SunPCi™ 1.2 Release Notes

THE NETWORK IS THE COMPUTER™

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SunPCi 1.2 Release Notes

The SunPCi™ 1.2 software is an upgrade to SunPCi version 1.0 and higher. It runs on the Solaris™ 2.6, Solaris 7, and Solaris 8 Beta Refresh operating environments, and it supports Windows 95, Windows NT 4.0 with Service Pack 4, 5, or 6a, and Windows 98 SE (Second Edition).

Note – For Windows NT installations, Service Packs 4 or 5 bring the best results. Do not install Service Pack 6a unless you need to fix a specific problem in Windows NT.

This document answers the following questions:

- What Is In This Package?
- How Do I Install a Full SunPCi Package?
- How Do I Install an Upgrade Patch?
- How Do I Update the BIOS?
- How Do I Install Windows 98 SE?
- Does This Release Run on the Solaris 8 Operating Environment?
- What Are the Known Problems With This Release?

You can obtain the SunPCi 1.2 software in one of two ways:

1. If you do not have a previous version of SunPCi software installed, you can download the complete SunPCi 1.2 package and install it. The complete SunPCi 1.2 package is stored at `http://www.sun.com/desktop/products/sunpci`.

   If you have a previous version of the SunPCi software installed, you may remove the existing package and install a complete new package, if desired (instead of upgrading your existing package). *This is the preferred method*.

2. If you already have SunPCi version 1.0 or higher installed, you can download the SunPCi 1.2 patch that corresponds to your software version. Like the full package, the patches are stored at `http://www.sun.com/desktop/products/sunpci`.

To determine the version of SunPCi software you have installed, refer to “Finding Out Your SunPCi Version” on page 8.

What Is In This Package?

The SunPCi 1.2 patch upgrade includes the SunPCi patch for your previously installed version of SunPCi, plus a README text file that describes the patch.

The SunPCi 1.2 full installation package contains the following files:

- SunPCi 1.2 software package
- *SunPCi 1.2 Release Notes* (this document)

The SunPCi documentation files, as well as the SunPCi 1.2 full installation package, are located at `http://www.sun.com/desktop/products/sunpci`.

Uncompressing the SunPCi Software Files

The SunPCi 1.2 files come in a compressed format. After you download the files to a directory on your Solaris system (for example, `$HOME/temp`), perform the following steps to uncompress the files:

1. **At the system prompt, use the `cd` command to go to the directory where you placed the downloaded files. For example:**

```
% cd /home/joeuser/temp
```

2. **Type the following command to uncompress all of the compressed files in the directory:**

```
% uncompress *Z
```

This uncompresses the PostScript™ and `.pdf` files for the manuals and the `.tar` file that contains the SunPCi 1.2 binaries.

3. **To extract the `.tar` file, type the following command:**

```
% tar xvf *.tar
```

This command extracts all of the SunPCi 1.2 files into a subdirectory called `SUNWspci` within the current directory (for example, `/home/joeuser/temp/SUNWspci`). This is the source directory path you use when you install the SunPCi 1.2 package, as described later in this document.

How Do I Install a Full SunPCi Package?

This section describes how to install the full package version of the SunPCi 1.2 software.

If you are upgrading from a previously installed version of the SunPCi software, you can either remove the previous version and install the full SunPCi 1.2 package, or you can install the patch that corresponds to your existing software version. To remove the old package and install the new package, follow the procedures in this section. To upgrade the existing package instead, refer to “How Do I Install an Upgrade Patch?” on page 7.

Removing the Previous SunPCi Package

Note – You only need to perform this procedure if you are upgrading from a previous version of SunPCi (1.1.2 or earlier) and want to install the full package rather than the patch. If you are installing SunPCi software for the first time, then skip this procedure and proceed to “Installing the Full SunPCi 1.2 Package” on page 6. If you are upgrading a previous version of the SunPCi software and want to install the upgrade patch, then skip this section and proceed to “Finding Out Your SunPCi Version” on page 8.

