Cisco SFS 7012 InfiniBand Server Switch Release Notes for Cisco Release 3.4 (0.11.3)

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This document describes the caveats and limitations for the Cisco SFS 7012. Use this document in conjunction with documents listed in the "Related Documentation" section on page 25.

Contents

This document includes the following section:

Introduction

The purpose of this document is to provide a description of Release 3.4 of the SFS 7012.

The SFS 7012 is modular InfiniBand (IB) switching system used for creating large, single-system grid/cluster server fabrics, or as a building block for larger fabrics.

Refer to the documents listed in the "Related Documentation" section on page 25.

System Requirements

This section describes the system requirements for the SFS 7012.

Table 1 lists the hardware supported on the SFS 7012.

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Table 1 SFS 7012 Supported Hardware Modules

Component	Part Number	Description	Applicable Products
SFS 7012 InfiniBand Server Switch 144 Port Chassis	74-4314-01	Cisco SFS 7012	SFS 7012 only
Switch Fabric Module - With Management	74-4319-01	SFS 7012/7024 managed switch fabric module	SFS 7012 and Cisco SFS 7024™ only
Switch Fabric DDR Module - With Management	74-4814-01	SFS 7012/7024 managed, DDR switch fabric module	SFS 7012 and Cisco SFS 7024™ only
Switch Fabric Module - No Management	74-4318-01	SFS 7012/7024 unmanaged switch fabric module	SFS 7012 and SFS 7024 only
Switch Fabric DDR Module - No Management	74-4813-01	SFS 7012/7024 unmanaged, DDR switch fabric module	SFS 7012 and SFS 7024 only
Switch Fabric Module - Blank Panel	74-4320-01	SFS 7012/7024 switch fabric module blank panel	SFS 7012 and SFS 7024 only
InfiniBand 4X 12-Port Line Card	74-4316-01	SFS 7012/7024 InfiniBand 4X 12-Port Line Card	SFS 7012 and SFS 7024 only
InfiniBand 4X, DDR 12-Port Line Card	74-4815-01	SFS 7012/7024 InfiniBand 4X, DDR 12-Port Line Card	SFS 7012 and SFS 7024 only
Line Card Blank Panel	74-4317-01	SFS 7012/7024 Line Card blank panel	SFS 7012 and SFS 7024 only
Power Supply	74-4321-01	SFS 7012/7024 power supply	SFS 7012 and SFS 7024 only
Power Supply Blank Panel	74-4322-01	SFS 7012/7024 power supply blank panel	SFS 7012 and SFS 7024 only
Fan Tray	74-4323-01	SFS 7012/7024 fan tray	SFS 7012 and SFS 7024 only

Caveats

This section lists the caveats and corrected caveats for this release.

Resolved Caveats

- 1546

  Symptom: Sensor error and failure messages found in log file.

- 1750

  Symptom: On most reboots, messages stating that a power suppl(ies) has gone offline are displayed on the serial console of the master spine. At the same time the power supplies shown are greyed out in Chassis Viewer. Attached is a sample log file:

```
productBecomeMaster -> Becoming MASTER (SYS_MANAGER = TRUE) Updated ARP for Chassis
OOB IP=172.29.239.70, MacAddr=00:05:ad:04:23:c2
Netcfg_IOU_NtpClient: Exiting on NETCFG_IOUTASK_MSG_EXIT (1)
axSa_trapTask: Got shutdown message. Exiting!
W|2006/11/08 17:05:41.696S: Thread "ax_subagent" (0x8784eeb0)
        TMS: Agentx Warning: Connection Lost to Master Agent
W|2006/11/08 17:05:42.352S: Thread "IsmMadUPoll" (0x86b84030)
        Ism: Device has become inaccessible Switch Leaf 2
W|2006/11/08 17:05:42.352S: Thread "IsmMadUPoll" (0x86b84030)
        Ism: Device has become inaccessible Switch Leaf 3
W|2006/11/08 17:05:42.352S: Thread "IsmMadUPoll" (0x86b84030)
        Ism: Device has become inaccessible Switch Leaf 4
W|2006/11/08 17:05:42.352S: Thread "IsmMadUPoll" (0x86b84030)
        Ism: Device has become inaccessible Switch Leaf 5
W|2006/11/08 17:05:42.352S: Thread "IsmMadUPoll" (0x86b84030)
        Ism: Device has become inaccessible Switch Leaf 6
W|2006/11/08 17:05:42.352S: Thread "IsmMadUPoll" (0x86b84030)
        Ism: Device has become inaccessible Switch Leaf 7
W|2006/11/08 17:05:42.352S: Thread "IsmMadUPoll" (0x86b84030)
        Ism: Device has become inaccessible Switch Leaf 8
W|2006/11/08 17:05:42.352S: Thread "IsmMadUPoll" (0x86b84030)
        Ism: Device has become inaccessible Switch Leaf 9
W|2006/11/08 17:05:42.352S: Thread "IsmMadUPoll" (0x86b84030)
        Ism: Device has become inaccessible Switch Leaf 10
W|2006/11/08 17:05:42.352S: Thread "IsmMadUPoll" (0x86b84030)
        Ism: Device has become inaccessible Switch Leaf 11
W|2006/11/08 17:05:42.352S: Thread "IsmMadUPoll" (0x86b84030)
        Ism: Device has become inaccessible Switch Leaf 12 Devices online: leafs=0
spines=3 isMaster=1 SYS_MANAGER=1
A|2006/11/08 17:05:49.142S: Thread "INVALID" (0x86393a30)
        CmuRed: Switch Failover has occured; Master now in slot: 101
W|2006/11/08 17:05:52.352S: Thread "IsmMadUPoll" (0x86b84030)
        Ism: Device has become inaccessible Switch Leaf 1
W|2006/11/08 17:05:52.352S: Thread "IsmMadUPoll" (0x86b84030)
        Ism: Device has become inaccessible Switch Spine 1-A
W|2006/11/08 17:05:52.352S: Thread "IsmMadUPoll" (0x86b84030)
        Ism: Device has become inaccessible Switch Spine 1-B
W|2006/11/08 17:05:52.352S: Thread "IsmMadUPoll" (0x86b84030)
        Ism: Device has become inaccessible Switch Spine 2-A
W|2006/11/08 17:05:52.352S: Thread "IsmMadUPoll" (0x86b84030)
        Ism: Device has become inaccessible Switch Spine 2-B
W|2006/11/08 17:05:52.352S: Thread "IsmMadUPoll" (0x86b84030)
        Ism: Device has become inaccessible Switch Spine 3-A
W|2006/11/08 17:05:52.352S: Thread "IsmMadUPoll" (0x86b84030)
```

```
        Ism: Device has become inaccessible Switch Spine 3-B Device 1, swId 1, System
Image GUID = 0x0005AD080104232A Device 1, swId 1, nodeGUID = 0x0005AD0007042405 Device
1 Model=SFS-X7012/24D-4-4X123206 Device 1 (leaf 1) online Device 2, swId 1, System
Image GUID = 0x0005AD080204232A Device 2, swId 1, nodeGUID = 0x0005AD0007042404 Device
2 Model=SFS-X7012/24D-4-4X123206 Device 2 (leaf 2) online Device 3, swId 1, System
Image GUID = 0x0005AD080304232A Device 3, swId 1, nodeGUID = 0x0005AD0007042403 Device
3 Model=SFS-X7012/24D-4-4X123206 Device 3 (leaf 3) online Device 4, swId 1, System
Image GUID = 0x0005AD080404232A Device 4, swId 1, nodeGUID = 0x0005AD0007042402 Device
4 Model=SFS-X7012/24D-4-4X123206 Device 4 (leaf 4) online Device 5, swId 1, System
Image GUID = 0x0005AD080504232A Device 5, swId 1, nodeGUID = 0x0005AD0007042401 Device
5 Model=SFS-X7012/24D-4-4X123206 Device 5 (leaf 5) online Device 6, swId 1, System
Image GUID = 0x0005AD080604232A Device 6, swId 1, nodeGUID = 0x0005AD0007042400 Device
6 Model=SFS-X7012/24D-4-4X123206 Device 6 (leaf 6) online Device 7, swId 1, System
Image GUID = 0x0005AD080704232A Device 7, swId 1, nodeGUID = 0x0005AD00070423FF Device
7 Model=SFS-X7012/24D-4-4X123206 Device 7 (leaf 7) online Device 8, swId 1, System
Image GUID = 0x0005AD080804232A Device 8, swId 1, nodeGUID = 0x0005AD00070423FE Device
8 Model=SFS-X7012/24D-4-4X123206 Device 8 (leaf 8) online Device 9, swId 1, System
Image GUID = 0x0005AD080904232A Device 9, swId 1, nodeGUID = 0x0005AD00070423FD Device
9 Model=SFS-X7012/24D-4-4X123206 Device 9 (leaf 9) online Device 10, swId 1, System
Image GUID = 0x0005AD080A04232A Device 10, swId 1, nodeGUID = 0x0005AD00070423FC
Device 10 Model=SFS-X7012/24D-4-4X123206 Device 10 (leaf 10) online Device 11, swId 1,
System Image GUID = 0x0005AD080B04232A Device 11, swId 1, nodeGUID =
0x0005AD00070423FB Device 11 Model=SFS-X7012/24D-4-4X123206 Device 11 (leaf 11) online
Device 12, swId 1, System Image GUID = 0x0005AD080C04232A Device 12, swId 1, nodeGUID
= 0x0005AD00070423FA Device 12 Model=SFS-X7012/24D-4-4X123206 Device 12 (leaf 12)
online Devices online: leafs=12 spines=3 isMaster=1 SYS_MANAGER=1
A|2006/11/08 17:06:10.932S: Thread "cme" (0x878787d0)              <-------------
        Cmea: Power supply 4 has gone off-line!
A|2006/11/08 17:06:10.932S: Thread "cme" (0x878787d0)
        Cmea: Power supply 5 has gone off-line!
A|2006/11/08 17:06:10.932S: Thread "cme" (0x878787d0)
        Cmea: Power supply 6 has gone off-line!                    <-------------
```

- 1780

Symptom: After executing the command "reboot all" on the master spine, very few alarm (A) messages are displayed on the serial console log of the slave spine. One of the messages appears to be incorrect, stating that a power failure is the cause of the reboot. Attached is a sample log:

```
Devices online: leafs=0 spines=0 isMaster=0 SYS_MANAGER=0 initializing:
leafs=0 spines=1
A|2006-11-29 23:42:02.980U: Thread "startup" (0x87dbf700)
    boot: I9K t3 Firmware Booting Version: 3.4.0.11.3
I|2006-11-29 23:42:02.980U: Thread "startup" (0x87dbf700)
    boot: Processor #0  CPU: Broadcom BCM1125
I|2006-11-29 23:42:02.980U: Thread "startup" (0x87dbf700)
    boot: BSP version 1.2-5ICS1
I|2006-11-29 23:42:02.980U: Thread "startup" (0x87dbf700)
    boot: VxWorks version 5.4  Kernel: WIND version 2.5
A|2006-11-29 23:42:02.980U: Thread "startup" (0x87dbf700)
    boot: Memory: Physical: 0x8000000 Available: 0x8000000 Reserved: 0x0
A|2006-11-29 23:42:02.980U: Thread "startup" (0x87dbf700)
    boot: Reboot cause (255): Power Failure (1).
I|2006-11-29 23:42:05.220U: Thread "CmuRedCtrl" (0x8786a3d0)
    CmuRed: sendCmuRedSnmpTrap: SWITCHA  is in SYNCHRONIZING state after
ARBITRATION event with SWITCHB in MASTER state!.
```

