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Solaris 7 (SPARC Platform Edition)
8/99 Release Notes

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Contents

Preface

The *Solaris™ 7 (SPARC™ Platform Edition) 8/99 Release Notes* contain installation problem details and other information that was not available until immediately before the release of the Solaris 7 8/99 operating environment, too late to be included in the `SUNWrdm` package that is resident on the Solaris 7 8/99 CD. This document complements the information in the `SUNWrdm` package, the online release notes, except for the information in Chapter 1.

Chapter 1 supersedes the information in the `installation_bugs` file that is part of the online release notes.

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

- When reading from the Solaris 7 8/99 CD, information about this release can be found in the directory:

  `/cdrom/sol_7_899_sparc/s0/Solaris_2.7/Docs/release_info/C`

- The default installed location for information about this release can be found in the directory:

  `/usr/share/release_info/Solaris_2.7/C`

Note - The name of this product is Solaris 7 8/99, but code and path or package path names may use Solaris 2.7 or SunOS 5.7. Always follow the code or path as it is written.

Who Should Use This Book

These notes are for users and system administrators who are installing and using the Solaris 7 8/99 operating environment.

Related Books

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

- *Solaris 7 (SPARC Platform Edition) Start Here*
- *Solaris 7 (SPARC Platform Edition) Installation Library*
- *Solaris 7 Installation Supplement*
- *Solaris 7 System Administration Supplement*
- *Solaris 7 Software Developer Supplement*

Solaris documentation is available on the Solaris 7 Documentation CD included with this product.

In this Solaris release you will find supplemental documentation describing new functionality. If a Solaris 7 AnswerBook2™ collection has been updated, you will find a *Solaris 7 Supplement* in that collection.

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 materials for hardware-specific installation instructions.

For known problems, new features, and patches not relating to installation, view the online files in the
`/cdrom/sol_7_899_sparc/s0/Solaris_2.7/Docs/release_info/C`
directory on the Solaris 7 **8/99** CD.

The `/cdrom/sol_7_899_sparc/s0/Solaris_2.7/Docs/release_info/C`
directory includes these files:

- `new_features` - product news and features that arrived too late to be included in the *"What's New in Solaris"* documentation on the Solaris 7 Documentation CD
- `runtime_bugs` - late-breaking problems not related to installation
- `installation_bugs` - known installation problems
- `patches` - late-breaking information on current and non-integrated patches for Solaris 7
- `eof` - late-breaking end of feature statements
- `driverupdate` - late-breaking information on drivers
- `documentation_issues` - late-breaking information about documentation errata and other documentation-related issues.

The installed location for the these files is the directory:

`/usr/share/release_info/Solaris_2.7/C`

Ordering Sun Documents

The Sun Software Shop stocks hundreds of manuals from Sun Microsystems, Inc. You can purchase individual printed manuals and AnswerBook2™ CDs.

For a list of documents and how to order them, visit the Software Shop at `http://www.sun.com/software/shop`.

Accessing Sun Documentation Online

The docs.sun.com℠ web site enables you to access Sun technical documentation online. You can browse the `docs.sun.com` archive or search for a specific book title or subject. The URL is `http://docs.sun.com`.

What Typographic Changes Mean

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:`

TABLE P–1 Typographic Conventions *(continued)*

Typeface or Symbol	Meaning	Example
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.

Installation Issues

This chapter describes problems relating to the installation of the Solaris 7 8/99 software environment.

The information in this chapter supersedes any information listed in the `installation_bugs` file that is part of the `SUNWrdm` package on the Solaris 7 8/99 CD. If you boot from the Solaris 7 8/99 CD, the `installation_bugs` file is located in the directory:

`/cdrom/sol_7_899_sparc/s0/Solaris_2.7/Docs/release_info/C`

The default installed location for the `installation_bugs` file is located in the directory:

`/usr/share/release_info/Solaris_2.7/C`

Note - The name of this product is Solaris 7 8/99, but code and path or package path names may use Solaris 2.7 or SunOS 5.7. Always follow the code or path as it is written.

Solaris Web Start Issues

This section only describes known installation issues that may occur when using Solaris Web Start, the browser-based program that enables you to install both the Solaris software and co-packaged software.

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:

- The Solaris 2.6 or Solaris 7 operating environment with its accompanying version of the HotJava™, Netscape Navigator™ 4.0, or Netscape Navigator™ 4.5 browser

- Windows 95 with the HotJava, Netscape Navigator 4.0, or Netscape Navigator 4.5 browser

Solaris Web Start may not run or display properly with older versions of HotJava, older versions of the Navigator browser, or with Internet Explorer.

Solaris Web Start Bugs

This section only describes known installation bugs that may occur when using Solaris Web Start, the browser-based program that enables you to install both the Solaris software and copackaged software.

Cannot Move the Root File System (4046659)

You can choose a system disk in Solaris Web Start but you cannot move the root file system off the system disk afterwards.

Workaround: If you need to do this, use the Solaris Interactive Installation program instead of Solaris Web Start.

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.

Installing With Solaris Web Start in Client/Server Mode May Produce Exception Messages in the HotJava Console Window (4248436)

When installing with Solaris Web Start in client/server mode, you may see the following exception messages in the HotJava console window:

```
sun.applet.AppletSecurityException: checkaccess.thread
  at java.lang.Throwable.<init>(Compiled Code)
  at java.lang.Exception.<init>(Compiled Code)
  at java.lang.RuntimeException.<init>(Compiled Code)
  at java.lang.SecurityException.<init>(Compiled Code)
  at  sun.applet.AppletSecurityException.<init>(Compiled Code)
  at sun.hotjava.security.PolicyUntrusted.checkAccess(Compiled Code)
  at sun.hotjava.security.HotjavaSecurity.checkAccess(Compiled Code)
  at java.lang.Thread.checkAccess(Compiled Code)
  at java.lang.Thread.stop(Compiled Code)
  at MouseOverPanel.handleMouseEnter(Compiled Code)
  at SolsticeConfTaskPage.handleEvent(Compiled Code)
  at java.awt.Component.postEvent(Compiled Code)
  at java.awt.Component.postEvent(Compiled Code)
  at java.awt.Component.postEvent(Compiled Code)
  at java.awt.Component.postEvent(Compiled Code)
  at java.awt.Component.postEvent(Compiled Code)
  at java.awt.Component.postEvent(Compiled Code)
  at java.awt.Component.postEvent(Compiled Code)
  at java.awt.Component.postEvent(Compiled Code)
  at java.awt.Component.dispatchEventImpl(Compiled Code)
  at java.awt.Container.dispatchEventImpl(Compiled Code)
  at java.awt.Component.dispatchEvent(Compiled Code)
  at java.awt.EventDispatchThread.run(Compiled Code)
Exception occurred during event dispatching:
sun.applet.AppletSecurityException: checkaccess.thread
```

When exception messages appear, mouse clicks may become slow to update and some information panels may not display properly.

Workaround: To improve the responsiveness of the mouse and complete the installation process, close the HotJava Console window. Some information panels may not update properly, but this does not affect the installation process. Web Start installs the products that you selected, however, the description may be inaccurate if you have moved the cursor over more than one product.

To prevent the exception messages, do not open the HotJava Console window before or during installation.

Interactive Installation Issues

New JumpStart Behavior

When you turn on a system with the JumpStart™ software already installed (this includes new systems and preinstalled systems on which another installation has been performed) in the Solaris 7 as well as the Solaris 2.6 operating environments, Solaris Web Start's introductory screen is displayed. You can now exit Solaris Web Start and perform a JumpStart installation.

Solaris `dtlogin` Screen

The Solaris 7 as well as the Solaris 2.6 operating environments default 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. Your desktop is displayed upon authentication of your login name and password. For more information about the login screen, see the `dtlogin` man page (provided with the Solaris Common Desktop Environment (CDE) man pages) or the *Common Desktop Environment: Advanced User's and System Administrator's Guide.*

`dtlogin` Notes for System Administrators

A system administrator who is new to CDE needs to know about CDE's graphical login program, `dtlogin`. Review the `dtconfig` man pages.

Interactive Installation Bugs

Installation Fails With a False Non-Mountable File System Error (4164303)

The following message may be displayed:

```
The Solaris operating environment on slice c0t0d0s0 cannot be upgraded.
A file system listed in the file system table (vfstab) could not be mounted.
```

The installation software may interpret inodes that are stored on striped DiskSuite™ meta devices for root inodes and attempt to mount the meta devices as upgradable slices. When this problem occurs, the mounts fail and the installation aborts.

