



# Sun Fire™ X2100 Server Release Notes

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For the latest version of these release notes and other Sun Fire™ X2100 Server documentation, visit the following URL:

[http://www.sun.com/products-n-solutions/hardware/docs/Servers/Workgroup\\_Servers/x2100/index.html](http://www.sun.com/products-n-solutions/hardware/docs/Servers/Workgroup_Servers/x2100/index.html)

Please note the following issues and considerations for the Sun Fire X2100 Server.

## Hardware/BIOS Issues

- [“Power LED Issues” on page 2](#)
- [“SATA Hot Plug for Windows XP OS Only” on page 2](#)
- [“Initializing the Boot Sector on the RAID Device” on page 2](#)
- [“Cannot Run the Pc-Check Diagnostics Program From a USB Drive” on page 3](#)
- [“Serial Console Redirection” on page 3](#)
- [“SMDC Console Redirection is not Currently Supported” on page 3](#)
- [“Maximum CPU Speed” on page 4](#)

## Linux-specific Issues

- [“Linux and Solaris OS Might Require Changes to `Xorg.conf`” on page 4](#)
- [“SLES 9 Dual Core Processor and SP Version” on page 4](#)
- [“SLES 9 \(SP 2\) 64-bit Dual Core Processor Panics with 4 GB Memory” on page 5](#)
- [“SLES 9 32-bit Will Only Use a Single Core With a Dual Core Processor” on page 5](#)
- [“Keyboard Stuttering With Red Hat Linux OS” on page 7](#)

## Solaris-specific Issues

- [“Lower USB Connector and Solaris 10 HW1” on page 7](#)
- [“Linux and Solaris OS Might Require Changes to `Xorg.conf`” on page 8](#)

## Windows-specific Issues

- [“Windows Installation With a KVM switch” on page 8](#)

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# Hardware/BIOS Issues

The following issues are related to the Sun Fire X2100 Server hardware or BIOS. These issues apply regardless of the operating system installed, unless otherwise stated.

## Power LED Issues

The following issues are related to the power LED:

- The system power LED will not turn off after an abnormal system shutdown, particularly during an operating system installation.
- The IPMI command **chassis power off** does not extinguish the power LED. To reset the power LED, disconnect the AC power cord, then reconnect it and power on the server.
- The system power LED remains on after shutdown in Solaris 10.

## SATA Hot Plug for Windows XP OS Only

SATA hot plug is supported only for the Windows XP Operating System (OS). If you wish to change hard disks with Linux or Solaris, you must reboot the system.

## Initializing the Boot Sector on the RAID Device

The BIOS RAID function does not initialize the boot sector on the RAID device.

To initialize the boot sector:

1. **Boot the server with the Supplemental CD.**
2. **Choose option 4, "Exit to DOS" from the main menu.**
3. **Type the `fdisk` command at the prompt.**
4. **When the display comes up, choose option 4 (Select other disk).**  
The system will then ask if you want to initialize the other disk.
5. **Choose Yes.**

## Cannot Run the Pc-Check Diagnostics Program From a USB Drive

The Pc-Check Diagnostics program on the Sun Fire X2100 Server Supplemental CD can be run either from the onboard DVD drive (if installed on the server) or from a remote server. Pc-Check will not work with an external USB CD-ROM drive.

See the Diagnostics chapter of the *Sun Fire X2100 Server User Guide* for more information on Pc-Check Diagnostics.

## Serial Console Redirection

To use serial console redirection, change the BIOS setting first, as follows:

1. **Connect a local keyboard and monitor to the Sun Fire X2100 Server.**
2. **Reboot the server.**
3. **Press F2 when you see the Sun logo screen.**
4. **Select Advanced BIOS Features ->Console Redirect ->Enabled over COM1.**

After the COM port is enabled, you can run an xterm window for console redirection if you are running a Solaris or Linux operating system.

To edit BIOS settings from the remote console:

1. **Reboot the server.**
2. **Press TAB-2 (both keys simultaneously) to invoke the BIOS Setup utility.**

This has the same result as pressing the F2 key in a local setup.

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**Note** – With a tip setup, you may need to press ESC twice when moving to a higher level window in the BIOS Setup utility.

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## SMDC Console Redirection is not Currently Supported

It is expected that later BIOS and firmware updates will allow this to be supported soon.

## Maximum CPU Speed

The CPU speed shown in `/proc/cpuinfo` is not always the processor maximum speed. As a result of the AMD PowerNow power saving functionality of the processor, the speed shown in `/proc/cpuinfo` will not always be the maximum speed of the processor.

If you need to display the maximum processor speed, enter the command `/etc/init.d/cpuspeed stop` before displaying the `cpuinfo` contents.

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## Linux-Specific Issues

The following issues apply when a specific version of the Linux operating system is installed on the Sun Fire X2100 Server.

### Linux and Solaris OS Might Require Changes to `Xorg.conf`

If a Linux or Solaris OS does not recognize your monitor, you might need to edit the `Xorg.conf` file to match the parameters supplied with your monitor.

