



Cisco Integrated Storage System Module Command Reference

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This section documents commands for the Cisco Integrated Storage System module application and new commands for Cisco IOS software:

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Cisco Integrated Storage System Module Commands

- [export mount-point media0](#)
- [format storages](#)

export mount-point media0

To restrict the NFS client to access only the local disk drive media (media0) of the specified Cisco Video Management and Storage module, use the **export mount-point media0** command.

export mount-point media0 *ip-address*

Syntax Description	<i>ip-address</i>	IP address, in dotted decimal notation, of the Cisco Video Management and Storage module that is permitted to access the ISS module.
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Command Default	Local disk drive media is not formatted.
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Command Modes	Format storages local configuration mode
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Command History	Version	Modification
	1.0	This command was introduced.

Usage Guidelines	Because all NFS clients can access this device by default, use of this command is not required unless you want to restrict the Cisco Integrated Storage System module so that it is accessible only by a single Cisco Video Management and Storage module. Using the IP address of Cisco Video Management and Storage module, this command specifies the permissions of an NFS client to access to the media0 device on this Cisco Integrated Storage System module. The keyword media0 is the unique string that identifies the hard disk drive on the Cisco Integrated Storage System.
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Examples	The following example shows the export mount-point media0 command used to restrict access to a specific Cisco Video Management and Storage module. <pre>iss> conf t Enter configuration commands, one per line. End with CNTL/Z. iss(config)> export mount-point media0 1.100.30.218 modified the export information. iss(config)></pre>
----------	--

format storages

To format the local disk drive media (media0), use the **format storages** command.

format storages *local media0*



Note

For the changes to take effect, the media must first be disabled and then reenabled.

Syntax Description

<i>local media0</i>	Local disk drive media (uses unique string identifier: media0) on the Cisco Integrated Storage System network module.
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Command Default

Local disk drive media is not formatted.

Command Modes

Format storages local configuration mode

Command History

Version	Modification
1.0	This command was introduced.

Usage Guidelines

The local disk drive media is identified by the unique string identifier *media0*. The Cisco Integrated Storage System module is supported within the ISR only if there is a Cisco Video Management and Storage System module present in the same ISR.



Note

Allow approximately five minutes for the 500 GB drive to format the media.

Examples

The following example shows the command to format the local disk drive media0. Note the warning message and the two confirmations that you must respond to before an attempt is made to format the device. Only upon the confirmation from the user, will it proceed with the formatting process.

```
iss-module# format storages local media0
!!!WARNING!!!
!!!WARNING!!! You are about to start a destructive sequence of
!!!WARNING!!! operations. All data on the storage device media0
!!!WARNING!!! will be lost and unrecoverable.
!!!WARNING!!! The device formatting can take up to a few minutes.
!!!WARNING!!! During formatting, your console is locked and
!!!WARNING!!! unavailable for use. Before you proceed further, back
!!!WARNING!!! up the contents of the storage device.
!!!WARNING!!!
!!!WARNING!!! If you are not sure what to do, answer "no" to the
!!!WARNING!!! following question and then exit.
!!!WARNING!!!
Do you wish to proceed [y/n]? : y
Are you sure you want to format the device and lose all the data [y/n]? : n
```

Cisco IOS Commands

This section documents new Cisco IOS commands used for accessing the Cisco Integrated Storage System module from the host router.

Use the following commands to access and configure the Cisco Integrated Storage System module from the host router.

- [service-module integrated-service-engine](#)
- [show controllers integrated-service-engine](#)
- [show interfaces integrated-service-engine](#)

service-module integrated-service-engine

To begin a service module session through a console connection, use the **service-module integrated-service-engine** command in privileged EXEC configuration mode.

service-module integrated-service-engine *slot/port* {**password-reset** | **reload** | **reset** | **session** | **shutdown** | **statistics** | **status**}

Syntax Description		
<i>slot</i>		Number of the router chassis slot for the network module.
<i>port</i>		Number of the integrated port on the network module. For network modules, always use 0. The slash mark (/) is required between the slot argument and the port argument.
password-reset		Reset of service module password.
reload		Reload of service module.
reset		Hardware reset of the service module.
session		Service module session. Opens a Telnet session that provides the Cisco integrated encoder command-line interface (CLI) from the Cisco IOS interface side.
shutdown		Shutdown of the service module.
statistics		Shows the integrated service module reset statistics.
status		Operational information about the service module.

Command Default None

Command Modes Privileged EXEC

Command History	Version	Modification
	12.4(11)T	This command was introduced.

Usage Guidelines

Use the **service-module integrated-service-engine** *slot/port* **shutdown** command before you remove the integrated service module from the router.