TotalNET Advanced Server (SunLink) Drivers Cause Panic After a Reboot (4121961)

```
 Warning:  mod_install: MT-unsafe driver 'tnatp' rejected panic[cpu0] /
thread=7051e040:mutex-enter:bad_mutex lp=1046aa20 owner=7051e040
thread=7051e040
```

An upgrade to TotalNET Advanced Server (SunLink™) version 5.2 is required with the Solaris 7 operating environment because of a driver conflict. Version 5.0 and version 5.1 for the TotalNET Advanced Server cause the Solaris 7 operating environment to not boot correctly.

Workaround: Before you install the Solaris 7 operating environment, you must upgrade all installations to version 5.2 for the TotalNET Advanced Server, which is available on the Solaris Easy Access Server 2.0 CD. Follow the instructions provided to upgrade existing TotalNET Advanced Server installations.

Installation Bugs That Occur During an Interactive Installation

Erroneous Messages Indicating Packages Added a Second Time (1235464)

This appears as an attempt to install the same architecture and version of a package that is already installed. This installation overwrites 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

Installation Progress Bar May Be Inaccurate (1266156)

The "Installing Solaris Software - Progress" bar sometimes indicates that an installation is complete when it is 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
```

Installation of Diskless Client Does Not Preserve Changes in the dfstab File on a 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 entered the following in the dfstab file:

```
share -F nfs -o rw /export/exec/Solaris_2.7_sparc.all/usr
```

then this entry is automatically replaced with the following entry during the upgrade:

```
share -F nfs -o ro /export/exec/Solaris_2.7_sparc.all/usr
```

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

Installation Bugs That May Occur During an Upgrade

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: Add all of the `SUNWkvm` packages before applying any patches that affect them:

```
# pkgadd -d SUNWkvm.*
```

Disk Space Requirements Can Be Exaggerated By the Upgrade Process (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 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.

sun4m Solstice AutoClients Fail to Mount Cache After an Upgrade From the Solaris 2.6 Hardware: 3/98 Release (4121951)

Solstice™ AutoClient™ systems display the following message when rebooting:

```
fsck -F cachefs: Cache directory /.cache/rootcache does not exist.
mount -F cachefs: cache fsck mount failed
fsck -F cachefs: Cache directory /.cache/rootcache does not exist.
mount -F cachefs: cache fsck mount failed
```

This directive indicates to the kernel that the root file system is of type cachefs. To determine whether or not a specific Solstice AutoClient system can be affected by this problem before you attempt an upgrade, examine the directory /export/root/*client-name*/var/sadm/pkg on the server (this is the Solstice AutoClient system's /var/sadm/pkg directory). If this directory contains a subdirectory called TADcar, the Solstice AutoClient system may be affected.

Workaround: Edit the /etc/system file for the Solstice AutoClient systems after the upgrade by appending the following line:

```
rootfs:cachefs
```

The Solstice AutoClient systems' /etc/system file is stored on the server as /etc/root/*client-name*/etc/system.

Clients Do Not Receive All Patches When a Server Is Upgraded (4175220)

Patches located in the Patches directory on the Solaris 7 8/99 CD are not automatically applied to clients whenever a server is upgraded.

Workaround: Apply the patches located in the Patches directory to clients after the upgrade has been completed.

SUNWcvc.u and SUNWdrr.u Packages Are Missing If You Upgrade From the Solaris 2.6 Hardware 3/98 or Solaris 2.6 5/98 Operating Environment to the Solaris 7 Operating Environment (4229675)

After you upgrade from the Solaris 2.6 Hardware 3/98 or the Solaris 2.6 5/98 operating environment and if your systems have sun4u diskless clients or Solstice AutoClient systems, then the SUNWcvc.u and SUNWdrr.u packages are not installed on diskless clients or Solstice AutoClient systems.

Workaround: After you have completed an upgrade, add the SUNWcvc.u and SUNWdrr.u packages to a sun4u diskless client or Solstice AutoClient system as follows with a client called *foo*:

1. Mount the Solaris 7 8/99 CD for the SPARC platform.
2. Change to the following directory:

```
# cd /cdrom/cdrom0/s0/Solaris_2.7/Product
```

3. Add the following packages using the `pkgadd` command:

```
# pkgadd -R /export/root/foo -d `pwd` SUNWcvc.u
# pkgadd -R /export/root/foo -d `pwd` SUNWdrr.u
```

Errors May Occur During A European Upgrade (4230247, 4225787)

After upgrading from the Solaris 7 3/99 or 5/99 operating environments to the Solaris 7 8/99 operating environment, the following errors may appear in the upgrade logs:

```
Doing pkgadd of SUNWplow to /.
pkgadd: ERROR: unable to create package object
</a/usr/openwin/share/locale/de.ISO8859-15>.
    file type <s> expected <d> actual
    unable to remove existing directory at
</a/usr/openwin/share/locale/de.ISO8859-15>
....
Installation of <SUNWplow> partially failed.
pkgadd return code = 2


Doing pkgadd of SUNWpldte to /.
WARNING: /a/usr/dt/appconfig/types/de.ISO8859-15
may not overwrite a populated directory.
......
pkgadd: ERROR: /a/usr/dt/appconfig/types/de.ISO8859-15
could not be installed.
.......
Installation of <SUNWpldte> partially failed.
pkgadd return code = 2
```

This warning occurs because the patch switches the affected directories listed in the upgrade logs from symbolic links to directories. The upgrade process then attempts to install an updated version of the package that does not include the change. These errors do not affect the operating environment on your system.

Workaround: Ignore these error messages.

Upgrading With Disk Space Reallocation Removes Language Packages (4258815)

An upgrade using disk space reallocation in which the `/usr` partition is resized or moved causes some language packages to be removed from the system. The

packages appear in the package database as installed, but the language files are not installed on the file system.

This does not occur on systems installed with only the English language.

Workaround: You may choose one of the following workarounds:

- To manually adjust file system sizes before upgrading:

  1. Back up the system.
  2. Using the `format` command, adjust the file system sizes according to the requirements described in the install program.
  3. Restore the system on to the new file systems.
  4. Start the upgrade. The upgrade will proceed without disk space reallocation as you have adjusted the file systems so that there is enough space to complete the upgrade.

- To install the missing packages after the upgrade is complete:

  1. Determine which packages are missing. The missing packages are those that do not appear in the `do_pkgadd` lines in the `/var/sadm/system/admin/upgrade_script` and who have non-empty lines in `SUNW_LOC` in their pkginfo files in the `/var/sadm/pkg` directory.
  2. Create an `admin` file as `/tmp/admin` with the following lines:

```
instance=overwrite
mail=
```

     For detailed instructions about creating an `admin` file, refer to `admin(4)`.

  3. Install the missing packages by typing the following command for each package to install:

```
# pkgadd -a /tmp/admin -d /cdrom/cdrom0/Solaris_2.7/Product package_name
```

     where *package_name* is the name of the package to install.

Note - If your Solaris 7 8/99 software is mounted somewhere other than the CD-ROM drive, change the argument to the −d option to be the absolute path to the `Solaris_2.7/Product` directory.

Symbolic Links to SUNWjvrt Are Missing After Upgrading from Solaris 7 (4259033)

After upgrading from the Solaris 7 operating environment using disk space reallocation, the java commands may not be found due to missing symbolic links.

Workaround: To restore the symbolic links, complete these steps:

1. **Remove the** SUNWjvdev **and** SUNWjvrt **packages.**

```
# pkgrm SUNWjvdev SUNWjvrt
```

2. **Re-install the** SUNWjvrt **and** SUNWjvdev **packages.**

```
# pkgadd -d /cdrom/cdrom0/s0/Solaris_7 SUNWjvrt SUNWjvdev
```

Solaris Installation Bugs

The SMEvplu.u Package Does Not Install Properly When Upgrading From Solaris 2.5.1 Hardware: 11/97 With Disk Space Reallocation (4190800)

If you are running a SPARCengine™ Ultra™ AX system and you are upgrading from the Solaris 2.5.1 Hardware: 11/97 operating environment with Disk Space Reallocation, the SMEvplu.u package does not install properly.

The following message appears in the upgrade_log:

```
Doing pkgadd of SMEvplu.u to /.
pkgadd: ERROR: SMEvplu is already installed at /
usr. Admin file will force a
duplicate installation at /.

