Solaris™ 2.6 (SPARC Platform Edition) Release Notes

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Contents

Preface

Solaris 2.6 (SPARC Platform Edition) Release Notes contain installation problem details and other information that was not available until immediately before the release of the Solaris™ 2.6 operating environment software.

Most of the information in the *Solaris 2.6 (SPARC Platform Edition) Release Notes* that was formerly distributed in hard copy format is now available online for ease of use. This document complements the information that is available in the `SUNWrdm` package, the online release notes. The information in Chapter 1 "Installation Issues" supersedes the information in the `installation_bugs` file that is part of the online release notes. All other chapters in this document supplement the other files that are part of the online release notes.

You can access the online release notes (the `SUNWrdm` package) as follows:

- When booting from the Solaris 2.6 CD, information about this release can be found in the `/cdrom/sol_2.6_sparc/s1/Solaris_2.6/Docs/ release_info/C` directory
- The default installed location for information about this release can be found in the `/usr/share/release_info/Solaris_2.6/C` directory

Who Should Use These Notes

These notes are for users and system administrators who are installing and using Solaris 2.6 software.

How This Book Is Organized

Chapter 1 "Installation Issues," lists installation problems and installation news that arrived too late for publication in other documents. When booting from the Solaris 2.6 CD, the `installation_bugs` file is located in the `/cdrom/sol_2.6_sparc/s1/Solaris_2.6/Docs/release_info/C` directory. The installed location for the `installation_bugs` file is the `/usr/share/release_info/Solaris_2.6/C` directory.

Chapter 2 "Late-Breaking Solaris Runtime Bugs," describes problems (non-installation) that arrived too late for publication in other documents. When booting from the Solaris 2.6 CD, the `runtime_bugs` file is located in the `/cdrom/sol_2.6_sparc/s1/Solaris_2.6/Docs/release_info/C` directory. The installed location for the `runtime_bugs` file is the `/usr/share/release_info/Solaris_2.6/C` directory.

"Late-Breaking Solaris Product News," is not included in this document. This chapter is included only in the online release notes. When booting from the Solaris 2.6 CD, the `new_features` file is located in the `/cdrom/sol_2.6_sparc/s1/Solaris_2.6/Docs/release_info/C` directory. The installed location for the `new_features` file is the `/usr/share/release_info/Solaris_2.6/C` directory.

"End of Software Support Statements," is not included in this document. This chapter is included only in the online release notes. When booting from the Solaris 2.6 CD, the `eof` file is located in the `/cdrom/sol_2.6_sparc/s1/Solaris_2.6/Docs/release_info/C` directory. The installed location for the `eof` file is the `/usr/share/release_info/Solaris_2.6/C` directory.

"Late-Breaking Patches," is not included in this document. This chapter is included only in the online release notes. When booting from the Solaris 2.6 CD, the `integrated_patches` file is located in the `/cdrom/sol_2.6_sparc/s1/Solaris_2.6/Docs/release_info/C` directory. The installed location for the `integrated_patches` file is the `/usr/share/release_info/Solaris_2.6/C` directory.

"Driver Update Information," is not included in this document. This chapter is included only in the online release notes. When booting from the Solaris 2.6 CD, the `driverupdate` file is located in the `/cdrom/sol_2.6_sparc/s1/Solaris_2.6/Docs/release_info/C` directory. The installed location for the `driverupdate` file is the `/usr/share/release_info/Solaris_2.6/C` directory.

Related Books

You may need to refer to the following manuals when installing Solaris software:

■ *Solaris 2.6 SPARC Installation Instructions*
■ *Information Library for Solaris 2.6 (SPARC Platform Edition)*

For some hardware configurations, you may need supplemental hardware-specific instructions for installing the Solaris operating environment. If your system requires hardware-specific actions at certain points, the manufacturer of your hardware has provided supplemental Solaris installation documentation. Refer to those documents for hardware-specific installation instructions.

Ordering Sun Documents

The SunDocs℠ program provides more than 250 manuals from Sun Microsystems, Inc. If you live in the United States, Canada, Europe, or Japan, you can purchase documentation sets or individual manuals using this program.

For a list of documents and how to order them, see the catalog section of the SunExpress™ Internet site at `http://www.sun.com/sunexpress`.

What Typographic Changes Mean

The following table describes the typographic changes used in this book.

TABLE P-1   Typographic Conventions

Typeface or Symbol	Meaning	Example
`AaBbCc123`	The names of commands, files, and directories; on-screen computer output	Edit your `.login` file. Use `ls -a` to list all files. `machine_name% You have mail.`
`AaBbCc123`	What you type, contrasted with on-screen computer output	`machine_name%` **`su`** `Password:`
AaBbCc123	Command-line placeholder: replace with a real name or value	To delete a file, type `rm` *filename*.
AaBbCc123	Book titles, new words or terms, or words to be emphasized	Read Chapter 6 in *User's Guide*. These are called *class* options. You *must* be root to do this.