Removing the integrated encoder without using the proper shutdown sequence can result in corruption of the hard disk. After successful shutdown of the application, the Cisco IOS software displays a message indicating that the network module can be removed.

Only one session at a time is allowed into the network module from the internal network-module-side interface.

After starting a session, you can perform any integrated module configuration task. You first access the console in a user-level shell. To access the privileged EXEC command shell, in which most commands are available, use the **enable** command.

After you finish configuring the module and exit the module console session, clear the session by using the **service-module integrated-service-engine slot/port session clear** command. At the confirmation prompt, press **Enter** to confirm the action, or press **n** to cancel.

Examples

The following example shows a session being opened for a Cisco Integrated Storage System module in slot 1:

```
Router# service-module integrated-service-engine 1/0 session
```

```
Trying 31.0.0.99, 2066 ... Open
iss-module>
```

Related Commands

Command	Description
enable	Enters privileged EXEC mode.
interface	Configures an interface and enters interface configuration mode.
show diag	Displays controller information for a network module.
show interface integrated-service engine	Displays basic interface configuration information for the Cisco Integrated Storage System network module.

show controllers integrated-service-engine

To display controller information for the integrated service module, use the **show controllers integrated-service-engine** command in privileged EXEC mode.

show controllers integrated-service-engine *slot/unit*

Syntax Description	<i>slot</i>	Number of the router chassis slot for the video module.
	<i>unit</i>	Number of the video module. For network modules, always use 0. The slash mark (/) is required between the slot argument and the unit argument.

Command Default None

Command Modes Privileged EXEC

Command History	Version	Modification
	12.4(11)T	This command was introduced.

Examples The following example shows the output from the **show controllers integrated-service-engine slot/unit** command:

```
Router# show controllers integrated-Service-Engine 4/0
Interface Integrated-Service-Engine4/0
Application is Cisco Foundation Software 5.0.0-26
Hardware is BCM5703 Gig Ethernet
IDB: 6619ABFC, FASTSEND: 60DD1034, MCI_INDEX: 0

INSTANCE=0x6619BD24
  Rx Ring entries = 512
  Rx Shadow = 0x6619C62C
  Rx Ring = 0x2DFC1C40
  Rx Ring Head = 425
  Rx Ring Last = 424
  Rx Jumbo Ring entries = 256
  Rx Jumbo Shadow = 0x6619CE64
  Rx Jumbo Ring = 0x2DFC5C80
  Rx Jumbo Ring Head = 0
  Rx Jumbo Ring Last = 255
  Rx Return Ring = 0x2DFC9CC0
  Rx Return Ring Head = 937
  Rx Return Ring Last = 936
  Rx STD Ring Shadow (malloc) = 0x6619C62C
  Rx STD Ring (malloc) = 0x2DFC1C40
  Rx JUMBO Ring Shadow (malloc) = 0x6619CE64
  Rx JUMBO Ring (malloc) = 0x2DFC5C80
  Rx Buffer Descr (malloc) = 0x2DFC9CC0
  Tx Ring entries = 512
  Tx Shadow = 0x6619DE9C
  Tx Shadow Head = 409
```

■ show controllers integrated-service-engine

```

Tx Shadow Tail = 409
Tx Shadow Tail Last = 408
Tx Shadow Free = 512
Tx Ring = 0x2DFD1D00
Tx Count = 0
Tx Free = 512
Tx Buffer Descr = 0x2DFD1D00
Tx Shadow (malloc) = 0x6619DE9C
Tx Ring (malloc) = 0x2DFD1D00

```

Status block and mail_box information

```

Status = 0x0, StatusTag = 0xD4
Status::RcvStdConIdx: 425 , RcvJumboConIdx: 0 , RcvMiniConIdx: 0
MBOX::RcvStdProdIdx:27 , RcvJumboProdIdx:255 , RcvMiniProdIdx: 0
Status::Send 0, SendConIdx: 409 , Rx Rtn 0, RcvProdIdx: 937
mail_box::Send 0,SendHostProdIdx: 69 , Rx Rtn 0,RcvRetConIdx: 27

```

Rings Status:

```
*** RX Entry: 14 , Tx Entry: 1 ***
```

RX #	duration	RtnHead	RtnTail	ProdHead	ProdTail
[0]	2	337	339	337	339
[1]	1	930	931	418	419
[2]	4	339	343	339	343
[3]	1	343	344	343	344
[4]	1	931	932	419	420
[5]	1	932	933	420	421
[6]	1	344	345	344	345
[7]	1	933	934	421	422
[8]	2	345	347	345	347
[9]	1	347	348	347	348
[10]	1	934	935	422	423
[11]	1	935	936	423	424
[12]	3	348	349	348	349
[13]	1	936	937	424	425
[14]	7	332	334	332	334
[15]	1	334	335	334	335
[16]	3	927	929	415	417
[17]	1	335	336	335	336
[18]	1	929	930	417	418
[19]	3	336	337	336	337