Installation of <SMEvplu> was suspended (administration).
No changes were made to the system.
pkgadd return code = 4
```

Workaround: Before rebooting, manually remove the exisiting SMEvplu package and install the new SMEvplu.u package.

1. **Remove the incomplete** SMEvplu **package:**

```
# pkgrm -R /a SMEvplu
```

2. **Change directories to the Solaris 7 Product directory:**

```
# cd cdrom/Solaris_7/Product
```

3. **Add the correct** `SMEvplu.u` **package:**

```
# pkgadd -d 'pwd' -R /a SMEvplu.u
```

Warnings May Occur When Creating a File System (4189127)

One of the following error messages may be displayed when creating a file system during installation:

```
Warning: inode blocks/cyl group (87) >= data blocks (63) in last
    cylinder group. This implies 1008 sector(s) cannot be allocated.
```

Or:

```
Warning: 1 sector(s) in last cylinder unallocated
```

The warning occurs when the size of the file system being created does not map exactly to the space on the disk being used. This can result in unused space on the disk that is not incorporated into the indicated file system. This unused space is not available for use by other file systems.

Workaround: Ignore the error message.

Not All Locales Supported Outside of Entire Metacluster (4181942)

All locales are supported only in the Entire Distribution and Entire Distribution plus OEM metaclusters. Subsets of these locales are supported in the Developer, End User, and Core metaclusters.

If you select a locale at the beginning of the installation that is not supported by the metacluster that you choose to install later in the installation on the metacluster selection screen, the following occur:

- Web Start installation of co-packaged products fails without installing the co-packaged products.

- You cannot open terminal windows in CDE.

For Desktop editions of the Solaris 7 8/99 operating environment, the Web Start installer installs the End User metacluster. For Server editions of the Solaris 7 8/99 operating environment, Web Start installs the Entire metacluster. You can change the defaults by selecting a Custom installation.

The following table indicates which locales are supported by each metacluster:

TABLE 1–1 Locales in Each Metacluster

Locale	Description	Core	End User	Developer	Entire/ Entire+OEM
ar	Egypt - English (ISO-8859-6)	•			•
he	Israel - English (ISO-8859-8)	•			•
he_IL	Israel - English (ISO-8859-8)	•			•
th_TH	Thailand - English (TIS 620.2533)			•	•
bg_BG	Bulgarian (ISO 8859-5)	•			•
cz	Czech Republic	•			•
da	Denmark	•	•	•	•
da.ISO8859-15	Denmark (ISO8859-15)	•			•
de	German	•	•	•	•
de.ISO8859-15	Euro German (ISO8859-15)	•	•	•	•
de.UTF-8	German (UTF-8)	•			•
de_AT	Austria	•			•
de_AT.ISO8859-15	Austria (ISO8859-15)	•			•
de_CH	Switzerland	•			•
el	Greece	•	•	•	•

TABLE 1–1   Locales in Each Metacluster   *(continued)*

Locale	Description	Core	End User	Developer	Entire/ Entire+OEM
en_AU	Australia - English (ISO-8859-1)	•	•	•	•
en_CA	Canada - English (ISO-8859-1)	•	•	•	•
en_EU.ISO8859-15	Euro English (ISO8859-15)	•	•	•	•
en_EU.UTF-8	Euro English (UTF-8)	•	•	•	•
en_GB	GB - English (ISO-8859-1)	•	•	•	•
en_GB.ISO8859-15	GB - English (ISO-8859-15)	•	•	•	•
en_IE	Ireland - English (8 bit)	•			•
en_IE.ISO8859-15	Ireland (ISO8859-15)	•			•
en_NZ	New Zealand - English (8 bit)	•			•
en_US	USA - English (ISO-8859-1)	•	•	•	•
en_US.UTF-8	USA - English (UTF-8)			•	•
es	Spanish	•	•	•	•
es.ISO8859-15	Euro Spanish (ISO8859-15)	•	•	•	•
es.UTF-8	Spanish (UTF-8)	•			•
es_AR	Argentina	•	•	•	•
es_BO	Bolivia	•	•	•	•
es_CL	Chile	•	•	•	•

Locale	Description	Core	End User	Developer	Entire/ Entire+OEM
es_CO	Colombia	•	•	•	•
es_CR	Costa Rica	•	•	•	•
es_EC	Ecuador	•	•	•	•
es_GT	Guatemala	•	•	•	•
es_MX	Mexico	•	•	•	•
es_NI	Nicaragua	•	•	•	•
es_PA	Panama	•	•	•	•
es_PE	Peru	•	•	•	•
es_PY	Paraguay	•	•	•	•
es_SV	El Salvador	•	•	•	•
es_UY	Uruguay	•	•	•	•
es_VE	Venezuela	•	•	•	•
et	Estonia	•			•
fi	Finland	•			•
fi.ISO8859–15	Finland (ISO8859-15)	•			•
fr	French	•	•	•	•
fr.ISO8859–15	Euro French (ISO8859-15)	•	•	•	•
fr.UTF-8	French (UTF-8)	•			•
fr_BE	Belgium	•			•
fr_BE.ISO8859–15	Belgium (ISO8859-15)	•			•
fr_CA	Canada	•			•

TABLE 1–1 Locales in Each Metacluster *(continued)*

Locale	Description	Core	End User	Developer	Entire/ Entire+OEM
fr_CH	Switzerland	•			•
hr_HR	Croatian (ISO 8859-2)	•			•
hu	Hungary	•			•
it	Italian	•	•	•	•
it.ISO8859-15	Euro Italian (ISO8859-15)	•	•	•	•
it.UTF-8	Euro Italion (UTF-8)	•			•
lt	Lithuania	•			•
lv	Latvia	•			•
mk_MK	Macedonian (ISO 8859-5)	•			•
nl	Netherlands	•			•
nl.ISO8859-15	Netherlands (ISO8859-15)	•			•
nl_BE	Netherlands/ Belgium	•			•
nl_BE.ISO8859-15	Netherlands/ Belgium (ISO8859-15)	•			•
no	Norway	•			•
no_NY	Nynorsk	•			•
nr	Bosnian (ISO 8859-2)	•			•
pl	Poland	•			•
pt	Portugal	•			•
pt.ISO8859-15	Portugal (ISO8859-15)	•			•

TABLE 1–1   Locales in Each Metacluster   *(continued)*

Locale	Description	Core	End User	Developer	Entire/ Entire+OEM
pt_BR	Portugal/Brazil	•			•
ro_RO	Romanian (ISO 8859-2)	•			•
ru	Russia	•			•
sk_SK	Slovak (ISO 8859-2)	•			•
sl_SI	Slovene (ISO 8859-2)	•			•
sq_AL	Albanian (ISO 8859-2)	•			•
sr_SP	Serbian (ISO 8859-5)	•			•
sv	Swedish	•	•	•	•
sv.ISO8859-15	Euro Swedish (ISO8859-15)	•	•	•	•
sv.UTF-8	Swedish (UTF-8)	•			•
tr	Turkey	•	•	•	•

Workaround: To prevent the problem, install the metacluster that contains the desired locale.

To repair an existing installation in the /etc/default/init file, change the references to the unsupported locale to reference a supported locale for the installed metacluster.

Font Package Warning Occurs During Installation (4226416)

The font packages listed below in the warning messages cover all language locales, including those that may not be on your Solaris CD. If you cannot find all the packages listed in the warning message, then only install those packages that you can find on your CD.

