



Solaris 10 6/06 Release Notes



Oracle Corporation
500 Oracle Parkway
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Preface

This document describes the Solaris 10 6/06 operating system. For information about the Solaris 10 3/05, Solaris 10 3/05 HW1, Solaris 10 3/05 HW2, and Solaris 10 1/06, see the “Solaris 10 Release Notes”, Sun part number 817-0552-17.

The *Solaris 10 6/06 Release Notes* contain installation and runtime problem details. Also included are end-of-software support statements for the Solaris 10 Operating System.

Note – This Solaris release supports systems that use the SPARC and x86 families of processor architectures: UltraSPARC, SPARC64, AMD64, Pentium, and Xeon EM64T. The supported systems appear in the *Solaris 10 Hardware Compatibility List* at <http://www.sun.com/bigadmin/hcl>. This document cites any implementation differences between the platform types.

In this document the term “x86” refers to 64-bit and 32-bit systems manufactured using processors compatible with the AMD64 or Intel Xeon/Pentium product families. For supported systems, see the *Solaris 10 Hardware Compatibility List*.

Who Should Use This Book

These notes are for users and system administrators who install and use the Solaris 10 software.

Related Books

You might need to refer to the following documentation when you install Solaris software:

- Java Desktop System Release 3 Solaris 10 Collection
- *Solaris 10 Start Here* card
- *Solaris 10 Installation Guide: Basic*
- *Solaris 10 Installation Guide: Network-Based Installations*
- *Solaris 10 Installation Guide: Solaris Live Upgrade and Upgrade Planning*
- *Solaris 10 Installation Guide: Advanced, JumpStart, Solaris Flash Archives and RAID-1 Volumes*

- *Solaris 10 System Administrator Collection*

For information on current CERT advisories, see the official CERT web site at <http://www.cert.org>.

For some hardware configurations, you might need supplemental hardware-specific instructions for installing the Solaris software. 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, such as *Solaris Sun Hardware Platform Guide*, for hardware-specific installation instructions.

Third-Party Web Site References

Third-party URLs are referenced in this document and provide additional, related information.

Note – Sun is not responsible for the availability of third-party web sites mentioned in this document. Sun does not endorse and is not responsible or liable for any content, advertising, products, or other material on or available from such sites or resources. Sun will not be responsible or liable for any damage or loss caused or alleged to be caused by or in connection with use of or reliance on any such content, goods, or services that are available on or through any such sites or resources.

Documentation, Support, and Training

See the following web sites for additional resources:

- [Documentation \(http://www.oracle.com/technetwork/indexes/documentation/index.html\)](http://www.oracle.com/technetwork/indexes/documentation/index.html)
- [Support \(http://www.oracle.com/us/support/systems/index.html\)](http://www.oracle.com/us/support/systems/index.html)
- [Training \(http://www.oracle.com/global/us/education/sun_select_country.html\)](http://www.oracle.com/global/us/education/sun_select_country.html) – Choose the country for which you want Training information for former Sun products.

Oracle Software Resources

Oracle Technology Network (<http://www.oracle.com/technetwork/index.html>) offers a range of resources related to Oracle software:

- Discuss technical problems and solutions on the [Discussion Forums](http://forums.oracle.com) (<http://forums.oracle.com>).
- Get hands-on step-by-step tutorials with [Oracle By Example](http://www.oracle.com/technetwork/tutorials/index.html) (<http://www.oracle.com/technetwork/tutorials/index.html>).
- Download [Sample Code](http://www.oracle.com/technology/sample_code/index.html) (http://www.oracle.com/technology/sample_code/index.html).

Typographic Conventions

The following table describes the typographic conventions that are used in this book.

TABLE P-1 Typographic Conventions

Typeface	Meaning	Example
AaBbCc123	The names of commands, files, and directories, and onscreen computer output	Edit your <code>.login</code> file. Use <code>ls -a</code> to list all files. <code>machine_name%</code> you have mail.
AaBbCc123	What you type, contrasted with onscreen computer output	<code>machine_name% su</code> Password:
<i>aabbcc123</i>	Placeholder: replace with a real name or value	The command to remove a file is <i>rm filename</i> .
<i>AaBbCc123</i>	Book titles, new terms, and terms to be emphasized	Read Chapter 6 in the <i>User's Guide</i> . <i>A cache</i> is a copy that is stored locally. Do <i>not</i> save the file. Note: Some emphasized items appear bold online.

Shell Prompts in Command Examples

The following table shows the default UNIX system prompt and superuser prompt for shells that are included in the Oracle Solaris OS. Note that the default system prompt that is displayed in command examples varies, depending on the Oracle Solaris release.

TABLE P-2 Shell Prompts

Shell	Prompt
Bash shell, Korn shell, and Bourne shell	\$
Bash shell, Korn shell, and Bourne shell for superuser	#
C shell	machine_name%
C shell for superuser	machine_name#

Installation Issues

This chapter describes problems that relate to the installation of the Solaris 10 Operating System.

Note – Some of the issues and bugs in this chapter have been fixed in subsequent Solaris 10 releases. If you have upgraded your Solaris software, certain issues and bugs in this chapter might no longer apply. To see which bugs and issues no longer apply to your specific Solaris 10 software, refer to [Appendix A, “Table of Integrated Bug Fixes in the Solaris 10 Operating System.”](#)

General Information

This section provides general information such as behavior changes in Solaris 10 OS.

New Minimum Memory Requirement

Beginning with the Solaris 10 1/06 release, all x86 based systems must now have at least 256 Mbytes of RAM to run the Solaris software.

Changes in Upgrade Support for Solaris Releases

Starting with the Solaris 10 1/06 release, you can upgrade the Solaris OS only from the following releases:

- Solaris 8 OS
- Solaris 9 OS
- Solaris 10 OS

To upgrade releases previous to the Solaris 8 software to the Solaris 10 1/06 software, upgrade to any of the releases in the preceding list first. Then upgrade to the Solaris 10 1/06 release.

Support for Products Not Part of the Solaris OS

Although the Solaris 10 software has been tested for compatibility with previous releases, some third-party applications might not be fully ABI compliant. Contact the supplier of these applications directly for information about compatibility.

Your system might run both a Solaris OS and other products that are not part of the Solaris software. These products might be supplied by either Sun or another company. If you upgrade this system to the Solaris 10 release, make sure that these other products are also supported on the Solaris 10 OS. Depending on the status of each of these products, you can perform one of the following options:

- Verify that the existing version of the product is supported on the Solaris 10 software.
- Install a new version of the product that is supported on the Solaris 10 release. You might need to remove the previous version of the product prior to upgrading to the Solaris software. See the product documentation for more details.
- Remove the product prior to upgrading to the Solaris 10 software.

Before You Begin

This section contains critical installation issues that you need to be aware of before installing or upgrading to Solaris 10 OS. These issues might have an impact that would prevent installation or upgrades from completing successfully. If bugs in this section apply to your system, you might need to perform the recommended workarounds before you install or upgrade.

Installation Change for the Solaris Companion DVD

When you are installing the Solaris OS, the Companion DVD is not available to be installed with the Solaris installation program. Use the `pkgadd(1M)` command to install the Solaris Companion DVD. For detailed installation instructions, see the README file on the Companion DVD.

Solaris Live Upgrade and Solaris Zones

Using Solaris Live Upgrade in conjunction with Solaris zones is not supported. If you have installed non-global zones on a Solaris 10 system, you cannot upgrade to the Solaris 10 1/06 release by using Solaris Live Upgrade.

If you use the `luupgrade` command, the following error message is displayed:

```
Unable to upgrade boot environment.
```

Workaround: To upgrade such a system, use either the Solaris interactive installation program or the custom JumpStart program. These programs apply to your Solaris 10 OS all the patches and new packages that represent the differences between your current OS and the Solaris 10 1/06 software. The programs also apply the packages and patches to all the non-global zones.

Both programs have limitations. For example, you cannot customize your upgrade by installing additional software products or additional locale packages, or by modifying the disk layout. For details about these limitations, see the [“Upgrading the Solaris OS When Non-Global Zones Are Installed”](#) in *Solaris 10 6/06 Installation Guide: Custom JumpStart and Advanced Installations*.

Patching Miniroot on x86 Machines

The procedures for using `patchadd` with the `-C` destination specifier to patch a miniroot on an x86 machine have changed. You must now unpack the miniroot, apply patches, then repack the miniroot.

See the following for the detailed steps:

- Chapter 8, “Preparing to Install From the Network With DVD Media (Tasks),” in *Solaris 10 6/06 Installation Guide: Network-Based Installations*
- Chapter 9, “Preparing to Install From the Network With CD Media (Tasks),” in *Solaris 10 6/06 Installation Guide: Network-Based Installations*

Correct Solaris Data Encryption Supplement Required for Installation of Solaris 10 1/06 Release

When you install the Solaris 10 1/06 release, you must use the Solaris Data Encryption Supplement that corresponds to the release. The supplement is delivered in the `SUNWcry` and `SUNWcryr` packages. If you do not have the correct supplement version, upgrade the supplement by installing the appropriate patch:

- Patch ID 118562-05 or a later revision for SPARC based systems
- Patch ID 118563-04 or a later revision for x86 based systems

To determine your current supplement version, use `showrev -p`.

Additional Procedures Required When Installing Patches for Solaris 10 1/06 Release

The following patches are applied to resolve problems that were reported in CR 6277164 and CR 6214222:

- Patch ID 119366-05 for SPARC based systems
- Patch ID 119367-05 for x86 based systems

The sections that follow provide further steps that you must perform to completely resolve the reported problems.

Resolving Issues With the GNOME Display Manager (6277164)

Note – Perform this procedure before you use the GNOME Display Manager (GDM) as your login program, or if you have already enabled GDM as your login program. Otherwise, you can skip this procedure.

When applying the patch, load new values into the GDM configuration files. Then restart the GDM application.

1. To load the new values into the configuration file, choose one of the following options.
 - Copy the `/etc/X11/gdm/factory-gdm.conf` file to the `/etc/X11/gdm/gdm.conf` file.
Perform this step if you have not made any modifications to the `gdm.conf` file. Then you can start the GDM application.
 - Manually merge the differences in the `factory-gdm.conf` file into the `gdm.conf` file.
Perform this step if you have modified the `gdm.conf` file and want to retain your modifications.

When merging files, copy the values for the following commands from the `factory-gdm.conf` file to the `gdm.conf` file. These commands enable you to obtain the best OS performance.

- `RebootCommand`
- `HaltCommand`
- `SuspendCommand`
- `DefaultPath`
- `RootPath`
- `GraphicalTheme`

2. To restart GDM, perform the following steps:
 - a. Become superuser.
 - b. Issue the following command:

- ```
svcadm disable application/gdm2-login
```
- c. In the console that is now displayed, press Return to display a command prompt.
  - d. To restart GDM, issue the following command:
- ```
# svcadm enable application/gdm2-login
```

Resolving Issues With AccessKeyMouseListeners (6214222)

To further resolve problems that are reported in CR 6214222, perform these steps when applying the patch.

1. Change to the `/etc/X11/gdm/modules` directory.
2. Copy the files from `factory-AccessDwellMouseEvents` to `AccessDwellMouseEvents`.
3. Copy the files from `factory-AccessKeyMouseEvents` to `AccessKeyMouseEvents`.
4. Restart GDM by following the steps that are provided in the previous section.

Sun Fire V250 Server Installation

The `SUNWCXall` software metacluster must be installed on a Sun Fire V250 Server.

NFS Version 4 Introduces New Prompt at First System Boot

Solaris 10 OS uses NFS Version 4 (NFSv4) as the default distributed file system mechanism. In NFSv4, file user and group attributes are exchanged as strings of the form “`user@domain`” and “`group@domain`,” respectively.

The domain portion of the string should be common between client and server. This information is automatically derived from the system's name service domain name. However, in certain cases, the derived domain might not match between client and server. This mismatch might typically occur in environments where either of the following circumstances is true:

- The DNS TXT record is not used.
- Multiple administrative domain boundaries are crossed.

If domain information between client and server does not match, NFSv4-accessed files might appear to be owned by “nobody.”

To ensure proper configuration, on the first system boot the system now prompts you for a domain to use for NFSv4. Answer “no” to this prompt if one of the following configurations describes your deployment:

- Your deployment utilizes the DNS TXT record to configure the NFSv4 domain.
- Your deployment has a single (flat) administrative domain.

Custom JumpStart and Advanced Installations

Environments that use the Custom JumpStart method to perform unattended system installations require minimal tuning to suppress the first boot prompts.

A sample script, `set_nfs4_domain`, is provided in the Solaris 10 distribution media and is located in the `${CDrom_mnt_pt}/Solaris_10/Misc/jumpstart_sample` directory. A copy of this script should be modified to set the `NFS4_DOMAIN` variable to site-specific needs and be called from within JumpStart's finish script. The target system's NFSv4 domain is therefore preconfigured as part of the JumpStart finish phase, and thus suppresses any first boot prompts.

Follow these steps to perform unattended installations:

1. Create a copy of the `set_nfs4_domain` script in the same directory as your JumpStart's `finish.sh` scripts.
2. Edit the script and set the `NFS4_DOMAIN` variable to your specific needs.
3. Edit your `finish.sh` script and append a call to `set_nfs4_domain`.
4. Perform the JumpStart installations as usual.

For further details, refer to the [sysidconfig\(1M\)](#), [sysidtool\(1M\)](#), [nfsmapid\(1M\)](#), and [nfs\(4\)](#) man pages. See also the *System Administration Guide: Network Services*.

x86: Systems With `elx` or `pcelx` NICs Fail Network Configuration

Systems with an `elx` or a `pcelx` network interface card (NIC) fail to install. During the configuration of the NIC, the following error message might be displayed:

```
WARNING: elx: transmit or jabber underrun: d0<UNDER, INTR, CPLT>
```

See the [elxl\(7D\)](#) or [pcelx\(7D\)](#) man page for more information.

Workaround: Install and run on systems that do not have `elx` or `pcelx` NICs.

Default Size of `/var` File System Inadequate for Extra Value Products

The default size of the `/var` file system might be insufficient for the Extra Value products in the following situations:

- If you install any of the Extra Value products that are provided on the Solaris 10 DVD or CDs
- If the `/var` file system is located on a separate slice

You must manually specify a larger slice size for the `/var` file system.

Note – If the `/var` file system is not on a separate slice or partition, this problem does not occur.

Workaround: Choose one of the following workarounds.

- If you are using the Solaris installation program GUI, follow these steps.
 1. Begin the installation.
 2. From Select Type of Install, select Custom Install.
The Solaris installation program displays several screens that enable you to customize the software localizations, products, and disk layout that you want to install.
 3. From Lay Out File Systems, select Modify.
The disk layout screen is displayed.
 4. Type `/var` in the File System column for a specific slice, then click Apply.
The installation program suggests a default size for the `/var` file system.
 5. Edit the Size column entry for the `/var` file system to twice the disk space size.
For example, if the installation program assigns 40 Mbytes of space, change the Size value to 80.
 6. Complete the installation.
- If you are using the Solaris installation program's text installer, follow these steps.
 1. Begin the installation.
 2. From Select Type of Install, select Custom Install.
The Solaris installation program displays several screens that enable you to customize the software localizations, products, and disk layout that you want to install.
 3. From Lay Out File Systems, select Auto Layout.
The disk layout screen is displayed.
 4. Type `/var` in the File System column for a specific slice.
The installation program suggests a default size for the `/var` file system.
 5. Press `F4_Customize` to customize the size of the `/var` file system.
 6. Edit the Size column entry for the `/var` file system to twice the disk space size.
For example, if the installation program assigns 40 Mbytes of space, change the Size value to 80.
 7. Complete the installation.
- If you are using the custom JumpStart program, use the `filesys` profile keyword to set the size of the `/var` file system. The following example sets the size of the `/var` file system on slice 5 to 256 Mbytes.

```
fileys c0t0d0s5 256 /var
```

x86: Do Not Upgrade Hewlett-Packard (HP) Vectra XU Series Systems With BIOS Version GG.06.13

The Solaris 10 software includes a feature that enables you to install large partitions. The system BIOS must support logical block addressing (LBA). BIOS Version GG.06.13 does not support LBA access. The Solaris boot programs cannot manage this conflict. This issue can also affect other HP Vectra systems.

If you perform this upgrade, your HP system can no longer boot. Only a blank black screen with a flashing underscore cursor is displayed.

Workaround: Do not upgrade HP Vectra XU Series systems with the latest BIOS Version GG.06.13 to the Solaris 10 release. This version no longer supports these systems.

You can still boot your system by using the boot diskette or boot CD because the boot paths do not use the hard disk code. Then select the hard disk as your bootable device instead of the network or CD-ROM drive.

SPARC: Older Firmware Might Need Boot Flash PROM Update

On SPARC based systems, Solaris 10 OS runs in 64-bit mode only. Some Sun4U systems might need to be updated to a higher level of OpenBoot firmware in the flash PROM to run the OS in 64-bit mode. The following systems might require a flash PROM update:

- Ultra 2
- Ultra 450 and Sun Enterprise 450
- Sun Enterprise 3000, 4000, 5000, and 6000 systems

The following table lists the UltraSPARC systems and the minimum firmware versions that are required to run the 64-bit Solaris 10 OS. *System type* is the equivalent of the output of the `uname -i` command. You can determine which firmware version you are running by using the `prtconf -V` command.

TABLE 1-1 Minimum Firmware Versions Required to Run 64-Bit Solaris Software on UltraSPARC Systems

System Type From <code>uname -i</code>	Minimum Firmware Version From <code>prtconf -V</code>
SUNW,Ultra-2	3.11.2
SUNW,Ultra-4	3.7.107
SUNW,Ultra-Enterprise	3.2.16

Note – If a system is not listed in the previous table, the system does not need a flash PROM update.

See any edition of the Solaris 8 Sun Hardware Platform Guide at <http://www.oracle.com/technetwork/indexes/documentation/index.html> for instructions to perform a flash PROM update.

Additional Patches Are Needed to Run Solaris Live Upgrade

For Solaris Live Upgrade to operate correctly, a limited set of patch revisions must be installed for a given OS version. Make sure you have the most recently updated patch list by consulting <http://sunsolve.sun.com>. For additional information, search for the info Doc 72099 on the SunSolve web site.

Limitation When Installing Solaris Live Upgrade Packages

If you are running the Solaris 7 or Solaris 8 release, you might not be able to run the Solaris Live Upgrade installer. These releases do not contain the set of patches that is needed to run the Java 2 runtime environment.

The typical failure that results is a Java exception error. The following messages might be displayed:

```
InvocationTargetException in ArchiveReader constructornull
    java.lang.reflect.InvocationTargetException
        at install.instantiateArchiveReader(Compiled Code)
        at install.<init>(Compiled Code)
        at install.main(Compiled Code)
```

To run the Solaris Live Upgrade installer and install the packages, you must have the Java 2 runtime environment recommended patch cluster.

Workaround: Complete the following workaround:

- Install the Solaris Live Upgrade packages by using the `pkgadd` command.
For step-by-step instructions, refer to [Chapter 8, “Using Solaris Live Upgrade to Create a Boot Environment \(Tasks\)”](#) in *Solaris 10 6/06 Installation Guide: Solaris Live Upgrade and Upgrade Planning*.
- Install the Java 2 runtime environment recommended patch cluster. The patch cluster is available on <http://sunsolve.sun.com>. Then, you can use the Solaris Live Upgrade installer to install the packages.

Solaris Management Console 2.1 Software Is Not Compatible With Solaris Management Console 1.0, 1.0.1, or 1.0.2 Software

Solaris Management Console 2.1 software is not compatible with Solaris Management Console 1.0, 1.0.1, or 1.0.2 software. If you are upgrading to the Solaris 10 release, and you have Solaris Management Console 1.0, 1.0.1, or 1.0.2 software installed, you must first uninstall the Solaris Management Console software before you upgrade. Solaris Management Console software might exist on your system if you installed the SEAS 2.0 overbox, the SEAS 3.0 overbox, or the Solaris 8 Admin Pack.

Workaround: Choose one of the following workarounds:

- Before you upgrade, use the `/usr/bin/prodreg` command to perform a full uninstall of Solaris Management Console software.
- If you did not uninstall Solaris Management Console 1.0, 1.0.1, or 1.0.2 software before you upgraded to the Solaris 10 release, you must first remove all Solaris Management Console 1.0, 1.0.1, or 1.0.2 packages. Use the `pkgrm` command for package removal instead of the `prodreg` command. Carefully follow the order of package removal. Complete the following steps:

1. Become superuser.
2. Type the following command:

```
# pkginfo | grep "Solaris Management Console"
```

If the description does not start with "Solaris Management Console 2.1," the package names in the output identify a Solaris Management Console 1.0 package.

3. Use the `pkgrm` command to remove all instances of Solaris Management Console 1.0 packages in the following order:

Note – Do not remove any package that has "Solaris Management Console 2.1" in its description. For example, `SUNWmc . 2` might indicate Solaris Management Console 2.1 software.

If the `pkginfo` output displays multiple versions of Solaris Management Console 1.0 packages, use the `pkgrm` command to remove both packages. Remove the original package. Then, remove the package that has been appended with a number. For example, if the `SUNWmcman` and `SUNWmcman . 2` packages appear in the `pkginfo` output, first remove the `SUNWmcman` package and then remove the `SUNWmcman . 2` package. Do not use the `prodreg` command.

```
# pkgrm SUNWmcman
# pkgrm SUNWmcapp
# pkgrm SUNWmcsvr# pkgrm SUNWmcsvu
```

```
# pkgrm SUNWmc
# pkgrm SUNWmcc
# pkgrm SUNWmcsws
```

4. In a terminal window, type the following command:

```
# rm -rf /var/sadm/pkg/SUNWmcapp
```

The Solaris Management Console 2.1 software should now function properly. For future maintenance, or if the Solaris Management Console 2.1 software does not function properly, remove the Solaris Management Console 2.1 software. Reinstall the software by completing the following steps:

1. Use the `pkgrm` command to remove all Solaris Management Console 2.1 packages and dependent packages in the following order:

Note – If your installation has multiple instances of Solaris Management Console 2.1 packages, such as `SUNWmc` and `SUNWmc.2`, first remove `SUNWmc`, and then `SUNWmc.2`. Do not use the `prodreg` command.

```
# pkgrm SUNWpmgr
# pkgrm SUNWrmui
# pkgrm SUNWlvmg
# pkgrm SUNWlvma
# pkgrm SUNWlvmr
# pkgrm SUNWdcInt
# pkgrm SUNWmga
# pkgrm SUNWmgapp
# pkgrm SUNWmcdev
# pkgrm SUNWmcex
# pkgrm SUNWwbmc
# pkgrm SUNWmc
# pkgrm SUNWmcc
# pkgrm SUNWmccom
```

2. Insert the Solaris 10 Software - 4 CD into your CD-ROM drive. Type the following in a terminal window:

```
#
# cd /cdrom/cdrom0/Solaris_10/Product
# pkgadd -d . SUNWmccom SUNWmcc SUNWmc SUNWwbmc SUNWmcex SUNWmcdev \
  SUNWmgapp SUNWmga SUNWdcInt SUNWlvmr SUNWlvma SUNWlvmg SUNWpmgr \
  SUNWrmui
```

All previous Solaris Management Console versions are removed. The Solaris Management Console 2.1 software is now functional.