The `pkgrm` program removes the old SunPCi program files. To run `pkgrm`, perform the following procedure.

1. **Become superuser on your system.**

   Enter the following command:

```
% su
```

   Enter the root password. The superuser prompt (for example, #) appears. If you do not know the password, see your system administrator.

2. **Enter the following command:**

```
# pkgrm SUNWspci
```

You are prompted to confirm the removal process.

3. **Enter** `y` **to continue with the removal, and then type** `y` **again to confirm.**

The SunPC package is removed from your system. You are notified when the removal is complete. The system responds with the following message:

```
Removal of <SUNWspci> was successful.
```

You can now proceed to the next section.

Installing the Full SunPCi 1.2 Package

Follow this procedure if you are installing SunPCi software for the first time. If you do not already have the SunPCi card installed in your system, refer to the *SunPCi Installation Guide* for instructions on how to install the hardware.

To install the SunPCi 1.2 package, perform the following procedure.

1. **Open a command (terminal) window on the Solaris desktop.**
2. **Become superuser on the system on which you want to install the SunPCi package.**
3. **Start the** `pkgadd` **program. Type the following command:**

```
# /usr/sbin/pkgadd -d pathname
```

where *pathname* is the path to the SunPCi package; for example, `/home/joeuser/temp`.

The `pkgadd` program starts, and displays the following message:

```
The following packages are available:
1 SUNWspci SunPCi
               (sparc) 1.2
Select package(s) you wish to process (or 'all' to process all
packages). (default: all) [?,??,q]:
```

4. **Press Return to accept the default choice (install the SunPCi package), and then press** `y` **to continue.**

   The `pkgadd` program copies the SunPCi files to the `/opt` directory on your system. The files are listed on your screen as they are copied. When all the SunPCi files have been copied, `pkgadd` displays the following message:

```
Installation of SUNWspci was successful.
The following packages are available:
1 SUNWspci SunPCi
              (sparc) 1.2
Select package(s) you wish to process (or 'all' to process all
packages). (default: all) [?,??,q]:
```

5. **Enter** `q` **to exit the** `pkgadd` **program.**

Note – If the `pkgadd` program issues a `BIOS Mismatch` message, you will need to flash (update) the BIOS on your SunPCi card. Refer to “How Do I Update the BIOS?” on page 11 for information on how to use the `sunpciflash` utility.

---

6. **Type the** `exit` **command to end your superuser session.**

   You are returned to your normal user session.

How Do I Install an Upgrade Patch?

If you are upgrading from SunPCi 1.0 or higher, you need to install a patch to upgrade to SunPCi 1.2. You can download the patch from the SunPCi product Web site at `http://www.sun.com/desktop/products/sunpci`.

Note – If you removed the previously installed package and installed the full SunPCi 1.2 package as described in “How Do I Install a Full SunPCi Package?” on page 5, skip this section and proceed to “How Do I Update the BIOS?” on page 11.

Finding Out Your SunPCi Version

- **To determine which version of SunPCi software you are running, type the following command:**

```
% pkginfo -l SUNWspci
```

Your system should return information similar to the following:

```
 PKGINST:  SUNWspci
     NAME:  SunPCi
 CATEGORY:  system
     ARCH:  sparc
  VERSION:  1.1
  BASEDIR:  /opt
   VENDOR:  Sun Microsystems, Inc.
     DESC:  This package contains the SunPCi software for Solaris
2, Sparc PCI Platforms
    PSTAMP:  quarklab17m04072332
  INSTDATE: Dec 04 1999 07:47
   HOTLINE:  Please contact your local service provider
    STATUS:  completely installed
     FILES:    440 installed pathnames
                62 directories
                15 executables
             30317 blocks used (approx)
```

Your version of SunPCi corresponds to the number on the VERSION: line. In the example above, the SunPCi version is 1.1.

Now that you know the version of SunPCi that you have installed, follow the appropriate procedure to install the upgrade patch.

