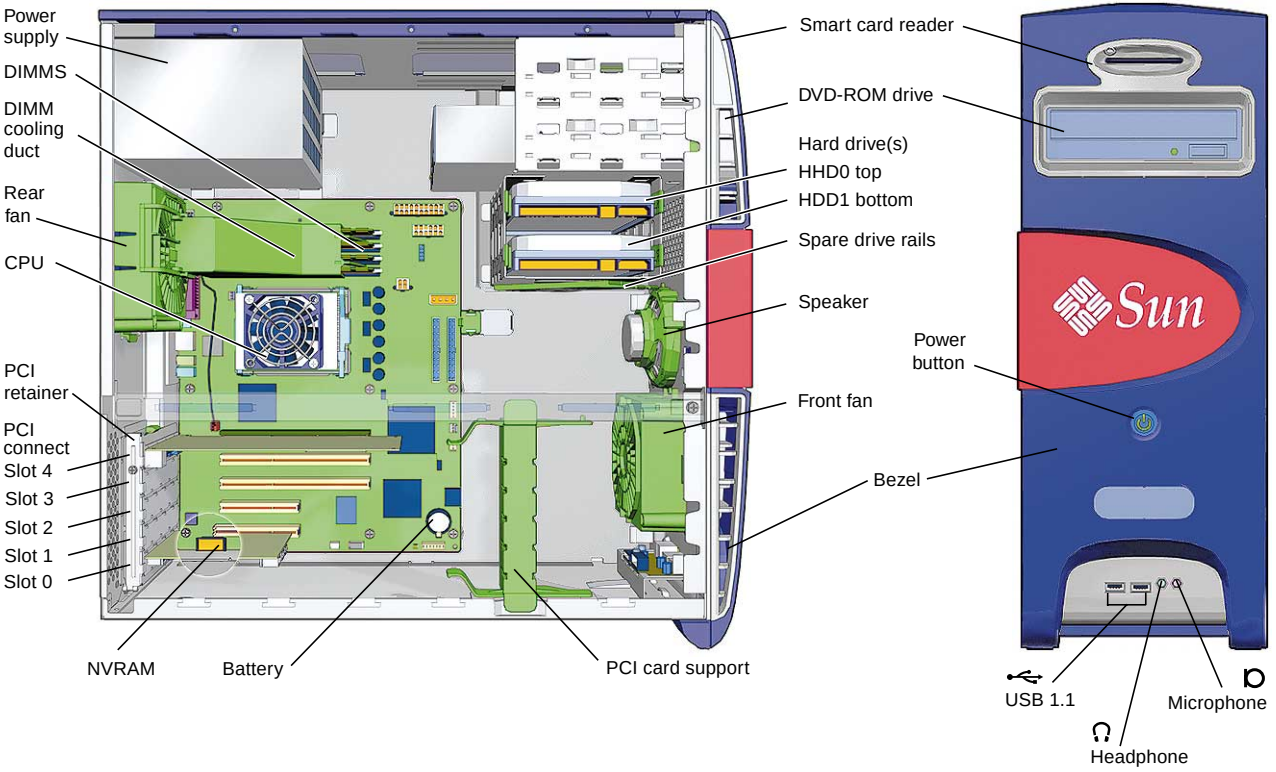
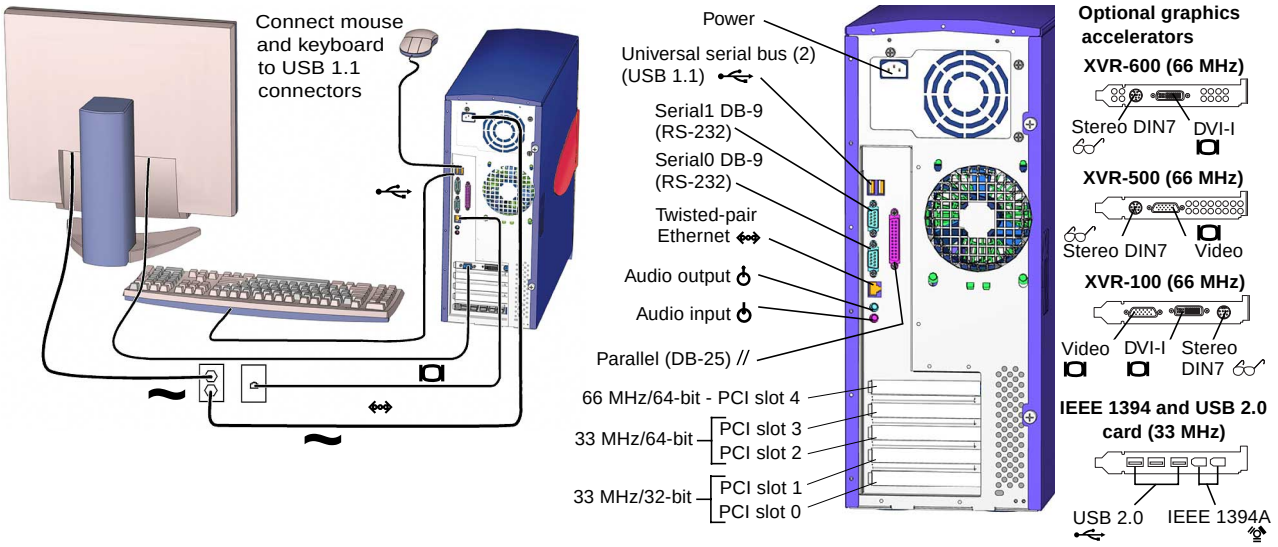
Sun Blade™ 1500 Workstation Troubleshooting Card



