

SunPCi II[™] 2.3.2 Product Notes

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SunPCi II 2.3.2 Product Notes

These Product Notes contain the latest information and known problems for the SunPCi[™] II 2.3.2 release. This document describes the following topics:

- "Access to Late-Breaking News" on page 1
- "What Is in This Package?" on page 1
- "New Features in SunPCi II 2.3.2 Software" on page 3
- "SunPCi II 2.3.2 Supported Solaris Operating Systems" on page 6
- "SunPCi II 2.3.2 Supported Microsoft Windows Operating Systems" on page 6
- "Known Problems With This Release" on page 6
- "Documentation Updates" on page 34

Access to Late-Breaking News

Updated and last-minute information for the SunPCi II 2.3.2 product release can be found at http://www.sun.com/desktop/products/sunpci

What Is in This Package?

The SunPCi II 2.3.2 software package (on the CD) contains the following files and documents:

SunPCi II 2.3.2 software package

- SunPCi II 2.3 Installation Guide in Adobe Acrobat Portable Document Format (PDF)
- SunPCi II 2.3 User's Guide in PDF format
- SunPCi II 2.3.2 Product Notes (this document) in PDF format
- Localized versions in PDF format of the SunPCi II 2.3 Installation Guide and the SunPCi II 2.3 User's Guide are in the Docs directory.

Viewing the Documentation PDF Files

English and localized versions of the documentation are in the Docs directory on the SunPCi II 2.3.2 CD in PDF format. The SunPCi II 2.3.2 CD contains the following documentation:

- SunPCi II 2.3 Installation Guide Describes how to install one or more SunPCi II card and also describes installing SunPCi II software.
- SunPCi II 2.3 User's Guide Describes how to configure the SunPCi II software to use one or more SunPCi II cards, and how to install the Microsoft Windows software on a SunPCi II card.
- *SunPCi II 2.3.2 Product Notes* (English only) Describes late-breaking issues concerning the SunPCi II product.

The following table is an index of the directories containing the translated documentation in the Docs directory on the SunPCi II CD.

Directory Name	Language	Directory Name	Language
С	English	ja	Japanese
de	German	ko	Korean
es	Spanish	sv	Swedish
fr	French	zh	Simplified Chinese
it	Italian	zh_TW_Big5	Traditional Chinese

To view the PDF files from the SunPCi II 2.3.2 CD, do the following:

- 1. Insert the SunPCi II 2.3.2 CD into the system CD-ROM drive.
 - A CDE File Manager window opens.

2. In the File Manager window, double-click the Docs subdirectory where the PDF files for your locale are stored on your SunPCi II 2.3.2 CD.

Refer to the Preface of the *SunPCi II 2.3 User's Guide*, or to the README file on the CD for the index of directory names for each translation locale (as shown in the table above).

3. In a separate terminal window, type the following command and press Return:

% acroread &

After a few seconds, the Adobe Acrobat splash screen opens, followed by the main program window.

- 4. In Adobe Acrobat, from the File menu, choose Open, and then click through the directory paths described in Step 2 until you reach the PDF document that you want to view.
- 5. Double-click the document file name to open the document.

You can now use the Page Up and Page Down keys, as well as the commands in Adobe Acrobat, to navigate and print the PDF files.

New Features in SunPCi II 2.3.2 Software

The SunPCi II 2.3.2 software contains the following new features:

- Emulated hard disk expansion
- Custom display modes in Windows 2000 and Windows XP Professional
- Bug fixes

Emulated Hard Disk Expansion

With the release of SunPCi II 2.3.2, you have the option of increasing space on your existing emulated hard disk. Disk expansion allows you to expand your Microsoft Windows hard drive to gain more hard disk space.

To use this newly added emulated hard disk space, you must either create a new partition and file system, such as a D: drive, or grow the existing hard drive, such as a C: drive. You must complete one of these procedures so that Microsoft Windows recognizes the newly added space.

You can expand hard disk space by doing the following in the SunPCi II 2.3.2 window:

1. Choose Options, then select Grow an Existing Emulated Drive (Meta + G).

The Grow an Existing Emulated Drive dialog box opens.

- 2. Select the hard drive in the Current Drives group box that you want to expand.
- **3.** Move the New Drive Size (in MB) horizontal scroll bar to the new size of the hard drive.

The size you choose is the total size of the emulated hard drive, which includes both the original space of the drive and the newly added space.

4. Click the OK button.

You might see a dialog box open, depending on how you partition your new emulated hard drive and how much you increased your hard drive space.

5. Click the OK button.

6. Restart Microsoft Windows.

After you expand the hard disk, you have one of two options to complete the procedure:

- You can create another drive in your Microsoft Windows system (such as a D: or E: drive) by using DOS and the fdisk option (and then format the disk in Microsoft Windows Explorer).
- You can use a third-party software, such as Partition Magic, to expand your current drive (such as a C: drive).

Custom Display Modes in Windows 2000 and Windows XP Professional

Since SunPCi II 2.3.1, you can specify custom display modes in Windows 2000 and Windows XP Professional. The display modes specify a new size and optional color depths available within the Microsoft Windows desktop. A custom display mode consists of a width and height (in pixels) and an optional bit depth (8,16, or 24 bits).

In the [Display] section of the SunPC.ini file, the format is:

tag=width, height [, depth]

where *width*, *height*, and *depth* (optional) are all decimal values, and *tag* is one of the following strings:

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- CustomMode
- CustomModel
- CustomMode2
- CustomMode3
- CustomMode4
- CustomMode5
- CustomMode6
- CustomMode7
- CustomMode8
- CustomMode9

The *tag* values do not need to be in any numerical or alphabetical order. For example, you might add the following to the [Display] section:

```
[Display]
CustomMode=1280, 960, 16
CustomMode4=1000,800, 24
CustomMode2=1280, 960, 8
```

This will add 1280x960 16-bit, 1000x800 24-bit, and 1280x960 8-bit display modes to the list of available modes.

Note – If the display does not support 8-bit graphics, an 8-bit entry (such as CustomMode2) is ignored, and the rejected entry appears in the SunPCi II log file.

The *width* and *height* parameters are required. However, if you do not specify a *depth* value, a mode is created for each depth that is supported by the display. Thus, on a system which supports 16-bit and 24-bit graphics, if the following entry is in the [Display] section:

```
CustomMode6=1200, 1000
```

two modes are created: 1200x1000 16-bit and 1200x1000 24-bit.

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SunPCi II 2.3.2 Supported Solaris Operating Systems

SunPCi II 2.3.2 software supports the Solaris[™] 7, 8, and 9 operating systems.