Open Caveats

- 1728

  Symptom: voltage and sensor failures on one spine after a reboot. While testing IB port enable-disable, during a required reboot, error messages for voltage of sensor failures were reported for spine 1. Additionally, followoing these errors only 11 out of 12 leaves were being reported by the master spine. The only way to return the system to a normal state was to power cycle the switch. Attached is a sample log:

```
Devices online: leafs=12 spines=3 isMaster=0 SYS_MANAGER=0
tIouMonSw: Initialization passed, monitoring 18 local IB devices.
W|2006/10/25 14:49:16.415S: Thread "IsmMadUPoll" (0x86b85050)
        Ism: Device has become inaccessible Switch Leaf 11
W|2006/10/25 14:49:26.434S: Thread "IsmMadUPoll" (0x86b85050)
        Ism: Device has become inaccessible Switch Leaf 12
W|2006/10/25 14:56:56.067S: Thread "CmuRedCtrl" (0x87869820)
        CmuRed: tf24SlaveConnMasterState: Master Heartbeat missed! Miss count=2.
W|2006/10/25 14:57:00.067S: Thread "CmuRedCtrl" (0x87869820)
        CmuRed: tf24SlaveConnMasterState: Master Heartbeat missed! Miss count=3.
SLAVE BECOMING MASTER!
W|2006/10/25 14:57:04.127S: Thread "tSlot" (0x87d4ba90)
        Osa: MAX7311: getPortValue failed port=0 loc=0x01034201 Leaf  1:HUB_PORT0
address=0x42 ra=0x800795dc
W|2006/10/25 14:57:04.287S: Thread "plugnplay" (0x87cf9f30)
        Osa: MAX7311: getPortValue failed port=0 loc=0x010a4001 Leaf  1:HUB_PORT7
address=0x40 ra=0x8003ff34
W|2006/10/25 14:57:04.287S: Thread "plugnplay" (0x87cf9f30)
        Osa: MAX7311: getPortValue failed port=0 loc=0x010a4c01 Leaf  1:HUB_PORT7
address=0x4C ra=0x800400d0
W|2006/10/25 14:57:04.287S: Thread "plugnplay" (0x87cf9f30)
        Osa: MAX7311: getPortValue failed port=0 loc=0x010a4801 Leaf  1:HUB_PORT7
address=0x48 ra=0x800400d0
W|2006/10/25 14:57:04.287S: Thread "plugnplay" (0x87cf9f30)
        Osa: MAX7311: getPortValue failed port=0 loc=0x010a4002 Leaf  2:HUB_PORT7
address=0x40 ra=0x8003ff34
W|2006/10/25 14:57:04.287S: Thread "plugnplay" (0x87cf9f30)
        Osa: MAX7311: getPortValue failed port=0 loc=0x010a4c02 Leaf  2:HUB_PORT7
address=0x4C ra=0x800400d0
W|2006/10/25 14:57:04.287S: Thread "plugnplay" (0x87cf9f30)
        Osa: MAX7311: getPortValue failed port=0 loc=0x010a4802 Leaf  2:HUB_PORT7
address=0x48 ra=0x800400d0
W|2006/10/25 14:57:04.287S: Thread "plugnplay" (0x87cf9f30)
        Osa: MAX7311: getPortValue failed port=0 loc=0x010a4003 Leaf  3:HUB_PORT7
address=0x40 ra=0x8003ff34
W|2006/10/25 14:57:04.287S: Thread "plugnplay" (0x87cf9f30)
        Osa: MAX7311: getPortValue failed port=0 loc=0x010a4c03 Leaf  3:HUB_PORT7
address=0x4C ra=0x800400d0
Loaded 8KB from Primary chassis eeprom
W|2006/10/25 14:57:04.287S: Thread "plugnplay" (0x87cf9f30)
        Osa: MAX7311: getPortValue failed port=0 loc=0x010a4803 Leaf  3:HUB_PORT7
address=0x48 ra=0x800400d0
W|2006/10/25 14:57:04.287S: Thread "plugnplay" (0x87cf9f30)
        Osa: MAX7311: getPortValue failed port=0 loc=0x010a4004 Leaf  4:HUB_PORT7
address=0x40 ra=0x8003ff34
W|2006/10/25 14:57:04.297S: Thread "plugnplay" (0x87cf9f30)
        Osa: MAX7311: getPortValue failed port=0 loc=0x010a4c04 Leaf  4:HUB_PORT7
address=0x4C ra=0x800400d0
W|2006/10/25 14:57:04.297S: Thread "plugnplay" (0x87cf9f30)
        Osa: MAX7311: getPortValue failed port=0 loc=0x010a4804 Leaf  4:HUB_PORT7
address=0x48 ra=0x800400d0
W|2006/10/25 14:57:04.297S: Thread "plugnplay" (0x87cf9f30)
```

```
        Osa: MAX7311: getPortValue failed port=0 loc=0x010a4005 Leaf  5:HUB_PORT7
address=0x40 ra=0x8003ff34
W|2006/10/25 14:57:04.297S: Thread "plugnplay" (0x87cf9f30)
        Osa: MAX7311: getPortValue failed port=0 loc=0x010a4c05 Leaf  5:HUB_PORT7
address=0x4C ra=0x800400d0
W|2006/10/25 14:57:04.297S: Thread "plugnplay" (0x87cf9f30)
        Osa: MAX7311: getPortValue failed port=0 loc=0x010a4805 Leaf  5:HUB_PORT7
address=0x48 ra=0x800400d0
W|2006/10/25 14:57:04.297S: Thread "plugnplay" (0x87cf9f30)
        Osa: MAX7311: getPortValue failed port=0 loc=0x010a4006 Leaf  6:HUB_PORT7
address=0x40 ra=0x8003ff34
W|2006/10/25 14:57:04.297S: Thread "plugnplay" (0x87cf9f30)
        Osa: MAX7311: getPortValue failed port=0 loc=0x010a4c06 Leaf  6:HUB_PORT7
address=0x4C ra=0x800400d0
W|2006/10/25 14:57:04.297S: Thread "plugnplay" (0x87cf9f30)
        Osa: MAX7311: getPortValue failed port=0 loc=0x010a4806 Leaf  6:HUB_PORT7
address=0x48 ra=0x800400d0
W|2006/10/25 14:57:04.297S: Thread "plugnplay" (0x87cf9f30)
        Osa: MAX7311: getPortValue failed port=0 loc=0x010a4007 Leaf  7:HUB_PORT7
address=0x40 ra=0x8003ff34
W|2006/10/25 14:57:04.297S: Thread "plugnplay" (0x87cf9f30)
        Osa: MAX7311: getPortValue failed port=0 loc=0x010a4c07 Leaf  7:HUB_PORT7
address=0x4C ra=0x800400d0
W|2006/10/25 14:57:04.297S: Thread "plugnplay" (0x87cf9f30)
        Osa: MAX7311: getPortValue failed port=0 loc=0x010a4807 Leaf  7:HUB_PORT7
address=0x48 ra=0x800400d0
W|2006/10/25 14:57:04.297S: Thread "plugnplay" (0x87cf9f30)
        Osa: MAX7311: getPortValue failed port=0 loc=0x010a4008 Leaf  8:HUB_PORT7
address=0x40 ra=0x8003ff34
W|2006/10/25 14:57:04.297S: Thread "plugnplay" (0x87cf9f30)
        Osa: MAX7311: getPortValue failed port=0 loc=0x010a4c08 Leaf  8:HUB_PORT7
address=0x4C ra=0x800400d0
W|2006/10/25 14:57:04.297S: Thread "plugnplay" (0x87cf9f30)
        Osa: MAX7311: getPortValue failed port=0 loc=0x010a4808 Leaf  8:HUB_PORT7
address=0x48 ra=0x800400d0
W|2006/10/25 14:57:04.297S: Thread "plugnplay" (0x87cf9f30)
        Osa: MAX7311: getPortValue failed port=0 loc=0x010a4009 Leaf  9:HUB_PORT7
address=0x40 ra=0x8003ff34
W|2006/10/25 14:57:04.297S: Thread "plugnplay" (0x87cf9f30)
        Osa: MAX7311: getPortValue failed port=0 loc=0x010a4c09 Leaf  9:HUB_PORT7
address=0x4C ra=0x800400d0
W|2006/10/25 14:57:04.297S: Thread "plugnplay" (0x87cf9f30)
        Osa: MAX7311: getPortValue failed port=0 loc=0x010a4809 Leaf  9:HUB_PORT7
address=0x48 ra=0x800400d0
W|2006/10/25 14:57:04.297S: Thread "plugnplay" (0x87cf9f30)
        Osa: MAX7311: getPortValue failed port=0 loc=0x010a400a Leaf 10:HUB_PORT7
address=0x40 ra=0x8003ff34
W|2006/10/25 14:57:04.307S: Thread "plugnplay" (0x87cf9f30)
        Osa: MAX7311: getPortValue failed port=0 loc=0x010a4c0a Leaf 10:HUB_PORT7
address=0x4C ra=0x800400d0
W|2006/10/25 14:57:04.307S: Thread "plugnplay" (0x87cf9f30)
        Osa: MAX7311: getPortValue failed port=0 loc=0x010a480a Leaf 10:HUB_PORT7
address=0x48 ra=0x800400d0
W|2006/10/25 14:57:04.307S: Thread "plugnplay" (0x87cf9f30)
        Osa: MAX7311: getPortValue failed port=0 loc=0x010a400b Leaf 11:HUB_PORT7
address=0x40 ra=0x8003ff34
W|2006/10/25 14:57:04.307S: Thread "plugnplay" (0x87cf9f30)
        Osa: MAX7311: getPortValue failed port=0 loc=0x010a4c0b Leaf 11:HUB_PORT7
address=0x4C ra=0x800400d0
W|2006/10/25 14:57:04.307S: Thread "plugnplay" (0x87cf9f30)
        Osa: MAX7311: getPortValue failed port=0 loc=0x010a480b Leaf 11:HUB_PORT7
address=0x48 ra=0x800400d0
W|2006/10/25 14:57:04.307S: Thread "plugnplay" (0x87cf9f30)
```

```
        Osa: MAX7311: getPortValue failed port=0 loc=0x010a400c Leaf 12:HUB_PORT7
address=0x40 ra=0x8003ff34
W|2006/10/25 14:57:04.307S: Thread "plugnplay" (0x87cf9f30)
        Osa: MAX7311: getPortValue failed port=0 loc=0x010a4c0c Leaf 12:HUB_PORT7
address=0x4C ra=0x800400d0
W|2006/10/25 14:57:04.307S: Thread "plugnplay" (0x87cf9f30)
        Osa: MAX7311: getPortValue failed port=0 loc=0x010a480c Leaf 12:HUB_PORT7
address=0x48 ra=0x800400d0
W|2006/10/25 14:57:06.627S: Thread "tAdm1024" (0x87d50b50)
        Osa: MAX7311: getPorts failed port=0 loc=0x03084c00 HUB_PORT5 address=0x4C
ra=0x8007d340
Welcome to the SFS-7012 CLI. Type 'list' for the list of commands.
SlaveSpine1-> W|2006/10/25 14:57:12.697S: Thread "cme" (0x87877ec0)
       Osa: MAX7311: getPortValue failed port=0 loc=0x03084e00 HUB_PORT5 address=0x4E
ra=0x8007d5d8
max6651 device=221 failed to initialize
W|2006/10/25 14:57:12.717S: Thread "cme" (0x87877ec0)
        Osa: Fan Tray 1 failed to initialize
max6651 device=221 failed to initialize
W|2006/10/25 14:57:12.737S: Thread "cme" (0x87877ec0)
        Osa: Fan Tray 1 failed to initialize
max6651 device=221 failed to initialize
W|2006/10/25 14:57:12.757S: Thread "cme" (0x87877ec0)
        Osa: Fan Tray 1 failed to initialize
max6651 device=221 failed to initialize
Error, failed to initialize Fan Tray 1!
max6651 device=222 failed to initialize
W|2006/10/25 14:57:12.777S: Thread "cme" (0x87877ec0)
        Osa: Fan Tray 2 failed to initialize
max6651 device=222 failed to initialize
W|2006/10/25 14:57:12.797S: Thread "cme" (0x87877ec0)
        Osa: Fan Tray 2 failed to initialize
max6651 device=222 failed to initialize
W|2006/10/25 14:57:12.817S: Thread "cme" (0x87877ec0)
        Osa: Fan Tray 2 failed to initialize
max6651 device=222 failed to initialize
Error, failed to initialize Fan Tray 2!
max6651 device=223 failed to initialize
W|2006/10/25 14:57:12.837S: Thread "cme" (0x87877ec0)
        Osa: Fan Tray 3 failed to initialize
max6651 device=223 failed to initialize
W|2006/10/25 14:57:12.857S: Thread "cme" (0x87877ec0)
        Osa: Fan Tray 3 failed to initialize
max6651 device=223 failed to initialize
W|2006/10/25 14:57:12.877S: Thread "cme" (0x87877ec0)
        Osa: Fan Tray 3 failed to initialize
max6651 device=223 failed to initialize
Error, failed to initialize Fan Tray 3!
max6651 device=224 failed to initialize
W|2006/10/25 14:57:12.917S: Thread "cme" (0x87877ec0)
        Osa: Fan Tray 4 failed to initialize
max6651 device=224 failed to initialize
W|2006/10/25 14:57:12.937S: Thread "cme" (0x87877ec0)
        Osa: Fan Tray 4 failed to initialize
max6651 device=224 failed to initialize
Loaded 8KB from Secondary chassis eeprom
W|2006/10/25 14:57:12.957S: Thread "cme" (0x87877ec0)
        Osa: Fan Tray 4 failed to initialize
max6651 device=224 failed to initialize
Error, failed to initialize Fan Tray 4!
Devices online: leafs=1 spines=3 isMaster=1 SYS_MANAGER=0
W|2006/10/25 14:57:12.987S: Thread "tSlot" (0x87d4ba90)
        Osa: MAX7311: getPortValue failed port=0 loc=0x01034266 SPINE 2:HUB_PORT0
address=0x42 ra=0x80079550
```

```
max6651 device=221 failed to initialize
W|2006/10/25 14:57:12.987S: Thread "tSlot" (0x87d4ba90)
        Osa: MAX7311: getPortValue failed port=0 loc=0x01034267 SPINE 3:HUB_PORT0
address=0x42 ra=0x80079550
max6651 device=222 failed to initialize
W|2006/10/25 14:57:13.037S: Thread "cme" (0x87877ec0)