Translations of Troubleshooting Card Information

Some information in this card is included in the *Sun Blade 1500 Workstation Getting Started Guide*, 816-7565, which is available in French, German, Italian, Japanese, Korean, Spanish, Swedish, Simplified Chinese, and Traditional Chinese languages.



Information to Collect Before Calling a Sun Service Support Center

System Configuration Information	Write Your Information Here
Sun service contract number	
System model (Example: Sun Blade 1500)	
Solaris™ operating environment and release that you are using (In a terminal window, type: `cat /etc/release` .)	
System serial number (Find the label on the left side of the bezel.)	
Peripherals attached to the system (Example: printer, external hard drive)	
Email address and phone number for you and a secondary contact Street address where the system is located	
Superuser password	(Do not write your password.)
Summary of problem and the work being done when the problem occurred	
Other Useful Information (Displayed when you click the CPU disk button on the CDE toolbar and select Hosts→System Info.)	
IP address	
Workstation name (System host name)	
Network or internet domain name	
Proxy server configuration	

Troubleshooting Procedures

Symptom	Troubleshooting
Workstation powers on, but the monitor does not.	1. Verify that the Power button for the monitor is turned on. 2. Verify that the monitor power cord is connected to a wall outlet. 3. Does the wall outlet have power? Test the wall outlet by plugging in another device.
System stops booting after the ok prompt is displayed.	At the ok prompt type: **boot** If the system does not boot, contact your system administrator or a Sun Service Support Center.

