



# Solaris 8 Maintenance Update 1 Installation Guide

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# Contents

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1. **Introduction** 5
  - What Is the Solaris 8 Maintenance Update 1? 5
  - When to Install the Solaris 8 Maintenance Update 1 5
2. **Installing the Solaris 8 Maintenance Update 1** 7
  - Time Considerations 7
  - Requirements 7
  - Installing the Solaris 8 MU1 8
  - Identifying the Version of Your Solaris 8 Maintenance Update 12
3. **Backing Out the Solaris 8 Maintenance Update 1** 13
  - Backing Out the Solaris 8 MU1 13
4. **Known Problems** 17
  - Installation Bugs 17
    - `install_mu` Does Not Function Correctly When Starting It Using `sh` (4062334) 17
    - `Patchadd` Displays an Error That It Is Terminating 17
5. **Error Messages** 19
- A. **Solaris 8 Maintenance Update Contents** 25
  - SPARC Platform Patch List 25
  - Intel Platform Patch List 32



## Introduction

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The *Solaris 8 Maintenance Update 1 Installation Guide* explains how to install and back out the Solaris™ 8 Maintenance Update™ 1 (MU1) software. This guide is for system administrators installing the MU1 software. For late-breaking MU1 issues identified too late to be included in this guide, refer to the *Solaris 8 Maintenance Update 1 Installation Guide* on <http://docs.sun.com>.

If you need more information on general procedures for system administration, refer to the *Solaris 8 System Administration Guide, Volumes I, II, and III*.

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### What Is the Solaris 8 Maintenance Update 1?

The Solaris 8 MU1 CD contains the same set of patches as the ones prepackaged on the Solaris 8 6/00 software CDs. These patches have been tested together and packaged for a one-step installation. The MU1 installation automatically updates your system without regressing any patches you have previously installed.

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### When to Install the Solaris 8 Maintenance Update 1

If your system is running the Solaris 8 operating environment and you want to apply patches released in the Solaris 8 6/00 operating environment without losing patches

you previously applied to your system, install the Solaris 8 MU1. Patches applied using the MU1 CD can be backed out.

If your system is running the Solaris 8 or earlier operating environment and you want to fully upgrade to new features and hardware support, install the Solaris 8 6/00 operating environment. The patches applied by installing the Solaris 8 6/00 operating environment will replace any previously installed Solaris 8 patches and cannot be backed out of the release.

Maintenance updates are primarily designed to update the Solaris operating software to a known, tested patch-level. If you want to apply a particular patch, and only that patch, do so through your normal support channels.

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**Note** - The name of this product is Solaris 8 MU1, but code or package path names might use Solaris 2.8 or SunOS™ 5.8. Always follow the code or path as it is written in this document.

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# Installing the Solaris 8 Maintenance Update 1

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This chapter describes how to install your Solaris 8 MU1 software. If you want to install the Solaris 8 MU1 software as part of a custom JumpStart™ installation, refer to the *Solaris 8 Advanced Installation Guide*.

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## Time Considerations

The Solaris 8 MU1 installation procedure is faster than the installation of the individual MU1 patches. The Solaris 8 MU1 installation time varies depending on:

- CPU speed of your machine
- `install_mu` option you select
- Transfer speed of the CD-ROM drive, hard drive, or network you use to access the `install_mu` code and patch set

If you install the MU1 with the backout option disabled, installation will proceed more quickly. However, you will not be able to back out any of the patches MU1 delivers.

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## Requirements

The MU1 may only be installed on a system running the Solaris 8 operating environment.

Space requirements per file system vary depending on:

- Whether you select the backout option
- The location of the backout directory when saving backout data
- The disk partitions and the space available in each file system versus the patch disk space needed per file system
- Your system's locale
- Whether some of the Maintenance Update patches are already installed on your system

The `install_mu` script performs a space analysis for you and reports the space needed per file system, including back out space if applicable. The space calculations take several minutes to complete.

The `install_mu` script does not proceed if it determines that space is lacking in one or more file systems. Although the patch installation space needed is calculated fairly precisely, the backout data space need is estimated and the reported need may be higher than the actual need.

If you are certain that you have enough space to apply the patch set (and backout data if desired) and you want to bypass the space calculation, run `install_mu` with the `-f` option.

---

## Installing the Solaris 8 MU1

Solaris 8 MU1 software can only be installed if both the system running `install_mu` and the target systems are already running the Solaris 8 operating environment.

It is best to reboot your system in single-user mode before installing MU1 because MU1 applies patches to system libraries. Individual systems in a multiuser system will be unstable if any processes have mapped to an unpatched version of a library and later attempt to map to different sections of the old library.

In single-user mode, network services are not available. If the MU1 image is on the network rather than on a CD, you must copy the MU1 image from the network to your local system before booting your system in single-user mode.

If it is not possible to reboot the system in single-user mode or if you do not have enough disk space to make a local copy of the MU1 image, you will need to install MU1 using NFS in multiuser mode. In this case, you should have the system in as quiet a state as possible, without users logged on or running jobs.

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**Note** - Be sure that you have backed up your system's operating system before proceeding.

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To install the Solaris 8 MU1 software:

1. **Make sure that no important user or system processes are running.**
2. **Exit the current session.**  
The CDE login screen appears.
3. **Click the Options button and select Command Line Login.**  
The system prompts you to log in.
4. **Type your login name as `root` and type the root password:**

```
login: root
password: root password
```

5. **Reboot in single-user mode. From the root shell prompt, type:**

```
# reboot -- -s
```

---

**Note** - Changing the run level from multiuser mode to single-user mode with the `shutdown` or `init` command might leave the `vold` process running. This process can cause problems mounting the MU1 CD in single-user mode.

---

6. **Type the root password.**

Check that the system displays the following message and is now in system maintenance mode.

```
Entering System Maintenance Mode

Sun Microsystems Inc. SunOS 5.8 Generic Feb 2000
#
```

- If you are running `install_mu` from the CD, go to Step 7 on page 10.

- If you are running `install_mu` from a local copy of the MU1 image, go to Step 8 on page 10.

