

Sun Fire™ 6800/4810/4800/3800 Systems Firmware 5.13.4 Release Notes

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Sun Fire[™] 6800/4810/4800/3800 Systems Firmware 5.13.4 Release Notes

This document provides information on new and revised features, as well as late-breaking news, for firmware release 5.13.4 on Sun Fire $^{\text{TM}}$ 6800/4810/4800/3800 systems. If you are updating from a version of firmware other than 5.13.0, please see the Sun Fire 6800/4810/4800/3800 Systems Firmware 5.13.0 Release Notes for the list of features added in that release, as well as the information contained here.

These release notes contain the following information:

- **■** General Information
- Known Sun Fire 6800/4810/4800/3800 Systems Limitations
- Requests for Enhancement (RFEs)

General Information

Firmware Compatibility

System boards with 5.12.x firmware are compatible with those running 5.13.0 through 5.13.4 firmware; system boards running 5.11.x are not. You can check the firmware compatibility of your boards by running the following command

```
showboards -p version -v
```

The information displayed indicates whether the firmware for each board is compatible with the ScApp version running on the system controller (SC). For details on verifying firmware compatibility, refer to the Install.info file included with this firmware release and the showboards command description in the Sun Fire 6800/4810/4800/3800 System Controller Command Reference Manual.

To simplify system administration, update all your system boards to the same firmware version and activate the new firmware version on your domains as soon as possible. Activate the domain firmware by running the setkeyswitch off and setkeyswitch on commands. For details on updating your system firmware, see the release-specific Install.info file included with each release of the firmware.

Firmware Upgrade and Downgrade

Instructions for upgrading firmware are provided in the Install.info file included with this firmware release. The Install.info file also contains instructions for downgrading to an earlier version of the firmware.



Caution — If you have a redundant SC configuration, you must first upgrade the firmware on the spare SC, then on the main SC, as explained in the Install.info file.

Upgrading a Domain CPU/Memory Board to a 900/1050MHz CPU/Memory Board

You can use a new UltraSPARC III(TM) (Cu) 900/1050 MHz CPU/Memory board to replace a CPU/Memory board in a domain. If the domain is configured with dynamic reconfiguration (DR) software, you can do so without bringing down the domain. For more information, see "Upgrading to a 900/1050MHz CPU/Memory Board" in the Install.info file.

Automatic Domain Reboot

The default value for the reboot-on-error parameter of the setupdomain command is now set to true. When the system detects a domain hardware error, the following occurs:

- A message informs you that a fatal hardware error has occurred.
- The domain is automatically rebooted.

Be aware that an automatic domain error reboot can occur up to a maximum of three times. After the third error reboot, the domain is paused and the error reboots are stopped. Also be aware that an error caused by a domain panic does not apply to the automatic error reboot. Rather than restarting the domain yourself, contact your service provider for assistance on resolving a domain hardware error.

If you set the reboot-on-error parameter value to false, the domain is paused when a domain hardware error is encountered. You must then manually restart the domain (run the setkeyswitch off and setkeyswitch on commands).

Restoring Configuration Files

If you use the dumpconfig command to save a system configuration but later upgrade the firmware, be aware that the configuration files are associated with the previous firmware version. If you use the restoreconfig command to restore those configuration files, the restoreconfig operation will fail because the firmware version of the configuration files is not compatible with the upgraded firmware.

Degraded SC Failover Configurations

If the main system controller (SC) is running a higher firmware version than the spare system controller, certain boards in the system can be controlled by the main SC but not the spare. For example, if the main SC is running 5.14.0 and the spare SC is running 5.13.3, and you force a failover to the spare, you will not be able to use any COD CPU/Memory boards because they are not supported by firmware releases older than 5.14.0.

Systems with mismatched firmware on main and spare SCs are considered to have a *degraded* failover configuration, because certain boards cannot be supported by the firmware version on the spare SC.