        Osa: Fan Tray 1 failed to initialize
W|2006/10/25 14:57:13.077S: Thread "cme" (0x87877ec0)
        Osa: Fan Tray 2 failed to initialize

productBecomeMaster -> Becoming MASTER (SYS_MANAGER = TRUE)
Updated ARP for Chassis OOB IP=172.29.239.70,
MacAddr=00:05:ad:04:23:c2Netcfg_IOU_NtpClient: Exiting on NETCFG_IOUTASK_MSG_EXIT (1)
axSa_trapTask: Got shutdown message. Exiting!
W|2006/10/25 14:57:13.167S: Thread "ax_subagent" (0x8784db90)
        TMS: Agentx Warning: Connection Lost to Master Agent
W|2006/10/25 14:57:17.447S: Thread "IsmMadUPoll" (0x86b85050)
        Ism: Device has become inaccessible Switch Leaf 1
W|2006/10/25 14:57:17.447S: Thread "IsmMadUPoll" (0x86b85050)
        Ism: Device has become inaccessible Switch Leaf 2
W|2006/10/25 14:57:17.447S: Thread "IsmMadUPoll" (0x86b85050)
        Ism: Device has become inaccessible Switch Leaf 3
W|2006/10/25 14:57:17.447S: Thread "IsmMadUPoll" (0x86b85050)
        Ism: Device has become inaccessible Switch Leaf 4
W|2006/10/25 14:57:17.447S: Thread "IsmMadUPoll" (0x86b85050)
        Ism: Device has become inaccessible Switch Leaf 5
W|2006/10/25 14:57:17.447S: Thread "IsmMadUPoll" (0x86b85050)
        Ism: Device has become inaccessible Switch Leaf 6
W|2006/10/25 14:57:17.447S: Thread "IsmMadUPoll" (0x86b85050)
        Ism: Device has become inaccessible Switch Leaf 7
W|2006/10/25 14:57:17.447S: Thread "IsmMadUPoll" (0x86b85050)
        Ism: Device has become inaccessible Switch Leaf 8
W|2006/10/25 14:57:17.447S: Thread "IsmMadUPoll" (0x86b85050)
        Ism: Device has become inaccessible Switch Leaf 9
W|2006/10/25 14:57:17.447S: Thread "IsmMadUPoll" (0x86b85050)
        Ism: Device has become inaccessible Switch Leaf 10
W|2006/10/25 14:57:17.447S: Thread "IsmMadUPoll" (0x86b85050)
        Ism: Device has become inaccessible Switch Leaf 11
W|2006/10/25 14:57:17.447S: Thread "IsmMadUPoll" (0x86b85050)
        Ism: Device has become inaccessible Switch Leaf 12
W|2006/10/25 14:57:17.447S: Thread "IsmMadUPoll" (0x86b85050)
        Ism: Device has become inaccessible Switch Spine 1-A
W|2006/10/25 14:57:17.447S: Thread "IsmMadUPoll" (0x86b85050)
        Ism: Device has become inaccessible Switch Spine 1-B
W|2006/10/25 14:57:17.447S: Thread "IsmMadUPoll" (0x86b85050)
        Ism: Device has become inaccessible Switch Spine 2-A
W|2006/10/25 14:57:17.447S: Thread "IsmMadUPoll" (0x86b85050)
        Ism: Device has become inaccessible Switch Spine 2-B
W|2006/10/25 14:57:17.447S: Thread "IsmMadUPoll" (0x86b85050)
        Ism: Device has become inaccessible Switch Spine 3-A
W|2006/10/25 14:57:17.447S: Thread "IsmMadUPoll" (0x86b85050)
        Ism: Device has become inaccessible Switch Spine 3-B
Devices online: leafs=0 spines=3 isMaster=1 SYS_MANAGER=1
A|2006/10/25 14:57:18.337S: Thread "INVALID" (0x8638bb80)
        CmuRed: Switch Failover has occured; Master now in slot: 101
Device 1, swId 1, System Image GUID = 0x0005AD080104232A
Device 1, swId 1, nodeGUID = 0x0005AD0007042405
Device=1 swId=1 eeprom=0:  65536 of 65536 bytes ( 65536 of 130016 bytes total)
Device=1 swId=1 eeprom=1:  64480 of 64480 bytes (130016 of 130016 bytes total)
000043b0:  80 00 82 00 80 ff ff ff 00 03 e7 24 20 00 00 00
  eeprom:  80 00 00 00 80 ff ff ff 00 03 e7 24 20 00 00 00
00005070:  00 00 00 00 80 80 80 80 00 00 91 5d ff ff ff ff
  eeprom:  00 00 00 00 80 80 80 80 00 00 f9 11 ff ff ff ff
W|2006/10/25 14:57:43.237S: Thread "cme" (0x87877ec0)
```

```
        Osa: ADM1024 Error: device 103 reports voltage of Sensor Failure(-1), target
range is 3.102V - 3.498V [A3.3V]
W|2006/10/25 14:57:43.237S: Thread "cme" (0x87877ec0)
        Osa: ADM1024 Error: device 103 reports voltage of Sensor Failure(-1), target
range is 3.102V - 3.498V [B3.3V]
W|2006/10/25 14:57:43.237S: Thread "cme" (0x87877ec0)
        Osa: ADM1024 Error: device 103 reports voltage of Sensor Failure(-1), target
range is 1.128V - 1.272V [B1.2V]
W|2006/10/25 14:57:43.237S: Thread "cme" (0x87877ec0)
        Osa: ADM1024 Error: device 103 reports voltage of Sensor Failure(-1), target
range is 1.692V - 1.908V [B1.8V]
W|2006/10/25 14:57:43.247S: Thread "cme" (0x87877ec0)
        Osa: ADM1024 Error: device 103 reports voltage of Sensor Failure(-1), target
range is 1.344V - 1.856V [B1.6V]
W|2006/10/25 14:57:43.247S: Thread "cme" (0x87877ec0)
        Osa: ADM1024 Error: device 103 reports voltage of Sensor Failure(-1), target
range is 10.440V - 13.560V [SW12.0V]
W|2006/10/25 14:57:43.247S: Thread "cme" (0x87877ec0)
        Osa: ADM1024 Error: device 103 reports voltage of Sensor Failure(-1), target
range is 4.700V - 5.300V [B5.0V]
W|2006/10/25 14:57:43.247S: Thread "cme" (0x87877ec0)
        Osa: ADM1024 Error: device 103 reports voltage of Sensor Failure(-1), target
range is 3.102V - 3.498V [A3.3V]
W|2006/10/25 14:57:43.247S: Thread "cme" (0x87877ec0)
        Osa: ADM1024 Error: device 103 reports voltage of Sensor Failure(-1), target
range is 3.102V - 3.498V [S3.3V]
W|2006/10/25 14:57:43.257S: Thread "cme" (0x87877ec0)
        Osa: ADM1024 Error: device 103 reports voltage of Sensor Failure(-1), target
range is 1.128V - 1.272V [S1.2V]
W|2006/10/25 14:57:43.257S: Thread "cme" (0x87877ec0)
        Osa: ADM1024 Error: device 103 reports voltage of Sensor Failure(-1), target
range is 1.692V - 1.908V [S1.8V]
W|2006/10/25 14:57:43.257S: Thread "cme" (0x87877ec0)
        Osa: ADM1024 Error: device 103 reports voltage of Sensor Failure(-1), target
range is 1.344V - 1.856V [S1.6V]
Device=1 swId=1 eeprom=0:  65536 of 65536 bytes ( 65536 of 130016 bytes total)
A|2006/10/25 14:57:43.267S: Thread "cme" (0x87877ec0)
        Cmea: 4 Temperature(s) sensor I/O errors
        Response: Bad reads will be ignored
        Correction: Persistent errors may indicate FRU requires service
2006/10/25 14:57:43.257S
            ambient 0.0: Failed to read temperature
            2006/10/25 14:57:43.257S
            ambient 1.0: Failed to read temperature
            2006/10/25 14:57:43.257S
            upstream 0.1: Failed to read temperature
            downstream 1.1: Failed to read temperature
Device=1 swId=1 eeprom=1:  64480 of 64480 bytes (130016 of 130016 bytes total)
Device 2, swId 1, System Image GUID = 0x0005AD080204232A
Device 2, swId 1, nodeGUID = 0x0005AD0007042404
W|2006/10/25 14:57:53.447S: Thread "cme" (0x87877ec0)
        Osa: ADM1024 Error: device 103 reports voltage of Sensor Failure(-1), target
range is 3.102V - 3.498V [A3.3V]
W|2006/10/25 14:57:53.457S: Thread "cme" (0x87877ec0)
        Osa: ADM1024 Error: device 103 reports voltage of Sensor Failure(-1), target
range is 3.102V - 3.498V [B3.3V]
W|2006/10/25 14:57:53.457S: Thread "cme" (0x87877ec0)
        Osa: ADM1024 Error: device 103 reports voltage of Sensor Failure(-1), target
range is 1.128V - 1.272V [B1.2V]
W|2006/10/25 14:57:53.457S: Thread "cme" (0x87877ec0)
        Osa: ADM1024 Error: device 103 reports voltage of Sensor Failure(-1), target
range is 1.692V - 1.908V [B1.8V]
W|2006/10/25 14:57:53.457S: Thread "cme" (0x87877ec0)
```

```
        Osa: ADM1024 Error: device 103 reports voltage of Sensor Failure(-1), target
range is 1.344V - 1.856V [B1.6V]
W|2006/10/25 14:57:53.457S: Thread "cme" (0x87877ec0)
        Osa: ADM1024 Error: device 103 reports voltage of Sensor Failure(-1), target
range is 10.440V - 13.560V [SW12.0V]
W|2006/10/25 14:57:53.457S: Thread "cme" (0x87877ec0)
        Osa: ADM1024 Error: device 103 reports voltage of Sensor Failure(-1), target
range is 4.700V - 5.300V [B5.0V]
W|2006/10/25 14:57:53.457S: Thread "cme" (0x87877ec0)
        Osa: ADM1024 Error: device 103 reports voltage of Sensor Failure(-1), target
range is 3.102V - 3.498V [A3.3V]
W|2006/10/25 14:57:53.457S: Thread "cme" (0x87877ec0)
        Osa: ADM1024 Error: device 103 reports voltage of Sensor Failure(-1), target
range is 3.102V - 3.498V [S3.3V]
W|2006/10/25 14:57:53.457S: Thread "cme" (0x87877ec0)
        Osa: ADM1024 Error: device 103 reports voltage of Sensor Failure(-1), target
range is 1.128V - 1.272V [S1.2V]
W|2006/10/25 14:57:53.467S: Thread "cme" (0x87877ec0)
        Osa: ADM1024 Error: device 103 reports voltage of Sensor Failure(-1), target
range is 1.692V - 1.908V [S1.8V]
W|2006/10/25 14:57:53.467S: Thread "cme" (0x87877ec0)
        Osa: ADM1024 Error: device 103 reports voltage of Sensor Failure(-1), target
range is 1.344V - 1.856V [S1.6V]
Device=2 swId=1 eeprom=0:  65536 of 65536 bytes ( 65536 of 130016 bytes total)
Device=2 swId=1 eeprom=1:  64480 of 64480 bytes (130016 of 130016 bytes total)
000043b0:  80 01 00 00 80 ff ff ff 00 03 e7 24 20 00 00 00
  eeprom:  80 00 00 00 80 ff ff ff 00 03 e7 24 20 00 00 00
00005070:  00 00 00 00 80 80 80 80 00 00 a4 ba ff ff ff ff
  eeprom:  00 00 00 00 80 80 80 80 00 00 f9 11 ff ff ff ff
Device=2 swId=1 eeprom=0:  65536 of 65536 bytes ( 65536 of 130016 bytes total)
W|2006/10/25 14:58:03.647S: Thread "cme" (0x87877ec0)
        Osa: ADM1024 Error: device 103 reports voltage of Sensor Failure(-1), target
range is 3.102V - 3.498V [A3.3V]
W|2006/10/25 14:58:03.647S: Thread "cme" (0x87877ec0)
        Osa: ADM1024 Error: device 103 reports voltage of Sensor Failure(-1), target
range is 3.102V - 3.498V [B3.3V]
W|2006/10/25 14:58:03.647S: Thread "cme" (0x87877ec0)
        Osa: ADM1024 Error: device 103 reports voltage of Sensor Failure(-1), target
range is 1.128V - 1.272V [B1.2V]
W|2006/10/25 14:58:03.647S: Thread "cme" (0x87877ec0)
        Osa: ADM1024 Error: device 103 reports voltage of Sensor Failure(-1), target
range is 1.692V - 1.908V [B1.8V]
W|2006/10/25 14:58:03.657S: Thread "cme" (0x87877ec0)
        Osa: ADM1024 Error: device 1MasterSpine1-> Osa: ADM1024 Error: device 103
reports voltage of Sensor Failure(-1), target range is 3.102V - 3.498V [A3.3V]
W|2006/10/25 14:58:03.657S: Thread "cme" (0x87877ec0)
        Osa: ADM1024 Error: device 103 reports voltage of Sensor Failure(-1), target
range is 3.102V - 3.498V [S3.3V]
W|2006/10/25 14:58:03.657S: Thread "cme" (0x87877ec0)
        Osa: ADM1024 Error: device 103 reports voltage of Sensor Failure(-1), target
range is 1.128V - 1.272V [S1.2V]
W|2006/10/25 14:58:03.657S: Thread "cme" (0x87877ec0)
        Osa: ADM1024 Error: device 103 reports voltage of Sensor Failure(-1), target
range is 1.692V - 1.908V [S1.8V]
W|2006/10/25 14:58:03.657S: Thread "cme" (0x87877ec0)
        Osa: ADM1024 Error: device 103 reports voltage of Sensor Failure(-1), target
range is 1.344V - 1.856V [S1.6V]
```

