



# Sun™ Ultra™ 45 and Ultra 25 Workstations Product Notes

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Sun Microsystems, Inc.  
[www.sun.com](http://www.sun.com)

Part No. 819-1893-15  
January 2008, Revision A

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# Sun Ultra 45 and Ultra 25 Workstations Product Notes

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The *Sun Ultra 45 and Ultra 25 Workstations Product Notes* contain late-breaking information about changes to Sun™ Ultra™ 45 and Ultra 25 hardware, software, and documentation. These product notes include:

- “Hardware Information” on page 1
- “Supported Media Types for DVD Dual Drive” on page 2
- “Supported Firmware and Software Versions” on page 4
- “Required Patches” on page 5
- “Known Issues” on page 6
- “Technical Support” on page 9
- “Documentation Errata” on page 9

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**Note** – All current Sun Ultra 45 documentation is available at:  
<http://docs.sun.com/app/docs/prod/ultra.work#hic>

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## Hardware Information

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**Note** – Before removing or installing any hardware, software, or firmware components, read all of these product notes, and the service documentation for that component.

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**Note** – Before removing or installing any hardware components, read all of the contents of the *Sun Ultra 45 and Ultra 25 Workstations Safety and Compliance Guide*, 819-2785.

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# Supported Media Types for DVD Dual Drive

The DVD dual drive is capable of reading and writing to the following media types:

Reads from:

- CD 700 Mbyte
- CD-R 700 Mbyte
- CD-RW 700 Mbyte
- DVD 4.7 Gbyte
- DVD-R 4.7 Gbyte
- DVD+R 4.7 Gbyte
- DVD-RW 4.7 Gbyte

Writes to:

- CD-R 700 Mbyte
- CD-RW 700 Mbyte
- DVD-R 4.7 Gbyte
- DVD+R 4.7 Gbyte
- DVD-RW 4.7 Gbyte

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# Sun XVR-300 Graphics Accelerator Support

## Installing the Sun XVR-300 in the PCIE0 Connector

If you install a Sun XVR-300 graphics accelerator in the x8 connector, PCI-E0, (physical slot No. 2), you must install OpenBoot™ PROM version 4.25.7 or a subsequent compatible release. This is necessary for both the Ultra 25 and Ultra 45 workstations.

## Number of Supported Graphics Accelerators and Minimum OS Versions

Up to two Sun XVR-300 graphics accelerators are supported on Sun Ultra 45 and Ultra 25 workstations. The graphics accelerators require Solaris™ 10 1/06 Operating System (OS) or later, or Solaris 9 9/05 HW OS or later.

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**Note** – You must install packages needed for the card to run on Solaris 10 1/06 or later from the software CD-ROM that ships with the Sun XVR-300. Refer to the *Sun XVR-300 Graphics Accelerator User's Guide*, 819-6651.

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## Improving Performance of Cards Installed in Connector PCIE2

If you are experiencing any problems with cards installed in connector PCIE2, perform the following procedures.

1. **Uninstall the software driver for the card.**
2. **Move the card to connector PCIE1.**
3. **Reinstall the software driver while the card is installed in connector PCIE1.**

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**Note** – You can leave the card in PCIE1 or move it back to PCIE2.

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## Installing DIMMs in the Same Bank

All DIMMs installed *in the same bank* must be from the same DIMM manufacturer, and have the exact same size and configuration.

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# Keyboard and Mouse Connections with Sun XVR-2500

When the workstations were first released, the keyboard had to be connected to the back panels. Later, support was added so that the keyboard could be connected to the front panel USB ports.

However, if you have installed a Sun XVR-2500 graphics accelerator in either PCIE1 or PCIE2, you must connect the keyboard to the back panel. The mouse can be connected to the front panel USB connector.

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# Supported Firmware and Software Versions

The following firmware and software versions are supported in this release of the Sun Ultra 45 and Ultra 25 workstations:

- Solaris 10 1/06 Operating System (OS)
- Solaris 9 9/05 HW Operating System (OS)
- Java™ Enterprise Systems (Java ES) 2005Q1 Software
- Sun Management Center 3.6 Version 2 Add-On Software (Ultra 45)
- Sun Management Center 3.6 Version 2 Update 1 Add-on Software (Ultra 25)
- SunVTST™ 6.1 PS1

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**Note** – Sun Management Center downloads are available from:  
<https://www.sun.com/download/>

Use the A-Z Index to find the latest Sun Management Center Add-on software.