Run the showfailover -v command to obtain status on the SC failover configuration. If the failover status is degraded, the showfailover output will identify the boards not supported on the spare SC. You must upgrade the spare SC to the same firmware version used by the main SC. Refer to the Install.info file for details on upgrading firmware.

Synchronizing the Date and Time on Redundant SCs

The date and time settings on both the main and spare SC must always be synchronized for failover purposes.

Although you can use the setdate command to set the date and time on both SCs, Sun strongly suggests that you configure both SCs to synchronize their date and time settings against a Simple Network Time Protocol (SNTP) server.

By configuring SNTP on the SCs, the SCs will periodically check the SNTP server to ensure that their date and time are accurate -- and in sync. You can use the setupplatform command to assign an SNTP server.

Note that if the main SC and spare SC do not have the same date and time and an SC failover occurs, a time jump may occur in running domains.

Checking Clock Signals After an SC Failover

If an SC failover has occurred and you need to hotplug an SC (remove an SC that has been powered off, then insert a replacement SC), be sure to verify that the clock signals to the system boards are coming from the new main SC before you perform the hot-plug operation. Run the showboard -p clock command to verify the clock signal source.

Power Supply Failures

In some cases, powering off or powering on a power supply can cause the power supply to fail (BugIDs 4725716, 4729961 and 4756529). The power supply failure might exhibit the following characteristics:

- Only the amber *ready* LED of the power supply is illuminated.
- The showboards command output identifies the Status for the power supply as Failed or the Component Type as No Grid Power.

Use the following workarounds to resolve the power supply failure. Start with Workaround 1. If this workaround is unsuccessful, perform Workaround 2. If the second workaround is unsuccessful, perform Workaround 3.

- Workaround 1 Turn the power supply switch off, then on. For Sun Fire 6800 systems, which have no power supply switches, start with Workaround 2.
- Workaround 2 Remove the failed power supply from the system, wait 20 seconds, then put it back in. If its green *power on* LED is not the only LED illuminated, repeat the procedure until it is. Several attempts may be necessary.
- Workaround 3 Reboot the SC, then use the power on command to turn on the power supply.

Known Sun Fire 6800/4810/4800/3800 Systems Limitations

This section lists only those bugs that might be seen by and have impact on a customer. Therefore, some bugs shown as fixed in the README file -- which lists all Bugs -- may never have appeared in Release Notes.

Note that the limitations shown here are identical to those noted in the 5.13.0 Release Notes, with the following exceptions:

- BugIDs 4678341 and 4676081 were fixed in 5.13.1
- BugID 4678108 was closed as not reproducible in 5.13.2
- BugIDs 4628965 (a duplicate of 4359579), 4635885 and 4653120 were fixed in 5.13.3
- BugIDs 4673352 and 4756806 have been closed in 5.13.4 as not reproducible

In addition, some references to 5.13.0 may have been updated to 5.13.x and some new BugIDs may have been added.

Fail to Set Security-Password After Clearing Out the Old One (Bug ID 4633060)

This bug occurs when the following steps are performed to set the security password for OpenBoot™ PROM (OBP):

- 1. Set the password and security mode.
- 2. Reset the domain.
- 3. Change or clear the security password by running the setenv command.
- 4. Change the security password to that assigned in Step 1.

Workaround: After clearing the security password, set a new security password different from the password previously used.

SC Reboots Infinite Times, When RIO Ethernet Test Fails in SC POST (Bug ID 4644974)

Workaround: When SC POST is running, press the spacebar to display the POST menu, then select option 0, Return to SC RTOS. Selecting this option causes POST to be skipped.

showplatform Output for Domain Status is Not Accurate (Bug ID 4647377)

The domain is at the OBP state due to a panic, but showplatform output indicates that the domain is running the Solaris operating environment.

Workaround: None.

disablecomponent is Not Supported Entirely for I/O Assemblies (Bug ID 4651114)

When you run the disablecomponent command to disable port 0 of an I/O assembly, the entire board is disabled and any components on the board are not used in the domain. However, you can disable only port 1 of an I/O assembly.