SunPCi II 2.3.2 Supported Microsoft Windows Operating Systems

SunPCi II 2.3.2 supports installation of the following Microsoft Windows operating systems and Service Packs:

- Microsoft Windows XP Professional
- Microsoft Windows NT 4.0 Workstation (Windows NT4 WS) Service Pack 6a
- Microsoft Windows 2000 Professional (Windows 2000 Professional) Service Pack 3
- Microsoft Windows 2000 Server Edition (Windows 2000 Server) Service Pack 3
- Microsoft Windows NT 4.0 Server (Windows NT4 Server) Service Pack 6a
- Microsoft Windows NT 4.0 Terminal Server (Windows NT4 TS) Service Pack 6
- Microsoft Windows Millennium Edition (Windows ME)
- Microsoft Windows 98 Second Edition (Windows 98 SE)

Note – SunPCi II 2.3.2 does not support Microsoft Windows 95 or the first release of Microsoft Windows 98.

Known Problems With This Release

The following sections describe known problems with the SunPCi II 2.3.2 release. These problems will be fixed in subsequent releases. This section describes the following topics:

- "SunPCi II 2.3.2 Hardware Issues" on page 7
- "SunPCi II 2.3.2 Software Issues" on page 9
- "Windows 98 SE Issues" on page 15
- "Windows NT Issues" on page 17
- "Windows 2000 and Windows XP Professional Issues" on page 21
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- "Microsoft Windows Application Issues" on page 28
- "Troubleshooting Microsoft Windows Applications" on page 33

SunPCi II 2.3.2 Hardware Issues

The following sections discuss known SunPCi II 2.3.2 hardware issues. Each issue is described with a suggested workaround.

Hardware-Related Changes in SunPCi II 2.3.2 Software

The SunPCi II 2.3.2 software release contains important hardware-related driver updates. It is *very* important that you update your Microsoft Windows drivers after installing the SunPCi II 2.3.2 software.

To update your drivers, see the *SunPCi II 2.3 User's Guide* chapter appropriate to your Microsoft Windows operating system for instructions on executing the update.bat file.

Power Management Message

If SunPCi II 2.3.2 is running (so the SunPCi II card is booted) and you attempt to exit or suspend the UltraSPARC[®] system, the operation fails and the sunpci2drv software displays this message to the console:

sunpci2drv: sunpci_detach() Can't Suspend, there are N sessions running.

Exit the SunPCi II 2.3.2 window before shutting down your system.

Using Disk Images With Different Cards

If you create a C: drive file on one SunPCi II card and then use that C: drive on a different SunPCi II card, you might observe one or both of the following two problems in Windows 2000, as a result of the Windows 2000 Plug and Play Manager probing the hardware.

External Monitor Conflict in Windows 2000 Professional

If you are using an external monitor with your older SunPCi II software, the SunPCi II desktop reappears on your system monitor after you upgrade to the newer card. If this happens, reinstall the external video controller as described in the *SunPCi II 2.3 User's Guide*.

Note – This problem does not occur when you use your system monitor to display SunPCi II software.

Physical Ethernet Driver Conflict in Windows 2000

After you install the SunPCi II card and restart the SunPCi II software, the Windows 2000 Plug and Play Manager opens a dialog box that asks you to enter the path to the location of the SiS Network Installation Files. The default path that opens in this dialog box points to a nonexistent location.

• If you are using the SiS physical Ethernet driver, type the following path into the dialog box:

C:\SUN\SISNET\WIN2K

Choose the NETOEM.INF file. This directs the installation script to the correct location for the drivers.

• If you are not using the SiS physical Ethernet driver with your older SunPCi II card, click Cancel to exit the installation.

Machines Containing PGX32 Cards Require a Solaris Patch

If your system has a PGX32 graphics card installed, you might observe some display problems while running CDE. You can fix these problems by applying a Solaris patch to your system after you have finished installing the SunPCi II software. These patches are available from your support representative, or you can download them from the following web site:

http://sunsolve.sun.com/

Note – You must have a service contract with Sun to use the SunSolveSM web site.

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Download and install the patch that corresponds to your version of the Solaris operating system. Each patch contains a README file that explains how to install it.

The following table shows the Solaris versions and the corresponding patch numbers.

Solaris Version	Patch Number
Solaris 7	107716-16
Solaris 8	109154-10
Solaris 9	No patch needed

Source Code for VNC Available (vnc_src.tar.Z)

As part of the VNC licensing agreement, Sun is required to make the VNC source code available for viewing with each SunPCi release. The VNC sources provided here are not supported by Sun Microsystems and are provided for reference purposes only as required under the GNU General Public License.

The VNC source code is located in the SunPCi II 2.3.2 CD source directory and is named vnc_src.tar.Z.

Uncompress the .Z file and then extract the .tar file to view the VNC source code.

Note – It is not required to build the VNC sources to use VNC. A prebuilt package is available as SUNWspvnc.

SunPCi II 2.3.2 Software Issues

The following sections discuss known SunPCi II 2.3.2 software issues. Each issue is described with a suggested workaround.

System Panics After Installing New Version of Solaris Software

If you upgrade to a new version of Solaris software without installing the correct version of the SunPCi II driver, starting SunPCi II might cause a system panic and the software will not work properly.

To avoid a system panic, uninstall the SunPCi II software, install the new version of Solaris software, and then reinstall the SunPCi II software.

For information about uninstalling and installing SunPCi software, see the *SunPCi II* 2.3 Installation Guide.

Installation Error Messages

You might see certain messages in your console window during or after installation of SunPCi II 2.3.2. The following table describes the messages and the actions you should take:

Message or Behavior	Recommended Action	
Driver failed to attach.	This message can appear for a number of reasons:	
	1. The workstation needs to be restarted after installation. Reboot your workstation using the Solaris boot -r command and then restart the SunPCi II software.	
	2. The SunPCi II card is not seated securely in the PCI slot. Reseat the card.	
	3. If neither of the above actions helps, your SunPCi II card might be defective. Refer to the <i>SunPCi II 2.3 Installation Guide</i> for information about service.	
	4. You might need to update the system OpenBoot [™] Programmable Read-Only Memory (PROM). Ask your service provider if an updated OpenBoot PROM is available for your system configuration.	
Source:C:\sun\update\.\\ sisaudio\winnt\ sisaudio.sys Target:C:\winnt\system32\ drivers\sisaudio.sys	This message can appear when you are updating your SunPCi II software from version 2.2.2 to 2.3.2. The message appears in a dialog box during the update process. Click Yes to close the dialog box and continue the update process.	
The target file is newer than the source. Overwrite the newer file?	This message appears for updates on Windows NT, as well as for the file sisaudio.dll.	