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**Note** – Before installing any software onto a Sun Ultra 45 or Ultra 25 hard drive, read the documentation for that software.

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# Required Patches

This section describes the patches available for the Sun Ultra 45 and Ultra 25 workstations. Patches are available from <http://www.sun.com/sunsolve>. The following list of mandatory patches are loaded on the hard drive. The mandatory patches must be installed on your workstation should you modify or reinstall the OS. Other patches may be installed on your workstation as needed.

Mandatory patches:

- 118557-03 or greater
- 118822-30 or greater
- 119582-04 or greater
- 119981-09 or greater
- 119578-18 or greater
- 120812-13 or greater
- 120928-07 or greater
- 121693-03 or greater
- 122081-01 or greater
- 121686-01 or greater (For the Sun Ultra 45 Workstation)
- 121687-01 or greater (For the Sun Ultra 25 Workstation)

Recommend patches:

- 122027-01 or greater
- 121302-01 or greater
- 120887-05 or greater

If you have cards installed in your workstation, refer to the documentation and README files for each card to determine if additional patches need to be installed.

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**Note** – Before contacting Sun for support, ensure that the mandatory patches are installed on your workstation. In addition to installing these patches, check the SunSolve<sup>SM</sup> web site on a regular basis for the availability of new patches.

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## ▼ To Apply Patches to the Boot Disk

### 1. Determine whether the patches have been installed on your system.

For example, using the `showrev` command, type the following:

```
# showrev -p | grep "Patch: 118822"
```

- If you see patch information listed for the queried patch, and the dash extension (the last two digits) matches or exceeds the required version, your system has the proper patches already installed and no further action is required.

For example, if patch 118822-23 or later is installed, your system has the required version of this patch.

- If you do not see patch information listed for the queried patch, or if the dash extension precedes the required version, go to [Step 2](#).

For example, if no version of the 118822 patch, or a version with an extension of -22 or earlier is installed, you must download and install the new patch.

**2. Go to <http://www.sun.com/sunsolve> to download the patches.**

Using the SunSolve PatchFinder tool, specify the base patch ID number (the first six digits) to access the current release of a patch.

**3. Follow the installation instructions provided in a specific patch's README file.**

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**Note** – Additional information about the latest patches may be found at: <http://sunsolve.sun.com>

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## Known Issues

This section describes issues that are known to exist at the time of this release of the Sun Ultra 45 and Ultra 25 workstations.

### Correctable Fabric Errors Occur Between the Sun XVR-300 and PLX Switch

Systems equipped with the Sun XVR-300 graphics accelerator might indicate that a correctable error has occurred. This error is harmless, and does not compromise data integrity.

To correct this issue, append the following lines to the `/etc/system` file:

```
set pci:pci_aer_ce_mask=0x11C1
set pci:pci_expected_ce_mask=0x11C1
```

Reboot the system to implement the changes.



Sometimes after adding these lines to the `/etc/system` file, the following message appears during Solaris boot:

```
sorry, variable 'pcie_expected_ce_mask' is not defined in the kernel
```

If you experience this error message, delete the final line in the `/etc/system` file (`set pcie:pcie_expected_ce_mask=0x11C1`), and reboot the system.

## General Functionality Issues

[TABLE 1](#) lists features that are not available at the time of this release of the Sun Ultra 45 and Ultra 25 workstations.

**TABLE 1** General Functionality Issues for the Sun Ultra 45 and Ultra 25 workstations

Feature	Comment
Gnome <code>xmms</code> audio player and warning message	This message is an <code>xmms</code> application error. These warnings can safely be ignored, and will not affect audio functionality.
Sun XVR-2500 graphics accelerator support	In limited cases when a system with a Sun XVR-2500 graphics accelerator card, part number 375-3292, is transported without being repacked into the original system packaging, the card might fail. Use the original system packaging, or equivalent, to transport the system.  This limitation does not apply to Sun XVR-2500 graphics accelerators, part number 375-3454.
Optical media write support	Cannot write to DVD+RW media, use DVD-RW, DVD-R or DVD+R media. Install patch ID No. 120887-05 or greater. Ignore subsequent appearance of console message "skipping finalizing".

## Specific Issues and Workarounds

[TABLE 2](#) and [TABLE 3](#) list known issues at the time of this release for which a change request ID (CR ID, formerly known as a bug ID) has been assigned. The tables also list possible workarounds for these issues.