SPARC: Upgrade Hangs on Sun Blade 1500 Workstations (6363365)

Upgrading to the Solaris 10 1/06 software might hang if you are installing or upgrading from a DVD media. The problem affects certain Sun Blade 1500 workstations that are equipped with the JLMS DVD drive. The error occurs when you use any of the following installation methods:

- Solaris interactive installation program
- Solaris Live Upgrade

When the system hangs, no error messages are displayed.

Workaround: To upgrade such a system, use a network installation image.

x86: Failure of BIOS Device Utility Prevents Installation or Upgrade From Being Completed (6362108)

On certain occasions, the utility for BIOS devices (`/sbin/biosdev`) might fail and prevent a successful installation or upgrade. The failure can occur under either of the following circumstances:

- Patch ID 117435-02 was applied, but the system was not rebooted.
- The system contains two or more identical disks that have identical `fdisk` partitions.

The following error message is displayed:

```
biosdev: Could not match any!!
```

Workaround: Make sure that you reboot the system after applying Patch ID 117435-02. Ensure that identical disks to be used in the installation or upgrade are configured with different `fdisk`-partition layouts.

The following example is based on a system that has two disks with identical `fdisk`-partition layouts. To change the layouts, perform the following steps.

1. Become superuser.
2. Start the disk maintenance utility.

```
# format
```

A list of available disks in the system is displayed.

3. To select the disk whose `fdisk` partition you want to change, type the disk's number.
4. From the list of Format options, select `fdisk`.

The disk's partition information and a list of fdisk options are displayed.

5. To change the disk's layout, choose one of the following:
 - To specify a different active partition, press 2.
 - To add another disk partition, press 1.
 - To delete an unused partition, press 3.
6. To save your changes and exit the fdisk menu, press 5.
7. To exit the disk maintenance utility, select Quit from the Format options.
8. Reboot the system.
9. After the system reboots, verify that the error message no longer appears. As superuser, type the following command:

```
# /sbin/biosdev
```

If the error message is still generated, repeat the procedure but select a different option in Step 5.

10. If the system contains other identical disks with identical fdisk-partition layouts, repeat Steps 1-9 on these disks. Otherwise, you can proceed with your Solaris installation or upgrade.

Upgrade Option Unavailable if the Root (/) File System Is a RAID-1 Volume (Mirror) (6263122)

A problem occurs when you upgrade to the Solaris 10 1/06 software a system whose root (/) file system is a RAID-1 volume. This problem occurs when you perform the upgrade as follows:

- You use CD media or an network installation image.
- You use the Solaris interactive installation program or custom JumpStart.

One of the following problems occurs:

- If you are using the Solaris interactive program, you are not given the option of upgrading in the panel Select upgrade or initial install.
- If you use custom JumpStart to upgrade, the following error message is displayed:

```
ERROR: No upgradeable root file systems were found.
```

Workaround: Perform Workaround 1 first. Proceed to Workaround 2 only if the first workaround did not resolve the issue.

- **Workaround 1:** Remove the RAID configurations before performing the upgrade. Rebuild your RAID configuration after the upgrade is completed. To remove the RAID configurations, follow these steps.
 1. Find the physical devices that are being used for the root partition's RAID-0 volumes or submirrors, as in the following example:

```
# df -k /
```

```
Filesystem      kbytes    used   avail capacity  Mounted on
/dev/md/dsk/d0  4459950 3089180 1326171    70%      /
```

```
# metastat -p d0
```

```
d0 -m d10 d11 1
d10 1 1 c1t0d0s0
d11 1 1 c1t1d0s0
```

2. Remove the mirror that is not being upgraded. In the example, if the disk to be upgraded is c1t0d0s0, you need to remove d11. Type the following:

```
# metadetach d0 d11
```

3. Revert to using the appropriate physical device to be upgraded. For the previous example, you issue the following command.

```
# metaroot c1t0d0s0
```

4. If necessary, verify that the /etc/vfstab has been updated with the required device.

```
# grep c1t0d0s0 /etc/vfstab
```

```
/dev/dsk/c1t0d0s0 /dev/rdisk/c1t0d0s0 / ufs 1 no -
```

5. Shut down the system.
6. Boot the system from the DVD or CD media.

In the panel Select upgrade or initial install, you can now choose to upgrade. You can also select the device to upgrade from the list of devices in the panel. Typically, the list contains the devices that comprise the original root subvolume.

However, if the option to upgrade remains unavailable, then skip to the alternative workaround.

7. To proceed with the upgrade, select the device.

To rebuild your RAID configurations after the upgrade has been completed, follow these steps.

1. Redefine the boot device.

```
# metaroot d0
```

2. Reboot the system.
3. Add the subvolume.

```
# metattach d0 d11
```

- **Workaround 2:** Use this workaround only if Workaround 1 was not successful. Do not perform this workaround without attempting the previous workaround first.

1. Reboot the system.

The system boots back to the existing Solaris release.

2. Delete the active metadvice that comprise the root partition by using the `metaclear` command.


```
# metaclear d0 d10 d11
```

3. Shut down the system.
4. Boot the system from the DVD or CD media.
5. Proceed with the installation by following the installation or upgrade options that appear on the screen.
6. After the upgrade is completed, reconfigure your metadevices by following the normal procedures.

The following example shows the steps to configure the root (/) metadevice, set up the system files for the metadevice, and reattach the subvolume.

```
# metainit d0 -m d10
# metaroot d0
# reboot

# metainit d11 1 1 c1t1d0s0
# metattach d0 d11
```

Note – You reattach the old subvolume after the system boot is completed.

Cannot Create a Solaris Flash Archive When Solaris Zones Are Installed (6246943)

Starting with the current Solaris release, a Solaris Flash archive cannot be properly created when a non-global zone is installed. The Solaris Flash feature is not currently compatible with the Solaris containers (zones) feature.

Do not use the `flar create` command to create a Solaris Flash archive in these instances:

- In any non-global zone
- In the global zone if there are any non-global zones installed

If you create a Solaris Flash archive in such an instance, the resulting archive might not install properly when the archive is deployed.

Workaround: None.

Installation Fails When You Install Solaris Flash Archive on Empty Boot Environment With Solaris Live Upgrade (6222925)

If you use Solaris Live Upgrade to install a Solaris Flash archive on an empty alternate boot environment, the installation fails. Messages that are similar to the following errors are displayed.

```
sh: /path_to_install_image/Solaris_10/Tools/Boot/usr/sbin/install.d
/mergescripts/merge_name_service: not found
```

```
ERROR: Transfer list entry (/a/var/svc/profile/name_service.xml):
mergescript failed (/path_to_install_image/Solaris_10/Tools/
Boot/usr/sbin/install.d/mergescripts/merge_name_service)
```

```
ERROR: Unable to copy a temporary file to it's final location
```

```
ERROR: Flash installation failed
```

```
Extracting Flash Archive: 100% completed (of 4361.24 megabytes)
The Solaris flash install of the BE S10B74L2 failed.
```

In the previous example, *path_to_install_image* is the directory path to the network installation image you are using for the installation.

Workaround: Follow these steps.

1. Change directories to the mergescripts directory in the network installation image that you are using for the installation.

```
# cd path_to_install_image/Solaris_10/Tools
/Boot/usr/sbin/install.d/mergescripts
```

2. Create the merge_name_service file.

```
# touch merge_name_service
```

3. Make the merge_name_service file executable.

```
# chmod a+x merge_name_service
```

4. On the system you want to install, install the Solaris Flash archive on the alternate boot environment with Solaris Live Upgrade.

For instructions about how to install a Solaris Flash archive with Solaris Live Upgrade, see [“Installing Solaris Flash Archives on a Boot Environment” in Solaris 10 6/06 Installation Guide: Solaris Live Upgrade and Upgrade Planning](#).

5. Mount the file systems in the alternate boot environment you installed in step 4.

```
# lumount alt_boot_env
mount-point
```

In the previous command, *alt_boot_env* is the boot environment you installed in step 4. *mount-point* is the mount point for the alternate boot environment.

6. Change directory to the `/var/svc/profile` directory in the alternate boot environment.

```
# cd mount-point/var/svc/profile
```

7. Remove the `name_service.xml` profile.

```
# rm name_service.xml
```

8. Create a symbolic link for the name service profile to the `name_service.xml` file.

```
# ln -s ns_name-service.xml name_service.xml
```

In the previous example, *name-service* is the name service you want to use for the system. Use one of the following strings for this value.

- nis
- nisplus
- dns
- ldap
- files

x86: Sun Java Workstations 2100Z Might Panic When Booting From Solaris 10 Operating System DVD (6214356)

The DVD combo-drive firmware in a Sun Java Workstation 2100Z might cause a system panic. The panic occurs when you boot the workstation from the Solaris 10 Operating System DVD. After the kernel banner is displayed, the following message is very quickly flashed:

```
panic[cpu0]/thread=fec1be20: mod_hold_stub:
Couldn't load stub module sched/TS_DTB
fec25cb0 genunix:mod_hold_stub+139 (fec04088, 63, fea11)
fec25cc4 unix:stubs_common_code+9 (1, 8, fec026e4)
fec25ce4 unix:disp_add+3d (fec026dc)
fec25d00 genunix:mod_installsched+a4 (fef01530, fef01518)
fec25d20 genunix:mod_install+2f (fef01518, fec25d3c,)
fec25d2c TS:_init+d (0, d6d89c88, fec25d)
fec25d3c genunix:modinstall+d9 (d6d89c88)
fec25d50 genunix:mod_hold_installed_mod+2e (d6d77640, 1, fec25d)
fec25d7c genunix:modload+ac (fec026c4, fec26c4)
fec25d98 genunix:scheduler_load+3d (fec026c4, fec026dc)
fec25db4 genunix:getcid+50 (fec026c4, fec28514)
fec25dcc unix:dispinit+df (fec25ddc, fe814ba9)
fec25dd4 unix:startup_modules+d5 (fec25dec, fe8cac37)
fec25ddc unix:startup+19 (fe800000, 166130, 7)
fec25dec genunix:main+16 ()
```

Then the system automatically resets.

Workaround: Choose one of the following options:

Workaround 1: Modify some BIOS configuration settings. This temporary workaround enables a Solaris 10 installation to be completed. However, this method might cause poor read-DVD performance. Follow these steps:

1. During system boot, press F2 at the prompt to enter the setup.

The screen displays attachment-type options similar to the following example:

```
Primary Master [ ]
Primary Slave [ ]
Secondary Master [CD-ROM]
Secondary Slave [ ]
```

2. Choose the DVD drive's attachment type by selecting the attachment type for CD-ROM.

Note – The screen might display more than one attachment type for CD-ROM, for example, if your system has multiple optical drives. In such cases, you might need to open the system case to determine the DVD drive's point of attachment. Make sure that you select the correct attachment type that applies to the DVD drive.

3. After selecting the correct CD-ROM attachment type, press Enter.

The next screen appears with Type : [Auto] automatically selected.

4. Press the spacebar twice to change the selection to Type : [CD-ROM].
5. Use the arrow keys to select Transfer Mode.
6. Press Enter to display a list of other Transfer Mode options.
7. Use the arrow keys to select Standard, then press Enter to accept your selection.
8. Press F10 to save the configuration changes and exit BIOS setup.

The system restarts.

Workaround 2: Update the DVD combo drive's firmware to v1.12. This option requires your DVD combo drive to be attached to a system that is running Microsoft Windows. Follow these steps.

1. Remove your DVD combo drive from the Sun Java Workstation 2100z. See the workstation's user's guide for steps to remove the drive properly.
2. Connect the drive to a system that is running Microsoft Windows. Make sure to change the drive's master and slave jumper settings, if needed.
3. Go to AOpen's download center at <http://download.aopen.com.tw/default.aspx>.
4. Search for your DVD drive's firmware by using the following information:
 - Product: Combo drives
 - Model: COM5232/AAH
 - Categories: Firmware
5. Download and install the firmware version R1.12.

6. Reinstall the drive on the workstation. If needed, restore the original master and slave jumper settings.

Note – Newer versions of the firmware might already be available at the site. Sun's tests confirm that the v1.12 release resolves the panic issue. Sun cannot confirm whether newer firmware revisions after v1.12 similarly resolve the problem.

x86: Serial Consoles of Some Sun Fire Systems Do Not Work (6208412)

The serial console (ttya) on the following Sun Fire systems does not work by default:

- Sun Fire V20z
- Sun Fire V40z
- Sun Fire V60x
- Sun Fire V65x

To use the serial console, you must manually configure the system's BIOS.

Workaround: This workaround requires your system to have a Sun keyboard and a display monitor. Follow these steps:

1. Boot the machine.
2. During system boot, press F2 at the prompt to access the Phoenix BIOS.
3. Under Peripherals, change the comm port from disabled to enabled.
4. Save the configuration and boot the system.
5. Use the eeprom command to change input-device and output-device to ttya.

Note – Pressing the Stop and N keys at system boot to reset the low-level firmware to default settings does not work on these systems.

Solaris Installation GUI Program Might Fail on Systems With Existing x86 fdisk Boot Partitions (6186606)

The Solaris installation GUI program might fail on a system with an existing x86 boot partition. The failure occurs if the existing x86 boot partition was created with the Solaris text-based installer. The following error message is displayed.

```
Default layout will not work on this system.  
Error:  
Error: ERROR: Could not create explicit fdisk partition on c0t0d0,
```

```
requested cylinders 14581 - 14597 in use by fdisk partition 1
Error:
Error: ERROR: System installation failed
Pfinstall failed. Exit stat= java.lang.UNIXProcess@a89ce3 2
artition on c0t0d0, requested cylinders 14581 - 14597 in use by fdisk
partition 1 ERROR: System installation failed
```

Workaround: Choose one of the following workarounds.

Workaround 1: When the installation program prompts you to select an installation type, select 3 Solaris Interactive Text (Desktop Session).

Workaround 2: If you use the Solaris installation GUI program, follow these steps.

1. Begin the installation.
2. At the prompt to select an installation type, select Custom Install.
The custom installation panels prompt you for information about the locales, software, and disks that you want to install.
3. Answer the questions on the screens as appropriate for your system.
4. On the Fdisk Selection screen, check the disk that contains the x86boot partition.
5. Remove the x86boot partition by changing it to UNUSED in the pull-down menu.
6. Add the x86boot partition back by changing UNUSED back to x86boot.
7. Continue the installation.

x86: X Server Unable to Open Mouse Device in Sun LX50 Servers (5027771)

On a Sun LX50 system, the X server might be unable to open a PS/2 mouse device. The error might occur either during installation or when the system reboots. When the problem occurs, the following error message is displayed:

```
ddxSUNWmouse: Error opening mouse device '/dev/kdmouse';
/dev/kdmouse: No such device or address
```

Consequently, the Solaris installation program can proceed only in command-line interface mode. After installation, the problem might persist during Solaris runtime.

Workaround: On the Y-cable that connects to the server's PS/2 connector, switch the connections between the PS/2 keyboard and mouse.

If the PS/2 mouse remains unrecognized after a system reboot, press the LX50 server's Reset button. Alternatively, use the reconfigure option (b - r) when the following boot prompt appears:

```
Select (b)oot or (i)nterpreter:
```

Installation Bugs

The following bugs might occur during or after the installation of Solaris 10 OS.

x86: Install Hangs on Systems With 512 Mbyte of Memory (6423854)

Installations can run out of memory and hang on 512-Mbyte systems under the following conditions:

- You install using a network installation image of the OS.
- The Solaris installation program is in a windowing environment:
 - The graphical user interface (GUI).
 - The `-text` option or “3. Solaris Interactive Text (Desktop session)” in the menu below.

When the system exhausts available memory, the GUI installation process slows and eventually fails. The text does not display in a windowing environment.

Workaround:

To avoid this problem, select a non-windowing environment during the initial installation startup. During startup from the installation media the following menu is displayed:

```
-----
1.      Solaris Interactive (default)
2.      Custom JumpStart
3.      Solaris Interactive Text (Desktop session)
4.      Solaris Interactive Text (Console session)
5.      Apply driver updates
6.      Single user shell
Enter the number of your choice.
-----
```

At this point, choose “4. Solaris Interactive Text (Console session)”. This non-windowing environment will initiate a text-only installation, without using memory-intense processes.

Creating a Solaris Flash Archive Fails When the End User Solaris Software Group is Installed (6397893)

The following example of the `flarcreate` command shows the error:

```
# flarcreate -n test.flar -c /net/ins3525-svr/export/rw/test.flar
Full Flash
Checking integrity...
```

```
Integrity OK.
Running precreation scripts...
./caplib: ERROR: /usr/ccs/bin/elfdump not found or not executable, exiting...

fdo: ERROR: Customization script failure.
ERROR: Precreation script failure.

Running pre-exit scripts...
Pre-exit scripts done.
```

Workaround:

From the DVD or CD installation media, add the SUNWbtool package using the `pkgadd` command. After this package is added, you can run the `flarcreate` command successfully.

1. Change directories.

```
# cd /cdrom/cdrom0/Solaris_10/Product
```

2. Add the SUNWbtool package.

```
# pkgadd -d 'pwd' SUNWbtool
```

x86: SVM Upgrade Fails From Solaris 9 9/05 OS to Solaris 10 6/06 or to Solaris Express (6397251)

If you upgrade a Solaris Volume Manager (SVM) on x86 platforms, the upgrade fails. The failure occurs if the SVM volume is configured on the root (/) file system and you upgrade from the Solaris 9 9/05 OS to the Solaris 10 6/06 OS or to a Solaris Express release.

The following error message is displayed:

```
Processing profile
```

```
ERROR: The specified root and/or boot was not found or was not upgradeable
Solaris installation program exited.
```

Solaris Not Sending a PRLI to Tape Device (6379955)

Solaris OS is not sending Process Login (PRLI) data to the tape device during a path recovery sequence.

No error message is displayed to the user, but the problem can be identified from:

- Regular system log messages indicates a path issue, such as offline or online.
- `Cfgadm -al` command. This command shows the failed condition for the tape device.
- I/O to a tape device has ceased.

Workaround:

To recover from this situation, use the `luxadm forcelp` command to the FC host bus adapter. For example:

```
luxadm -e forcelp /dev/cfg/c99
```

c99 is the specific controller that is being used to communicate with the tape transport.

Java Problem Prevents Accessibility Environment for Speech From Setting Up Correctly (6377106)

If you are installing the Solaris 10 6/06 release from a combined network installation image or DVD media, the installation partially fails. This failure causes some accessibility features, such as speech feedback, not to work. The problem is related to Java packages and accessibility packages that cause an older Java software to become the default version.

Workaround:

After the installation completes, you must manually create some links and copy some files to various locations. After this is done, the Java 1.5.0 version will be the correct default version executed, and the various files for Java will be in place. The speech feedback for accessibility users will work properly.

Follow this procedure:

1. Log in as superuser.
2. Change to the `/usr` directory.

```
# cd /usr
```
3. Remove the current java directory.

```
# rm java
```
4. Link to the current java directory.

```
# ln -s jdk/jdk1.5.0_06 java
```
5. Change to the `/lib` directory.

```
# cd jdk/jdk1.5.0_06/jre/lib/
```
6. Link to the accessibility file.

```
# ln -s /usr/share/jar/accessibility.properties
```
7. Copy the Java file.

```
# cp /usr/share/jar/gnome-java-bridge.jar ext/
```

x86: After Installing the OS with a Solaris Flash Archive, Problem With Displaying Console (6372197)

After installing a Solaris Flash archive, the console value in the `/boot/solaris/bootenv.rc` file is not updated. After the reboot, the system is up and running, but the console does not display properly.

Workaround:

1. Telnet to the system remotely.
2. Modify the `/boot/solaris/bootenv.rc` file with the correct console value.

The value is one of the following:

- `ttya`
 - `ttyb`
 - `screen`
3. Reboot the system.

x86: Custom JumpStart Profile Test Fails With Locale Keyword (6340509)

When you test your JumpStart profile using the `pfinstall -D` command, the dry run test fails under the following conditions:

- The profile contains the `locale` keyword.
- You are testing a release that contains GRUB software. Starting with the Solaris 10 1/06 release, the GRUB boot loader facilitates booting different operating systems installed on your system with the GRUB menu.

With the introduction of GRUB software, the miniroot is compressed. The GRUB software can no longer find the list of locales from the compressed miniroot. Aminiroot is the smallest possible Solaris root (`/`) file system and is found on the Solaris installation media.

The following error message is displayed:

```
Could not select locale
```

Workaround:

The script values are as follows:

- `MEDIA_DIR=/cdrom/cdrom0/s0`
- `MINIROOT_DIR=$MEDIA_DIR/Solaris_10/Tools/Boot`
- `MINIROOT_ARCHIVE=$MEDIA_DIR/boot/x86.miniroot`

- `TEMP_FILE_NAME=/tmp/test`

Perform the following steps:

1. Uncompress the miniroot archive.

```
# /usr/bin/gzcat $MINIROOT_ARCHIVE > $TEMP_FILE_NAME
```

2. Create the miniroot device using the `lofiadm` command.

```
# LOFI_DEVICE=/usr/sbin/lofiadm -a $TEMP_FILE_NAME
# echo $LOFI_DEVICE/dev/lofi/1
```

3. Mount the miniroot with `lofi` under the miniroot directory.

```
# /usr/sbin/mount -F ufs $LOFI_DEVICE $MINIROOT_DIR
```

4. Test the profile.

```
# /usr/sbin/install.d/pfinstall -D -c $MEDIA_DIR $path-to-jumpstart_profile
```

5. After the `pfinstall` testing is completed, unmount the `lofi` device.

```
# umount $LOFI_DEVICE
```

6. Delete the `lofi` device.

```
# lofiadm -d $TEMP_FILE_NAME
```

Postinstallation Problems With Whole Root Zone, Diskless Client, and Solaris Live Upgrade (6358227)

Postinstallation processes might encounter problems while the `SUNWgnome-ally_libs-share` package is being added. The problems affect the following situations:

- Using non-global zones and setting up a whole root zone
- Using Solaris Live Upgrade to upgrade from the Solaris 8 or Solaris 9 release
- Setting up a diskless client from the Solaris 10 1/06 release

1. If you are using non-global zones and have set up a whole root zone, the following error message is displayed:

```
# zoneadm -z wholerootzone install
```

```
Installation of these packages generated warnings:
```

```
<SUNWgnome-ally_libs-share>
```

```
The file
```

```
</export/home/wholerootzone/root/var/sadm/system/logs/install_log>
```

```
contains a log of the zone installation
```

```
.
```

```
#
```

The `install_log` reports the following error:

```
*** package <SUNWgnome-ally_libs-share> installed with warnings:
```

```
cp: cannot access ../../../../share/jar/gnome-java-bridge.jar
```

```
pkgadd: ERROR: postinstall script did not complete successfully
```

```
Installation of <SUNWgnome-ally-libs-share> on zone <wholerootzone>  
partially failed.
```

2. If you upgrade by using Solaris Live Upgrade from the Solaris 8 or Solaris 9 release, the `upgrade_log` reports the following error:

```
Doing pkgadd of SUNWgnome-ally-libs-share to /.  
15360 blocks  
/a/var/sadm/pkg/SUNWgnome-ally-libs-share/install/postinstall:  
/sbin/zonename: not found  
Installation of <SUNWgnome-ally-libs-share> was successful.
```

3. If you set up the diskless client service for the Solaris 10 1/06 release, the log file in `/var/sadm/system/logs` for your specific system reports the following error:

```
Doing pkgadd of SUNWgnome-ally-libs-share to /export/Solaris_10.  
15360 blocks  
/export/Solaris_10/var/sadm/pkg  
/SUNWgnome-ally-libs-share/install/postinstall:  
/export/Solaris_10/usr/java/jre/lib: does not exist  
pkgadd: ERROR: postinstall script did not complete successfully  
Installation of <SUNWgnome-ally-libs-share> failed.  
pkgadd return code = 1
```

Workaround: In all three situations, ignore the error messages.

x86: Problem With Choosing a Terminal Type When Installing Solaris 10 1/06 Software (6350819)

When you use the Solaris interactive installation program, the Choose Terminal Type screen causes errors in the installation. The program immediately accepts the first character that you type and then proceeds with the installation. Consequently, you cannot choose an option that requires you to type more than one character. If you accidentally typed one character, which the installation program immediately accepts, the rest of the installation proceeds in error. No error message is displayed.

