Viewing Server Properties

This chapter includes the following sections:

Viewing Server Properties

Before you begin

The server must be powered on, or the properties will not display.

Procedure

	Command or Action	Purpose
Step 1	Server# **scope chassis**	Enters chassis command mode.
Step 2	Server /chassis # **show detail**	Displays server properties.

Example

This example displays server properties:

```
Server# scope chassis
Server /chassis # show detail
Chassis:
    Power: on
    Power Button: unlocked
    IOS Lockout: unlocked
    Serial Number: FOC16161F1P
    Product Name: E160D
    PID : UCS-E160D-M1/K9
    UUID: 1255F7F0-9F17-0000-E312-94B74999D9E7
    Description
```

Viewing the Actual Boot Order

SUMMARY STEPS

1. Server# **scope bios**
2. Server /bios # **show actual-boot-order**

DETAILED STEPS

	Command or Action	Purpose
Step 1	Server# **scope bios**	Enters the BIOS command mode.
Step 2	Server /bios # **show actual-boot-order**	Displays details of the BIOS status.

Example

The following examples display actual boot order:

```
E160S/bios# scope bios
Server /bios # show actual-boot-order
Boot Order   Type                       Boot Device
------------ -------------------------- ----------------------------------
1            Internal EFI Shell         Internal EFI Shell
2            CD/DVD                     Cisco vKVM-Mapped vDVD1.22
3            CD/DVD                     Cisco CIMC-Mapped vDVD1.22
4            Network Device (PXE)       TE2 - 10G Port 2
5            Network Device (PXE)       TE3 - 10G Port 3
6            Network Device (PXE)       GE0 - 1G Internal Port 0
7            Network Device (PXE)       GE1 - 1G Internal Port 1
8            FDD                        Internal Flash
9            FDD                        Cisco vKVM-Mapped vFDD1.22
10           HDD                        Cisco vKVM-Mapped vHDD1.22
11           HDD                        Cisco CIMC-Mapped vHDD1.22
12           HDD                        RAID Adapter

E1120D/bios# scope bios
Server /bios # show actual-boot-order
Boot Order   Type                       Boot Device
------------ -------------------------- ----------------------------------
1            CD/DVD                     Cisco vKVM-Mapped vDVD1.22
2            CD/DVD                     Cisco CIMC-Mapped vDVD1.22
3            HDD                        RAID Adapter
```

```
4              HDD                    Cisco
5              HDD                    Cisco vKVM-Mapped vHDD1.22
6              HDD                    Cisco CIMC-Mapped vHDD1.22
7              FDD                    Cisco vKVM-Mapped vFDD1.22
8              Network Device (PXE)   IBA XE Slot 0300 v2358
9              Network Device (PXE)   IBA XE Slot 0301 v2358
10             Network Device (PXE)   BRCM MBA Slot 0500 v15.2.7
11             Network Device (PXE)   BRCM MBA Slot 0501 v15.2.7
12             Internal EFI Shell     Internal EFI Shell
```

Viewing CIMC Information

Before you begin

Install the CIMC firmware on the server.

SUMMARY STEPS

1. Server# **scope cimc**
2. Server /cimc # **show** [**detail**]

DETAILED STEPS

	Command or Action	Purpose
Step 1	Server# **scope cimc**	Enters CIMC command mode.
Step 2	Server /cimc # **show** [**detail**]	Displays the CIMC firmware, current time, and boot loader version.

Example

This example shows information about the CIMC:

```
Server# scope cimc
Server /cimc # show detail
CIMC:
    Firmware Version: 1.0(1.20120417172632)
    Current Time: Thu Apr 26 12:11:44 2012
    Boot-loader Version: 1.0(1.20120417172632).16
```

Viewing SD Card Information

Before you begin

Install the CIMC firmware on the server.

> **Note** .
>
> SD card is not supported on the M3 modules (UCS-E160S-M3, UCS-E180D-M3, and UCS-E1120D-M3).

