



New Cisco IOS Commands for the Cisco 1800 Series Fixed-Configuration Routers

This document introduces new Cisco IOS commands implemented for the Cisco 1800 series fixed-configuration routers, which include the Cisco 1801, 1802, 1803, 1811, and 1812 routers.

The Cisco 1800 series fixed-configuration routers are part of the new line of integrated services routers that are optimized for secure, fast, high-quality delivery of multiple concurrent services for small-to-medium-sized businesses and small enterprise branch offices. All models offer embedded hardware-based encryption that provides superior performance for advanced applications, optional 802.11 a/b/g wireless LAN functionality, an integrated real-time clock for digital certificates, and optional Power over Ethernet (PoE).

[Table 1](#) shows the distinguishing features of the Cisco 1800 series fixed-configuration router models.

Table 1 Cisco 1800 Series Fixed-Configuration Routers

Router	Features
Cisco 1801, 1802, 1803 routers	<ul style="list-style-type: none">• 8-port 10/100BASE-T switch• 10/100BASE-T WAN port• ISDN/ST port• One of the following:<ul style="list-style-type: none">– ADSL-over-POTS port– ADSL-over-ISDN port– G.SHDSL WAN port
Cisco 1811 and 1812 routers	<ul style="list-style-type: none">• 8-port 10/100BASE-T switch• Two 10/100BASE-T WAN ports• Two USB ports• One of the following:<ul style="list-style-type: none">– ISDN/ST port– Analog modem port



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Additional References

The following sections provide references related to the new Cisco IOS commands implemented for the Cisco 1801, 1802, 1803, 1811, and 1812 routers.

Related Documents

Related Topic	Document Title
Cisco 1800 series fixed-configuration routers	Cisco 1811 and Cisco 1812 Integrated Services Router Cabling and Installation
	Cisco 1801, Cisco 1802, and Cisco 1803 Integrated Services Router Cabling and Installation
	Cisco 1800 Series Integrated Services (Fixed) Software Configuration Guide
Cisco IOS software	Cisco IOS software documentation , all releases. See the documentation for the Cisco IOS software release installed on your router.

Technical Assistance

Description	Link
The Cisco Technical Support website contains thousands of pages of searchable technical content, including links to products, technologies, solutions, technical tips, and tools. Registered Cisco.com users can log in from this page to access even more content.	http://www.cisco.com/techsupport

Command Reference

The following new commands are covered in this document:

- **show c1800**
- **show controller fastethernet**

show c1800

To display platform-specific information for troubleshooting the Cisco 1800 series fixed-configuration routers, use the **show c1800** command in privileged EXEC mode.

show c1800

Syntax Description This command has no arguments or keywords.

Command Default This command has no default behavior or values.

Command Modes Privileged EXEC

Command History	Release	Modification
	12.3(8)YI	This command was introduced for the Cisco 1801, 1802, 1803, 1811, and 1812 routers.

Usage Guidelines This command displays information about the platform and provides complex troubleshooting information that may be used by Cisco technical support.

Examples The following is sample output from the **show c1800** command:

```
Router# show c1800

C1800 Platform Information:
Interrupts:

Assigned Handlers...
  Vect  Handler  # of Ints  Name
  02    80231444  00000000  MC145574 ISDN S/T Transceiver Interrupt
  03    80089188  00000003  WIC Network IO INT handler
  06    80089188  0000001F  WIC Network IO INT handler
  09    80350534  00000000  C1800 fan fault Int Handler
  12    80089678  00008601  M8500 CPM INTERRUPT
  13    800522F4  00000005  Host/PCI Bridge Interrupt
  14    801204D0  00001D17  pq3 tsec1 tx interrupt
  15    801204D0  00000011  pq3 tsec1 rx interrupt
  16    801204D0  00000000  pq3 tsec1 error interrupt
  17    801204D0  00000000  pq3 tsec2 tx interrupt
  18    801204D0  00000000  pq3 tsec2 rx interrupt
  19    801204D0  00000000  pq3 tsec2 error interrupt
  20    8005792C  000084D4  DMA Intr handler
  25    80352924  00000000  pq3 performance monitor interrupt
  34    800E009C  00F36ECC  M8500_TIMER_INTERRUPT
  35    80231468  00000000  MC145574_TIMER_INTERRUPT
  37    8003AD74  00000000  Timebase Reference Interrupt
  38    8004174C  0000091D  16552 Con/Aux Interrupt
  39    81AE0484  00000000  SEC Interrupt Handler
```

```

IOS Priority Masks mapped to internal levels...
  Level 00 = [ 00000000 ]
  Level 01 = [ 00000000 ]
  Level 02 = [ 00000000 ]
  Level 03 = [ 00000003 ]
  Level 04 = [ 00000007 ]
  Level 05 = [ 00000008 ]
  Level 06 = [ 00000009 ]
  Level 07 = [ 0000000A ]
CTPR = 00000000      Current Level = 00
Interrupt Throttling:
Throttle Count = 00000000  Timer Count = 00000000
Netint usec = 00000FA0    Netint Mask usec = 000003E8
Active = 0                Configured = 0
Longest IRQ = 00000000

```

Table 1 describes the significant fields shown in the display.