Symptom	Troubleshooting
CD or DVD does not eject from the media tray when you press the Eject button.	**User-Level Procedures** 1. Move the mouse or press any key on the keyboard. The drive might be in low-power mode. 2. Attempt to eject the CD using the Eject button on the media drive. 3. In a terminal window type: **`eject cdrom`** 4. If Step 3 does not work, verify that the CD is not mounted. In a terminal window, type: **`df | grep cdrom`** If the CD is mounted, text similar to this example will be displayed: `/cdrom/wzi-2230 (/vol/dev/dsk/c0t2d0/wzi-2230): 0 blocks 0 files` 5. Unmount the CD by typing: **`umount`** *and the command output shown in parentheses in Step 4.* In the example above, the mount point is `wzi-2230`. You would type: **`umount /vol/dev/dsk/c0t2d0/wzi-2230`** 6. Type the command: **`eject cdrom`** **Alternate Procedure for Media CDs** 1. Right-click the mouse and select Workspace Menu→Folders→Open CDROM. A File Manager window should open. 2. Select File→Eject. 3. If the CD does not eject, use a terminal window to exit the CD directory by typing: **`cd`** 4. Try again to eject the CD from the File Manager window. If you need further assistance, contact your system administrator or a Sun Service Support Center. **System Administrator Emergency Procedures for All CDs** As superuser, stop the `vold` daemon: 1. Open a terminal window. 2. As superuser, type: **`/etc/init.d/volmgt stop`** 3. Press the Eject button on the media player. **Note:** To mount another CD, you need to start `vold` by typing: **`/etc/init.d/volmgt start`** **If the CD has not ejected using Step 3 above, complete these steps:** 1. Bring the system to the `ok` prompt. 2. Press the Eject button. If the CD still does not eject using the two processes above, there might be a cable problem or other hardware problem. Call a Sun Service Support Center for further assistance.
No video displays on the monitor screen.	1. Verify that the monitor cable is attached to the graphics accelerator connector. 2. Connect the monitor to another system. Does the monitor work when connected to the other system? 3. If you have another monitor, does it work when connected to the original system? 4. Verify that OpenBoot™ PROM defaults are set properly: a. Press and hold the Power button for 4 seconds to power off the system. b. Wait 4 seconds and power on the system. c. As soon as the Power button blinks, quickly press the Power button twice. The `ok` prompt is displayed and the system enters a safe NVRAM mode. d. Verify the settings of these OpenBoot PROM parameters: `output-device` is set to `screen` and `input-device` is set to `keyboard`. e. If the `ok` prompt does not display, or if changing the `output-device` setting does not help, contact a Sun Service Support Center.
Workstation does not power on when the front panel Power button is pressed.	Keep notes on the following situations in case you need to call service: 1. Is the Power button LED illuminated on the front of the system? Ensure that the power cord is connected to the system and to a grounded power receptacle. 2. Does the wall outlet have power? Test by plugging in another device. 3. Does the system beep when the system is powered on? Ensure that the keyboard is plugged in. 4. Test with another keyboard that you know is functional. Does the system beep when you connect the keyboard and power on the system? 5. Does the monitor sync within 5 minutes after power on? (The green LED on the monitor stops flashing and remains illuminated.) **Note:** If the monitor syncs but does not display an `ok` prompt or a login window, the system might not be passing POST. Call a Sun Service Support Center. If the system passes POST and displays the `ok` prompt but does not boot Solaris, type: **`boot`**

Symptom	Troubleshooting
Hung application. Application won't respond.	**Procedure 1: Using the Host Workstation** 1. From the CDE toolbar, select Tools→Find Process. 2. In the Process Manager window, select the process that is hung. The name of the application or process is in the Command column. 3. Select Process→Kill. **Note:** You may be able to log in from another workstation and use these same GUI tools to save and close, or kill applications. **Procedure 2: Using a Terminal Window From Your Own Workstation** 1. To determine the ID number of the hung process, type: **`ps -ef | grep`** *process name* **Note:** First kill the last application you used when the system hung, and if necessary, kill the next most recent applications that you used. 2. To stop the process, type: **`kill -9`** *process ID* **Procedure 3: Using Remote Login or Telnet** 1. From another workstation, use a terminal window, and type either **`rlogin`** *hostname* or type: **`telnet`** *hostname* 2. Type your login ID and password. 3. From the terminal window, type: **`ps -ef | grep`** *process name* 4. Start killing processes. Type the name of the last application you were using when the system froze. Type: **`kill -9`** *process ID* After killing the processes for the last used application, look at your system to see if it is usable. If not, continue to kill processes until the system is usable or until you can shut it down and restart it. **Caution:** Be sure to log off from the remote system. Another user might be able to access your system if you do not exit the terminal window. 5. On the second workstation, type **`exit`** and close the terminal window.
Hung or frozen workstation: No response from mouse or keyboard or any application.	1. Try to access your system from a different workstation on the network. 2. From a terminal window type: **`ping`** *hostname* 3. If no response, remotely log in from another system using `telnet` or `rlogin`, and ping the system again. 4. Attempt to kill processes until the system responds. (See the procedures for "Hung Application" in this table.) **If the above procedures do not work:** **Caution:** Only experienced system administrators should use a "Stop" command. Using any "Stop" command might cause loss of core dumps, which makes it difficult to diagnose system problems. 1. Press Stop-A. If the system responds, the system displays the `ok` prompt. 2. Try to force a core file dump. At the `ok` prompt, type this command: **`sync`** **Note:** The default location for a core file deposit is: /var/crash/*hostname* 3. The Sun Service Support Center might request the core file for root cause analysis. **If the above procedures do not work:** 1. Press the Power button to power off the system. 2. Wait 20 to 30 seconds and power on the system. **Note:** When you power on the system again, you might need to run `fsck` to repair damaged links. If the system still does not function properly, contact Sun Service Support.
Keyboard or mouse does not respond to actions.	1. Verify that the mouse and keyboard cables are connected to the on-board USB 1.1 connectors on the workstation. (Do not connect the mouse and keyboard to the USB connectors on the IEEE 1394 and USB 2.0 card.) 2. Verify that the workstation is powered on and the front Power button LED is illuminated.