- 1751

  Symptom: During a reboot on the slave spine, the timestamps used for logging are not consistent with the System Time setting.

  Workaround: Slave spines receive time settings from the master spine using NTP. During a slave boot, there is a time when the slave spine has not received its time from the master and messages get logged with the times flagged with a different time values suffix. Following is a list

  - B: Time since boot
  - U: UTC Time (Don't have time zone stamp)
  - S: Standard Time (Local timezone and DST is not in effect)
  - D: Daylight Saving time is in effect (Local Timezone)

- 1754

  Symptom: Occasionally, installed power supply(s) and back plane descriptions show a status of "Not Present" and a part number of "Value not set" within Chassis Viewer. By default the field values are initialized by the SPINE the first time that the spine is installed in a chassis. The values reflect the state of the power supplies by the spine at that time.

  Workaround: The user can edit these fields to a more applicable description.

- 1784

  Symptom: After executing the CLI command ismChassisSetEnable via the serial console, many eeprom messages are displayed on the master spine (some on the slave spine as well) following a reboot. The result of all of these messages is that the reboot of the system takes longer than usual. Attached is a sample log:

```
MasterSpine2-> ismChassisSetEnable 0

REBOOT of ALL DEVICES is REQUIRED to activate changes made with this command

MasterSpine2->
MasterSpine2-> fwVersion
Slot 101 Information -----------------
  Firmware Version: 3.4.0.11.3
  Firmware build:   3_4_0_11_3
  Firmware BSP:     t3
  MBC Version:      None
  Bootrom Version:  3.4.0.11.3


Slot 102 Information -----------------
  Firmware Version: 3.4.0.11.3
  Firmware build:   3_4_0_11_3
  Firmware BSP:     t3
  MBC Version:      None
  Bootrom Version:  3.4.0.11.3


MasterSpine2-> reboot all
Disruptive reboot of ALL DEVICES in this chassis Proceed with reboot? [N] Y
         i9kbaseboard.c->productSlotReset:2482 TIME NOW 1164847968
.
.
.

Device 102, swId 1, System Image GUID = 0x0005AD086604232A Device 102, swId 1,
nodeGUID = 0x0005AD0006042566 [0x86fb8b30] ssh server listening on 0.0.0.0
port 22.
```

```
Device=102 swId=1 eeprom=0:  65536 of 65536 bytes ( 65536 of 130016 bytes
total)
Device=102 swId=1 eeprom=1:  64480 of 64480 bytes (130016 of 130016 bytes
total)
000043b0:  80 ff ff ff 80 ff ff ff 00 03 e7 24 20 00 00 00
  eeprom:  80 00 00 00 80 ff ff ff 00 03 e7 24 20 00 00 00
00005070:  00 00 00 00 80 80 80 80 00 00 f2 c3 ff ff ff ff
  eeprom:  00 00 00 00 80 80 80 80 00 00 ec 66 ff ff ff ff
Device=102 swId=1 eeprom=0:  65536 of 65536 bytes ( 65536 of 130016 bytes
total)
Device=102 swId=1 eeprom=1:  64480 of 64480 bytes (130016 of 130016 bytes
total) Device 1, swId 1, System Image GUID = 0x0005AD080104232A Device 1, swId
1, nodeGUID = 0x0005AD0007042405
Device=1 swId=1 eeprom=0:  65536 of 65536 bytes ( 65536 of 130016 bytes total)
Device=1 swId=1 eeprom=1:  64480 of 64480 bytes (130016 of 130016 bytes total)
000043b0:  80 ff ff ff 80 ff ff ff 00 03 e7 24 20 00 00 00
  eeprom:  80 00 00 00 80 ff ff ff 00 03 e7 24 20 00 00 00
00005070:  00 00 00 00 80 80 80 80 00 00 e7 b4 ff ff ff ff
  eeprom:  00 00 00 00 80 80 80 80 00 00 f9 11 ff ff ff ff
Device=1 swId=1 eeprom=0:  65536 of 65536 bytes ( 65536 of 130016 bytes total)
Device=1 swId=1 eeprom=1:  64480 of 64480 bytes (130016 of 130016 bytes total)
Device 102, swId 2, System Image GUID = 0x0005AD086604232A Device 102, swId 2,
nodeGUID = 0x0005AD1006042566
Device=102 swId=2 eeprom=0:  65536 of 65536 bytes ( 65536 of 130016 bytes
total)
Device=102 swId=2 eeprom=1:  64480 of 64480 bytes (130016 of 130016 bytes
total)
000043b0:  80 ff ff ff 80 ff ff ff 00 03 e7 24 20 00 00 00
  eeprom:  80 00 00 00 80 ff ff ff 00 03 e7 24 20 00 00 00
00005070:  00 00 00 00 80 80 80 80 00 00 7d ee ff ff ff ff
  eeprom:  00 00 00 00 80 80 80 80 00 00 63 4b ff ff ff ff
```

Workaround: These messages increase the boot time only incrementally, and are useful because they indicate bytes in the switch chip eeprom that are being modified (from the previous values). These messages only occur on the RS232 console.

- 1760

  Symptom: During idle time, NTP client error messages are displayed on the master spine serial console. Following is an example:

```
MasterSpine1->
MasterSpine1-> NtpClient: ERROR getting the Time error code is: : S_sntpcLib_TIMEOUT
```