Table 1 *show c1800 Field Descriptions*

Field	Description
Interrupts	Status of the interrupt services.
Assigned Handlers	Data about the interrupt handlers.
Vect	Processor vector number.
Handler	Execution address of the handler assigned to this vector.
# of Ints	Number of times this handler has been called.
Name	Name of the handler assigned to this vector.
IOS Priority Masks	Internal IOS priorities.
Interrupt Throttling	Behavior of the interrupt throttling mechanism.
Throttle Count	Number of times the throttle has become active.
Timer Count	Number of times the throttle has been deactivated because the maximum masked out time for network-level interrupt has been reached.
Netint usec	Maximum time that the network-level interrupt is allowed to run, in microseconds.
Netint Mask usec	Maximum time that the network-level interrupt is masked out, in microseconds, to allow process-level code to run.
Active	The network-level interrupt is masked or the router is in interrupt throttle state. 1 = Active; 0 = Not active at this moment.
Configured	Throttling is enabled or configured when set to 1. To configure network throttling, use the scheduler allocate command.
Longest IRQ	Duration of longest network-level interrupt, in microseconds.

show controller fastethernet

To display information about the Fast Ethernet controller chip in the Cisco 1800 series fixed-configuration routers, use the **show controller fastethernet** command in user EXEC or privileged EXEC mode.

show controller fastethernet *number*

Syntax Description

<i>number</i>	The 10/100BASE-T WAN port number—0 or 1—assigned at the factory at the time of installation.
---------------	--

Command Default

This command has no default behavior or values.

Command Modes

User EXEC
Privileged EXEC

Command History

Release	Modification
12.3(8)YI	This command was introduced for the Cisco 1801, 1802, 1803, 1811, and 1812 routers.

Usage Guidelines

This command displays information about the Fast Ethernet controller, such as initialization block, transmit ring, receive ring, and errors, and is generally useful for diagnostic tasks performed by Cisco technical support.

Examples

The following is sample output from the **show controller fastethernet** command:

```
Router# show controller fastethernet0

Interface FastEthernet0
Hardware is PQUICC3 MPC8500 ADDR: 8347B424, FASTSEND: 8011F078
DIST ROUTE ENABLED: 0
Route Cache Flag: 11
  IADDR0 = 0x00000000
  IADDR1 = 0x00000000
  IADDR2 = 0x00000000
  IADDR3 = 0x00000000
  IADDR4 = 0x00000000
  IADDR5 = 0x00000000
  IADDR6 = 0x00000000
  IADDR7 = 0x00000000
  GADDR0 = 0x00000000
  GADDR1 = 0x00000004
  GADDR2 = 0x00000000
  GADDR3 = 0x00000000
  GADDR4 = 0x00000000
  GADDR5 = 0x00000000
  GADDR6 = 0x00000000
```

