



Router Memory Commands

This chapter provides detailed descriptions of the commands used to maintain router memory.

For configuration information and examples, refer to the “Maintaining Router Memory” chapter in the *Cisco IOS Configuration Fundamentals Configuration Guide*.

Flash Memory File System Types

Cisco platforms use one of three different Flash memory file system types. Some commands are supported on only one or two file system types. This chapter notes commands that are not supported on all file system types.

See Table 27 to determine which Flash memory file system type your platform uses.

Table 27 Flash Memory File System Types

Type	Platforms
Class A	Cisco 7000 family, C12000, LightStream1010
Class B	Cisco 1003, Cisco 1004, Cisco 1005, Cisco 2500 series, Cisco 3600 series, Cisco 4000 series, Cisco AS5200
Class C	Cisco MC3810, disk0 and disk1 of SC3640

Replaced Commands

Commands in this chapter that have been replaced by new commands continue to perform their normal functions in the current release but are no longer documented. Support for these commands will cease in a future release. See the “Cisco IOS File System Commands” chapter in this book for the description of the `copy` command. Table 28 maps the old commands with their replacements.

Table 28 Mapping Old Commands to New Commands

Old Command	New Command
<code>configure network</code>	<code>copy source-url system:running-config</code>
<code>configure overwrite-network</code>	<code>copy source-url nvram:startup-config</code>
<code>write memory</code>	<code>copy system:running-config nvram:startup-config</code>
<code>write network</code>	<code>copy system:running config destination-url</code>

memory scan

To enable the Memory Scan feature on a Cisco 7500 series router, use the **memory scan** command. Use the **no** form of this command to restore the router configuration to the default.

memory scan

no memory scan

Syntax Description This command has no arguments or keywords.

Defaults This command is disabled by default.

Command Modes Global configuration

Command History	Release	Modification
	12.0(4)XE	This command was introduced.
	12.0(7)T	This command was implemented in Cisco IOS Release 12.0 T.

Examples The following example configures the Memory Scan feature on a Cisco 7500 series router:

```
memory scan
```

memory-size iomem

To reallocate the percentage of DRAM to use for input/output memory and processor memory on Cisco 3600 series routers, use the **memory-size iomem** global configuration command. The **no** form of this command reverts to the default allocation of 25 percent I/O memory and 75 percent processor memory.

memory-size iomem *i/o-memory-percentage*

no memory-size iomem *i/o-memory-percentage*

Syntax Description

i/o-memory-percentage

The percentage of DRAM allocated to I/O memory. The values permitted are **10, 15, 20, 25, 30, 40, and 50** percent. A minimum of 4 MB of memory is required for I/O memory.

Defaults

The default allocation is 25 percent I/O memory and 75 percent processor memory.



Note

If the **smartinit** process has been enabled, the default memory allocation of 25% to I/O does not apply. Instead, **smartinit** examines the network modules and then calculates the I/O memory required.

Command Modes

Global configuration

Command History

Release	Modification
11.2 P	This command was introduced.

Usage Guidelines

When you specify the percentage of I/O memory in the command line, processor memory automatically acquires the remaining percentage of DRAM memory.

Examples

The following example allocates 40 percent of the DRAM memory to I/O memory and the remaining 60 percent to processor memory:

```
Router# configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)# memory-size iomem 40
Router(config)# exit
Router# copy system:running-config nvram:startup-config
Building configuration...
[OK]

Router# reload

rommon 1 > boot
program load complete, entry point: 0x80008000, size: 0x32ea24
Self decompressing the image :
#####
#####
##### [OK]
```

partition

To separate Flash memory into partitions on Class B file system platforms, use the **partition** global configuration command. Use the **no** form of this command to undo partitioning and to restore Flash memory to one partition.