Workaround: Start the installation normally. At the screen that prompts you for the installation type, select the type before the timer expires in 30 seconds. Subsequent selection of the terminal type should work properly.

x86: Invalid /sbin/dhcpinfo Error During Installation (6332044)

If you install the Solaris 10 1/06 release on an x86 based system, the following error message is displayed.

```
/sbin/dhcpinfo: primary interface requested but no primary interface is set
```

The error does not affect the installation, and the installation succeeds.

Workaround: Ignore the error message.

SPARC: Loadkeys Warnings Appear When System Is Booted From Solaris OS DVD (6329642)

When you boot the system from the Solaris OS DVD to install the Solaris software, the following warning is displayed:

```
/sbin/install-discovery: /usr/bin/loadkeys: not found
```

Consequently, keyboard mappings for autodetected keyboards are not automatically loaded during the boot process.

Workaround: None. Ignore the warning message. You can continue to install the Solaris software on the system even without the keyboard mappings. After you have completed the installation, these mappings are automatically set when you reboot the system.

Solaris Install Launcher Exiting Causes Reboots (6300863)

In some situations, installation of Solaris 10 3/05 HW1 fails when the Solaris Install Launcher fails to find `find_device.out`, reboots, then reaches the same point and prompts for a reboot again.

Workaround: Specify the `-text` option when booting:

```
boot net -text
```

x86: Installation From CD Media Appears to Hang After Reboot Selection (6270371)

A problem might occur when you are using the Solaris installation program and are using CD media. After the installation of the Solaris software from the Solaris 10 1/06 Software CD - 4, the following prompt is displayed:

```
Press Reboot now to continue.
```

If you press Reboot, the system might not respond. The installation is successful. However, the error prevents the installation program from exiting normally. Consequently, the typical postinstallation cleanup and system reboot cannot occur.

An error message similar to the following example is logged in `/tmp/disk0_install.log` file:

```
Exception in thread "Thread-70" java.lang.IndexOutOfBoundsException:
Index: 6, Size: 5
    at java.util.ArrayList.add(ArrayList.java:369)
    at
com.sun.wizards.core.WizardTreeManager.
actualExitButtonPressed(WizardTreeManager.java:1499)
    at
com.sun.wizards.core.WizardTreeManager.
exitButtonPressed(WizardTreeManager.java:1486)
    at
com.sun.wizards.core.AutonextController.
run(AutonextController.java:736)
    at
java.lang.Thread.run(Thread.java:595)
```

Workaround: Choose one of the following workarounds.

■ **Workaround 1:** Follow these steps.

1. Shut down the system, then turn on the power again.
2. After the system starts up, insert the appropriate CD at the prompt. Although the CD is inserted, no additional software is installed on the system. In a moment, the system reboots normally.

■ **Workaround 2:** Follow these steps.

1. Open a terminal window.
2. Log in as superuser.
3. Create or modify access to the `.instsuccess` file.

```
# touch /tmp/.instsuccess
```

4. Stop the Java process.

```
# pkill -9 java
```

The system reboots without prompting for the CD media.

x86: kdmconfig Program Runs Twice After Initial Installation (6209092)

During the first system reboot after an initial Solaris 10 OS installation, the `kdmconfig` program might run twice. During this initial startup, each time the program starts, you are prompted to select an X server. This situation occurs on x86 based systems that have not been configured to use the X server. An example of such a system is a “headless” system that is not using a graphics display.

Workaround: Each time the program starts and prompts for an X server, press F3_Exit. A short delay might occur before the startup process resumes. After this initial startup is completed, the problem no longer occurs if the system is subsequently rebooted.

x86: System Fails to Boot After Custom JumpStart Installation (6205478)

If you use the Custom JumpStart installation method to install on an x86 based system, and explicitly configure slice 2 as the overlap slice in the profile, an error occurs. The system does not reboot successfully after the installation is completed. The following error message is displayed:

```
Cannot find Solaris partition
```

This failure occurs because the overlap slice 2 (c0t0d0s2, for example) is set to begin at cylinder 1 rather than cylinder 0.

Workaround: In the Custom JumpStart profile, remove the `filesys` keyword entry that configures slice 2 as the overlap slice. For example, you would remove a keyword entry that is similar to the following entry.

```
filesys c0t0d0s2 all overlap
```

After you remove the entry, perform the Custom JumpStart installation.

x86: GUI Interactive Installation From DVD Fails if boot-device Variable Is Not Set (5065465)

If you install Solaris from the Solaris 10 Operating System DVD, the interactive GUI installation might fail. This failure occurs if the `boot-device` configuration variable is not set on the system.

To determine if the `boot-device` configuration variable is set, type the following command.

```
# prtconf -pv | grep boot-device
```

If the output of this command is `boot-device:` with no associated device, you cannot use the interactive GUI installation program to install from the Solaris 10 Operating System DVD.

Workaround: Use the interactive text installer to install Solaris 10 software. When the installation program asks you to select a type of installation, select option 3, Solaris Interactive Text (Desktop Session).

For more information about installing from the Solaris 10 Operating System DVD, see [Solaris 10 6/06 Installation Guide: Basic Installations](#).

SPARC: Solaris 10 OS Installation Program Might Not Display Special Case Panels Properly (5002175)

If you install the Solaris 10 software by using the Solaris installation program, some of the information and exit panels for the Sun Remote Services (SRS) Net Connect software might not display properly.

The installation panel frame and Cancel button are displayed, but the installation panel content is missing.

Note – This problem might also occur during a Solaris installation of other software products that are included in this Solaris OS release.

Workaround: Follow these steps:

1. Bypass the SRS Net Connect installation by clicking the Cancel button when the empty installation panel is displayed.
2. After the installation of the Solaris 10 software has completed, manually install the SRS Net Connect software from the Solaris 10 Operating System DVD or Solaris 10 Software - 2 CD.

Installing the SRS Net Connect software after the initial Solaris 10 software installation has completed ensures that all panels are displayed properly.

x86: USB Keyboards Might Freeze During Install on Some Dell Precision Workstations (4888849)

During installation, USB keyboards on some Dell Precision Workstations might freeze or become partially inoperative, thereby preventing installation.

Workaround: Perform one of the following workarounds:

- Switch the USB emulation mode in the firmware.
- Switch to a PS/2 keyboard.
- Reboot and try again.

Alternatively, update the system's BIOS to resolve the problem.

SPARC: Error Messages Might Be Seen When Installing Solaris By Using a Network Image (4704046)

You can install Solaris by using a network image. If that image is created by combining the Solaris 10 Software CDs, the following error messages might be seen:


```
Error message:      Jun 18 10:51:53 b26b statd[149]: [ID 514559
daemon.error] svc_tp_create: Could not register prog 100024 vers 1 on udp
Jun 18 10:51:53 b26b statd[149]: [ID 514559 daemon.error] svc_tp_create:
Could not register prog 100024 vers 1 on tcp
Jun 18 10:51:53 b26b statd[149]: [ID 514559 daemon.error] svc_tp_create:
Could not register prog 100024 vers 1 on ticlts
Jun 18 10:51:53 b26b statd[149]: [ID 514559 daemon.error] svc_tp_create:
Could not register prog 100024 vers 1 on ticotsord
Jun 18 10:51:53 b26b statd[149]: [ID 514559 daemon.error] svc_tp_create:
Could not register prog 100024 vers 1 on ticots
Jun 18 10:51:53 b26b statd[149]: [ID 447212 daemon.error] statd:
unable to create (SM_PROG, SM_VERS) for netpath.
```

Workaround: None. Ignore the message. After the system boots, the Network File System (NFS) functions normally.

Warnings Might Occur When a File System Is Created (4189127)

When a file system is created during installation, one of the following warning messages might be displayed:

```
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 that you created does not equal the space on the disk that is being used. This discrepancy 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 warning message.

Upgrade Issues and Bugs

Note – For the latest information about upgrade support beginning with the Solaris 10 1/06 release, see [“Changes in Upgrade Support for Solaris Releases” on page 19](#).

This section describes upgrade bugs. Some might occur while you are upgrading to Solaris 10 OS. Others might occur after you have completed upgrading.

Upgrade Fails on System With Zones That Have Been Installed But Not Booted

A non-global zone that has been installed but never booted or made ready prevents a system from being upgraded correctly. No error message is displayed.

Workaround:

If such a zone is found, the zone should be made ready and then halted prior to starting the upgrade. For example:

```
global# zoneadm -z myzone ready ; zoneadm -z myzone halt
```

Upgrade of System With Zones Installed Fails (6444457, 6444791)

Upgrade of a Solaris 10 or Solaris 10 1/06 system with zones installed to Solaris 10 6/06 will fail if the Core System Support Software Group (SUNWCreq) or End User Solaris Software Group (SUNWCuser) metaclusters are also installed on the system. No error message is displayed.

Workaround: Install the appropriate patch:

- For SPARC: Patch ID 118822-30
- For x86: Patch ID 118844-30

and any patches which 118822-30 or 118844-30 depends on for the system being upgraded and then proceed with the upgrade to Solaris 10 6/06.

Zone Creation Error With SUNWgnome-a11y-libshare (6437617)

If you are installing whole-root non-global zones in the Solaris 10 6/06 release, the following error message might appear in the zone error log:

```
/export/home/wholerootzone/root/var/sadm/pkg/SUNWgnome-a11y-libshare/install/postinstall:
cannot return when not in function
pkgadd: ERROR: postinstall script did not complete successfully
```

```
Installation of <SUNWgnome-a11y-libshare> on zone <wholerootzone>
```

Note – The name `wholerootzone` in the error message is for illustrative purposes, and the path that appears in the installation log might be different on different systems.

Workaround: None.

qlc.conf Configuration File Not Updated While Upgrading to Solaris 10 6/06 Release (6428334)

While upgrading to Solaris 10 6/06 release with an existing `/kernel/drv/qlc.conf` configuration file, the `qlc.conf` file is not acquiring the updated format and parameters. No error message is displayed.

Workaround:

To update the `qlc.conf` file, install the following patches after upgrading to Solaris 10 6/06 release:

- SPARC: Patch 119130-21 or latest revision.
- i386: Patch 119131-21 or latest revision.

Upgrading a Solaris 10 System with Non-Global Zones to the Solaris 10 6/06 release Might Cause the Local File System Service to Fail (6428258)

Upgrading a Solaris 10 3/05 system or a Solaris 10 1/06 system to the Solaris 10 6/06 release with non-global zones might cause the SMF service that mounts local file systems to fail in the non-global zones. As a result, other services in the non-global zones might fail to start.

After upgrading a Solaris 10 system with non-global zones to the Solaris 10 6/06 release, services might be in the maintenance state. For example:

```
# zlogin myzone svcs -x
svc:/system/filesystem/local:default (local file system mounts)
  State: maintenance since Wed May 24 13:18:06 2006
  Reason: Start method exited with $SMF_EXIT_ERR_FATAL.
    See: http://sun.com/msg/SMF-8000-KS
    See: /var/svc/log/system-filesystem-local:default.log
  Impact: 18 dependent services are not running. (Use -v for list.)
```

Workaround:

Reboot the non-global zone from the global zone. For example:

```
global# zoneadm -z myzone reboot
```

Upgrade From Solaris 10 to Solaris 10 6/06 Gives SMF Errors on Reboot and Contains Solaris Package Issues That Might Impact Patching (6421275)

When upgrading from Solaris 10 to Solaris 10 6/06, multiple SMF and package violation errors occur upon reboot. The following error message is displayed:

```
oyster console login: May  3 15:05:47 svc.startd[7]:
svc:/system/basicreg:default: Method "/usr/sbin/sconadm register -c -m autoreg"
failed with exit status 1.
May  3 15:05:48 svc.startd[7]: svc:/system/basicreg:default:
Method "/usr/sbin/sconadm register -c -m autoreg" failed with exit status 1.
May  3 15:05:48 svc.startd[7]: svc:/system/basicreg:default:
Method "/usr/sbin/sconadm register -c -m autoreg" failed with exit status 1.
May  3 15:05:48 svc.startd[7]: system/basicreg:default failed
```

```
#scvs -xv
svc:/system/basicreg:default (?)
State: maintenance since Wed May 03 15:05:48 2006
Reason: Start method failed repeatedly, last exited with status 1.
  See: http://sun.com/msg/SMF-8000-KS
  See: /var/svc/log/system-basicreg:default.log
Impact: This service is not running.
#
# cat /var/svc/log/system-basicreg:default.log
[ May  3 15:05:33 Enabled. ]
[ May  3 15:05:33 Rereading configuration. ]
[ May  3 15:05:47 Executing start method
("/usr/sbin/sconadm register -c -m autoreg") ]
You must accept terms of use (by passing in -a) in order to register.
The terms of use and binary code license agreement are located at:
Terms of Use : http://sun.com/applink/sunuc/toulen
Binary Code License Agreement :
http://sun.com/applink/sunuc/bcllen
[ May  3 15:05:48 Method "start" exited with status 1 ]
[ May  3 15:05:48 Executing start method
("/usr/sbin/sconadm register -c -m autoreg") ]
You must accept terms of use (by passing in -a) in order to register.
The terms of use and binary code license agreement are located at:
Terms of Use : http://sun.com/applink/sunuc/toulen
```

```
Binary Code License Agreement :
http://sun.com/applink/sunuc/bcllen
[ May  3 15:05:48 Method "start" exited with status 1 ]
#
```

we also had multiple packages owning the same type "f" files
after zones upgrade as follows:

```
/usr/lib/breg/basicreg.jar
/usr/lib/breg/br-common.jar
```

```

/usr/lib/breg/data/RegistrationProfile.properties
/usr/lib/breg/jdom.jar
/usr/lib/breg/resources/i18n/assetStrings_de.properties
/usr/lib/breg/resources/i18n/assetStrings_es.properties
/usr/lib/breg/resources/i18n/assetStrings_fr.properties
/usr/lib/breg/resources/i18n/assetStrings_it.properties
/usr/lib/breg/resources/i18n/assetStrings_ja.properties
/usr/lib/breg/resources/i18n/assetStrings_ko.properties
/usr/lib/breg/resources/i18n/assetStrings_sv.properties
/usr/lib/breg/resources/i18n/assetStrings_zh.properties
/usr/lib/breg/resources/i18n/assetStrings_zh_TW.properties
/usr/lib/breg/resources/i18n/countryStrings_de.properties
/usr/lib/breg/resources/i18n/countryStrings_es.properties
/usr/lib/breg/resources/i18n/countryStrings_fr.properties
/usr/lib/breg/resources/i18n/countryStrings_it.properties
/usr/lib/breg/resources/i18n/countryStrings_ja.properties
/usr/lib/breg/resources/i18n/countryStrings_ko.properties
/usr/lib/breg/resources/i18n/countryStrings_sv.properties
/usr/lib/breg/resources/i18n/countryStrings_zh.properties
/usr/lib/breg/resources/i18n/countryStrings_zh_TW.properties
/usr/lib/breg/resources/i18n/languageStrings_de.properties
/usr/lib/breg/resources/i18n/languageStrings_es.properties
/usr/lib/breg/resources/i18n/languageStrings_fr.properties
/usr/lib/breg/resources/i18n/languageStrings_it.properties
/usr/lib/breg/resources/i18n/languageStrings_ja.properties
/usr/lib/breg/resources/i18n/languageStrings_ko.properties
/usr/lib/breg/resources/i18n/languageStrings_sv.properties
/usr/lib/breg/resources/i18n/languageStrings_zh.properties
/usr/lib/breg/resources/i18n/languageStrings_zh_TW.properties
/usr/lib/breg/resources/i18n/wizardStrings_de.properties
/usr/lib/breg/resources/i18n/wizardStrings_es.properties
/usr/lib/breg/resources/i18n/wizardStrings_fr.properties
/usr/lib/breg/resources/i18n/wizardStrings_it.properties
/usr/lib/breg/resources/i18n/wizardStrings_ja.properties
/usr/lib/breg/resources/i18n/wizardStrings_ko.properties
/usr/lib/breg/resources/i18n/wizardStrings_sv.properties
/usr/lib/breg/resources/i18n/wizardStrings_zh.properties
/usr/lib/breg/resources/i18n/wizardStrings_zh_TW.properties
/usr/lib/breg/resources/i18n/xmlValueStrings_de.properties
/usr/lib/breg/resources/i18n/xmlValueStrings_es.properties
/usr/lib/breg/resources/i18n/xmlValueStrings_fr.properties
/usr/lib/breg/resources/i18n/xmlValueStrings_it.properties
/usr/lib/breg/resources/i18n/xmlValueStrings_ja.properties
/usr/lib/breg/resources/i18n/xmlValueStrings_ko.properties
/usr/lib/breg/resources/i18n/xmlValueStrings_sv.properties
/usr/lib/breg/resources/i18n/xmlValueStrings_zh.properties
/usr/lib/breg/resources/i18n/xmlValueStrings_zh_TW.properties
/usr/lib/breg/wizard.jar
/usr/sbin/sconadm
/usr/sbin/smpatch

```

Workaround: Follow these steps:

1. Become superuser.
2. List the SUNWbreg and SUNWbrg localization packages that are installed on the system.

```

# pkginfo | awk '{print $2}' | grep 'SUNW.breg' > /tmp/list.breg
# cat /tmp/list.breg
SUNWcbreg

```

```
SUNWdbreg
SUNWebreg
SUNWfbreg
SUNWhbreg
SUNWibreg
SUNWjbrg
SUNWkbrg
SUNWsbrg
# pkginfo | awk '{print $2}' | grep 'SUNW.brg' > /tmp/list.brg
# cat /tmp/list.brg
SUNWcbrg
SUNWdbreg
SUNWebreg
SUNWfbreg
SUNWhbreg
SUNWibreg
SUNWjbrg
SUNWkbrg
SUNWsbrg
```

Note – The contents of the `/tmp/list.breg` file and `/tmp/list.brg` file might vary depending on which localization packages are installed on the system, or the files might be empty. If the `/tmp/list.brg` file contains packages, save the list of package names so that you know which packages you will need to copy in step 5. If the files are empty, skip to step 4.

3. Uninstall the packages found in step 2.

```
# pkgrm 'cat /tmp/list.breg /tmp/list.brg'
```

4. Uninstall the `SUNWbrg`, `SUNWdc`, and `SUNWbreg` packages.

```
# pkgrm SUNWbrg SUNWdc SUNWbreg
```

5. Copy the `SUNWbrg` package and the localization packages that you need from the distribution media, such as CD or DVD.

Note – The localization packages that you need are listed in the `/tmp/list.brg` file.

```
# cd distribution-media
# cd Solaris_10/Product
# cp -rp SUNWbrg 'cat /tmp/list.brg' /tmp
```

6. Install the `SUNWbrg` and localization packages.

```
# pkgadd -d /tmp SUNWbrg
```

If the `/tmp/list.brg` file is not empty, install the localization packages.

