from the **show debugging** command. In this example, three types of CDP debugging are enabled.

```
Router# show debugging

CDP:
  CDP packet info debugging is on
  CDP events debugging is on
  CDP neighbor info debugging is on
```

Related Commands	Command	Description
	debug	Begin message logging for the specified debug command

show derived-config

To display the composite results of all the configuration commands that apply to an interface, including commands that come from sources such as static templates, dynamic templates, dialer interfaces, and authentication, authorization, and accounting (AAA) per-user attributes, use the **show derived-config** command in privileged EXEC mode.

show derived-config [*interface type number*]

Syntax Description	interface <i>type number</i> (Optional) Displays the derived configuration for a specific interface. If you use the interface keyword, you must specify the interface type and the interface number (for example, interface ethernet 0).
---------------------------	--

Command Modes	Privileged EXEC
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Command History	Release	Modification
	12.1	This command was introduced.

Usage Guidelines Configuration commands can be applied to an interface from sources such as static templates, dynamic templates bound by resource pooling, dialer interfaces, AAA per-user attributes and the configuration of the physical interface. The **show derived-config** command displays all the commands that apply to an interface.

The output for the **show derived-config** command is nearly identical to that of the **show running-config** command. It differs when the configuration for an interface is derived from a template, a dialer interface, or some per-user configuration. In those cases, the commands derived from the template, dialer interface, and so on, will be displayed for the affected interface.

If the same command is configured differently in two different sources that apply to the same interface, the command coming from the source that has the highest precedence will appear in the display.

Examples The following examples show sample output for the **show running-config** and **show derived-config** commands for serial interface 0:23 and dialer interface 0. The output of the **show running-config** and **show derived-config** commands is the same for dialer interface 0 because none of the commands that apply to that interface are derived from any sources other than the configuration of the dialer interface. The output for the **show running-config** and **show derived-config** commands for serial interface 0:23 differs because some of the commands that apply to serial interface 0:23 come from dialer interface 0.

```
Router# show running-config interface Serial0:23

Building configuration...

Current configuration :296 bytes
!
interface Serial0:23
  description PRI to ADTRAN (#4444150)
  ip unnumbered Loopback0
  encapsulation ppp
```

```
dialer rotary-group 0
isdn switch-type primary-dms100
isdn incoming-voice modem
isdn calling-number 4444150
peer default ip address pool old_pool
end
```

```
Router# show running-config interface Dialer0
```

```
Building configuration...
```

```
Current configuration :257 bytes
!
interface Dialer0
  description Dialin Users
  ip unnumbered Loopback0
  no ip proxy-arp
  encapsulation ppp
  dialer in-band
  dialer idle-timeout 30
  dialer-group 1
  peer default ip address pool new_pool
  ppp authentication pap chap callin
end
```

```
Router# show derived-config interface Serial0:23
```

```
Building configuration...
```

```
Derived configuration :332 bytes
!
interface Serial0:23
  description PRI to ADTRAN (#4444150)
  ip unnumbered Loopback0
  encapsulation ppp
  dialer rotary-group 0
  isdn switch-type primary-dms100
  isdn incoming-voice modem
  isdn calling-number 4444150
  peer default ip address pool new_pool
  ppp authentication pap chap callin
end
```

```
Router# show derived-config interface Dialer0
```

```
Building configuration...
```

```
Derived configuration :257 bytes
!
interface Dialer0
  description Dialin Users
  ip unnumbered Loopback0
  no ip proxy-arp
  encapsulation ppp
  dialer in-band
  dialer idle-timeout 30
  dialer-group 1
  peer default ip address pool new_pool
  ppp authentication pap chap callin
end
```

Related Commands

Command	Description
show running-config	Displays the contents of the currently running configuration file or the configuration for a specific interface.

show disk0:

To display flash or file system information for a disk located in slot 0, use the **show disk** command in user EXEC or privileged EXEC mode.

show disk0: [all | filesystems]

Syntax Description	all	(Optional) The all keyword displays complete information about flash memory, including information about the individual devices in flash memory and the names and sizes of all system image files stored in flash memory, including those that are invalid.
	filesystems	(Optional) Displays the device information block, the status information, and the usage information.

Command Modes	User EXEC Privileged EXEC
---------------	------------------------------

Command History	Release	Modification
	11.3AA	This command was introduced.
	12.2	This command was incorporated into Cisco IOS Release 12.2.
	12.3(7)T	This command was enhanced to display information about the ATA ROM monitor library (monlib) file.
	12.2(25)S	This command was integrated into Cisco IOS Release 12.2(25)S.

Usage Guidelines The **show disk0:** command is supported only on platforms that have a disk file system located in slot 0. Use the **show disk0:** command to display details about the files in a particular ATA PCMCIA flash disk memory card.

For more information regarding file systems and flash cards, access the *PCMCIA Filesystem Compatibility Matrix and Filesystem Information* document at the following URL:

http://www.cisco.com/en/US/partner/products/hw/routers/ps341/products_tech_note09186a00800a7515.shtml



Note

The name of the ATA monlib file may contain a platform name that does not match the platform that you are using. Different platforms may have a similar name or the same name for their ATA monlib file.

Examples

The following examples show displays of information about the flash disks or file system information for a disk. The output is self-explanatory.

```
c7200# show disk0:

-#- --length-- -----date/time----- path
1      29505176 Feb 27 2006 17:56:52 +00:00 c7200-jk9o3s-mz.124-6.T
2          32768 Feb 24 2006 13:30:30 +00:00 file1.log

34738176 bytes available (29540352 bytes used)
```

```
c7200# show disk0: all

-#- --length-- -----date/time----- path
1      29505176 Feb 27 2006 17:56:52 +00:00 c7200-jk9o3s-mz.124-6.T
2          32768 Feb 24 2006 13:30:30 +00:00 file1.log

34738176 bytes available (29540352 bytes used)
```

```
***** ATA Flash Card Geometry/Format Info *****
```

```
ATA CARD GEOMETRY
  Number of Heads:      4
  Number of Cylinders   984
  Sectors per Cylinder  32
  Sector Size           512
  Total Sectors         125952
```

```
ATA CARD FORMAT
  Number of FAT Sectors 62
  Sectors Per Cluster   8
  Number of Clusters    15693
  Number of Data Sectors 125812
  Base Root Sector      232
  Base FAT Sector       108
  Base Data Sector      264
```

```
ATA MONLIB INFO
  Image Monlib size = 73048
  Disk monlib size = 55296
  Name = NA
  Monlib end sector = NA
  Monlib Start sector = NA
  Monlib updated by = NA
  Monlib version = NA
```

```
c7200# show disk0: fileys
```

```
***** ATA Flash Card Geometry/Format Info *****
```

```
ATA CARD GEOMETRY
  Number of Heads:      4
  Number of Cylinders   984
  Sectors per Cylinder  32
  Sector Size           512
  Total Sectors         125952
```

```
ATA CARD FORMAT
  Number of FAT Sectors 62
  Sectors Per Cluster   8
  Number of Clusters    15693
  Number of Data Sectors 125812
  Base Root Sector      232
```

```

Base FAT Sector      108
Base Data Sector    264

```

```

ATA MONLIB INFO
  Image Monlib size = 73048
  Disk monlib size = 55296
  Name = NA
  Monlib end sector = NA
  Monlib Start sector = NA
  Monlib updated by = NA
  Monlib version = NA

```

Related Commands

Command	Description
dir disk0:	Displays a directory listing of files on an ATA PCMCIA flash disk card located in slot 0.
dir disk1:	Displays a directory listing of files on an ATA PCMCIA flash disk card located in slot 1.
show disk1:	Displays flash or file system information for a disk located in slot 1.

show disk1:

To display flash or file system information for a disk located in slot 1, use the **show disk1:** command in user EXEC or privileged EXEC mode.

show disk1: [all | filesystems]

Syntax Description	all	(Optional) The all keyword displays complete information about flash memory, including information about the individual devices in flash memory and the names and sizes of all system image files stored in flash memory, including those that are invalid.
	filesystems	(Optional) Displays the device information block, the status information, and the usage information.

Command Modes	User EXEC Privileged EXEC
---------------	------------------------------

Command History	Release	Modification
	11.3AA	This command was introduced.
	12.2	This command was incorporated into Cisco IOS Release 12.2.
	12.3(7)T	This command was enhanced to display information about the ATA ROM monitor library (monlib) file.
	12.2(25)S	This command was integrated into Cisco IOS Release 12.2(25)S.

Usage Guidelines The **show disk1:** command is supported only on platforms that have a disk file system. Use the **show disk01:** command to display details about the files in a particular ATA PCMCIA flash disk memory card located in slot 1.

For more information regarding file systems and flash cards, access the *PCMCIA Filesystem Compatibility Matrix and Filesystem Information* document at the following URL:

http://www.cisco.com/en/US/partner/products/hw/routers/ps341/products_tech_note09186a00800a7515.shtml



Note

The name of the ATA monlib file may contain a platform name that does not match the platform that you are using. Different platforms may have a similar name or the same name for their ATA monlib file.