Shell Prompts in Command Examples

The following table shows the default system prompt and superuser prompt for the C shell, Bourne shell, and Korn shell.

TABLE P-2   Shell Prompts

Shell	Prompt
C shell prompt	`machine_name%`
C shell superuser prompt	`machine_name#`
Bourne shell and Korn shell prompt	`$`
Bourne shell and Korn shell superuser prompt	`#`

Installation Issues

This chapter describes known problems relating to the installation of the Solaris 2.6 software environment. In addition to the existing Solaris Interactive Installation facility, Solaris 2.6 contains a new installation method called Solaris Web Start. Solaris Web Start is a browser-based utility that facilitates installation of all products contained in each product box.

Note – The information in this chapter supersedes any information listed in the `installation_bugs` file that is part of the `SUNWrdm` package on the Solaris 2.6 CD. If you boot from the Solaris 2.6 CD, the `installation_bugs` file is located in the `/cdrom/sol_2.6_sparc/s1/Solaris_2.6/Docs/release_info/C` directory. The default installed location for the `installation_bugs` file is the `/usr/share/release_info/Solaris_2.6/C` directory.

Contacting Customer Support

If you have any support issues, call your authorized service provider. For further information about SunSoft support, see `http://access1.sun.com`. To find out more about Sun Microsystems, see `http://www.sun.com`.

Installation News

This section describes:

- Solaris Web Start news
- Autofs Administration news
- Solaris Installation news

Solaris Web Start News

Limited Browser Support in Client-Server Mode

To use the client-server mode of Solaris Web Start, you must have one of the following software configurations installed on the client:

- Solaris 2.6 with the latest Hot Java browser
- Windows 95 with the Netscape Navigator 4.0 browser

Solaris Web Start may not run or display properly with some of the older versions of HotJava or with other software configurations.

No Software Upgrades

Because Solaris Web Start is designed to install software on a new system, it does not at present enable you to upgrade software on an installed system. Use the Solaris Interactive Installation program instead of Solaris Web Start.

Minimum System Requirements

If you want to use Solaris Web Start, your computer must have:

- A boot disk with a capacity of 1.05 Gbyte or higher

  You need a 1.05 Gbyte boot disk (formatted and labeled) to run Solaris Web Start, after which the program determines whether your system has sufficient disk space to install the products you selected. A 2.1 Gbytes boot disk is recommended for installing server software.

- At least 48 Mbytes of Random Access Memory (RAM)

It is not generally possible to run Solaris Web Start with less than 48 Mbytes of RAM. However, if your system is SPARC-based, has between 32 and 48 Mbytes of RAM, and meets disk space requirements, Solaris Web Start will attempt to run in client-server mode.

If your system does not meet these requirements, use the Solaris Interactive Installation program instead of Solaris Web Start.

No Customizing of Solaris Software Clusters

Solaris Web Start installs entire software clusters and does not afford the flexibility of installing particular packages within a cluster. Use the Solaris Interactive Installation program instead of Solaris Web Start.

No Installations of "Nil" Versions

Solaris Web Start installs the full or "heavy" versions of all software packages. Use the pkgadd command to install "nil" versions where available.

Cannot Use Custom JumpStart to Control Solaris Web Start

You cannot control the behavior of Solaris Web Start by using a custom JumpStart™ profile. If you have a Custom JumpStart profile located either on a diskette or on the network, Solaris Web Start ignores it.

Some Swap Space May Be Required

During the final part of the installation process, Solaris Web Start may require some swap space to store the software it reads from CDs. If your system has less than 96 Mbytes of random access memory (RAM), then Solaris Web Start needs enough swap space to make available a total of 96 Mbytes of swap and RAM space. If you want to set up your system without any swap space, use the Solaris Interactive Installation program instead of Solaris Web Start.

Autofs Administration News

Autofs in the Solaris 2.6 release was enhanced to include support for browsing. This makes it possible to view the contents of a particular autofs mount point without causing the file systems to be mounted. Standard tools, such as the `ls(1)`, `filemgr(1)`, and `dtfile(1X)`, can be used to traverse autofs mount points.

The support for the new browsing functionality works well for small autofs maps but can cause problems with larger maps. In previous releases, it was safe to browse autofs mount points such as /home and /net because there were only a few entries displayed in the directory. With the new browsing functionality, there can be many entries displayed, depending on the local site configuration. Some applications have been found which made unsafe assumptions about the numbers of entries found in these directories. These applications need to be modified to eliminate this assumption. It is advisable to temporarily disable browsing on larger autofs maps such as /home and /net until these applications can be modified.