Determining Your Patch Version

The patch you download and install depends on the version of SunPCi software you have installed. TABLE 1 shows the patches needed to upgrade SunPCi 1.0, 1.0.1, or 1.1.2 to SunPCi 1.2.

TABLE 1 Patch Numbers for SunPCi Version Upgrades

Your base SunPCi package version (`pkginfo -l`)	**Download and install this patch to upgrade to SunPCi 1.2**
1.0	107515-05
1.0.1	107938-04
1.1.2	108478-01

Installing the Patch

After you download the appropriate patch from `http://www.sun.com/desktop/products/sunpci`, perform the following procedure.

1. **Open a command (terminal) window on the Solaris desktop.**
2. **Become superuser on your system; enter the following command:**

```
% su
```

Enter the root password. The superuser prompt (for example, #) appears. If you do not know the password, see your system administrator.

3. **Use the `cd` command to go to the directory where you placed the patch file (for example, `$HOME/temp`).**
4. **To find out the version of your operating system, type the following command:**

```
# uname -a
```

Do not type the # sign; that is your superuser prompt. Press Return when you have finished typing the command.

Your workstation returns a line of text similar to the following:

```
SunOS myworkstn 5.6 Generic sun4u sparc SUNW, Ultra-30
```

Note the SunOS version number that appears. For example, SunOS 5.5.1 is Solaris 2.5.1 and SunOS 5.6 is Solaris 2.6. You need to know the version of your operating system in order to use the correct command to install the patch.

5. **If you are running Solaris 2.6 or earlier, type the following command:**

```
# ./installpatch .
```

If you are running Solaris 7 or higher, use this command:

```
# /usr/sbin/patchadd .
```

The installation process takes a few minutes. You will see console messages similar to the following:

```
Checking installed packages and patches...

Generating list of files to be patched...

Verifying sufficient filesystem capacity (exhaustive method)...

Installing patch packages...
```

When the patch installation is complete, the console returns the following messages (substituting the number of the patch you installed for *XXXXXX-XX*):

```
Patch number XXXXXX-XX has been installed.

Patch packages installed:

SUNWspci
```

If your system reports any errors installing the patch, refer to the README file that came with the patch.

How Do I Update the BIOS?

The SunPCi software contains a utility for updating (also called *flashing*) the BIOS on your SunPCi card. This utility is located at `/opt/SUNWspci/bin` and is called `sunpciflash`.

Note – Your BIOS version should be .054 in order to run SunPCi 1.2 software.

Make sure you exit the SunPCi software before running the `sunpciflash` utility. You run `sunpciflash` at the UNIX superuser prompt.

To update your BIOS, perform the following steps:

1. **Become superuser on your workstation, if you are not already logged in as superuser.**
2. **Type the following command:**

```
# cd /opt/SUNWspci/bin
```

This places you in the directory where `sunpciflash` is located.

3. **Type this command to update (flash) your BIOS:**

```
# ./sunpciflash -f /opt/SUNWspci/bios/sunpci.bin
```

If you want to save a copy of your old BIOS for any reason, you can include the `-s` switch and the file name to which you want to save your old BIOS. For example, to update your BIOS and save the old file to `/home/joeuser/oldbios`, you would type the following command on one line:

```
# ./sunpciflash -f /opt/SUNWspci/bios/sunpci.bin -s /home/joeuser/
oldbios
```

The system replies by showing the following messages:

```
Flashing /opt/SUNWspci/bios/sunpci.bin, Version 0.054 (Current
Version 0.049)
BIOS flashed to version 0.054
```

How Do I Install Windows 98 SE?

In order to install Windows 98 SE (Second Edition) on SunPCi software, you will need to have the Windows 98 SE installation CD. There are two types of Windows 98 installations:

- Full Windows 98 SE installation on a newly created C: drive, and
- Upgrade an existing Windows 95 C: drive to work with Windows 98 SE

Note – The Windows 98 SE software is not provided with the SunPCi package. You need to have your own copy of Windows 98 SE available in order to perform the installation.