Solaris Stale Links

If you have stale links to files in your workstation's file system (such as symbolic links to files or directories that you have deleted or moved), update or remove the links. Otherwise, browsing in the file system can cause Microsoft Windows to freeze.

Dual-Boot Emulated Drives Are Not Supported

SunPCi II 2.3.2 does not support dual-boot emulated drives. If you want to run different versions of Microsoft Windows on SunPCi II, then create an emulated drive for each operating system and install the operating system and applications to the emulated drive. Use the Attach Drive command from the SunPCi II Options menu to switch among the different operating systems. For more information about how to manage multiple SunPC.ini files and emulated disk images, see the *SunPCi II 2.3 User's Guide*.

Error Messages Might Appear When Starting SunPCi II 2.3.2 Software for the First Time

After you install SunPCi II 2.3.2 software on your emulated C: drive, you might see one of the following sets of error messages in the BIOS boot screen when you start the software for the first time:

```
Warning! CPU has been changed
Press F1 to continue, DEL to enter setup.
```

or

```
Warning! CPU Speed has changed.
Press F1 to continue, DEL to enter setup.
```

To prevent these messages from appearing every time you start the SunPCi II software, perform the following steps:

- 1. When one of the messages appears, press the Delete key to enter the Setup screen.
- 2. Use the arrow keys on your keyboard to move to the Save and Exit Setup menu item and press Return.

The screen responds with the following message:

Save to CMOS and Exit?

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3. Type Y.

SunPCi II continues to boot. The error messages will not display the next time you start SunPCi II software.

Missing Master.ini File After Factory Installation

If you have SunPCi II 2.3.2 software preinstalled or if you install the SunPCi II 2.3.2 software before the hardware, the/etc/Master.ini file will not get created and you will receive the following message when attempting to first open SunPCi II:

ERROR, there are no cards specified in the Master.ini file.

To run SunPCi II 2.3.2 properly, you must force the reloading of the SunPCi Solaris driver, as well as the creation of the /etc/Master.ini file by doing the following:

- 1. Go to the /opt/SUNWspci2/drivers/solaris directory in SunPCi II.
- 2. Type the sunpcload command.

Note – You must be in the root directory for the sunpcload command to work properly.

This command reloads the Solaris driver for SunPCi II and creates the /etc/Master.ini file, which contains the configuration information needed to properly run SunPCi II.

Special Considerations for Sun Blade Workstations and Sun Enterprise Servers

If you have a SunPCi II card preinstalled in a Sun Blade[™] workstation or a Sun Enterprise[™] server or if the version is not SunPCi II 2.3.2, you might need to install the SunPCi II software after you configure your preinstalled Solaris image.

• To verify if your SunPCi II software is already installed, type the following command at the system prompt:

% pkginfo -l SUNWspci2

If your system returns a message similar to the following message, you need to install the SunPCi II software from the CD:

ERROR: information for "SUNWspci2"

You should also go to this site to download software updates:

http://www.sun.com/desktop/products/sunpci

Configuring the MouseKeys Accessibility Option

To use MouseKeys on the system monitor in Windows 2000 Professional, do the following:

- **1.** Choose the Start button, select Settings, and then select Control Panel. The Control Panel window opens.
- 2. Double-click the Display icon.
 - a. Select the Settings tab.
 - b. Choose the True Color (24-bit) option in the Colors group box.
 - c. Click the OK button to close the Display Properties dialog box.
- 3. Double-click the Mouse icon.
 - a. Select the Pointers tab.
 - b. Check the "Enable pointer shadow" check box.
 - c. Click the OK button to close the Mouse Properties dialog box.
- 4. Double-click the Accessibility Options icon.
 - a. Select the Mouse tab.
 - b. Check the Use MouseKeys check box.
 - c. Click the OK button to close the Accessibility Options dialog box.
- 5. Close the Control Panel.
- 6. Use the arrow keys on the keyboard to move the cursor on the display.

Accessibility options cannot be enabled in any other supported Microsoft Windows operating system on the system monitor. Accessibility options might be available on Sun systems. Consult your sales representative for more information.

MouseKeys in any supported Microsoft Windows operating system are enabled on an external monitor and a serial mouse. Enable MouseKeys in the Accessibility Options window from the Control Panel for the particular Microsoft Windows operating system, as in Steps 1 though 6 in the previous procedure (Step 3 is optional).

Note – You must enable the True Color (24-bit) option in the Colors group box in the Settings tab for the "Enable pointer shadow" check box to be viewable in the Pointers tab.

Multiple Cards and Microsoft Windows

In multiple card installations, select one of many configuration (.ini) files, which reference the desired emulated drives by using the sunpci -p command option. See the *SunPCi II 2.3 User's Guide* for more information.

Configuring Virtual Networking Using SunPCi II 2.3.2 Software

If you are installing SunPCi II software on an UltraSPARC system with more than one network interface, the SunPCi II startup script displays the following message:

SunPCi: This machine has multiple network interfaces. If you are using SunPC networking, you need to set the environment variable NVL_INTERFACE to indicate the desired network interface. Type netstat -i for a list of interfaces on this machine.

Enter the interface name into the script, for example if the netstat -i command returns one of the following names: hme0, hme1, or eri0, then enter the name into the script. Be sure to use the correct Ethernet name, especially if you are planning on using virtual networking. Virtual networking shares the UltraSPARC system's Ethernet port.

Xinerama Display

When using SunPCi II during an Xinerama session, the mouse can behave erratically if the SunPCi II session is set to display on the non-default (right-side) frame buffer. To avoid this issue, when using SunPCi II during an Xinerama session, set the SunPCi II display to the default (left-side) frame buffer.

Windows 98 SE Issues

The following sections discuss known Windows 98 SE issues. Each issue is described with a suggested workaround.

Removing the CD From the CD-ROM Drive Before Installation Completes

When installing Windows 98 SE, do not remove the Windows 98 SE CD from the CD-ROM drive until after the software is installed *and* F:\drivers\win98\setup completes executing. Removing the CD results in File Not Found messages during the Windows 98 SE installation and driver setup.

Updating an Existing Windows 98 SE C: Drive

Note – This procedure applies only to C: drives created in SunPCi II 2.1 or later software running Windows 98 SE.

To update your existing Windows 98 SE C: drive, follow these steps:

1. Click the Start button and choose Run from the pop-up menu.

The Run dialog box opens.

2. Type the following path into the dialog box:

f:\drivers\win98\setup

3. Click the OK button.

The InstallShield Wizard dialog box opens and displays a progress bar. The SunPCi Drivers Setup window opens.

4. Select the "Update existing drivers" radio button.

5. Click the Next button.

The Welcome to SunPCi Setup Program window opens.