```
# pkgadd -d /tmp 'cat /tmp/list.brg'
```

x86: Upgrade Option Is Not Available When Upgrading to Solaris Express 3/06 OS (6386504)

The upgrade operation fails when upgrading the OS to the Solaris Express 3/06 OS as follows:

- For the Solaris installation program, the upgrade option is unavailable.
- For the custom JumpStart program, the upgrade fails.

This problem is due to an unused boot partition that must be deleted.

The problem occurs under the following circumstances:

- You have performed an initial installation from the Solaris 8, 9, or 10 3/05 release. An x86 boot partition was created during installation.
- You have performed an initial installation from the Solaris 10 1/06 release or Solaris Express release that supports GRUB. The x86 boot partition is preserved, but is not used.
- You try to upgrade to the Solaris Express 3/06 OS.

The following error will be in `/tmp/install_log`:

```
# more /tmp/install_log
kdmconfig: The following warning was noted:
Error while executing loadkeys command.
Checking c1d0s0 for an upgradeable Solaris image.
The x86 Boot fdisk partition is missing /a/boot/solaris/bootenv.rc
```

Workaround:

- If you are upgrading with the Solaris installation program, delete the unused boot partition using the `format` or `fdisk` command. Repartition before you upgrade.
- If you are upgrading with JumpStart, specify the disk that contains the root (`/`) file system to be upgraded with the `root_device` keyword. For example, the profile would contain the following keywords:
 - `install_type upgrade`
 - `root_device c1t0d0s0`

Device ID Discrepancies After Upgrading From Solaris 9 9/04 OS

In this Solaris 10 release, Solaris Volume Manager displays device ID output in a new format. Solaris 9 9/04 OS, which introduced device ID support in disk sets, does not recognize the new format. When you upgrade to Solaris 10 OS from the Solaris 9 9/04 release, device IDs that are associated with existing disk sets are not updated in the Solaris Volume Manager configuration. If you need to revert to Solaris 9 9/04 OS, configuration changes made to disk sets after the

upgrade might not be available to Solaris 9 9/04 OS. For more information, see [Chapter 25, “Troubleshooting Solaris Volume Manager \(Tasks\),”](#) in *Solaris Volume Manager Administration Guide*.

Locale Problem Occurs After You Upgrade a System That Contains Zones (6361672)

A locale problem occurs when you use the GUI-based installation program to upgrade a system that contains zones. After the installation, the LANG variable in the /etc/default/init file is set to null. If you issue any system command, the following error message is displayed:

```
couldn't set locale correctly
```

Workaround: As superuser, choose one of the following workarounds:

- **Workaround 1:** If you have already upgraded the system, manually edit the /etc/default/init file to set the correct LANG and LC_* variables. Then reboot the system. For more information and examples, see the [locale\(1\)](#) man page.
- **Workaround 2:** Use the text-based installation program to upgrade the system. Perform either of the following steps that is appropriate to your system:
 - For SPARC systems, use the text flag with the boot command. For example, if you are using the CD media to install the software, issue the following command:

```
ok boot cdrom - text
```
 - For x86 systems, at the installation selection screen, select 3 Solaris Interactive Text (Desktop session).

For more information, see the Solaris 10 Installation Guides.

x86: Adding Driver Updates Might Cause Failure of Network Configuration (6353146)

Installation of the Solaris 10 OS might fail while you are adding Driver Updates (DU), which are also known as Install Time Updates (ITU). This error occurs if you are using the GUI to install the Solaris 10 software. The following message is displayed:

```
Unable to run cmd: /usr/sbin/sysidput
```

Workaround: Use either of the following workarounds.

- **Workaround 1:** Configure the installation to use DHCP to gather network configuration information.
- **Workaround 2:** Use a text-based installation method.

- If you are performing the text-based installation in a desktop session, follow these steps.
 1. After you have finished adding ITUs, type Ctrl-c instead of typing **e**.
 2. Choose option 3.
- If you specify a serial console to use during the installation, follow these steps.
 1. After you have finished adding ITUs, type Ctrl-c instead of typing **e**.
 2. Choose option 4.

x86: Cannot Delete the Solaris Live Upgrade Boot Environment That Contains the GRand Unified Bootloader Menu (6341350)

When you use Solaris Live Upgrade to create boot environments, one of the boot environments in the system hosts the GRand Unified Bootloader (GRUB) menu. This boot environment cannot be removed with the `ldelete` command.

If you attempt to remove the boot environment, the following error message is displayed:

```
ERROR: The boot environment name-of-boot-environment contains the GRUB menu.  
ERROR: You are not allowed to delete this BE.  
Unable to delete boot environment.
```

Workaround: Use either the `lmake` command or the `luupgrade` command to reuse this boot environment. Make the boot environment that contains the GRUB menu the last boot environment to be deleted.

Note – Solaris Live Upgrade does not allow the last boot environment to be deleted. Nor can the boot environment that contains the GRUB menu be deleted. Therefore, if the last boot environment also contains the GRUB menu, then you can delete all other boot environments if needed.

x86: Removal of Agilent Fibre Channel HBA Driver Package Fails When Upgrading to Solaris 10 1/06 Release (6330840)

If you use Solaris Live Upgrade to upgrade from the Solaris 8 2/02 release to the Solaris 10 1/06 release, the removal of the Agilent Fibre Channel HBA Driver Package (HPFC) fails. The following error message is recorded in the `upgrade_log` file.

```
Removing package HPFC:  
Modifying /a/kernel/drv/sd.conf  
cmdexec: ERROR: unable to open
```

```
/a/var/sadm/pkg/HPFC/save/sed/kernel/drv/sd.conf
pkgrm: ERROR: class action script did not complete successfully
```

```
Removal of partially failed.
pkgrm return code = 2
```

The upgrade succeeds, but two instances of the HPFC package are included on the system.

Workaround: Follow these steps.

1. Become superuser.
2. Remove both instances of the HPFC package.

```
# pkgrm HPFC
# pkgrm HPFC.2
```

3. Insert the Solaris 10 1/06 OS DVD in the DVD-ROM drive.
4. Change directories to the directory that contains the HPFC package.

```
# cd /cdrom/Solaris_10/Product
```

5. Add the HPFC package to the system.

```
# pkgadd -d 'pwd' HPFC
```

Solaris Live Upgrade `luupgrade` Command Missing the Progress Bar (6239850)

The upgrade progress bar does not appear when you use the Solaris Live Upgrade software in the following manner:

- You use the Solaris 10 1/06 CD media to upgrade the OS.
- You upgrade a boot environment by using the `luupgrade` command with the following options:
 - `-i` to install from the CD media
 - `-O "-nodisplay -noconsole"` to run the installer on the second CD in text mode and without user interaction
- You are upgrading to the Solaris 10 1/06 software from the following releases:
 - Solaris 8 release
 - Solaris 9 release
 - Solaris 10 release

For example, if you run the following command, the progress bar should be displayed after you see the following output:

```
Running installer on BE s10u1.
```

However, the bar fails to appear.

```
# luupgrade -i -n s10u1 -s /net/installsrv/export/s10u1
-O "-nodisplay -noconsole"
```

```
Validating the contents of the media /net/installsrv/export/s10u1.
The media is a standard Solaris media.
The media contains a standard Solaris installer.
The media contains Solaris 3 version 10.
Mounting BE s10u1.
Running installer on BE s10u1.
```

No error message is displayed.

Workaround: Use the `prstat` command. This command enables you to watch the progress while packages are being added during the installation.

SPARC: Upgrading From Solaris 9 Releases With Recommended Patch Cluster Partially Succeeds (6202868)

For a system that is running a Solaris 9 release with the recommended patch cluster installed, upgrading to Solaris 10 OS only partially succeeds. This problem affects systems that are running the following releases with the Solaris 9 recommended patch cluster installed.

- Solaris 9 release
- Solaris 9 9/02 release
- Solaris 9 12/02 release
- Solaris 9 4/03 release
- Solaris 9 8/03 release
- Solaris 9 12/03 release
- Solaris 9 4/04 release

When you upgrade to the Solaris 10 release, the `SUNWcti2x` package is not successfully removed from the system.

Workaround: Choose one of the following workarounds.

- To avoid this problem, apply patch ID 117426-03, or a later version, to the system before you upgrade to the Solaris 10 OS.

To download this patch, go to <http://sunsolve.sun.com>.

- If you encounter this problem during the upgrade, follow these steps.
 1. In a text editor, comment out the following line in the `/var/sadm/pkg/SUNWcti2x/install/preremove` file.


```
rem_drv -b ${BASEDIR} sc_nct || EXIT=1
```
 2. Remove the `SUNWcti2x` package.

```
# pkgrm SUNWcti2x
```

Obsolete Uninstallers Not Removed When You Use Solaris Live Upgrade to Upgrade From Previous Solaris Releases (6198380)

If you use Solaris Live Upgrade to upgrade from the Solaris 8 or Solaris 9 releases to Solaris 10 OS, obsolete uninstaller programs are not removed. These uninstaller programs from the previous OS remain in the system's /var/sadm/prod directory.

The following obsolete uninstallers are not removed.

```
uninstall_Alternate_Pathing_2_3_1.class
uninstall_CDRW_1_1.class o uninstall_CDRW_1_0.class
uninstall_Bonus_Localization_-_Catalan_CDE_Desktop.class
uninstall_Bonus_Localization_-_Polish_CDE_Desktop.class
uninstall_Bonus_Localizations_-_Russian_CDE_Desktop.class
uninstall_Capacity_on_Demand_1_0.class
uninstall_Java3D_1_3_1.class
uninstall_Java3D_1_3.class
uninstall_Java3D_1_2_1_04.class
uninstall_Java3D_1_2_1_03.class
uninstall_Lights_Out_Management_2_0.class
uninstall_Man_Page_Supplement.class
uninstall_OpenGL_1_3.class
uninstall_OpenGL_1_2_3.class
uninstall_Netra_ct_Platform_1_0.class
uninstall_Netra_t11xx_Alarms_2_0.class
uninstall_Netscape_6_2_3.class
uninstall_Netscape_6_2_1_Beta.class
uninstall_PC_launcher_1_0_2.class
uninstall_PC_launcher_1_0_1_PCfileviewer_1_0_1.class
uninstall_RSC_2_2_2.class
uninstall_RSC_2_2_1.class
uninstall_RSC_2_2.class
uninstall_ShowMeTV_1_3.class
uninstall_Solaris_9_French_Localization.class
uninstall_Solaris_9_German_Localization.class
uninstall_Solaris_9_Hong_Kong_Traditional_Chinese_Localization.class
uninstall_Solaris_9_Italian_Localization.class
uninstall_Solaris_9_Japanese_Localization.class
uninstall_Solaris_9_Korean_Localization.class
uninstall_Solaris_9_Simplified_Chinese_Localization.class
uninstall_Solaris_9_Spanish_Localization.class
uninstall_Solaris_9_Swedish_Localization.class
uninstall_Solaris_9_Traditional_Chinese_Localization.class
uninstall_Solaris_On_Sun_Hardware_Documentation.class
uninstall_Sun_Hardware_AnswerBook.class
uninstall_SunATM_5_0.class
uninstall_SunATM_5_1.class
uninstall_SunFDDI_PCI_3_0.class
uninstall_SunFDDI_SBus_7_0.class
```

```

uninstall_Sun_Fire_880_FC-AL_Backplane_Firmware_1_0.class
uninstall_Sun_Fire_B10n_Load_Balancing_Blade_1_1.class
uninstall_SunForum_3_1.class
uninstall_SunForum_3_2.class
uninstall_SunHSI_PCI_3_0.class
uninstall_SunHSI_SBus_3_0.class
uninstall_SunScreen_3_2.class
uninstall_SunVTS_5_1_PS6.class
uninstall_SunVTS_5_1_PS5.class
uninstall_SunVTS_5_1_PS4.class
uninstall_SunVTS_5_1_PS3.class
uninstall_SunVTS_5_1_PS2.class
uninstall_SunVTS_5_1_PS1.class
uninstall_SunVTS_5_0.class
uninstall_System_Management_Services_1_4.class
uninstall_System_Management_Services_1_3.class
uninstall_System_Management_Services_1_2.class
uninstall_System_Service_Processor_3_5.class
uninstall_WBEM_DR_1_0.class
uninstall_Web_Start_Wizards_SDK_3_0_2.class
uninstall_Web_Start_Wizards_SDK_3_0_1.class
uninstall_Web_Start_Wizards_SDK.class
uninstall_XML_Libraries_2_4_12.class

```

Workaround: After you upgrade the system, manually remove the obsolete uninstallers in the `/var/sadm/prod` directory.

Configuration File `pam.conf` Not Automatically Updated After an Upgrade (5060721)

This Solaris 10 release introduces changes in `pam_ldap` functionality. When you upgrade to the current release, `pam_ldap` configurations in your existing `pam.conf` configuration file are not updated to reflect these changes. If `pam_ldap` configuration is detected, the CLEANUP file that is generated at the end of the upgrade contains the following notification:

```

/etc/pam.conf please examine/update the pam_ldap configuration
because its functionality has changed,
refer to pam_ldap(5) documentation for more information

```

Workaround: After the upgrade, examine `/etc/pam.conf`. If necessary, modify this file manually to be compatible with the new functionalities of `pam_ldap`. The modifications involve password prompting such as the `use_first_pass` and `try_first_pass` options as well as password updates. For more information about updating `pam.conf`, refer to the [pam_ldap\(5\)](#) man page and documentation.

Installer Text Display Problem When Using Solaris Live Upgrade (4736488)

When using the Solaris Live Upgrade `luupgrade(1M)` command with the `-i` option to complete an upgrade of an inactive boot environment, the text that the installers display might be unreadable in some languages. The text is corrupted when the installers request fonts that do not exist on the older release that is on the current boot environment.

Workaround: Choose one of the following workarounds:

- Use a combined network installation image to do the installation.
- Enable the C locale by setting the environment variable on your system.
 - If you are using the Bourne shell or Korn shell, follow these steps:
 1. Set the C locale.

```
# LANG=C; export LANG
```
 2. Begin the installation.
 - If you are using the C shell, follow these steps:
 1. Type the following:

```
# csh
```
 2. Set the C locale.

```
# setenv LANG C
```
 3. Begin the installation.

SPARC: Removal of SUNWjxcft Package Records Error During Upgrade (4525236)

When you upgrade from the Solaris 8 software to the Solaris 10 release, a problem is encountered when the `SUNWjxcft` package is removed. The following error message is recorded in the `upgrade_log` file:

```
Removing package SUNWjxcft:
Can't open /a/usr/openwin/lib/locale/ja/X11/fonts/TTbitmaps/fonts.upr
Can't open /a/usr/openwin/lib/locale/ja/X11/fonts/TTbitmaps/fonts.scale
Can't open /a/usr/openwin/lib/locale/ja/X11/fonts/TTbitmaps/fonts.alias
Can't open /a/usr/openwin/lib/locale/ja/X11/fonts/TT/fonts.upr
Can't open /a/usr/openwin/lib/locale/ja/X11/fonts/TT/fonts.scale
Can't open /a/usr/openwin/lib/locale/ja/X11/fonts/TT/fonts.alias
Removal of <SUNWjxcft> was successful
```

Workaround: Ignore the error message.

Upgrading to Solaris 10 Release Might Disable Existing Secure Shell Daemon (sshd) (4626093)

If you upgrade to the Solaris 10 release on a system that is running a third-party Secure Shell, such as OpenSSH from the `/etc/init.d/sshd` daemon, the upgrade disables the existing Secure Shell daemon. During an upgrade, Solaris 10 software overwrites the contents of `/etc/init.d/sshd`.

Workaround: Choose one of the following workarounds:

- If you do not want the Secure Shell protocol server program on your system, do not install the `SUNWsshdr` and `SUNWsshdu` packages during the upgrade.
- If you do not want the Secure Shell protocol server or client programs on your system, do not install the Secure Shell Cluster (`SUNWcssh`) during the upgrade.

Upgrade Fails if /export Directory Is Near Capacity (4409601)

If the `/export` directory is near full capacity when you upgrade to the Solaris 10 release, space requirements for `/export` are miscalculated. The upgrade then fails. This problem commonly occurs if a diskless client is installed. Another instance of when the problem occurs is when third-party software is installed in the `/export` directory. The following message is displayed:

WARNING: Insufficient space for the upgrade.

Workaround: Before you upgrade, choose one of the following workarounds:

- Rename the `/export` directory temporarily, until the upgrade is completed.
- Temporarily comment out the `/export` line in the `/etc/vfstab` file until the upgrade is completed.
- If `/export` is a separate file system, then unmount `/export` before you perform the upgrade.

Upgrading Diskless Client Servers and Clients (4363078)

If your system currently supports diskless clients that were installed with the Solstice AdminSuite 2.3 Diskless Client tool, you must perform the following two steps:

1. Delete all existing diskless clients that are the same Solaris version and architecture as the server.
2. Install or upgrade to the Solaris 10 release.

For specific instructions, see the [System Administration Guide: Basic Administration](#).

If you attempt to install the Solaris 10 software over existing diskless clients, the following error message might be displayed:

```
The Solaris Version (Solaris version-number) on slice
<xxxxxxx> cannot
be upgraded.
There is an unknown problem with the software configuration installed
on this disk.
```

In this error message, *version-number* refers to the Solaris version that is currently running on your system. *<xxxxxxx>* refers to the slice that is running this version of the Solaris software.

Additional Installation Issues

This section describes issues that are related to the installation of the Solaris OS.

Patchadd Fails When Installing Patches From the UpgradePatches Directory (6241052)

If you use the `patchadd` command to install patches that are in the DVD media `UpgradePatches` directory, `patchadd` fails. These patches are used for the standard upgrade process and should not be used with any patch installation program.

No error message is displayed.

smosservice add Command Does Not Install Designated ARCH=all Packages (4871256)

The `smosservice add` command does not install any packages that are designated `ARCH=all` in the root (`/`) or `/usr` file systems. There is no error message indicating these packages were skipped. This problem exists in all Solaris OS versions, and applies to both SPARC based and x86 based clients.

Note that the list of missing packages varies, depending on the Solaris release that you are running.

Workaround: Locate and install the missing `ARCH=all` packages.

For step-by-step instructions on locating and installing missing packages, see “How to Locate and Install Missing `ARCH=all` Packages” in [System Administration Guide: Basic Administration](#).

StarOffice Patch Application Requires Additional Steps

The following patches are applied to the Solaris OS to resolve StarOffice problems that were reported in CR 6234855 and CR 6262830:

- For SPARC based systems
 - Patch ID 119412-06
 - Patch ID 119906-03
- For x86 based systems:
 - Patch ID 119413-06
 - Patch ID 119907-03

To completely resolve the reported problems, perform the following steps after applying the patches. These steps enable you to use StarOffice 7 Product 5 software to open, for example, those OpenDocument files that were created in StarOffice 8 software.

1. Become superuser.
2. Issue the following command:


```
# update-mime-database /usr/share/mime
```
3. Log out of the system and then log in again.

StarOffice and StarSuite Software Cannot Coexist in the Same System

When you install Solaris 10 OS, either the StarOffice or the StarSuite software is also automatically installed, depending on which language you select. The languages and the corresponding software that these languages support are listed as follows:

Selected Language	Supported Software
Chinese, Japanese, Korean	StarSuite
Other languages	StarOffice

StarOffice and StarSuite cannot coexist in the same system. If you want to replace a software that you accidentally installed, follow these steps.

1. Insert the Solaris 10 Software - 3 CD or Solaris 10 Operating System DVD in the drive.
2. Become superuser.
3. Change to the Product directory, for example, `/cdrom/cdrom0/Solaris_10/Product`.

4. Replace the software.

- To replace StarOffice with StarSuite, use the following commands:

```
# pkgrm SUNWsoagm SUNWsom  
# pkgadd -d . SUNWsoagm SUNWsoam
```

- To replace StarSuite with StarOffice, use the following commands:

```
# pkgrm SUNWsoagm SUNWsoam  
# pkgadd -d . SUNWsoagm SUNWsom
```

Cannot Install Documentation Packages With Names Longer Than Nine Characters on Documentation Servers Running Solaris 7 or Solaris 8 Software

Some localized documentation collections in PDF format have package names that are longer than nine characters. To install these PDF collections on servers that are running Solaris 7 or 8 software, you must first install two patches.

Workaround: For instructions on how to install these patches, see the Solaris Documentation Important Information file on Solaris 10 OS Documentation DVD. This file is located in the following directory:

```
mount-point/README/locale/install_  
locale.html
```

Additional Related Locales Might Be Installed

When you select a locale for your installation, additional related locales might also be installed. This change in behavior occurs in the Solaris 10 release because all full locales, with message translations, and the Asian and Japanese partial locales, locale enabler, have been repackaged based on language support for locales. Other partial locales are still packaged and installed based on geographic region, such as Central Europe.

Languages CD Installs All Languages By Default With Solaris Live Upgrade (4898832)

If you use Solaris Live Upgrade with multiple CDs to install the Solaris 10 release, the Languages CD installs all languages by default.

After the installation, if you log in to the system in a locale that is different than the locale you selected during installation, garbled characters might be displayed. After you log in to any of these locales, the English locale is displayed.

Workaround: During installation, select the custom install option. Uncheck any languages that you do not want to install during the Languages CD installation.

Solaris Runtime Issues

This chapter describes runtime issues that are known to be problems.

Note – Some of the issues and bugs in this chapter have been fixed in subsequent Solaris 10 releases. If you have upgraded your Solaris software, certain issues and bugs in this chapter might no longer apply. To see which bugs and issues no longer apply to your specific Solaris 10 software, refer to [Appendix A, “Table of Integrated Bug Fixes in the Solaris 10 Operating System.”](#)

Common Desktop Environment

The following bugs in Solaris 10 OS apply to the Common Desktop Environment (CDE).

x86: Cannot Configure Full-Screen Magnification on Systems With One Video Card

If your Solaris 10 system has a single physical video card, you cannot configure the system for full-screen magnification. For such a configuration, you must use a separate configuration file in which you define settings for a dummy driver. First, make sure that the Xserver is not running. Then perform the following steps:

1. Log in to a command-line session.
 - If you are using the GNOME Display Manager, follow these steps:
 - a. Log in to a session as superuser.
 - b. At the prompt, type **svcadm disable application/gdm2-login**.
 - c. Log in again as superuser.
 - If you are using dtlogin, follow these steps:
 - a. In the dtlogin window, click Options and select Command Line Login.

- b. Log in as superuser.
2. Create a new `xorg.conf` file.

```
# /usr/X11/bin/Xorg -configure
```

The command creates the file `xorg.conf.new` in the root (`/`) directory.

3. Copy the new configuration file to the `/etc/x11` directory and rename the file `xorg.conf`.

```
# cp /xorg.conf.new /etc/X11/xorg.conf
```

4. Modify the configurations in the file by using the following sample configurations:

- Add a new monitor section.

```
Section "Monitor"
    Identifier      "monitor_dummy"
    ModelName       "dummy"
    HorizSync       10-200
    VertRefresh     20-90
EndSection
```

- Add a new device section.

```
Section "Device"
    BoardName       "dummy"
    Driver          "dummy"
    Identifier       "device_dummy"
    VendorName       "dummy"
    videoram        10000
EndSection
```

Note – You might need to adjust the `videoram` value, depending on the screen width, height, and color depth of your particular graphics card. The value in Kbytes must be large enough for the intended screen. For example, you can compute the value by using the formula `width * height * bpp/8`.

- Add a new screen section.

```
Section "Screen"
    DefaultDepth    24
    SubSection "Display"
        Depth       24
        Modes        "1280x1024"
    EndSubSection
    Device           "device_dummy"
    Identifier       "screen_dummy"
    Monitor          "monitor_dummy"
EndSection
```

Note – You might need to adjust the resolution value for your particular system setup.

5. Look for the following line under the `ServerLayout` section:

```
Screen      0 "Screen0" 0 0
```

6. Insert the following line below the line in the previous step:

```
Screen      1 "screen_dummy" RightOf "Screen0"
```

This new line defines Screen1, a second dummy screen that is notionally to the right of Screen0, the physical and primary screen.

7. Save the changes.
8. Reboot the system from the appropriate command-line session:
 - If you are using GDM, perform the following:
 - a. Type **svcadm enable application/gdm2-login**.
 - b. Reboot the system.
 - If you are using dtlogin, reboot the system and log in.
9. Start the Gnopernicus screen reader.
10. Change the Startup Mode to Magnifier.
11. Click Preferences, then select Magnifier.
12. Click Add/Modify.
13. Assign the following values for Magnifier preferences:
 - For Source: 0.1
 - For Zoomer Placement:
 - Left and Top: 0
 - Bottom and Right: maximum
14. Click Apply.

Because of the overlaying full-screen magnification zoomer, the Gnopernicus windows become invisible. However, full-screen magnification is now available.

x86: Problems Configuring USB Mouse Device as Extension Device for Use With GNOME On-Screen Keyboard

You cannot set up a USB mouse device as an extension device with the GNOME On-Screen Keyboard (GOK). The configuration fails when you are setting up the USB mouse device while using a PS2 mouse device as the core pointer. To properly set up the USB mouse, follow these steps.

1. Log in as superuser.
2. While the USB mouse device is unplugged, type the following in a terminal window:

```
# ls -l /dev/usb/hid*
```

3. Connect the USB mouse and type the previous command again.
4. Record the path of the USB mouse that is displayed on the screen.
5. Log in to a command-line session.
 - If you are using the GNOME Display Manager, follow these steps:
 - a. Log in to a session as superuser.
 - b. At the prompt, type **svcadm disable application/gdm2-login**.
 - c. Log in again as superuser.
 - If you are using dtlogin, follow these steps:
 - a. In the dtlogin window, click Options and select Command Line Login.
 - b. Log in as superuser.
6. Create a new `xorg.conf` file.