Make sure you have enough space on your C: drive to accommodate the installation. Windows 98 SE requires a minimum of 100 Mbytes of free hard disk space. For more information on how C: drive files work in SunPCi software, refer to the *SunPCi User's Guide* AnswerBook (included on the CD shipped with your SunPCi hardware).

Performing a Full Windows 98 SE Installation

The checklist in TABLE 2 is designed to help you perform a successful Windows 98 SE installation on a new C: drive.

TABLE 2 Windows 98 Full Installation Checklist

Complete	Procedure	Reference (page number)
❒	Create a new C: drive.	page 13
❒	Check to see if Solaris Volume Manager (`vold`) is running.	page 13
❒	Insert the Windows 98 CD into your CD-ROM drive and start SunPCi. The DOS prompt (`C:\>`) is displayed.	page 13
❒	Type `r:\cdrom\cdrom0\win98\setup.exe` to install Windows 98 SE.	page 14
❒	From the Start menu, choose Run. In the Run field, type `f:\drivers\win98\setup.exe` to install the SunPCi drivers.	page 15

To perform the full installation of Windows 98 SE, follow this procedure.

1. **Start the SunPCi software, if it is not already running.**

2. **Create a new C: drive.**

   The minimum size drive you can create is 500 Mbytes, but a drive size of at least 1 Gbyte is recommended. Make sure you have enough space available on your workstation's hard drive.

3. **Check to see if Solaris Volume Manager (`vold`) is running.**

   To find out if Volume Manager is enabled, type `ps -ef | grep vold`. The system returns information on the Volume Manager process (`vold`) if it is enabled. If you want to use your workstation's diskette drive as drive A:, you will need to run the `vold_floppy_disable` script. Refer to the *SunPCi User's Guide* for more information.

4. **Insert your Windows 98 SE CD into the CD-ROM drive.**

   Do not remove the CD until after all the drivers are loaded. If your workstation does not have Solaris Volume Manager (`vold`) enabled, you will need to log in to your workstation as root and mount the CD-ROM drive manually as described in the next step.

   If your workstation (Ultra™ 5 or Ultra 10) has an IDE drive, the device will be `/dev/dsk/c0t2d0s2`.

5. **If Solaris Volume Manager support is not enabled on your workstation, become superuser and change to the root partition and become superuser. To change to the root partition, become superuser and then type the following command:**

```
# cd /
```

   If your workstation has Solaris Volume Manager enabled, skip this step and proceed directly to Step 6.

   If your workstation has a SCSI drive, type the following command to mount the CD-ROM drive at `/cdrom`:

```
# mount -o ro -F hsfs /dev/dsk/c0t6d0s2 /cdrom
```

Note – Make sure you type `-o` with no space between the minus sign and the letter o.

---

6. **If you do not already have the SunPCi program running, start it by entering the following command:**

```
# /opt/SUNWspci/bin/sunpci
```

The SunPCi software starts. When it has finished the startup process, the DOS prompt (`C:\>`) is displayed.

7. **Type the following command at the DOS prompt and press Return:**

```
C:\> r:\cdrom\cdrom0\win98\setup.exe
```

If you needed to mount the CD-ROM drive manually in Step 5, replace the `\cdrom\cdrom0` path with the path for the location at which the CD-ROM drive is mounted. (For example, in Step , the mount point is `/cdrom`.)

8. **From the SunPCi Options menu, choose Attach Mouse to attach the mouse cursor to the SunPCi window.**

9. **Follow the instructions on the screens to install Windows 98 SE.**

A series of informational screens is displayed as the installation continues. When the installation is finished, the setup program will automatically reboot the SunPCi software.

Windows will ask if you want to save your system files in case you want to uninstall Windows 98 SE. This is not necessary if you have backed up your C: drive file.