6. Click the Next button.

The InstallShield window is displayed, along with a progress bar. When the installation is complete, the Information dialog box is displayed, stating SunPCi will continue to load its drivers and reboot.

7. Click the OK button.

The SunPCi II software restarts.

McAfee 6.0 Installation

When installing McAfee 6.0 from the CD, in some cases menus in the Autorun window are unreadable. Moving down the menu with the pointer, the text becomes visible.

Frozen DOS Window

In prior versions of SunPCi II, Windows 98 SE and Windows ME randomly froze when you opened a full-size version of the DOS window. To rectify this problem, you must manually install the SunPCi Display Driver.

Although new drivers are copied into SunPCi II 2.3.2 during the installation process, you need to manually complete the SunPCi Display Driver installation process after the 2.3.2 installation is complete for the changes to take effect.

After you install the SunPCi II 2.3.2 software and the SunPCi Display Driver described below, the DOS window no longer freezes.

To install the SunPCi Display Driver, do the following:

1. Right-click your Microsoft Windows desktop.

2. Choose Properties.

The Display Properties dialog box opens.

3. Select the Settings tab.

4. Click the Advanced button.

The SunPCi Display Driver Properties dialog box opens.

5. Select the Adapter tab.

6. Click the Change button.

The Update Device Driver Wizard dialog box opens saying the wizard is searching for the SunPCi Display Driver.

7. Click the Next button.

A second Update Device Driver Wizard dialog box opens with the default radio button "Search for a better driver than the one your device is using now (Recommended)" selected.

8. Click the Next button.

A third Update Device Driver Wizard dialog box opens with the "Floppy disk drives" check box checked.

9. Click the Next button.

A fourth dialog box opens and closes as it searches for the driver device. Then another Update Device Driver Wizard dialog box opens stating that the Microsoft Windows driver file is searching for the device SunPCi Display Driver.

10. Click the Next button.

Another Update Device Driver Wizard dialog box opens stating Microsoft Windows continues to use the current driver.

11. Click the Finish button.

12. Close any other open dialog boxes.

The Systems Settings Changed dialog box opens.

13. Click the Yes button to restart your workstation.

You should now be able to view the full DOS window clearly.

Windows NT Issues

The following sections discuss known Windows NT issues. Each issue is described with a suggested workaround.

Service Packs and Serial Mouse Message

If you are installing Service Pack 5 or 6a for Microsoft Windows NT 4.0 Workstation and you have a serial mouse attached to your SunPCi II card, you might see the following messages in two New Hardware Found dialog boxes during the Service Pack installation procedure:

```
Microsoft Serial Mouse
Windows NT has found new hardware and is installing the software
for it.
```

Required files are already installed on your hard disk. Setup can use these existing files, or Setup can recopy them from your original Windows NT CD-ROM or from a network share.

Would you like to skip file copying and use the existing files? (If you click No, you will be prompted to insert your Windows NT CD-ROM or to supply an alternate location where the needed files may be found.)

• Click Yes to skip file copying.

Note – These messages *only* appear if you have a serial mouse attached to the serial port of your SunPCi II card. If you are using the SunPCi II virtual mouse, these messages are not displayed.

Using UNC Path Names to Locate Files

Using Universal Naming Convention (UNC) path names to locate Office XP or Office 2000 files, for example \\localhost\export\home\myfiles.doc, does not work in this version of the software.

Directory Enumeration

If a SunFSD directory contains a file with a file name containing more than five periods ("."), directory enumeration might take a long time.

There are two solutions to this problem:

- Rename the files to decrease the number of periods to fewer than five.
- Copy the file to the C: drive.

Installing Citrix MetaFrame on Windows NT4 TS

After installing Citrix MetaFrame 1.8 on Windows NT4 TS, a Dr. Watson for Windows NT message is displayed:

```
An application error has occurred and an application error log is
being generated
PNSVC.exe
Exception violation (0xc000005), Address 0x77f92fb6
```

Install MetaFrame Service Pack 2, which you can obtain from www.citrix.com.

Updating an Existing Windows NT, Windows 2000, or Windows XP Professional C: Drive

Note – This procedure applies only to C: drives created in SunPCi II 2.0.1 or later software, running either Windows NT, Windows 2000, or Windows XP Professional.

To update your existing C: drive, follow these steps:

- 1. Map a drive (for example, X:) in Microsoft Windows Explorer to the location where you installed the SunPCi II 2.3.2 software package (by default, the /opt directory).
- 2. Map your drive to the following location:

\localhost\opt\SUNWspci2\

- 3. Do one of the following, depending on the operating system you are running:
 - If you are running Windows NT, click down the directory tree to \drivers\ winnt\patch and double-click update.bat to complete the installation.
 - If you are running Windows 2000, click down the directory tree to \drivers\ win2k\patch and double-click update.bat to complete the installation.
 - If you are running Windows XP Professional, click down the directory tree to \drivers\winxp\patch and double-click update.bat to complete the installation.

Note – The default installation location is /opt/SUNWspci2. If you installed the SunPCi II software to another location, map the drive to that location.

When the script finishes, you can use your existing C: drive with the SunPCi II 2.3.2 software.

Upgrading From Windows NT to Windows XP Professional

When upgrading from Windows NT to Windows XP Professional, a blank dialog box opens. This happens after the Dynamic Update completes, and when the Preparing Installation radio button on the left pane of the Windows XP Professional Installation Wizard is selected.

This dialog box soon disappears and the installation process continues normally.

External CD-RW Drive

If you have an external CD-RW (Compact Disc - Rewritable) drive connected to your SunPCi II card and you plan to upgrade from Windows NT to Windows XP Professional, make sure that you uninstall the external CD-RW drivers from Windows NT before you perform the upgrade. Otherwise, the upgrade program returns the following message:

```
The file bp32drv4.sys is missing. Copy file from c:\
$WIN_NT$.~LS.
```

Slow Screen Redraws in Lotus Smart Suite

Some pages in Lotus Organizer in Lotus Smart Suite Millennium 9.7 paint very slowly. However, this does not affect the usability of the application.

Installing Additional Printers on Slow Networks

If you are using Windows NT and are attempting to install an additional printer on a slow network, the installation process might freeze.

If you type the following command and it takes longer than one minute to respond, this indicates network and installation issues:

% lpstat -v

If the network is working normally, you will not encounter this issue and the <code>lpstat -v</code> command will respond in seconds.

This is a known issue and is currently under investigation.

Office 2000 Installation Might Freeze on Windows NT Terminal Server Edition

During the installation of Office 2000 on a system running Windows NT Terminal Server Edition, Service Pack 6, the installation sometimes freezes.

This issue happens when the Finishing Microsoft Office 2000 Setup dialog box is open and the status bar is about halfway finished. If the installation freezes at this point in the process, you must restart your system.