To manage browsing, two new autofs map options have been introduced, browse and nobrowse. The browse option is used to enable browsing and the nobrowse option disables browsing. The default option is browse. These options work on a per entry basis. Therefore, browsing can be disabled for an entire map or for individual map entries.

The options for the /home and /net entries in the default /etc/auto_master file that is shipped with the Solaris 2.6 software have been updated to include the nobrowse option. Therefore, freshly installed systems have browsing disabled for the /home and /net autofs mount points.

The upgrade procedure has been enhanced to include the nobrowse option on the /home and /net entries in /etc/auto_master, provided that those entries have not been previously modified. If those entries have been modified, possibly to add other options, then these modifications must be made manually.

If the local name space includes other large site-specific autofs maps, then browsing may need to be disabled for each of those maps.

The directions for disabling autofs browsing are contained in the *NFS Administration Guide* in the section, "Disabling Autofs Browsability."

Solaris Installation News

Solaris Default Login Screen

Solaris 2.6 defaults to a login screen when you initially boot your workstation, regardless of which desktop you are using. You can select your desktop from the login screen. The login screen requires the user's name and password. Upon authentication of your name and password, your desktop displays. For more information about the login screen, see the DtLogin man page (provided with the Solaris CDE man pages) or the *Solaris CDE Advanced User's and System Administrator's Guide* (provided with the AnswerBook2 documentation CD-ROM).

`DtLogin` Notes for System Administrators

System Administrators should find the following `DtLogin` notes useful:

- DtLogin starts the X-server at boot time. If your system requires non-default X-server options, you can add them to the last line of the `/etc/dt/config/Xservers` configuration file. This file is not automatically created. However, you can create the file by becoming superuser and then typing:

```
# mkdir /etc/dt/config
# cp /usr/dt/config/Xservers /etc/dt/config
```

  For example, if your system has two frame buffers, `fb0` and `fb1`, add the following Xsun options to the end of the last line of the `/etc/dt/config/Xservers` file:

```
-dev /dev/fb0 -dev /dev/fb1
```

- Choose Command Line Login from the Options menu on the `DtLogin` screen to display the command line login prompt.
- Xserver startup errors are found in the `DtLogin` error log file in:

```
/var/dt/Xerrors
```

- Errors occurring during a User's login are logged in the following file:

```
$HOME/.dt/startlog
```

- To kill the `DtLogin` screen for any one time system administration work, as root, enter:

```
/usr/dt/bin/dtconfig -kill
```

- To disable the `DtLogin` screen for the next system boot, enter:

```
/usr/dt/bin/dtconfig -d
```

- To re-enable the `DtLogin` screen for the next system boot, enter:

```
/usr/dt/bin/dtconfig -e
```

New Locales in the Base Installation

The installation window in the base Solaris 2.6 CD offers several English language locales. If you want to use 8-bit characters, you should install through one of the `en_XX` options. The locale used in the installation will become the default system locale.

Note – The C locale was installed by default in the base English releases prior to Solaris 2.6.

TABLE 1-1 New Locales Offered in Installation

Locale Name	Language/Territory	Code Set
C	American English	7-bit
en_AU	Australian English	8-bit
en_CA	Canadian English	8-bit
en_UK	UK English	8-bit
en_US	American English	8-bit

To enable JumpStart for the new 8-bit locales, add the line locale *xx* (substituting the appropriate 8-bit locale for *xx*, for example, `en_US`) to the JumpStart profile file. For detailed information about the locale profile keyword, see "Preparing Custom JumpStart Installations" in the *Solaris Advanced Installation Guide.*

Default JumpStart Now Offers Choice of Solaris Web Start

When you turn on a new system that has a hard disk that can boot and automatically run a JumpStart installation (or an existing system that has been given that capability with the re-preinstall command), there is a change in the behavior when that system begins installing from a Solaris 2.6 CD.

The system displays the Solaris Web Start Welcome screen rather than run the default JumpStart installation automatically from the Solaris 2.6 CD.

At that point, if you want to perform a default JumpStart installation, you can exit Solaris Web Start and continue.

There is no change in Custom JumpStart behavior in this release.

AnswerBook2 Software Browser Requirements

If your browser does not support saving cookies or you turn off support for cookies in your browser, you cannot access AnswerBook2 functions for defining your personal library or setting your language preferences.

However, if your browser supports the HTTP 1.1 protocol for sending language preferences to the server (`ACCEPT-LANGUAGE`, `ACCEPT-CHARSET`), then the AnswerBook2 software uses the browser language preferences. Otherwise, the AnswerBook2 language preference defaults to the language environment of the documentation server.