7. **To mount the MU1 CD, place the CD in the drive and from the root shell prompt, type:**

```
# mount -o ro -F hsfs /dev/dsk/c0t6d0s0 /cdrom
```

---

**Note** - In some cases the CD-ROM drive might be on a controller other than `c0` or a target other than `t6`, which would require a different path to the CD-ROM device. Check with your system administrator if you have questions about mounting the CD-ROM drive.

---

8. **Run `install_mu`.**

- From a local copy of the MU1 image, type:

```
# cd local_directory
# ./install_mu options
```

- From the MU1 CD, type:

```
# cd /cdrom
# ./install_mu options
```

You can use the following options on the command line.

TABLE 2-1 Command-Line Options for `install_mu`

Option	Description
<code>-d</code>	Specifies that patches will not be backed up. Using this argument decreases the time to install the software, but it also prevents you from backing out individual patches. Cannot be specified with <code>-B</code> option.
<code>-p patchdir</code>	Specifies directory that includes all the patches.
<code>-q</code>	Disables the display of dots that indicate <code>install_mu</code> activity.
<code>-B backoutdir</code>	Specifies that the backout data is saved in the indicated directory. Cannot be specified with the <code>-d</code> option.
<code>-f</code>	Forces installation of patch set without checking for sufficient disk space. Using this option saves time, but you must use it only if you are certain that you have enough space.

When the installation is complete, the following message appears.

```
install_mu completed successfully.
```

- If you see this message, go to Step 9 on page 11.
- If you encounter any errors, go to Chapter 5.

**9. Reboot the system by typing:**

```
# sync ; reboot
```

You are then prompted for a login.

---

**Note** - To prevent the library conflict problem, you must reboot your system after installing MU1.

---

**10. Type your login name and password:**

```
login: login
password: password
```

---

## Identifying the Version of Your Solaris 8 Maintenance Update

To identify the version of your Solaris 8 MU software, type:

```
# cat /etc/release
```

To identify the patches the MU software applied to your system, type:

```
# showrev -p
```

---

**Note** - If you compare the `showrev -p` output from applying the Solaris 8 MU1 software to the `showrev -p` output from installing the Solaris 8 6/00 operating environment, you will note that the following patches are not applied in the MU1 installation:

- Solaris 8 MU1 SPARC Platform Edition:
  - 108631-06
  - 109316-01
- Solaris 8 MU1 Intel Platform Edition:
  - 108632-06

These patches are needed to generate the Solaris 8 6/00 operating environment, but are not needed to apply the Solaris 8 MU1 patches.

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## Backing Out the Solaris 8 Maintenance Update 1

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The patches in the Solaris 8 MU1 software have been tested together as a set and, for the greatest stability, should be used that way. If you need to remove one of the patches, you may do so provided that you did not use the `-d` option of `install_mu` during the installation of the Solaris 8 MU1 software.

Instructions for backing out individual patches are located in each patch directory. Patch directories are located in `$ROOTDIR/var/sadm/patch/`.

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**Note** - Backing out the entire MU is not possible if you selected the `-d` option of `install_mu`.

---

---

## Backing Out the Solaris 8 MU1

It is best to reboot your system in single-user mode before backing out the MU1. MU1 applies patches to system libraries. Individual systems in a multiuser system will be unstable if any processes have mapped to a patched version of a library and later attempt to map to different sections of the old library.

In single-user mode, network services are not available. If the MU1 image is on the network rather than on a CD, you must copy the MU1 image from the network to your local system before booting your system in single-user mode.

If you cannot reboot the system in single-user mode or if you do not have enough disk space to make a local copy of the MU1 image, you need to back out MU1 using NFS in multiuser mode. In this case, you should have the system in as quiet a state as possible, without users logged on or running jobs.

The `backout_mu` script provided by MU1 enables you to back out an entire MU.

To back out the Solaris 8 MU1 software:

**1. Make sure that no important user or system processes are running.**

**2. Exit the current session.**

The CDE login screen appears.

**3. Click the Options button and select Command Line Login.**

The system prompts you to log in.

**4. Type your login name as `root` and type the root password:**

```
login: root
password: root password
```

**5. Reboot in single-user mode. From the root shell prompt, type:**

```
# reboot -- -s
```

---

**Note** - Changing the run level from multiuser mode to single-user mode with the `shutdown` or `init` command might leave the `vold` process running. This process can cause problems when mounting the MU1 CD in single-user mode.

---

**6. Type the root password.**

Check that the system displays the following message and is now in system maintenance mode.

```
Entering System Maintenance Mode
Sun Microsystems Inc. SunOS 5.8 Generic Feb 2000
```

**7. Determine where you are running the `backout_mu` command.**

- If you are running `backout_mu` from the CD, go to Step 8 on page 15.

- If you are running `backout_mu` from a local copy of the MU1 image, go to Step 9 on page 15.

**8. To mount the MU1 CD, place the CD in the drive and from the root shell prompt, type:**

```
# mount -o ro -F hfs /dev/dsk/c0t6d0s0 /cdrom
```

---

**Note** - In some cases, the CD-ROM drive might be on a controller other than `c0` or a target other than `t6`, which would require a different path to the CD-ROM device. Check with your system administrator if you have questions about mounting the CD-ROM drive.

---

**9. Run `backout_mu`.**

- From a local copy of the MU1 image, type:

```
# cd local_directory  
# ./backout_mu options
```

- From the MU1 CD, type:

```
# cd /cdrom  
# ./backout_mu options
```

TABLE 3-1 Command-Line Options for `backout_mu`

Option	Description
<code>-T tooldir</code>	Specifies the location of the patch tools directory
<code>-q</code>	Disables the display of dots that indicate <code>backout_mu</code> activity
<code>-B backoutdir</code>	Specifies an alternate directory in which patches have been saved

When the backout is complete, the following message is displayed.

```
backout_mu completed successfully.
```

- If you see this message, go to Step 10 on page 16 to complete the backout.
- If you encounter any errors, go to Chapter 5.

#### 10. Reboot the system by typing:

```
# sync ; reboot
```

You are then prompted for a login.

**Note** - To prevent the library conflict problem, you must reboot your system after backing out MU1 .

#### 11. Type your login name and password:

```
login: login  
password: password
```



## Known Problems

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This chapter describes known problems relating to the installation and use of the Solaris 8 MU1 software.