For more information about these CRs, visit the SunSolve web site.

**TABLE 2** Specific Issues and Related CR IDs for the Sun Ultra 45 and Ultra 25 Workstations

CR ID	Description	Workaround
6390526	USB 2.0 hub is lost to OpenBoot PROM after Solaris EHCI driver is run. This change will persist after rebooting.	None.
4905815	<code>prtfru</code> cannot get manufacturer or serial number information from SPD region of commodity DIMMs made by manufacturers who do not program the information in the DIMM SPD segment.	Power off and open system to check DIMM manufacturer or serial numbers.
6453303	Rebooting the system using <code>boot -r</code> may result in a kernel panic if an Emulex-based Fibre Channel card is installed in another PCI slot in a system with a Sun XVR-100 graphics accelerator installed.	None
6317659	During a resume the system may hang.	To recover from the hang, power cycle the system and type <code>boot</code> to avoid the resume cycle.
6323576	System may intermittently fail if rebooted remotely with the following <code>issue-port-enable</code> failed message on the console	<ul style="list-style-type: none"> <li>• Type <b>reset-all</b> at the console or</li> <li>• Power cycle the system</li> </ul>
6351895	You might see the following console message during a system boot: <code>WARNING:ppm_init_cb: ppm domain domain_diskfet will be offline</code> Should this happen, some of the I <sup>2</sup> C devices will be missing from the device tree, including FRUID PROMs. NOTE: There is no functional impact except that hard disks will not be powered off in power saving mode.	Reboot or power cycle the system
6360436	In power saving mode, the front panel LED might not blink.	No workaround at this time.
6368667	The front USB 2.0 port sometimes functions at USB 1.1 speeds, even when there are no USB 1.1 devices attached.	No workaround at this time.
6379460	No support for two Sun XVR-100 graphics accelerators in PCI-X slots.	Only one Sun XVR-100 graphics accelerator is supported in the system (either PCI-X slot) at this time.

**TABLE 3** Specific Issues and Related CR IDs for the Sun Ultra 25 workstation

CR ID	Description	Workaround
6415504	EPA compliance fails due to CPU powering up if using CDE.	Use Java Desktop System instead of CDE.  If you choose to use CDE, add the following line to <code>/etc/power.conf</code> , and then run <code>pmconfig(1M)</code> :  <code>device-thresholds /SUNW,UltraSPARC-IIIi@0,0 \ (2147483647s 15m)</code>
6421603	If you reinstall Solaris 10 1/06 from install media, you must install the entire distribution plus OEM support plus all patches, to set up CPU power management.	If you reinstall S10 1/06, and power management is not working, install package <code>SUNWus.u</code> from the install media at <code>/cdrom/sol_10_106_sparc/s0/Solaris_10/Product</code> . Then reboot the system.  Alternatively, install Solaris 10 1/06 Entire Distribution plus OEM support from the Solaris 10 Media Kit, plus patches.

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## Technical Support

If you have any technical questions or issues that are not addressed in the Sun Ultra 45 and Ultra 25 workstations documentation, contact your local Sun Services representative. For customers in the U.S. or Canada, call 1-800-USA-4SUN (1-800-872-4786). For customers in the rest of the world, find the World Wide Solution Center nearest you by visiting the web site:

<http://www.sun.com/service/contacting/solution.html>

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## Documentation Errata

This section describes changes to the Sun Ultra 45 documentation.

For the latest release version of these and other manuals, check the web site:

<http://docs.sun.com/app/docs/prod/ultra45>

## Sun Ultra 45 and Sun Ultra 25 Workstations Installation Guide (819-1892-10)

Table 1-5 of this installation guide incorrectly describes the DB-9 serial ports as “RS-432.” The DB-9 ports are RS-232.

## Sun Ultra 45 Workstation Getting Started Guide (819-1894-11)

The second row, column two of Table 1-2, currently reads:

“Choose Solaris 8 HW 5/03 Operating System release.”

The text should read:

“Choose Solaris 10 Operating System release.”