```
Warning!  It is strongly recommended that the following font package be
installed for all locales:

SUNWi1of

Warning!  It is strongly recommended that the following font packages be
installed to support locales (other than ISO8859-1 locales) as needed:

SUNWi2of SUNWi2rf SUNWi4of SUNWi4rf SUNWi5of SUNWi7of SUNWi7rf
SUNWi9of SUNWi9rf SUNWjxcft SUNWkcoft SUNWcttf SUNWhttf SUNW5xfnt
```

This message is only advisory and does not indicate an installation failure.

Workaround: Installation of the font packages listed in the warning message is strongly recommended.

System Administration Installation Bugs

Addition of Solaris 7 Service to an OS Server Results in an Upgrade Failure Message (4171470)

When the Solaris 7 system software is added to an OS server as a service, the following error message is displayed:

```
celebris:  Error:  Error adding OS service Solaris 2.7 i386 i86pc:
service modification failed.
See /var/sadm/system/logs/upgrade_log for more information
(/var/sadm/install_data/upgrade_log on Solaris 2.3 or 2.4).
```

Where *celebris* is the name of the OS server.

If you review the indicated log file, you will see that the addition of the SUNWplow package failed with the following message:

```
Doing pkgadd of SUNWplow to /.
ERROR: attribute verification of
<export/exec/Solaris_2.7_i386.all/etc/default/init> failed
pathname does not exist
```

Workaround: Ignore the error message.

User Disabling of Daemons and Servers in `inetd.conf` Overridden by Package Instance (4220923)

The interactive installation program adds lines for the KCMS Profile Server, Font Server, CacheFS Daemon, and Kerbd Daemon even though they already exist and are commented out in `/etc/inetd.conf`.

Workaround: The unnecessary entries in `/etc/inetd.conf` can be deleted or commented out with a text editor.

64–Bit Solaris Issues

This section describes installation-related 64–bit Solaris issues.

Sun UltraSPARC System (sun4u) May Need Flash PROM (Open Boot) Upgrade

If you want to run the 64-bit Solaris operating environment on an UltraSPARC system, you may need to upgrade its Flash PROM firmware. The Solaris 7 installation programs have a new check box for adding 64-bit support. This new 64-bit support is selected by default when installing on Sun UltraSPARC systems.

Note - If you choose to run the 32-bit Solaris operating environment on any Sun or UltraSPARC system, the Flash PROM upgrade is not needed.

The following table lists the UltraSPARC (sun4u) systems that are affected and the minimum firmware versions needed. If the system is not listed in the table, it does not need a Boot PROM upgrade. Use `uname -i` to check the system type. Use `prtconf -V` to identify the firmware version.

System Type from `uname -i`	Minimum Fimware Version from `prtconf -V`
SUNW,Ultra-1-Engine	3.10.0
SUNW,Ultra-1	3.11.1
SUNW,Ultra-2	3.11.2

System Type from `uname -i`	Minimum Fimware Version from `prtconf -V`
SUNW,Ultra-4	3.7.107
SUNW,Ultra-Enterprise	3.2.16

Note - For instructions on performing the Flash PROM update using the Solaris CD, refer to the *Solaris 7 Sun Hardware Platform Guide*. If you do not have this manual, it can be obtained at `http://docs.sun.com`.

AnswerBook2 Documentation Installation Bugs

Installing `SUNWab2u` Before `SUNWab2r` and `SUNWab2s` Causes Problems (4230969)

Installing the `SUNWab2u` package before the other AnswerBook2 packages, `SUNWab2r` and `SUNWab2s`, causes the following:

- Warning messages will display during the installation
- The scan option will not find any AnswerBook1 collections
- Links between books will attempt to retrieve the book from docs.sun.com, rather than from the local server

Workaround: Use the installer (Web Start utility) or the `pkgrm` command to remove the `SUNWab2u`, `SUNWab2r`, and `SUNWab2s` packages.

To install the packages in the correct order, use the installer (Web Start utility).

If you install the packages manually using the `pkgadd` command, install them in the following order:

1. `SUNWab2r`
2. `SUNWab2s`
3. `SUNWab2u`

Solstice AutoClient Installation Issue

The Solstice AutoClient product is not included in the SEAS 3.0 product shipped with the Solaris 7 8/99 release. If you have installed diskless clients and AutoClient systems, you can continue to use those systems. You can manage those systems using an earlier release of Solstice AdminSuite.

Late-Breaking Solaris Runtime Issues

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 7 8/99 CD for additional runtime problems.

The information in this chapter supplements any information listed in the `runtime_bugs` file that is part of the `SUNWrdm` package on the Solaris 7 8/99 CD. If you boot from the Solaris 7 8/99 CD, the `runtime_bugs` file is located in the directory:

`/cdrom/sol_7_899_sparc/s0/Solaris_2.7/Docs/release_info/C`

The default installed location for the `runtime_bugs` file is the directory:

`/usr/share/release_info/Solaris_2.7/C`

Note - The name of this product is Solaris 7 8/99, but code and path or package path names may use Solaris 2.7 or SunOS 5.7. Always follow the code or path as it is written.

Common Desktop Environment (CDE) Bugs

Cannot Print in `dtmail` for Non-ISO_1 Locales (4072209)

If you are running a non-ISO_1 locale, such as `ru`, `hr`, and `pl`, you cannot print emails in `dtmail`.

Workaround: To print an email, save the e-mail as a file and use `dtpad` or the `lp` command to print the file.

Solaris Information Files Display in English (4202477)

If you display the 7 Solaris information files (listed in Step 2 on page 24) that are included in the `SUNWrdm` packages and installed in the `/usr/share/release_info/Solaris_2.7/`*locale* directory, you can only view them in English even though you logged in using the European locale.

1. **Select Information from the front panel's Help menu.**

2. **Double-click the Solaris_2.7 folder in the Application Manager.**

    The following 7 Solaris Information files are displayed:

    - `documentation_issues`
    - `driverupdate`
    - `eof`
    - `installation_bugs`
    - `new_features`
    - `patches`
    - `runtime_bugs`

3. **Double-click on each file.**

    It displays each file in `dtpad`.

Workaround: Go to `/usr/share/release_info/Solaris_2.7/`*locale* and use `vi` or `dtpad`.

System Administration Bugs

`/var/adm/messages` File Contains Incorrect Time Stamp (4216235)

The system time in the `/var/adm/messages` file is inaccurate when displaying boot-related information for the first boot after a `netinstall`. In the following excerpt from the `/var/adm/messages` file, you will see that the system time gets set to a later time.

```
Jun  1 22:05:07 sunergy2 unix: mem = 49152K (0x3000000)
Jun  1 22:05:07 sunergy2 unix: avail mem = 44359680
Jun  1 22:05:07 sunergy2 unix: root nexus = SUNW,SPARCclassic
Jun  1 17:39:59 sunergy2 unix: iommu0 at root
Jun  1 17:39:59 sunergy2 unix: :
Jun  1 17:39:59 sunergy2 unix: obio 0x10000000
Jun  1 17:39:59 sunergy2 unix:
Jun  1 17:39:59 sunergy2 unix: sbus0 at iommu0
```

Workaround: You may delete the innaccurate messages.

UFS Quotas Not Enabled After Booting (4226352)

If you have UFS file systems listed in /etc/vfstab with quotas enabled, you must apply the following workaround. Otherwise, quotas are not enabled automatically after booting a system.

Workaround: You must run quotacheck -a and quotaon -a for quotas to be correctly enabled. Otherwise, quotas remain disabled.

Cannot Detach UE10000 Board if in.rarpd daemon Is Running and /rplboot Exists (4231845)

If you setup a UE10000 board as a diskless client and Solstice AutoClient server and Solstice AdminSuite daemons are running, you cannot detach the board using Dynamic Reconfiguration. When you attempt to detach the board, you will see something similar to the following error message:

```
dr> complete_detach 2
Completing detach of board 2.
DR Error: detach_board: UNCONFIGURE ioctl failed
PIM (errno #5): /sbus@48,0/SUNW,hme@0,8c00000
Board detachment failed.
Retry the COMPLETE or ABORT the operation.
dr>
```

Workaround: If you set up a UE10000 board as a Solstice server servicing diskless clients and AutoClient systems, follow these steps before running a Dynamic Reconfiguration operation:

1. **Move** /rplboot **to** /rplboot_orig**:**

```
# mv /rplboot /rplboot_orig
```

2. Stop the NFS server:

```
# /etc/init.d/nfs.server stop
```

3. Start the NFS server:

```
# /etc/init.d/nfs.server start
```

4. Kill the in.rarpd **daemon:**

```
# kill -9 PID
```

where *PID* is the Process ID of the in.rarpd daemon

5. Kill the rpc.bootparamd **daemon:**

```
# kill -9 PID
```

where *PID* is the Process ID of the rpc.bootparamd daemon

You are now able to run Dynamic Reconfiguration successfully to detach the UE10000 board. During the Dynamic Reconfiguration operation, you can not service any diskless clients or AutoClient systems. To restart client services after the successful Dynamic Reconfiguration operation:

1. Move /rplboot_orig **to** /rplboot**:**