Examples

The following examples show displays of information about the flash disks or file system information for a disk. The output is self-explanatory.

```
c7200# show disk1:

-#- --length-- -----date/time----- path
1      29505176 Feb 27 2006 17:56:52 +00:00 c7200-jk9o3s-mz.124-6.T
2          32768 Feb 24 2006 13:30:30 +00:00 file1.log

34738176 bytes available (29540352 bytes used)
```

```
c7200# show disk1: all

-#- --length-- -----date/time----- path
1      29505176 Feb 27 2006 17:56:52 +00:00 c7200-jk9o3s-mz.124-6.T
2          32768 Feb 24 2006 13:30:30 +00:00 file1.log

34738176 bytes available (29540352 bytes used)
```

```
***** ATA Flash Card Geometry/Format Info *****
```

```
ATA CARD GEOMETRY
  Number of Heads:          4
  Number of Cylinders       984
  Sectors per Cylinder     32
  Sector Size               512
  Total Sectors             125952
```

```
ATA CARD FORMAT
  Number of FAT Sectors    62
  Sectors Per Cluster     8
  Number of Clusters      15693
  Number of Data Sectors  125812
  Base Root Sector        232
  Base FAT Sector         108
  Base Data Sector        264
```

```
ATA MONLIB INFO
  Image Monlib size = 73048
  Disk monlib size = 55296
  Name = NA
  Monlib end sector = NA
  Monlib Start sector = NA
  Monlib updated by = NA
  Monlib version = NA
```

```
c7200# show disk1: fileys
```

```
***** ATA Flash Card Geometry/Format Info *****
```

```
ATA CARD GEOMETRY
  Number of Heads:          4
  Number of Cylinders       984
  Sectors per Cylinder     32
  Sector Size               512
  Total Sectors             125952
```

```
ATA CARD FORMAT
  Number of FAT Sectors    62
  Sectors Per Cluster     8
  Number of Clusters      15693
  Number of Data Sectors  125812
  Base Root Sector        232
```

```
Base FAT Sector      108
Base Data Sector    264
```

```
ATA MONLIB INFO
Image Monlib size = 73048
Disk monlib size = 55296
Name = NA
Monlib end sector = NA
Monlib Start sector = NA
Monlib updated by = NA
Monlib version = NA
```

Related Commands

Command	Description
dir disk0:	Displays a directory listing of files on an ATA PCMCIA flash disk card located in slot 0.
dir disk1:	Displays a directory listing of files on an ATA PCMCIA flash disk card located in slot 1.
show disk0:	Displays flash or file system information for a disk located in slot 0.

show environment

To display temperature, voltage, and blower information on the Cisco 7000 series, Cisco 7200 series, Cisco 7500 series routers, Cisco AS5300 series access servers, and Cisco 12000 series Gigabit Switch Routers (GSRs), use the **show environment** command in privileged EXEC mode.

show environment [**alarms** | **all** | **fans** | **hardware** | **last** | **leds** | **power-supply** | **table** | **temperature** | **voltages**]

Syntax Description		
	alarms	(Optional) Displays the alarm contact information.
	all	(Optional) Displays a detailed listing of all environmental monitor parameters (for example, the power supplies, temperature readings, voltage readings, and blower speeds). This is the default.
	fans	(Optional) Displays blower and fan information.
	hardware	(Optional) Displays hardware-specific information.
	last	(Optional) Displays information on the last measurement made.
	leds	(Optional) Displays the status of the MBus LEDs on the clock and scheduler cards and switch fabric cards.
	power-supply	(Optional) Displays power supply voltage and current information. If applicable, displays the status of the redundant power supply.
	table	(Optional) Displays the temperature, voltage, and blower ranges and thresholds.
	temperature	(Optional) Displays temperature information.
	voltages	(Optional) Displays voltage information.

Defaults If no options are specified, the default is **all**.

Command Modes Privileged EXEC

Command History	Release	Modification
	10.0	This command was introduced.
	11.2 GS	The alarms , fans , hardware , leds , power-supply , table , temperature , and voltages keywords were added for Cisco 12000 series GSRs.
	11.3(6)AA	This command was expanded to monitor the RPS and board temperature for the Cisco AS5300 platform, Cisco 3600 Series routers, Cisco 7200 series routers, and the Cisco 12000 series routers.

Usage Guidelines The availability of keywords will depend on your system.

Once a minute a routine is run that gets environmental measurements from sensors and stores the output into a buffer. This buffer is displayed on the console when the **show environment** command is entered.

If a measurement exceeds desired margins, but has not exceeded fatal margins, a warning message is printed to the system console. The system software queries the sensors for measurements once a minute, but warnings for a given test point are printed at most once every hour for sensor readings in the warning range and once every 5 minutes for sensor readings in the critical range. If a measurement is out of line within these time segments, an automatic warning message appears on the console. As noted, you can query the environmental status with the **show environment** command at any time to determine whether a measurement is at the warning or critical tolerance.

If a shutdown occurs because of detection of fatal environmental margins, the last measured value from each sensor is stored in internal nonvolatile memory.

For environmental specifications, refer to the hardware installation and configuration publication for your individual chassis.

If the Cisco 12000 series exceeds environmental conditions, a message similar to the following is displayed on the console:

```
%GSR_ENV-2-WARNING: Slot 3 Hot Sensor Temperature exceeds 40 deg C;
Check cooling systems
```


Note

Blower temperatures that exceed environmental conditions do not generate a warning message.

You can also enable Simple Network Management Protocol (SNMP) notifications (traps or informs) to alert a network management system (NMS) when environmental thresholds are reached using the **snmp-server enable traps envmon** and **snmp-server host** global configuration commands.

Whenever Cisco IOS software detects a failure or recovery event from the DRPS unit, it sends an SNMP trap to the configured SNMP server. Unlike console messages, only one SNMP trap is sent when the failure event is first detected. Another trap is sent when the recovery is detected.

Cisco AS5300 DRPS software reuses the MIB attributes and traps defined in CISCO-ENVMON-MIB and CISCO-ACCESS-ENVMON-MIB. CISCO-ENVMON-MIB is supported by all Cisco routers with RPS units, and CISCO-ACCESS-ENVMON-MIB is supported by the Cisco 3600 series routers.

A power supply trap defined in CISCO-ENVMON-MIB is sent when a failure is detected and when a failure recovery occurs for the following events: input voltage fail, DC output voltage fail, thermal fail, and multiple failure events.

A fan failure trap defined in CISCO-ENVMON-MIB is sent when a fan failure or recovery event is detected by Cisco IOS software.

A temperature trap defined in CISCO-ACCESS-ENVMON-MIB is sent when a board overtemperature condition is detected by Cisco IOS software.

CISCO-ACCESS-ENVMON-MIB also defines an overvoltage trap. A similar trap is defined in CISCO-ENVMON-MIB, but it requires the `ciscoEnvMonVoltageStatusValue` in `varbinds`. This value indicates the current value of the voltage in the RPS. With Cisco AS5300 RPS units, the current voltage value is not sent to the motherboard.

CISCO-ENVMON-MIB is extended to add a new enumerated value, `internalRedundant(5)`, for MIB attribute `ciscoEnvMonSupplySource`. This is used to identify a RPS unit.

Examples

In the following example, the typical **show environment** display is shown when no warning conditions are in the system for the Cisco 7000 series and Cisco 7200 series routers. This information may vary slightly depending on the platform you are using. The date and time of the query are displayed, along with the data refresh information and a message indicating that there are no warning conditions.

```
Router> show environment

Environmental Statistics
  Environmental status as of 13:17:39 UTC Thu Jun 6 1996
  Data is 7 second(s) old, refresh in 53 second(s)

  All Environmental Measurements are within specifications
```

Table 53 describes the significant fields shown in the display.

Table 53 *show environment Field Descriptions*

Field	Description
Environmental status as of...	Current date and time.
Data is..., refresh in...	Environmental measurements are output into a buffer every 60 seconds, unless other higher-priority processes are running.
Status message	If environmental measurements are not within specification, warning messages are displayed.

Cisco 7000 Series Routers

The following are examples of messages that display on the system console when a measurement has exceeded an acceptable margin:

```
ENVIRONMENTAL WARNING: Air flow appears marginal.
ENVIRONMENTAL WARNING: Internal temperature measured 41.3(C)
ENVIRONMENTAL WARNING: +5 volt testpoint measured 5.310(V)
```

The system displays the following message if voltage or temperature exceed maximum margins:

```
SHUTDOWN: air flow problem
```

In the following example, there have been two intermittent power failures since a router was turned on, and the lower power supply is not functioning. The last intermittent power failure occurred on Monday, June 10, 1996, at 11:07 p.m.

```
7000# show environment all

Environmental Statistics
  Environmental status as of 23:19:47 UTC Wed Jun 12 1996
  Data is 6 second(s) old, refresh in 54 second(s)

  WARNING: Lower Power Supply is NON-OPERATIONAL

  Lower Power Supply:700W, OFF      Upper Power Supply: 700W, ON

  Intermittent Powerfail(s): 2      Last on 23:07:05 UTC Mon Jun 10 1996

  +12 volts measured at 12.05(V)
  +5 volts measured at 4.96(V)
  -12 volts measured at -12.05(V)
  +24 volts measured at 23.80(V)

  Airflow temperature measured at 38(C)
  Inlet temperature measured at 25(C)
```

Table 54 describes the significant fields shown in the display.

Table 54 *show environment all Field Descriptions for the Cisco 7000 Series Routers*

Field	Description
Environmental status as of...	Date and time of last query.
Data is..., refresh in...	Environmental measurements are output into a buffer every 60 seconds, unless other higher-priority processes are running.
WARNING:	If environmental measurements are not within specification, warning messages are displayed.
Lower Power Supply	Type of power supply installed and its status (On or Off).
Upper Power Supply	Type of power supply installed and its status (On or Off).
Intermittent Powerfail(s)	Number of power hits (not resulting in shutdown) since the system was last booted.
voltage specifications	System voltage measurements.
Airflow and inlet temperature	Temperature of air coming in and going out.

The following example is for the Cisco 7000 series router. The router retrieves the environmental statistics at the time of the last shutdown. In this example, the last shutdown was Friday, May 19, 1995, at 12:40 p.m., so the environmental statistics at that time are displayed.

```
Router# show environment last

Environmental Statistics
  Environmental status as of 14:47:00 UTC Sun May 21 1995
  Data is 6 second(s) old, refresh in 54 second(s)

  WARNING: Upper Power Supply is NON-OPERATIONAL

LAST Environmental Statistics
  Environmental status as of 12:40:00 UTC Fri May 19 1995
  Lower Power Supply: 700W, ON      Upper Power Supply: 700W, OFF

  No Intermittent Powerfails

  +12 volts measured at 12.05 (V)
  +5 volts measured at 4.98 (V)
  -12 volts measured at -12.00 (V)
  +24 volts measured at 23.80 (V)

  Airflow temperature measured at 30 (C)
  Inlet temperature measured at 23 (C)
```

Table 55 describes the significant fields shown in the display.