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### Installation Bugs

#### `install_mu` Does Not Function Correctly When Starting It Using `sh` (4062334)

Because of problems regarding the interactions between `sh(1)` and `ksh(1)`, the `install_mu` utility might fail to install certain patches correctly when you start it using the following command from the command line or from an administrative script:

```
# /bin/sh ./install_mu options
```

**Workaround:** Execute `install_mu` from the command line or from an administrative script as follows:

```
# ./install_mu options
```

#### `Patchadd` Displays an Error That It Is Terminating

One of the following benign messages might be displayed by `install_mu`:

```
One or more patch packages included in  
XXXXXX-YY are not installed on this system.
```

```
Patchadd is terminating.
```

Or:

```
Installation of XXXXXX-YY failed:  
  Attempting to patch a package that is not installed.
```

These messages indicate that `patchadd` could not find on your system any of the packages that it intended to patch, so it skipped the indicated patch.

The message is displayed when `patchadd` notices a discrepancy installing a patch of one architecture onto a system with a different architecture (for example, a `sun4u` patch on a `sun4m` system.)

This may also be the result of one or more missing packages. The package might have been removed by the administrator, or never installed, as in the case of installing a cluster smaller than the Entire Distribution.

**Workaround:** Ignore the message.

## Error Messages

---

The screen messages displayed during the execution of `install_mu` and `backout_mu` do not include all errors that might have occurred. Therefore, check the detail log file for additional information about any patches or packages that were not installed or backed out.

```
# more $ROOTDIR/var/sadm/install_data/log_file.mu_version_name.date_time
```

In this example:

- `$ROOTDIR` is the root directory of the system that you have just updated; for example, `/` for the local system and `/export/root/clientname` for a diskless client.
- `log_file` is the name of the log file for the process you completed. For install, it is `Maintenance_Update_log`. For backout, it is `MU_Backout_log`.
- `mu_version_name` is the name of the MU (it is `Solaris_8MU1` for MU1).
- `date_time` is the designated date and time copied from `date +%Y%m%d%H%M%S (yyyymmddHHMMSS` or `year-month-day-hour-minute-second`).

---

**Note** - `$ROOTDIR/var/sadm/install_data/log_file` is a symbolic link to the most recent MU log file.

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**Note** - You will see only the error text when the message appears, not the error code number included here. The error code numbers are included here in case you are writing a script that calls the `install_mu` or `backout_mu` and your script needs to know the return values for the failure conditions.

---

### Error Code 1:

```
signal detected.
```

install\_mu (backout\_mu) is terminating.

**Explanation and recommended action:** You interrupted `install_mu` (or `backout_mu`) by pressing Control-C. Reinvoke the program. If you reinvoke `install_mu`, error messages about previously applied patches will appear in the log file. Ignore the error messages.

#### Error Code 2:

install\_mu (backout\_mu) is unable to find the `INST_RELEASE` file for the target file system. This file must be present for `install_mu` (`backout_mu`) to function correctly.

**Explanation and recommended action:** The program cannot find the file `/var/sadm/system/admin/INST_RELEASE` in the client's root area. The client was not created properly or has become corrupted. Back up the client, then remove and re-create it.

#### Error Code 3:

ERROR: Cannot find *\$xcommand* which is required for proper execution of `install_mu` (`backout_mu`).

**Explanation and recommended action:** `install_mu` and `backout_mu` require certain system utilities (for example `awk`, `sed`, `grep`) to be present in the server's `/usr/bin` and `/usr/sbin` directories. One of these utilities is missing. Contact your system administrator for assistance.

#### Error Code 4:

The `-B` and `-d` arguments are mutually exclusive.

**Explanation and recommended action:** The `-d` option requests that no backout data be saved. The `-B` option specifies a directory to store backout data. You cannot use these two options together. Reinvoke `install_mu` with only one of these options.

#### Error Code 5:

The `-p` parameter must be a directory. *\$uPATCHDIR* is not a directory.

**Explanation and recommended action:** You selected the `-p` option and supplied a path that is not a valid directory. Reinvoke `install_mu` (or `backout_mu`) with a valid path to the `-p` option.

#### Error Code 6:

The `-B` parameter must be a directory. *\$1* is not a directory.

**Explanation and recommended action:** You supplied an option to `-B` that is not a directory. Reinvoke `install_mu` (or `backout_mu`) with a valid path to the `-B` option.

**Error Code 7:**

Permissions on backout directory `$BACKOUTDIR` not adequate.

**Explanation and recommended action:** You supplied an option to `-B` that is not a writable directory. Contact your system administrator for assistance.

**Error Code 10:**

Invalid option.

**Explanation and recommended action:** You selected an unrecognized option. Read the usage message displayed and reinvoke `install_mu` (or `backout_mu`).

**Error Code 11:**

Can't write to Log File: `$LOGFILE`

**Explanation and recommended action:** `install_mu` and `backout_mu` need to write its log into the `$ROOTDIR/var/sadm/install_data` directory, where `$ROOTDIR` specifies the root directory of your client or server. Check that the `install_data` directory is writable, then reinvoke `install_mu` (or `backout_mu`).

**Error Code 12:**

`SUNWcar` (core architecture root) package does not exist in `$ROOTDIR/var/sadm/pkg`.

**Explanation and recommended action:** The `/var/sadm/pkg/SUNWcar` directory is missing in the client or server's root area. Your client or server has become corrupted. Contact your system administrator for assistance.

**Error Code 13:**

`install_mu` (`backout_mu`) only supports `sparc` and `i386` architectures. `install_mu` (`backout_mu`) has detected `ARCH=$LPROC`.

**Explanation and recommended action:** You ran `install_mu` (or `backout_mu`) on a system whose architecture is not `SPARC` or `i386`. Reinvoke `install_mu` (or `backout_mu`) on a supported platform.

**Error Code 14:**

`-p` parameter does not point to a directory containing a `.order` file. Looked in `$uPATCHDIR` and in `$uPATCHDIR/$SMU_TOP/$LPROC/Patches`.

**Explanation and recommended action:** You provided a path to a patch directory but `install_mu` could not find a `.order` file in that directory, which it needs to determine the correct patch installation order. `install_mu` (or `backout_mu`) looked in *Spath\_you\_specified* and in *Spath\_you\_specified/MU/Sarch/Patches*, where *Sarch* is either “sparc” or “i386.” Check for the existence of a `.order` file and reinvoke `install_mu` (or `backout_mu`).