show controller fastethernet

```

GADDR7 = 0x00000000
IEVENT=0x00000600, IMASK=B3718180, EDIS=00000000, ECNTRL=00003000
MINFLR=0x00000040, PTV=00000000, DMACTRL=000000C3, TBIPA=0000000A
FIFO_TX_THR=0x00000100, FIFO_TX_STARVE=0x00000080, FIFO_STARVE_SHUTOFF=0x00000100,
TCTRL=0x00000000
TSTAT=0x80000000, TBDLEN=0x0000003C, CTBPTR=0x0E8179F8, TBPTR=0x0E817A00
TBASE=0x0E817820, OSTBD=0x08000000, OSTBDF=0x00000000, RCTRL=0x00000004
RSTAT=0x00000000, RBDLEN=0x000005C0, CRBPTR=0x0E817658, MRBLR=0x00000600
RBASE=0x0E8175E0, MACCFG1=0x0000003F, MACCFG2=0x000007104, IPGIFG=0x40605060
HAFDUP=0x0001F037, MAXFRM=0x00000600, MIIMCFG=0x00000014, MIIMCOM=0x00000000
MIIMADD=0x00000719, MIIMCON=0x0000000E, MIIMSTAT=0x0000000E, MIIMIND=0x00000000
IFSTAT=0x00000000, MACSTNADDR1=0x9AD3FDFC, MACSTNADDR2=0x0B000000
ATTR=0x000048C0, ATTRELI=0x0004000E
RMON MIB Registers
TR64=32, TR127=0, TR255=0, TR511=5
TR1K=0, TRMAX=0, TRMGV=0
RBYT=0, RPKT=0, RFCS=0, RMCA=0
RBCA=0, RXCF=0, RXPF=0, RXUO=0
RALN=0, RFLR=0, RCDE=0, RCSE=0
RUND=0, ROVR=0, RFRG=0, RJBR=0
RDRP=0
TBYT=3968, TPKT=37, TMCA=5, TBCA=0
TXPF=0, TDFR=0, TEDF=0, TSCL=0
TMCL=0, TLCL=0, TNCL=0, TDRP=0
TJBR=0, TFCS=0, TXCF=0, TOVR=0
TUND=0, TFRG=0
CAR1=0x00000000, CAR2=0x00000000
CAM1=0xFE01FFFF, CAM2=0x000FFFFF
Software MAC address filter(hash:length/addr/mask/hits):
0xC0: 0 0100.0ccc.cccc 0000.0000.0000 0
pq3_tsec_instance=0x8347D90C
rx ring entries=64, tx ring entries=64
rxring=0xE8175E0, rxr shadow=0x8347DB5C, rx_head=0, rx_tail=0
txring=0xE817820, txr shadow=0x8347DC88, tx_head=60, tx_tail=60, tx_count=0
RX_RING_ENTRIES
status 9000, len 0, buf_ptr E818E00
status 9000, len 0, buf_ptr E817AC0
status 9000, len 0, buf_ptr E818140
status 9000, len 0, buf_ptr E818780
status 9000, len 0, buf_ptr E819440
status 9000, len 0, buf_ptr E819AC0
status 9000, len 0, buf_ptr E81A100
status 9000, len 0, buf_ptr E81A780
status 9000, len 0, buf_ptr E81ADC0
status 9000, len 0, buf_ptr E81B440
status 9000, len 0, buf_ptr E81BA80
status 9000, len 0, buf_ptr E81C100
status 9000, len 0, buf_ptr E81C740
status 9000, len 0, buf_ptr E81CDC0
status 9000, len 0, buf_ptr E81D400
status 9000, len 0, buf_ptr E73C0C0
status 9000, len 0, buf_ptr E73BA40
status 9000, len 0, buf_ptr E73B3C0
status 9000, len 0, buf_ptr E73AD40
status 9000, len 0, buf_ptr E73A6C0
status 9000, len 0, buf_ptr E73A040
status 9000, len 0, buf_ptr E7399C0
status 9000, len 0, buf_ptr E739340
status 9000, len 0, buf_ptr E738CC0
status 9000, len 0, buf_ptr E738640
status 9000, len 0, buf_ptr E737FC0
status 9000, len 0, buf_ptr E737940
status 9000, len 0, buf_ptr E7372C0
status 9000, len 0, buf_ptr E756A00

```

```
status 9000, len 0, buf_ptr E756380
status 9000, len 0, buf_ptr E755D00
status 9000, len 0, buf_ptr E755680
status 9000, len 0, buf_ptr E755000
status 9000, len 0, buf_ptr E754980
status 9000, len 0, buf_ptr E754300
status 9000, len 0, buf_ptr E753C80
status 9000, len 0, buf_ptr E753600
status 9000, len 0, buf_ptr E752F80
status 9000, len 0, buf_ptr E752900
status 9000, len 0, buf_ptr E752280
status 9000, len 0, buf_ptr E751C00
status 9000, len 0, buf_ptr E751580
status 9000, len 0, buf_ptr E750F00
status 9000, len 0, buf_ptr E750880
status 9000, len 0, buf_ptr E750200
status 9000, len 0, buf_ptr E74FB80
status 9000, len 0, buf_ptr E74F500
status 9000, len 0, buf_ptr E74EE80
status 9000, len 0, buf_ptr E74E800
status 9000, len 0, buf_ptr E74E180
status 9000, len 0, buf_ptr E74DB00
status 9000, len 0, buf_ptr E74D480
status 9000, len 0, buf_ptr E74CE00
status 9000, len 0, buf_ptr E74C780
status 9000, len 0, buf_ptr E74C100
status 9000, len 0, buf_ptr E74BA80
status 9000, len 0, buf_ptr E74B400
status 9000, len 0, buf_ptr E74AD80
status 9000, len 0, buf_ptr E74A700
status 9000, len 0, buf_ptr E74A080
status 9000, len 0, buf_ptr E749A00
status 9000, len 0, buf_ptr E749380
status 9000, len 0, buf_ptr E748D00
status B000, len 0, buf_ptr E748680
```