If your browser does not support saving (persistent) cookies, your personal library and language preferences apply only to the current browser session and your preferences may be lost when you exit the browser. You have to reset your preferences if you exit and restart the browser for any reason.

Use a browser that supports persistent cookies and/or turn cookies on or re-enter preferences with each session.

Graphical User Interface (GUI) Installations Are Not Supported on Systems That Have Only 16 Mbytes of Memory

If you are installing the Solaris 2.6 operating environment on systems that have only 16 Mbytes of system memory, then GUI installations are not supported.

Workaround: If you want to install the Solaris 2.6 operating environment on systems with 16 Mbytes of memory, you can use the Curses User Interface (CUI). GUI operations are supported on 16 Mbytes systems after the installed system has been booted with the Solaris 2.6 operating system.

Centralized Calendar Access Swap Requirement

If you deploy centralized calendar services where users have access to their Calendar from a remote centralized server, then each Calendar requires about ten times the total size of Calendar files in swap space to work reliably.

For example, if users want to have access to a Calendar from the same server and the Calendar files' size totals 50 Mbytes, then Calendar requires 500 Mbytes of swap space to work reliably.

If these space limitations are not considered during the installation of Solaris, users may have unreliable access to the Calendar.

Workaround: Increase swap space to enable the Calendar to work reliably.

Installation Bugs

This section describes:

- Solaris Web Start installation bugs
- Common Desktop Environment (CDE) bugs
- Solaris installation bugs
- System administration bugs
- Upgrade bugs

Solaris Web Start Installation Bugs

This section describes only known installation bugs that may occur when using Solaris Web Start, a new browser-based program that enables you to install both the Solaris software and co-packaged software. These problems do not occur when using the Solaris Interactive Installation program.

Cannot Move the Root Partition   4046659

Solaris Web Start lets you choose a system disk, but it does not let you move the root partition off the system disk afterwards. If you need to perform this task, use the Solaris Interactive Installation program instead of Solaris Web Start.

Colors May Display Incorrectly in Netscape Browser 4056980

Different parts of the Solaris Web Start interface occasionally display the wrong color when viewed through the Netscape Communicator 4.0 for Windows browser. This occurs only when the system is set to display 256 colors. To avoid this problem, set the system to display a different number of colors.

Solaris Web Start May Provide Less Than the Recommended Swap Space 4059174, 4066142

By default, Solaris Web Start usually provides the recommended amount of swap space for your system's configuration. However, on systems with minimal disk space, Solaris Web Start may provide less swap space if doing so is the only way to accommodate your software selections. Under no circumstances does Solaris Web Start provide less swap space than is required to ensure that the total of swap and system memory is equal to 96 Mbytes.

Solaris Web Start is most likely to provide less than recommended swap space when you elect to install the Entire Software Group and all the Solaris 2.6 documentation on systems with 1.05 Gbyte disks.

On systems with 96 Mbytes or more of physical memory, Solaris Web Start may eliminate the swap partition altogether, even when you request a swap partition by selecting the manual option from the Layout File Systems menu.

Workaround: If you experience trouble starting applications and the following error message is displayed after completing an installation with less than recommended swap space, you can select from one of two possible solutions:

```
Cannot fork process: not enough space
```

- Deselect a software component in Solaris Web Start to make additional space available;

  or

- If you experience trouble starting applications and see the above-listed error message displayed after completing an installation with less than the recommended swap space, create a swap file to augment your system's swap space. See the `swap` reference manual page for more information.

Products May Not Use All Reserved Space 4059182

Solaris Web Start reserves disk space based on the total requirements of all the products that you install. If you check disk space allocation after installing but before using the products, you may find a substantial amount of apparently unused space. Some of this space may be taken up when you run the software; some of it may remain unused.

Workaround: If you want to allocate less total disk space than Solaris Web Start requires, use the Solaris Interactive Installation program instead.

Your Web Browser May Hang or Crash With Solaris Web Start 4061657

In some instances, your web browser may hang or crash while running Solaris Web Start. If this occurs, you need to restart your Solaris Web Start session.

Workaround: To Resume Using Solaris Web Start:

What you do depends on the type of failure, and on where you were accessing Solaris Web Start from. Select the appropriate option below.

TABLE 1-2 Resuming Solaris Web Start

	Access From a Remote System	Access From a System Being Installed
Browser vanishes	Restart the browser and reconnect to the URL originally provided.	Choose Continue from the popup that appears.
Browser hangs	Kill the browser process (see below), and then restart the browser and reconnect to the URL originally provided.	Kill the browser process (see below), and then choose Continue from the popup that appears.