Table 55 *show environment last Field Descriptions for the Cisco 7000 Series Routers*

Field	Description
Environmental status as of...	Current date and time.
Data is..., refresh in...	Environmental measurements are output into a buffer every 60 seconds, unless other higher-priority processes are running.

Table 55 *show environment last Field Descriptions for the Cisco 7000 Series Routers (continued)*

Field	Description
WARNING:	If environmental measurements are not within specification, warning messages are displayed.
LAST Environmental Statistics	Displays test point values at time of the last environmental shutdown.
Lower Power Supply: Upper Power Supply:	For the Cisco 7000 router, indicates the status of the two 700W power supplies. For the Cisco 7010 router, indicates the status of the single 600W power supply.

In the following example, shows sample output for the current environmental status in tables that list voltage and temperature parameters. There are three warning messages: one each about the lower power supply, the airflow temperature, and the inlet temperature. In this example, voltage parameters are shown to be in the normal range, airflow temperature is at a critical level, and inlet temperature is at the warning level.

```
Router> show environment table
```

```
Environmental Statistics
```

```
Environmental status as of Mon 11-2-1992 17:43:36
Data is 52 second(s) old, refresh in 8 second(s)
```

```
WARNING: Lower Power Supply is NON-OPERATIONAL
WARNING: Airflow temperature has reached CRITICAL level at 73(C)
WARNING: Inlet temperature has reached WARNING level at 41(C)
```

```
Voltage Parameters:
```

SENSE	CRITICAL	NORMAL	CRITICAL
+12 (V)	10.20	12.05 (V)	13.80
+5 (V)	4.74	4.98 (V)	5.26
-12 (V)	-10.20	-12.05 (V)	-13.80
+24 (V)	20.00	24.00 (V)	28.00

```
Temperature Parameters:
```

SENSE	WARNING	NORMAL	WARNING	CRITICAL	SHUTDOWN
Airflow	10	60	70	73 (C)	88
Inlet	10	39	41 (C)	46	64

[Table 56](#) describes the significant fields shown in the display.

Table 56 *show environment Field Descriptions for the Cisco 7000 Series Router*

Field	Description
SENSE (Voltage Parameters)	Voltage specification for a DC line.
SENSE (Temperature Parameters)	Air being measured. Inlet measures the air coming in, and Airflow measures the temperature of the air inside the chassis.
WARNING	System is approaching an out-of-tolerance condition.

Table 56 show environment Field Descriptions for the Cisco 7000 Series Router (continued)

Field	Description
NORMAL	All monitored conditions meet normal requirements.
CRITICAL	Out-of-tolerance condition exists.
SHUTDOWN	Processor has detected condition that could cause physical damage to the system.

Cisco 7200 Series Routers

The system displays the following message if the voltage or temperature enters the “Warning” range:

```
%ENVM-4-ENVWARN: Chassis outlet 3 measured at 55C/131F
```

The system displays the following message if the voltage or temperature enters the “Critical” range:

```
%ENVM-2-ENVCRTIT: +3.45 V measured at +3.65 V
```

The system displays the following message if the voltage or temperature exceeds the maximum margins:

```
%ENVM-0-SHUTDOWN: Environmental Monitor initiated shutdown
```

The following message is sent to the console if a power supply has been inserted or removed from the system. This message relates only to systems that have two power supplies.

```
%ENVM-6-PSCHANGE: Power Supply 1 changed from ZyteK AC Power Supply to removed
```

The following message is sent to the console if a power supply has been powered on or off. In the case of the power supply being shut off, this message can be due to the user shutting off the power supply or to a failed power supply. This message relates only to systems that have two power supplies.

```
%ENVM-6-PSLEV: Power Supply 1 state changed from normal to shutdown
```

The following is sample output from the **show environment all** command on the Cisco 7200 series router when there is a voltage warning condition in the system:

```
7200# show environment all

Power Supplies:
  Power supply 1 is unknown. Unit is off.
  Power supply 2 is ZyteK AC Power Supply. Unit is on.

Temperature readings:
  chassis inlet   measured at 25C/77F
  chassis outlet 1 measured at 29C/84F
  chassis outlet 2 measured at 36C/96F
  chassis outlet 3 measured at 44C/111F

Voltage readings:
  +3.45 V measured at +3.83 V:Voltage in Warning range!
  +5.15 V measured at +5.09 V
  +12.15 measured at +12.42 V
  -11.95 measured at -12.10 V
```

[Table 57](#) describes the significant fields shown in the display.

Table 57 *show environment all Field Descriptions for the Cisco 7200 Series Router*

Field	Description
Power Supplies:	Current condition of the power supplies including the type and whether the power supply is on or off.
Temperature readings:	Current measurements of the chassis temperature at the inlet and outlet locations.
Voltage readings:	Current measurement of the power supply test points.

The following example is for the Cisco 7200 series router. This example shows the measurements immediately before the last shutdown and the reason for the last shutdown (if appropriate).

```
7200# show environment last

chassis inlet      previously measured at 27C/80F
chassis outlet 1   previously measured at 31C/87F
chassis outlet 2   previously measured at 37C/98F
chassis outlet 3   previously measured at 45C/113F
+3.3 V            previously measured at 4.02
+5.0 V            previously measured at 4.92
+12.0 V           previously measured at 12.65
-12.0 V           previously measured at 11.71

last shutdown reason - power supply shutdown
```

[Table 58](#) describes the significant fields shown in the display.

Table 58 *show environment last Field Descriptions for the Cisco 7200 Series Router*

Field	Description
chassis inlet	Temperature measurements at the inlet area of the chassis.
chassis outlet	Temperature measurements at the outlet areas of the chassis.
voltages	Power supply test point measurements.
last shutdown reason	Possible shutdown reasons are power supply shutdown, critical temperature, and critical voltage.

The following example is for the Cisco 7200 series router. This information lists the temperature and voltage shutdown thresholds for each sensor.

```
7200# show environment table

Sample Point      LowCritical    LowWarning     HighWarning     HighCritical
chassis inlet     40C/104F      50C/122F
chassis outlet 1  43C/109F      53C/127F
chassis outlet 2  75C/167F      75C/167F
chassis outlet 3  55C/131F      65C/149F
+3.45 V           +2.76         +3.10          +3.80           +4.14
+5.15 V           +4.10         +4.61          +5.67           +6.17
+12.15 V          +9.72         +10.91         +13.37          +14.60
-11.95 V          -8.37         -9.57          -14.34          -15.53
Shutdown system at 70C/158F
```

[Table 59](#) describes the significant fields shown in the display.

Table 59 show environment table Field Descriptions for the Cisco 7200 Series Router

Field	Description
Sample Point	Area for which measurements are taken.
LowCritical	Level at which a critical message is issued for an out-of-tolerance voltage condition. The system continues to operate; however, the system is approaching shutdown.
LowWarning	Level at which a warning message is issued for an out-of-tolerance voltage condition. The system continues to operate, but operator action is recommended to bring the system back to a normal state.
HighWarning	Level at which a warning message is issued. The system continues to operate, but operator action is recommended to bring the system back to a normal state.
HighCritical	Level at which a critical message is issued. For the chassis, the router is shut down. For the power supply, the power supply is shut down.
Shutdown system at	The system is shut down if the specified temperature is met.

Cisco 7500 Series Router

The sample output for the Cisco 7500 series routers may vary depending on the specific model (for example, the Cisco 7513 router). The following is sample output from the **show environment all** command on the Cisco 7500 series router:

```
7500# show environment all

Arbiter type 1, backplane type 7513 (id 2)
Power supply #1 is 1200W AC (id 1), power supply #2 is removed (id 7)
Active fault conditions: none
Fan transfer point: 100%
Active trip points: Restart_Inhibit
15 of 15 soft shutdowns remaining before hard shutdown

          1
          0123456789012
Dbus slots:  X      XX      X

card      inlet      hotpoint      exhaust
RSP(6)    35C/95F      47C/116F      40C/104F
RSP(7)    35C/95F      43C/109F      39C/102F

Shutdown temperature source is 'hotpoint' on RSP(6), requested RSP(6)

+12V measured at 12.31
+5V measured at 5.21
-12V measured at -12.07
+24V measured at 22.08
+2.5 reference is 2.49

PS1 +5V Current      measured at 59.61 A (capacity 200 A)
PS1 +12V Current     measured at 5.08 A (capacity 35 A)
PS1 -12V Current     measured at 0.42 A (capacity 3 A)
PS1 output is 378 W
```

[Table 60](#) describes the significant fields shown in the display.

Table 60 show environment all Field Descriptions for the Cisco 7500 Series Routers

Field	Description
Arbiter type 1	Numbers indicating the arbiter type and backplane type.
Power supply	Number and type of power supply installed in the chassis.
Active fault conditions:	Lists any fault conditions that exist (such as power supply failure, fan failure, and temperature too high).
Fan transfer point:	Software controlled fan speed. If the router is operating below its automatic restart temperature, the transfer point is reduced by 10 percent of the full range each minute. If the router is at or above its automatic restart temperature, the transfer point is increased in the same way.
Active trip points:	Compares temperature sensor against the values displayed at the bottom of the show environment table command output.
15 of 15 soft shutdowns remaining	When the temperature increases above the “board shutdown” level, a soft shutdown occurs (that is, the cards are shut down, and the power supplies, fans, and CI continue to operate). When the system cools to the restart level, the system restarts. The system counts the number of times this occurs and keeps the up/down cycle from continuing forever. When the counter reaches zero, the system performs a hard shutdown, which requires a power cycle to recover. The soft shutdown counter is reset to its maximum value after the system has been up for 6 hours.
Dbus slots:	Indicates which chassis slots are occupied.
card, inlet, hotpoint, exhaust	Temperature measurements at the inlet, hotpoint, and exhaust areas of the card. The (6) and (7) indicate the slot numbers. Dual-Route/Switch Processor (RSP) chassis can show two RSPs.
Shutdown temperature source	Indicates which of the three temperature sources is selected for comparison against the “shutdown” levels listed with the show environment table command.
Voltages (+12V, +5V, -12V, +24V, +2.5)	Voltages measured on the backplane.
PS1	Current measured on the power supply.