TX #	duration	Send_head	Send_tail
[0]	0	194	195
[1]	0	388	389
[2]	0	181	183
[3]	0	389	392
[4]	0	183	185
[5]	0	392	395
[6]	0	185	187
[7]	0	395	396
[8]	0	187	188
[9]	0	396	398
[10]	0	398	399
[11]	0	188	189
[12]	0	399	402
[13]	0	402	404
[14]	0	189	191
[15]	0	404	405
[16]	0	191	192
[17]	0	405	408
[18]	0	192	194
[19]	0	408	409


```
PCI Register [0x4C800000]
  PCI Msi Control = 0x5
  PCI Msi addr = 0xFFFFFFFF, 0xDEF7FFF8
  PCI MiscHostCtrl = 0x10020098
  PCI DMA Control = 0x763F0000
  PCI PciState = 0x20FE
  PCI clk ctrl = 0xBF
  PCI ModeCtrl = 0x4030034
  PCI MiscCfg = 0x83082
  PCI MiscLocalCtrl = 0x1016F09

Mac Control Register [0x4C800400]
  MAC Mode = 0xE0480C
  Mac Status = 0x4000403
  Mac Event = 0x1000
  Mac Led = 0xC80
  Mac RX MTU = 0x2808
  Mac Tx AutoNeg = 0x0
  MAC Rx AutoNeg = 0x0
  Mac Tx Mode = 0x52
  Mac Tx Status = 0x8
  Mac Tx Length = 0x2620
  Mac Rx Mode = 0x406
  Mac Rx Status = 0x0
  Mac Serdes Ctrl = 0x616000
  Mac Serdes Status = 0x2

General Control Register [0x4C806800]
  GCR Mode = 0x4030034, GCR MiscCfg = 0x83082
  GCR LocalCtrl = 0x1016F09, GCR Timer = 0x3810AB4C
  Buf Mgr Address Space Begin = 0x4C804400
  Buf Mgr Flow Control Low Water Mark Adr = 0x4C804414 Data = 0x130
  Buf Mgr Flow Control High Water Mark Adr = 0x4C804418 Data = 0x17C

Hardware MAC Address Filters
-----
  Hardware Perfect Address Filters
MAC addr[00] = 00-12-80-13-47-B8
MAC addr[01] = 01-00-0C-CC-CC-CC
MAC addr[02] = 01-80-C2-00-00-07
MAC addr[03] = 01-80-C2-00-00-02
MAC addr[04] = 00-00-00-00-00-00
MAC addr[05] = 00-00-00-00-00-00
MAC addr[06] = 00-00-00-00-00-00
MAC addr[07] = 00-00-00-00-00-00
MAC addr[08] = 00-00-00-00-00-00
MAC addr[09] = 00-00-00-00-00-00
MAC addr[10] = 00-00-00-00-00-00
MAC addr[11] = 00-00-00-00-00-00
MAC addr[12] = 00-00-00-00-00-00
MAC addr[13] = 00-00-00-00-00-00
MAC addr[14] = 00-00-00-00-00-00
MAC addr[15] = 00-00-00-00-00-00
  Hardware Multicast Hash Filters
MAC Hash addr[00] = 00000000
MAC Hash addr[01] = 00000000
MAC Hash addr[02] = 00000000
MAC Hash addr[03] = 00000000
  Hardware Receive Rules Filters
Receive Rules Config = 00000008
Rule: [00] = 0x42000000
Value: [00] = 0x7FFFFFFF
Rule: [01] = 0x06000004
Value: [01] = 0x7FFFFFFF
```

■ show controllers integrated-service-engine

```

Rule:  [02]  = 0x00000000
Value: [02]  = 0x00000000
Rule:  [03]  = 0x00000000
Value: [03]  = 0x00000000
Rule:  [04]  = 0x00000000
Value: [04]  = 0x00000000
Rule:  [05]  = 0x00000000
Value: [05]  = 0x00000000
Rule:  [06]  = 0x00000000
Value: [06]  = 0x00000000
Rule:  [07]  = 0x00000000
Value: [07]  = 0x00000000
Rule:  [08]  = 0x00000000
Value: [08]  = 0x00000000
Rule:  [09]  = 0x00000000
Value: [09]  = 0x00000000
Rule:  [10]  = 0x00000000
Value: [10]  = 0x00000000
Rule:  [11]  = 0x00000000
Value: [11]  = 0x00000000
Rule:  [12]  = 0x00000000
Value: [12]  = 0x00000000
Rule:  [13]  = 0x00000000
Value: [13]  = 0x00000000
Rule:  [14]  = 0x00000000
Value: [14]  = 0x00000000
Rule:  [15]  = 0x00000000
Value: [15]  = 0x00000000