**Error Code 15:**

```
install_mu cannot locate patch order (.order) file. Paths
searched: ./SLPROC/Patches, $MU_TOP/SLPROC/Patches, /cdrom/
cdrom0/SLPROC/Patches, ./SuPATCHDIR, and ./SuPATCHDIR/$MU_TOP/
SLPROC/Patches.
```

**Explanation and recommended action:** You did not supply `install_mu` (or `backout_mu`) with the `-p` option to identify the patch directory and `install_mu` (or `backout_mu`) could not locate the patch directory. Reinvoke `install_mu` (or `backout_mu`) with the `-p` option.

**Error Code 16:**

You must be root to execute this script.

**Explanation and recommended action:** You need root privileges to run `install_mu` or `backout_mu` because only user root can apply and remove patches. Reinvoke the program as root.

**Error Code 17:**

```
install_mu (backout_mu) can only patch version 2.8 systems.
Target system is version $TrgOSVers.
```

**Explanation and recommended action:** You asked `install_mu` to apply patches to a server or client not running Solaris 8, or you asked `backout_mu` to back out patches from a server or client not running Solaris 8. `install_mu` and `backout_mu` must be run on a Solaris 8 system.

**Error Code 18:**

Directory with patch tools, `$TOOLS DIR`, not found.

**Explanation and recommended action:** `install_mu` (or `backout_mu`) cannot find the Tools directory distributed with the Maintenance Update. If you copied the Maintenance Update distribution to your system, then the copy has probably become corrupted or modified. Reinstall the Maintenance Update distribution.

**Error Code 19:**

```
$TOOLS DIR/patchadd (or patchrm) does not exist or is not
executable.
```

**Explanation and recommended action:** The Maintenance Update distribution comes with its own versions of `patchadd` and `patchrm`. One of these versions is missing or is not executable. If you copied the Maintenance Update distribution to your system, then the copy has probably become corrupted or modified. Reinstall the Maintenance Update distribution.

**Error Code 22:**

Not enough disk space to apply entire patch set.

**Explanation and recommended action:** `install_mu` analyzed your system and determined that not enough disk space was on one or more file systems to install the entire patch set. Make disk space available in the deficient file systems reported and reinvoke `install_mu`. If you believe that you have enough disk space to apply the Maintenance Update, reinvoke `install_mu` with the `-f` option.

**Error Code 23:**

Not enough disk space to save patch backout data.

**Explanation and recommended action:** `install_mu` analyzed your system and determined that not enough disk space was in the backout directory to save patch backout data. Select a backout directory with enough space, then reinvoke `install_mu`. If you believe that you really have enough disk space in the backout directory, reinvoke `install_mu` with the `-f` option.

**Error Code 24:**

Dry run disk space check failed.

**Explanation and recommended action:** `install_mu` invokes `pkgadd` with a special option to check for sufficient disk space. `pkgadd` failed, probably because `/` or `/var` is very low on disk space or because your system has become corrupted. Contact your system administrator for assistance.

**Error Code 25:**

The `-f` and `-D` options are mutually exclusive.

**Explanation and recommended action:** The `-f` option instructs `install_mu` to skip the dry-run disk space calculation phase. The `-D` option requests that only the dry-run calculations be made. Choose one option, but not both.

**Error Code 27:**

Cannot find state file. Looked for a file of the form `$ROOTDIR/var/sadm/install_data/.mu_state.{$root_or_usr.date_time}`.

**Explanation and recommended action:** `backout_mu` requires a file containing a list of the patches `install_mu` applied in order to know which patches to back

out. If this file is missing, `backout_mu` cannot function. To remove the MU1 patch set, run the `backout_mu` program from the MU1 software distribution.

**Error Code 28:**

The `-T` parameter must be a directory. `$uTOOLDIR` is not a directory.

**Explanation and recommended action:** You supplied an option to `-T` that is not a directory. Reinvoke `backout_mu` with a valid path to the `-T` option.

**Error Code 29:**

`-T` parameter does not point to a directory containing patching tools. Looked in `$uTOOLDIR` and in `$uTOOLDIR/MU/common/Tools`.

**Explanation and recommended action:** `backout_mu` requires the tools `installpatch.fast` and `backoutpatch.fast`. These tools could not be found in the directory specified by the `-T` option. Reinvoke `backout_mu` with a valid path to the `-T` option.

**Error Code 30:**

`backout_mu` cannot locate tools directory. Paths searched: `./common/Tools`, `MU/common/Tools`, `/cdrom/cdrom0/MU/common/Tools`

**Explanation and recommended action:** `backout_mu` searched unsuccessfully in various directories for the patch tools `installpatch.fast` and `backoutpatch.fast`. Reinvoke `backout_mu` with the `-T` option and a path to these tools.



## Solaris 8 Maintenance Update Contents

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This chapter provides the contents of the Solaris 8 MU1.

For example, the following patch:

```
108561-02 : CDE 1.4 Window Manager Features Patch
```

```
4301525 4301522 4299651 4301229 4300013 4303415 4304468 4302626
```

lists all parts of a patch where:

- 108561-02 is the patch ID number
- CDE 1.4 Window Manager Features Patch is the synopsis patch description
- 4301525 4301522 4299651 4301229 4300013 4303415 4304468 4302626 are the identification numbers of the bugs fixed by patch ID 108561-02

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## SPARC Platform Patch List

```
108528-01 : SunOS 5.8: kernel update patch  
4256799 4272737 4293528 4295776 4303474 4304696 4305365 4306004 4306367 4307062  
4307080 4307747 4307827 4309011 4309802 4309818 4310864 4311134 4312278 4313746 4313747  
4314201
```

```
108576-01 : SunOS 5.8: Expert3D IFB Graphics Patch  
4287694 4288477 4288903 4292508 4294341 4294348 4297823 4299666
```

```
108604-03 : SunOS 5.8: Elite3D AFB Graphics Patch  
4234045 4294963 4300089 4303885 4308725
```

```
108605-03 : SunOS 5.8: Creator 8 FFB Graphics Patch  
4234045 4294963 4303885 4308725
```

(continued)

108652-04 : X11 6.4.1 Xsun patch  
4281374 4292395 4286682 4300866 1221324 4308554 4306350 4312517 4287741 4297581  
4297830 4299495 4306774 4308640 4308661 4308670 4311088 4312780 4312893