The following example is for the Cisco 7500 series router. This example shows the measurements immediately before the last shutdown.

```
7500# show environment last

RSP(4) Inlet           previously measured at 37C/98F
RSP(4) Hotpoint       previously measured at 46C/114F
RSP(4) Exhaust        previously measured at 52C/125F
+12 Voltage           previously measured at 12.26
+5 Voltage            previously measured at 5.17
-12 Voltage           previously measured at -12.03
+24 Voltage           previously measured at 23.78
```

[Table 61](#) describes the significant fields shown in the display.

Table 61 show environment last Field Descriptions for the Cisco 7500 Series Router

Field	Description
RSP(4) Inlet, Hotpoint, Exhaust	Temperature measurements at the inlet, hotpoint, and exhaust areas of the card.
Voltages	Voltages measured on the backplane.

The following example is for the Cisco 7500 series router. This information lists the temperature and voltage thresholds for each sensor. These thresholds indicate when error messages occur. There are two level of messages: warning and critical.

7500# show environment table

```

Sample Point      LowCritical    LowWarning    HighWarning    HighCritical
RSP(4) Inlet      44C/111F      50C/122F
RSP(4) Hotpoint   54C/129F      60C/140F
RSP(4) Exhaust
+12 Voltage       10.90         11.61         12.82         13.38
+5 Voltage        4.61          4.94          5.46          5.70
-12 Voltage       -10.15        -10.76        -13.25        -13.86
+24 Voltage       20.38         21.51         26.42         27.65
2.5 Reference     2.43          2.51
Shutdown boards at 70C/158F
Shutdown power supplies at 76C/168F
Restart after shutdown below 40C/104F
    
```

Table 62 describes the significant fields shown in the display.

Table 62 show environment table Field Descriptions for the Cisco 7500 Series Router

Field	Description
Sample Point	Area for which measurements are taken.
LowCritical	Level at which a critical message is issued for an out-of-tolerance voltage condition. The system continues to operate; however, the system is approaching shutdown.
LowWarning	Level at which a warning message is issued for an out-of-tolerance voltage condition. The system continues to operate, but operator action is recommended to bring the system back to a normal state.
HighWarning	Level at which a warning message is issued. The system continues to operate, but operator action is recommended to bring the system back to a normal state.
HighCritical	Level at which a critical message is issued. For the chassis, the router is shut down. For the power supply, the power supply is shut down.
Shutdown boards at	The card is shut down if the specified temperature is met.
Shutdown power supplies at	The system is shut down if the specified temperature is met.
Restart after shutdown	The system will restart when the specified temperature is met.

Cisco AS5300 Series Access Servers

In the following example, keywords and options are limited according to the physical characteristics of the system is shown:

```
as5300# show environment ?

all      All environmental monitor parameters
last     Last environmental monitor parameters
table    Temperature and voltage ranges
|        Output modifiers
<cr>

as5300# show environment table

%This option not available on this platform
```

Cisco 12000 Series GSR

The following examples are for the Cisco 12000 series GSRs.

The following is sample output from the **show environment** command for a Cisco 12012 router. Slots 0 through 11 are the line cards, slots 16 and 17 are the clock and scheduler cards, slots 18 through 20 are the switch fabric cards, slots 24 through 26 are the power supplies, and slots 28 and 29 are the blowers. An “NA” in the table means that no values were returned. In some cases it is because the equipment is not supported for that environmental parameter (for example, the power supply and blowers in slots 24, 26, 28, and 29 do not have a 3V power supply, so an NA is displayed).

```
Router# show environment

Slot #   3V           5V           MBUS 5V Hot Sensor      Inlet Sensor
        (mv)        (mv)        (mv)      (deg C)      (deg C)
0       3300       4992       5040       42.0         37.0
2       3296       4976       5136       40.0         33.0
4       3280       4992       5120       38.5         31.5
7       3280       4984       5136       42.0         32.0
9       3292       4968       5160       39.5         31.5
11      3288       4992       5152       40.0         30.5
16      3308       NA         5056       42.5         38.0
17      3292       NA         5056       40.5         36.5
18      3304       NA         5176       36.5         35.0
19      3300       NA         5184       37.5         33.5
20      3304       NA         5168       36.5         34.0
24      NA        5536       5120       NA           31.5
26      NA        5544       5128       NA           31.5
28      NA        NA         5128       NA           NA
29      NA        NA         5104       NA           NA

Slot #   48V           AMP_48
        (Volt)      (Amp)
24      46           12
26      46           19

Slot #   Fan 0      Fan 1      Fan 2
        (RPM)      (RPM)      (RPM)
28      2160       2190       2160
29      2130       2190       2070
Router#
```

[Table 63](#) describes the significant fields shown and lists the equipment supported by each environmental parameter. “NA” indicates that the reading could not be obtained, so the command should be again.

Table 63 show environment Field Descriptions for the Cisco 12000 Series Routers

Field	Description
Slot #	Slot number of the equipment. On the Cisco 12012 router, slots 0 through 11 are the line cards, slots 16 and 17 are the clock and scheduler cards, slots 18 through 20 are the switch fabric cards, slots 24 through 27 are the power supplies, and slots 28 and 29 are the blowers.
3V (mv)	Measures the 3v power supply on the card. The 3v power supply is on the line cards, GRP card, clock and scheduler cards, and switch fabric cards.
5V (mv)	Measures the 5v power supply on the card. The 5v power supply is on the line cards, GRP card, and power supplies.
MBUS 5V (mv)	Measures the 5v MBus on the card. The 5v MBus is on all equipment.
Hot Sensor (deg C)	Measures the temperature at the hot sensor on the card. The hot sensor is on the line cards, GRP card, clock and scheduler cards, switch fabric cards, and blowers.
Inlet Sensor (deg C)	Measures the current inlet temperature on the card. The inlet sensor is on the line cards, GRP card, clock and scheduler cards, switch fabric cards, and power supplies.
48V (Volt)	Measures the DC power supplies.
AMP_48 (Amp)	Measures the AC power supplies.
Fan 0, Fan 1, Fan 2	Measures the fan speed in rotations per minute.

The following is sample output from the **show environment all** command for the Cisco 12008 router. Slots 0 through 7 are the line cards, slots 16 and 17 are the clock scheduler cards (the clock scheduler cards control the fans), slots 18 through 20 are the switch fabric cards, and slots 24 and 26 are the power supplies. The Cisco 12008 router does not support slots 25, 27, 28, and 29. An “NA” in the table means that no values were returned. In some cases it is because the equipment is not supported for that environmental parameter (for example, the power supplies in slots 24 and 26 do not have a hot sensor, so an NA is displayed).

```
Router# show environment all

Slot # Hot Sensor      Inlet Sensor
      (deg C)          (deg C)
2      31.0             22.0
5      33.5             26.5
16     25.5             21.5
18     22.0             21.0
19     22.5             21.0
24     NA              29.5
26     NA              24.5

Slot # 3V      5V      MBUS 5V
      (mv)    (mv)    (mv)
2      3292    5008    5136
5      3292    5000    5128
16     3272    NA      5128
18     3300    NA      5128
19     3316    NA      5128

Slot # 5V      MBUS 5V 48V      AMP_48
      (mv)    (mv)    (Volt)  (Amp)
```

```

24      0      5096   3      0
26     5544   5144   47     3

```

Slot # Fan Information

```
16      Voltage 16V Speed slow: Main Fans Ok Power Supply fans Ok
```

Alarm Indicators

```
No alarms
```

Slot # Card Specific Leds

```
16      Mbus OK SFCs Failed
18      Mbus OK
19      Mbus OK
24      Input Failed
26      Input Ok
```

The following is sample output from the **show environment table** command for a Cisco 12012 router. The **show environment table** command lists the warning, critical, and shutdown limits on your system and includes the GRP card and line cards (slots 0 to 15), clock and scheduler cards (slots 16 and 17), switch fabric cards (slots 18 to 20), and blowers.