TX_RING_ENTRIES

```
status 0, len 3C, buf_ptr EAD544A
status 0, len 3C, buf_ptr EAD594A
status 0, len 3C, buf_ptr EAD5BCA
status 0, len 3C, buf_ptr EAD634A
status 0, len 3C, buf_ptr EAD5A8A
status 0, len 3C, buf_ptr EAD648A
status 0, len 17C, buf_ptr EAE6C42
status 0, len 3C, buf_ptr EAD698A
status 0, len 3C, buf_ptr EAD6C0A
status 0, len 3C, buf_ptr EAD6ACA
status 0, len 3C, buf_ptr EAD6D4A
status 0, len 3C, buf_ptr EAD6E8A
status 0, len 3C, buf_ptr EAD6FCA
status 0, len 17C, buf_ptr EAE7322
status 0, len 3C, buf_ptr E70110A
status 0, len 3C, buf_ptr E70174A
status 0, len 3C, buf_ptr E7019CA
status 0, len 3C, buf_ptr E701C4A
status 0, len 3C, buf_ptr E701ECA
status 0, len 3C, buf_ptr E700FCA
status 0, len 17C, buf_ptr EAE7A02
status 0, len 3C, buf_ptr EAD530A
status 0, len 3C, buf_ptr EAD56CA
status 0, len 3C, buf_ptr EAD51CA
status 0, len 3C, buf_ptr EAD544A
status 0, len 3C, buf_ptr EAD594A
status 0, len 3C, buf_ptr EAD5BCA
status 0, len 17C, buf_ptr EAE80E2
```

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```

status 0, len 3C, buf_ptr EAD634A
status 0, len 3C, buf_ptr EAD5A8A
status 0, len 3C, buf_ptr EAD648A
status 0, len 3C, buf_ptr EAD698A
status 0, len 3C, buf_ptr EAD6C0A
status 0, len 3C, buf_ptr EAD6ACA
status 0, len 17C, buf_ptr EAE87C2
status 0, len 3C, buf_ptr EAD6D4A
status 0, len 3C, buf_ptr EAD6E8A
status 0, len 3C, buf_ptr EAD6FCA
status 0, len 3C, buf_ptr E70110A
status 0, len 3C, buf_ptr E70174A
status 0, len 3C, buf_ptr E7019CA
status 0, len 17C, buf_ptr EAE8EA2
status 0, len 3C, buf_ptr E701C4A
status 0, len 3C, buf_ptr E701ECA
status 0, len 3C, buf_ptr E700FCA
status 0, len 3C, buf_ptr EAD530A
status 0, len 3C, buf_ptr EAD56CA
status 0, len 3C, buf_ptr EAD51CA
status 0, len 17C, buf_ptr EAE9582
status 0, len 3C, buf_ptr EAD544A
status 0, len 3C, buf_ptr EAD594A
status 0, len 3C, buf_ptr EAD5BCA
status 0, len 3C, buf_ptr EAD634A
status 0, len 3C, buf_ptr EAD5A8A
status 0, len 3C, buf_ptr EAD648A
status 0, len 17C, buf_ptr EAE9C62
status 0, len 3C, buf_ptr EAD698A
status 0, len 3C, buf_ptr EAD6C0A
status 0, len 3C, buf_ptr EAD6ACA
status 0, len 3C, buf_ptr EAD6D4A
status 0, len 3C, buf_ptr EAD530A
status 0, len 3C, buf_ptr EAD56CA
status 0, len 3C, buf_ptr EAD51CA
status 2000, len 17C, buf_ptr EAE6562
throttled=0, enabled=0, disabled=0
rx_framing_err=0, rx_overflow_err=0, rx_buffer_err=0
rx_no_enp=0, rx_discard=0
tx_one_col_err=0, tx_more_col_err=0, tx_no_enp=0, tx_deferred_err=0
tx_underrun_err=0, tx_late_collision_err=0, tx_loss_carrier_err=0
tx_exc_collision_err=0, tx_buff_err=0, fatal_tx_err=0
PHY (8) registers:
Register 00 1000
Register 01 786D
Register 02 0022
Register 03 1619
Register 04 01E1
Register 05 0020
Register 06 0004
Register 07 2001
Register 08 0020
Register 15 0000
Register 1B 0000
Register 1F 1584

```

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■ show controller fastethernet