```

Software MAC Address Filter (hash:length/addr/mask/hits)

```

-----
0x000: 0  ffff.ffff.ffff  0000.0000.0000      0
0x038: 0  0012.8013.47b8  0000.0000.0000      0
0x0C0: 0  0100.0ccc.cccc  0000.0000.0000      0
0x0C0: 1  0180.c200.0002  0000.0000.0000      0
0x0C5: 0  0180.c200.0007  0000.0000.0000      0

```

```

Software filtered frames: 0
Unicast software filter needed: 0
Multicast software filter needed: 0
Promiscuous mode: 0

```

HARDWARE STATISTICS

```

Rx good packets: 99220
Rx CRC:          0
Rx alignment:    0
Rx short:        0

```

```

Tx good frames:      146809
Tx maxm collisions:  0
Tx late collisions:  0
Tx underruns:        0
Tx lost carrier:     0
Tx deferred:         0
Tx single collision:  0
Tx multiple collision: 0
Tx total collisions:  0

```

----- HW FLOW CONTROL STATS -----

```

Rx XON PAUSE Frames Received: 0
Rx XOFF PAUSE Frames Received: 0
Rx XOFF State Entered: 0
Tx XON Sent: 0
Tx XOFF Sent: 0

```

INTERRUPT STATISTICS

```

CX   = 76355123
FR   = 78987643
CNA  = 0
RNR  = 0
MDI  = 0
SWI  = 0
FCP  = 0

```

```

Full Promiscuous Mode = disabled
Loopback Mode = disabled

```

I/O Congestion Counters:

```

Standard Packet Count : 14860
Jumbo Packet Count   : 0

```

I2C Registers:

```

AFS - Control Register   : 0x4000D000
SMBUS Input Register    : 0x0000041B
SMBUS Output Register   : 0x00004C61
SMBUS GRC Local Register : 0x01016F09

```

I2C Error Counter:

```

Total I2C Output Errors : 0
Total I2C Input Errors  : 0
I2C Transaction Errors  : 0

```

Module Reset Statistics:

```

CLI reset count = 0
CLI reload count = 2
Registration request timeout reset count = 0
Error recovery timeout reset count = 0
Module registration count = 19

```

Related Commands

Command	Description
show interfaces integrated-service-engine	Displays basic interface configuration information for the video service module.

show interfaces integrated-service-engine

To display basic interface configuration information for an integrated interface, use the **show interfaces integrated-service-engine** command in user EXEC mode.

show interfaces integrated-service-engine *slot/port*

Syntax Description	<i>slot</i>	Number of the router chassis slot for the Cisco Integrated Storage System module.
	<i>port</i>	Number of the integrated Cisco Integrated Storage System module. For network modules, always use 0. The slash mark (/) is required between the <i>slot</i> argument and the <i>port</i> argument.

Defaults	None
-----------------	------

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

Command History	Version	Modification
	12.4(11)T	This command was introduced.

Examples The following example shows output from the **show interfaces integrated-Service-Engine 1/0** command:

```
Router# show interfaces integrated-service-engine 4/0
Integrated-Service-Engine4/0 is up, line protocol is up
  Hardware is BCM5703, address is 0012.8013.47b8 (bia 0012.8013.47b8)
  Internet address is 11.0.0.20/24
  MTU 1500 bytes, BW 1000000 Kbit, DLY 10 usec,
    reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation ARPA, loopback not set
  Keepalive not set
  Full-duplex, 1000Mb/s, link type is force-up, media type is internal
  output flow-control is XON, input flow-control is XON
  ARP type: ARPA, ARP Timeout 04:00:00
  Last input 00:00:00, output 00:00:00, output hang never
  Last clearing of "show interface" counters never
  Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 6
  Queueing strategy: fifo
  Output queue: 0/512 (size/max)
  5 minute input rate 58000 bits/sec, 106 packets/sec
  5 minute output rate 1560000 bits/sec, 159 packets/sec
    100598858 packets input, 3481805992 bytes, 0 no buffer
    Received 222 broadcasts, 0 runts, 0 giants, 0 throttles
    0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
    0 watchdog, 0 multicast, 0 pause input
    0 input packets with dribble condition detected
  141669474 packets output, 550374239 bytes, 0 underruns
    0 output errors, 0 collisions, 5 interface resets
    0 babbles, 0 late collision, 0 deferred
```

```
0 lost carrier, 0 no carrier, 0 pause output  
0 output buffer failures, 0 output buffers swapped out
```

Related Commands

Command	Description
interface integrated-service-engine	Configures the interface slot and port numbers where the service module resides.

■ `show interfaces integrated-service-engine`