### SLES 9 Dual Core Processor and SP Version

If you have an Sun Fire X2100 Server with a dual core processor (e.g., model 175), you must use SLES 9 (SP 2) 32-bit or 64-bit. SLES 9 (SP 0) and (SP 1) 32-bit and 64-bit on a dual core processor will hang or panic the kernel.

## SLES 9 (SP 2) 64-bit Dual Core Processor Panics with 4 GB Memory

If you have an Sun Fire X2100 Server with a dual core processor with 4GB of memory, SLES 9 (SP 2) 64-bit will panic the kernel.

To avoid this issue, you can either use the 32-bit kernel versions of SLES 9 (SP 2), change the memory configuration to less than 4GB memory, or use the following workaround to disable memory remapping:

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**Note** – If you disable the memory remapping with 4 GB installed, the amount of memory available will be reduced to 3.5 GB.

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To disable memory remapping:

1. Press the F2 during boot when you see the SUN logo.
2. Choose Advanced Chipset Features ->DRAM Configuration
3. Disable both S/W Memory hole remapping and H/W memory hole remapping.
4. Reboot the server.

## SLES 9 32-bit Will Only Use a Single Core With a Dual Core Processor

SLES 9 32-bit (SP 1 or SP 2) on a dual core processor system will only use a single core. For SP 2, there is a patch on the Supplemental CD that fixes this issue. See the following procedure for instructions on installing this patch.

To install the patch for SLES 9 (SP 2) 32-bit:

1. Do one of the following, depending on whether you have already installed SLES 9 (SP 2):
  - *If you have not installed SLES 9 yet:* Install SLES 9 (SP 2) from the distribution media.
    - Make sure you install the kernel source RPMs.
    - If there isn't an explicit checkbox for this during package selection, use the module search feature in the SLES installer and search for "kernel-source".  
The kernel source package should be listed in the search results; check it so that the source RPMs are installed.

- If you've already installed SLES 9 (SP 2) without the source RPM:
  - Use YaST2's "Install and Remove Software" feature to select the kernel source and gcc RPMs and install them.
  - Alternatively, you can install the source RPM manually by installing CD #2 from the SLES 9 (SP 2) distribution.

The source RPM is in `suse/i586/kernel-source-version.i586.rpm`.

Where *version* is the version of the kernel.

2. Login to the server as root (superuser).
3. With the kernel source RPMs installed, change directory to `/usr/src/linux-version` and copy the included patch (`sun.patch`) from the Supplemental CD to the `/usr/src/linux-version` directory.

```
# cp /suppl_x.x/sun.patch /usr/src/linux-version/
```

Where `suppl_x.x` is the directory on the *x.x* version Supplemental CD and *version* is the version of the kernel.

4. Apply the patch to the kernel source by executing the following command.

```
# patch -p1 -g0 --verbose --dry-run < sun.patch
```

This will test the patch without making any changes to the installed kernel source.

5. Verify that the patch program does not report any failures (it may warn about carriage returns but that is not critical).  
If any failures are reported, try to reinstall SLES 9, then repeat this procedure.
6. Assuming that there aren't any failures, apply the patch for real by executing the same command without the `--dry-run` option.

```
# patch -p1 -g0 --verbose < sun.patch
```

7. Copy the file `/proc/config.gz` to `/usr/src/linux-version`, unzip `config.gz`, and rename the resulting config file to `.config`.

```
# cp /proc/config.gz /usr/src/linux-version  
# cd /usr/src/linux-version/  
# gunzip config.gz  
# mv config .config
```

8. Execute the following `make` commands:

```
# make oldconfig
# make all
# make modules_install
# make install
```

A new kernel replaces the old kernel as a boot option on the grub boot loader menu.

9. Reboot the system and select the new kernel when grub starts.

## Keyboard Stuttering With Red Hat Linux OS

Sometimes the terminal will show several repeated letters on the terminal when only one letter is typed. The extra letters are recognized by the system, so the input given might be incorrect.

The problem can be resolved by disabling the keyboard repeat function as follows:

1. Under the Red Hat at the corner of the screen, chose Preferences ->Keyboard.
2. Uncheck Keyboard repeats when key is held down.

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## Solaris-specific Issues

The following issues apply when the Solaris 10 Operating System is installed on the Sun Fire X2100 Server.

### Lower USB Connector and Solaris 10 HW1

If you are running the Solaris 10 (HW1) operating system on your Sun Fire X2100 Server, the lower USB connector on the front of the server will not function. Use the top USB connector.

To resolve this issue, install patch ID 118844-20, when it is available. You can obtain this patch at:

<http://sunsolve.sun.com>

## Linux and Solaris OS Might Require Changes to `Xorg.conf`

See details on this issue in [“Linux and Solaris OS Might Require Changes to `Xorg.conf`” on page 4.](#)

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## Windows-specific Issues

The following issue applies when a Windows operating system is installed on the Sun Fire X2100 Server.

### Windows Installation With a KVM switch

When performing a Windows installation with a keyboard, video, mouse (KVM) switch, you must keep the KVM switch set to the same system until the installation begins formatting the disk. If you switch to another system and then back, the system will not recognize the USB keyboard and mouse. Once the formatting has begun, you can switch to other systems.