10. **Once the SunPCi software reboots, a dialog box is displayed asking you to enter a network password for Microsoft Networking.**

If you want to use NDIS (which provides direct access to your network for SunPCi), type your UNIX workstation user name and password and press Return. Confirm your password when the program asks you to.

If you are accessing the network through your local host using the SunPCi file system driver, you do not need to log in to Microsoft Networking. Just click OK to continue.

Note – Drives that use NDIS and the file system driver are referred to as *extended* drives. For more information on extended drives, refer to the *SunPCi User's Guide*.

The installation process continues, and the setup program indicates that it is updating your hardware, files, and settings. After the setup process is complete, a Welcome to Windows 98 dialog box is displayed.

11. **Click Close to close this dialog box.**

12. **Click Start and then select Shut Down from the pop-up menu.**

13. **Choose Restart the computer and then click Yes.**

    The SunPCi window reboots. To continue the installation, proceed to the following section.

Installing the Windows 98 Drivers

The `setup` utility installs the SunPCi drivers. You execute this utility from within Windows 98 SE.

1. **Click Start and select Run from the pop-up menu.**

   A dialog box is displayed.

2. **Type the following path into the dialog box and click OK:**

   ```
   f:\drivers\win98\setup.exe
   ```

   This program installs the SunPCi drivers. As the installation process continues, informational windows are displayed.

3. **When the driver installation has finished, click OK to close the dialog box.**

4. **Click Start and select Shut Down from the pop-up menu.**

   A dialog box is displayed; select Restart the Computer and click Yes.

   When Windows 98 SE reboots, you may see an `Updating Files` message on your screen. When the updating process is complete, the message disappears.

5. **If you are using NDIS to access your network, when the Microsoft Networking dialog box is displayed, type in your user name and password and click OK.**

   Otherwise, click cancel or press Esc to escape.

6. **If a dialog box appears asking if you want to receive DHCP messages, click No.**

   If you do not see the dialog box, skip this step.

7. **Click Start and select Settings, then Control Panel from the pop-up menus.**

   The Control Panel window is displayed.

8. **Double-click on the Date/Time icon to set the correct date and time.**

   You are now ready to start using Windows 98 SE with all your PC applications.

Upgrading Your Windows 95 C: Drive to Windows 98 SE

Before You Start

Before you start the upgrade procedure, make sure that you have performed the following tasks.

1. Make sure that you have at least 100 Mbytes of free space on your Windows 95 C: drive. If not, you will need to install Windows 98 SE (Second Edition) on a new C: drive.

2. Before you perform this procedure, make sure you have made a backup copy of your Windows 95 C: drive file.

Caution – If you do not make a backup and your upgrade process does not complete for some reason, you may lose your data.

3. Make sure you have updated your SunPCi software to version 1.2 before performing this procedure. Refer to “Installing the Full SunPCi 1.2 Package” on page 6 or “How Do I Install an Upgrade Patch?” on page 7 if you have not already updated the software.

Once you have performed these steps, you are ready to upgrade your Windows 95 C: drive. TABLE 3 describes the steps you need to follow to upgrade your existing Windows 95 C: drive to Windows 98.

TABLE 3 Windows 98 Upgrade Checklist

Complete	Procedure	Reference (page number)
❒	Update your BIOS to version .054.	page 11
❒	Insert the Windows 98 SE CD into your CD-ROM drive and start SunPCi. Click OK when the Newer Drivers Available dialog box appears.	page 17

TABLE 3 Windows 98 Upgrade Checklist

Complete	Procedure	Reference (page number)
❒	From the Start menu, choose Run. In the Run field, type `f:\drivers\win95\setup.exe` to install the updated SunPCi Windows 95 drivers.	page 19
❒	Either edit your `autoexec.bat` file to include the `sunpcnet use r:/` command or copy your Windows 95 `.cab` (cabinet) files to another directory on your C: or D: drive.	page 18
❒	From the Start menu, choose Run. In the Run field, type `f:\drivers\win98\setup.exe` to install the SunPCi Windows 98 SE drivers.	page 22

Updating the Windows 95 Drivers

1. **Insert your Windows 98 SE CD into the CD-ROM drive.**

   Do not remove the CD until after all the drivers are loaded.