To kill the browser process (HotJava is used here as an example), open a console window and type the command:

```
# ps -ef | grep java
```

You should see two lines appear that look something like this:

```
myname 11892    410  0 hh:mm:ss pts/x    0:00 grep java
myname 11878 11877 23 hh:mm:ss pts/x   X:XX /usr/java/bin/java ...
```

The first number in the second line is the process ID of the browser. To kill the process, type kill -9 followed by the process ID. In this example:

```
# kill -9 11878
```

Common Desktop Environment (CDE) Bugs

CDE Mailer Needs Additional Free Memory to Open a Mailbox

The CDE Mailer needs twice the size of a mailbox in free memory to open the mailbox. For example, if you have a 150 Mbytes mailbox, you need at least 300 Mbytes of free memory to open the mailbox.

Workaround: Increase your swap space to enable your mailbox to be opened.

Solaris Installation Bugs

Using boot version 8 expected 4

The internal version information in the boot code has changed in the Solaris 2.6 operating environment.

If the following message is displayed when net booting, the wrong version of inetboot has been used to start the net boot process.

```
Warning: Using boot version 8 expected 4
```

Workaround: Perform an `rm_install_client` and `add_install_client` on the net boot server that you are using. Make sure that you are net booting from a correctly configured net boot server. Refer to `install_scripts(1M)` for more details on using `rm_install_client` and `add_install_client`.

SPARC PCI Systems - panic: BAD TRAP During Boot 4065612

Some SPARC PCI system configurations may panic while booting because of a problem with the `glm` SCSI host adapter driver.

Workaround: Contact your authorized Sun support provider regarding the availability of a patch.

Read-only File System Errors Upgrading Some Configurations   4051667

When upgrading `SUNWCxall` (Entire Distribution plus OEM support) or Ultra 450/ Ultra Enterprise 450 systems from Solaris 2.5.1 Hardware 4/97 to the Solaris 2.6 operating environment, the following error messages may be displayed in the upgrade log:

```
Removing package SUNWevc: Permission denied Cannot access file (/
etc/name_to_major). Permission denied Cannot access file (/etc/
minor_perm). Permission denied Cannot access file (/etc/
driver_aliases). Removal of <SUNWevc> was successful
```

Workaround: Ignore error messages.

System Administration Installation Bugs

The following bugs occur only during an installation.

Erroneous Messages Indicating Packages Added a Second Time   1235464

```
This appears to be an attempt to install the same architecture
and version of a package which is already installed. This
installation will attempt to overwrite this package
```

When upgrading a system with the Entire Distribution plus OEM Cluster, the following packages seem to be added twice:

- `SUNWolinc`
- `SUNWxwdim`
- `SUNWxwinc`
- `SUNWxwman`
- `SUNWxwpmn`

- SUNWxwsrc
- SUNWolbk
- SUNWoldim
- SUNWolman
- SUNWolsrc

Workaround: You can ignore this message if you try to add a package that has already been installed on a system. The installed package is simply overwritten.

Installation Progress Bar May be Inaccurate   1266156

The "Installing Solaris Software - Progress" bar sometimes indicates that an installation is complete when still in progress. The install program may add packages for several minutes after the progress bar has indicated that the installation is complete.

Do not rely on the progress bar to indicate that the installation is complete. The installation displays the following message when the program has completed all installation operations:

```
   Installation complete
```

JumpStart Installs on Wrong Default Boot Disk   4027156

JumpStart does not install the default boot on the current default boot disk under some conditions. A condition under which the problem has been observed involves using a fully automated install on a SPARCstation 5 with two hard disk drives. Therefore, the previous version of the Solaris operating environment is booted instead of the current one when you reboot.

Workaround: Install the Solaris operating environment without JumpStart.

/export/exec/ Selection Is Missing for Auto-Layout in Curses User Interface   4052574

During an initial install of an OS Server with a Curses User Interface, the /export/exec/ file system entry is missing from the auto-layout display. Therefore, it is not possible to select the file system, if needed.

Installation of Diskless Client Does Not Preserve Changes in `dfstab` File on Server 4045544

When you upgrade the Solaris operating environment on a server with diskless clients, the options on the `dfstab` line are not preserved for `/usr`. For example, if you had entered the following in the `dfstab` file,

```
share -F nfs -o rw /export/exec/Solaris_2.6_sparc.all/usr
```

then this entry would be automatically replaced with the following entry during the upgrade:

```
share -F nfs -o ro /export/exec/Solaris_2.6_sparc.all/usr
```

Workaround: Before you attempt to upgrade the Solaris operating environment on an OS server that has a diskless or autoclient, back up the `/etc/dfs/dfstab` file for the clients.