During the boot procedure, the system displays a network error message.	Use this procedure if the system displays these error messages:
	`Warning: timed out waiting for NIS to come up`
	`:Timeout waiting for ARP/RARP packet`
	1. From a remote system, contact the system with this command: **`ping`** *hostname*
	2. Verify with your system administrator that the network is operational.
	3. Verify that the Ethernet cable is connected between the workstation and the wall outlet or router.
	4. Try connecting another Ethernet cable. Does the new cable work?
	5. If cable changes do not help, bring the system to the `ok` prompt and verify the OpenBoot PROM settings. Most systems should be set to `diag-switch? = false` and `boot-device` set to `disk net`. For more information on OpenBoot PROM settings, see the *Sun Blade 1500 Service, Diagnostics, and Troubleshooting Manual*, 816-7564, or contact a Sun Service Support Center.

Symptom	Troubleshooting
Workstation appears to be in low-power mode, but the Power button LED does not blink.	The power-indicator LED only blinks when all workstation components are in low-power mode. A tape drive might be connected to your workstation. Because tape drives do not enter low-power mode, the power-indicator LED does not blink.

For more troubleshooting information see the *Sun Blade 1500 Service, Diagnostics, and Troubleshooting Manual* (816-7564).

Diagnostics Commands

To View	User (% or $ prompt or custom prompt)	Superuser (# prompt)	OpenBoot PROM (ok Prompt)
OpenBoot PROM settings. Default settings are not shown.	`eeprom`	`eeprom`	`printenv`
Most recent error messages.	`more /var/adm/messages`	`more /var/adm/messages`	—
Installed Solaris patches.	`showrev -p`	`showrev -p`	—

System boot dates and time system has been active.	`last`
	`psrinfo`
	`w` or `uptime`
		`last`
		`psrinfo`
		`w` or `uptime`
			—

Component and device information.	`prtconf -vp` `prtpicl`	`prtconf -vp` `prtpicl`	
List of installed replaceable components.	`prtfru`	`prtfru`	—
IDE devices.	—	—	`probe-ide`
Device tree.	—	—	`show-devs`
Device alias pathnames.	—	—	`devalias`
Boots system in single-user mode.	—	`reboot -- -s`	`boot -s`

Useful Sun Web Sites and Phone Numbers

Sun Blade 1500 Workstation Documents and Support Resources	URL or Telephone Number
PDF files for all the current Sun Blade 1500 Documents. Key documents include: *Sun Blade 1500 Service, Diagnostics, and Troubleshooting Manual*, 816-7564 *Sun Blade 1500 Workstation Getting Started Guide*, 816-7565 *Sun Blade 1500 Product Notes*, 816-7569	`http://www.sun.com/documentation/` Select the links: Additional Hardware Documentation→ Desktops & Workstations→Sun Blade Workstations. Select the Sun Blade 1500 link.
Find Solaris and other software documents here. This is also an alternative web site for some Sun Blade 1500 workstation documents. This web site has full search capabilities.	`http://docs.sun.com/`
Warranty and Contract Support contacts. Links to other service tools.	`http://www.sun.com/service/online/`
Discussion and troubleshooting forums.	`http://supportforum.sun.com/`
Support, diagnostic tools and alerts for all Sun products.	`http://www.sun.com/bigadmin/`
SunSolve: Contains links to software patches. Lists some system specifications, troubleshooting and maintenance information, and other tools.	`http://www.sunsolve.sun.com/`
Warranties for every Sun product.	`http://www.sun.com/service/support/warranty/`
Sun Service Support phone numbers.	1-800-872-4786 (1-800-USA-4Sun) Select Option 1
This web site lists international telephone numbers for Sun Service Support.	`http://www.sun.com/service/contacting/solution.html`

Powering Off the Workstation

Method	Procedure
Method 1	1. Close and save any open applications. 2. Press the Sleep key (or press and release the system Power button). 3. Select Shutdown.
Method 2	1. Close and save any open applications. 2. As superuser, type: **`shutdown`**

Sun Welcomes Your Comments

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`docfeedback@sun.com`

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