- 1779

  Symptom: Immediately after executing the “reboot all” command, the serial console log of the master spine displays many Alarm (A), Error (E) and Warning (W) messages. Attached is a sample log:

```
MasterSpine2-> reboot all
Disruptive reboot of ALL DEVICES in this chassis Proceed with reboot? [N] Y
     i9kbaseboard.c->productSlotReset:2482 TIME NOW 1164843657
W|2006-11-29 15:40:57.852S: Thread "tCliConsole" (0x87dff950)
    Osa: Info, rebooting card in slot 1.
     i9kbaseboard.c->productSlotReset:2482 TIME NOW 1164843657
W|2006-11-29 15:40:57.852S: Thread "tCliConsole" (0x87dff950)
    Osa: Info, rebooting card in slot 2.
     i9kbaseboard.c->productSlotReset:2482 TIME NOW 1164843657
W|2006-11-29 15:40:57.852S: Thread "tCliConsole" (0x87dff950)
    Osa: Info, rebooting card in slot 3.
     i9kbaseboard.c->productSlotReset:2482 TIME NOW 1164843657
W|2006-11-29 15:40:57.852S: Thread "tCliConsole" (0x87dff950)
    Osa: Info, rebooting card in slot 4.
```

```
     i9kbaseboard.c->productSlotReset:2482 TIME NOW 1164843657
W|2006-11-29 15:40:57.872S: Thread "tCliConsole" (0x87dff950)
    Osa: Info, rebooting card in slot 5.
     i9kbaseboard.c->productSlotReset:2482 TIME NOW 1164843657
W|2006-11-29 15:40:57.902S: Thread "tCliConsole" (0x87dff950)
    Osa: Info, rebooting card in slot 6.
     i9kbaseboard.c->productSlotReset:2482 TIME NOW 1164843657
W|2006-11-29 15:40:57.932S: Thread "tCliConsole" (0x87dff950)
    Osa: Info, rebooting card in slot 7.
     i9kbaseboard.c->productSlotReset:2482 TIME NOW 1164843657
W|2006-11-29 15:40:57.962S: Thread "tCliConsole" (0x87dff950)
    Osa: Info, rebooting card in slot 8.
     i9kbaseboard.c->productSlotReset:2482 TIME NOW 1164843657
W|2006-11-29 15:40:57.992S: Thread "tCliConsole" (0x87dff950)
    Osa: Info, rebooting card in slot 9.
     i9kbaseboard.c->productSlotReset:2482 TIME NOW 1164843658
W|2006-11-29 15:40:58.022S: Thread "tCliConsole" (0x87dff950)
    Osa: Info, rebooting card in slot 10.
     i9kbaseboard.c->productSlotReset:2482 TIME NOW 1164843658
W|2006-11-29 15:40:58.052S: Thread "tCliConsole" (0x87dff950)
    Osa: Info, rebooting card in slot 11.
     i9kbaseboard.c->productSlotReset:2482 TIME NOW 1164843658
W|2006-11-29 15:40:58.082S: Thread "tCliConsole" (0x87dff950)
    Osa: Info, rebooting card in slot 12.
     i9kbaseboard.c->productSlotReset:2482 TIME NOW 1164843658
W|2006-11-29 15:40:58.112S: Thread "tCliConsole" (0x87dff950)
    Osa: Info, rebooting card in slot 101.
     i9kbaseboard.c->productSlotReset:2482 TIME NOW 1164843658
W|2006-11-29 15:40:58.182S: Thread "tCliConsole" (0x87dff950)
    Osa: Info, rebooting card in slot 103.
MasterSpine2-> W|2006-11-29 15:40:58.332S: Thread "tChModWkr103"
MasterSpine2-> W|(0x862845d0)
    TMS: CMS Warning: Info, slot 103 remove event has been received!
W|2006-11-29 15:40:58.332S: Thread "tChModWkr11" (0x8628f5d0)
    TMS: CMS Warning: Info, slot 11 remove event has been received!
W|2006-11-29 15:40:58.332S: Thread "tChModWkr04" (0x862a29d0)
    TMS: CMS Warning: Info, slot 4 remove event has been received!
W|2006-11-29 15:40:58.342S: Thread "tChModWkr05" (0x8629fdd0)
    TMS: CMS Warning: Info, slot 5 remove event has been received!
W|2006-11-29 15:40:58.342S: Thread "tChModWkr06" (0x8629d1d0)
    TMS: CMS Warning: Info, slot 6 remove event has been received!
W|2006-11-29 15:40:58.342S: Thread "tChModWkr01" (0x862aadd0)
    TMS: CMS Warning: Info, slot 1 remove event has been received!
W|2006-11-29 15:40:58.342S: Thread "tChModWkr02" (0x862a81d0)
    TMS: CMS Warning: Info, slot 2 remove event has been received!
W|2006-11-29 15:40:58.342S: Thread "tChModWkr03" (0x862a55d0)
    TMS: CMS Warning: Info, slot 3 remove event has been received!
W|2006-11-29 15:40:58.342S: Thread "tChModWkr08" (0x862979d0)
    TMS: CMS Warning: Info, slot 8 remove event has been received!
W|2006-11-29 15:40:58.352S: Thread "tChModWkr07" (0x8629a5d0)
    TMS: CMS Warning: Info, slot 7 remove event has been received!
W|2006-11-29 15:40:58.352S: Thread "tChModWkr10" (0x862921d0)
    TMS: CMS Warning: Info, slot 10 remove event has been received!
W|2006-11-29 15:40:58.352S: Thread "tChModWkr12" (0x8628c9d0)
    TMS: CMS Warning: Info, slot 12 remove event has been received!
W|2006-11-29 15:40:58.352S: Thread "tChModWkr09" (0x86294dd0)
    TMS: CMS Warning: Info, slot 9 remove event has been received!
W|2006-11-29 15:40:58.612S: Thread "tChModWkr101" (0x86289dd0)
    TMS: CMS Warning: Info, slot 101 remove event has been received!
W|2006-11-29 15:40:59.332S: Thread "tChModWkr103" (0x862845d0)
    TMS: CMS Warning: Info, slot 103 reboot event has been received!
W|2006-11-29 15:40:59.332S: Thread "tChModWkr11" (0x8628f5d0)
    TMS: CMS Warning: Info, slot 11 reboot event has been received!
W|2006-11-29 15:40:59.332S: Thread "tChModWkr04" (0x862a29d0)
```

```
    TMS: CMS Warning: Info, slot 4 reboot event has been received!
W|2006-11-29 15:40:59.342S: Thread "tChModWkr05" (0x8629fdd0)
    TMS: CMS Warning: Info, slot 5 reboot event has been received!
W|2006-11-29 15:40:59.342S: Thread "tChModWkr06" (0x8629d1d0)
    TMS: CMS Warning: Info, slot 6 reboot event has been received!
W|2006-11-29 15:40:59.342S: Thread "tChModWkr01" (0x862aadd0)
    TMS: CMS Warning: Info, slot 1 reboot event has been received!
W|2006-11-29 15:40:59.342S: Thread "tChModWkr02" (0x862a81d0)
    TMS: CMS Warning: Info, slot 2 reboot event has been received!
W|2006-11-29 15:40:59.342S: Thread "tChModWkr03" (0x862a55d0)
    TMS: CMS Warning: Info, slot 3 reboot event has been received!
W|2006-11-29 15:40:59.352S: Thread "tChModWkr07" (0x8629a5d0)
    TMS: CMS Warning: Info, slot 7 reboot event has been received!
W|2006-11-29 15:40:59.352S: Thread "tChModWkr10" (0x862921d0)
    TMS: CMS Warning: Info, slot 10 reboot event has been received!
W|2006-11-29 15:40:59.352S: Thread "tChModWkr12" (0x8628c9d0)
    TMS: CMS Warning: Info, slot 12 reboot event has been received!
W|2006-11-29 15:40:59.352S: Thread "tChModWkr09" (0x86294dd0)
    TMS: CMS Warning: Info, slot 9 reboot event has been received!
W|2006-11-29 15:40:59.612S: Thread "tChModWkr101" (0x86289dd0)
    TMS: CMS Warning: Info, slot 101 reboot event has been received!
W|2006-11-29 15:41:00.002S: Thread "IsmMadUPoll" (0x865e6710)
    Ism: Device has become inaccessible Switch Leaf 1
W|2006-11-29 15:41:00.002S: Thread "IsmMadUPoll" (0x865e6710)
    Ism: Device has become inaccessible Switch Leaf 2
W|2006-11-29 15:41:00.002S: Thread "IsmMadUPoll" (0x865e6710)
    Ism: Device has become inaccessible Switch Leaf 3
W|2006-11-29 15:41:00.002S: Thread "IsmMadUPoll" (0x865e6710)
    Ism: Device has become inaccessible Switch Leaf 4
W|2006-11-29 15:41:00.002S: Thread "IsmMadUPoll" (0x865e6710)
    Ism: Device has become inaccessible Switch Leaf 5
W|2006-11-29 15:41:00.002S: Thread "IsmMadUPoll" (0x865e6710)
    Ism: Device has become inaccessible Switch Leaf 6
W|2006-11-29 15:41:00.002S: Thread "IsmMadUPoll" (0x865e6710)
    Ism: Device has become inaccessible Switch Leaf 7
W|2006-11-29 15:41:00.002S: Thread "IsmMadUPoll" (0x865e6710)
    Ism: Device has become inaccessible Switch Leaf 8
W|2006-11-29 15:41:00.002S: Thread "IsmMadUPoll" (0x865e6710)
    Ism: Device has become inaccessible Switch Leaf 9
W|2006-11-29 15:41:00.002S: Thread "IsmMadUPoll" (0x865e6710)
    Ism: Device has become inaccessible Switch Leaf 10
W|2006-11-29 15:41:00.002S: Thread "IsmMadUPoll" (0x865e6710)
    Ism: Device has become inaccessible Switch Leaf 11
W|2006-11-29 15:41:00.002S: Thread "IsmMadUPoll" (0x865e6710)
    Ism: Device has become inaccessible Switch Leaf 12
W|2006-11-29 15:41:00.002S: Thread "IsmMadUPoll" (0x865e6710)
    Ism: Device has become inaccessible Switch Spine 1-A
W|2006-11-29 15:41:00.002S: Thread "IsmMadUPoll" (0x865e6710)
    Ism: Device has become inaccessible Switch Spine 1-B
     i9kbaseboard.c->productSlotReset:2482 TIME NOW 1164843660
W|2006-11-29 15:41:00.002S: Thread "IsmMadUPoll" (0x865e6710)
    Ism: Device has become inaccessible Switch Spine 2-A
W|2006-11-29 15:41:00.002S: Thread "IsmMadUPoll" (0x865e6710)
    Ism: Device has become inaccessible Switch Spine 2-B
W|2006-11-29 15:41:00.002S: Thread "IsmMadUPoll" (0x865e6710)
    Ism: Device has become inaccessible Switch Spine 3-A
W|2006-11-29 15:41:00.002S: Thread "IsmMadUPoll" (0x865e6710)
    Ism: Device has become inaccessible Switch Spine 3-B
W|2006-11-29 15:41:00.182S: Thread "ssiSpawnDelayedResetCardTask"
W|(0x8635c1f0)
    Osa: Info, rebooting the local card.
W|2006-11-29 15:41:00.332S: Thread "tChModWkr102" (0x862871d0)
    TMS: CMS Warning: Info, slot 102 reboot event has been received!
W|2006-11-29 15:41:00.332S: Thread "tChModWkr08" (0x862979d0)
```

```
    TMS: CMS Warning: Info, slot 8 reboot event has been received!
E|2006-11-29 15:41:01.602S: Thread "cme" (0x87878ad0)
    Cmea: Fan 1 in fan tray 1 running at 0 RPM in low fan speed range!
E|2006-11-29 15:41:01.602S: Thread "cme" (0x87878ad0)
    Cmea: Fan 2 in fan tray 1 running at 0 RPM in low fan speed range!
E|2006-11-29 15:41:01.602S: Thread "cme" (0x87878ad0)
    Cmea: Fan 1 in fan tray 2 running at 0 RPM in low fan speed range!
E|2006-11-29 15:41:01.602S: Thread "cme" (0x87878ad0)
    Cmea: Fan 2 in fan tray 2 running at 0 RPM in low fan speed range!
E|2006-11-29 15:41:01.602S: Thread "cme" (0x87878ad0)
    Cmea: Fan 1 in fan tray 3 running at 0 RPM in low fan speed range!
E|2006-11-29 15:41:01.602S: Thread "cme" (0x87878ad0)
    Cmea: Fan 2 in fan tray 3 running at 0 RPM in low fan speed range!
E|2006-11-29 15:41:01.602S: Thread "cme" (0x87878ad0)
    Cmea: Fan 1 in fan tray 4 running at 0 RPM in low fan speed range!
E|2006-11-29 15:41:01.602S: Thread "cme" (0x87878ad0)
    Cmea: Fan 2 in fan tray 4 running at 0 RPM in low fan speed range!
W|2006-11-29 15:41:01.602S: Thread "cme" (0x87878ad0)
    Osa: MAX7311: getPortValue failed port=1 loc=0x03084c00 HUB_PORT5
address=0x4C ra=0x8007e8c4
A|2006-11-29 15:41:01.602S: Thread "cme" (0x87878ad0)
    Cmea: Power supply 1 has gone off-line!
A|2006-11-29 15:41:01.602S: Thread "cme" (0x87878ad0)
    Cmea: Power supply 2 has gone off-line!
A|2006-11-29 15:41:01.602S: Thread "cme" (0x87878ad0)
    Cmea: Power supply 3 has gone off-line!
E|2006-11-29 15:41:01.602S: Thread "cme" (0x87878ad0)
    Cmea: Error: 1 power supply(s) are required for this configuration!
W|2006-11-29 15:41:03.382S: Thread "tChFanWkr02" (0x86251860)
    Osa: MAX7311: getPortValue failed port=0 loc=0x03084e00 HUB_PORT5
address=0x4E ra=0x8007e380
```

- 1781

  Symptom: After executing the "reboot all" command, a warning message is displayed on the serial console of the master spine with a "TIME NOW" string. Attached is a sample log:

```
W|2006-11-29 15:41:00.002S: Thread "IsmMadUPoll" (0x865e6710)
    Ism: Device has become inaccessible Switch Spine 1-A
W|2006-11-29 15:41:00.002S: Thread "IsmMadUPoll" (0x865e6710)
    Ism: Device has become inaccessible Switch Spine 1-B
     i9kbaseboard.c->productSlotReset:2482 TIME NOW 1164843660
W|2006-11-29 15:41:00.002S: Thread "IsmMadUPoll" (0x865e6710)
    Ism: Device has become inaccessible Switch Spine 2-A
```

- 1782

  Symptom: During a reboot, fan, power supply and other worker thread(s) warning messages are displayed. Attached is a sample log:

```
W|2006-11-29 16:17:19.613S: Thread "tChModWkr102" (0x862c4e50)
    TMS: CMS Warning: Info, slot 102 reboot event has been received!
W|2006-11-29 16:17:21.653S: Thread "tChPwrWkr04" (0x8629d320)
    Osa: MAX7311: getPorts failed port=0 loc=0x03084c00 HUB_PORT5
address=0x4C ra=0x8007e0f4
W|2006-11-29 16:17:22.653S: Thread "tChFanWkr04" (0x8628ace0)
    Osa: MAX7311: getPortValue failed port=0 loc=0x03084e00 HUB_PORT5
address=0x4E ra=0x8007e380
```

- 1783

  Symptom: Error messages are occasionally displayed when executing the commang "ismChassisSetEnable 1". Attached is a sample:

```
MasterSpine1-> ismChassisSetEnable 1
A|2006-11-27 13:51:22.830S: Thread "CmuRedCtrl" (0x8786a430)
    CmuRed: tf34MasterConnSyncState: Error 0xffffffff, missed 2 slave
status.

REBOOT of ALL DEVICES is REQUIRED to activate changes made with this command

MasterSpine1->
```