108664-02 : SunOS 5.8: Support for SME platforms  
4298987 4309134

108680-02 : SunOS 5.8: SuperIO 307 (plug-n-play) device drivers  
4252667 4306404

108714-01 : CDE 1.4: libDtWidget patch  
4289349

108723-01 : SunOS 5.8: /kernel/fs/lofs and /kernel/fs/sparcv9/lofs patch  
4126922

108725-01 : SunOS 5.8: st driver patch  
4270641 4319238

108727-02 : SunOS 5.8: /kernel/fs/nfs and /kernel/fs/sparcv9/nfs patch  
4276984 4293528

108781-01 : Solaris 8: Get UDCTool to work for zh\_TW  
4307173

108806-02 : Solaris 8: Sun Quad FastEthernet qfe driver  
4306341 4301636 4321069 4321602

108808-05 : SunOS 5.8: Manual Page updates for Solaris 8  
4312130 4323321 4323394 4314114 4310895

108810-01 : SunOS 5.8: DirUmountRecurse unmounts incorrectly  
4299103

108820-01 : SunOS 5.8: nss\_compat.so.1 patch  
4302441

108823-01 : SunOS 5.8: compress/uncompress/zcat patch  
4295877

108825-01 : SunOS 5.8: /usr/lib/fs/cachefs/cfsadmin patch  
4207874

108827-01 : SunOS 5.8: libthread patch  
4288299

108835-01 : CDE 1.4: dtcm patch  
4285729

108869-01 : SunOS 5.8: snmpdx/mibiisa/libssasmp/snmplib patch  
4299328 4301970 4309416

(continued)

- 108874-01 : SunOS 5.8: fhc driver patch  
4304051
- 108875-04 : SunOS 5.8: c2audit patch  
4224166 4290575 4307306 4308525 4322741
- 108897-01 : X11 6.4.1 Xprint patch  
4305734
- 108899-01 : SunOS 5.8: /usr/bin/ftp patch  
4294697
- 108901-01 : SunOS 5.8: /kernel/sys/rpcmod and /kernel/strmod/rpcmod patch  
4107735
- 108909-01 : CDE 1.4: Smart Card Administration GUI patch  
4301377 4301411
- 108914-01 : SunOS 5.8: localisation updates for different components
- 108919-01 : CDE 1.4: dtlogin patch  
4072784 4293300 4302209
- 108921-02 : CDE 1.4: dtwm patch  
4306589 4311842 4301522 4299651 4300013
- 108925-03 : Solaris 8: New Messages for new I18N projects  
4321271 4323500
- 108933-01 : Hex broken in Swedish dtcalc, Mistranslation in Spanish dtmail  
4308864 4304021
- 108940-01 : Motif 2.1.1: Runtime library patch for Solaris 8  
4299216
- 108947-01 : SunOS 5.8: /platform/sun4u/cprboot patch  
4296960
- 108949-01 : CDE 1.4: libDtHelp/libDtSvc patch  
4298416
- 108954-02 : SunOS 5.8: localisation updates for different components
- 108956-01 : SunOS 5.8: htt\_server dumps core on SCH's cm.so in utf-8 locales  
4314242
- 108958-02 : SunOS 5.8: Patch for libspmisvc.so.1  
4256556 4302899 4313039
- 108960-01 : SunOS 5.8: Patch for sysidnet  
4310705

(continued)

108962-01 : SunOS 5.8: XmlReader fails on an HTTP stream  
4314140

108964-02 : SunOS 5.8: /usr/sbin/snoop patch  
4297326 4297676 4313760 4315280 4317713 4321696 4321713 4321720 4321721 4321723  
4321725 4321726 4322042 4322055 4322058 4322060 4322064 4322200 4322670

108966-01 : SunOS 5.8: /kernel/fs/ufs and /kernel/fs/sparcv9/ufs patch  
4293528

108968-02 : SunOS 5.8: vol/vold/rmmount patch  
1206000 4108297 4145529 4205437 4211612 4254816 4255049 4285374 4286446 4292408  
4292563 4296452 4298451 4298465 4298563 4298567 4303430 4304283 4304289 4305067 4306425  
4307495 4307500 4307620 4307634 4312778 4313091

108970-01 : SunOS 5.8: /usr/lib/fs/pcfs/fsck and /usr/lib/fs/pcfs/mkfs patch  
4145536 4210625 4250242 4256652

108972-01 : SunOS 5.8: /sbin/fdisk patch  
4221693

108974-02 : SunOS 5.8: sd and uata driver patch  
4285368 4285546 4305131 4313235

108975-02 : SunOS 5.8: /usr/bin/rmformat and /usr/sbin/format patch  
4242879 4292212 4308431 4311553 4322206

108977-01 : SunOS 5.8: libsmmedia patch  
4292214 4308431 4311553

108979-05 : SunOS 5.8: Netra ct patch  
4236043 4242051 4253713 4255980 4272737 4276021 4290269 4303126 4306367 4307062  
4307080 4307747 4307827 4309011 4309802 4309818 4310864 4311126 4311134 4312838 4312937  
4314121 4314936 4315098 4315100 4315101 4317657 4317667 4318351 4318728 4318747 4320440  
4320471 4328225 4330429 4330774

108981-02 : SunOS 5.8: /kernel/drv/hme and /kernel/drv/sparcv9/hme patch  
4247473 4327720

108982-03 : SunOS 5.8: fctl/fp/fcp/usoc driver patch  
4291069 4294605 4298666 4298671 4298676 4298680 4298689 4298693 4298699 4299785  
4300943 4300953 4302739 4304902 4323071 4324847

108983-02 : SunOS 5.8: fcip patch  
4304890 4320876

108984-02 : SunOS 5.8: qlc adb macros patch  
4264323 4278254 4300470 4300943 4300953 4302087 4304897 4324126 4324180 4324192  
4324478

108985-01 : SunOS 5.8: /usr/sbin/in.rshd patch  
4158689 4305888

(continued)