SUMMARY STEPS

1. Server# **scope cimc**
2. Server /cimc # **show sd detail**

DETAILED STEPS

	Command or Action	Purpose
Step 1	Server# **scope cimc**	Enters CIMC command mode.
Step 2	Server /cimc # **show sd detail**	Displays the following information about the SD card: manufacturer and application ID, serial number, hardware and firmware revision, manufacture date, and whether the SD card is detected. If the card detected status is **yes**, it indicates that the SD card is present and is functional.

Example

This example shows information about the CIMC:

```
Server# scope cimc
Server /cimc # show sd detail
Manufacturer ID: Unigen 0x000045
    OEM/Application ID: 0x0024
    Serial Number: 0x39500025
    Hardware Revision: 0x2
    Firmware Revision: 0x0
    Manufacture Date: 06/2013
    Card Detected: yes
```

Viewing CPU Properties

Before you begin

The server must be powered on, or the properties will not display.

Procedure

	Command or Action	Purpose
Step 1	Server# **scope chassis**	Enters chassis command mode.
Step 2	Server /chassis # **show cpu** [**detail**]	Displays CPU properties.

Example

This example displays CPU properties:

```
Server# scope chassis
Server /chassis # show cpu
Name          Cores     Version
------------ -------- -------------------------------------------------
CPU1          4         Intel(R) Xeon(R) CPU     E5-2418L 0 @ 2.00GHz

Server /chassis #
```

Viewing Memory Properties

Before you begin

The server must be powered on, or the properties will not display.

Procedure

	Command or Action	Purpose
Step 1	Server# **scope chassis**	Enters chassis command mode.
Step 2	Server /chassis # **show dimm** [**detail**]	Displays memory properties.

Example

This example displays memory properties:

```
Server# scope chassis
Server /chassis # show dimm
Name                  Capacity        Channel Speed (MHz) Channel Type
-------------------- --------------- ------------------- ---------------

Node0_Dimm0           8192 MB         1333                DDR3
Node0_Dimm1           8192 MB         1333                DDR3
Node0_Dimm2           8192 MB         1333                DDR3
```

This example displays detailed information about memory properties:

```
Server# scope chassis
Server /chassis # show dimm detail
Name Node0_Dimm0:
 Capacity: 8192 MB
 Channel Speed (MHz): 1333
 Channel Type: DDR3
 Memory Type Detail: Registered (Buffered)
 Bank Locator: Node0_Bank0
 Visibility: Yes
 Operability: Operable
 Manufacturer: Samsung
 Part Number: M393B1K70DH0-
 Serial Number: 86A7D514
 Asset Tag: Dimm0_AssetTag
```

```
Data Width: 64 bits
Name Node0_Dimm1:
Capacity: 8192 MB
```

Viewing Power Supply Properties

Before you begin

The server must be powered on, or the properties will not display.

Note   Power-cap is not supported on ISR44XX. It is supported only on ISR-G2.

SUMMARY STEPS

1. Server# **scope power-cap**
2. Server /power-cap # **show** [**detail**]

DETAILED STEPS

	Command or Action	Purpose
Step 1	Server# **scope power-cap**	Enters the power cap command mode.
Step 2	Server /power-cap # **show** [**detail**]	Displays the server power consumption information.

Example

This example displays the detailed power supply properties for a single-wide E-Series Server:

```
Server# scope power-cap
Server /power-cap # show detail
 Cur Consumption (W): 36.10 W
 Max Consumption (W): 075
 Min Consumption (W): 36.10 W
Server /power-cap #
```

This example displays the detailed power supply properties for a double-wide E-Series Server:

```
Server# scope power-cap
Server /power-cap # show detail
 Cur Consumption (W): 43.1 W
 Max Consumption (W): 160
 Min Consumption (W): 43.1 W
Server /power-cap #
```

Viewing Storage Properties

Viewing Storage Adapter Properties

Before you begin

The server must be powered on, or the properties will not display.