- 1785

  Symptom: When issuing the specific command **`reboot now -m -n`**, voltage errors are displayed on the master spine. Attached is a sample log:

```
Device 103 Model=SFS-7012-24-FM DDR
Device 103 (spine 3) online
Devices online: leafs=12 spines=2 isMaster=1 SYS_MANAGER=1 initializing:
leafs=0 spines=1
tIouMonSw: Initialization passed, monitoring 18 local IB devices.
Welcome to the SFS-7012 CLI. Type list for the list of commands.
MasterSpine2-> Device 101 Model=SFS-7012-24D-MM-K9
Device 101 (spine 1) online
Devices online: leafs=12 spines=3 isMaster=1 SYS_MANAGER=1 initializing:
leafs=0 spines=0
W|2006-11-29 17:57:13.278S: Thread "cme" (0x878781c0)
    Osa: MAX1137 Error: device 101 reports voltage of 3.336, target range
is 0.000V - 0.000V [3.3V]
W|2006-11-29 17:57:13.278S: Thread "cme" (0x878781c0)
    Osa: MAX1137 Error: device 101 reports voltage of 2.516, target range
is 0.000V - 0.000V [2.5V]
W|2006-11-29 17:57:13.278S: Thread "cme" (0x878781c0)
    Osa: MAX1137 Error: device 101 reports voltage of 1.197, target range
is 0.000V - 0.000V [1.2V]
W|2006-11-29 17:57:13.278S: Thread "cme" (0x878781c0)
    Osa: MAX1137 Error: device 101 reports voltage of 1.255, target range
is 0.000V - 0.000V [Vtt]
A|2006-11-29 17:57:13.278S: Thread "cme" (0x878781c0)
    Cmea: 6 Temperature(s) sensor I-O errors
    Response: Bad reads will be ignored
    Correction: Persistent errors may indicate FRU requires service
        ambient 0.0: temperature 29 C (limit 0 C)
        ambient 1.0: temperature 21 C (limit 0 C)
        upstream 0.1: temperature 42 C (limit 0 C)
        downstream 1.1: temperature 40 C (limit 0 C)
        Ambient 0.0: temperature 30 C (limit 0 C)
        CPU Temp 0.1: temperature 38 C (limit 0 C)
```

- 1790

  Symptom: When using command “ismChassisSetSpeed”, error messages are displayed when the 7024 port speed is set to 1, 2 and 3. The errors can seen in both hemispheres, sometimes only in one hemisphere, and sometimes no error messages are returned. Following a reboot, the links come up as configured. Attached are the console messages.

```
RS232 console messages:

MasterSpine6-> ismChassisSetSpeed 3
REBOOT of ALL DEVICES is REQUIRED to activate changes made with this command

MasterSpine6-> A|2006-11-30 15:52:47.943S: Thread "CmuRedCtrl" (0x8786a390)
        CmuRed: tf34MasterConnSyncState: Error 0xffffffff, missed 2 slave status.

MasterSpine1-> ismChassisSetSpeed 3
REBOOT of ALL DEVICES is REQUIRED to activate changes made with this command
MasterSpine1->

MasterSpine6-> ismChassisSetSpeed 2
ibstatmon cannot acquire AVPD_LOCK owner=IsmMadUPoll lockCount=1 owner_ra=0x8036b1ec
REBOOT of ALL DEVICES is REQUIRED to activate changes made with this command
MasterSpine6->

MasterSpine1-> ismChassisSetSpeed 2
REBOOT of ALL DEVICES is REQUIRED to activate changes made with this command
MasterSpine1->
```

- 1791

  Symptom: Error messages were being displayed on screen. While this was happening, the chassis status and leaf 21 status LED switched to amber. All the power supply LEDs were green. Hosts were connected to leaf 21 and port speeds on both hemisphers were set to 5 Gbs. The errors were reported on the upper hemispher only. The error messages continued for approximately 1 hour, at which time both hemispheres were rebooted. Following the reboot, the error messages stopped. Attached are the console messages.

```
RS232 Log messages.
--------------------
 Osa: ADM1024 Error: device 21 reports voltage of 0.000, target range is 10.440V
- 13.560V [SW12.0V]
W|2006-11-29 11:45:09.237S: Thread "cme" (0x87878a30)
        Osa: ADM1024 Error: device 21 reports voltage of 0.000, target range is
1.128V - 1.272V [B1.2V.2]
W|2006-11-29 11:45:09.237S: Thread "cme" (0x87878a30)
        Osa: ADM1024 Error: device 21 reports voltage of 0.000, target range is
3.102V - 3.498V [B3.3V]
W|2006-11-29 11:45:09.237S: Thread "cme" (0x87878a30)
        Osa: ADM1024 Error: device 21 reports voltage of 0.000, target range is
1.692V - 1.908V [B1.8V]
W|2006-11-29 11:45:09.237S: Thread "cme" (0x87878a30)
        Osa: ADM1024 Error: device 21 reports voltage of 0.000, target range is
1.457V - 1.643V [B1.55V]
W|2006-11-29 11:45:19.347S: Thread "cme" (0x87878a30)
        Osa: ADM1024 Error: device 21 reports voltage of 0.000, target range is
10.440V - 13.560V [SW12.0V]
W|2006-11-29 11:45:19.347S: Thread "cme" (0x87878a30)
        Osa: ADM1024 Error: device 21 reports voltage of 0.000, target range is
1.128V - 1.272V [B1.2V.2]
W|2006-11-29 11:45:19.347S: Thread "cme" (0x87878a30)
        Osa: ADM1024 Error: device 21 reports voltage of 0.000, target range is
3.102V - 3.498V [B3.3V]
W|2006-11-29 11:45:19.347S: Thread "cme" (0x87878a30)
```

```
        Osa: ADM1024 Error: device 21 reports voltage of 0.000, target range is
1.692V - 1.908V [B1.8V]
W|2006-11-29 11:45:19.347S: Thread "cme" (0x87878a30)
        Osa: ADM1024 Error: device 21 reports voltage of 0.000, target range is
1.457V - 1.643V [B1.55V]
```

- 1796

Symptom: Setting the chassis IP address with the command "setChassisIpAddr -h 172.29.239.244 -m 255.255.252.0" returns mixed error and success messages on the RS232 console. However, when the chassis is queried with "showChassisIpAddr" the new updated IP address is displayed correctly.

Setting the default route with the command "setDefaultRoute -h 172.29.236.1" an error is displayed on the RS232 console. Addtionally, the CLI prompt is not displayed. The user must press “Enter” to display the prompt. Attached are the console messages.

```
SPINE6
======
MasterSpine6-> showChassisIpAddr
Chassis IP Address: 192.168.100.10 Net mask: 255.255.255.0
MasterSpine6-> setChassisIpAddr -h 172.29.239.244 -m 255.255.252.0
You may need to reconnect if you have connected via: 192.168.100.10
W|   20 05:56:29.390B: Thread "CmuRedCtrl" (0x875a2f90)
        CmuRed: cmuRed_syncIfSendMsg: Sync interface is not active at this time.
W|   20 05:56:29.390B: Thread "CmuRedCtrl" (0x875a2f90)
        CmuRed: cmuRed_syncIfSendTakeoverMsg: Error sending takeover msg to
remote switch!.
W|   20 05:56:29.390B: Thread "CmuRedCtrl" (0x875a2f90)
        CmuRed: cmuRed_syncServer: Error processing control message.
OOB IP Address-netmask successfully updated

MasterSpine6-> W|   20 05:58:10.980B: Thread "tCliConsole" (0x87dff950)
        Osa: Failure deleting route
MasterSpine6-> showLastRetCode
Last Exit Code: 0: Success
MasterSpine6->

SPINE 1
==========
MasterSpine1-> setChassisIpAddr -h 172.29.239.245 -m 255.255.252.0
You may need to reconnect if you have connected via: 172.29.239.244
W|    0 00:16:50.350B: Thread "CmuRedCtrl" (0x875a2fd0)
        CmuRed: cmuRed_syncIfSendMsg: Sync interface is not active at this time.
W|    0 00:16:50.350B: Thread "CmuRedCtrl" (0x875a2fd0)
        CmuRed: cmuRed_syncIfSendTakeoverMsg: Error sending takeover msg to
remote switch!.
W|    0 00:16:50.350B: Thread "CmuRedCtrl" (0x875a2fd0)
        CmuRed: cmuRed_syncServer: Error processing control message.
OOB IP Address-netmask successfully updated

MasterSpine1-> setDefaultRoute -h 172.29.236.1

 NEW Gateway is 172.29.236.1
MasterSpine1-> W|    0 00:18:59.370B: Thread "tCliConsole" (0x87dff950)
        Osa: Failure deleting route
```

- 1801

Symptom: All SF7024 and SFS7012 power supplies have labels with the part number 74-4321-02, however, the CLI and GUI report part number 74-4321-01. Attached is a sample console message:

```
MasterSpine6-> showInventory
......
NAME: "Power Supply 7",  DESCR: "SFS 7012-7024 Power Supply"
```

```
PID: 74-4321-01, VID: N-A, SN: N-A

NAME: "Power Supply 8",  DESCR: "SFS 7012-7024 Power Supply"
PID: 74-4321-01, VID: N-A, SN: N-A

NAME: "Power Supply 9",  DESCR: "SFS 7012-7024 Power Supply"
PID: 74-4321-01, VID: N-A, SN: N-A
```