Cannot Install With JumpStart on Second System That Shares a SPARCstorage Array 4055230

If one system reserves some of the disks in a SPARCstorage Array using the `ssaadm reserve` command, then the second system that attempts to share the remaining disks in the same SPARCstorage Array cannot be installed using JumpStart.

Workaround: The following two workarounds are available:

● **Install the second system using the Solaris Interactive Installation facility instead of JumpStart.**

The alternative workaround is as follows

1. **Release the reservation on the disks of the SPARCstorage Array on the first system by using the** `ssaadm release` **command.**

2. **Install the second system using JumpStart.**

   The JumpStart profile must not include the disks that the first system attempts to reserve.

3. **Reserve the disks on the first system again after you complete the installation.**

Upgrade Bugs

All bugs described in this section occur only if you perform an upgrade.

Note – Before you start to upgrade your system, you may want to read bug ID 4030749.

Upgrade Can Remove Patch Backout Data   4030749

An upgrade removes all files in the `/var/sadm/patch/` directory and thus deletes all backout data for unbundled products.

Workaround: Protect any unbundled product backout files in the `/var/sadm/patch/` directory by backing them up before performing an upgrade and restoring them afterwards.

Multiple Architecture Server Cannot Be Patched   1249343

After upgrading a server with diskless clients of more than one SPARC kernel architecture, such as a sun4u server with diskless sun4c, sun4d, and sun4m clients, the `SUNWkvm` packages for clients whose kernel architectures differ from that of the server cannot be patched.

Workaround: Manually add all of the `SUNWkvm` packages before applying any patches that affect them.

```
# pkgadd -d directory-where-packages-reside SUNWkvm.*
```

`upgrade_script` Terminates Abnormally During Upgrade With Disk Space Reallocation   4010183

During an upgrade, a warning may be displayed indicating that the `/usr` directory has insufficient space. After you attempt to use auto-layout, the following error message is displayed:

```
Error: upgrade_script terminated abnormally.
```

Workaround: Perform the following steps:

1. **Look at the end of the** `/a/var/sadm/system/logs/upgrade_log` **file for an error that is similar to the one listed below:**

```
/a/var/sadm/system/admin/upgrade_script: syntax error at line 3519:
   `fi' unexpected
```

Note – The line number listed in this example is different from the one that is displayed on your screen.

---

2. **Write down the number that is displayed on your terminal.**

   Change the directory as follows:

   ```
   # cd /a/var/sadm/system
   ```

3. **Make a backup copy of the** `upgrade_script` **script before making any modifications.**

   ```
   # cp upgrade_script upgrade_script.bak
   ```

4. **Edit the** `upgrade_script  script` **with an editor of your choice by performing the following steps:**

   a. **Locate the line number noted in step 1 above.**

   If you are using the vi editor to locate the line number, turn line numbering on by using the `set number` command; you can use another vi command so that you can identify the line number.

   b. **Position your cursor on the line and make sure that it contains** `fi`.

   c. **Delete the line.**

   d. **Save the file and exit the editor.**

5. **Resume the upgrade process by executing the** `upgrade_script` **script after you have completed the modifications by entering the following at the command line prompt:**

```
# /a/var/sadm/system/logs/upgrade_log/upgrade_script
```

The upgrade process now continues at the proper place.

A System That Can Be Upgraded Has Incorrectly Been Declared as a System That Cannot Be Upgraded Because of Disk Space — 4041733

The upgrade program can exaggerate by as much as 30 percent the amount of space required for upgrades to systems with the Solaris software. Therefore, it prevents many systems that can be upgraded from being upgraded without deselecting packages or finding more space.

Workaround: You can manually reallocate disk space among file systems or use the Software Customization menu to remove software packages that are not needed.

`SUNWlibC` (C++ Library) May be Upgraded Improperly If Previously Patched — 4046326

If the `SUNWlibC` (C++ compiler) package has previously been patched by installing patch ID 101242-XX using `pkgadd` rather than `installpatch`, then the `SUNWlibC` package may have left the system in an unacceptable state. After you complete the installation, even though it may appear to have succeeded, the `SUNWlibC` package may not have been correctly updated. Your system may possibly appear to contain both old and new versions of this package, `SUNWlibC` and `SUNWlibC.2`, neither package, or the original Solaris 2.6 package.

Some ways to determine if something is wrong are:

1. **Compile a C++ program that is known to include new features of changes found with C++ in the Solaris 2.6 operating environment, to see if they are present.**

2. **Examine the patch directory for the presence of the** `SUNWlibC.2` **package or the** `SUNWlibC` **package followed by a number extension.**

   If either package is present, you need to correct the problem.

3. **Compile any C++ program to determine whether or not it compiles and links correctly.**

4. **C++ compiles yield unexpected behavior.**

Workaround: If you discover a problem, delete patch ID 101242-XX and install `SUNWlibC`.