To fix this issue, choose File, then select Restart PC from the SunPCi II window to gracefully exit the system.

After restarting your system, Windows NT Terminal Server Edition restarts and Office 2000 is fully installed.

Note – You cannot shut down the system from within Microsoft Windows when this issue occurs or the software will not complete the installation.

Windows 2000 and Windows XP Professional Issues

The following sections discuss known Windows 2000 or Windows XP Professional issues. Each issue is described with a suggested workaround.

Extended Drive (SunFSD)

You might observe the following problems when using file system drives with Windows 2000 or Windows XP Professional:

- File attributes (such as read-only and write-only) might not work correctly.
- File links do not work on file system drives. If you need to link to a file that is located on a file system drive, move the file to your C: or D: drive and then create the link.
- If you create a desktop shortcut to a file on a file system drive, that shortcut does
 not update automatically if you change the file's location on the drive. You need
 to delete the existing shortcut and create a new one.

Using UNC path names to locate Office XP or Office 2000 files, such as
 \localhost\export\home\myfiles.doc, does not work in this version of
 the software.

For more information on file system drives, refer to the SunPCi II 2.3 User's Guide.

If you are experiencing problems installing Windows 2000 or Windows XP Professional application software packages to extended drives, see the *SunPCi II 2.3 User's Guide*, in Appendix A, "Troubleshooting."

Installing Applications on SunFSD

If you are experiencing problems installing Windows 2000 or Windows XP Professional application software packages, see the *SunPCi II 2.3 User's Guide*, in Appendix A, "Troubleshooting."

Some software applications cannot be installed to a network drive, including SunFSD, and must be installed directly to the emulated disk.

Copying to and From CD-ROM Devices

The internal CD-ROM device is not supported by EZ CD Creator. To use this application software, attach an external CD-ROM device and use it for copying from and to the CD device media. To copy, place the source CD in the external device, and make a copy to disc. Replace the external device media with your target write-enabled media and copy the source material from disc to the target media in the external drive.

SiS 630 Video Driver

If you install the SiS 630 video driver for use with an external monitor and apply certain change mode operations (display size, resolution), undesirable behaviors can affect specific applications.

If Symantec's PcAnywhere 10.0 software package is installed and you switch to an external monitor, you might not be able to switch back to the internal (Sun) monitor. When you request this switch from the external monitor to the internal monitor, Windows 2000 or Windows XP Professional states that there is a "permission problem" and that the VGA driver will then be used. You are not able to switch to the internal (Sun) monitor until you uninstall PcAnywhere. This is a problem with PcAnywhere and cannot be fixed by SunPCi II software.

Mouse Unavailable at Start of Windows XP Professional After Fresh Installation

When the SunPCi II software restarts after a fresh installation of Windows XP Professional, the mouse is not yet available. You must use the keyboard equivalents to navigate the initial video setup window. Use the Tab key to toggle between settings and Enter to select settings. Select Yes to change the video settings, and Yes again to confirm the changes.

After you select and confirm the initial video settings, the installation continues with the SunPCi II mouse working properly.

No Mouse Input After Booting in Safe Mode

When booting the Windows 2000 Professional or Windows XP Professional operating system into Safe Mode, the Sun Mouse Filter driver is uninstalled. Therefore you are left with no mouse with which to navigate.

You can boot into Safe Mode by following these steps:

- 1. During startup of the operating system, press the F8 key.
- 2. Select Safe Mode and press Return.
- 3. The operating system starts in Safe Mode and no mouse is available.

This is a known issue and is currently under investigation.

Installing Windows 2000 or Windows XP Professional on an UltraSPARC 60 System

During installation of Windows 2000 or Windows XP Professional on an UltraSPARC 60 system message an Unable to copy files error or an Unable to find file error might display. Start the installation again from the beginning, and install the Windows 2000 Server or Windows XP Professional operating system using an external monitor configured using the sunpci -vga option.

This problem only occurs during installation of the operating system. You can run the system from the internal monitor after installation is complete.

This is a known issue and is currently under investigation.

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Upgrading From Windows NT Workstation to Windows 2000 Professional

Note – This issue applies only to Windows 2000 Professional. It does not apply to Windows XP Professional.

Before upgrading to Windows 2000 Professional, uninstall Media Player 7 from Windows NT4 WS (if necessary), and then upgrade to a Windows 2000 Professional. After upgrading, reinstall Media Player 7. Media Player 7 is not supported by Windows NT4 WS.



Caution – Failure to uninstall Media Player 7 before upgrading to Windows 2000 Professional from Windows NT4 WS results in your CD-ROM drive not being available after the upgrade.

Upgrading From Windows ME to Windows XP Professional

When upgrading from Windows ME to Windows XP Professional, a blank dialog box opens. This happens after the Dynamic Update completes, when the Preparing Installation radio button on the left pane of the Windows XP Professional Installation Wizard is selected.

This dialog box soon disappears and the installation process continues normally.

Upgrading From Windows 2000 Professional to Windows XP Professional

When upgrading from Windows 2000 Professional to Windows XP Professional, you might see a dialog box with a Wrong Volume; insert C: drive error message. This dialog box opens when Windows 2000 Professional is still running anti-virus software during the upgrade process. Click Retry to continue.

Note – Always disable any anti-virus software before upgrading your version of Microsoft Windows.

Installing Japanese Windows XP Professional

There are two ways to install the Japanese version of Windows XP Professional on SunPCi II: the automatic method and the manual method.

Automatic Installation

To install the Japanese version of Windows XP Professional using the automatic method, perform the following steps:

- 1. Start the SunPCi II software, if it is not already running, and make sure that the Japanese Windows XP Professional CD is in your CD-ROM drive.
- 2. Click the OK button.

The Create a New Emulated Drive dialog box opens.

- 3. In the Select an Operating System pane, select either Windows XP Professional-FAT16 or Windows XP Professional-NTFS.
- 4. Select the radio button to attach the drive as a C: drive.
- 5. Move the slider to make the size of the drive at least 2 Gbytes.
- **6.** Specify the directory and file name for the drive and click the OK button. SunPCi II software restarts after the disk drive is created.
- 7. Type Y and press Return when this message appears:

This cdrom appears to be Japanese Windows, is that correct?

8. Choose Options, and select Create a New Emulated Drive from the SunPCi II window.

The Create a New Emulated Drive dialog box opens.

- 9. In the Select an Operating System pane, select DR DOS 7.01 (Bootable).
- 10. Attach this drive as the D: drive.
- 11. Move the slider to make the size of the drive at least 2 Gbytes.
- 12. Specify the directory and file name for the drive and click the OK button.
- 13. When you receive a message asking you to shut down Windows and reset SunPCi II, click the OK button.
- 14. Choose File, then select Reset PC from the SunPCi II window.