- 108987-01 : SunOS 5.8: Patch for patchadd and patchrm  
4278860 4304640 4303509 4292990 4299710
- 108989-02 : SunOS 5.8: /usr/kernel/sys/acctctl and /usr/kernel/sys/exacctsys patch  
4305365 4312278 4313746 4313747 4314201
- 108991-02 : SunOS 5.8: libc and watchmalloc patch  
4193683 4225913 4292683 4312278 4314913
- 108993-01 : SunOS 5.8: nss and ldap patch  
4312278
- 108995-01 : SunOS 5.8: /usr/lib/libproc.so.1 patch  
4312278
- 108997-03 : SunOS 5.8: libexacct and libproject patch  
4305365 4312278 4313746 4313747 4314201
- 108999-01 : SunOS 5.8: PAM patch  
4312278
- 109003-01 : SunOS 5.8: /etc/init.d/acctadm and /usr/sbin/acctadm patch  
4312278
- 109005-01 : SunOS 5.8: /sbin/su.static and /usr/bin/su patch  
4312278
- 109007-01 : SunOS 5.8: at/atrm/batch/cron patch  
4312278
- 109009-01 : SunOS 5.8: /etc/magic and /usr/bin/file patch  
4312278
- 109011-01 : SunOS 5.8: /usr/bin/id and /usr/xpg4/bin/id patch  
4312278
- 109013-02 : SunOS 5.8: /usr/bin/lastcomm patch  
4305365 4312278 4313746 4313747 4314201
- 109015-01 : SunOS 5.8: /usr/bin/newtask patch  
4312278
- 109017-01 : SunOS 5.8: /usr/bin/pgrep and /usr/bin/pkill patch  
4312278
- 109019-01 : SunOS 5.8: /usr/bin/priocntl patch  
4312278
- 109021-01 : SunOS 5.8: /usr/bin/projects patch  
4312278
- 109023-01 : SunOS 5.8: /usr/bin/sparcv7/ps and /usr/bin/sparcv9/ps patch

(continued)

4312278

109025-01 : SunOS 5.8: /usr/bin/sparcv7/truss and /usr/bin/sparcv9/truss patch  
4312278

109027-01 : SunOS 5.8: /usr/bin/wracct patch  
4312278

109029-01 : SunOS 5.8: perl patch  
4312278

109031-01 : SunOS 5.8: projadd/projdel/projmod patch  
4312278

109033-01 : SunOS 5.8: /usr/bin/sparcv7/prstat and /usr/bin/sparcv9/prstat patch  
4312278

109035-01 : SunOS 5.8: useradd/userdel/usermod patch  
4312278

109037-01 : SunOS 5.8: /var/yp/Makefile and /var/yp/nicknames patch  
4312278

109041-02 : SunOS 5.8: sockfs patch  
4224166 4290575 4322741

109043-02 : SunOS 5.8: sonode adb macro patch  
4224166 4290575 4322741

109045-02 : SunOS 5.8: /usr/sbin/sparcv7/crash and /usr/sbin/sparcv9/crash patch  
4224166 4290575 4322741

109066-03 : SunOS 5.8: NCA Support for Apache Web Server patch  
4285881 4294231 4296334 4297125 4297126 4297294 4299951 4300202 4300429 4300836  
4301047 4303787 4306793 4307672 4307679 4307683 4308402 4311970 4312075 4312396 4313734  
4316564 4317634 4318360 4318365 4324351 4326195 4326198

109068-01 : Japanese CDE 1.4: Update Japanese CDE help files  
4302904

109070-01 : WBEM (japanese): fix japanese improper messages  
4302909

109072-02 : Japanese CDE 1.4: sdtsmartcardadmin help files  
4318088 4301377

109077-01 : SunOS 5.8: /usr/lib/inet/in.dhcpd patch  
4313817

109087-01 : SunOS 5.8: atok8 terminates "Shell widget modeShell has zero..."  
4297016 4301750

109091-01 : SunOS 5.8: /usr/lib/fs/ufs/ufsrestore patch

(continued)

- 4297558
- 109093-01 : SunOS 5.8: JFP message files patch  
4318917
- 109094-01 : SunOS 5.8: localisation updates for different components
- 109128-01 : Provide conversion between codepages 1256 and ISO8859-6  
4301870
- 109131-01 : SunOS 5.8: JFP manpages patch  
4320935
- 109137-01 : SunOS 5.8: /usr/sadm/install/bin/pkginstall patch  
4318844
- 109142-01 : CDE 1.4: dtterm libDtTerm patch  
4308751
- 109145-01 : SunOS 5.8: /usr/sbin/in.routed patch  
4319852
- 109147-01 : SunOS 5.8: linker patch  
4309212 4311226 4312449
- 109149-01 : SunOS 5.8: /usr/sbin/mkdevmaps patch  
4316613
- 109153-01 : SunOS 5.8: /platform/sun4u/kernel/misc/cpr patch  
4305817
- 109157-02 : SunOS 5.8: WOS Message Update  
4329574
- 109165-03 : CDE 1.4: dtfile patch  
4257760 4256612 4256615 4256616 4256617 4297751 4259270 4287012 4292249 4303367  
4297401 4302856 4305084 4305248 4303443 4291565 4308823 4306243 4291444 4286997 4310115  
4302740 4301375 4312545 4314867 4312316 4310827 4292266 4316515 4314491 4317156 4317797  
4314870 4322296 4318940 4325417
- 109167-01 : CDE 1.4: Desktop Help Updates Patch  
4307183 4319636
- 109169-05 : CDE 1.4: Window Manager Enhancements Patch  
4301525 4301229 4303415 4304468 4308078 4310419 4311506 4312315 4311916 4312250  
4311992 4312375 4305293 4316508 4299329 4321374 4327961 4321817 4328036 4328268
- 109176-01 : Japanese CDE 1.4: New Feature patch  
4322170
- 109179-03 : SunOS 5.8: localisation updates for different components

(continued)

- 109181-01 : SunOS 5.8: /kernel/fs/cachefs patch  
4166371 4292697 4299056
- 109200-01 : SunOS 5.8: localisation updates for different components  
4313061
- 109221-01 : SunOS 5.8: Patch for sysidnet  
4322703
- 109247-01 : Bad translation causes core dump in German install  
4324017
- 109249-01 : Help not localised for the dhcpmgr  
4324311
- 109255-01 : Unlocalised buttons on user-interface of dhcpmgr  
4324315
- 109264-01 : Graphics missing from Help in Smart Card  
4324308
- 109277-01 : SunOS 5.8: /usr/bin/iostat patch  
4313169
- 109279-01 : SunOS 5.8: /kernel/drv/ip and /kernel/drv/sparcv9/ip patch  
4299951
- 109318-01 : SunOS 5.8: libspmisoft patch  
4324404