`SUNWsolnm` Upgrade Problem 4066153

When upgrading from the Solaris 2.5.1 Hardware 4/97 release to the Solaris 2.6 release, the following error is displayed in the `upgrade_log` file:

```
Doing pkgadd of SUNWsolnm to /.
```

Current administration does not enable you to create a new instance of this existing package. However, the installation service could not determine which package instance to overwrite.

```
No changes were made to the system.
pkgadd return code = 4
```

Workaround: Perform the following steps after you have completed the upgrade:

1. **Become superuser.**

2. **Remove the** `SUNWsolnm` **packages:**

```
# pkgrm SUNWsolnm*
```

If the system supports diskless clients or autoclients, perform the following steps for each client:

```
# pkgrm -R /export/root/clientname SUNWsolnm*
```

3. **Add the** `SUNWsolnm` **package from the 2.6 media:**

```
# cd /cdrom/cdrom0/s0/Solaris_2.6/Product
# pkgadd -d `pwd` SUNWsolnm
```

If the system supports diskless clients or autoclients, perform the following steps for each client:

```
# cd /cdrom/cdrom0/s0/Solaris_2.6/Product
# pkgadd -d `pwd` -R /export/root/clientname SUNWsolnm
```

Late-Breaking Solaris Runtime Bugs

This chapter describes known runtime problems. You may also want to refer to the online `runtime_bugs` file in the `SUNWrdm` package on the Solaris CD for additional runtime problems.

Note – The information in this chapter supplements any information listed in the `runtime_bugs` file that is part of the `SUNWrdm` package on the Solaris 2.6 CD. If you boot from the Solaris 2.6 CD, the `runtime_bugs` file is located in the `/cdrom/sol_2.6_sparc/s1/Solaris_2.6/Docs/release_info/C` directory. The default installed location for the `runtime_bugs` file is the `/usr/share/release_info/Solaris_2.6/C` directory.

Performance Note

TCP Slow-start Initial Value Can Be Changed
4054780 4057676

Non-Solaris clients may experience somewhat slower network performance on short-lived connections, such as http connections, when served by Solaris servers. This problem occurs because of Solaris' strict adherence to the TCP Slow-start specification (RFC2001). You can now modify the initial value that TCP Slow-start uses by tuning an `ndd` variable. For detailed information on how to modify this variable and an explanation of this behavior, go to the section titled "Sun Performance Information" under "Sun On the Net" at `http://www.sun.com`.

Solaris Bugs

`xdm` Does Not Have Executable Permissions

The execute bit for `/usr/openwin/bin/xdm` has been turned off.

Workaround: Become superuser and then type:

```
# chmod a+x /usr/openwin/bin/xdm
```

POSIX `readdir_r` Returns `EINVAL` When All Entries Have Been Read   4062296

```
int readdir_r(DIR *dirp, struct dirent *entry, struct dirent
**result);
```

The POSIX specification for `readdir_r()` does not clearly specify whether an end-of-file condition (EOF) should be treated as an error or as a successful operation.

The Solaris 2.6 implementation of `readdir_r()` in the POSIX environment handles EOF as an error condition. On EOF, `readdir_r()` returns `EINVAL` and sets `*result` to NULL.

A subsequent release of Solaris may change this behavior to be more consistent with other POSIX interfaces, such that on EOF, `readdir_r()` would return `0` and would set `*result` to NULL.

Workaround: Developers should write their applications to detect EOF by first checking whether `*result` is equal to NULL and then checking whether the return value is `0` or `EINVAL`. Applications written this way work in both cases.

Common Desktop Environment (CDE) Bugs

Displaying the `dtfile` Pop-Up Menu May Cause a Core Dump 4049745

If you display the `dtfile` pop-up menu, then the `dtfile` "File Select View" menu bar menus no longer function and may cause a core dump.

Workaround: Do not display the `dtfile` pop-up menu by clicking the mouse menu button over a file or folder icon. Also, do not display the `dtfile` pop-up menu by clicking the menu button over any part of the `dtfile` file and folder Viewing Area.

No Error or Warning Messages Are Generated if You Make an Illogical Selection in the CDE Calendar's Date Field 4060832

If you make an illogical selection in a CDE Calendar's data field, such as selecting Leap Year 2/29 for a recurring yearly Calendar appointment, CDE ignores this information. In this example, the appointment is only scheduled in leap years (years that have a 2/29 date) on your Calendar.

Screen Can Fail to Return From Screensaver Mode 4062599

Some systems with a CG6 framebuffer can fail to return from screensaver mode, leaving the screen blank and apparently unresponsive to typing and mouse movements.