Router# show environment table

Hot Sensor Temperature Limits (deg C):

	Warning	Critical	Shutdown
GRP/GLC (Slots 0-15)	40	46	57
CSC (Slots 16-17)	46	51	65
SFC (Slots 18-20)	41	46	60

Inlet Sensor Temperature Limits (deg C):

	Warning	Critical	Shutdown
GRP/GLC (Slots 0-15)	35	40	52
CSC (Slots 16-17)	40	45	59
SFC (Slots 18-20)	37	42	54

3V Ranges (mv):

	Warning		Critical		Shutdown	
	Below	Above	Below	Above	Below	Above
GRP/GLC (Slots 0-15)	3200	3400	3100	3500	3050	3550
CSC (Slots 16-17)	3200	3400	3100	3500	3050	3550
SFC (Slots 18-20)	3200	3400	3100	3500	3050	3550

5V Ranges (mv):

	Warning		Critical		Shutdown	
	Below	Above	Below	Above	Below	Above
GRP/GLC (Slots 0-15)	4850	5150	4750	5250	4680	5320

MBUS_5V Ranges (mv):

	Warning		Critical		Shutdown	
	Below	Above	Below	Above	Below	Above
GRP/GLC (Slots 0-15)	5000	5250	4900	5350	4750	5450
CSC (Slots 16-17)	4820	5150	4720	5250	4750	5450
SFC (Slots 17-20)	5000	5250	4900	5350	4750	5450

Blower Operational Range (RPM):

Top Blower:

	Warning	Critical
	Below	Below
Fan 0	1000	750
Fan 1	1000	750
Fan 2	1000	750

```

Bottom Blower:
                Warning   Critical
                Below     Below
Fan 0           1000      750
Fan 1           1000      750
Fan 2           1000      750
    
```

The following is sample output from the **show environment leds** command for a Cisco 12012 router. The **show environment leds** command lists the status of the MBus LEDs on the clock, scheduler, and the switch fabric cards.

```

Router# show environment leds

16 leds Mbus OK
18 leds Mbus OK
19 leds Mbus OK
20 leds Mbus OK
    
```

Related Commands

Command	Description
snmp-server enable traps envmon	Controls (enables or disables) environmental monitoring SNMP notifications.
snmp-server host	Specifies how SNMP notifications should be sent (as traps or informs), the version of SNMP to use, the security level of the notifications (for SNMPv3), and the recipient (host) of the notifications.

show file

The **show file** command has been replaced by the **more** command. See the description of the **more** command for more information.

show file descriptors

To display a list of open file descriptors, use the **show file descriptors** command in EXEC mode.

show file descriptors

Syntax Description This command has no arguments or keywords.

Command Modes EXEC

Command History	Release	Modification
	11.3 AA	This command was introduced.

Usage Guidelines File descriptors are the internal representations of open files. You can use this command to learn if another user has a file open.

Examples The following is sample output from the **show file descriptors** command:

```
Router# show file descriptors

File Descriptors:

  FD  Position  Open  PID  Path
  --  -
  0   187392    0001   2   tftp://dirt/hampton/c4000-i-m.a
  1   184320    030A   2   flash:c4000-i-m.a
```

[Table 64](#) describes the fields shown in the display.

Table 64 *show file descriptors Field Descriptions*

Field	Description
FD	File descriptor. The file descriptor is a small integer used to specify the file once it has been opened.
Position	Byte offset from the start of the file.
Open	Flags supplied when opening the file.
PID	Process ID of the process that opened the file.
Path	Location of the file.

show file information

To display information about a file, use the **show file information** command in EXEC mode.

show file information *file-url*

Syntax Description	<i>file-url</i>	The URL of the file to display.
--------------------	-----------------	---------------------------------

Command Modes	EXEC
---------------	------

Command History	Release	Modification
	11.3 AA	This command was introduced.

Examples

The following is sample output from the **show file information** command:

```
Router# show file information tftp://dirt/hampton/c2500-j-1.a

tftp://dirt/hampton/c2500-j-1.a:
  type is image (a.out) [relocatable, run from flash]
  file size is 8624596 bytes, run size is 9044940 bytes [8512316+112248+420344]
  Foreign image

Router# show file information slot0:c7200-js-mz

slot0:c7200-js-mz:
  type is image (elf) []
  file size is 4770316 bytes, run size is 4935324 bytes
  Runnable image, entry point 0x80008000, run from ram

Router1# show file information nvram:startup-config

nvram:startup-config:
  type is ascii text
```

[Table 65](#) describes the possible file types.

Table 65 Possible File Types

Types	Description
image (a.out)	Runnable image in a.out format.
image (elf)	Runnable image in elf format.
ascii text	Configuration file or other text file.
coff	Runnable image in coff format.
ebcdic	Text generated on an IBM mainframe.
lzw compression	Lzw compressed file.
tar	Text archive file used by the Channel Interface Processor (CIP).

show file systems

To list available file systems, use the **show file systems** command in EXEC mode.

show file systems

Syntax Description This command has no arguments or keywords.

Command Modes EXEC

Command History	Release	Modification
	11.3 AA	This command was introduced.

Usage Guidelines Use this command to learn the alias names (Prefixes) of the file systems your router supports.

Examples The following is sample output from the **show file systems** command:

```
Router# show file systems

File Systems:

      Size(b)      Free(b)  Type    Flags  Prefixes
      -          -        -       -      -
      -          -        opaque  rw     null:
      -          -        opaque  rw     system:
      -          -        opaque  ro     xmodem:
      -          -        opaque  ro     ymodem:
      -          -        network rw     tftp:
      -          -        network rw     rcp:
      -          -        network rw     ftp:
*   4194304      4190616  flash   rw     flash:
      131066      129185   nvram   rw     nvram:
      -          -        opaque  wo     lex:
```

[Table 66](#) describes the significant fields shown in the display.

Table 66 *show file systems Field Descriptions*

Type	Description
Size(b)	Amount of memory in the file system (in bytes).
Free(b)	Amount of free memory in the file system (in bytes).
Type	Type of file system.
Flags	Permissions for file system.
Prefixes	Alias for file system.
disk	The file system is for a rotating medium.
flash	The file system is for a Flash memory device.

Table 66 *show file systems Field Descriptions (continued)*

Type	Description
network	The file system is a network file system (TFTP, rcp, FTP, and so on).
nvrnram	The file system is for an NVRAM device.
opaque	The file system is a locally generated “pseudo” file system (for example, the “system”) or a download interface, such as brimux.
rom	The file system is for a ROM or EPROM device.
tty	The file system is for a collection of terminal devices.
unknown	The file system is of unknown type.

[Table 67](#) describes file system flags.

Table 67 *Possible File System Flags*

Flag	Description
ro	The file system is Read Only.
wo	The file system is Write Only.
rw	The file system is Read/Write.

show (flash)

To display the layout and contents of a Flash memory file system, use the **show flash-filesystem** command in EXEC mode.

Class A Flash File Systems

show flash-filesystem: [**all** | **chips** | **filesystems**]

Class B Flash File Systems

show flash-filesystem: [**partition number**] [**all** | **chips** | **detailed** | **err** | **summary**]

Class C Flash File Systems

show flash-filesystem:

Syntax Description	<i>flash-filesystem:</i>	Flash memory file system followed by a colon. Valid flash file system keywords include: <ul style="list-style-type: none"> • bootflash: • flash: • slot0: • slot1: • slavebootflash: • slaveslot0: • slaveslot1:
all		(Optional) On Class B Flash file systems, all keyword displays complete information about Flash memory, including information about the individual ROM devices in Flash memory and the names and sizes of all system image files stored in Flash memory, including those that are invalid. On Class A Flash file systems, the all keyword displays the following information: <ul style="list-style-type: none"> • The information displayed when no keywords are used. • The information displayed by the filesystems keyword. • The information displayed by the chips keyword.
chips		(Optional) Displays information per partition and per chip, including which bank the chip is in, plus its code, size, and name.
filesystems		(Optional) Displays the Device Info Block, the Status Info, and the Usage Info.
partition number		(Optional) Displays output for the specified partition number. If you do not specify a partition in the command, the router displays output for all partitions. You can use this keyword only when Flash memory has multiple partitions.

detailed	(Optional) Displays detailed file directory information per partition, including file length, address, name, Flash memory checksum, computer checksum, bytes used, bytes available, total bytes, and bytes of system Flash memory.
err	(Optional) Displays write or erase failures in the form of number of retries.
summary	(Optional) Displays summary information per partition, including the partition size, bank size, state, and method by which files can be copied into a particular partition. You can use this keyword only when Flash memory has multiple partitions.

Command Modes EXEC

Command History	Release	Modification
	11.3 AA	This command was introduced.
	12.3	A timestamp that shows the offset from Coordinated Universal Time (UTC) was added to the show command display.

Usage Guidelines If Flash memory is partitioned, the command displays the requested output for each partition, unless you use the **partition** keyword.

The command also specifies the location of the current image.

To display the contents of boot Flash memory on Class A or B file systems, use the **show bootflash:** command as follows:

Class A Flash file systems

show bootflash: [**all** | **chips** | **fileSYS**]

Class B Flash file systems

show bootflash: [**partition** *number*] [**all** | **chips** | **detailed** | **err**]

To display the contents of internal Flash memory on Class A or B file systems, use the **show flash:** command as follows:

Class A Flash file systems

show flash: [**all** | **chips** | **fileSYS**]

Class B Flash file systems

show flash: [**partition** *number*][**all** | **chips** | **detailed** | **err** | **summary**]

The **show** (Flash file system) command replaces the **show flash devices** command.

Examples

The output of the **show** command depends on the type of Flash file system you select. Types include **flash:**, **bootflash:**, **slot0:**, **slot1:**, **slavebootflash:**, **slaveslot0:**, and **slaveslot1:**.

Examples of output from the **show flash** command are provided in the following sections:

- Class A Flash File System
- Class B Flash File Systems

Although the examples use **flash:** as the Flash file system, you may also use the other Flash file systems listed.

Class A Flash File System

The following three examples show sample output for Class A Flash file systems. [Table 68](#) describes the significant fields shown in the display.

The following is sample output from the **show flash:** command.

```
Router# show flash:

-#- ED --type-- --crc--- -seek-- nlen -length- -----date/time----- name
1  .. unknown 317FBA1B 4A0694 24 4720148 Dec 15 2003 17:49:36 -08:00
hampton/nitro/c7200-j-mz
2  .. unknown 9237F3FF 92C574 11 4767328 Jan 02 2004 18:42:53 -08:00 c7200-js-mz
3  .D unknown 71AB01F1 10C94E0 10 7982828 Jan 02 2004 18:48:14 -08:00 rsp-jsv-mz
4  .D unknown 96DACD45 10C97E0 8 639 Jan 03 2004 12:09:17 -08:00 the_time
5  .. unknown 96DACD45 10C9AE0 3 639 Jan 03 2004 12:09:32 -08:00 the_time
6  .D unknown 96DACD45 10C9DE0 8 639 Jan 03 2004 12:37:01 -08:00 the_time
7  .. unknown 96DACD45 10CA0E0 8 639 Jan 03 2004 12:37:13 -08:00 the_time

3104544 bytes available (17473760 bytes used)
```

Table 68 show (Class A Flash File System) Field Descriptions

Field	Description
#	Index number for the file.
ED	Whether the file contains an error (<i>E</i>) or is deleted (<i>D</i>).
type	File type (1 = configuration file, 2 = image file). The software displays these values only when the file type is certain. When the file type is unknown, the system displays “unknown” in this field.
crc	Cyclic redundant check for the file.
seek	Offset into the file system of the next file.
nlen	Name length—Length of the filename.
length	Length of the file itself.
date/time	Date and time the file was created. In the example, -08:00 indicates that the given date and time is 8 hours behind Coordinated Universal Time (UTC).
name	Name of the file.