```
# mv /rplboot_orig /rplboot
```

2. Stop the NFS server:

```
# /etc/init.d/nfs.server stop
```

3. Start the NFS server:

```
# /etc/init.d/nfs.server start
```

4. **Run the** `in.rarpd` **daemon:**

```
# /usr/sbin/in.rarpd -a &
```

5. **Run the** `rpc.bootparamd` **daemon:**

```
# /usr/sbin/rpc.bootparamd &
```

Remote Console Bugs

The following bugs occur when the Remote Console feature is enabled.

`init` Does Not Recognize Carrier Drop Off From a Serial Display and Therefore Does Not Revert to the Default Console (4191023)

If you lose the carrier, for example, become disconnected from the serial port that is not located on the default console or on an auxiliary console through which you are logged in, and then bring the system to single-user or administrative mode by executing the `init` command from that port, you must ensure that the carrier is reestablished on that serial port before bringing the system back up. The system then prompts you for a run level to which you want to boot the system (only on the port where the `init` command was initiated).

Workaround: Reconnect to the serial ports when you lose the carrier before rebooting the system.

`init` Prompts for Run Level When the `reboot` Command Is Executed From a Standalone Session (4191148)

A misleading message is sometimes displayed on the device on which you initiated the `init` state transition when administering a system using the `init` command even though you executed the `reboot` command. When executing `init s`, a single-user shell is established on a remote console and the subsequent rebooting of the system can cause the following message to be displayed:

```
Enter run level
```

Workaround: Ignore the misleading message.

Change the `init` Command's Run Level Prompt to Display on a `tty` On Which Control—D or the `exit` Command Are Executed (4196862)

If you press Control—D as a superuser or after logging in as `root` from the superuser login prompt and then issue an `exit` command to be at the default run level, you are prompted for the default run level. The prompt is displayed on a console on which the `init` command was initially executed instead of the console on which Control—D or the `exit` command were originally issued.

If you execute the `init` command from a `pty`, `/dev/console` becomes the default device on which you are prompted for a run level. If you are running a remote console and log in as a superuser and then type Control—D to boot the system, the run level prompt is then displayed on the console instead of the auxiliary console.

The `init` Command Does Not Display Its Run Level Prompt When Reconnecting to the Port of an Auxiliary Console (4196993)

If a configuration includes one or more auxiliary consoles and the carrier drops the connection for the auxiliary console on which the `init` command was run, and the sulogin shell has exited from another auxiliary or default console, then the following prompt will not be displayed after reestablishing the connection on the port from which the carrier dropped the connection:

```
Enter Run Level
```

Although you are never prompted for the run level, the system is still waiting for the run level to be entered.

Workaround: Reestablish the connection on the port from the carrier has dropped the connection and enter the desired run level even though you are not prompted for the run level.

Some Console Messages Cannot Be Redirected to Auxiliary Consoles (4197589)

Daemons or commands may use `/dev/console` explicitly to display messages. The frequency of such messages is low among the set of messages that the console may display.

Workaround: All messages are still printed to `/dev/console` and can therefore be monitored. You can also monitor syslog log files.

`syslog` Writes Messages to `/dev/syscon` When Unable to Send to `syslogd` (4219265)

If `syslogd` needs to display error messages on a console, these messages will be directed to the default location `/dev/syscon`. The error messages are not displayed on any configured auxiliary consoles in this feature patch.

File System Bugs

UFS File System Panic (4241656)

Very infrequently, while doing disk I/O, the UFS file system will panic with the error message:

```
panic, ufs_fault_v+0x4c:, call, real_panic_v, alloccgblk:
can't find blk    in cyl .....
```

Workaround: Reboot the system and run the `fsck` command on the affected file system to recover from the problem.

Java Development Kit (JDK™) Bugs

JDK 1.1.7_07: Java Applications Dump Core When There Is Insufficient Swap Space (4037312, 4042667)

Java applications dump core when there is not enough swap space. Applications sometimes produce the following bus error:

```
not enough space
```

Workaround: Exit other applications running on the system or add more swap space. See the *Solaris System Administration Guide* for details on adding swap space.

JDK 1.1.7_07: Adjust Colormap To Improve Performance in True-Color Environment (4102599)

Many X-requests in Java applications can cause a slow startup in 8-bit color (TrueColor or PseudoColor) environments. This is apparent on slower systems. A large part of the startup delay is due to the computation of an optimal dithered colormap by the `awt` library during initialization.

Workaround: Adjust the colormap size computed at initialization by using the environment variable `VIRTCUBESIZE`. Set it to a power of 2 between 4 and 32. The default value is 32.

```
setenv VIRTCUBESIZE 8
```

JDK 1.2.1_02a: Underlined Text Displays Slowly on a Non-local Host (4170221)

When you set the DISPLAY environment variable to a host other than the one running the virtual machine, underlined text in a network browser displays at a much slower rate than text that is not underlined.

Workaround: Do not use remote display.

JDK 1.2.1_02a: Text Rendering Performance Regression From JDK 1.1.7 and Earlier Releases (4210230)

Text rendering with JDK 1.2 is much slower than with JDK 1.1.7 and earlier releases, including rendering on platforms with Direct Graphics Access support (for example: cg6, ffb frame buffers).

Workaround: Keep socket writes to less than 64 kbytes.

AnswerBook2 Documentation Bugs

AnswerBook2 Print Function Disabled for Asian Locales (4163661)

The AnswerBook2 Print function does not work for Asian (Korean, Simplified Chinese, and Traditional Chinese) documents.

Workaround: To print AnswerBook2 pages in these locales, use your browser's print function.

`ab2cd` Causes TCL Errors When Started With LC_ALL Set to a Value Other Than C or Blank (4249211)

When running the AnswerBook2 server with the command `ab2cd`, if LC_ALL is set to a value other than C or blank, you will see the following error message:

```
Internal Server Plugin Error
../dwinterp/dwinterp.cc reported


TCL script exception:

File not found: "/tmp/.ab2/data/config/dynaweb.dwc"
-----------------------------


Please notify your System Administrator.../dwsp/dwspns.cc reported "Null
Pointer" exception caught in ../dwsp/dwspns.cc, line 244
Please notify your System Administrator.
```

Workaround: Before starting `ab2cd`, type the following command:

```
# unsetenv LC_ALL
```

Solaris Runtime Bugs

Man Page for `netstat` Truncated (4246745)

When a user tries to access the `netstat(1M)` reference manual page using the man command, the page does not print completely. The problem arises because of an `nroff` bug that occurs only in the C locale. The `nroff` file generated by the man command contains invalid characters that may cause a core dump.

The same behavior occurs with the `netmask(1M)` and `m64config(1M)` reference manual pages.

`Workaround`: Use AnswerBook2 to view the complete `netstat(1M)`, `netmask(1M)`, and `m64config(1M)` reference manual pages.

Localization Bugs

OpenWindows Is Not Supported As a Desktop Option In Some Locales

OpenWindows™ is not supported as a desktop option in the following locales and partial locales:

TABLE 2–1 Desktop Options Not Supported

Desktop Option	Name of Country
`en_GB.ISO8859-15`	Britain
`de.ISO8859-15`	Germany
`fr.ISO8859-15`	France
`it.ISO8859-15`	Italy
`es.ISO8859-15`	Spain
`sv.ISO8859-15`	Sweden

TABLE 2–1   Desktop Options Not Supported   *(continued)*

Desktop Option	Name of Country
da.ISO8859-15	Denmark
de_AT.ISO8859-15	Austria
en_IE.ISO8859-15	Ireland
pt.ISO8859-15	Portugal
nl_BE.ISO8859-15	Belgium
nl.ISO8859-15	Netherlands
fr_BE.ISO8859-15	Belgium
fi.ISO8859-15	Finland
el_EURO	Greece
he	Israel
ar	Egypt
de.UTF-8	Germany
fr.UTF-8	France
it.UTF-8	Italy
es.UTF-8	Spain
sv.UTF-8	Sweden
en_EU.UTF-8	Europe

Late-Breaking News

This chapter lists late-breaking new features that arrived too late to be included in the "What's New: A Closer Look" in the *Solaris 7 (SPARC Platform Edition) Installation Library*. In addition, you can also refer to the "What's New at a Glance" section in the *Solaris 7 Supplement*, the *Solaris 7 System Administration Supplement*, and the *Solaris 7 Software Developer Supplement*. You may also want to refer to the online `new_features` file in the `SUNWrdm` package on the Solaris CD for additional information on new features.

The information in this chapter supplements any information listed in the `new_features` file that is part of the `SUNWrdm` package on the Solaris 7 8/99 CD. If you boot from the Solaris 7 8/99 CD, the `new_features` file is located in the directory:

`/cdrom/sol_7_899_sparc/s0/Solaris_2.7/Docs/release_info/`

The default installed location for the `new_features` file is the directory:

`/usr/share/release_info/Solaris_2.7/C`

Note - The name of this product is Solaris 7 8/99, but code and path or package path names may use Solaris 2.7 or SunOS 5.7. Always follow the code or path as it is written.

Dynamic Reconfiguration (DR) for Sun Enterprise 6x00, 5x00, 4x00, and 3x00 Systems

If you plan to implement DR on Sun Enterprise 6x00, 5x00, 4x00 and 3x00 systems, visit the following Sun web site for late-breaking news, frequently-asked questions (FAQ) and the latest downloading instructions for patches and firmware needed to run DR:

```
http://sunsolve2.sun.com/sunsolve/Enterprise-dr
```

End-of-Support Statements

This chapter lists late-breaking end-of-support statements that arrived too late to be included in the online `eof` file in the `SUNWrdm` package on the Solaris CD.

The information in this chapter supplements any information listed in the `eof` file that is part of the `SUNWrdm` package on the Solaris 7 8/99 CD. If you boot from the Solaris 7 8/99 CD, the `eof` file is located in the directory:

`/cdrom/sol_7_899_sparc/s0/Solaris_2.7/Docs/release_info/C`

The default installed location for the `eof` file is the directory:

`/usr/share/release_info/Solaris_2.7/C`

Note - The name of this product is Solaris 7 8/99, but code and path or package path names may use Solaris 2.7 or SunOS 5.7. Always follow the code or path as it is written.

End of Software Support Statements for Future Releases of the Solaris Operating Environment

The `sysidnis(1M)` System Identification Program

The `sysidnis(1M)` program may be removed in a future release. `sysidnis(1m)` is the System Identification program responsible for configuring name services during installation and upgrade, and after unconfiguration using `sys-unconfig(1M)`.

`sysidnis(1M)` will be replaced by `sysidns(1M)`.

XIL

XIL may no longer be supported in a future release. The following warning is generated when an XIL program is compiled:

```
#error: "XGL has been declared Obsolete and may not be present in
versions of Solaris after 8.
#define SUNXIL_WARNING_DISABLE (or use -D) to disable this message."
```

To compile an XIL program, disable the message by adding **#define** to the program:

```
#define SUNXIL_WARNING_DISABLE
```

or by using the following compiler directive:

```
-DSUNXIL_WARNING_DISABLE
```

Documentation Issues

This chapter describes known documentation problems. You may also want to refer to the online `documentation_issues` file in the `SUNWrdm` package on the Solaris 7 8/99 CD for additional documentation problems.

Note - The information in this chapter supplements any information listed in the `documentation_issues` file that is part of the `SUNWrdm` package on the Solaris 7 8/99 CD. If you boot from the Solaris 7 8/99 CD, the `documentation_issues` file is located in the directory:

`/cdrom/sol_7_899_sparc/s0/Solaris_2.7/Docs/release_info/C`

The default installed location for the `documentation_issues` file is the directory:

`/usr/share/release_info/Solaris_2.7/C`

Note - The name of this product is Solaris 7 but code and path or package path names may use Solaris 2.7 or SunOS 5.7. Always follow the code or path as it is written.

Documentation Errata

Documentation Errata for AnswerBook2 Server

Book Affected: Traditional Chinese version of *Installing and Administering an AnswerBook2 Server*

In the Traditional Chinese version of the book *Installing and Administering an AnswerBook2 Server*, several commands have been translated to show Chinese

commands or parameters. These commands should remain in their original form, as shown in the English version of the book.

To read the correct examples of commands and parameters, refer to the English version of *Installing and Administering an AnswerBook2 Server*.

Documentation Errata for *Solaris 7 8/99 Installation Supplement*

Book Affected: *Solaris 7 8/99 Installation Supplement*

In the *Solaris 7 8/99 Installation Supplement*, it is noted that if you are running Solstice AdminSuite 2.3 software and want to add OS services to your server, you need to install the Solstice AminSuite 2.3 patch number 104468-06. This patch applies to the Solaris 7 *SPARC Platform Edition*. If you are running the Solaris 7 *Intel Platform Edition*, install the Solstice AdminSuite 2.3 patch number 104469-06.

Maintenance Update Patch List

The patches listed in this appendix are are on the Solaris 7 8/99 CD. They have been applied using:

- SolStart

  The patches are located in the `/var/sadm/patch` directory on an installed system.

- Freshbits technology

  These patches were applied when the Solaris 7 8/99 CD was created. Therefore, these patches are not located in the `/var/sadm/patch` directory.

The `showrev -p` command provides a list of all patches applied to the installed system regardless of how they were applied. The Solaris 7 8/99 CD includes a known and tested level of patches; however, patches cannot be backed out of the Solaris 7 8/99 release.

Patch List

```
106144-09  :   SunOS 5.7:  Elite3D AFB Graphics Patch
         4136467 4160577 4163164 4165917 4169127 4170600 4170604 4172542 4175212 4178791
4175184 4184293 4186140 4175013 4182420 4156144 4157108 4176160 4176185 4200455 4201148
4187303 4204070 4209616 4177108 4221200 4225365 4229537 4236011 4232947 4233704 4245211