Procedure

	Command or Action	Purpose
Step 1	Server# **scope chassis**	Enters the chassis command mode.
Step 2	Server /chassis # **show storageadapter** [*slot*] [**detail**]	Displays installed storage cards.
		Note This command displays all MegaRAID controllers on the server that can be managed through the CIMC. If an installed controller or storage device is not displayed, then it cannot be managed through the CIMC.
Step 3	Server /chassis # **scope storageadapter SLOT-5**	Enters command mode for an installed storage card.
Step 4	Server /chassis/storageadapter # **show capabilites** [**detail**]	Displays RAID levels supported by the storage card.
Step 5	Server /chassis/storageadapter # **show error-counters** [**detail**]	Displays number of errors seen by the storage card.
Step 6	Server /chassis/storageadapter # **show firmware-versions** [**detail**]	Displays firmware version information for the storage card.
Step 7	Server /chassis/storageadapter # **show hw-config** [**detail**]	Displays hardware information for the storage card.
Step 8	Server /chassis/storageadapter # **show pci-info** [**detail**]	Displays adapter PCI information for the storage card.
Step 9	Server /chassis/storageadapter # **show running-firmware-images** [**detail**]	Displays running firmware information for the storage card.
Step 10	Server /chassis/storageadapter # **show settings** [**detail**]	Displays adapter firmware settings for the storage card.

Example

This example displays storage properties:

```
Server# scope chassis
Server /chassis # show storageadapter

Controller Product Name              Firmware Package Build Product ID     Cache Memory
Size
---------- -------------------------- --------------------- -------------- -----------------
```

```
          SLOT-5     LSI MegaRAID SAS 2004 ROMB  20.10.1-0092          LSI Logic      0 MB
```

Viewing Physical Drive Properties

Procedure

	Command or Action	Purpose
Step 1	Server# **scope chassis**	Enters the chassis command mode.
Step 2	Server /chassis # **scope storageadapter SLOT-5**	Enters command mode for an installed storage card.
Step 3	Server /chassis/storageadapter # **show physical-drive** [*slot-number*] [**detail**]	Displays physical drive information for the storage card.
Step 4	Server /chassis/storageadapter # **show physical-drive-count** [**detail**]	Displays the number of physical drives on the storage card.
Step 5	Server /chassis/storageadapter # **scope physical-drive** *slot-number*	Enters command mode for the specified physical drive.
Step 6	Server /chassis/storageadapter/physical-drive # **show general** [**detail**]	Displays general information about the specified physical drive.
Step 7	Server /chassis/storageadapter/physical-drive # **show status** [**detail**]	Displays status information about the specified physical drive.

Example

This example displays general information about the physical drive number 1 on the storage card named SLOT-5:

```
Server# scope chassis
Server /chassis # scope storageadapter SLOT-5
Server /chassis/storageadapter # scope physical-drive 1
Server /chassis/storageadapter/physical-drive # show general
Slot Number 1:
    Controller: SLOT-5
    Enclosure Device ID: 64
    Device ID: 3
    Sequence Number: 2
    Media Error Count: 0
    Other Error Count: 12
    Predictive Failure Count: 0
    Link Speed: 6.0 Gb/s
    Interface Type: SATA
    Media Type: HDD
    Block Size: 512
    Block Count: 1953525168
    Raw Size: 953869 MB
    Non Coerced Size: 953357 MB
    Coerced Size: 952720 MB
    SAS Address 0: 4433221100000000
```

```
      SAS Address 1:
      Connected Port 0:
      Connected Port 1:
      Connected Port 2:
      Connected Port 3:
      Connected Port 4:
```

This example provides status information about the physical drive number 1 on the storage card named SLOT-5:

```
Server# scope chassis
Server /chassis # scope storageadapter SLOT-5
Server /chassis/storageadapter # scope physical-drive 1
Server /chassis/storageadapter/physical-drive # show status
Slot Number 1:
   Controller: SLOT-5
   State: system
   Online: true
   Fault: false
```