You can determine whether or not you have a model CG6 framebuffer by typing:

```
# /usr/sbin/prtconf | grep cg
```

Workaround: If this bug occurs, rlogin to the failing system and shut down your system to save your files. A reboot is required to make the screen operational. However, it is recommended that you perform a controlled reboot rather than pressing L1-A.

If you have a CG6 framebuffer and want to prevent this bug from re-occurring, choose any screen pattern other than a blank screen for lockscreen.

Java Bugs

Applets That Export Java RMI Objects May Fail   4064085

Applets that export Java RMI objects may fail with a `java.io.FileNotFoundException` exception raised while loading the RMI skeleton class. This is due to an interaction between the Java RMI runtime and the use of RMI in HotJava for the Solaris operating environment which causes the wrong class loader to be used.

Workaround: Install the applets RMI skeleton class files locally and set the *CLASSPATH* environment variable to include them before starting HotJava.

AnswerBook2 Notes

Viewing Documents From a CD Is Not Available

The `ab2_cd` script, as documented in the "Installing Document Server Software" section of the AnswerBook2 Help, is not available in the `Solaris_2.6_Doc` directory on the Solaris 2.6 Documentation CD. The option to view the AnswerBook2 documents from the CD is not available.

Searching Japanese AnswerBook1 Documents

The `SUNWjeuc` and `SUNWjiu8` packages located on the Japanese Solaris 2.6 CD are required to be installed on the server in order to search Japanese AnswerBook1 documents.

AnswerBook2 Bugs

ko Messages Display in English (`En_US`)   4065721

There is no support for Korean locale messages in the AnswerBook2 command line
output or browser. When the AnswerBook2 language preference is set to Korean, the
messages display as for the C locale.

Very Long Tables Are Slow To Display   4064641

Some books, such as the *MultiThreaded Programmers Guide*, have tables that span over
one hundred pages. These pages take longer than expected to load. You see a stalled
message in the browser status bar until the page finally loads.

Workaround: Wait for the entire table to load. Do not interrupt the loading of a very
long table.

Search Syntax Defaults to Literal Search   4065793

A default search that includes more than one word, such as the search does not have
quotes, or the words AND and OR between search words, performs an exact search
in some cases.

Workaround: Always specify the words AND or OR between search words to
achieve this specific type of search.

Interbook Links Are Not Resolved Locally   4066516

When following links to some book titles, the link is resolved to the
`http://docs.sun.com/` server rather than the local server. If
`http://docs.sun.com/` is not available or if the book does not exist there, an
error is generated, even if the book is available on the local server.

Workaround: As root on the document server, edit the `/var/log/ab2/catalog/`
`local.socat` file and replace the entries containing the string `dummy` with the book
identifier, as described in the following steps. As soon as you have edited the file, all
links work locally. Therefore, there is no need to restart the server.

1. **Find an entry containing the word `dummy` in the second field.**

2. **Find the book name in that entry.**

   It is the string following the `book=` string.

3. **Replace the `dummy` string (the word `dummy`) with the following text, substituting the book name for *BOOKNAME* below. Be sure to keep the entire entry on one line, and preserve capitalization, special characters, and spacing exactly as shown here:**

   ```
   "-//Sun::SunSoft//DOCUMENT BOOKNAME Version 1//EN"
   ```

   Example of a corrected line:

   ```
   PUBLIC     "-//Sun::SunSoft//DOCUMENT BINARY Version 1/EN"      "<dweb
   coll='coll.47.4' book='BINARY'>/opt/answerbooks/english/solaris_2.6/SUNWaadm/
   books/BINARY</dweb>"
   ```

4. **Repeat for all entries containing `dummy` in the second field.**

5. **Save the file.**

AnswerBook2 Administration Bugs

answerbook2_admin Script Requires SUNWab2(r,s,u) Packages

4063836

If the AnswerBook2 software packages are not installed, running the `answerbook2_admin` script or selecting `answerbook2_admin` in the CDE `system_admin` panel fails.

Workaround: Install the SUNWab2(r,s,u) packages.

Documentation Collection Bugs

Solaris Internationalization Guide for Developers does not appear in the AnswerBook2 Library 4066791

The *Solaris Internationalization Guide for Developers* does not appear in the Solaris 2.6 Software Developer AnswerBook Vol 2 collection.

Workaround: To browse the book locally, enter the following URL, substituting the name of your documentation server for *doc-server-name*:

```
http://doc-server-name:8888/ab2/
@LegacyTocView?toc=SUNWab_124_1%3A%2Fopt%2Fanswerbooks%2Fenglish%2Fsolaris_2.6
%2FSUNWabdev%2Ftoc%2FI18N%3AI18N
```

You can also view and search this document at `http://docs.sun.com`.