2. **To find out if Volume Manager is enabled, type** `ps -ef | grep vold`**. The system returns information about the Volume Manager process (**`vold`**) if it is enabled. If you want to use your workstation's diskette drive as drive A:, you will need to run the** `vold_floppy_disable` **script. Refer to the** *SunPCi User's Guide* **for more information.**

   If Solaris Volume Manager support is not enabled on your workstation, change to the root partition and become superuser.

   If your workstation has Solaris Volume Manager enabled, skip this step.

   If your workstation has a SCSI drive, type the following command to mount the CD-ROM drive:

```
# mount -o ro -F hsfs /dev/dsk/c0t6d0s2 /cdrom
```

Note – Make sure you type `-o` with no space between the minus sign and the letter o.

If your workstation (Ultra 5 or Ultra 10) has an IDE drive, the device will be `/dev/dsk/c0t2d0s2`.

3. **If you do not already have the SunPCi software running, start it by entering the following command:**

```
# /opt/SUNWspci/bin/sunpci
```

The SunPCi software starts. The Windows 95 desktop is displayed. If a dialog box appears announcing that the `spccheck` utility has found newer drivers for SunPCi, click OK to continue.

4. **From the Start menu, choose Run.**

The Run dialog box is displayed.

5. **Type the following command in the Run dialog box and click OK:**

```
f:\drivers\win95\setup.exe
```

The setup program indicates that it is updating your hardware, files, and settings.

After the setup process is complete, a dialog box is displayed asking whether you want to restart your computer.

6. **Click OK to restart SunPCi.**

The SunPCi window reboots.

To continue the installation, you need to perform one of the following two procedures:

- Edit your `autoexec.bat` file to include the `sunpcnet use r:/` command; or
- Copy the Windows 95 `.cab` files to another location on your C: or D: drive

The procedure you perform depends on the amount of emulated disk space you have available.

Editing the `autoexec.bat` File

Perform this procedure if you have 100 Mbytes of free disk space on your C: drive, but do not have an additional 170 Mbytes of free disk space on either C: or D:. If you do have the additional 170 Mbytes of free disk space (for a total of 270 Mbytes), perform the procedure in the next section, “Copying the `.cab` Files” on page 20.

To edit your `autoexec.bat` file, follow these steps.

1. **Use your favorite Windows text editor (such as Notepad) to open the file `C:\autoexec.bat`.**

2. **Add the following line to the end of the file:**

```
sunpcnet use r: /
```

Note – Make sure you add a space between the colon and the forward slash.

3. **Save the file and exit the text editor.**

4. **From the Start menu, choose Shut Down.**

   Click on Restart the Computer and then click OK to restart Windows.

5. **From the Start menu, choose Run.**

   The Run dialog box is displayed.

6. **Type the following command into the Run dialog box and click OK:**

```
r:\cdrom\cdrom0\win98\setup.exe
```

   This starts the Windows 98 installation process. Follow the instructions on the screen.

   After Windows 98 SE reboots the first time, you may see a message similar to the following:

```
SUNWFSD not installed.
```

   This message appears because the SunPCi drivers are not yet loaded during the Windows 98 SE upgrade; it does not indicate a problem. Just click OK to continue.

7. **Once the SunPCi software reboots, a dialog box is displayed asking you to enter a network password for Microsoft Networking.**

   If you want to use NDIS (which provides direct access to your network for SunPCi), type your UNIX workstation user name and password and press Return. Confirm your password when the program asks you to.

   If you are accessing the network through your local host using the SunPCi file system driver, you do not need to log in to Microsoft Networking. Just click OK to continue.

Note – Drives that use NDIS and the file system driver are referred to as *extended* drives. For more information on extended drives, refer to the *SunPCi User's Guide*.