Viewing Virtual Drive Properties

Procedure

	Command or Action	Purpose
Step 1	Server# **scope chassis**	Enters the chassis command mode.
Step 2	Server /chassis # **scope storageadapter SLOT-5**	Enters command mode for an installed storage card.
Step 3	Server /chassis/storageadapter # **show virtual-drive** [*drive-number*] [**detail**]	Displays virtual drive information for the storage card.
Step 4	Server /chassis/storageadapter # **show virtual-drive-count** [**detail**]	Displays the number of virtual drives configured on the storage card.
Step 5	Server /chassis/storageadapter # **scope virtual-drive** *drive-number*	Enters command mode for the specified virtual drive.
Step 6	Server /chassis/storageadapter/virtual-drive # **show physical-drive** [**detail**]	Displays physical drive information about the specified virtual drive.

Example

This example displays power supply properties:

```
Server# scope chassis
Server /chassis # scope storageadapter SLOT-5
Server /chassis/storageadapter # show virtual-drive
Virtual Drive  Status               Name                     Size       RAID Level
-------------- -------------------- ------------------------ ---------- ----------
0              Optimal                                       571250 MB  RAID 1

Server /chassis/storageadapter # show virtual-drive-count
PCI Slot SLOT-5:
```

```
      Virtual Drive Count: 1
      Degraded Virtual Drive Count: 0
      Offline Virtual Drive Count: 0
Server /chassis/storageadapter # scope virtual-drive 0
Server /chassis/storageadapter/virtual-drive # show physical-drive
Span  Physical Drive Status     Starting Block Number Of Blocks
----- -------------- ---------- -------------- ----------------
0     2              online     0              1169920000
0     1              online     0              1169920000
```

Viewing PCI Adapter Properties

Before you begin

The server must be powered on, or the properties will not display.

SUMMARY STEPS

1. Server# **scope chassis**
2. Server /chassis # **show pci-adapter** [**detail**]

DETAILED STEPS

	Command or Action	Purpose
Step 1	Server# **scope chassis**	Enters the chassis command mode.
Step 2	Server /chassis # **show pci-adapter** [**detail**]	Displays PCI adapter properties.

Example

This example displays PCI adapter properties:

```
Server# scope chassis
Server /chassis # show pci-adapter
Name            Slot  Vendor ID    Device ID    Product Name
--------------- ----- ------------ ------------ ------------------------
PCIe Adapter1   1     0x1137       0x0042       Cisco UCS P81E Virtual...
PCIe Adapter2   5     0x1077       0x2432       Qlogic QLE2462 4Gb dua...

Server /chassis #
```

Viewing Power Policy Statistics

Before you begin

Note This is applicable only on ISR-G2 platforms.

Procedure

	Command or Action	Purpose
Step 1	Server# **show power-cap** [**detail**]	Displays the server power consumption statistics and the power cap policy.

The displayed fields are described in the following table:

Name	Description
Current Consumption	The power currently being used by the server, in watts.
Maximum Consumption	The maximum number of watts consumed by the server since the last time it was rebooted.
Minimum Consumption	The minimum number of watts consumed by the server since the last time it was rebooted.

Example

This example displays the detailed power statistics for a single-wide E-Series Server:

```
 Server# scope power-cap
 Server /power-cap # show detail
  Cur Consumption (W): 36.10 W
  Max Consumption (W): 075
  Min Consumption (W): 36.10 W
 Server /power-cap #
```

This example displays the detailed power statistics for a double-wide E-Series Server:

```
 Server# scope power-cap
 Server /power-cap # show detail
  Cur Consumption (W): 43.1 W
  Max Consumption (W): 160
  Min Consumption (W): 43.1 W
 Server /power-cap #
```

Viewing Hard Drive Presence

Before you begin

The server must be powered on, or the properties will not display.

