



# Sun Fire™ Entry-Level Midrange Systems Firmware 5.20.0 Release Notes

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Sun Microsystems, Inc.  
www.sun.com

Part No. 819-5084-10  
April 2006, Revision A

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# Sun Fire Entry-Level Midrange Systems Firmware 5.20.0 Release Notes

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This document provides information on new and revised features, as well as late-breaking news, for firmware release 5.20.0 on Sun Fire E2900 Sun Fire V1280, Netra 1280, and Netra 1290 systems.

This document contains the following topics:

- [Firmware Documentation for Sun Fire Entry-Level Midrange \(E2900/V1280/Netra 1280/Netra 1290\) Systems](#)
- [Features Introduced in the 5.20.0 Release](#)
- [General Information](#)
- [Known Limitations for Sun Fire Entry-Level Midrange Systems](#)

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## Firmware Documentation for Sun Fire Entry-Level Midrange (E2900/V1280/Netra 1280/Netra 1290) Systems

- *Sun Fire Entry-Level Midrange System Administration Guide* (part number 819-5086-10)
- *Sun Fire Entry-Level Midrange System Controller Command Reference Manual* (part number 819-5085-10)
- *Sun Fire Entry-Level Midrange System Firmware 5.20.0 Release Notes* (part number 819-5084-10)

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# Features Introduced in the 5.20.0 Release

This section provides a brief description of the new features in 5.20.0 for Sun Fire entry-level midrange systems.

## Supported Systems

The 5.20.0 release supports the new Netra 1290 systems. The minimum firmware release for Netra 1290 systems is 5.20.0.

## Supported Board Types

The 5.20.0 release supports UltraSPARC IV+ CPU/Memory boards – For information on upgrading systems with UltraSPARC IV+ CPU/Memory boards, refer to the *Sun Fire E2900/V1280 1.8GHz CPU/Memory Board Upgrade Requirements* (819-3242-10) and the *Sun Fire E2900 System Service Manual* (817-4054) or *Sun Fire V1280/Netra 1280 Systems Service Manual* (817-0510).

## Availability Features Receive Further Enhancements in 5.20.0

The 5.20.0 firmware release, when used on systems with domains running the Solaris 10 Operating System, provides information on Solaris-detected hardware fault events. This information is captured by Solaris software and then communicated to the system controller. The system controller reports this information through automatic diagnosis (AD) and domain (DOM) event messages.

## Commands Added or Changed for 5.20.0

The following SC command was modified in 5.20.0:

- `setupsc` – Added Log Reset and Verbose Data Reset options.

For details on this command, refer to its description in the *Sun Fire Entry-Level Midrange System Controller Command Reference Manual*.

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# General Information

## Requirements for Entry-Level Midrange Systems

Sun Fire E2900 systems require 5.17.0 firmware or greater and the Solaris 8 2/04 or Solaris 9 4/04 operating environments as the minimum Solaris releases. Sun Fire E2900 systems and Sun Fire V1280 systems with UltraSPARC IV+ CPU/Memory boards or PCI-X I/O boards (or both) require a minimum release of 5.19.0 firmware and compatible releases of the Solaris 10 or Solaris 9 operating system (when available) as the minimum Solaris releases.

**TABLE 1** Minimum Firmware and Software Versions Supported on Entry-Level Midrange Systems

Systems	Minimum Firmware Release	Minimum Solaris 8 Operating System	Minimum Solaris 9 Operating System	Minimum Solaris 10 Operating System
<b>Sun Fire E2900 Systems</b>	5.17.0 firmware	Solaris 8 2/04	Solaris 9 4/04	Solaris 10
<b>Sun Fire V1280/Netra 1280 Systems</b>	5.13.001x firmware	Solaris 8 2/02	Solaris 9 4/03	Solaris 10
	5.17.0 firmware	Solaris 8 2/04	Solaris 9 4/04	
<b>Netra 1290 Systems</b>	5.2.0.0 firmware		Solaris 9 9/05	Solaris 10 1/06

Certain hardware components require minimum firmware revisions in midrange entry-level systems, as follows:

- UltraSPARC IV CPU/Memory boards require 5.17.0 firmware or greater.
- UltraSPARC IV+ CPU/Memory boards require 5.19.0 firmware or greater.

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**Note** – Entry-Level midrange systems with SC V2s (but without UltraSPARC IV CPU/Memory boards) can be downgraded from 5.17.0 (or greater) to 5.13.001x firmware releases, but note that those earlier releases will not support features introduced in 5.17.0, 5.18.0, 5.19.0, or 5.20.0.