106145-08  :   SunOS 5.7:  Creator 7 FFB Graphics Patch
         4178791 4175013 4182420 4156144 4012535 4156098 4160585 4165396 4172537 4173830
4187303 4204070 4209616 4226313 4236011 4232947 4245211
```

(continued)

106146-07 : SunOS 5.7: M64 Graphics Patch
          4166676 4166564 4167729 4174185 4174287 4174783 4175630 4175668 4175851 4178198
4182726 4185216 4185486 4189734 4175585 4191155 4191632 4194640 4198192 4199987 4204624
4205110 4192291 4210359 4109173 4147781 4192921 4211738 4219116 4219978 4225222

106147-03 : SunOS 5.7: VIS/XIL Graphics Patch
          4163883 4172620 4182420

106148-05 : SunOS 5.7: XFB Graphics Patch
          4178791 4176160 4176185 4200235 4187566 4221205

106327-05 : SunOS 5.7: Shared library patch for C++
          1136478 1146175 1147577 1147044 1148647 1151825 1159647 1160084 1161999 1165177
1169658 1164100 1166414 1171426 1172054 1172379 1173166 1178171 1187592 1180564 1184772
1182934 1174107 1193580 1194462 1195674 1232632 1232579 1232305 1223494 1259645 1262573
1254838 1264396 1265054 4022750 4005413 4079317 4082776 4100882 4121018 4089011 4067988
4050876 4100612 4123883 4181458 4173766 4103581 4183435 4187260 4187325 4191439 4058012
4101606 4132688 4190043 4193618 4199857

106541-06 : SunOS 5.7: kernel update patch
          4104625 4112730 4115711 4115715 4120985 4132290 4136059 4138467 4139770 4140352
4143503 4147402 4152055 4154939 4155392 4159337 4165983 4166495 4167270 4168739 4170410
4170500 4173696 4174167 4174331 4175299 4175350 4175558 4176940 4177334 4177496 4178298
4178455 4179342 4179407 4179883 4181570 4182043 4182047 4182227 4182234 4182240 4182970
4184015 4184305 4184430 4184786 4184788 4184852 4184877 4185110 4185366 4185742 4186155
4188005 4190083 4190117 4190138 4190405 4190466 4190566 4190796 4190807 4190812 4191544
4192056 4192195 4192227 4192420 4192639 4192698 4193375 4193378 4193379 4193380 4193381
4193383 4193467 4193657 4194789 4196986 4197418 4197450 4197461 4198134 4198723 4198942
4199032 4199606 4200121 4200817 4201921 4203394 4204046 4205009 4206401 4209971 4210841
4211024 4211033 4211618 4212524 4212620 4212634 4212925 4213705 4214611 4214739 4216224
4217122 4219071 4219851 4223353 4224086 4224714 4224729 4226963 4233009 4236372 4238230
4240566 4242668

106733-06 : SunOS 5.7: Create a patch analyzer
          4170691 4175875 4178977 4132282 4186583 4186586 4186587 4186588 4242739

106793-03 : SunOS 5.7: ufsdump and ufsrestore patch
          4077276 4132365 4145883 4169853 4184189 4240566

106843-01 : OpenWindows 3.6.1 (japanese) fixed OW ws menu bug for sparc:
          4177882

106857-09 : SunOS 5.7: European locale updates
          4179837 4175110 4203951 4193529

106879-01 : Power_Mgmt-SW 7: sys-suspend patch
          4174133

106887-02 : SunOS 5.7:   SunVideo 1.4 Patch
          4197200 4233236

106915-02 : SunOS 5.7: dtmail in zh.GBK can't read 2.5.1 Chinese email by default.

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            4182320 4231572

106917-01 : SunOS 5.7: when view mails change charset, dtmail dump core.
            4175029

106924-01 : SunOS 5.7: /kernel/drv/isp and /kernel/drv/sparcv9/isp patch
            4166035

106925-01 : SunOS 5.7: /kernel/drv/glm and /kernel/drv/sparcv9/glm patch
            4162302 4176924

106926-04 : SunOS 5.7:   sdtudctool, sdtudc_register and sdtudc_extract patch
            4199125 4178971 4183926 4178952 4178964 4162315 4176705 4179808 4192450 4189691
4212116 4209084

106934-03 : CDE 1.3: libDtSvc Patch
            4181281 4167347 4191060 1194724

106936-01 : SunOS 5.7: /etc/cron.d/logchecker patch
            4094591

106938-02 : SunOS 5.7: libresolv patch
            4134616 4211042

106940-01 : SunOS 5.7: /usr/sbin/makedbm patch
            4144726

106942-03 : SunOS 5.7: libnsl, rpc.nisd and nis_cachemgr patch
            4152002 4157559 4161969 4162879 4186012

106944-02 : SunOS 5.7: /kernel/fs/fifofs and /kernel/fs/sparcv9/fifofs patch
            4166116 4211236

106946-01 : SunOS 5.7: /usr/sbin/sar patch
            4175435

106948-01 : SunOS 5.7: /kernel/drv/qe and /kernel/drv/sparcv9/qe patch
            4154455

106949-01 : SunOS 5.7: BCP (binary compatibility) patch
            4169198

106950-06 : SunOS 5.7: linker patch
            4159122 4165487 4173576 4174468 4176579 4179880 4188527 4188843 4194264 4205087
4214649 4215164 4215587 4225937 4234657 4235241

106952-01 : SunOS 5.7: /usr/bin/uux patch
            4179980

106959-01 : SunOS 5.7: last portion of audio file gets chopped or repeats
            4184851

106960-01 : SunOS 5.7: Manual Pages for patchadd.1m and patchrm.1m

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4178212

106963-01 : SunOS 5.7: /kernel/drv/esp and /kernel/drv/sparcv9/esp patch
4176942

106967-01 : SunOS Release: 5.7 htt server unexpectedly restart
4172429

106969-01 : SunOS 5.7: zh.GBK, Input Method, Alt+1 sometimes can not work properly
4183054

106971-01 : xetops of zh.GBK locale doesn't process TAB character:
4187748

106973-01 : SunOS 5.7: Correct translation error.
4176030

106978-08 : SunOS 5.7: fix for sysid
4166260 1213369 4204782 4205403 4207595 4208607 4211403 4225369 4229542 4236194
4235726

106980-05 : SunOS 5.7: libthread patch
4157739 4173285 4173422 4189981 4207409 4209710 4209713 4220253

106982-01 : SunOS 5.7: /kernel/drv/fas and /kernel/drv/sparcv9/fas patch
4172361

106985-01 : SunOS 5.7: /usr/sbin/uadmin and /sbin/uadmin patch
4167438

106987-02 : SunOS 5.7: /usr/sbin/tar patch
4118310 4159872

106999-01 : SunOS 5.7: /usr/lib/adb/sparcv9/adbsub.o patch
4164583

107001-01 : CDE 1.3: Actions patch
4157154

107003-03 : SunOS 5.7: Updated Lucida Hebrew Fonts for Solaris 7
4187022

107011-01 : CDE 1.3: sdtwebclient patch
4110777 4164680 4185288

107014-01 : XIL 1.4: Deskset Loadable Pipeline Libraries
4177176 4174709

107018-01 : SunOS 5.7: /usr/sbin/in.named patch
4134616

107022-03 : CDE 1.3: Calendar Manager patch
4184188 4117156 4230754

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107031-01 : SunOS 5.7: /usr/ucb/ucblinks patch
     4161576

107033-01 : Solaris 7: xetops crashes for BIG5
     4188052

107038-01 : SunOS 5.7: apropos/catman/man/whatis patch
     4107178 4154565

107042-03 : SunOS 5.7: JFP install/sysadm messages patch
     4217570 4221453

107044-01 : SunOS 5.7: Russian and Polish print failure on some printers
     4190105

107049-01 : Solaris 7: dtlogin language menu displays wrong info
     4176962

107059-01 : SunOS 5.7: /usr/bin/sort and /usr/xpg4/bin/sort patch
     4181185

107063-01 : Solaris 7: Thai engine crashes in 64bit mode
     4186151

107072-01 : CDE 1.3: Spell Checker patch
     4185079

107074-01 : SunOS 5.7: SUNWultratest doesn't support sun4us platform
     4190729

107076-01 : SunOS 5.7: /usr/kernel/drv/vol and /usr/kernel/drv/sparcv9/vol patch
     4181968

107078-10 : OpenWindows 3.6.1 Xsun Patch:
     4183231 4163790 4184889 4178200 4194588 4192179 4168571 4204224 4208458 4102279
4198669 4209569 4136721 4102279 4206665

107081-06 : Motif 1.2.7: Runtime library patch
     4159034 4149711 4171291 4170491 4162369 4165677 4171723 4174322 4183749 4186734
4186826 4128879 4191550 4197157 4197929 4197924 4207929 4209526 4211104 4224885 4226996
4201602 4219810 4191346

107115-02 : SunOS 5.7: LP Patch
     4085677 4095132 4129917 4156106 4165358 4167443 4179341

107117-05 : SunOS 5.7: libbsm patch
     4166626 4167174 4168892 4172111 4172702 4174308 4179861 4182072 4187811 4188193
4194454 4196408 4196541 4218800

107119-04 : SunOS 5.7: JFP manpages patch
     4185342 4190255 4195644 4199110 4222912

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107121-02 : SunOS 5.7: uata and dad driver patch
4179264 4186223 4205336 4212490

107124-03 : SunOS 5.7: JFP message files patch