SUMMARY STEPS

1. Server# **scope chassis**
2. Server /chassis # **show hdd**

DETAILED STEPS

	Command or Action	Purpose
Step 1	Server# **scope chassis**	Enters the chassis command mode.
Step 2	Server /chassis # **show hdd**	Displays the hard drives.

Example

This example displays power supply properties:

```
Server# scope chassis
Server /chassis # show hdd
    Name                Status
------------------- -------------------
HDD1_PRS            inserted
HDD2_PRS            inserted
HDD3_PRS            inserted
```

Viewing the MAC Address of an Interface

You can view the system defined interface names and the MAC address that is assigned to each host interface.

SUMMARY STEPS

1. Server# **scope cimc**
2. Server /cimc # **scope network**
3. Server /cimc/network # **show lom-mac-list** [**detail**]

DETAILED STEPS

	Command or Action	Purpose
Step 1	Server# **scope cimc**	Enters CIMC command mode.

	Command or Action	Purpose
Step 2	Server /cimc # **scope network**	Enters network command mode.
Step 3	Server /cimc/network # **show lom-mac-list** [**detail**]	Displays the system defined interface names and the MAC address that is assigned to each host interface.

Example

This example shows how to display the system defined interface names and the MAC address that is assigned to each host interface:

```
Server# scope cimc
Server /cimc # scope network
Server /cimc/network # show lom-mac-list
Interface                   MAC Address
--------------------------- -------------------
Console                     00:24:c4:f4:89:ee
GE1                         00:24:c4:f4:89:ef
GE2                         00:24:c4:f4:89:f0
GE3                         00:24:c4:f4:89:f1
```

For M3 servers, the interface GE is replaced by TE. This example shows the output for M3 servers:

```
Server# scope cimc
Server /cimc # scope network
Server /cimc/network # show lom-mac-list
Interface                   MAC Address
--------------------------- -------------------
Console                     28:6f:7f:ee:ac:0a
GE1                         28:6f:7f:ee:ac:0b
TE2                         28:6f:7f:ee:ac:0c
TE3                         28:6f:7f:ee:ac:0d
```

Viewing the Status of CIMC Network Connections

Before you begin

You must log in as a user with admin privileges to view the status of the CIMC network connections; whether the link is detected (physical cable is connected to the network interface) or not detected.

SUMMARY STEPS

1. Server# **scope cimc**
2. Server /cimc # **scope network**
3. Server /cimc/network # **show link state [detail]**

DETAILED STEPS

	Command or Action	Purpose
Step 1	Server# **scope cimc**	Enters CIMC command mode.

	Command or Action	**Purpose**
Step 2	Server /cimc # **scope network**	Enters CIMC network command mode.
Step 3	Server /cimc/network # **show link state [detail]**	Displays the status of the CIMC network connections; whether the link is detected (physical cable is connected to the network interface) or not detected.

Example

This example displays the status of the CIMC network connections:

```
Server# scope cimc
Server /cimc # scope network
Server /cimc/network # show link state
Interface                      State
------------------------------ --------------------
Console                        Link Detected
GE1                            No Link Detected
GE2                            No Link Detected
GE3                            No Link Detected
Dedicated                      Link Detected

Server /cimc/network # show link-state detail
Link State:
    Interface: Console
    State: Link Detected
Link State:
    Interface: GE1
    State: No Link Detected
Link State:
    Interface: GE2
    State: No Link Detected
Link State:
    Interface: GE3
    State: No Link Detected
Link State:
    Interface: Dedicated
    State: Link Detected
```

For M3 servers, the interface GE is replaced by TE. This example shows the output for M3 servers:

```
Server# scope cimc
Server /cimc # scope network
Server /cimc/network # show link state
Interface                      State
------------------------------ --------------------
Console                        Link Detected
GE1                            Link Detected
TE2                            No Link Detected
TE3                            No Link Detected
Dedicated                      No Link Detected
```