The following is sample output from the **show flash: chips** command:

```
RouterA# show flash: chips

***** Intel Series 2+ Status/Register Dump *****

ATTRIBUTE MEMORY REGISTERS:
  Config Option Reg (4000): 2
  Config Status Reg (4002): 0
  Card Status Reg (4100): 1
```

```

Write Protect Reg (4104): 4
Voltage Cntrl Reg (410C): 0
Rdy/Busy Mode Reg (4140): 2

COMMON MEMORY REGISTERS: Bank 0
Intelligent ID Code : 8989A0A0
Compatible Status Reg: 8080
Global      Status Reg: B0B0
Block Status Regs:
  0 : B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0
  8 : B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0
 16 : B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0
 24 : B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0

COMMON MEMORY REGISTERS: Bank 1
Intelligent ID Code : 8989A0A0
Compatible Status Reg: 8080
Global      Status Reg: B0B0
Block Status Regs:
  0 : B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0
  8 : B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0
 16 : B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0
 24 : B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0

COMMON MEMORY REGISTERS: Bank 2
Intelligent ID Code : 8989A0A0
Compatible Status Reg: 8080
Global      Status Reg: B0B0
Block Status Regs:
  0 : B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0
  8 : B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0
 16 : B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0
 24 : B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0

COMMON MEMORY REGISTERS: Bank 3
Intelligent ID Code : 8989A0A0
Compatible Status Reg: 8080
Global      Status Reg: B0B0
Block Status Regs:
  0 : B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0
  8 : B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0
 16 : B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0
 24 : B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0

COMMON MEMORY REGISTERS: Bank 4
Intelligent ID Code : 8989A0A0
Compatible Status Reg: 8080
Global      Status Reg: B0B0
Block Status Regs:
  0 : B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0
  8 : B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0
 16 : B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0
 24 : B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0 B0B0

```

The following is sample output from the **show flash: filesystems** command:

```

RouterA# show flash: filesystems

----- F I L E   S Y S T E M   S T A T U S -----
Device Number = 0
DEVICE INFO BLOCK:
Magic Number           = 6887635   File System Vers = 10000   (1.0)
Length                 = 1400000   Sector Size      = 20000
Programming Algorithm = 4           Erased State     = FFFFFFFF

```

```

File System Offset    = 20000      Length = 13A0000
MONLIB Offset        = 100        Length = C730
Bad Sector Map Offset = 1FFEC      Length = 14
Squeeze Log Offset   = 13C0000    Length = 20000
Squeeze Buffer Offset = 13E0000    Length = 20000
Num Spare Sectors    = 0
  Spares:
STATUS INFO:
  Writable
  NO File Open for Write
  Complete Stats
  No Unrecovered Errors
  No Squeeze in progress
USAGE INFO:
  Bytes Used          = 10AA0E0    Bytes Available = 2F5F20
  Bad Sectors         = 0          Spared Sectors  = 0
  OK Files            = 4          Bytes = 90C974
  Deleted Files       = 3          Bytes = 79D3EC
  Files w/Errors      = 0          Bytes = 0

```

The following is sample output from the **show flash:** command:

```

RouterB> show flash:

System flash directory:
File Length Name/status
  1 4137888 c3640-c2is-mz.Feb24
[4137952 bytes used, 12639264 available, 16777216 total]
16384K bytes of processor board System flash (Read/Write)\

```

The following example shows detailed information about the second partition in internal Flash memory:

```

RouterB# show flash: partition 2

System flash directory, partition 2:
File Length Name/status
  1 1711088 dirt/images/c3600-i-mz
[1711152 bytes used, 15066064 available, 16777216 total]
16384K bytes of processor board System flash (Read/Write)

```

Class B Flash File Systems

[Table 69](#) describes the significant fields shown in the displays.

Table 69 *show (Class B Flash File System) all Fields*

Field	Description
addr	Address of the file in Flash memory.
available	Total number of bytes available in Flash memory.
Bank	Bank number.
Bank-Size	Size of bank in bytes.
bytes used	Total number of bytes used in Flash memory.
ccksum	Computed checksum.
Chip	Chip number.
Code	Code number.

Table 69 show (Class B Flash File System) all Fields (continued)

Field	Description
Copy-Mode	Method by which the partition can be copied to: <ul style="list-style-type: none"> • RXBOOT-MANUAL indicates a user can copy manually by reloading to the boot ROM image. • RXBOOT-FLH indicates user can copy via Flash load helper. • Direct indicates user can copy directly into Flash memory. • None indicates that it is not possible to copy into that partition.
fcksum	Checksum recorded in Flash memory.
File	Number of the system image file. If no filename is specified in the boot system flash command, the router boots the system image file with the lowest file number.
Free	Number of bytes free in partition.
Length	Size of the system image file (in bytes).
Name	Name of chip manufacturer and chip type.
Name/status	Filename and status of a system image file. The status [invalidated] appears when a file has been rewritten (recopied) into Flash memory. The first (now invalidated) copy of the file is still present within Flash memory, but it is rendered unusable in favor of the newest version. The [invalidated] status can also indicate an incomplete file that results from the user abnormally terminating the copy process, a network timeout, or a Flash memory overflow.
Partition	Partition number in Flash memory.
Size	Size of partition (in bytes) or size of chip.
State	State of the partition. It can be one of the following values: <ul style="list-style-type: none"> • Read-Only indicates the partition that is being executed from. • Read/Write is a partition that can be copied to.
System flash directory	Flash directory and its contents.
total	Total size of Flash memory (in bytes).
Used	Number of bytes used in partition.

The following is sample output from the **show flash: all** command:

```
RouterB> show flash: all
Partition  Size    Used    Free    Bank-Size  State    Copy Mode
   1         16384K  4040K   12343K   4096K      Read/Write  Direct

System flash directory:
File Length  Name/status
      addr    fcksum  ccksum
   1  4137888  c3640-c2is-mz.Feb24
      0x40      0xED65  0xED65
```

[4137952 bytes used, 12639264 available, 16777216 total]
 16384K bytes of processor board System flash (Read/Write)

Chip	Bank	Code	Size	Name
1	1	01D5	1024KB	AMD 29F080
2	1	01D5	1024KB	AMD 29F080
3	1	01D5	1024KB	AMD 29F080
4	1	01D5	1024KB	AMD 29F080
1	2	01D5	1024KB	AMD 29F080
2	2	01D5	1024KB	AMD 29F080
3	2	01D5	1024KB	AMD 29F080
4	2	01D5	1024KB	AMD 29F080
1	3	01D5	1024KB	AMD 29F080
2	3	01D5	1024KB	AMD 29F080
3	3	01D5	1024KB	AMD 29F080
4	3	01D5	1024KB	AMD 29F080
1	4	01D5	1024KB	AMD 29F080
2	4	01D5	1024KB	AMD 29F080
3	4	01D5	1024KB	AMD 29F080
4	4	01D5	1024KB	AMD 29F080

The following is sample output from the **show flash: all** command on a router with Flash memory partitioned:

Router# **show flash: all**

System flash partition information:

Partition	Size	Used	Free	Bank-Size	State	Copy-Mode
1	4096K	3459K	637K	4096K	Read Only	RXBOOT-FLH
2	4096K	3224K	872K	4096K	Read/Write	Direct

System flash directory, partition 1:

File	Length	Name/status
addr	fcksum	ccksum
1	3459720	master/igs-bfpx.100-4.3
	0x40	0x3DE1 0x3DE1

[3459784 bytes used, 734520 available, 4194304 total]
 4096K bytes of processor board System flash (Read ONLY)

Chip	Bank	Code	Size	Name
1	1	89A2	1024KB	INTEL 28F008SA
2	1	89A2	1024KB	INTEL 28F008SA
3	1	89A2	1024KB	INTEL 28F008SA
4	1	89A2	1024KB	INTEL 28F008SA

Executing current image from System flash [partition 1]

System flash directory, partition2:

File	Length	Name/status
addr	fcksum	ccksum
1	3224008	igs-kf.100
	0x40	0xEE91 0xEE91

[3224072 bytes used, 970232 available, 4194304 total]
 4096K bytes of processor board System flash (Read/Write)

Chip	Bank	Code	Size	Name
1	2	89A2	1024KB	INTEL 28F008SA
2	2	89A2	1024KB	INTEL 28F008SA
3	2	89A2	1024KB	INTEL 28F008SA
4	2	89A2	1024KB	INTEL 28F008SA

The following is sample output from the **show flash: chips** command:

```
RouterB> show flash: chips
```

```
16384K bytes of processor board System flash (Read/Write)
```