4195663 4216216 4240891

107127-02 : SunOS 5.7: /usr/lib/autofs/automountd patch
4188020

107136-01 : Solaris 7: Fixed Dtmail Shortcuts to be consistent with English
4181490

107138-01 : Solaris 7: Fixed SUNW5ttf package to display ps files
4178539

107147-03 : SunOS 5.7: pci driver patch
4170981 4177530 4180438 4205258 4205298 4224713

107147-04 : SunOS 5.7: pci driver patch
4170981 4177530 4180438 4205258 4205298 4224713

107148-03 : SunOS 5.7: /kernel/fs/cachefs and /kernel/fs/sparcv9/cachefs patch
4170190 4170376 4171181

107171-03 : SunOS 5.7: Fixes for patchadd and patchrm
4186941 4176890 4190866 4150762 4193454 4194281 4194308 4224092 4245279

107178-01 : CDE 1.3: libDtHelp.so.1 patch
4193245

107180-06 : CDE 1.3: dtlogin patch
4178402 4178408 4178415 4178431 4184874 4189472 4190072 4190214 4201306 4205939
4198977 4225029 4225037 4213502 4170777

107185-01 : SunOS 5.7: Miscellaneous Russian KOI8-R problems
4195697 4189003 4194495

107187-01 : SunOS 5.7: Miscellaneous Eastern European locale problems
4174452 4179411 4138017

107200-05 : CDE 1.3: dtmail patch
4190570 4201459 4191180 4180102 4134913

107209-06 : Solaris 7: WOS Message Updates

107219-01 : CDE 1.3: dtprintinfo patch
4007233 4191060 4191065

107226-04 : CDE 1.3: dtwm patch
4169837 4209745 4212855 4230855

107233-01 : OpenWindows 3.6.1: xterm patch

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4184297

107248-01 : CDE 1.3: sdtaudio patch
4189907

107250-02 : OpenWindows 3.6.1 libsv8.so.1 Patch:
4194602

107259-01 : SunOS 5.7: /usr/sbin/vold patch
4194660

107285-01 : SunOS 5.7: passwd & pam_unix.so.1 patch
4172457

107292-01 : SunOS 5.7: ifp driver patch
4185774

107293-01 : SunOS 5.7: libgss.so.1 and gsscred patch
4195223

107306-01 : CDE 1.3: dtfile patch
1194724 4195992 4185042

107316-01 : SunOS 5.7: localeconv() returns wrong results for French
4192615

107330-01 : SunOS 5.7: /usr/sbin/ntpdate patch
4201436

107332-02 : SunOS 5.7: libadm patch
4197828

107337-01 : OpenWindows 3.6.1: KCMS configure tool has a security vulnerability
4199722

107351-01 : XGL 3.3.1: XGL Patch (stripped version)
4202983 4172537

107359-01 : SunOS 5.7: BCP (binary compatibility) patch
4198681

107401-01 : SunOS 5.7: /usr/bin/iostat patch
4085790

107403-01 : SunOS 5.7: rlmod & telmod patch
4204044

107409-01 : Solaris 7: dtfile Menu is localized
4181159

107413-01 : Solaris 7: Fix Translation "Incomplete last line" in vi for zh/zh.GBK
4202972

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107415-01 : Solaris 7: Result of TAB in xetops of zh.GBK isn't the same with vi
4202006

107419-01 : Solaris 7: missing snapshot files
4181454

107430-01 : SunOS 5.7: Installer utility used by NCR breaks under Solaris 7
4205603

107432-03 : SunOS 5.7: CTL printing patch
4210384 4172142 4173334 4210140

107437-03 : Solaris 7: support IBM Cp837 and Cp874 iconv modules(th_TH)
4212930 4228950

107438-02 : SunOS 5.7: iso8859-15 locale copy and paste fix
4203951 4244676

107441-01 : SunOS 5.7: /usr/bin/mailx patch
4207629

107443-05 : SunOS 5.7: packaging utilities patch
4155622 4176616 4197238 4199317 4222097 4226928 4244631 4249447

107448-01 : SunOS 5.7: /usr/lib/fs/cachefs/cachefsd patch
4204223

107450-01 : SunOS 5.7: /platform/SUNW,Ultra-Enterprise-10000/lib/cvcd patch
4198962

107451-02 : SunOS 5.7: /usr/sbin/cron patch
4177427 4184825 4196408

107453-01 : SunOS 5.7: Ultra-80 platform patch
4210707

107454-03 : SunOS 5.7: /usr/bin/ftp patch
4138598 4193146 4197316

107456-01 : SunOS 5.7: /etc/nsswitch.dns patch
1194875

107458-02 : SunOS 5.7: sd & ssd drivers patch
4169315 4169319 4174794 4196836 4204491 4212961 4224495

107459-01 : SunOS 5.7: qec driver patch
4106428

107460-03 : SunOS 5.7: st driver patch
4166568 4166574 4166583 4206636 4208102 4211607

107462-01 : SunOS 5.7: /kernel/sched/TS patch
4201921

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107465-02 : SunOS 5.7: /kernel/fs/hsfs and /kernel/fs/sparcv9/hsfs patch
    4193932 4218422

107499-02 : SunOS 5.7: koi8-R -ow hanged before dtlogin screen
    4192535

107546-02 : OpenWindows 3.6.1: Ultra 80 Support Patch
    4212493

107551-01 : SunOS 5.7: /usr/bin/date and /usr/xpg4/bin/date patch
    4167131

107553-01 : SunOS 5.7: /usr/kernel/drv/ipdcm & /usr/kernel/drv/sparcv9/ipdcm patch
    4193690

107555-01 : SunOS 5.7: /usr/lib/libldap.so.3 & /usr/lib/sparcv9/libldap.so.3 patch
    4182937 4200010

107577-01 : SunOS 5.7: japanese installer utility patch
    4221385

107584-01 : SunOS 5.7: /usr/lib/vold/dev_cdrom.so.1 patch
    4062297

107587-01 : SunOS 5.7: /usr/lib/acct/lastlogin patch
    4212054

107589-02 : SunOS 5.7: se, zs, kbd and kbio.h patch
    4144228 4145265 4147705 4159098 4164468 4176071 4177655 4178060 4190872 4191338
4194055 4199552 4202013

107624-01 : SunOS 5.7: /usr/lib/fs/ufs/df patch
    4211712

107628-01 : SunOS 5.7 sdtwebstart.dt 599 l10n_euro message updates:

107638-01 : Solaris 7: Fix the problem with font size change in dtstyle
    4201168

107680-01 : SunOS 5.7: /kernel/sys/msgsys and /kernel/sys/sparcv9/msgsys patch
    4058214

107684-01 : SunOS 5.7: sendmail patch
    4214238

107688-01 : CDE 1.3 Actions patch:
    4215879

107691-01 : SunOS 5.7: l10n_euro message updates for SUNW*is SUNW*os 599

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107700-01 : Solaris 7: FIxes the installation warning for zh.GBK
        4222076

107702-01 : CDE 1.3: dtsession patch
        4197661

107709-02 : SunOS 5.7: libssasnmp/libssagent/snmpdx/mibiisa patch
        4144431 4166235 4171108 4172607 4176076 4178419 4185282 4186361 4189025 4208419
4218931 4219323 4224859 4224980 4232111 4233051 4237139

107711-01 : cde 1.3: sdtvolcheck patch
        4004473

107716-02 : SunOS 5.7: PGX32 Graphics Patch
        4225083 4228453 4231943 4237268 4236513 4230823 4238896

107738-01 : SunOS 5.7: Estonian locale uses incorrect codeset (QU)
        4192473

107744-01 : SunOS 5.7: /usr/bin/du and /usr/xpg4/bin/du patch
        4221507

107784-03 : SunOS 5.7: Manual Pages for Solaris 7 update 3
        4246662 4242931 4184788 4165909 4195648 4166583 4214692 4214697 4167270 4169315
4180075 4193614 4189427 4173822 4186746 1070678 4136939 4153439 4162004 4171658 4170933
4169829 4146611 4147612 4165502 4166848 4178133 4179296 4181039 4181145

107792-01 : SunOS 5.7: /usr/bin/pax patch
        4061087

107794-01 : SunOS 5.7: ASET patch
        4202027

107796-01 : SunOS 5.7: /kernel/fs/lofs and /kernel/fs/sparcv9/lofs patch
        4176333

107799-01 : SunOS 5.7: compress/uncompress/zcat patch
        4217213

107807-01 : Xserver_2.7: xrdb patch
        4221044

107809-02 : SunOS 5.7: SPECIAL PATCH
        4234651

107811-01 : SunOS 5.7: Japanaese iconv patch
        4216797 4232724

107813-01 : SunOS 5.7: Japanaese UTF-8 iconv patch
        4216797 4221058 4232724

107817-01 : Solaris 7: Fix Garbage characters display
        4206605

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107834-01 : SunOS 5.7: /usr/include/sys/dkio.h patch
     4201824

107836-01 : SunOS 5.7: /usr/sbin/format patch
     4165909

107838-01 : SunOS 5.7: libtnfctl patch
     4192482

107841-01 : SunOS 5.7: /kernel/misc/rpcsec and /kernel/misc/sparcv9/rpcsec patch
     4198273

107843-01 : SunOS 5.7: /sbin/init and /usr/sbin/init patch
     4225983

107891-01 : SunOS 5.7: Openwindows not supported by some euro locales
     4174253

107899-01 : SunOS 5.7: /platform/SUNW,Ultra-Enterprise-10000/lib/dr_daemon patch
     4229238

107919-01 : SunOS 5.7: /usr/include/sys/mhd.h patch
     4236793

107933-01 : SunOS 5.7: l10n_euro message updates for SUNW*is SUNW*os 899

107972-01 : SunOS 5.7: /usr/sbin/static/rcp patch
     4240566

108029-01 : SunOS 5.7: S899 u3 prodreg fix for Java 1.1 and Java 1.2 VM
     4244075