- 1802

Symptom: The Model Number and Product Name information reported by CLI and Web UI is not consistent with the PRD Vital Product Data (VPD) Information. Attached is a sample log:

```
MasterSpine6-> fruInfo 106
Display module info
xInfo_ModuleInfo:
        RecType:       0               LastRec:       0               LenMult: 0
        ReadOnly:      1               RecordFormat:  2               RecLen: 15
        LogicalLen:  021
        HdrChkSum:    c6
        ModGuid:      0005ad0006042406
        IBModType:     1        (1=IB)
        ModuleClass:   2        (0=TCA,1=HCA,2=Sw)
        NodeCount:     2        (IB nodes on this mod)
        LinkCount:    30        (IB links on this mod)
        BckplnLnkCnt:  0        (IB links to backplane)
        IBMLCount:     0        (Ibml Links on this mod)
        BckplnIBMLCnt: 0        (Ibml Links to backplane)
        ModuleSize:    0        (0=not specified)
        FormFactor:    3        (2=StdIB,3=WideIB)

xInfo_ModulePowerInfo:
        RecType:       3               LastRec:       0               LenMult: 0
        ReadOnly:      1               RecordFormat:  1               RecLen: 15
        LogicalLen:  021
        HdrChkSum:    c4
        OpThermPwr:   0x0061a8 mw
        OpCurrent:    0x9c4 mw
        IdleCurrent:  0x9c4 mw
        InitCurrent:  0x9c4 mw
        InitTime:     0x1770 (10's of ms)
        PM Supported:  0        (1=yes)
        StndBy Sptd:   0        (1=yes)
        UStndBy Sptd:  0        (1=yes)
        USleep Sptd:   0        (1=yes)
        Redundant Pwr: 1        (0=unk,1=no,2=yes)
        Power Class:   1

xInfo_PortConnectionInfo:
        RecType:       4               LastRec:       0               LenMult: 0
        ReadOnly:      1               RecordFormat:  2               RecLen: f7
        LogicalLen:  247
        HdrChkSum:    e0
        Conn Cnt:     30
        NodeGUID Hnd:  1        Port No: 0001   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  1        Port No: 0002   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  1        Port No: 0003   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  1        Port No: 0004   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  1        Port No: 0005   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  1        Port No: 0006   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  1        Port No: 0007   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  1        Port No: 0008   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  1        Port No: 0009   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  1        Port No: 000a   Conn Type: 8b   BkplnConn: 21
```

```
        NodeGUID Hnd:  1        Port No: 000b   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  1        Port No: 000c   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  1        Port No: 000d   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  1        Port No: 000e   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  1        Port No: 000f   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  1        Port No: 0010   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  1        Port No: 0011   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  1        Port No: 0012   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  1        Port No: 0013   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  1        Port No: 0014   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  1        Port No: 0015   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  1        Port No: 0016   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  1        Port No: 0017   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  1        Port No: 0018   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  2        Port No: 0019   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  2        Port No: 001a   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  2        Port No: 001b   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  2        Port No: 001c   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  2        Port No: 001d   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  2        Port No: 001e   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  2        Port No: 001f   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  2        Port No: 0020   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  2        Port No: 0021   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  2        Port No: 0022   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  2        Port No: 0023   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  2        Port No: 0024   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  2        Port No: 0025   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  2        Port No: 0026   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  2        Port No: 0027   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  2        Port No: 0028   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  2        Port No: 0029   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  2        Port No: 002a   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  2        Port No: 002b   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  2        Port No: 002c   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  2        Port No: 002d   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  2        Port No: 002e   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  2        Port No: 002f   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  2        Port No: 0030   Conn Type: 8b   BkplnConn: 21

xInfo_CMEInfo:
        RecType:       5               LastRec:       0               LenMult: 0
        ReadOnly:      1               RecordFormat:  1               RecLen: 13
        LogicalLen:  019
        HdrChkSum:    c4
        CmeGuid Type:  1
        Cme Guid:     0a0b0c0d0e0f0a0b
        CmeFirmwareVr:80a7322b  (BCD)
        SlotNumbers0: fe        (Ibml w/CME? ext1|slt6..slt1|cme
        SlotNumbers1: 03        (Ibml w/CME? ext0|rsv...slt8|slt7

xInfo_BuddyInfo:
        RecType:       7               LastRec:       0               LenMult: 0
        ReadOnly:      1               RecordFormat:  2               RecLen: 19
        LogicalLen:  025
        HdrChkSum:    bb
        Buddy Cnt:    2
        GUID:    06 24 04 06 00 ad 05 00        NodeGUID Hnd:    1
        GUID:    06 24 04 06 10 ad 05 00        NodeGUID Hnd:    2

xInfo_IOCPMInfo:
        RecType:       9               LastRec:       0               LenMult: 0
        ReadOnly:      1               RecordFormat:  1               RecLen: 10
        LogicalLen:  016
        HdrChkSum:    c3
```

```
        IOC_Count:     1
        IOC 0
                IOCPMCap:        0
                IDozeCurrent:    0
                INapCurrent:     0
                ISleepCurrent:   0
                IStndByCurrent:104

xInfo_AssetTagInfo:
        RecType:       8                LastRec:       1                LenMult: 0
        ReadOnly:      0                RecordFormat:  1                RecLen: 14
        LogicalLen:  020
        HdrChkSum:    60
        FRUHandle:     0
        Asset Tag Enc:cb
        Asset Tag:    73 73 74 30 36 33 32 30 30 32 39

xInfo_FRUInfo:
        RecType:       2                LastRec:       0                LenMult: 0
        ReadOnly:      1                RecordFormat:  1                RecLen: 6c
        LogicalLen:  108
        HdrChkSum:    6e
        FruType:       3
        FruHandle:     0
        FRUGUIDType:   1
        FruGuid:      0005ad0006042406
        SerNumEncLen: cb        SerNum:       sst06320029
        PtNumEncLen:  ca        PartNum:      74-4814-01
        ModelEncLen:  d2        ModelNum:     SFS-7012/24D-MM-K9
        VersionEncLen:c3        Version:      V01
        MfgEncLen:    c3        Manufacturer: SST
        ProdNmEncLen: d7        ProductName:  Fabric Module-MGR'D DDR
        MfgIdEndLen:   1        MfgId:        0005ad
        MfgTime:
        OemEncLen: 88   OemData:   01010005ad042361

MasterSpine6->



min
password->
Welcome to the SFS-7024 CLI. Type 'list' for the list of commands.
MasterSpine1-> fruInfo 101
Display module info
xInfo_ModuleInfo:
        RecType:       0                LastRec:       0                LenMult: 0
        ReadOnly:      1                RecordFormat:  2                RecLen: 15
        LogicalLen:  021
        HdrChkSum:    c6
        ModGuid:      0005ad000604240a
        IBModType:     1        (1=IB)
        ModuleClass:   2        (0=TCA,1=HCA,2=Sw)
        NodeCount:     2        (IB nodes on this mod)
        LinkCount:    30        (IB links on this mod)
        BckplnLnkCnt:  0        (IB links to backplane)
        IBMLCount:     0        (Ibml Links on this mod)
        BckplnIBMLCnt: 0        (Ibml Links to backplane)
        ModuleSize:    0        (0=not specified)
        FormFactor:    3        (2=StdIB,3=WideIB)

xInfo_ModulePowerInfo:
        RecType:       3                LastRec:       0                LenMult: 0
        ReadOnly:      1                RecordFormat:  1                RecLen: 15
```

```
        LogicalLen:  021
        HdrChkSum:    c4
        OpThermPwr:   0x0061a8 mw
        OpCurrent:    0x9c4 mw
        IdleCurrent:  0x9c4 mw
        InitCurrent:  0x9c4 mw
        InitTime:     0x1770 (10's of ms)
        PM Supported:  0        (1=yes)
        StndBy Sptd:   0        (1=yes)
        UStndBy Sptd:  0        (1=yes)
        USleep Sptd:   0        (1=yes)
        Redundant Pwr: 1        (0=unk,1=no,2=yes)
        Power Class:   1

xInfo_PortConnectionInfo:
        RecType:       4                LastRec:       0                LenMult: 0
        ReadOnly:      1                RecordFormat:  2                RecLen: f7
        LogicalLen:  247
        HdrChkSum:    e0
        Conn Cnt:     30
        NodeGUID Hnd:  1        Port No: 0001   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  1        Port No: 0002   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  1        Port No: 0003   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  1        Port No: 0004   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  1        Port No: 0005   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  1        Port No: 0006   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  1        Port No: 0007   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  1        Port No: 0008   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  1        Port No: 0009   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  1        Port No: 000a   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  1        Port No: 000b   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  1        Port No: 000c   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  1        Port No: 000d   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  1        Port No: 000e   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  1        Port No: 000f   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  1        Port No: 0010   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  1        Port No: 0011   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  1        Port No: 0012   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  1        Port No: 0013   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  1        Port No: 0014   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  1        Port No: 0015   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  1        Port No: 0016   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  1        Port No: 0017   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  1        Port No: 0018   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  2        Port No: 0019   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  2        Port No: 001a   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  2        Port No: 001b   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  2        Port No: 001c   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  2        Port No: 001d   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  2        Port No: 001e   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  2        Port No: 001f   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  2        Port No: 0020   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  2        Port No: 0021   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  2        Port No: 0022   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  2        Port No: 0023   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  2        Port No: 0024   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  2        Port No: 0025   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  2        Port No: 0026   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  2        Port No: 0027   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  2        Port No: 0028   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  2        Port No: 0029   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  2        Port No: 002a   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  2        Port No: 002b   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  2        Port No: 002c   Conn Type: 8b   BkplnConn: 21
```

```
        NodeGUID Hnd:  2        Port No: 002d   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  2        Port No: 002e   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  2        Port No: 002f   Conn Type: 8b   BkplnConn: 21
        NodeGUID Hnd:  2        Port No: 0030   Conn Type: 8b   BkplnConn: 21

xInfo_CMEInfo:
        RecType:       5                LastRec:       0               LenMult: 0
        ReadOnly:      1                RecordFormat:  1               RecLen: 13
        LogicalLen:  019
        HdrChkSum:    c4
        CmeGuid Type:  1
        Cme Guid:     0a0b0c0d0e0f0a0b
        CmeFirmwareVr:80a731bd  (BCD)
        SlotNumbers0: fe        (Ibml w/CME? ext1|slt6..slt1|cme
        SlotNumbers1: 03        (Ibml w/CME? ext0|rsv...slt8|slt7

xInfo_BuddyInfo:
        RecType:       7                LastRec:       0               LenMult: 0
        ReadOnly:      1                RecordFormat:  2               RecLen: 19
        LogicalLen:  025
        HdrChkSum:    bb
        Buddy Cnt:    2
        GUID:    0a 24 04 06 00 ad 05 00        NodeGUID Hnd:    1
        GUID:    0a 24 04 06 10 ad 05 00        NodeGUID Hnd:    2

xInfo_IOCPMInfo:
        RecType:       9                LastRec:       0               LenMult: 0
        ReadOnly:      1                RecordFormat:  1               RecLen: 10
        LogicalLen:  016
        HdrChkSum:    c3
        IOC_Count:     1
        IOC 0
                IOCPMCap:        0
                IDozeCurrent:    0
                INapCurrent:     0
                ISleepCurrent:   0
                IStndByCurrent:104

xInfo_AssetTagInfo:
        RecType:       8                LastRec:       1               LenMult: 0
        ReadOnly:      0                RecordFormat:  1               RecLen: 14
        LogicalLen:  020
        HdrChkSum:    60
        FRUHandle:     0
        Asset Tag Enc:cb
        Asset Tag:    73 73 74 30 36 33 32 30 30 32 38

xInfo_FRUInfo:
        RecType:       2                LastRec:       0               LenMult: 0
        ReadOnly:      1                RecordFormat:  1               RecLen: 6c
        LogicalLen:  108
        HdrChkSum:    6e
        FruType:       3
        FruHandle:     0
        FRUGUIDType:   1
        FruGuid:      0005ad000604240a
        SerNumEncLen: cb        SerNum:       sst06320028
        PtNumEncLen:  ca        PartNum:      74-4814-01
        ModelEncLen:  d2        ModelNum:     SFS-7012/24D-MM-K9
        VersionEncLen:c3        Version:      V01
        MfgEncLen:    c3        Manufacturer: SST
        ProdNmEncLen: d7        ProductName:  Fabric Module-MGR'D DDR
        MfgIdEndLen:   1        MfgId:        0005ad
        MfgTime:
```

```
        OemEncLen: 88   OemData:   01010005ad042360
```

- 1803

  Symptom: During a master spine reboot, "power supply offline" messages are displayed on the master spine serial console log. Attached are two sample outputs:

  Sample 1:

```
MasterSpine2-> reboot -m
Non-disruptive reboot of Master (local) Spine2 selected Proceed with reboot?
[N] Y Goodbye
MasterSpine2-> W|2006-12-07 12:52:17.008S: Thread "tReboot" (0x86365ec0)
        Osa: Info, rebooting the local card.
         i9kbaseboard.c->productSlotReset:2482 TIME NOW 1165524737
E|2006-12-07 12:52:17.808S: Thread "cme" (0x87878ad0)
        Cmea: Fan 1 in fan tray 1 running at 0 RPM in low fan speed range!
E|2006-12-07 12:52:17.808S: Thread "cme" (0x87878ad0)
        Cmea: Fan 2 in fan tray 1 running at 0 RPM in low fan speed range!
E|2006-12-07 12:52:17.808S: Thread "cme" (0x87878ad0)
        Cmea: Fan 1 in fan tray 2 running at 0 RPM in low fan speed range!
E|2006-12-07 12:52:17.808S: Thread "cme" (0x87878ad0)
        Cmea: Fan 2 in fan tray 2 running at 0 RPM in low fan speed range!
E|2006-12-07 12:52:17.808S: Thread "cme" (0x87878ad0)
        Cmea: Fan 1 in fan tray 3 running at 0 RPM in low fan speed range!
E|2006-12-07 12:52:17.808S: Thread "cme" (0x87878ad0)
        Cmea: Fan 2 in fan tray 3 running at 0 RPM in low fan speed range!
E|2006-12-07 12:52:17.808S: Thread "cme" (0x87878ad0)
        Cmea: Fan 1 in fan tray 4 running at 0 RPM in low fan speed range!
E|2006-12-07 12:52:17.808S: Thread "cme" (0x87878ad0)
        Cmea: Fan 2 in fan tray 4 running at 0 RPM in low fan speed range!
W|2006-12-07 12:52:17.808S: Thread "cme" (0x87878ad0)
        Osa: MAX7311: getPorts failed port=0 loc=0x03084c00 HUB_PORT5
address=0x4C ra=0x8007e0f4
A|2006-12-07 12:52:17.808S: Thread "cme" (0x87878ad0)
        Cmea: Power supply 1 has gone off-line!
A|2006-12-07 12:52:17.808S: Thread "cme" (0x87878ad0)
        Cmea: Power supply 2 has gone off-line!
A|2006-12-07 12:52:17.808S: Thread "cme" (0x87878ad0)
        Cmea: Power supply 3 has gone off-line!
E|2006-12-07 12:52:17.808S: Thread "cme" (0x87878ad0)
        Cmea: Error: 3 power supply(s) are required for this configuration!
W|2006-12-07 12:52:17.808S: Thread "cme" (0x87878ad0)
        Osa: MAX7311: getPortValue failed port=0 loc=0x010a4e01 Leaf
1:HUB_PORT7 address=0x4E ra=0x80081224
```

  Sample 2:

```
Cmea: Fan 2 in fan tray 4 running at 0 RPM in low fan speed range!
W|2006-11-29 15:41:01.602S: Thread "cme" (0x87878ad0)
Osa: MAX7311: getPortValue failed port=1 loc=0x03084c00 HUB_PORT5 address=0x4C
ra=0x8007e8c4
A|2006-11-29 15:41:01.602S: Thread "cme" (0x87878ad0)
Cmea: Power supply 1 has gone off-line!
A|2006-11-29 15:41:01.602S: Thread "cme" (0x87878ad0)
Cmea: Power supply 2 has gone off-line!
A|2006-11-29 15:41:01.602S: Thread "cme" (0x87878ad0)
Cmea: Power supply 3 has gone off-line!
E|2006-11-29 15:41:01.602S: Thread "cme" (0x87878ad0)
Cmea: Error: 1 power supply(s) are required for this configuration!
W|2006-11-29 15:41:03.382S: Thread "tChFanWkr02" (0x86251860)
Osa: MAX7311: getPortValue failed port=0 loc=0x03084e00 HUB_PORT5 address=0x4E
ra=0x8007e380
```

- 105397

  Symptom: When hot-swapping spine and leaf modules, the master spine may temporarily report U31 access errors against the module that was just hot-swapped. The U31 device is an I2C switch on the inserted module providing access to the remaining I2C devices on the module. The management software normally recovers from these errors without any additional user interaction.