```
# /usr/X11/bin/Xorg -configure
```

The command creates the file `xorg.conf.new` in the root (`/`) directory.

7. Copy the new configuration file to the `/etc/x11` directory and rename the file `xorg.conf`.

```
# cp /xorg.conf.new /etc/X11/xorg.conf
```

8. Modify the configurations in the file:

- In the `ServerLayout` section, add an input device for `Mouse1` after the line `InputDevice "Mouse0" "CorePointer"`. See the following example:

```
InputDevice "Mouse0" "CorePointer"
InputDevice "Mouse1"
```

- In the `InputDevice` section that contains the line `Identifier "Mouse0"`, apply the following changes:
 - Change Option `"Device" "/dev/mouse"` to Option `"Device" "/dev/kdmouse"`.
 - Change Option `"Protocol" "auto"` to Option `"Protocol" "VUID"`.
 - Add the following new Option:

```
Option "StreamsModule" "vuid3ps2"
```

After you have applied the changes, the section should appear similar to the following example:

```
Section "InputDevice"
    Identifier "Mouse0"
    Driver "mouse"
    Option "Protocol" "VUID"
    Option "Device" "/dev/kdmouse"
    Option "StreamsModule" "vuid3ps2"
EndSection
```

- Create a new `InputDevice` section after the preceding `InputDevice` section:

```
Section "InputDevice"
    Identifier "Mouse1"
```



```

        Driver      "mouse"
        Option      "Device" "/dev/usb/hid1"
    EndSection

```

Note – /dev/usb/hid1 is an example path for the USB mouse. Use the path in Step 4 to replace /dev/usb/hid1.

9. Save the file and exit.
10. Reboot the system from the appropriate command-line session:
 - If you are using GDM, perform the following:
 - a. Type **svcadm enable application/gdm2-login**.
 - b. Reboot the system.
 - If you are using dtlogin, reboot the system.
11. Log in to the accessible UI user's account.
12. Enable Assistive Technology Support by clicking Launch Menu => Preferences => Accessibility => Assistive Technology Support.
13. Log out of the system then log in to the accessible UI user's account again.
14. Open a terminal window and type the following command:


```
% /usr/sfw/bin/gok --select-action=switch1
```
15. In the GOK window, click GOK and select Preferences.
16. If necessary, set up GOK to the accessible UI user's needs. Otherwise, to accept the current setup, click Apply then click OK in the GOK Preferences window.
17. Exit GOK and then restart it by clicking Launch Menu => Applications => Accessibility => On-Screen Keyboard. The following warning message might be displayed:


```
The device you are using to control GOK is
also controlling the system pointer.
```
18. Click OK.
19. Exit GOK and then repeat steps 14-17.

The warning message is no longer displayed.

x86: Support for Intel Integrated i810 and i815 Graphics Chipsets

Intel Integrated i810 and i815 Graphics Chipsets are not supported by the Xorg X Window System server. Support is available with the Xsun server. To configure the Xsun server to use these chipsets, follow these steps:

1. Become superuser.

2. Run the program to configure keyboard, display, and mouse.

kdmconfig

3. On the Introduction and X Server Selection screen, select the Xsun server.
On the View and Edit Window System Configuration screen, Intel i810/i815 (4MB) should be automatically selected and displayed as the Video Device.
4. If the Intel i810 and i815 Chipsets are not automatically selected, select the Change Video Device/Monitor option.
5. On the Video Device Selection screen, select the Intel i810/i815 (4MB) option.
6. Continue to select other kdmconfig options.

Arabic Text Not Appearing in ar Locales

If your x86 system is using Xorg as the default Xserver, the Arabic font (iso7759-6) does not appear in the ar locale. This error does not occur if you are using XSun instead of XOrg.

Workaround: Follow these steps.

1. As superuser, edit /usr/dt/config/Xservers.

- Uncomment or add the following line:

```
:0 Local local_uid@console root /usr/openwin/bin/Xsun :0  
-nobanner -defdepth 24
```

- Comment out the following line:

```
:0 Local local_uid@console root /usr/X11/bin/Xorg :0
```

2. Reboot the system.

Alternatively, you can log in to ar_EG.UTF-8 or other UTF-8 locales.

x86: Time Settings Might Cause Key Combinations to Fail to Start Assistive Technologies in the Sun Java Desktop System (6351923)

Problems might occur if you use the AT keyboard to start the following assistive technologies in the Sun Java Desktop System (Java DS). Default time settings might cause the use of key combinations to fail to start these technologies:

- GNOME On-Screen Keyboard (GOK)
- Magnifier
- Speech

Workaround: Follow these steps to start these technologies by using the keyboard when you log in.

1. Open the `/etc/X11/gdm/modules/AccessKeyMouseEvents` file.
2. Navigate to the line that defines the default minimum and maximum time limits for keystrokes.

For example, for GOK, the line is the following:

```
Contro1k 1 1000 10000 gok --login --access-method=directselection
```

3. Modify the line by performing the following:
 - a. Change the minimum and maximum time settings.
 - b. Ensure that you include the correct path for GOK, `/usr/sfw/bin/gok`.

After you have completed the changes, the sample line should appear as follows:

```
Contro1k 1 10 100 /usr/sfw/bin/gok --login --access-method=directselection
```

Launch Menu Cannot Be Opened With Ctrl-Esc (6340714)

A problem occurs if you configure the Magnifier with two virtual or physical video devices in the following manner:

- The Magnifier's source set is :0.1.
- The Magnifier's target set is :0.0.

In this configuration, the key combination Ctrl-Esc cannot open the Launch menu on the magnified second desktop system.

Workaround: None.

x86: Problems With dtlogin When Using UTF-8 Locales (6334517)

If you upgrade an x86 based system from Solaris 9 9/04 release to any release of the Solaris 10 software, the login program might not work. The problem occurs when you select any UTF-8 locale in the dtlogin GUI. When the error occurs, the GUI generates a core dump.

Workaround: Do not select any UTF-8 locale from the Language pull-down menu under Options.

SPARC: Problems Configuring Preferences With the GNOME On-Screen Keyboard (6329929)

Software problems affect the use of extended devices such as a second mouse device or a USB head tracker with the GNOME On-Screen Keyboard (GOK). Consequently, the user preferences Dwell Selection and Direct Selection cannot be set by using GOK. Instead, you need to set these user preferences by using a physical keyboard and mouse device.

Workaround: After you have set the system to use an extended device, perform the following procedures in sequence.

First, set GOK to ensure that the core pointer is controlled by the primary mouse device. Other extended devices are then reserved for use by AT applications. Follow these steps when starting GOK for the first time:

1. Start GOK.
2. In the window where Sticky Keys have been activated, press Enter.
3. In the window that prompts you to use core pointer mode, use the arrow keys to highlight Cancel, then press Enter.
4. To set user preferences, click GOK and select Preferences.
5. Configure Dwell Selection or Direct Selection.
 - To configure Dwell Selection, follow these steps:
 - a. Click the Access Methods tab.
 - b. Choose Dwell Selection from the Method drop-down menu.
 - c. Click the Actions tab and perform the following:
 - Choose Dwell from the Name drop-down menu.
 - Check that Activate on Dwell is selected for Behavior.
 - Check that Other input device is selected for Event Source.
 - d. Click Apply.
 - e. In the Actions tab, perform the following:
 - Choose Mouse Pointer from the Name drop-down menu.
 - Check that Activate on Enter is selected for Behavior.
 - f. Click Apply, then click OK.
 - g. Exit the GOK window.
 - h. Log out and log in again.
 - To configure Direct Selection, follow these steps:
 - a. Click the Access Methods tab.
 - b. Choose Direct Selection from the Method drop-down menu.

- c. From the Activate drop-down menu, choose Switch1 to use mouse button 1 on the second mouse.
- d. Click Apply, then click OK.
- e. Exit the GOK window.
- f. Log out and log in again.

x86: GNOME Applications Fail With dtremote (6278039)

GNOME applications do not start if you log in remotely and enable accessibility in gnome-at-properties. If you attempt to start a GNOME application, the following error message is displayed:

```
** ERROR **: Accessibility app error:
exception during registry activation from id:
IDL:Bonobo/GeneralError:1.0
aborting...
```

Workaround: None. Do not enable accessibility when you log in by using dtremote.

To revert to the default desktop settings in which accessibility is disabled, close the GNOME session. Issue the following command:

```
% gnome-cleanup
```

Full-Screen Magnification and Keyboard Accessibility Features Not Working (6273030)

On your Java Desktop System software, you cannot set up the following:

- Full-screen magnification
- Keyboard accessibility features

Workaround: Perform the following steps:

1. Open the `/etc/X11/gdm/gdm.conf` file.
2. Depending on your system's platform, perform the following:
 - On SPARC based systems:
 - a. Look for the line in the file that begins as follows:


```
command=/usr/openwin/bin/Xsun
```
 - b. Append the following modification to the line:

```
+kb +accessx -dev framebuffer1 -dev  
framebuffer2
```

For example:

```
+kb +accessx -dev /dev/fbs/pfb1 -dev /dev/fbs/pfb0
```

- On x86 based systems:
 - a. Look for the line in the file that begins as follows:

```
command=/usr/X11R6/bin/Xorg
```

- b. Append the following modification to the line:

```
+kb +accessx
```

x86: kdmconfig Command Does Not Create System Identification Configuration File for Xorg X Server (6217442)

If you use the JumpStart installation method, the process might use a system identification configuration (`sysidcfg`) file. This file is used to generate a specific Xsun configuration file for a system. The Xsun configuration portion of a `sysidcfg` file is created by the command `kdmconfig -d filename`. However, on systems that use the default Xorg server, the command does not create a file with any Xorg configuration information. Consequently, you cannot use the JumpStart method on these systems without some additional preparatory steps.

Workaround: Before using the JumpStart installation method on a system that uses the Xorg server, perform the following steps.

1. Prepare a specific `xorg.conf` file to be used on the system. Store this file in the JumpStart directory of the JumpStart server.

For instructions to create an `xorg.conf` file and to access Xorg information, see [“x86: Program That Configures Keyboard, Display, and Mouse Not Working for X Server \(6178669\)” on page 80](#).

2. Create a finish script that copies the `xorg.conf` file to the `/etc/X11` directory in the system that you want to install. For example, the script might include the following line:

```
cp ${SI_CONFIG_DIR}/xorg.conf /etc/X11/Xorg.conf
```

3. In the custom JumpStart rules file, include the finish script in the rules entry for systems of the type that you want to install.
4. Perform the custom JumpStart installation.

For instructions about how to perform a custom JumpStart installation, see the [Solaris 10 6/06 Installation Guide: Custom JumpStart and Advanced Installations](#). Chapter 4 includes information about the JumpStart rules file, while Chapter 5 contains a section about finish scripts.

Desktop Icons Invisible on Second Desktop System (6211279)

A problem occurs if you configure the Magnifier with two virtual or physical video devices in the following manner:

- The Magnifier's source set is :0.1.
- The Magnifier's target set is :0.0.

In this configuration, no icons appear on the screen of the second desktop system.

Workaround: None.

x86: kdmconfig Instructions to Configure Xorg X Server Are Incomplete (6205881)

Instructions that are provided in the `kdmconfig` program to configure the Xorg server are incomplete. The program lists basic instructions to generate an `xorg.conf` file. However, some relevant information is unavailable. For example, options in the `xorg.conf` file can be overridden in several places:

- Command-line options
- Information that is detected by the Xorg server when the server starts
- The startup scripts for the Xorg server, which might include passing overriding arguments

Thus, for more information about Xorg configuration, refer to the following sources:

- Xorg(1x) man page in the `/usr/X11/man` directory
- Man pages for the desktop systems that use the X server, such as the following:
 - `dtlogin(1X)` in the `/usr/dt/man` directory
 - `gdm(1)` in the `/usr/share/man` directory

If these directories are not in your man path, use one of these options:

- Add the directory to the `MANPATH` environment variable setting.
- Use the `-M` directory option of the `man` command.

Some scripts that start the Xorg server use `smf(5)` repository properties. In particular, the FMRI `svc:/applications/x11/x11-server` is used for storing X server properties. The following properties are relevant to the Xorg server:

- `options/xserver`
- `options/default_depth`
- `options/server_args`

You can set and retrieve these properties by becoming superuser and using the `svccfg` command, as shown in the following example:

```
# svccfg
svc:> select application/x11/x11-server
svc:/application/x11/x11-server> listprop options/default_depth
options/default_depth integer 24

svc:/application/x11/x11-server> setprop options/default_depth = 8
svc:/application/x11/x11-server> listprop options/default_depth
options/default_depth integer 8

svc:/application/x11/x11-server> end
#
```

x86: Program That Configures Keyboard, Display, and Mouse Not Working for X Server (6178669)

In this current Solaris 10 release, the default X server has changed from Xsun to Xorg. The program that configures keyboard, display, and mouse (`kdmconfig`) applies only to the Xsun server. The program has no effect on Xorg server configuration. Consequently, you cannot use `kdmconfig` to configure the Xorg server. While `kdmconfig` allows you to select which server to use, `kdmconfig` only configures the Xsun server.

Workaround: To configure the Xorg server, perform the following steps:

1. Create an `xorg.conf` file with one of these commands:
 - `/usr/X11/bin/Xorg -configure`
 - `/usr/X11/bin/xorgconfig`
 - `/usr/X11/bin/xorgcfg`
2. Edit the resultant `xorg.conf` file with the necessary changes.
3. Move the `xorg.conf` file to `/etc/X11/xorg.conf`.

For more details about Xorg configuration, refer to the Xorg man pages in `/usr/X11/man`. This directory is not in the default man page path. To view these man pages, use one of the following options:

- Add the path to the settings of the environment variable `MANPATH`.
- Use the syntax `man -M /usr/X11/man`.

Note – Xorg command line options can override `xorg.conf` settings. See the man pages for more details about options to use with Xorg.

CDE Removable Media Auto Run Capability Removed (4634260)

The Removable Media auto run capability in the CDE desktop environment has been temporarily removed from the Solaris 10 software.

Workaround: To use the auto run function for a CD-ROM or another removable media volume, you must do one of the following:

- Run the `volstart` program from the top level of the removable media file system.
- Follow the instructions that are included with the CD for access from outside of CDE.

Solaris PDASync Cannot Delete Last Entry From the Desktop (4260435)

After you delete the last item from the desktop, the item is restored from the handheld device to the desktop when you synchronize your handheld device. Examples of items that you might delete, and then have restored, are the last appointment in your Calendar or the last address in the Address Manager.

Workaround: Manually delete the last entry from the handheld device prior to synchronization.

Solaris PDASync Does Not Support Data Exchange With the Multibyte Internationalized PDA Device (4263814)

If you exchange multibyte data between a PDA device and Solaris CDE, the data might be corrupted in both environments.

Workaround: Back up your data on your personal computer with the PDA backup utility before you run the Solaris PDASync application. If you accidentally exchange multibyte data and corrupt that data, restore your data from the backup.

Documentation DVD

The following Documentation DVD bugs apply to the Solaris 10 release.

SUNWsdocs Package Needed to Remove Other Documentation Packages

If you remove the SUNWsdocs package, then try to remove other documentation packages, the removal fails. This problem occurs because the SUNWsdocs package is installed with any collection and provides the browser entry point.

Workaround: If you removed the SUNWsdocs package, reinstall the SUNWsdocs package from the documentation media and then remove the other documentation packages.

European Locale PDF Documents Available Only Through C Locale (4674475)

On systems that are running the current Solaris 10 release, PDF documents on the Solaris 10 Documentation DVD are not accessible in the following European locales:

- de (German)
- es (Spanish)
- fr (French)
- it (Italian)
- sv (Swedish)

Workaround: Choose one of the following workarounds.

- On x86 based platforms, set the environment variable LC_ALL to C `acroread`. For example, in the C shell, type the following command in a terminal window:

% `env LC_ALL=C acroread`
- On SPARC based systems, upgrade to Adobe Acrobat Reader 5.0 or a later version.

File Systems

The following file system bugs apply to the Solaris 10 release.

ZFS and UNIX/POSIX Compliance Issues

ZFS is designed to be a POSIX compliant file system and in most situations, ZFS is POSIX compliant. However, two edge case conditions exist when ZFS does not meet the POSIX compliance tests:

1. Updating ZFS files system capacity statistics.
2. Modifying existing data with a 100 percent full file system.

Related CRs:

- 6362314
- 6362156
- 6361650
- 6343113
- 6343039

Adding ZFS Patch to a Solaris 10 6/06 System Causes Spurious Warning Messages (6429860)

Adding ZFS patches to a Solaris 10 6/06 system causes spurious warning messages from the patchadd command because the ZFS packages are being added to the system for the first time. The following error message is displayed:

```
The following requested patches have packages not installed on the system:  
Package SUNWzfskr from directory SUNWzfskr in patch 122641-03  
is not installed on the system.
```

```
Changes for package SUNWzfskr will not be applied to the system.
```

Workaround:

Ignore the spurious messages from the patchadd command.

ufsrestore Does Not Use acl_set () For Setting ACLs (6421216)

The ufsrestore utility generates errors if a UFS archive with POSIX-draft ACLs is restored in a ZFS file system. The files are restored correctly, but the ACL information is ignored.

During the ufsrestore operation, the following error message is generated:

```
setacl failed: Invalid argument
```

Workaround:

Use any of the following ACL-aware commands to transfer UFS files with ACLs to a ZFS file system:

- `cp`
- `mv`
- `tar`
- `cpio`
- `rcp`

The POSIX-draft ACLs are translated into the equivalent NFSv4-style ACLs.

fdisk -E Can Sweep Disk Used by ZFS Without Warning (6412771)

If you use the `fdisk -E` command to modify a disk that is used by a ZFS storage pool, the pool becomes unusable and might cause an I/O failure or system panic.

Workaround:

Do not use the `fdisk` command to modify a disk that is used by a ZFS storage pool. If you need to access a disk that is used by a ZFS storage pool, use the `format` utility. In general, disks that are in use by file systems should not be modified.

x86: BIOS Hangs on Reboot After Using ZFS on Sun Ultra 20 or Sun Fire X2100 (6363449)

A Sun Ultra 20 workstation or Sun Fire X2100 server might hang on reboot if disks connected these systems to contain a ZFS storage pool.

BIOS versions that might exhibit this problem are:

- Sun Ultra 20 workstations with a BIOS version lower than 2.2.3
- Sun Fire X2100 servers with a BIOS version lower than 1.1.1

Workaround:

1. Disconnect the disks that are used by ZFS before rebooting the system until the minimum BIOS level that supports ZFS on these systems can be installed.
2. From the release 1.4 Supplemental CD, install the minimum supported BIOS version to support ZFS.

The supported BIOS versions are:

- BIOS version 2.2.3 for Sun Ultra 20 workstations.
- BIOS version 1.1.1 for Sun Fire X2100 servers.

You can also download the supplemental CD image for release 1.4 from the following locations:

- Ultra 20: <http://www.sun.com/desktop/workstation/ultra20/downloads.html>
- Sun Fire X2100: <http://www.sun.com/servers/entry/x2100/downloads.jsp>

ZFS and Third-Party Backup Product Issues

The following are the issues with the Veritas NetBackup and Sun StorEdge Enterprise Backup Software (EMC and Legato NetWorker) products.

Veritas NetBackup Does Not Back Up and Preserve Files With ZFS/NFSv4 ACLs (6352899)

The Veritas NetBackup product can be used to back up ZFS files, and this configuration is supported. However, this product does not currently support backing up or restoring NFSv4-style ACL information from ZFS files. Traditional permission bits and other file attributes are correctly backed up and restored.

If a user tries to back up or restore ZFS files, the NFSv4-style ACL information from ZFS files is silently dropped. There is no error message indicating that the ACL information from ZFS files has been dropped.

Support for ZFS/NFSv4 ACLs is under development and is expected to be available in the next Veritas NetBackup release.

Workaround 1:

As of the Solaris 10 06/06 release, both the `tar` and `cpio` commands correctly handle ZFS files with NFSv4-style ACLs.

Use the `tar` command with the `-p` option or the `cpio` command with the `-P` option to write the ZFS files to a file. Then, use the Veritas NetBackup to back up the `tar` or `cpio` archive.

Workaround 2:

As an alternative to using Veritas NetBackup, use the ZFS `send` and `receive` commands to back up ZFS files. These commands correctly handle all attributes of ZFS files.

Legato Networker Needs to Support ZFS/NFSv4 ACLs (6349974)

Currently, the Sun StorEdge Enterprise Backup Software product cannot be used to back up or restore ZFS files.

If a user tries to back up or restore ZFS files, the following error message is displayed:

```
save: Unable to read ACL information for '/path': Operation not applicable
```

The support for ZFS/NFSv4 ACLs is expected to be available in the upcoming Sun StorEdge EBS 7.3 Service Update 1 release.

Workaround:

1. Mount the ZFS file system by using NFSv4 on another system.
2. Back up or restore the ZFS files from the NFSv4-mounted directory.

ZFS GUI Should Check For `/usr/lib/embedded_su` at the Beginning of Each Wizard (6326334)

If you add the `SUNWzfs` package from a Solaris 10 6/06 release to a system that runs a pre-Solaris 10 6/06 release, which does not have the `embedded_su` patch, the ZFS Administration application wizards are not fully functional.

If you attempt to run the ZFS Administration application on a system without the `embedded_su` patch, you will only be able to browse your ZFS configuration. The following error message is displayed:

```
/usr/lib/embedded_su: not found
```

Workaround:

Add the `embedded_su` patch (119574-02) to the system that runs a pre-Solaris 10 6/06 release.

du Reports Wrong Size Information on RAID-Z (6288488)

For a RAID-Z virtual device, the following commands report inflated “space used” and “space available” size information:

- `du`
- `df`
- `zfs list`

The reported space information includes the space used to store the parity data.

Fails to Sync File System on Panic (6250422)

If a host panics with file system I/O occurring to a target, which is connected by using the Solaris iSCSI software initiator, the I/O might not be able to flush or sync to the target device. This inability to flush or sync might cause file system corruption. No error message is displayed.

Workaround:

Use the journaling file system like UFS. Starting with Solaris 10, UFS logging is enabled by default. For more information about UFS, see [“What’s New in File Systems?” in *System Administration Guide: Devices and File Systems*](#).

Need Itinerary so That Interrupted scrub or resilver Doesn't Have to Restart (2136811)

If a ZFS snapshot is created while a data scrub or resilver operation is in progress, the scrub or resilver operation will restart from the beginning. If snapshots are taken frequently, the scrub or resilver operation might never complete.

Workaround:

Do not take snapshots while a scrub or resilver operation is in progress.

Upgrading From Some Solaris Express or Solaris 10 Releases Requires Remounting of File Systems

After you upgrade an NFSv4 server from 6/05 to Solaris Express 7/05 or later (including all Solaris 10 updates), your programs might encounter EACCES errors. Furthermore, directories might erroneously appear to be empty.

To prevent these errors, unmount and then remount the client file systems. In case unmounting fails, you might need to forcibly unmount the file system by using `umount -f`. Alternatively, you can also reboot the client.

NFSv4 Access Control List Functions Might Work Incorrectly

NFSv4 Access Control List (ACL) functions might work improperly if clients and servers in the network are installed with different previous Solaris 10 releases. The affected ACL functions and command-line utilities that use these functions are the following:

- `acl()`

- `facl()`
- `getfacl`
- `setfacl`

For more information about these functions and utilities, see their respective man pages.

For example, errors might be observed in a network that includes the following configuration:

- A client that is running Solaris 10 Beta software
- A server that is running Solaris 10 software

The following table illustrates the results of the ACL functions in client-server configurations with different Solaris 10 releases.

Operation	Client S10 OS	Server S10 OS	Result
get ACL	S10 Beta	S10 OS	fabricated ACL *
get ACL	S10 OS	S10 Beta	works ok
set ACL	S10 Beta	S10 OS	works ok
set ACL	S10 OS	S10 Beta	Error: EOPNOTSUP

Workaround: For the NFSv4 ACL functionality to work properly, perform a full installation of the Solaris 10 OS on both the server and the client.

Access Problems Between Solaris NFSv4 Clients and NFSv4 Servers

In the current Solaris 10 version, Solaris implementation of NFSv4 Access Control Lists (ACL) is now compliant with RFC 3530 specifications. However, errors occur for NFSv4 clients that use the Solaris 10 Beta 2 or Beta 1 versions. These clients cannot create files in the NFSv4 servers that are using the current Solaris 10 release. The following error message is displayed:

NFS getacl failed for *server_name*: error 9 (RPC: Program/version mismatch)

Workaround: None.

Using mkfs Command to Create File System Might Fail on Very Large Disks (6352813)

The `mkfs` command might be unable to create a file system on disks with a certain disk geometry and whose sizes are greater than 8 Gbytes. The derived cylinder group size is too large for the 1-Kbyte fragment. The large size of the cylinder group means that the excess metadata cannot be accommodated in a block.

The following error message is displayed:

```
With 15625 sectors per cylinder, minimum cylinders
per group is 16. This requires the fragment size to be
changed from 1024 to 4096.
Please re-run mkfs with corrected parameters.
```

Workaround: Use the `newfs` command instead. Or, assign a larger fragment size, such as 4096, when you use the `mkfs` command.

File System Creation Might Fail on Small Slices (6346510)

Creating a UFS file system with the `newfs` command might fail under the following conditions:

- The size of the slice is small, approximately less than 4 Mbytes.
- The size of the disk exceeds 8 Gbytes.

The error is caused by the large-size requirement of the file system for metadata. The following warning message is displayed:

```
Warning: inode blocks/cyl group (295) >= data blocks (294) in last
        cylinder group. This implies 4712 sector(s) cannot be allocated.
/dev/rdisk/c0t0d0s6:      0 sectors in 0 cylinders of 48 tracks, 128 sectors
        0.0MB in 0 cyl groups (13 c/g, 39.00MB/g, 18624 i/g)
super-block backups (for fsck -F ufs -o b=#) at:
#
```

Workaround: As superuser, perform one of the following workarounds:

- **Workaround 1:** Specify the number of tracks when you use the `newfs` command. Follow these steps.

1. Use the `format` command to find out the number of tracks to assign. For example:

```
# format

Searching for disks...done
AVAILABLE DISK SELECTIONS:
    0. c0t0d0 <SUN18G cyl 7506 alt 2 hd 19 sec 248>
       /pci@1f,4000/scsi@3/sd@0,0
Specify disk (enter its number):
```

In the example, the number of tracks is 19.

2. Assign the number to the file system that you create with the `newfs` command. For example:

```
# newfs -v -t 19 /dev/dsk/c0t0d0s6

newfs: construct a new file system /dev/dsk/c0t0d0s6: (y/n)? y
mkfs -F ufs /dev/dsk/c0t0d0s6 4712 -1 19 8192 1024 16 10 167 2048
t 0 -1 8 128 n
mkfs: bad value for nsect: -1 must be between 1 and 32768
mkfs: nsect reset to default 32
Warning: 152 sector(s) in last cylinder unallocated
/dev/dsk/c0t0d0s6: 4712 sectors in 8 cylinders of 19 tracks,
32 sectors
2.3MB in 1 cyl groups (16 c/g, 4.75MB/g, 2304 i/g)
super-block backups (for fsck -F ufs -o b=#) at:
32,
#
```

- **Workaround 2:** Specify the number of bytes per inode (nbpi) in the `newfs` command to reduce the inode density in the file system. For example:

```
# newfs -i 4096 /dev/dsk/c0t0d0s6
newfs: construct a new file system /dev/dsk/c0t0d0s6: (y/n)? y
Warning: 1432 sector(s) in last cylinder unallocated
/dev/dsk/c0t0d0s6: 4712 sectors in 1 cylinders of 48 tracks,
128 sectors
2.3MB in 1 cyl groups (16 c/g, 48.00MB/g, 11648 i/g)
super-block backups (for fsck -F ufs -o b=#) at:
32,
#
```

Undetected Write Errors in NFSv4 Client With Full File System (6346204)

An NFSv4 client whose file system is near full capacity mishandles error codes that are returned from the server. The client receives the correct (NFS4ERR_NOSPC) error code from the server. However, the client fails to transmit the (ENOSPC) error code to the application. The application does not receive the error notifications through the normal system functions such as `write()`, `close()`, or `fsync()`. Consequently, the application's continuous attempts to write or modify data can cause data loss or corruption.

The following error message is recorded in `/var/adm/messages`:

```
nfs: [ID 174370 kern.notice] NFS write error on host hostname
```

```

:
No space left on device.
nfs: [ID 942943 kern.notice] File: userid=uid, groupid=gid
nfs: [ID 983240 kern.notice] User: userid=uid, groupid=gid
nfs: [ID 702911 kern.notice] (file handle: 86007000 2000000 a000000 6000000 32362e48 a000000 2000000 5c8fa257)

```

Workaround: Do not perform work on client systems whose file systems are near full capacity.

System Crash Dump Fails on Devices Greater Than 1 TByte (6214480)

The system cannot generate a dump on a partition that is equal to or greater than 1 Tbyte in size. If such a device is on a system, the following might occur after the system boots subsequent to a system panic:

- The system does not save the dump.
- The following message is displayed:


```
0% done: 0 pages dumped, compression ratio 0.00, dump failed: error 6
```

Workaround: Configure the size of your system's dump device to less than 1 Tbyte.

Using smoservice Command to Add OS Services Results in Insufficient Disk Space Message (5073840)

If you use the `smoservice` command to add OS services to a UFS file system, a message that there is insufficient disk space available is displayed. This error is specific to UFS file systems on EFI-labeled disks.

Workaround: Complete the following workaround.

1. Apply the SMI VTOC disk label.
2. Re-create the file system.
3. Rerun the `smoservice` command.

Hardware–Related Issue and Bugs

The following hardware–related issue and bugs apply to the Solaris 10 release.

Registration Tool Prevents Power Management on Some Framebuffers (6321362)

If the background processes for the registration tool are left running, the Elite3D and Creator3D framebuffers stop power management. This failure reduces the power savings when the system is in a power-managed state. Under certain conditions, sys-suspend might also hang. No error message is displayed. The system might hang during a system suspend or resume operation.

Workaround:

Run the following command approximately 60 seconds after each login:

```
# pkill -f basicreg.jar  
# pkill -f swupna.jar
```

SPARC: Sun Crypto Accelerator 4000 Board Versions 1.0 and 1.1 Not Supported in Solaris 10 OS

A new cryptographic framework is provided in Solaris 10 OS. However, versions 1.0 and 1.1 of the Sun Crypto Accelerator 4000 board's software and firmware do not utilize this framework. Consequently, these versions are not supported in the Solaris 10 OS.

The 2.0 release uses the new framework. This release is available as a free upgrade to current Sun Crypto Accelerator 4000 users who plan to use Solaris 10 OS. Because the Sun Crypto Accelerator 4000 is an export-controlled product, you must contact Sun Enterprise Services or your local sales channel to obtain the free upgrade. Additional information is available on the Sun Crypto Accelerator 4000 web page at Sun's [products site](#).

Certain USB 2.0 Controllers Are Disabled

Support for certain USB 2.0 controllers has been disabled because of incompatibilities between these devices and the EHCI driver. The following message is displayed:

```
Due to recently discovered incompatibilities with this  
USB controller, USB2.x transfer support has been disabled.  
This device will continue to function as a USB1.x controller.  
If you are interested in enabling USB2.x support please refer
```

to the ehci(7D) man page.
Please refer to www.sun.com/io for Solaris Ready products
and to www.sun.com/bigadmin/hcl for additional compatible
USB products.

For the latest information about USB devices, see http://www.sun.com/io_technologies/USB-Faq.html.

Supported USB Devices and Corresponding Hub Configurations

This Solaris release supports both USB 1.1 and USB 2.0 devices. The following table is a summary of USB devices that work in specific configurations. Connection types can either be direct to the computer or through a USB hub. Note that USB 1.1 devices and hubs are low speed or full speed. USB 2.0 devices and hubs are high speed. For details about ports and speeds of operation, see the *System Administration Guide: Devices and File Systems*.

TABLE 2-1 USB Devices and Configurations

USB Devices	Connection Types
USB 2.0 storage devices	Direct, USB 1.1 hub, USB 2.0 hub
USB 1.1 devices except audio	Direct, USB 1.1 hub, USB 2.0 hub
USB 1.1 audio devices	Direct, USB 1.1 hub
USB 2.0 audio devices	Not supported

x86: Limitations Exist With Certain Device Drivers in Solaris 10 OS

The following list describes limitations with certain drivers and interfaces in this release of Solaris 10 for x86 platforms:

Checkpoint Resume	This functionality is turned off for all device types. In the <code>DDI_SUSPEND</code> code in your <code>detach()</code> function, you should return <code>DDI_FAILURE</code> .
Power Management	This functionality is unavailable to USB devices. Do not create power management components. Write your driver so that <code>pm_raise_power()</code> and <code>pm_lower_power()</code> are called only when power management components are created.

DVD-ROM/CD-ROM Drives on Headless Systems

Power management of interactive devices such as removable media is linked with power management of your monitor and the graphics card that drives your monitor. If your screen is active, devices such as the CD-ROM drive and diskette remain at full-power mode. These devices might switch to low-power mode on a system without a monitor. To restore power to the CD or diskette, type **volcheck** to obtain the latest status from each removable device.

Alternatively, you can disable power management on your system by using the Dtpower GUI. By disabling power management, these devices are constantly at full power.

x86: Manual Configuration Required to Specify Non-US English Keyboards

By default, the `kdmconfig` program specifies Generic US-English(104-Key) as the keyboard type that is connected to the system. If the system's keyboard is not a US-English keyboard, you must manually specify the keyboard type during installation. Otherwise, installation continues by using the default keyboard specification that is inconsistent with the system's actual keyboard type.

Workaround 1: If the system's keyboard is not a US-English keyboard, perform the following steps during installation:

1. When the Proposed Window System Configuration For Installation is displayed, press Esc.

Note – The information on the Proposed Window System Configuration For Installation, which includes the keyboard type, is displayed only for 30 seconds. If you want to change configuration settings, you must press Esc before the 30 seconds lapse. Otherwise, the installation continues by using the displayed settings.

2. Change the keyboard type to the type that corresponds to your system's keyboard.
3. Press Enter to accept the changes and continue with the installation.

Workaround 2: If you want to change the keyboard type in a system that is already running Solaris 10 OS, use the `kdmconfig` program. Choose the option that applies to the type of X server your system is running.

- If your system is running the Xsun server, follow these steps:
 1. Run `kdmconfig`.
 2. Use the Change Keyboard option to change the keyboard type.
 3. Save the configuration.

- If your system is running the default Xorg server, follow these steps:
 1. Run `kdmconfig`.
 2. Select the Xsun server.
 3. Use the Change Keyboard option to change the keyboard type.
 4. Save the configuration.
 5. Run `kdmconfig` again to switch to the Xorg server.

SPARC: Power Management in Sun Expert3D and Sun Elite3D Hardware Not Working Under Certain Circumstances (6321362)

Sun Expert3D or Sun Elite3D cards in Sun Blade 1000 or Sun Blade 2000 workstations normally switch to low-power mode after an idle period. However, if these cards are set as the primary head in the Xserver, power management does not work. The affected cards remain at full power and no power savings are realized. No error message is displayed.

Workaround: None.

SPARC: jfca Driver for Certain Host Bus Adapters That Are Connected to Tape Devices Might Cause Errors (6210240)

The `jfca` driver for the following host bus adapters (HBAs) might cause system panics or I/O failures when these HBAs are connected to tape devices:

- SG-PCI1FC-JF2
- SG-PCI2FC-JF2

The `jfca` driver for these HBAs is prone to race conditions when certain operations are being run, and thus causes the errors. The operations are the following:

- Link reset
- Loop reset
- Switch reset
- Repeated link failures

Error messages similar to the following examples might be displayed:

- I/O failure messages


```
jfca: [ID 277337 kern.info] jfca4: Sequencer-detected error. Recover immediately.
```

```
last message repeated 18376 times
jfca: [ID 716917 kern.notice] jfca4: ExgWarning: SendVerify(1): SHOULD
ABORT THE ORIG I/O PKG=30007520bd8!
scsi: [ID 107833 kern.warning] WARNING:
/pci@1e,600000/SUNW,jfca@3,1/fp@0,0/st@w2100001086108
628,1 (st3):
  SCSI transport failed: reason 'timeout': giving up
```

- System panic message

```
panic[cpu1]/thread=2a100497cc0:
BAD TRAP: type=31 rp=2a1004978d0 addr=a8 mmu_fsr=0 occurred in module
"jfca" due to a NULL pointer dereference
```

Workaround: Do not connect tape devices to either the SG-PCI1FC-JF2 or SG-PCI2FC-JF2 HBA.

Contention Exists Between Certain Devices That Share the Same Bus (6196994)

A bus contention occurs if Quad Fast-Ethernet (QFE) cards share the same bus with any of the following adapters:

- Sun GigaSwift adapter
- Sun Dual Gigabit Ethernet and Dual SCSI/P adapter
- Sun Quad Gigaswift Ethernet adapter

The infinite-burst parameter of the ce driver that is used by these adapters is enabled by default. Consequently, little or no bus time is available for the QFE ports that share the same bus.

Workaround: Do not place QFE cards on the same bus as the network adapters in the list.

hat_getkpfnum() DDI Function Is Obsolete (5046984)

The `hat_getkpfnum()` DDI function is obsolete. Developers should update their device drivers to not use the `hat_getkpfnum()` DDI interface. If drivers are using `hat_getkpfnum()`, warnings similar to the following example are displayed:

```
WARNING: Module mydrv is using the obsolete hat_getkpfnum(9F)
interface in a way that will not be supported in
a future release of Solaris. Please contact the
vendor that supplied the module for assistance,
or consult the Writing Device Drivers guide,
available from http://www.sun.com for migration
advice.
---
Callstack of bad caller:
  hat_getkpfnum_badcall+93
```



```

hat_getkpfnum+6e
mydrv_setup_tx_ring+2d
mydrv_do_attach+84
mydrv_attach+242
devi_attach+6f
attach_node+62
i_ndi_config_node+82
i_ddi_attachchild+4a
devi_attach_node+4b
devi_attach_children+57
config_immediate_children+6e
devi_config_common+77
mt_config_thread+8b

```

To determine if a driver is using `hat_getkpfnum()`, consult the driver source code, or examine the driver's symbols by using `nm()`. Using the driver `mydrv` as an example, type the following syntax:

```
% nm /usr/kernel/drv/mydrv | grep hat_getkpfnum
```

For guidance about migrating drivers away from `hat_getkpfnum()`, refer to [Appendix B, “Summary of Solaris DDI/DKI Services,”](#) in *Writing Device Drivers*.

Some Systems With USB 2.0 Hardware Might Hang or Panic (5030842)

Systems with certain USB 2.0 hardware might frequently hang or panic when running this Solaris release. These problems are associated with USB 2.0 devices that are not based on the NEC chip set. When these problems occur, the following error message about the Enhanced Host Controller Interface (EHCI) is displayed:

```

WARNING: /pci@0,0/pci8086,244e@1e/pci925,1234@2,2 (ehci1):
This controller is not supported.
Please refer to www.sun.com/io for Solaris Ready products
and to www.sun.com/bidadmin/hcl for additional compatible USB products

```

Workaround: Depending on your system's hardware configuration, choose one of the following options:

- Replace the USB 2.0 host controller hardware with hardware that is based on the NEC chip set. USB 2.0 hardware that is based on the NEC chip set is known to work well with the Solaris OS.
- On systems whose USB 2.0 host controller hardware is built into the motherboard and that have spare PCI slots, perform the following steps:
 1. Add a PCI-based USB 2.0 card that is based on the NEC chip.
 2. Become superuser.

3. Disable USB 2.0 on the motherboard and enable USB 2.0 support only through the PCI card. Issue the following commands:

```
# update_drv -d -i '"pciclass,0c0320"' usba10_ehci
# update_drv -a -i '"pci1033,e0"' usba10_ehci
# reboot
```

4. For faster operation, connect your USB 2.0 devices to the card's ports instead of the original ports on the motherboard.

- Even if you cannot add new USB hardware to your system, you can still disable your system's EHCI by performing the following steps:

1. Become superuser.
2. Issue the following commands:

```
# update_drv -d -i '"pciclass,0c0320"' usba10_ehci
# reboot
```

Note – USB 2.0 ports are operated by two companion hardware pieces:

- EHCI for the high-speed piece
- Either Open Host Controller Interface (OHCI) or Universal Host Controller Interface (UHCI) for the low-speed and full-speed piece

On x86 based systems, drivers for both OHCI and UHCI exist. On SPARC based systems, only OHCI USB 1.1 host controller hardware is supported. Therefore, only USB hardware with OHCI companion controllers continue to work on SPARC systems whose companion EHCI controller is disabled. Ports of the USB hardware remain operational even with EHCI disabled, provided that your system has the proper OHCI or UHCI drivers. USB 2.0 devices that are connected to these ports run only as fast as a USB 1.1 device.

To verify whether EHCI and OHCI host controllers exist on your SPARC based systems, type:

```
# prtconf -D
```

Check the output for EHCI entries next to one or more OHCI entries, similar to the following example:

```
pci, instance #0 (driver name: pci_pci)
usb, instance #0 (driver name: usba10_ohci)
usb, instance #1 (driver name: usba10_ohci)
usb, instance #0 (driver name: usba10_ehci)
```

x86: Using Two Adaptec SCSI Card 39320D Cards on a Sun Fire V65x Server Might Cause the System to Panic (5001908)

Using two Adaptec SCSI Card 39320D cards on a Sun Fire V65x server might cause that system to panic. The panic occurs during initial reboot after you have installed Solaris 10 software. The following error message is displayed:

```
Initializing system Please wait...
1 run-time error M6111: MATH
  - floating-point error: stack underflow
```

Workaround: Remove the second Adaptec card.

x86: Soft System-Shutdown is Not Supported in Solaris OS on x86 (4873161, 5043369)

The Solaris OS on x86 does not support a soft system-shutdown that is initiated by a command. A command to shut down simulates pressing the power button to turn the power off. On x86-based systems, issuing this command while the Solaris OS is running turns the power off immediately without properly shutting down the operating system. The improper shutdown process might corrupt the file system.

Workaround: Before powering off, shut down the operating system first. Perform the following steps:

1. Become superuser.
2. Use one of the available commands to shut down the Solaris OS properly, such as `init`, `halt`, or `shutdown`. For example:


```
# shutdown
```
3. After the operating system shuts down completely, you can switch off the power by one of two ways:
 - If the system supports soft system-shutdown, issue the command to turn off the power.
 - If the system does not support soft system-shutdown, turn off the power manually by using the power switch.

For more information about the commands to shut down the operating system, see the man pages for the [init\(1M\)](#), [halt\(1M\)](#), and [shutdown\(1M\)](#) commands. For information about turning off your system's power, refer to the system's manuals.

Some DVD and CD-ROM Drives Fail to Boot Solaris (4397457)

The default timeout value for the SCSI portion of the SunSwift PCI Ethernet/SCSI host adapter (X1032A) card does not meet the timeout requirements of Sun's SCSI DVD-ROM drive (X6168A). With marginal media, the DVD-ROM occasionally experiences timeout errors. The only exceptions are Sun Fire 6800, 4810, 4800, and 3800 systems. These systems overwrite the SCSI timeout value by means of OpenBoot PROM.

Workaround: For other platforms, use the on-board SCSI interfaces or DVD-ROM compatible SCSI adapters, such as the following examples:

- X1018A (SBUS: F501-2739-xx)
- X6540A (PCI: F375-0005-xx)

iPlanet Directory Server 5.1 Issues

This section provides important information for users of iPlanet Directory Server 5.1 who are upgrading to the new Solaris 10 release.

Installing Directory Server 5.1

Sun Java System Directory Server 5 2005Q1 replaces iPlanet Directory Server 5.1 that was integrated in the Solaris 9 Operating System. In Solaris 10 OS, this new Directory Server can be installed as part of the Sun Java Enterprise System.

Note – For information about the Sun Java System Directory Server 5 2005Q1, refer to the documentation for the Sun Java System at <http://docs.sun.com>.

Solaris 10 OS continues to support Directory Server 5.1. You might need to install Directory Server 5.1 under the following circumstances:

- You need to recover Directory Server 5.1 data.
- You want to migrate your data to Directory Server 5 2005Q1.

In Solaris 10 release, you install the Directory Server 5.1 manually. Follow these steps:

1. Insert the Solaris 10 Software - 4 CD into your CD-ROM drive.
2. Become superuser.
3. In a terminal window, install the Directory Server.