Chip	Bank	Code	Size	Name
1	1	01D5	1024KB	AMD 29F080
2	1	01D5	1024KB	AMD 29F080
3	1	01D5	1024KB	AMD 29F080
4	1	01D5	1024KB	AMD 29F080
1	2	01D5	1024KB	AMD 29F080
2	2	01D5	1024KB	AMD 29F080
3	2	01D5	1024KB	AMD 29F080
4	2	01D5	1024KB	AMD 29F080
1	3	01D5	1024KB	AMD 29F080
2	3	01D5	1024KB	AMD 29F080
3	3	01D5	1024KB	AMD 29F080
4	3	01D5	1024KB	AMD 29F080
1	4	01D5	1024KB	AMD 29F080
2	4	01D5	1024KB	AMD 29F080
3	4	01D5	1024KB	AMD 29F080
4	4	01D5	1024KB	AMD 29F080

The following is sample output from the **show flash: detailed** command:

```
RouterB> show flash: detailed
```

```
System flash directory:
```

File	Length	Name/status
		addr fcksum ccksum
1	4137888	c3640-c2is-mz.Feb24
		0x40 0xED65 0xED65

```
[4137952 bytes used, 12639264 available, 16777216 total]
```

```
16384K bytes of processor board System flash (Read/Write)
```

The following is sample output from the **show flash: err** command:

```
RouterB> show flash: err
```

```
System flash directory:
```

File	Length	Name/status
1	4137888	c3640-c2is-mz.Feb24

```
[4137952 bytes used, 12639264 available, 16777216 total]
```

```
16384K bytes of processor board System flash (Read/Write)
```

Chip	Bank	Code	Size	Name	erase	write
1	1	01D5	1024KB	AMD 29F080	0	0
2	1	01D5	1024KB	AMD 29F080	0	0
3	1	01D5	1024KB	AMD 29F080	0	0
4	1	01D5	1024KB	AMD 29F080	0	0
1	2	01D5	1024KB	AMD 29F080	0	0
2	2	01D5	1024KB	AMD 29F080	0	0
3	2	01D5	1024KB	AMD 29F080	0	0
4	2	01D5	1024KB	AMD 29F080	0	0
1	3	01D5	1024KB	AMD 29F080	0	0
2	3	01D5	1024KB	AMD 29F080	0	0
3	3	01D5	1024KB	AMD 29F080	0	0
4	3	01D5	1024KB	AMD 29F080	0	0
1	4	01D5	1024KB	AMD 29F080	0	0
2	4	01D5	1024KB	AMD 29F080	0	0
3	4	01D5	1024KB	AMD 29F080	0	0
4	4	01D5	1024KB	AMD 29F080	0	0

See [Table 69](#) for a description of the fields. The **show flash: err** command also displays two extra fields: erase and write. The erase field indicates the number of erase errors. The write field indicates the number of write errors.

The following is sample output from the **show flash summary** command on a router with Flash memory partitioned. The partition in the Read Only state is the partition from which the Cisco IOS image is being executed.

```
Router# show flash summary
```

```
System flash partition information:
```

Partition	Size	Used	Free	Bank-Size	State	Copy-Mode
1	4096K	2048K	2048K	2048K	Read Only	RXBOOT-FLH
2	4096K	2048K	2048K	2048K	Read/Write	Direct

Related Commands

Command	Description
more	Displays the contents of any file in the Cisco IOS File System.

show fh-log

The **show fh-log** command has been replaced by the **more fh:logfile** command. See the description of the **more fh:logfile** command for more information.

show gsr

To display hardware information on the Cisco 12000 series Gigabit Switch Routers (GSRs), use the **show gsr** command in EXEC mode.

show gsr [chassis-info [details]]

Syntax Description	chassis-info	(Optional) Displays backplane NVRAM information.
	details	(Optional) In addition to the information displayed, this option includes hexadecimal output of the backplane NVRAM information.
Command Modes	EXEC	
Command History	Release	Modification
	11.2GS	This command was introduced to support the Cisco 12000 series GSRs.

Usage Guidelines Use this command to determine the type of hardware installed in your Cisco 12000 series GSR router.

Examples The following is sample output from the **show gsr** command for a Cisco 12012 router. This command shows the type and state of the card installed in the slot.

```
Router# show gsr

Slot 0 type = Route Processor
        state = IOS Running MASTER
Slot 7 type = 1 Port Packet Over SONET OC-12c/STM-4c
        state = Card Powered
Slot 16 type = Clock Scheduler Card
        state = Card Powered PRIMARY CLOCK
```

The following is sample output from the **show gsr chassis-info** command for a Cisco 12012 router:

```
Router# show gsr chassis-info

Backplane NVRAM [version 0x20] Contents -
  Chassis: type 12012 Fab Ver: 1
    Chassis S/N: ZQ24CS3WT86MGVHL
  PCA: 800-3015-1 rev: A0 dev: 257 HW ver: 1.0
    Backplane S/N: A109EXPR75FUNYJK
  MAC Addr: base 0000.EAB2.34FF block size: 1024
  RMA Number: 0x5F-0x2D-0x44 code: 0x01 hist: 0x1A
```

show gt64010 (7200)

To display all GT64010 internal registers and interrupt status on the Cisco 7200 series routers, use the **show gt64010** command in EXEC mode.

show gt64010

Syntax Description This command has no arguments or keywords.

Command Modes EXEC

Command History	Release	Modification
	11.2	This command was introduced.

Usage Guidelines This command displays information about the CPU interface, DRAM/device address space, device parameters, direct memory access (DMA) channels, timers and counters, and protocol control information (PCI) internal registers. The information is generally useful for diagnostic tasks performed by technical support only.

Examples The following is a partial sample output for the **show gt64010** command:

```
Router# show gt64010

GT64010 Channel 0 DMA:
  dma_list=0x6088C3EC, dma_ring=0x4B018480, dma_entries=256
  dma_free=0x6088CECC, dma_reqt=0x6088CECC, dma_done=0x6088CECC
  thread=0x6088CEAC, thread_end=0x6088CEAC
  backup_thread=0x0, backup_thread_end=0x0
  dma_working=0, dma_complete=6231, post_coalesce_frames=6231
  exhausted_dma_entries=0, post_coalesce_callback=6231

GT64010 Register Dump: Registers at 0xB4000000

CPU Interface:
  cpu_interface_conf      : 0x80030000 (b/s 0x00000380)
  addr_decode_err        : 0xFFFFFFFF (b/s 0xFFFFFFFF)
Processor Address Space :
  ras10_low               : 0x00000000 (b/s 0x00000000)
  ras10_high              : 0x07000000 (b/s 0x00000007)
  ras32_low               : 0x08000000 (b/s 0x00000008)
  ras32_high              : 0x0F000000 (b/s 0x0000000F)
  cs20_low                : 0xD0000000 (b/s 0x000000D0)
  cs20_high               : 0x74000000 (b/s 0x00000074)
  cs3_boot_low           : 0xF8000000 (b/s 0x000000F8)
  cs3_boot_high          : 0x7E000000 (b/s 0x0000007E)
  pci_io_low              : 0x00080000 (b/s 0x00000800)
  pci_io_high             : 0x00000000 (b/s 0x00000000)
  pci_mem_low             : 0x00020000 (b/s 0x00000200)
  pci_mem_high            : 0x7F000000 (b/s 0x0000007F)
  internal_spc_decode     : 0xA0000000 (b/s 0x000000A0)
```

```
bus_err_low      : 0x00000000 (b/s 0x00000000)
bus_err_high     : 0x00000000 (b/s 0x00000000)
.
.
.
```

show history

To list the commands you have entered in the current EXEC session, use the **show history** command in EXEC mode.

show history

Syntax Description This command has no arguments or keywords.

Command Modes EXEC

Command History	Release	Modification
	10.0	This command was introduced.

Usage Guidelines The command history feature provides a record of EXEC commands you have entered. The number of commands that the history buffer will record is determined by the **history size** line configuration command or the **terminal history size** EXEC command.

[Table 70](#) lists the keys and functions you can use to recall commands from the command history buffer.

Table 70 History Keys

Key	Function
Ctrl-P or Up Arrow ¹	Recalls commands in the history buffer in a backward sequence, beginning with the most recent command. Repeat the key sequence to recall successively older commands.
Ctrl-N or Down Arrow ¹	Returns to more recent commands in the history buffer after recalling commands with Ctrl-P or the Up Arrow. Repeat the key sequence to recall successively more recent commands.

1. The arrow keys function only with ANSI-compatible terminals.

Examples The following is sample output from the **show history** command, which lists the commands the user has entered in EXEC mode for this session:

```
Router# show history
  help
  where
  show hosts
  show history
Router#
```

Related Commands	Command	Description
	history size	Enables the command history function, or changes the command history buffer size for a particular line.
	terminal history size	Enables the command history feature for the current terminal session, or changes the size of the command history buffer for the current terminal session.

show idb

To display information about the status of interface descriptor blocks (IDBs), use the **show idb** command in privileged EXEC mode.

show idb

Syntax Description This command has no arguments or keywords.

Command Modes Privileged EXEC

Command History	Release	Modification
	12.1	This command was introduced.
	12.2(15)T	The output of this command was changed to show additional information.

Examples The following is sample output from the **show idb** command:

```
Router# show idb

Maximum number of Software IDBs 8192. In use 17.

Active           HWIDBs      SWIDBs
Inactive         10          3
Total IDBs       15          17
Size each (bytes) 5784        2576
Total bytes      86760      43792

HWIDB#1  1  2  GigabitEthernet0/0 0 5, HW IFINDEX, Ether)
HWIDB#2  2  3  GigabitEthernet9/0 0 5, HW IFINDEX, Ether)
HWIDB#3  3  4  GigabitEthernet9/1 6 5, HW IFINDEX, Ether)
HWIDB#4  4  5  GigabitEthernet9/2 6 5, HW IFINDEX, Ether)
HWIDB#5 13  1  Ethernet0 4 5, HW IFINDEX, Ether)
```

[Table 71](#) describes the significant fields shown in the display.