When the system finishes copying files, the SunPCi II software restarts.

15. When the Windows XP Professional operating system asks where to install Windows, install software to the C: drive.

The installation routine continues. Follow the steps displayed on the screen. After you finish the installation, you can detach the D: drive, delete the emulated drive file, and remove it from your SunPC.ini file.

Manual Installation

To install the Japanese version of Windows XP Professional using the manual method, perform the following steps:

- 1. Start the SunPCi II software, if it is not already running, and make sure that the Japanese Windows XP Professional CD is in your CD-ROM drive.
- **2.** Click the OK button. The Create a New Emulated Drive dialog box opens.
- 3. In the Select an Operating System pane, select DR DOS 7.01 (Bootable).
- 4. Select the radio button to attach the drive as a C: drive.
- 5. Move the slider to make the size of the drive at least 2 Gbytes.
- **6.** Specify the directory and file name for the drive and click the OK button. SunPCi II software reboots after the disk drive is created.
- 7. Choose Options, then select Create a New Emulated Drive from the SunPCi II window.

The Create a New Emulated Drive dialog box opens.

- 8. In the Select an Operating System pane, select DR DOS 7.01 (Bootable).
- 9. Select the radio button to attach this drive as the D: drive.
- 10. Move the slider to make the size of the drive at least 2 Gbytes.
- 11. Specify the directory and file name for the drive and click the OK button.
- 12. When you receive a message asking you to shut down Windows and reset SunPCi II, click the OK button.
- 13. Choose File, then select Choose Reset PC from the SunPCi II window.
- 14. Create a file system for the emulated drive as follows:
 - To create a FAT file system on the drive, type the following at the C:\> prompt and press Return:

f:\drivers\winxp\setupwxp /td

■ To create an NTFS file system for the emulated drive, type the following at the C:\> prompt and press Return:

f:\drivers\winxp\setupwxp /td /NTFS:max

When the system finishes copying the files, SunPCi II software restarts.

15. When the Windows XP Professional operating system asks where to install Windows, install the software to the C: drive.

The installation routine continues. Follow the steps displayed on the screen. After you finish the installation, you can detach the D: drive, delete the emulated drive file, and remove it from your SunPC.ini file.

Microsoft DirectDraw Performance

With Windows 2000, Microsoft introduced a new suite of graphics engines known collectively as DirectX, and one of these components is known as DirectDraw. Because the SunPCi internal display is based on the X-windows protocol and does not have direct access to the Solaris platform's graphics adapter, DirectDraw functionality was disabled by default in older versions of SunPCi software. Many newer software suites, such as Office XP, enable direct draw by default.

Since SunPCi II 2.3.1, DirectDraw is *enabled* by default. However, with DirectDraw enabled, Windows 2000 and Windows XP Professional might exhibit poor graphics performance, either in some specific applications or in specific applets in the base operating system, such as in 3D screen savers.

If normal performance of the 3D screen savers is required, or if graphics performance degraded after installing SunPCi II 2.3.2, you can disable DirectDraw by doing the following:

1. Add the following line to the [Display] section of the SunPCi .ini file:

```
[Display]
...
DirectDraw=off
```

2. Restart the SunPCi session.

System Clock and Daylight Savings Time

If you shut down a SunPCi II session running Windows 2000 Professional before a Daylight Savings Time (DST) change, and then restart after the DST change, the first SunPCi II session after the time change displays a two-hour difference (that is, in the fall, the display time is two hours earlier instead of one hour earlier; in the spring, the display time is two hours later, instead of one hour later). However, for subsequent sessions, the clock displays correctly.

If the SunPCi II session is running through the time change, the system time is adjusted correctly.

Incorrect Path Name After Adding D: Drive in Windows XP Professional

While using Windows XP Professional, the path name displayed for a newly mapped D: drive might be incorrect.

This situation occurs when you have an existing SunFSD mapping to letter D: and then attach another emulated drive as letter D:. After restart, the attached emulated D: drive shows the path name of the previously mapped SunFSD drive.

The contents of the D: drive and the SunFSD drive are unaffected and are correct, even if the path name listing is incorrect.

This is a known issue and is currently under investigation.

Cannot Unmap SunFSD Drives in Windows 2000 Professional

If multiple user accounts were created during a Windows 2000 Professional installation without Administrators privileges, there will be issues with non-Administrator users mapping and unmapping SunFSD drivers in the following situations:

- Administrators cannot unmap a SunFSD drive originally mapped by a user, although Administrators can unmap a drive mapped by another Administrator.
- Users cannot unmap a SunFSD drive they originally mapped if the user account was originally created without Administrator privileges.

This is a known issue and is currently under investigation.

Microsoft Windows Application Issues

The following section describes known issues with Microsoft Windows applications.

Adobe Photoshop Installation to SunFSD

On Windows XP Professional, if installing Photoshop 5.0, 5.5, or 6.0 to a SunFSD drive, the Choose Directory dialog box does not list any SunFSD mounted drives.

Instead of browsing for the location, type the drive letter and directory in the text entry field near the top of the dialog box. The installation then proceeds normally.

Note – This problem is not present in Photoshop 6.0.1.

Adobe Photoshop Directory Enumeration to SunFSD

When using Photoshop 5.0, 5.5, or 6.0, directory enumeration in Windows NT might take a long time.

There are two solutions to this problem:

- Rename the files to decrease the number of periods to fewer than five.
- Copy the file to the C: drive.

Corel Draw 10 Installation

When installing the Corel Draw 10 upgrade version without a previous version of Corel Draw installed, the installation software prompts you with the following dialog:

This installation requires a previous installation of Corel Draw or the original product CD. Please insert the CD containing your previous version and click OK.

After inserting the previous Corel CD, you must wait until the CD is fully mounted (when the red LED stops blinking) before clicking the OK button. The Corel installer will freeze if you do *not* wait for the CD to mount.

Installation and SunFSD on Windows XP Professional

Some software applications cannot be installed to a network drive, including SunFSD, and must be installed directly to the emulated disk. This is exactly the same behavior with a standard PC running Windows XP Professional and using a Samba drive.

In Windows XP Professional, some software applications will not install to a SunFSD drive. The current known list includes the following:

- Adobe Photoshop 7
- Corel Draw 10
- Corel WordPerfect 2002
- Microsoft FrontPage 2002
- Microsoft Office XP
- Microsoft Project 2002
- Microsoft Visio 2002

Note – This is not exhaustive list, but includes the known applications that cannot be installed to a SunFSD at this time.

If you are running Windows XP Professional, the installation of these software applications must be on the SunPCi II emulated drive.