Cisco 1600 series and Cisco 3600 series

partition *flash-filesystem*: [*number-of-partitions*][*partition-size*]

no partition *flash-filesystem*:

All other Class B platforms

partition flash *partitions* [*size1 size2*]

no partition flash

Syntax Description		
<i>flash-filesystem</i>		One of the following Flash file systems, which must be followed by a colon (:). The Cisco 1600 series can only use the flash: keyword. <ul style="list-style-type: none"> flash:—Internal Flash memory slot0:—Flash memory card in PCMCIA slot 0 slot1:—Flash memory card in PCMCIA slot 1
<i>number-of-partitions</i>		(Optional) Number of partitions in Flash memory.
<i>partition-size</i>		(Optional) Size of each partition. The number of partition size entries must be equal to the number of specified partitions.
<i>partitions</i>		Number of partitions in Flash memory. Can be 1 or 2.
<i>size1</i>		(Optional) Size of the first partition in megabytes.
<i>size2</i>		(Optional) Size of the second partition in megabytes.

Defaults

Flash memory consists of one partition.

If the partition size is not specified, partitions of equal size are created.

Command Modes

Global configuration

Command History

Release	Modification
10.3	This command was introduced.

Usage Guidelines

For the Cisco 1600 series and Cisco 3600 series, to undo partitioning, use the **partition flash-filesystem:1** or **no partition flash-filesystem:** command. For other Class B platforms, use either the **partition flash 1** or **no partition flash** command. If there are files in a partition other than the first, you must use the **erase flash-filesystem:partition-number** command to erase the partition before reverting to a single partition.

When creating two partitions, you must not truncate a file or cause a file to spill over into the second partition.

Examples

The following example creates two partitions of 4 MB each in Flash memory:

```
partition flash 2 4 4
```

The following example divides the Flash memory card in slot 0 into two partitions, each 8 MB in size on the Cisco 3600:

```
Router# configure terminal  
Enter configuration commands, one per line. End with CNTL/Z.  
Router(config)# partition slot0: 2 8 8
```

The following example creates four partitions of equal size in the card on a Cisco 1600 series:

```
Router# configure terminal  
Enter configuration commands, one per line. End with CNTL/Z.  
Router(config)# partition flash: 4
```

show (Flash file system)

To display the layout and contents of a Flash memory file system, use the **show EXEC** command.

Class A Flash file systems

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

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 (bootflash: , flash: , slot0: , slot1: , slavebootflash: , slaveslot0: , or slaveslot1:).
all	(Optional) On Class B Flash file systems, all shows 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, all shows the following information: <ul style="list-style-type: none"> The information displayed when no keywords are used. The information displayed by the fileSYS keyword. The information displayed by the chips keyword.
chips	(Optional) Shows information per partition and per chip, including which bank the chip is in plus its code, size, and name.
fileSYS	(Optional) Shows the Device Info Block, the Status Info, and the Usage Info.
detailed	(Optional) Shows 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) Shows write or erase failures in the form of number of retries.
partition number	(Optional) Shows 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.
summary	(Optional) Shows 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.

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, use the **show bootflash:** command as follows:

Class A Flash file systems

show bootflash: [all | chips | fileys]

Class B Flash file systems

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

To display the contents of internal Flash memory, use the **show flash:** command as follows:

Class A Flash file systems

show flash: [all | chips | fileys]

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.

Example

Class A Flash File System

The following three examples show sample output for Class A Flash file systems. Table 29 describes the fields shown in the output.

Table 29 *show (Class A Flash File System) Field Descriptions*

Field	Description
#	File's index number.
ED	Whether the file contains an error (<i>E</i>) or is deleted (<i>D</i>).
type	File's <i>type</i> (1 = configuration file, 2 = image file). The software displays these values only when the file's type is certain. When the file's type is unknown, the system displays unknown in this field.
crc	File's cyclic redundant check.
seek	Offset into the file system of the next file.
nlen	Length of the file's name.
length	Length of the file itself.
date/time	Date and time the file was created.
name	File's name.