The installation process continues, and the setup program indicates that it is updating your hardware, files, and settings. After the setup process is complete, a Welcome to Windows 98 dialog box is displayed.

8. **Click Close to close this dialog box.**

9. **When the Windows 98 SE installation process has completed, choose Shut Down from the Start menu, and then choose Restart the Computer. Click OK to restart Windows.**

Now that you have installed Windows 98 SE, skip the following section and proceed directly to "Installing the SunPCi Windows 98 SE Drivers" on page 22.

Copying the `.cab` Files

Perform this procedure if you have 100 Mbytes of free disk space available on your C: drive and 170 Mbytes of additional space available on either C: or D:. In this procedure, *X*: is used to mean "either your C: drive or your D: drive," and *Y*: is your CD-ROM drive.

Note – If you have edited your `autoexec.bat` file as described in the previous section, skip this procedure and continue on to "Installing the SunPCi Windows 98 SE Drivers" on page 22.

Note – Before you copy the Windows 98 SE `.cab` (cabinet) files, make sure you have sufficient free space on the drive to which you are copying them.

To copy the `.cab` files, perform the following steps.

1. **From the Start menu, choose Programs, and then choose MS-DOS Prompt.**

   The DOS prompt (`C:\>`) is displayed.

2. **Type the following command, substituting the drive (C: or D:) to which you are copying the `.cab` files for the drive letter *X*: :**

```
C:\> mkdir X:\win98cd
```

3. **Make sure the Windows 98 SE CD is in your CD-ROM drive. Type the following command, substituting the drive you specified in the previous step for *X*: and the drive letter of your CD-ROM drive for *Y*: :**

```
C:\> copy Y:\win98\*.* X:\win98cd
```

4. **Type the following command, substituting the drive (C: or D:) to which you have copied the `.cab` files for the drive letter *X*: :**

```
C:\> X:\win98cd\setup.exe
```

After Windows 98 SE reboots the first time, you may see a message similar to the following:

```
SUNWFSD not installed.
```

This message appears because the SunPCi drivers are not yet loaded during the Windows 98 SE upgrade; it does not indicate a problem. Just click OK to continue.

5. **Once the SunPCi software reboots, a dialog box is displayed asking you to enter a network password for Microsoft Networking.**

If you want to use NDIS (which provides direct access to your network for SunPCi), type your UNIX workstation user name and password and press Return. Confirm your password when the program asks you to.

If you are accessing the network through your local host using the SunPCi file system driver, you do not need to log in to Microsoft Networking. Just click OK to continue.

Note – Drives that use NDIS and the file system driver are referred to as *extended* drives. For more information on extended drives, refer to the *SunPCi User's Guide*.

The installation process continues, and the setup program indicates that it is updating your hardware, files, and settings. After the setup process is complete, a Welcome to Windows 98 dialog box is displayed.

6. **Click Close to close this dialog box.**

When the setup process is complete, proceed to the following section, "Installing the SunPCi Windows 98 SE Drivers" on page 22. You can delete the temporary directory `\win98cd` once you have finished installing Windows 98.

Installing the SunPCi Windows 98 SE Drivers

The `setup` utility installs the SunPCi drivers. You execute this utility from within Windows 98 SE.

1. **Click Start and select Run from the pop-up menu.**

   A dialog box is displayed.

2. **Type the following path into the dialog box and click OK:**

   ```
   f:\drivers\win98\setup.exe
   ```

   As the installation progresses, informational windows are displayed.

3. **After the installation has completed, click OK to close the dialog box.**

4. **Click Start and select Shut Down from the pop-up menu.**

   A dialog box is displayed; select Restart the Computer and click Yes.

   When Windows 98 SE reboots, you may see an `Updating Files` message on your screen. When the updating process is complete, the message disappears.

5. **If you are using NDIS to access your network, when the Microsoft Networking dialog box is displayed, type in your user name and password and click OK.**

   Otherwise, click Cancel or press Esc to escape.

6. **If a dialog box appears asking if you want to receive DHCP messages, click No.**

   If you do not see the dialog box, skip this step.