```
# cd /cdrom/cdrom0/Solaris_10/Product/
# pkgadd -d . IPLTnls IPLTnspr IPLTnss IPLTjss IPLTpldap \
IPLTdsr IPLTdsu IPLTadmin IPLTcons IPLTadcon IPLTdscon \
IPLTadman IPLTdsman
```

To install Simplified Chinese localization packages, issue the following additional command:

```
# pkgadd -d . IPLTcdsu IPLTcadmin IPLTccons IPLTcadcon \
IPLTcdscon IPLTcadman IPLTcdsman
```

To install Japanese localization packages, issue the following additional command:

```
# pkgadd -d . IPLTjdsu IPLTjadmin IPLTjcons IPLTjadcon \
IPLTjdscon IPLTjadman IPLTjdsman
```

4. After installation is complete, configure iPlanet Directory Server 5.1. Refer to [Chapter 11](#), “Sun ONE Directory Server Configuration,” in *System Administration Guide: Naming and Directory Services (DNS, NIS, and LDAP)*.

Migrating to the Sun Java System Directory Server 5 2005Q1



Caution – The database formats of the two Directory Server versions are incompatible. Thus, if you are a Directory Server 5.1 user, Sun recommends that you migrate your database to a database that is formatted for the Sun Java System Directory Server 5 2005Q1.

To perform a migration, both versions of the Directory Server must exist in the system that has been upgraded to the Solaris 10 OS. If you are a DS 5.1 user, but are using the compressed archive (.tar.gz) delivery format, you can skip immediately to the migration instructions in Step 2.

1. On a terminal window, check whether iPlanet Directory Server 5.1 packages are present in your system.

```
$ pkginfo | grep IPLT
```

If the following packages appear as output, then you can go to Step 2 to proceed with the migration. The output indicates that the iPlanet Directory Server 5.1 packages are in the system.

```
system IPLTadcon Administration Server Console
system IPLTadman Administration Server Documentation
system IPLTadmin Administration Server
system IPLTcons Console Client Base
system IPLTdscon Directory Server Console
system IPLTdsman Directory Server Documentation
system IPLTdsr Directory Server (root)
```

```
system IPLTdsu    Directory Server (usr)
system IPLTjss    Network Security Services for Java
system IPLTnls    Nationalization Languages and Localization Support
system IPLTnspr    Portable Runtime Interface
system IPLTnss    Network Security Services
system IPLTpldap  PerLDAP
$
```

If the packages do not exist, then install the iPlanet Directory Server 5.1 packages first. Refer to the 4-step procedure in the preceding section “[Installing Directory Server 5.1](#)” on [page 100](#). After installation is complete, go to Step 2 to proceed with the migration.

2. Migrate your iPlanet Directory Server 5.1 database to the current version. For instructions, refer to the documentation collection for the Sun Java System Directory Server at http://docs.sun.com/coll/DirectoryServer_05q1.

After migrating your data, make sure you continue to back up directory data in the same way as you backed up directory data before migration. Future disaster recovery might require the migrated database.

Issues While Running Debugger

The following issues involve the kernel debugger.

SPARC: Problems With dbx Debugger While Processing 64-bit Objects (6347707)

The dbx debugger terminates with a memory access failure while processing certain 64-bit executable files and libraries. However, the problem does not affect the normal use of these 64-bit objects. An error message similar to the following example is displayed:

```
dbx: internal error: signal SIGBUS (invalid address alignment)
```

Workaround: Use either the mdb debugger or the Solaris Dynamic Tracing facility instead. These alternatives can diagnose processes that use the 64-bit objects.

System Might Loop When Master CPU Is Changed (4405263)

A system that is running the Solaris kernel debugger to debug a live system might loop with incomplete error messages. This loop occurs when the OpenBoot PROM's master CPU is

changed. A system reset restores the system to operation. However, the traces of the original failure are lost. Consequently, you cannot perform a diagnosis of the fatal reset.

Workaround: When the system is at the PROM level, the OpenBoot's ok prompt is displayed. In a system with multiple CPUs, the ok prompt is preceded by a number that is enclosed in curly braces. This number indicates the active CPU in the system. To run your debug session while at the PROM level, use the following steps.

1. Raise pil to f by typing the following command:

```
{0} ok h# 0f pil!
```

2. Use the switch-cpu command to selectively switch from the currently active CPU to different CPUs. For example, to switch from CPU #0 to CPU #1, type the following command:

```
(0) ok 1 switch-cpu
```

The ok prompt is now preceded by the number of the CPU to which you switched.

```
{1} ok
```

3. Run your debugger.
4. At the end of your debugger session, issue a reset -all command to return the system to normal use.

Note – Make sure that you upgrade the system to the latest version of the OpenBoot PROM.

Localization Issues

This section describes localization issues that apply to Solaris 10 OS.

Deadkeys Not Working With GTK Applications on Xsun in EMEA UTF-8 Locales (6429880)

When logging to European UTF-8 locales, deadkeys are not working with GTK (Gnome) applications on Xsun if the IM mode is not Latin. No error message is displayed.

Workaround:

Turn on Latin mode by pressing the Ctrl+Space, the default IM trigger key combination. To show input mode and to switch the input language on the Java Desktop System, add the Input Method Switcher applet on the JDS panel by clicking mouse button 3 on the panel and selecting **Add to Panel -> Utility -> InputMethod Switcher**.

L10N Messages Missing When Using localeadm Utility to Add Locales (6423974)

When the `Locale_config` configuration file is created using the DVD/net image, using the `Locale_config` file to add locales leaves many unlocalized messages on the Gnome Desktop. No error message is displayed.

Workaround 1:

Login as superuser and do the following:

1. Change to the location of the `localeadm` `Locale_config` file.

```
# cd /usr/sadm/lib/localeadm/
```

2. Revert to the existing `Locale_config` file bundled with the `localeadm` utility.

```
# mv Locale_config_S10.txt.old Locale_config_S10.txt
```

Workaround 2:

Re-create the `Locale_config` file by using the CD images.

IIIMF Packages Might Not be Installed (6388988)

Internet/Intranet Input Method Framework (IIIMF) packages required for input method in UTF-8 locales, might not be installed by your locale selection during Solaris install. No error message is displayed.

Workaround:

1. Check, if IIIMF packages are installed on the Solaris OS.

```
% pkginfo SUNWiimr SUNWiimu
```

2. Install IIIMF packages.

```
# pkgadd -d <package directory> SUNWiimr SUNWiimu
```

SPARC: Keycode 50 Does Not Work for European Keyboard Layouts (6387317)

Keycode 50 is not working for European keyboard layouts. This problem occurs with all European `*6.kt` keytable files. All keytables assign some symbols to keycode 50, but the key does not work. No error message is displayed.

Workaround:

Edit the *.kt files in the /usr/openwin/share/etc/keytables directory. Duplicate keycode 50 for keycode 49 in the affected *.kt file. For example, add the following entry for keycode 49 to the affected keytable file:

```
49 RN XK_numbersign XK_asciitilde
```

Several Arabic Fonts Do Not Work in GNOME (6384024)

In GNOME when you select certain Arabic fonts, the characters do not display. This problem appears when you select fonts for applications, the desktop, or the window title using the GNOME font properties menu. The affected fonts include:

- Akhbar MT (Regular, Bold)
- Shayyal MT (Regular, Bold)
- Naskh MT (Regular, Bold)

No error message is displayed.

Workaround:

Use any of the newly delivered Kacst family of fonts to display Arabic characters in GNOME applications.

Unable to Switch Input Language on Session-Saved Applications (6360759)

Multiple language input is supported in UTF-8 locales, but the language switch is not working with session-saved applications where mouse button 1 is clicked first after login. This problem occurs with the Java Desktop System (JDS). No error message is displayed.

Workaround:

Click mouse button 1 on the backgroundworkspace or Launch Menu before clicking any application.

Some Language Input Does Not Work Correctly on Non-U.S. Keyboard Layouts (6319383)

Localized keyboard layout based language inputs, such as Cyrillic and Arabic, are not working correctly with non-U.S. keyboard layouts. For example, if you are using French keyboard and switch to Arabic input then the typed output results are not based on Arabic Keyboard layout. For more information about input method, see Input Method Preference Editor and InputMethod Switcher Applet help. No error message is displayed.

Workaround 1:

Use XKB extension to switch keyboard layouts for Xorg server (x86 only). For example, add the following entry to the `xorg.conf` configuration file:

```
Section "InputDevice"
    Identifier "Keyboard1"
    Driver "Keyboard"

    Option "XkbModel" "pc105"
    Option "XkbLayout" "us,fr,ru"
    Option "XkbOptions" "grp:alt_shift_toggle"
EndSection
```

This configuration enables you to switch among U.S., French, and Russian keyboard layouts by pressing the Alt-Shift keys. For more information, see the `/usr/X11/share/doc/README.XKB-Config` file.

Workaround 2:

Use the `xorgcfg` utility to configure localized keyboard layouts (x86 only).

If a non-root user uses the `xorgcfg` utility, the configuration is not saved, but keyboard layout is changed for the current session.

Keyboard Shortcuts in Mozilla in ES Locale Are Unusual and Ambiguous (6288620)

The keyboard shortcuts in Mozilla 1.7 are unusual, especially in Spanish locale. For example, Ctrl-S is being used for copying as well as for saving. No error message is displayed.

Workaround:

Identify the shortcut keys assigned to user actions from menu in the product.

Login Screen Marks UTF-8 Locales as Recommended

On the Language menu of the login screen, the UTF-8 locales are labeled as a recommended option. For example, for Japanese locales, the screen would appear as follows:

```
ja_JP.eucJP ----- Japanese EUC
ja_JP.PCK ----- Japanese PCK
ja_JP.UTF-8 (Recommended) - Japanese UTF-8
```

Using UTF-8 locales is recommended to users of the Java Desktop System (JDS) because JDS uses UTF-8/Unicode as internal character encoding. This recommendation also applies to the announcement of future end-of-software support for non-UTF-8 locales. See [“Legacy or Traditional Non-UTF-8 Locales” on page 164](#).

When migrating to UTF-8 locales, the files affect the method that you use to import or export data.

Microsoft Office Files

Microsoft Office files are encoded in Unicode. StarOffice applications can read and write the Unicode encoded files.

HTML Files

HTML files authored using HTML editors such as Mozilla Composer, or HTML files saved by a web browser, usually contain a charset encoding tag. After exporting or importing, you can browse such HTML files with the Mozilla Navigator web browser, or edit the files with Mozilla Composer, according to the encoding tag in the HTML file.

Fixing Broken HTML File

Some HTML files might be displayed in garbage characters. This problem is typically due to the following reasons:

- The charset encoding tag is incorrect.
- The charset encoding tag is missing.

To find the charset encoding tag in the HTML file, perform the following actions:

1. Open the file with Mozilla.
2. Press Ctrl-i, or click View to open the View menu.
3. Click Page Info.

The charset information is in the bottom of the General tab, for example:

```
Content-Type text/html; charset=us-ascii
```

If the string `charset=us-ascii` does not match the actual encoding of the file, the file might appear broken. To edit the encodings of the HTML file, perform the following actions:

1. Open the file with Mozilla Composer.
2. Open the File menu.
3. Select Save as Charset.
4. Choose the correct encoding. Mozilla Composer automatically converts the encoding and the charset tag as appropriate.

Emails Saved As Portable Format

Modern mails are tagged with the MIME charset tag. The Email and Calendar application accepts MIME charset tags. You do not need to perform any encoding conversion.

Plain Text Files

Plain text files do not have a charset tag. If the files are not in UTF-8 encoding, encoding conversion is needed. For example, to convert a plain text file encoded in Traditional Chinese big5 to UTF-8, execute the following command:

```
iconv -f big5 -t UTF-8 inputfilename
```

```
> outputfilename
```

You can also use the File System Examiner for the encoding conversion.

You can use the Text Editor to read and write character encoding text automatically or by specifying an encoding explicitly when opening or saving a file.

To start Text Editor, click Launch, then choose Applications->Accessories->Text Editor.

File Names and Directory Names

If file names and directory names using multibyte characters are not in UTF-8 encoding, encoding conversion is needed. You can use File System Examiner to convert file and directory names and the contents of plain text files from legacy character encodings to UTF-8 encoding. Refer to the online Help for File System Examiner for more information.

To start File Systems Examiner, click Launch, then choose Applications->Utilities->File System Examiner.

When you access non-UTF-8 file or directory names on Microsoft Windows via SMB using File Manager, you can access the non-UTF-8 file or directory names without encoding conversion.

Launching Legacy Locale Applications

For applications that are not ready to migrate to Unicode UTF-8, you can create a launcher on a front panel to start the application in legacy locales. You can also launch the applications directly from the command line. Perform the following steps to create a launcher for an application.

1. Right-click on the panel where you want to place the launcher.
2. Choose Add to Panel->Launcher.
3. Use the following format to type the entry in the Command field in the Create Launcher dialog:

```
env LANG=locale LC_ALL=  
locale application name
```

For example, if you want to launch an application called `motif-app` from `/usr/dt/bin` in the Chinese Big5 locale, enter the following text in the Command field of the Create Launcher:

```
env LANG=zh_TW.BIG5 LC_ALL=zh_TW.BIG5 /usr/dt/bin/motif-app
```

4. Click OK to create the launcher on the panel.

When you need to run CLI (command line interface) applications which are specific to a legacy locale, open a Terminal window in the legacy locale first and then run the CLI applications in the same Terminal window. To open a Terminal window in a legacy locale, enter the following command:

```
eng LANG=locale LC_ALL=locale GNOME-TERMINAL --disable-factory.
```

Instead of opening a new Terminal window in a legacy locale, you can switch the locale setting from UTF-8 to a legacy locale in the current Terminal window by changing the encoding the Set Character Encoding menu in the Terminal window. Then you must also set the `LANG` and `LC_ALL` environment variables to the current shell.

Hardware for Estonian Keyboard Type 6, French Canadian Keyboard Type 6, and Polish Programmers Keyboard Type 5 Not Available

Software support for three additional keyboard layouts has been added to the Solaris OS: Estonian keyboard Type 6, French Canadian keyboard Type 6, and Polish programmers keyboard Type 5.

This software gives users in Estonia, Canada, and Poland greater flexibility for keyboard input by modifying standard U.S. keyboard layouts to their own language needs.

Currently, no hardware is available for the three additional keyboard layout types.

Workaround: To take advantage of this new keyboard software, modify the `/usr/openwin/share/etc/keytables/keytable.map` file in one of the following ways:

- For the Estonian Type 6 keyboard, make the following changes:
 1. Change the `US6.kt` entry to `Estonia6.kt` in the `/usr/openwin/share/etc/keytables/keytable.map` file. The modified entry should read as follows:

```
6                                0                Estonia6.kt
```
 2. Add the following entries to the `/usr/openwin/lib/locale/iso8859-15/Compose` file:

<scaron>	: "/xa8"	scaron
<scaron>	: "/xa6"	scaron
<scaron>	: "/270"	scaron
<scaron>	: "/264"	scaron

3. Reboot the system for the changes to take effect.
- For the French Canadian Type 6 keyboard, make the following changes:
 1. Change the `US6.kt` entry to `Canada6.kt` in the `/usr/openwin/share/etc/keytables/keytable.map` file. The modified entry should read as follows:

```
6                                0                Canada6.kt
```

2. Reboot the system for the changes to take effect.
- If you are using the existing Polish Type 5 keyboard layout, make the following changes:
 1. Change the `Poland5.kt` entry to `Poland5_pr.kt` in the `/usr/openwin/share/etc/keytables/keytable.map` file. The modified entry should read as follows:

```
4                                52                Poland5_pr.kt
```

Note – If you are using a keyboard with dip-switches, make sure the switches are set to the correct binary value for the Polish keytable entry (binary 52) before rebooting the system.

2. If you are using a standard U.S. Type 5 keyboard, change the `US5.kt` entry to `Poland5_pr.kt` in the `/usr/openwin/share/etc/keytables/keytable.map` file. The modified entry should read as follows:

```
4                                33                Poland5_pr.kt
```

3. Reboot the system for the changes to take effect.

Cannot Print Documents in Portable Document Format (6239307, 6218079)

On all locales, the Document Viewer cannot print localized files that are in Portable Document Format (PDF).

Workaround: Choose one of the following workarounds:

- On SPARC based systems, use the Acrobat Reader to print localized PDF files.
- On x86 based systems, use StarOffice to create and then print PDF files.

x86: Login Process Might Hang in Certain Asian Non-UTF-8 Locales (6215527)

On some x86 based systems, if you log in to certain Asian non-UTF-8 locales, the login process might hang. The following are examples of the locales where the error is observed:

- zh_CN.EUC
- zh_TW.BIG5
- ko_KR.EUC

Workaround: At the login window's Language menu, choose UTF-8 locales.

Special Keyboard Keys Do Not Work (5077631)

Special keys on the left of the keyboard do not work on European keyboard mappings. This problem affects all European locales.

Workaround: Use shortcut keys instead of the special keyboard keys. The following example lists shortcut keys and the corresponding functions:

- Ctrl-Z - Undo
- Ctrl-C - Copy
- Ctrl-V - Paste
- Alt-Tab allows you to switch between windows.

Modifier Keys Do Not Function Correctly (4996542)

On all locales, the Alt key and the Shift key might not function as modifier keys when you use the Internet/Intranet input method. For example, the Shift-arrow key combination might not allow you to select text. Instead, the combination might insert Latin characters.

Workaround: Use a different input method, for example, Default. To switch input methods, right-click on an object and select Input method.

Chinese and Korean Characters Are Printed In a Box (4977300)

The postscript printer does not bundle Chinese or Korean fonts. Consequently, in Chinese or Korean locales, if you attempt to print from the Mozilla browser, the characters are printed within a box. The Common UNIX Printer System (CUPS) needs to convert the Mozilla postscript fonts before a file can be printed.

Workaround: Perform the following steps.

1. Click Launch => Preferences => Printers.
2. Right-click the PostScript printer icon, then select Properties.
3. Click the Advanced tab.
4. Set the Ghostscript pre-filtering to Convert to PS level 1.

Sort Capability in the European UTF-8 Locales Does Not Function Correctly (4307314)

The sort capability in the European UTF-8 locales does not work properly.

Workaround: Before you attempt to sort in a FIGGS UTF-8 locale, set the *LC_COLLATE* variable to the ISO-1 equivalent.

```
# echo $LC_COLLATE
> es_ES.UTF-8
# LC_COLLATE=es_ES.IS08859-1
# export LC_COLLATE
```

Then start sorting.

Networking Issues

The following networking bugs apply to the Solaris 10 release.

Memory Leaks with ECC and RSA Cipher Suites (6421471)

Memory leak in NSS with ECC and RSA cipher suites might cause a system hang or system panic. The out of memory error message is displayed.

Workaround: Install the following patches:

- Patch ID 119213-09 for SPARC based systems.
- Patch ID 119214-09 for x86 based systems.

iSCSI Initiator Does Not Handle LUN Address Reporting Properly (6377485)

The Solaris iSCSI software initiator does not support logical units with a LUN greater than 255. No error message is displayed.

Workaround:

Change the logical unit numbers of the target device to less than 255.

LUN Numbers Greater Than 256 Are Treated Differently by 2-Gbyte and 4-Gbyte QLogic HBAs (6371273)

QLogic 4-Gbyte HBAs treat LUN numbers greater than 255 differently than QLogic 2-Gbyte HBAs. The following error message is displayed:

Customer cannot have a lun number greater than 255.

Workaround:

Do not allocate a LUN with a number greater than 255 on a single port when attaching to the QLogic HBAs.

Wrong MAC Address is Displayed When There is More Than One Ethernet Card (6316245)

When you register to a Solaris 10 6/06 OS for remote update management using the Sun Update Connection, your system information is displayed. If your system has more than one Ethernet card, the same MAC address is displayed for all the Ethernet cards. No error message is displayed.

Workaround: None.

SPARC: RTM_IFINFO Message Has Different Sizes on 32-bit and 64-bit Compilations

Sixty-four-bit programs that create PF_ROUTE sockets and parse the contents of RTM_IFINFO messages in the `if_msghdr_t` structure might work incorrectly unless they are recompiled.

IP Forwarding Disabled by Default in Solaris 10 OS

In this Solaris release, IP forwarding is disabled by default. This setting applies to both IPv4 and IPv6 regardless of other system configurations. Systems with multiple IP interfaces that formerly forwarded IP packets by default no longer have this automatic feature. To enable IP forwarding in multihomed systems, administrators must manually perform additional configuration steps.

Workaround: The command `routeadm` enables IP forwarding. The configuration changes that are the result of `routeadm` usage persist across system reboots.

- To enable IPv4 forwarding, type **`routeadm -e ipv4-forwarding`**.
- To enable IPv6 forwarding, type **`routeadm -e ipv6-forwarding`**.
- To apply the enabled IP-forwarding configuration to the currently running system, type **`routeadm -u`**.

For more information about IP forwarding, see the [routeadm\(1M\)](#) man page.

Generic LAN Driver Version 3 Fails to Set Field Length of Logical Link Control Frames (6350869)

The Generic LAN Driver Version 3 (GLDv3) incorrectly sets the field length of Logical Link Control (LLC) frames. Consequently, protocols such as AppleTalk that are dependent on LLC do not function correctly. No error message is displayed. The problem affects the following network interface controllers:

- bge
- e1000g
- xge

Workaround: None.

Zone Not Booting When IP Address Belongs to a Failed IP Network Multipathing Group (6184000)

A zone can be configured so that the zone's IP address becomes part of an IP Network Multipathing (IPMP) group. The configuration process is documented in [“How to Extend IP Network Multipathing Functionality to Shared-IP Non-Global Zones”](#) in *System Administration Guide: Oracle Solaris Containers-Resource Management and Oracle Solaris Zones*.

If all the network interfaces in the IPMP group fail, a zone does not boot if it has an IP address that is part of the IPMP group.

The following example illustrates the result if you attempt to boot the zone.

```
# zoneadm -z my-zone boot
zoneadm: zone 'my-zone': bge0:1:
could not set default interface for multicast: Invalid argument
zoneadm: zone 'my-zone': call to zoneadmd failed
```

Workaround: Repair at least one network interface in the group.

Intermittent Errors Might Occur With the Use of DataDigests (5108515)

Internet SCSI (iSCSI) targets might report cyclic redundancy check (CRC) errors if DataDigests are enabled. User applications that update input/output buffers after transmitting to the iSCSI initiator might cause a miscalculation of the CRC. When the target responds with a CRC error, the iSCSI Initiator retransmits the data with the correct DataDigest CRC. Data integrity is maintained. However, data transfer performance is affected. No error message is displayed.

Workaround: Do not use the DataDigest option.

ATM LANE Subnets for IPv4/IPv6 Might Not Complete Initialization (4625849)

During system boot, multiple instances might not connect to their LAN Emulation (LANE) instance if more than eight LANE instances are on a single adapter. This bug does not appear at multiuser level.

Workaround: To reinitialize your SunATM network, perform the following steps:

1. Verify the problem by issuing a `lanestat -a` command.

Instances that are not connected have Virtual Circuit Identifier (VCI) values of 0 to the LAN Emulation Server (LES) and Broadcast and Unknown Address Server (BUS).

2. Stop and restart your SunATM network.