  – **Workaround:** If the U31 errors do persist, remove and re-insert the affected module.

- Miscellaneous

  Symptom: Forcing links to DDR (5 Gb/s) is not currently supported.

- Miscellaneous

  Symptom: Hot-swapping a managed spine with Anafa-II firmware different from the rest of the chassis will cause a disruptive reboot.

Note All components in the chassis should have the same Anafa-II firmware version as well as the same SFS 7012 embedded firmware version. Following is a SFS 7012/Anafa-II compatibility matrix:

Table 2 Firmware Compatability Matrix

SFS 7024 Firware Version	Anafa-II Firmware Version
3.1.0.0.x	0.4.0
3.2.0.0.12	0.8.3
3.3.x	0.8.4
3.4.x	0.8.5

  – **Workaround:** Reboot each managed spine to make certain the firmware versions are the same throughout the chassis.

Related Documentation

The documentation set for the SFS 7012 includes the following documents:

- *Regulatory Compliance and Safety Information for the Cisco SFS 7012 and SFS 7024*
- *Cisco SFS 7012 InfiniBand Server Switch Release Notes for Cisco Releases*
- *Cisco SFS 7012 InfiniBand Server Switch Hardware Users Guide*
- *Cisco SFS 7012 InfiniBand Server Switch Installation and Configuration Note*

Obtaining Documentation

Cisco documentation and additional literature are available on Cisco.com. This section explains the product documentation resources that Cisco offers.

Cisco.com

You can access the most current Cisco documentation at this URL:

http://www.cisco.com/techsupport

You can access the Cisco website at this URL:

http://www.cisco.com

You can access international Cisco websites at this URL:

http://www.cisco.com/public/countries_languages.shtml

Product Documentation DVD

The Product Documentation DVD is a library of technical product documentation on a portable medium. The DVD enables you to access installation, configuration, and command guides for Cisco hardware and software products. With the DVD, you have access to the HTML documentation and some of the PDF files found on the Cisco website at this URL:

http://www.cisco.com/univercd/home/home.htm

The Product Documentation DVD is created and released regularly. DVDs are available singly or by subscription. Registered Cisco.com users can order a Product Documentation DVD (product number DOC-DOCDVD= or DOC-DOCDVD=SUB) from Cisco Marketplace at the Product Documentation Store at this URL:

http://www.cisco.com/go/marketplace/docstore

Ordering Documentation

You must be a registered Cisco.com user to access Cisco Marketplace. Registered users may order Cisco documentation at the Product Documentation Store at this URL:

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If you do not have a user ID or password, you can register at this URL:

http://tools.cisco.com/RPF/register/register.do

Documentation Feedback

You can provide feedback about Cisco technical documentation on the Cisco Technical Support & Documentation site area by entering your comments in the feedback form available in every online document.

Cisco Product Security Overview

Cisco provides a free online Security Vulnerability Policy portal at this URL:

http://www.cisco.com/en/US/products/products_security_vulnerability_policy.html

From this site, you will find information about how to do the following:

- Report security vulnerabilities in Cisco products
- Obtain assistance with security incidents that involve Cisco products
- Register to receive security information from Cisco

A current list of security advisories, security notices, and security responses for Cisco products is available at this URL:

http://www.cisco.com/go/psirt

To see security advisories, security notices, and security responses as they are updated in real time, you can subscribe to the Product Security Incident Response Team Really Simple Syndication (PSIRT RSS) feed. Information about how to subscribe to the PSIRT RSS feed is found at this URL:

http://www.cisco.com/en/US/products/products_psirt_rss_feed.html

Reporting Security Problems in Cisco Products

Cisco is committed to delivering secure products. We test our products internally before we release them, and we strive to correct all vulnerabilities quickly. If you think that you have identified a vulnerability in a Cisco product, contact PSIRT:

- For emergencies only—security-alert@cisco.com

  An emergency is either a condition in which a system is under active attack or a condition for which a severe and urgent security vulnerability should be reported. All other conditions are considered nonemergencies.
- For nonemergencies—psirt@cisco.com

In an emergency, you can also reach PSIRT by telephone:

- 1 877 228-7302
- 1 408 525-6532

Tip We encourage you to use Pretty Good Privacy (PGP) or a compatible product (for example, GnuPG) to encrypt any sensitive information that you send to Cisco. PSIRT can work with information that has been encrypted with PGP versions 2.*x* through 9.*x*.

Never use a revoked encryption key or an expired encryption key. The correct public key to use in your correspondence with PSIRT is the one linked in the Contact Summary section of the Security Vulnerability Policy page at this URL:

http://www.cisco.com/en/US/products/products_security_vulnerability_policy.html

The link on this page has the current PGP key ID in use.

If you do not have or use PGP, contact PSIRT to find other means of encrypting the data before sending any sensitive material.

Product Alerts and Field Notices

Modifications to or updates about Cisco products are announced in Cisco Product Alerts and Cisco Field Notices. You can receive Cisco Product Alerts and Cisco Field Notices by using the Product Alert Tool on Cisco.com. This tool enables you to create a profile and choose those products for which you want to receive information.

To access the Product Alert Tool, you must be a registered Cisco.com user. (To register as a Cisco.com user, go to this URL: http://tools.cisco.com/RPF/register/register.do) Registered users can access the tool at this URL: http://tools.cisco.com/Support/PAT/do/ViewMyProfiles.do?local=en

Obtaining Technical Assistance

Cisco Technical Support provides 24-hour-a-day award-winning technical assistance. The Cisco Technical Support & Documentation website on Cisco.com features extensive online support resources. In addition, if you have a valid Cisco service contract, Cisco Technical Assistance Center (TAC) engineers provide telephone support. If you do not have a valid Cisco service contract, contact your reseller.

Cisco Technical Support & Documentation Website

The Cisco Technical Support & Documentation website provides online documents and tools for troubleshooting and resolving technical issues with Cisco products and technologies. The website is available 24 hours a day at this URL:

http://www.cisco.com/techsupport

Access to all tools on the Cisco Technical Support & Documentation website requires a Cisco.com user ID and password. If you have a valid service contract but do not have a user ID or password, you can register at this URL:

http://tools.cisco.com/RPF/register/register.do

Note Use the **Cisco Product Identification Tool** to locate your product serial number before submitting a request for service online or by phone. You can access this tool from the Cisco Technical Support & Documentation website by clicking the **Tools & Resources** link, clicking the **All Tools (A-Z)** tab, and then choosing **Cisco Product Identification Tool** from the alphabetical list. This tool offers three search options: by product ID or model name; by tree view; or, for certain products, by copying and pasting **show** command output. Search results show an illustration of your product with the serial number label location highlighted. Locate the serial number label on your product and record the information before placing a service call.

Tip Displaying and Searching on Cisco.com

If you suspect that the browser is not refreshing a web page, force the browser to update the web page by holding down the Ctrl key while pressing F5.

To find technical information, narrow your search to look in technical documentation, not the entire Cisco.com website. On the Cisco.com home page, click the **Advanced Search** link under the Search box

and then click the **Technical Support & Documentation** radio button.

To provide feedback about the Cisco.com website or a particular technical document, click **Contacts & Feedback** at the top of any Cisco.com web page.

Submitting a Service Request

Using the online TAC Service Request Tool is the fastest way to open S3 and S4 service requests. (S3 and S4 service requests are those in which your network is minimally impaired or for which you require product information.) After you describe your situation, the TAC Service Request Tool provides recommended solutions. If your issue is not resolved using the recommended resources, your service request is assigned to a Cisco engineer. The TAC Service Request Tool is located at this URL:

http://www.cisco.com/techsupport/servicerequest

For S1 or S2 service requests, or if you do not have Internet access, contact the Cisco TAC by telephone. (S1 or S2 service requests are those in which your production network is down or severely degraded.) Cisco engineers are assigned immediately to S1 and S2 service requests to help keep your business operations running smoothly.

To open a service request by telephone, use one of the following numbers:

Asia-Pacific: +61 2 8446 7411
Australia: 1 800 805 227
EMEA: +32 2 704 55 55
USA: 1 800 553 2447

For a complete list of Cisco TAC contacts, go to this URL:

http://www.cisco.com/techsupport/contacts

Definitions of Service Request Severity

To ensure that all service requests are reported in a standard format, Cisco has established severity definitions.

Severity 1 (S1)—An existing network is “down” or there is a critical impact to your business operations. You and Cisco will commit all necessary resources around the clock to resolve the situation.

Severity 2 (S2)—Operation of an existing network is severely degraded, or significant aspects of your business operations are negatively affected by inadequate performance of Cisco products. You and Cisco will commit full-time resources during normal business hours to resolve the situation.

Severity 3 (S3)—Operational performance of the network is impaired while most business operations remain functional. You and Cisco will commit resources during normal business hours to restore service to satisfactory levels.

Severity 4 (S4)—You require information or assistance with Cisco product capabilities, installation, or configuration. There is little or no effect on your business operations.

Obtaining Additional Publications and Information

Information about Cisco products, technologies, and network solutions is available from various online and printed sources.

- The Cisco Online Subscription Center is the website where you can sign up for a variety of Cisco e-mail newsletters and other communications. Create a profile and then select the subscriptions that you would like to receive. To visit the Cisco Online Subscription Center, go to this URL:

  http://www.cisco.com/offer/subscribe

- The *Cisco Product Quick Reference Guide* is a handy, compact reference tool that includes brief product overviews, key features, sample part numbers, and abbreviated technical specifications for many Cisco products that are sold through channel partners. It is updated twice a year and includes the latest Cisco channel product offerings. To order and find out more about the *Cisco Product Quick Reference Guide*, go to this URL:

  http://www.cisco.com/go/guide

- Cisco Marketplace provides a variety of Cisco books, reference guides, documentation, and logo merchandise. Visit Cisco Marketplace, the company store, at this URL:

  http://www.cisco.com/go/marketplace/

- Cisco Press publishes a wide range of general networking, training, and certification titles. Both new and experienced users will benefit from these publications. For current Cisco Press titles and other information, go to Cisco Press at this URL:

  http://www.ciscopress.com

- *Internet Protocol Journal* is a quarterly journal published by Cisco Systems for engineering professionals involved in designing, developing, and operating public and private internets and intranets. You can access the *Internet Protocol Journal* at this URL:

  http://www.cisco.com/ipj

- Networking products offered by Cisco Systems, as well as customer support services, can be obtained at this URL:

  http://www.cisco.com/en/US/products/index.html

- Networking Professionals Connection is an interactive website where networking professionals share questions, suggestions, and information about networking products and technologies with Cisco experts and other networking professionals. Join a discussion at this URL:

  http://www.cisco.com/discuss/networking

- “What’s New in Cisco Documentation” is an online publication that provides information about the latest documentation releases for Cisco products. Updated monthly, this online publication is organized by product category to direct you quickly to the documentation for your products. You can view the latest release of “What’s New in Cisco Documentation” at this URL:

  http://www.cisco.com/univercd/cc/td/doc/abtunicd/136957.htm

- World-class networking training is available from Cisco. You can view current offerings at this URL:

  http://www.cisco.com/en/US/learning/index.html

This document is to be used in conjuction with the documents listed in the "Related Documentation" section.