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## Intel Platform Patch List

- 108529-01 : SunOS 5.8\_x86: kernel update patch  
4293528 4295776 4303474 4304696 4305365 4306004 4312278 4313746 4313747 4314201
- 108653-04 : X11 6.4.1\_x86: Xsun patch  
4281374 4292395 4286682 4300866 1221324 4308554 4306350 4312517 4287741 4297581  
4297830 4299495 4306774 4308640 4308661 4308670 4311088 4312780 4312893
- 108715-01 : CDE 1.4\_x86: libDtWidget patch

(continued)



4289349

108724-01 : SunOS 5.8\_x86: /kernel/fs/lofs patch  
4126922

108726-01 : SunOS 5.8\_x86: st driver patch  
4270641 4319238

108728-02 : SunOS 5.8\_x86: /kernel/fs/nfs patch  
4276984 4293528

108782-01 : Solaris 8\_x86: Get UDCTool to work for zh\_TW  
4307173

108809-05 : SunOS 5.8\_x86: Manual Page updates for Solaris 8  
4312130 4323321 4323394 4314114 4310895

108811-01 : SunOS 5.8\_x86: DirUmountRecurse unmounts incorrectly  
4299103

108821-01 : SunOS 5.8\_x86: /usr/lib/nss\_compat.so.1 patch  
4302441

108822-01 : SunOS 5.8\_x86: /boot/solaris/boot.bin patch  
4300016

108824-01 : SunOS 5.8\_x86: compress/uncompress/zcat patch  
4295877

108826-01 : SunOS 5.8\_x86: /usr/lib/fs/cachefs/cfsadmin patch  
4207874

108828-01 : SunOS 5.8\_x86: libthread patch  
4288299

108836-01 : CDE 1.4\_x86: dtcm patch  
4285729

108870-01 : SunOS 5.8\_x86: snmpdx/mibiisa/libssasmp/snmplib patch  
4299328 4301970 4309416

108876-03 : SunOS 5.8\_x86: c2audit patch  
4224166 4290575 4308525 4322741

108883-01 : SunOS 5.8\_x86: mmu32/mmu36 patch  
4305696 4307800

108898-01 : X11 6.4.1\_x86: Xprint patch  
4305734

108900-01 : SunOS 5.8\_x86: /usr/bin/ftp patch  
4294697

(continued)

- 108902-01 : SunOS 5.8\_x86: /kernel/sys/rpcmod and /kernel/strmod/rpcmod patch  
4107735
- 108915-01 : SunOS 5.8\_x86: localisation updates for different components
- 108920-01 : CDE 1.4\_x86: dtlogin patch  
4072784 4293300 4302209
- 108922-02 : CDE 1.4\_x86: dtwm patch  
4306589 4311842 4301522 4299651 4300013
- 108934-01 : SunOS 5.8\_x86: bugfix for European locales, dtmail, dtcalc, SmartCard  
4308864 4304021 4301544
- 108941-01 : Motif 2.1.1\_x86: Runtime library patch for Solaris 8\_x86  
4299216
- 108950-01 : CDE 1.4\_x86: litDtHelp/libDtSvc patch  
4298416
- 108955-01 : SunOS 5.8\_x86: localisation updates for different components
- 108957-01 : SunOS 5.8\_x86: htt\_server dumps core on SCH's cm.so in utf-8 locales  
4314242
- 108959-02 : SunOS 5.8\_x86: Patch for libspmisvc.so.1  
4256556 4302899 4313039
- 108961-01 : SunOS 5.8\_x86: Patch for sysidnet  
4310705
- 108963-01 : SunOS 5.8\_x86: XmlReader fails on an HTTP stream  
4314140
- 108965-02 : SunOS 5.8\_x86: /usr/sbin/snoop patch  
4297326 4297676 4313760 4315280 4317713 4321696 4321713 4321720 4321721 4321723  
4321725 4321726 4322042 4322055 4322058 4322060 4322064 4322200 4322670
- 108967-01 : SunOS 5.8\_x86: /kernel/fs/ufs patch  
4293528
- 108969-02 : SunOS 5.8\_x86: vol/vold/rmmount patch  
1206000 4108297 4145529 4205437 4211612 4254816 4255049 4285374 4286446 4292408  
4292563 4296452 4298451 4298465 4298563 4298567 4303430 4304283 4304289 4305067 4306425  
4307495 4307500 4307620 4307634 4312778 4313091
- 108971-01 : SunOS 5.8\_x86: /usr/lib/fs/pcfs/fsck and /usr/lib/fs/pcfs/mkfs patch  
4145536 4210625 4250242 4256652
- 108973-01 : SunOS 5.8\_x86: /sbin/fdisk patch  
4221693

(continued)

108976-02 : SunOS 5.8\_x86: /usr/bin/rmformat and /usr/sbin/format patch  
4242879 4292212 4308431 4311553 4322206

108978-01 : SunOS 5.8\_x86: libsmmedia patch  
4292214 4308431 4311553

108980-04 : SunOS 5.8\_x86: PCI HotPlug framework patch  
4272737 4276021 4303126 4306367 4307062 4307080 4307747 4307827 4309011 4309802  
4309818 4310864 4311126 4311134 4312937 4314121 4314936 4315098 4315100 4315101 4318351  
4318747 4320440 4320471 4330429 4330774

108986-01 : SunOS 5.8\_x86: /usr/sbin/in.rshd patch  
4158689 4305888

108988-01 : SunOS 5.8\_x86: Patch for patchadd and patchrm  
4278860 4304640 4303509 4292990 4299710

108990-02 : SunOS 5.8\_x86: acctctl & exactsys patch  
4305365 4312278 4313746 4313747 4314201

108992-02 : SunOS 5.8\_x86: libc and watchmalloc patch  
4193683 4225913 4292683 4312278 4314913