Workaround: Disable the individual slots that contain the populated cards.

The setfailover on Command Sometimes Results in the Failover State Being Enabled But Not Active (Bug ID 4656519)

Workaround: Do the following:

- 1. On the main or spare SC, run the setfailover off command.
- 2. On both the main and spare SC, look for the message indicating that the failover state is disabled. Check the failover state by running the showfailover command.
- 3. On the main or spare SC, run the setfailover on command.
- 4. On both the main and spare SC, look for the message indicating that failover is enabled and active. Check the failover state by running the showfailover command.

SC Hangs After SC Failover, When Reset and SC Failover are Done at the Same Time (Bug ID 4662431)

Workaround: When an SC failover is occurring, do not reset the domain or perform setkeyswitch operations and do not run other SC commands, except the showfailover command.

Can't Configure DNS (BugID 4696232)

The setupplatform command does not accept a dash (-) to unconfigure the primary/secondary DNS servers. (It does accept a dash to unconfigure the DNS domain.)

Workaround: Specify 0.0.0.0 to unconfigure the primary/secondary DNS servers. This method is not generally recommended, but can be used until the problem is fixed.

Improper Warning Message with Three Fan Trays on 3800 (BugID 4709181)

If you power on a Sun Fire 3800 system that has three fan trays and is configured to come up with no domains active, the system issues the following warning message:

```
WARNING: Unplugging FT[0|1|2|3] may cause insufficient cooling
```

This message is misleading. The system is designed to run with four fan trays for a measure of redundancy. If one of the trays is removed, the system can run safely on the remaining three.

Workaround: Ignore the message.

Requests for Enhancement (RFEs)

SC Hangs After Automatic setkeyswitch off (RFE 4454599)

Manual reset of the SC has no effect.

Workaround: Do the following:

- 1. Connect to each active domain through a network connection, such as telnet or rlogin.
- 2. Shut down each domain, if possible.
- 3. Power down the Sun Fire system, then power it up again.

No LED Fault Indicator on System Board After the Board Fails POST (RFE 4454623)

Workaround: Run the showlogs or showboards command (from the platform shell) to show errors and the test status of a faulty system board.

Software Licensing Problems With Host ID and MAC (RFE 4492051)

The current scheme of assigning the host ID and MAC address based on which physical domain is in use (A, B, and so forth) can prevent host licensed software from running. In situations where a hardware failure would require changing domains, host licensed software refuses to start.

Workaround: It may be possible to reconfigure the system hardware to support the required domain. Contact your service provider for assistance.

Single I/O Assembly Failure Causes Boot Failure (RFE 4502247)

The I/O assemblies are not capable of being tested in isolation. For this reason the failures that become visible when I/O POST runs stop the entire boot process because the failures pause the domain hardware.

Workaround: Remove the failed I/O assembly from the domain by running the deleteboard command. Turn the keyswitch on by running the setkeyswitch on command to reboot without the failed board. Refer to the *Sun Fire* 6800/4810/4800/3800 System Controller Command Reference Manual for correct usage of the deleteboard command.

Changing the Date On the Main SC and Doing SC Failover Affects the Domain Date (RFE 4663142)

If the SNTP (Simple Network Time Protocol) server has not been configured and the main and spare SC have different dates, an SC failover changes the domain date and time.

Workaround: Do **one** of the following:

- Configure the SNTP server (for details, see the setupplatform command description in the Sun Fire 6800/4810/4800/3800 System Controller Command Reference Manual) on both SCs to establish the correct date and time. Then, establish the correct domain date and time by running the setdate command at the domain shell, or rdate(1M) at the Solaris operating environment level.
- Run the setdate command on both SCs to set the correct date and time:

schostname: SC> setdate -r datehost

where *datehost* is the remote system used as the time server.

Messages for Changing Partition Are Not Consistent While Domains Are Active (RFE 4734993)

When reconfiguring the chassis from dual-partition to single-partition mode, all domains must have keyswitch position set to off. The message displayed should make that clear.