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## Sun Fire Link Interconnect Supported On Solaris 8 and Solaris 9 Operating Systems Only

In order to use the Sun Fire Link interconnect with 5.20.0 firmware, you must use either Solaris 8 or Solaris 9 operating systems.

# Firmware Upgrade and Downgrade

Instructions for updating firmware (upgrade and downgrade) are provided in the *Sun Fire Entry-Level Midrange System Administration Guide*.

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## Known Limitations for Sun Fire Entry-Level Midrange Systems

This section describes only those bugs with potentially significant impact. The README file lists all bugs, including those seen only internally at Sun.

### Change POSIX Time Zones 2007 Transition Dates – U.S. Energy Policy Act of 2005 (BugID 6369788)

New Daylight Saving Time (DST) rules come into effect (depending upon time zone) on Sunday March 11, 2007. For example, In 2006 Pacific Standard Daylight Saving Time (PDT) starts on Sunday April 2, and ends on Sunday October 29. In 2007 PDT starts on Sunday March 11, and ends on Sunday November 4.

The DST rules have changed due to the U.S. Energy Policy Act of 2005 with changes beginning in 2007. A subset of these changes were instituted in 2006 in conjunction with the Australian Commonwealth Games.

As a reminder, the system controller (SC) will issue reboot warning messages on SC consoles, printing once a day starting on January 1, 2007. For example,

WARNING: SC was booted in year 2006, and SC current year is 2007. Please reboot the SC to get the current Daylight Saving Time rules.

To load the new DST rules, reboot the SC between January 1, 2007 and Sunday March 11, 2007.



## OBP show-post-results and ScApp showboards Output for I/O Type Do Not Match (BugID 6305912)

The I/O type of some boards in entry-level midrange systems can be reported differently by OBP and ScApp. For example,

POST shows the I/O board as PCI+ :

```
...  
/N0/IB6 On PCI+ I/O Board      Active  Passed  
...
```

The ScApp showboards command shows the same I/O board as PCIX:

```
...  
Board 6, Type: PCIX IO  
port 24 - Status = Pass, Type: PCIX IO  
port 25 - Status = Pass, Type: PCIX IO  
...
```

When in doubt, rely on the board type reported by ScApp.

## Upgrade of Firmware Changes Connection Type (BugID 5060748, 6255332)

If you change the connection type after updating firmware on entry-level midrange systems from 5.17.x, 5.18.x, 5.19.x, or 5.20.x to 5.13.x, then the new connection type (selected in 5.13.x) is not guaranteed once you update firmware back to 5.17.x, 5.18.x, 5.19.x, or 5.20.x. If you subsequently update the firmware to 5.17.x, 5.18.x, 5.19.x, or 5.20.x from 5.13.x, the original connection type that you had in 5.17.x, 5.18.x, 5.19.x, or 5.20.x before the change to 5.13.x will be restored.

**Workaround:** Set the connection type explicitly (using the `setupnetwork` command) to ensure system security.

```
sgcn_output_line(): OBP console
blocked; message data lost (BugID
4939206)
```

A message indicating that there are dropped console messages is displayed when data is being provided by Solaris software or by the OpenBoot PROM faster than the system controller can write it to the console.

**Workaround:** None.

## Power Failure May Corrupt SEEPROM Contents (BugID 5093450)

If a power failure and SC reboot occurs during an add segment operation, one or more SEEPROM segments may become corrupted upon a reboot. However, even though these error messages display, the availability of the domains is not affected.

**Workaround:** None.

## prtdiag Still Shows the Previous USIV+ Processor Speed After DR In USIV+ Board With Different Speed (BugID 6372446)

On Sun Fire E2900 systems containing UltraSPARC IV+ CPU/memory boards, the `prtdiag` command can report an incorrect speed if the command is executed after a DR operation that includes a change of processor speeds.

**Workaround:** Kill and then restart the `picld` daemon. For example,

```
# pkill picld
# /usr/lib/picl/picld
```

```
panic:recursive mutex_enter, Then  
panic:panic sync timeout After cfgadm  
unconfigure N0.SB0::mem (BugID 6379866)
```

In some systems using UltraSPARC IV+ CPU/memory boards, the use of this command,

```
# cfgadm -c unconfigure N0.SB0::memory
```

can lead to system panics.

**Workaround:** Apply the appropriate patches to your Solaris OS.

```
SBBC Reset Reason(s): Peer Reset,  
Watchdog Reset (BugID 6412546)
```

Opening multiple remote connections (such as SSH) to the SC can cause the SC to reset. Crashes appear to be more likely when multiple remote connections are running at the same time as performing domain reconfiguration (DR) operations.

**Workaround:** Limit the number of remote connections to the SC, especially during DR operations.