Table 71 show idb Field Descriptions

Field	Description
In use	Total number of software IDBs (SWIDBs) that have been allocated. This number never decreases. SWIDBs are never deallocated.
Active	Total number of hardware IDBs (HWIDBs) and SWIDBs that are allocated and in use.
Inactive	Total number of HWIDBs and SWIDBs that are allocated but not in use.
Total	Total number of HWIDBs and SWIDBs that are allocated.

show ip director default

To verify default metric configuration information for DistributedDirector metrics, use the **show ip director default** command in privileged EXEC mode.

show ip director default [priority | weight]

Syntax Description	priority	(Optional) Default priorities for metrics
	weight	(Optional) Default weights for metrics

Command Modes Privileged EXEC

Command History	Release	Modification
	12.2(4)T	This command was introduced.

Usage Guidelines Use this command to verify default metric configurations.

Examples The following is sample output from the **show ip director default priority** command:

```
Router# show ip director default priority

Director default metric priorities:
random priority = 2
DRP route lookup external to AS priority = 1
administrative preference priority = 0
DRP route lookup internal to AS priority = 0
DRP distance to associated server priority = 0
portion priority = 0
Round-trip time from DRP to client priority = 0
DFP originated weight priority = 0
Route-map evaluation priority = 0
```

Related Commands	Command	Description
	ip director default priorities	Sets default priorities for DistributedDirector metrics.

show ip director dfp

To display information about the current status of the DistributedDirector connections with a particular Dynamic Feedback Protocol (DFP) agent, use the **show ip director dfp** command in EXEC mode.

show ip director dfp [*host-name* | *ip-address*]

Syntax Description

<i>host-name</i>	(Optional) Host name.
<i>ip-address</i>	(Optional) IP address.

Command Modes

EXEC

Command History

Release	Modification
12.1(5)T	This command was introduced.

Examples

The following is sample output from the **show ip director dfp** command:

```
Router# show ip director dfp

172.24.9.9:
Max retries: 5
Timeout between connect attempts: 60
Timeout between updates: 90
Last update received: 00:00:12 ago
Server Port BindID Address Mask
172.28.9.9 80 0 0.0.0.0 0.0.0.0
192.168.25.25
Max retries: 5
Timeout between connect attempts: 60
Timeout between updates: 90
Last update received: 00:00:44 ago
Server Port BindIDAddress Mask
192.168.30.30 800 0.0.0.0 0.0.0.0
```

show ip drp boomerang

To display the status of various boomerang domains, use the **show ip drp boomerang** command in privileged EXEC mode.

show ip drp boomerang [*domain-name*]

Syntax Description	<i>domain-name</i> (Optional) Specified domain name.
---------------------------	--

Command Modes	Privileged EXEC
----------------------	-----------------

Command History	Release	Modification
	12.2(8)T	This command was introduced.

Usage Guidelines The **show ip drp boomerang** command can be used on the boomerang client to display the status of the various boomerang domains. The following information can be shown for each domain:

- Alias information—The number of DNS requests for each alias.
- Content server address information:
 - Number of DNS requests.
 - Number of requests dropped because server is down.
 - Number of requests dropped because there is no original server.
 - Number of requests dropped because of security failures.

Examples The following is sample output from the **show ip drp boomerang** command:

```
Router# show ip drp boomerang www.boom1.com

DNS packets with unknown domain 0

Domain www.boom1.com
Content server          172.16.101.101 up
Origin server          0.0.0.0
DNS A record requests  0
Dropped (server down) 0
Dropped (no origen server) 0
Security failures      0

Alias www.boom2.com
DNS A record requests  0
```

Related Commands

Command	Description
alias (boomerang configuration)	Configures an alias name for a specified domain.
ip drp domain	Adds a new domain to the DistributedDirector client or configures an existing domain and puts the client in boomerang configuration mode.
server (boomerang configuration)	Configures the server address for a specified boomerang domain.
show ip drp	Displays DRP statistics on DistributedDirector or a DRP server agent.
tll dns	Configures the number of seconds for which an answer received from the boomerang client will be cached by the DNS client.
tll ip	Configures the IP TTL value for the boomerang response packets sent from the boomerang client to the DNS client in number of hops.

show ip http server

To display details about the current configuration of the HTTP server, use the **show ip http server** command in user EXEC or privileged EXEC mode.

show ip http server { **all** | **status** | **session-module** | **connection** | **statistics** | **history** }

Syntax Description		
all		Displays all HTTP server information.
status		Displays only HTTP server status configuration.
session-module		Displays only supported HTTP services (Cisco IOS modules).
connection		Displays only the current connections to the HTTP server, including the local and remote IP addresses being accessed.
statistics		Displays only HTTP server connection statistics.
history		Displays only the previous 20 connections to the HTTP server, including the IP address accessed, and the time when the connection was closed.

Command Modes	
	User EXEC
	Privileged EXEC

Command History	Release	Modification
	12.2(15)T	This command was introduced.

Usage Guidelines

Use this command to show detailed status information about the HTTP server.

If the HTTP secure server capability is present, the output of the **show ip http server all** command will also include the information found in the output of the **show ip http server secure status** command.

Examples

The following is sample output from the **show ip http server all** command:

```
Router# show ip http server all

HTTP server status: Enabled
HTTP server port: 80
HTTP server authentication method: enable
HTTP server access class: 0
HTTP server base path:
Maximum number of concurrent server connections allowed: 5
Server idle time-out: 30 seconds
Server life time-out: 120 seconds
Maximum number of requests allowed on a connection: 2
HTTP secure server capability: Not Present
HTTP server application session modules:
  Session module Name  Handle  Description
Homepage_Server      5       IOS Homepage Server
QDM                   2       QOS Device Manager Server
HTTP IFS Server      1       HTTP based IOS File Server
QDM SA                3       QOS Device Manager Signed Applet Server
```

```

WEB_EXEC          4      HTTP based IOS EXEC Server
XSM               6      XML Session Manager
VDM               7      VPN Device Manager Server
ITS               8      IOS Telephony Service
ITS_LOCDIR        9      ITS Local Directory Search

```

HTTP server current connections:

```

local-ipaddress:port  remote-ipaddress:port  in-bytes  out-bytes
172.19.254.37:80      128.190.254.45:33737  70        2294

```

HTTP server statistics:

Accepted connections total: 1360

HTTP server history:

```

local-ipaddress:port  remote-ipaddress:port  in-bytes  out-bytes  end-time
172.91.254.37:80      128.190.254.45:63530  60        1596      10:50:00 12/19

```

Table 72 describes the significant fields shown in the display.

Table 72 *show ip http server Field Descriptions*

Field	Description
HTTP server status:	Enabled or disabled. Corresponds to the [no] ip http server command.
HTTP server port:	Port used by the HTTP server. Corresponds to the ip http port command.
HTTP server authentication method:	Authentication method used for HTTP server logins. Corresponds to the ip http authentication command.
HTTP server access class:	Access list number assigned to the HTTP server. A value of zero (0) indicates no access list is assigned. Corresponds to the ip http access-class command.
HTTP server base path:	Base HTTP path specifying the location of the HTTP server files (HTML files). Corresponds to the ip http path command.
Maximum number of concurrent server connections allowed:	Corresponds to the ip http max-connections command.
Server idle time-out:	The maximum number of seconds the connection will be kept open if no data is received or if response data can not be sent out. Corresponds to the ip http timeout-policy command.
Server life time-out:	The maximum number of seconds the connection will be kept open. Corresponds to the ip http timeout-policy command.
Maximum number of requests allowed on a connection:	The maximum number of requests that will be processed on a connection before the connection is closed. Corresponds to the ip http timeout-policy command.
HTTP secure server capability:	Indicates if the running software image supports the secure HTTP server (“Present” or “Not Present”). If the capability is present, the output from the show ip http server secure status command will appear after this line.

Table 72 show ip http server Field Descriptions (continued)

Field	Description
HTTP server application session modules:	<p>Cisco IOS services that use the HTTP server. Services are provided for application interfaces, including:</p> <ul style="list-style-type: none"> the Cisco Web browser user interface, which uses the Cisco IOS Homepage Server, HTTP-based EXEC Server, and HTTP IOS File System (IFS) Server the VPN Device Manager (VDM) application, which uses the VDM Server and the XML Session Manager (XSM) the QoS Device Manager (QDM) application, which uses the QDM Server the IP Phone and Cisco IOS Telephony Service applications, which use the ITS Local Directory Search and IOS Telephony Server (ITS)
HTTP server current connections:	Currently active HTTP connections.
HTTP server statistics:	How many connections have been accepted.
HTTP server history:	<p>Details about the last 20 connections, including the time the connection was closed (end-time). End-time is given in Universal Coordinated Time (UTC or GMT), using a 24-hour clock and the following format:</p> <p><i>hh:mm:ss month/day</i></p>

The following example shows sample output for the **show ip http server status** command:

```
Router# show ip http server status
HTTP server status: Disabled
HTTP server port: 80
HTTP server authentication method: enable
HTTP server access class: 0
HTTP server base path:
Maximum number of concurrent server connections allowed: 5
Server idle time-out: 600 seconds
Server life time-out: 600 seconds
Maximum number of requests allowed on a connection: 1
HTTP secure server capability: Present
HTTP secure server status: Disabled
HTTP secure server port: 443
HTTP secure server ciphersuite: 3des-ede-cbc-sha des-cbc-sha rc4-128-md5 rc4-12a
HTTP secure server client authentication: Disabled
HTTP secure server trustpoint:
```

The lines indicating the status of the HTTP secure (HTTPS) server will only be visible if your software image supports the HTTPS server. If your software image does not support SSL, only the following line will be visible:

```
HTTP secure server capability: Not present
```

Related Commands

Command	Description
debug ip http server all	Enables debugging output for all HTTP processes on the system.
ip http server	Enables the HTTP 1.1 server, including the Cisco web browser user interface.
ip http secure-server	Enables the secure HTTP (HTTPS) server.
show ip http server secure status	Displays the status of the secure HTTP (HTTPS) server.