7. **Click Start and select Settings, then Control Panel from the pop-up menus.**

   The Control Panel window is displayed.

8. **Double-click on the Date/Time icon to set the correct date and time.**

   You are now ready to start using Windows 98 SE with all your PC applications.

Does This Release Run on the Solaris 8 Operating Environment?

SunPCi 1.2 has been built and tested on the Solaris 8 operating environment Beta Refresh release. The SunPCi 1.2 drivers may work on the FCS version of Solaris 8 software, but it may be necessary to update the drivers when Solaris 8 is released. If so, updated drivers will be available for downloading from the SunPCi product Web site at `http://www.sun.com/desktop/products/sunpci`.

Note – Do not use the SunPCi software with Solaris 8 builds older than the Beta Refresh version. Likewise, do not install SunPCi software versions earlier than 1.2 to Solaris 8; they will not work.

What Are the Known Problems With This Release?

This section describes known problems with this release of SunPCi 1.2 software. The section includes the following topics:

- Windows 98 SE Issues
- Windows NT Issues
- Solaris 8 Issues
- Workstation Issues

Windows 98 SE Issues

Power Management

The Windows Power Management (Monitor and CPU Sleep) feature is disabled by default. *Do not* turn it on. Turning on Power Management can cause video hangs or corrupt your C: drive.

Windows 98 Retail Issues

The first retail edition of Windows 98 shipped without a driver that was included in later versions of the operating system software (such as the Second Edition). If you have installed the retail edition and see an error message that reads `Can't find cdcache.exe`, just click OK to continue.

Using a Windows 98 Startup Disk

Windows will ask if you want to create a startup disk. If you want to do so, note that option 1, Start with CD-ROM, does not work with SunPCi.

Windows NT Issues

Known Problems

Some audio CDs do not work with Windows NT. This is a known problem.

If you install Microsoft Office 2000 to a file system drive running under Windows NT and you encounter problems installing or using the application, install Office 2000 to an emulated drive (C: or D:).

Sending attachments with Eudora email messages sometimes results in an error message. This is also a known problem and will be fixed in the next software release.

Installing Windows NT on an Ultra 5 Running Solaris 2.6 or Earlier

If you are using an Ultra 5 workstation running version 2.6 or earlier of the Solaris operating environment and your workstation contains the standard M64 frame buffer, you need to install Solaris patches in order to correct some Solaris display problems that affect Windows NT.

If you are running Solaris 2.5.1, you need to install patch 103792-25.

If you are running Solaris 2.6, you need to install patch 105362-24.

You can find both patches at `http://www.sun.com/desktop/products/sunpci`.

To install the patch, refer to the procedure in "How Do I Install an Upgrade Patch?" on page 7.

Converting a FAT Disk to NTFS

If you have an emulated drive (such as drive D:) in FAT format and you want to convert it to NTFS, use the Disk Administrator function in Windows NT to perform the conversion. *Do not* use the convert function from the `C:\` command line.

Solaris 8 Issues

Package Installation Failures

If you are installing SunPCi software to the Solaris 8 operating environment, make sure you install SunPCi version 1.2 or higher. Versions earlier than 1.2 will not install correctly on Solaris 8. System messages from a failed package installation appear similar to the following:

```
 ## Executing postinstall script.
>
> The SunPCi driver installation has failed.
>   Cannot find the driver file: sunpcidrv.280
> Can not open the SunPCi device
>   The device driver is not installed.
> pkgadd: ERROR: postinstall script did not complete successfully
>
> Installation of <SUNWspci> partially failed.
>
> The following packages are available:
>   1  SUNWspci     SunPCi
>                   (sparc) 1.0.1
```

Workstation Issues

Display Driver

If you are changing display resolutions in the SunPCi window from 24-bit mode to 8-bit mode, you need to reboot your workstation in order to show the change in the Windows Properties dialog box. If you do not reboot, Properties still shows 24-bit mode.