Microsoft Office XP Installation and SunFSD on Windows 2000 Professional

In Windows 2000 Professional, Microsoft Office XP fails if it is installed to a SunFSD drive or a Samba drive, in which any of the directories in the path are longer than the DOS 8.3 format. For example, Office XP fails if you install it to the directory \longpathname\name1\name2, but it works if you install it to \shortnme\name1\name2.

There are two workarounds for this problem:

- Install Office XP to an emulated drive.
- Make sure that the path name on a SunFSD or Samba drive contains only short names (eight characters or fewer).

Microsoft Office 2000 and Office XP Drive Not Found Error

If you are using Microsoft Office 2000 or Office XP and you insert an Office document as a graphic into another Office document (for example, inserting a Microsoft Excel spreadsheet into a Microsoft PowerPoint slide), you might see a Drive Not Found error message. This does not happen with earlier versions of Microsoft Office.

Microsoft Office 2000 or Office XP Graphic File Import

If you want to use a Microsoft Office document as a graphic in another Microsoft Office 2000 or Office XP document, convert the document to a different format before inserting it. For example, you could convert a Microsoft Excel spreadsheet to a graphic (.jpg) or Microsoft Word (.doc) file.

Retrospect Software and SunFSD

In Microsoft Windows, if you use Retrospect software (version 5.6 or 6.0) to back up data through SunFSD, an erroneous message might appear reporting that there is not enough available space for backup, even if the space exists.

This issue occurs since Retrospect checks the root of the SunFSD mounted path only for available space.

To avoid this problem, verify that the root of the destination path directory contains adequate space for backup.

Norton Antivirus Software Does Not Scan SunFSD Drives in Windows 2000, Windows XP Professional, and Windows NT

When using Norton Antivirus software, specifically the 2002 Consumer Edition and the 7.60 Corporate Edition, you might have problems scanning files mounted on SunFSD drives.

If you use the 2002 Consumer Edition, the scanning might get into an infinite loop and not complete scanning. If you get into this situation, stop the scan and exit the application.

If you use the 7.60 Corporate Edition, the software might repeat scanning certain files and sub directories, but it will eventually complete scanning.

Symantec states that Norton Antivirus 2002 Consumer Edition is not intended for use in scanning network-mapped drives.

Roxio Easy CD Creator 5.0 Installation

Roxio Easy CD Creator 5 causes a Windows NT crash (BSOD) with KMODE_EXCEPTION_NOT_HANDLED if the software is installed with no supported CD burners attached to the system.

Make sure that a supported CD burner is installed before installing the software.

Symantec PC Anywhere 10.5 Remote Display

If a SunPCi session running Windows XP Professional is used as a PC Anywhere host, the graphics display on the remote system is not updated. Mouse movements are sent and effected on the host, and the graphics on the host are updated, but those updates are not sent back to the remote system. However, if a PC is used as the host and a SunPCi session is used as the remote system, the graphics display on the SunPCi remote system is correct.

Note – This "session sharing" functionality is, by default, available on Windows XP Professional as "Remote Desktop." See Microsoft documentation for more details.

Symantec WinFax Pro 10.0 Display and Windows ME

When using Windows ME, the Symantec WinFax Pro 10.0 Autorun menu displays incorrectly. Text below the icons does not appear in the window.

CD-ROMs Must Be ISO 9660 Compliant

If you are using CD-ROMs that are not ISO 9660 compliant, the CD-ROMs might not work properly on Solaris systems. Specifically, if you are installing software applications to work through SunPCi, CD-ROMs that are not ISO 9660 compliant might not install or work properly.

Corel Office 2000 and Corel Office 2002 installation CD-ROMs are not ISO 9660 compliant. To avoid this problem, only use CD-ROMs that are ISO 9660 compliant.

Using WordPerfect 9 Installed on a SunFSD Drive with Windows XP Professional

WordPerfect 9 is part of the Corel WordPerfect Office 2000 Software Suite.

You might not be able to open WordPerfect 9 installed on a SunFSD drive while using Windows XP Professional. You might receive a Microsoft Windows error message if Corel WordPerfect Office 2000 was installed into a folder name that was more than seven characters.

To avoid this issue, install Corel WordPerfect Office 2000 to a folder with a name of seven or less characters.

Troubleshooting Microsoft Windows Applications

The following table lists some possible Microsoft Windows application issues, their causes, and recommended solutions.

Problem	Cause	Solution	
Inserting a file into Microsoft Office 2000 does not work.	The object file (such as clip art or an Excel spreadsheet) is located on a file system drive or on a drive mapped using \\localhost\path.	Copy or move the object file to your C: or D: drive and then insert it again.	
When attaching and running an external monitor at 1600 x 1200 display resolution, Windows 2000 resets.	The default shared memory configuration is set too low.	In the BIOS setup program, increase shared memory to at least 8 Mbytes to support the 1600 x 1200 display resolution.	
System appears to hang during installation of Corel Draw 10 for Microsoft Windows.	CD is not completely mounted before you clicked the OK button.	After inserting the previous Corel Draw CD, you must wait until the new CD is fully mounted (when the LED stops blinking) before clicking OK. The Corel installer freezes if	
When installing the Corel Draw 10 upgrade version without a previous version of Corel Draw installed, the install software will prompt you to insert a CD of a previous full version of the software.		you do not wait for the CD to mount.	
When performing a virus scan in Norton Antivirus (all versions), the system appears to hang.	The virus scan can enter an infinite loop if another user or process is accessing the directory	Turn off all processes accessing that directory and do not read or write to the directory being scanned.	
	at the same time as Norton Antivirus.	Do not attempt to use the drive until after Norton Antivirus is finished with its scan.	

Problem	Cause	Solution
Norton Antivirus 2002 might require increase in the Solaris file limit.	Norton Antivirus seems to "hold on" to many of the files it opens, which may result in the log file message, "Too many open files."	Increase the number of files that can be simultaneously open by Solaris, To find out the current limit, use the command: ulimit -Hn In the /etc/system, add the following line: set rlim_fd_max=XXXX (XXXX should be a greater number than the one returned by the ulimit -Hn command.)
Some image rendering problems exist when working with Office XP WordArt files in Windows 2000 or Windows XP Professional.	Frame buffer is set to 8-bit color depth.	Change graphics settings to higher color depth (16-bit or 24-bit).

If you are experiencing problems installing Microsoft Windows application software packages, see the *SunPCi II 2.3 User's Guide*, in Appendix A, "Troubleshooting."

Documentation Updates

This section describes updates in the documentation, specifically in the *SunPCi II 2.3 Installation Guide* and the *SunPCi II 2.3 User's Guide*.