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

RouterA# **show flash:**

```

-#- ED --type-- --crc--- -seek-- nlen -length- -----date/time----- name
1  .. unknown 317FBA1B 4A0694 24 4720148 Aug 29 1997 17:49:36 hampton/nitro/c7200-j-mz
2  .. unknown 9237F3FF 92C574 11 4767328 Oct 01 1997 18:42:53 c7200-js-mz
3  .D unknown 71AB01F1 10C94E0 10 7982828 Oct 01 1997 18:48:14 rsp-jsv-mz
4  .D unknown 96DACD45 10C97E0 8 639 Oct 02 1997 12:09:17 the_time
5  .. unknown 96DACD45 10C9AE0 3 639 Oct 02 1997 12:09:32 the_time
6  .D unknown 96DACD45 10C9DE0 8 639 Oct 02 1997 12:37:01 the_time
7  .. unknown 96DACD45 10CA0E0 8 639 Oct 02 1997 12:37:13 the_time

```

3104544 bytes available (17473760 bytes used)

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: fileys** command:

```
RouterA# show flash: fileys

----- 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
```

Class B Flash File Systems

Table 30 describes fields in the sample output for Class B Flash file systems.

Table 30 *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.
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.

Table 30 *show (Class B Flash File System) all Fields (continued)*

Field	Description
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:** 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)
```

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 30 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
```

■ show (Flash file system)

Related Commands	Command	Description
	show flash	Displays the layout and contents of a Flash memory file system.
	show flash chips	Displays the layout and contents of a Flash memory file system.
	show flash filesystems	Displays the layout and contents of a Flash memory file system.

show memory scan

To monitor the number and type of parity (memory) errors on your system, use the **show memory scan EXEC** command.

show memory scan

Syntax Description This command has no arguments or keywords.

Defaults No default behavior or values

Command Modes EXEC

Command History	Release	Modification
	12.0(4)XE	This command was introduced.
	12.0(7)T	This command was implemented in Cisco IOS Release 12.0 T.

Examples The following example shows a result with no memory errors:

```
Router# show memory scan
Memory scan is on.
No parity error has been detected.
```

If errors are detected in the system, the **show memory scan** command generates an error report. In the following example, memory scan detected a parity error:

```
Router# show memory scan
Memory scan is on.
Total Parity Errors 1.
AddressBlockPtrBlkSizeDispositRegion Timestamp
6115ABCD60D5D0909517A4ScrubedLocal 16:57:09 UTC Thu Mar 18
```

Table 31 explains the fields contained in the error report:

Table 31 show memory scan Fields

Field	Description
Address	The byte address where the error occurred
BlockPtr	The pointer to the block that contains the error
BlockSize	The size of the memory block

Table 31 *show memory scan Fields (continued)*

Field	Description
Disposit <ul style="list-style-type: none"> • BlockInUse • InFieldPrev • InHeader • Linked • MScrubed • MultiError • NoBlkHdr • NotYet • Scrubed • SplitLinked 	The action taken in response to the error: <ul style="list-style-type: none"> • An error was detected in a busy block. • An error was detected in the previous field of a block header. • An error was detected in a block header. • A block was linked to a bad list. • The same address was scrubbed more than once, and the block was linked to a bad list. • Multiple errors have been found in one block. • No block header was found. • An error was found, no action has been taken at this time. • An error was scrubbed. • A block was split, and only a small portion was linked to a bad list.
Region <ul style="list-style-type: none"> • IBSS • IData • IText • local 	The memory region in which the error was found: <ul style="list-style-type: none"> • image BSS • imagedata • imagetext • heap
Timestamp	The time the error occurred.

write memory

The **copy system:running-config nvram: startup-config** command replaces the **write memory** command. See the **copy** command for more information.

write network

The **copy system:running-config *destination-url*** command replaces the **write network** command. See the **copy** command for more information.