108994-01 : SunOS 5.8\_x86: nss and ldap patch  
4312278

108996-01 : SunOS 5.8\_x86: /usr/lib/libproc.so.1 patch  
4312278

108998-03 : SunOS 5.8\_x86: libexacct and libproject patch  
4305365 4312278 4313746 4313747 4314201

109000-01 : SunOS 5.8\_x86: PAM patch  
4312278

109004-01 : SunOS 5.8\_x86: /etc/init.d/acctadm and /usr/sbin/acctadm patch  
4312278

109006-01 : SunOS 5.8\_x86: /sbin/su.static and /usr/bin/su patch  
4312278

109008-01 : SunOS 5.8\_x86: at/atrm/batch/cron patch  
4312278

109010-01 : SunOS 5.8\_x86: /etc/magic and /usr/bin/file patch  
4312278

109012-01 : SunOS 5.8\_x86: /usr/bin/id and /usr/xpg4/bin/id patch  
4312278

109014-02 : SunOS 5.8\_x86: /usr/bin/lastcomm patch  
4305365 4312278 4313746 4313747 4314201

(continued)

109016-01 : SunOS 5.8\_x86: /usr/bin/newtask patch  
4312278

109018-01 : SunOS 5.8\_x86: /usr/bin/pgrep and /usr/bin/pkill patch  
4312278

109020-01 : SunOS 5.8\_x86: /usr/bin/priocntl patch  
4312278

109022-01 : SunOS 5.8\_x86: /usr/bin/projects patch  
4312278

109024-01 : SunOS 5.8\_x86: /usr/bin/i86/ps patch  
4312278

109026-01 : SunOS 5.8\_x86: /usr/bin/i86/truss patch  
4312278

109028-01 : SunOS 5.8\_x86: /usr/bin/wracct patch  
4312278

109030-01 : SunOS 5.8\_x86: perl patch  
4312278

109032-01 : SunOS 5.8\_x86: projadd/projdel/projmod patch  
4312278

109034-01 : SunOS 5.8\_x86: /usr/bin/i86/prstat patch  
4312278

109036-01 : SunOS 5.8\_x86: useradd/userdel/usermod patch  
4312278

109038-01 : SunOS 5.8\_x86: /var/yp/Makefile and /var/yp/nicknames patch  
4312278

109042-02 : SunOS 5.8\_x86: sockfs patch  
4224166 4290575 4322741

109044-02 : SunOS 5.8\_x86: sonode adb macro patch  
4224166 4290575 4322741

109046-02 : SunOS 5.8\_x86: /usr/sbin/i86/crash patch  
4224166 4290575 4322741

109067-03 : SunOS 5.8\_x86: NCA Support for Apache Web Server patch  
4285881 4294231 4296334 4297125 4297126 4297294 4299951 4300202 4300429 4300836  
4301047 4303787 4306793 4307672 4307679 4307683 4308402 4311970 4312075 4312396 4313734  
4316564 4317634 4318360 4318365 4324351 4326195 4326198

109069-01 : Japanese CDE 1.4: update CDE help files for \_x86  
4302904

(continued)

109071-01 : WBEM (japanese): fix japanese improper messages for \_x86  
4302909

109073-02 : Japanese CDE 1.4\_x86: New Feature patch  
4302027 4305195 4322170

109078-01 : SunOS 5.8\_x86: /usr/lib/inet/in.dhcpd patch  
4313817

109088-01 : SunOS 5.8\_x86: atok8 terminates "Shell widget modeShell has zero..."  
4297016 4301750

109092-01 : SunOS 5.8\_x86: /usr/lib/fs/ufs/ufsrestore patch  
4297558

109095-01 : SunOS 5.8\_x86: localisation updates for different components

109119-01 : SunOS 5.8\_x86: JFP message files patch for x86  
4318917

109129-01 : SunOS 5.8\_x86: Provide conversion between codepages 1256 and ISO8859-6  
4301870

109132-01 : SunOS 5.8\_x86: JFP manpages patch  
4320935

109138-01 : SunOS 5.8\_x86: /usr/sadm/install/bin/pkginstall patch  
4318844

109143-01 : CDE 1.4\_x86: dtterm libDtTerm patch  
4308751

109146-01 : SunOS 5.8\_x86: /usr/sbin/in.routed patch  
4319852

109148-01 : SunOS 5.8\_x86: linker patch  
4309212 4311226 4312449

109150-01 : SunOS 5.8\_x86: /usr/sbin/mkdevmaps patch  
4316613

109155-01 : SunOS 5.8\_x86: vgatext and terminal-emulator patch  
4307285

109158-02 : SunOS 5.8\_x86: WOS Message Update  
4329574

109166-03 : CDE 1.4\_x86: dtfile patch  
4257760 4256612 4256615 4256616 4256617 4297751 4259270 4287012 4292249 4303367  
4297401 4302856 4305084 4305248 4303443 4291565 4308823 4306243 4291444 4286997 4310115  
4302740 4301375 4312545 4314867 4312316 4310827 4292266 4316515 4314491 4317156 4317797

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4314870 4322296 4318940 4325417

109168-01 : CDE 1.4\_x86: Desktop Help Updates Patch  
4307183 4319636

109170-05 : CDE 1.4\_x86: Window Manager Enhancements Patch  
4301525 4301229 4303415 4304468 4308078 4310419 4311506 4312315 4311916 4312250  
4311992 4312375 4305293 4316508 4299329 4321374 4327961 4321817 4328036 4328268

109180-02 : SunOS 5.8\_x86: localisation updates for different components

109182-01 : SunOS 5.8\_x86: /kernel/fs/cachefs patch  
4166371 4292697 4299056

109201-02 : SunOS 5.8\_x86: localisation updates for different components  
4313061 4327905

109222-01 : SunOS 5.8\_x86: Patch for sysidnet  
4322703

109248-01 : SunOS 5.8\_x86: Bad translation causes core dump in German install  
4324017

109250-01 : SunOS 5.8\_x86: Help not localised for the dhcpmgr  
4324311

109278-01 : SunOS 5.8\_x86: /usr/bin/iostat patch  
4313169

109280-01 : SunOS 5.8\_x86: /kernel/drv/ip patch  
4299951

109319-01 : SunOS 5.8\_x86: libspmisoft patch  
4324404

109538-01 : SunOS 5.8\_x86: Unlocalised buttons on user-interface of dhcpmgr  
4324315