## Sun Ultra 45 Workstation Installation Guide (819-1891-10)

The following information is supplemental:

### Getting Started With Preinstalled Software

#### *NetBeans 4.1*

NetBeans™ IDE 4.1 installation location: `/opt/netbeans-4.1`

To run the IDE, type: `/opt/netbeans-4.1/bin/netbeans`

To uninstall the IDE, type: `/opt/netbeans-4.1/_uninst/uninstaller`

#### *Java Studio Creator 2004Q2*

Java Studio Creator 2004Q2 includes the following:

- Sun Java Studio Creator development environment
- Sun Java System Application Server Platform Edition
- PointBase Embedded Database

Installation location: `/opt/Creator`

Installation log: `/opt/Creator/install.log`

Application Server Information:

- Admin user name: admin
- Admin user password: adminadmin
- Admin port: 14848

More port Information: `/opt/Creator/system/install.properties`

## *Java Studio Enterprise 8*

Sun Java Studio Enterprise 8 will be installed in the following location:

`/opt/sun/jstudio_ent8`

The following features are included:

- Sun Java Studio Enterprise 8
- Sun Java System Application Server 8.1 UR2 Platform Edition
- Collaboration Runtime

Installation Summary:

- Total size: 273.9 Mbyte
- Product: `/opt/sun/jstudio_ent8`
- IDE: `/opt/sun/jstudio_ent8/ide`
- Application Server: `/opt/sun/jstudio_ent8/AppServ8.1UR2`
- Application Server admin username: admin
- Application Server admin password: adminadmin
- Collaboration Runtime: `/opt/sun/jstudio_ent8/CollabRuntime`

## *Sun Studio 11*

The installation and licensing log files are located at: `/var/sadm/install/logs`

To view a log file, type at the prompt:

```
% cd /var/sadm/install/logs;more filename
```

The installed product contains Update Notification, a feature that checks a web service at Sun Microsystems and informs you of relevant updates. Please refer to the Release Notes for further information.

If you installed any component of the Sun Studio 11 developer tools on a network server, to send getting started information to the developers who use the network-installed software, you can use the email template:

```
/install-directory/SUNWspro/READMEs/email_template.txt
```

You should now set your PATH to include:

```
install-directory/SUNWspro/bin
```

For instance, if <install-directory> is /opt (the default) for Bourne-family shells (sh, bash, ksh): \$ PATH=/opt/SUNWspro/bin:\$PATH

The export PATH for C-family shells (csh, tcsh):

```
% setenv PATH /opt/SUNWspro/bin:$PATH
```

Then, to run the IDE, type at the prompt: % sunstudio

## Sun Ultra 45 Workstation Service and Diagnostics Manual (819-1892-11)

The following information has changed and been improved in the -11 version of the service manual. For the latest version of this manual go to:

<http://docs.sun.com/app/docs/prod/ultra45.ws#hic>

### Changes to Tables

- Table 1-1 – Incorrectly states that two Sun XVR-100 graphics accelerators are supported. Only one Sun XVR-100 is supported.
- Table 3-1 – OpenBoot PROM Memory Checks and Actions
- Table 12-2 – OpenBoot PROM Messages and Their Meaning
- Table B-4 – Declared Noise Emissions: ISO 9296

### Examples

- 9.3.1.1 – `fmddump -v` command
- 9.3.2.1 – `fmadm config` command
- 9.3.3 – Using the `fmstat` command
- 12.3.2 – OpenBoot Diagnostics Menus

Section 3.2.4, “Installing the DIMMS”, the Note was incorrect. The correct Note is shown here:

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**Note** – If your workstation has two CPUs and four DIMMs, the workstation operates most efficiently with two DIMMs per CPU. DIMM connectors are color-coded blue and black. You must install DIMMs in pairs in the same color connectors. DIMMs in the same bank must be from the same vendor and must be identical in size.

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## Changes to Figures

The following illustrations were corrected in the -11 version of the *Sun Ultra 45 Workstation Service and Diagnostics Manual*:

- Figure 3-1 – Motherboard With Component Connections
  - Motherboard connector J3 should connect to the I/O module and connector J11 should connect to the DVD dual drive
- Figure 3-14 – Reconnecting Cables to the Motherboard
- Figure 5-3 – Removing the Power Supply
- Figure 5-4 – Installing the Power Supply
- Figure 5-5 – Power Supply Cable Connections at Motherboard and Hard Drive Backplane
- Figure C-2 – Sun Ultra 45 System Diagram

## Other Changes

In the functional specifications chapter:

The declared acoustic levels are shown in [TABLE 4](#), where 1B = 10dB..

**TABLE 4** Declared Acoustic Levels

<b>Workstation</b>	<b>Idle</b>	<b>Operating</b>
Sun Ultra 45	5.0 B <sup>1</sup>	5.1 B
Sun Ultra 25		