SunPCi II 2.3 Installation Guide

The following section describes updates to the SunPCi II 2.3 Installation Guide.

Solaris 2.6 Operating System No Longer Supported

In Chapter 1, "SunPCi II Hardware Installation," under the heading "Before You Install SunPCi II Cards," and under the sub-heading "System Hardware and Solaris Requirements," remove from the text any reference to Solaris 2.6 and add Solaris 9 as a supported operating system.

Sun Blade 150 and Sun Blade 2000 Systems Supported

In Chapter 1, "SunPCi II Hardware Installation," under the heading "Before You Install SunPCi II Cards," and under the sub-heading "Supported System and Power Requirements," Table 1-1 should state that the Sun Blade 150 and Sun Blade 2000 systems are now supported with the release of SunPCi II 2.3.2.

Supported Solaris Operating Systems

In Chapter 2, "SunPCi II Software Installation," under the heading "Supported Solaris Operating Environments," the list should now say the following:

- Solaris 7
- Solaris 8
- Solaris 9

Installing Solaris Patches

In Chapter 2, "SunPCi II Software Installation," under the heading "Installing the Solaris Patches," the information about Solaris 2.6 patches in Table 2-1 and Table 2-2 is no longer relevant, since SunPCi II 2.3.2 does not support Solaris 2.6 software.

SunPCi II 2.3 User's Guide

The following section describes updates to the SunPCi II 2.3 User's Guide.

Updated Documentation

In the Preface, under the heading "Related Documentation," within the table, replace *SunPCi II 2.3 Product Notes* and 806-4789-15 with *SunPCi II 2.3.2 Product Notes* and 806-4789-17.

In Chapter 1, "Introducing SunPCI II Version 2.3 Hardware and Software," under the heading "Viewing the Documentation PDF Files," remove *SunPCi II 2.3 Product Notes* and replace with *SunPCi II 2.3.2 Product Notes*.

Supported Solaris Operating Systems

In Chapter 2, "Getting Started," under the heading "System Requirements," change the following: replace the list Solaris 2.6, Solaris 7, and Solaris 8 with Solaris 7, Solaris 8, and Solaris 9.

User Interface Terminology Update in Windows XP Professional and Windows 2000 Professional

In Chapter 5, "Using Windows XP Professional," under the heading "Configuring Virtual Ethernet Networking on Windows XP Professional," and under the subheading "How to Configure External Video for Windows XP Professional," user interface terminology changed. In the Computer Management window, under Display Adapters, the option "NULL SiS VGA Driver" is now called "SiS 630/730 (no driver installed)." For Steps 5 and 13, replace the terminology "Sun Microsystems NULL SiS VGA Driver" with "SiS 630/730 (no driver installed)."

In Chapter 6, "Using Windows 2000 Professional and Windows 2000 Server," under the heading "Configuring Virtual Ethernet Networking on Windows 2000," and under the sub-heading "How to Configure External Video for Windows XP Professional," user interface terminology changed. In the Computer Management window, under Display Adapters, the option "NULL SiS VGA Driver" is now called "SiS 630/730 (no driver installed)." For Step 6, replace the terminology "Sun Microsystems NULL SiS VGA Driver" with "SiS 630/730 (no driver installed)."

Updated Options Menu

In Chapter 11, "Using SunPCi II Software," under the heading "Options Menu," add the following information in Table 11-2 (between the settings of Create a New Emulated Drive and Attach CD-ROM):

Grow an Existing Emulated Drive (META + G). The purpose of this option is to allow expansion and growth of your emulated hard disk.

For further information, see "New Features in SunPCi II 2.3.2 Software" on page 3.

Printing Problems Using Solaris and SunPCi II Hardware

In Chapter 11, "Using SunPCi II Software," under the heading "Printing From Microsoft Windows Using Solaris Printers," add the following information to the Note section:

When connecting a printer from your Solaris workstation, do one of the following:

- Connect the printer to the SunPCi II hardware (back plate or add-on back plate) to print from Microsoft Windows.
- Connect the printer to the non-SunPCi II Sun hardware to print from Solaris.

There are hardware compatibility issues, particularly drivers, that might not work properly if you try to print from Microsoft Windows when you are connected to the non-SunPCi II Sun hardware.

Screen Saver Conflict With Power-Saving Mode

In Chapter 11, "Using SunPCi II Software," under the heading "Use of Screen Savers," add the following information after the first paragraph:

If you use the Windows 2000 power-saving mode to power down your monitor, avoid using the 3D Maze screen saver since it conflicts with the power-saving mode timer and does not allow the monitor to go into the power-saving mode.

Remote Display of SunPCi II on Non-Sun Systems

In Appendix A, "Troubleshooting," under the heading "SunPCi II Hardware Problems," and under the sub-heading "Video Display Problems," add the following information:

When you use a remote display of SunPCi II, the display device should be a Sun workstation. If you run a remote display of SunPCi II using a non-Sun workstation, performance will likely be poor or might not work at all.

The remote display of SunPCi II is only supported when the display device is a Sun workstation.

Double Mouse Pointer in Windows XP Professional

In Appendix A, "Troubleshooting," under the heading, "Windows XP Professional Issues," and under the sub-heading "Double Mouse Pointer," the following information replaces the existing information:

If you are using Windows XP Professional and attempt to move the Microsoft Windows pointer outside the SunPCi II window, two pointers then appear on the desktop: one is the Microsoft Windows pointer that freezes on the SunPCi II window border and the other pointer becomes visible outside the SunPCi II window.

The Windows pointer works only while in the SunPCi II window and the other normally invisible pointer becomes visible only when you leave the SunPCi II window. Once you return to the SunPCi II window, the normally invisible pointer disappears and the Windows pointer again becomes active and the only pointer viewable. To fix this problem, you can either change the display to 16 bits per pixel (BPP) or disable the pointer shadows.

To change the display to 16 bits, do the following:

- 1. Right-click your Windows desktop.
- 2. Choose Properties.

The Display Properties dialog box opens.

- 3. Select the Settings tab.
- 4. Select Medium (16 bit) in the Color quality drop-down list box.
- 5. Click the Apply button.

The desktop flickers while applying the new settings.

6. Click the OK button in the Display Properties dialog box.

To disable the mouse pointer shadows, do the following:

- 1. Right-click your My Computer icon.
- 2. Choose Properties.

The System Properties dialog box opens.

- 3. Select the Advanced tab.
- **4.** Click the Settings button in the Performance group box. The Performance Options dialog box opens.
- 5. Remove the check in the "Show shadows under the mouse pointer" check box.
- 6. Click the Apply button.
- 7. Click the OK button in the Performance Options dialog box.
- 8. Click OK to close the System Properties dialog box.