```
# /etc/init.d/sunatm stop  
# /etc/init.d/sunatm start
```

3. Reset netmasks or any other network setup for the SunATM interfaces.

Configuring Multiple Tunnels Between Two IP Nodes With Filtering Enabled Might Result in Packet Loss (4152864)

If you configure multiple IP tunnels between two IP nodes, and enable `ip_strict_dst_multihoming` or other IP filters, packet loss might result.

Workaround: Choose one of the following:

- First, configure a single tunnel between the two IP nodes. Add addresses to the tunnel by using the `ifconfig` command with the `addif` option.
- Do not enable `ip_strict_dst_multihoming` on tunnels between two IP nodes.

Security Issues

The following security issues applies to the Solaris 10 release.

Nonpassword Logins Fail With `pam_ldap` Enabled

After the account management PAM module for LDAP (`pam_ldap`) is enabled, users must have passwords to log in to the system. Consequently, nonpassword-based logins fail, including those logins that use the following tools:

- Remote shell (`rsh`)
- Remote login (`rlogin`)
- Secure shell (`ssh`)

Workaround: None.

Incorrect Parameters Might Cause Panic in Sun StorEdge T3 (4319812)

A Sun StorEdge T3 system might panic if an application uses the HTTP interface to send tokens with out-of-range parameters.

Service Management Facility

This section describes issues that involve the Service Management Facility of Solaris 10 OS.

Print Services Have Offline Settings by Default (5100134)

When a host has no local printers configured, two print services, `ipp-listener` and `rfc1179`, are set to offline by default. These services are automatically moved to online after local printers are configured on the host. The default offline settings of these services do not indicate an error. Therefore, no user intervention is required.

Workaround: None.

keyserv Daemon Disables Some File System Services (5084183)

On systems that do not use Network Information Service (NIS) or NIS+ name service, the NFS and autofs services are disabled. The failure is due to these services' dependency on the `keyserv` daemon. The `keyserv` daemon relies on the RPC domain name, which is not set on systems that do not use NIS or NIS+. Consequently, the failure of the `keyserv` daemon causes the NFS and autofs services to become disabled.

Workaround: To enable the services, perform the following steps:

1. Become superuser.
2. Issue the following commands:

```
# svcadm disable network/rpc/keyserv
# svcadm disable -t network/nfs/client:default
# svcadm enable network/nfs/client:default
# svcadm disable -t network/nfs/server:default
# svcadm enable network/nfs/server:default
# svcadm disable -t network/rpc/gss:ticotsord
# svcadm enable network/rpc/gss:ticotsord
```

Login Prompts Sometimes Appear Before File Systems Are Mounted (5082164)

During system startups, sometimes the login services such as console or ssh logins start before remote file systems and naming services become available. Consequently, the user name might not be recognized or the user's home directory might not be available.

Workaround: If the error occurs, wait for a few seconds and then log in again. Alternatively, log in from a local account to view the system state.

Smart Card

The following Smart Card bugs apply to Solaris 10 OS.

System Does Not Respond to Smart Card (4415094)

If `ocfserv` terminates and the display is locked, the system remains locked even when a smart card is inserted or removed.

Workaround: Perform the following steps to unlock your system:

1. Perform a remote login to the machine on which the `ocfserv` process was terminated.
2. Become superuser.
3. Kill the `dtsession` process by typing the following in a terminal window.

```
# pkill dtsession
```

`ocfserv` restarts and smart card login and capability are restored.

Edit Config File Menu Item in Smartcards Management Console Does Not Work (4447632)

The Edit Config File menu item in the Smartcards Management Console does not edit smart card configuration files that are located in `/etc/smartcard/opencard.properties`. If the menu item is selected, a warning is displayed which indicates not to continue unless requested by technical support.

Workaround: Do not use the Edit Config File menu item in the Smartcards Management Console. For information on smart card configuration, see the *Solaris Smartcard Administration Guide*.

Solaris Commands and Standards

The following section describes behavior changes in certain commands and standards in Solaris 10 OS.

Bash 2.0.5b No Longer Sets Some Environment Variables

Solaris 10 OS includes Bash 2.0.5b. This shell no longer automatically exports the following variables to the environment:

- HOSTNAME
- HOSTTYPE
- MACHTYPE
- OSTYPE

This new behavior applies even if the shell assigns default values to these variables.

Workaround: Export these variables manually.

New `ln` Utility Requires `-f` Option

The behavior of `/usr/bin/ln` has changed to adhere to all of the standards from SVID3 through XCU6. If you use the `ln` command without the `-f` option to link to an existing target file, the link is not established. Instead, a diagnostic message is written to standard error, and the command proceeds to link any remaining source files. Finally, the `ln` command exits with an error value.

For example, if file `b` exists, the syntax `ln a b` generates the following message:

```
ln: b: File exists
```

This behavior change affects existing shell scripts or programs that include the `ln` command without the `-f` option. Scripts that used to work might now fail in Solaris 10 OS.

Workaround: Use the `-f` option with the `ln` command. If you have existing scripts that execute the link utility, make sure to modify these scripts to comply with the command's new behavior.

New tcsh Rejects setenv Variable Names That Use a Dash or an Equals Sign

In Solaris 10 OS, tcsh has been upgraded to version 6.12. This version no longer accepts environment variables whose names use a dash or an equals sign. Scripts that contain setenv lines and that work in earlier Solaris versions might generate errors in the current Solaris 10 release. The following error message is displayed:

```
setenv: Syntax error
```

For more information, refer to the tcsh man page for the Solaris 10 OS.

Workaround: Do not use the dash or equals sign in names for environment variables.

STDIO getc Family EOF Condition Behavior Change

Applications that were built in strict standard C conformance mode are affected by the behavior changes of certain library functions. An example is applications that were compiled by using the cc -Xc or c89 compilation mode. The behavior has changed for the following library functions:

- fgetc()
- fgets()
- fgetwc()
- fgetws()
- getc()
- getchar()
- gets()
- getwc()
- getwchar()
- getws()

A formal interpretation of the 1990 C Standard requires that after an end-of-file condition is set, no more data is returned from the file on subsequent input operations. The exception is if the file pointer is repositioned or the error and end-of-file flags are explicitly cleared by the application.

The behavior for all other compilation modes remains unchanged. Specifically, the interfaces can read additional newly written data from the stream after the end-of-file indicator has been set.

Workaround: Call fseek() or clearerr() on the stream to read additional data after the EOF condition has been reported on the stream.

Output Columns of the ps Command Have Been Widened

Due to larger UIDs, processor ids, and cumulative execution time, the columns of the `ps` command output have been widened. Customer scripts should not assume fixed output columns.

Workaround: Scripts should use the `-o` option of the `ps` command.

For more information, see the [ps\(1\)](#) man page.

Command ping -v Does Not Work on IPv6 Addresses (4984993)

The command `ping -v` fails when the command is applied to addresses that use Internet Protocol version 6 (IPv6). The following error message is displayed:

```
ping: setsockopt IPV6_RECVRTHDRDSTOPTS Invalid argument
```

Workaround: None. To obtain the same ICMP packet information that `ping -v` provides, use the `snoop` command.

Solaris Volume Manager

The following Solaris Volume Manager bugs apply to the Solaris 10 release.

Solaris Volume Manager metattach Command Might Fail

If you have a Solaris Volume Manager mirrored root (`/`) file system in which the file system does not start on cylinder 0, all submirrors you attach must also not start on cylinder 0.

If you attempt to attach a submirror starting on cylinder 0 to a mirror in which the original submirror does not start on cylinder 0, the following error message is displayed:

```
can't attach labeled submirror to an unlabeled mirror
```

Workaround: Choose one of the following workarounds:

- Ensure that both the root file system and the volume for the other submirror start on cylinder 0.

- Ensure that both the root file system and the volume for the other submirror do not start on cylinder 0.

Note – By default, the JumpStart installation process starts swap at cylinder 0 and the root (/) file system somewhere else on the disk. Common system administration practice is to start slice 0 at cylinder 0. Mirroring a default JumpStart installation with root on slice 0, but not cylinder 0, to a typical secondary disk with slice 0 that starts at cylinder 0, can cause problems. This mirroring results in an error message when you attempt to attach the second submirror. For more information about the default behavior of Solaris installation programs, see the Solaris 10 Installation Guides.

Solaris Volume Manager `metassist` Command Fails in Non-English Locales (5067097)

In non-English locales, the Solaris Volume Manager `metassist` command might fail to create volumes. For example, if `LANG` is set to `ja` (Japanese), the following error message is displayed:

```
xmlEncodeEntitiesReentrant : input not UTF-8
Syntax of value for attribute read on mirror is not valid
Value "XXXXXX"(unknown word) for attribute read on mirror
is not among the enumerated set
Syntax of value for attribute write on mirror is not valid
Value "XXXXXX"(Parallel in Japanese) for attribute write on mirror
is not among the enumerated set
metassist: XXXXXX(invalid in Japanese) volume-config
```

Workaround: As superuser, set the `LANG` variable to `LANG=C`.

For the Bourne, Korn, and Bash shells, use the following command:

```
# LANG=C; export LANG
```

For the C shell, use the following command:

```
# setenv LANG C
```

Volume Creation Fails in Systems With Unformatted Disks (5064066)

Creating Solaris Volume Manager volume configurations with the `metassist` command might fail if an unformatted disk is in the system. The following error message is displayed:

```
metassist: failed to repartition disk
```

Workaround: Manually format any unformatted disks before you issue the `metassist` command.

Hot Spares Do Not Work Correctly When Solaris Volume Manager RAID-1 (Mirror) or RAID-5 Volumes Are Created in Disk Sets Built on Soft Partitions (4981358)

If you create a Solaris Volume Manager RAID-1 (mirror) or RAID-5 volume in a disk set that is built on top of a soft partition, hot spare devices do not work correctly.

Problems that you might encounter include, but are not limited to, the following:

- A hot spare device might not activate.
- A hot spare device status might change, indicating the device is broken.
- A hot spare device is used, but resynced from the wrong drive.
- A hot spare device in use encounters a failure, but the broken status is not reported.

Workaround: Do not use this configuration to create a Solaris Volume Manager RAID-1 or RAID-5 volume in disk sets.

Solaris Volume Manager `metadevadm` Command Fails if Logical Device Name No Longer Exists (4645721)

You cannot replace a failed drive with a drive that has been configured with the Solaris Volume Manager software. The replacement drive must be new to Solaris Volume Manager software. If you physically move a disk from one slot to another slot on a Sun StorEdge A5x00, the `metadevadm` command fails. This failure occurs when the logical device name for the slice no longer exists. However, the device ID for the disk remains present in the metadvice replica. The following message is displayed:

```
Unnamed device detected. Please run 'devfsadm && metadevadm -r' to resolve.
```

Note – You can access the disk at the new location during this time. However, you might need to use the old logical device name to access the slice.

Workaround: Physically move the drive back to its original slot.

Solaris Volume Manager `metarecover` Command Fails to Update `metadb` Namespace (4645776)

If you remove and replace a physical disk from the system, and then use the `metarecover -p -d` command to write the appropriate soft partition specific information to the disk, an open failure results. The command does not update the metadevice database namespace to reflect the change in disk device identification. The condition causes an open failure for each such soft partition that is built on top of the disk. The following message is displayed:

Open Error

Workaround: Create a soft partition on the new disk instead of using the `metarecover` command to recover the soft partition.

Note – If the soft partition is part of a mirror or RAID 5, use the `metareplace` command without the `-e` option to replace the old soft partition with the new soft partition.

```
# metareplace dx mirror or RAID 5  
old_soft_partition new_soft_partition
```

Sun Java Desktop System

This section describes issues that apply to the Sun Java Desktop System (Java DS) in the Solaris 10 OS.

Email and Calendar

This section describes issues related to Email and Calendars.

Problems With Using Multiple Attachments (6260583)

If you drag and drop email messages to a new email message body, the content of the new email message is corrupted.

Workaround: To send multiple attachments, perform the following steps:

1. Select the messages you want to attach.
2. On the Menu bar, choose Action => Forward => Attached.

Alternatively, you can press Ctrl-J to send the messages.

Problem With Changing Authentication Type (6246543)

After you change the authentication type for the incoming mail server, Email and Calendar might not work correctly.

Workaround: Restart Email and Calendar.

Problems When Saving Attachments With Localized Content (6204976)

The Evolution application, which includes Email and Calendar, cannot save attachments with localized content.

Workaround: None.

Incomplete List of Contacts in Contact Folder (5088514)

After you import an LDAP Data Interchange Format file containing several contacts, only some of the contacts are displayed in your contact folder. This is a display problem only. Email and Calendar has imported all the contacts.

Workaround: Restart Email and Calendar.

Login Issues

This section describes login issue.

Login Error Message

You might encounter the following error message when you log in to a Java Desktop System session:

```
Could not look up internet address for hostname.
This will prevent GNOME from operating correctly.
It may be possible to correct the problem by adding
hostname to the file /etc/hosts
```

Workaround: Ensure that your hostname is set up correctly in the `/etc/hosts` file. Perform the following steps:

1. Set the hostname in the `/etc/hosts` file as follows:

```
127.0.0.1 localhost loghost hostname
localhost.localdomain
```

hostname is the name of your system.

2. Ensure that your hostname is listed in the `/etc/nodename` file. This file must also contain the following line:

```
127.0.0.1 localhost loghost hostname
localhost.localdomain
```

3. Add the following entry to the `/etc/inet/ipnodes` file:

```
127.0.0.1 hostname
```

\$PATH issues (6247943)

When you log into Java Desktop System Release 3, your `$PATH` is set incorrectly to the following:

```
/usr/bin::usr/dt/bin:/usr/openwin/bin:/bin:  
/usr/ucb:/usr/openwin/bin:/usr/dt/bin
```

Workaround: Remove the following from your `$PATH`:

- `/usr/openwin/bin:`
- `/bin:`
- `::`

The resulting path should be similar to the following example:

```
/usr/bin:/usr/dt/bin:/usr/ucb:/usr/openwin/bin:/usr/dt/bin
```

Remote Connection Problems (6203727)

If you use `dtlogin` remote connection, you cannot connect to the GNOME Display Manager from certain systems.

Workaround: When you are prompted to select the remote login, specify the IP address instead of the hostname.

Help System

Wrong Help Window Opened For Volume Control (6253210)

If you use the Yelp browser to open the online help for Volume Control, the help file for the Keyboard Accessibility panel application is opened instead.

Workaround: None.

Online Help Freezes (5090731)

If you open an application's online help and no help files exist for that application, an error dialog box is displayed. Unless you click OK, the online Help system freezes and you cannot open the online help of other applications that you start subsequently.

Workaround: You must click the OK button in the error dialog box.

Mozilla Browser

Cannot Print Certain Documents From the Mozilla Browser

You cannot print documents from the Mozilla browser if the documents contain Unicode characters that are not in the Basic Multilingual Plane (BMP).

Workaround: None.

Cannot Specify User Preferences for Roaming Access in Mozilla Browser (6200999)

In the Mozilla browser, you can specify that User Preferences should be transferred to and from the Roaming Access server. You specify your Roaming Access option by following these steps:

1. On the browser, click Edit and select Preferences.
2. Select Roaming User, then select Item Selection.
3. On the right panel, select User Preferences.

However, the selection of User Preferences does not take effect.

Workaround: None.

Keyboard Shortcuts Fail (6192644)

In the Mozilla browser, you enable caret browsing by pressing F7. When caret browsing is enabled, the keyboard shortcut Ctrl-Home brings you to the beginning of the web page that you are browsing. However, this keyboard shortcut does not work when you browse certain sites such as www.yahoo.com and www.mozilla.org.

Workaround: Disable caret browsing by pressing F7.

System-Level Issues

User Preferences Not Fully Compatible

User preferences in your home account for an earlier version of the GNOME Desktop might be partly incompatible with the version on the Java DS Release 3.

Workaround: Reset your preferences. Perform the following steps:

1. Log out of the Java Desktop System.
2. Click Session and choose Failsafe terminal.
3. Log in.

4. In the failsafe terminal window, enter the following commands:

```
% gnome-cleanup exit
```

5. Log in again.

Your GNOME preferences are now reset.

GNU Image Manipulation Program Missing From the Graphics Menu (6209566)

The GNU Image Manipulation Program (GIMP) is not available in the Graphics menu.

Workaround: Perform the following steps.

1. Open a terminal window.
2. Edit the `/usr/share/applications/gimp-2.0.desktop` file.
3. Change the Exec and TryExec lines to add the full path to the GIMP binary:

```
TryExec=/usr/sfw/bin/gimp2.0  
Exec=/usr/sfw/bin/gimp-remote-2.0 %u
```

Problems With Online Registration of StarOffice 7 Software (6208829)

You might be unable to complete the online registration of the StarOffice 7 software if the software cannot find Mozilla on the system. The software must be able to locate the Email and Calendar application to successfully send documents.

Workaround: Add `/usr/sfw/bin` to your PATH. Perform the following steps.

1. Open a terminal window.
2. Issue the following command:
3. To start the StarOffice software, issue the following command:

```
% export PATH=/usr/sfw/bin:$PATH
```

```
% soffice
```

4. Complete the StarOffice registration procedure.

Problems With Sound Recorder

The slide bar and the side counter do not work when the Sound Recorder is recording a `new.wav` file.

Workaround: None.

Volume Control Option Not Working

The option in the Volume Control panel application that enables you to start the Volume Control desktop applications does not work.

Workaround: None.

Outdated List of Allowed Applications for Solaris OS (6267922)

In the Solaris software, you restrict application launching by setting to true the `/desktop/gnome/lockdown/restrict_application_launching` gonf key. This setting allows only certain applications to appear on the Launch menu where you can start these applications. The allowed applications are listed in the `/desktop/gnome/lockdown/allowed_applications` gonf key.

Currently, the list includes applications that are outdated and are no longer included in the Java Desktop System software. Moreover, the list also contains references to certain applications with incorrect directory locations. Consequently, if you restrict application launching, certain key applications such as Mozilla or StarOffice do not appear on the Launch menu.

Workaround: Perform the following steps.

1. Become superuser.
2. Remove the `~/ .gconf/desktop/gnome/lockdown` directory if the directory exists.

```
# rm -rf ~/ .gconf/desktop/gnome/lockdown
```

3. Log out of the system and then log in again.

Problems When Using Keyboard Indicator (6245563)

Using the keyboard indicator might make the keyboard unusable when you switch between X servers.

Workaround: None. Do not use the Keyboard Indicator.

Certain View Options Might Cause File Manager to Fail (6233643)

The File Manager might fail if you use the following View options:

- View as Catalog
- View as Image Collection

Depending on the View options that you use, the following error messages might be displayed:

- Error:
The application nautilus has quit unexpectedly
- Error:
The Catalog view encountered an error while starting up
- Error:
The Image Collection view encountered an error while starting up

Workaround: None. Every time these problems occur, restart File Manager or click the Restart Application button on the crash dialog box.

CD Quality, Lossless Mode Fails at Start of Recording (6227666)

If you use the Sound Recorder multimedia application in CD Quality, Lossless mode, the application fails when recording starts. The following error message is displayed:

The Application "gnome-sound-recorder" has quit unexpectedly.

Workaround: Perform the following steps.

1. Become superuser.
2. Issue the following command:

```
# GCONF_CONFIG_SOURCE=xml:./etc/gconf/gconf.xml.defaults
/usr/bin/gconftool-2 --makefile-install-rule
/etc/gconf/schemas/gnome-audio-profiles.schemas
```

In addition, existing users must perform the following steps.

1. If the gnome-audio-profiles-properties application is running, stop the application by closing the application window.
2. If the profile cdlossless exists in `~/.gconf/system/gstreamer/audio/profiles`, remove the profile.

```
% rm ~/.gconf/system/gstreamer/audio/profiles/cdlossless
```
3. Log out of the system and then log in again.

Cannot Delete Files Outside of Home Directory (6203010, 5105006)

You can only delete files from your own home directory file system.

Workaround: To delete files outside your home directory file system, open a terminal window and use the command line.

Problems Creating Certain Types of Archives (5082008)

You cannot use Archive Manager to create the following types of archives:

- .arj
- .lha
- .bzip
- .lzop
- .zoo

Workaround: None.

Cannot Type Multibyte Characters in Text Editor 2.9.1 (4937266)

When you enable the Auto Indent function in the gedit text editor, you cannot type multibyte characters correctly.

Workaround: Disable the Auto Indent function. Perform the following steps in the text editor.

1. Choose Edit => Preferences.
2. In the Categories list, select Editor, then Auto Indent.
3. Deselect the Enable auto indentation option.

System Administration

This section describes system administration bugs in Solaris 10 OS.

smosservice or smdiskless Is Broken Due to wbem Issues (6378956)

The smosservice or smdiskless command might not work because of a dependency on JDK 1.5 release.

The following error message is displayed:

```
/usr/sadm/bin/smosservice list -u <user> -p <password> Exception in thread "main"
java.lang.UnsupportedClassVersionError:
com/sun/management/viperimpl/console/BaseConsoleOptionsManager
(Unsupported major.minor version 49.0)
at java.lang.ClassLoader.defineClass0(Native Method)
    at java.lang.ClassLoader.defineClass(ClassLoader.java:539)
    at java.security.SecureClassLoader.defineClass(SecureClassLoader.java:123)
    at java.net.URLClassLoader.defineClass(URLClassLoader.java:251)
    at java.net.URLClassLoader.access$100(URLClassLoader.java:55)
    at java.net.URLClassLoader$1.run(URLClassLoader.java:194)
    at java.security.AccessController.doPrivileged(Native Method)
    at java.net.URLClassLoader.findClass(URLClassLoader.java:187)
    at java.lang.ClassLoader.loadClass(ClassLoader.java:289)
    at sun.misc.Launcher$AppClassLoader.loadClass(Launcher.java:274)
    at java.lang.ClassLoader.loadClass(ClassLoader.java:235)
    at java.lang.ClassLoader.loadClassInternal(ClassLoader.java:302)
```

Workaround:

Set the JAVA_HOME variable to point to a JDK 1.5 installation.

```
# JAVA_HOME=/usr/java
```

Sun Patch Manager Tool 2.0 Not Compatible With Previous Versions

A system that runs the Sun Patch Manager Tool 2.0 can manage remote systems that run Patch Manager Tool, including Sun Patch Manager Tool 1.0.

However, a system with an earlier version of Patch Manager Tool cannot manage remote systems that run Patch Manager Tool 2.0. Earlier versions include the following:

- Sun Patch Manager Base Software 1.x
- Sun Patch Manager Tool 1.0

Note – Common Information Model/Web Based Enterprise Management (CIM/WBEM) support for Patch Manager Tool does not exist in the Solaris 8 OS. Consequently, remote management with Patch Manager does not apply to Solaris 8 systems.

Sun Remote Services Net Connect Supported Only in the Global Zone

Sun Remote Services (SRS) Net Connect is supported only in the global zone. Error messages are displayed if you perform one of the following actions:

- You install SRS Net Connect in a local zone.

- SRS Net Connect is installed in the global zone at the time a local zone is created.

The error messages are as follows:

```
*** package SUNWcstu failed to install -
interactive administration required:
```

```
Interactive request script supplied by package
pkgadd: ERROR: request script did not complete successfully
```

```
Installation of SUNWcstu was suspended (interaction required).
No changes were made to the system.
```

```
*** package SUNWfrunc failed to install -
interactive administration required:
```

```
Interactive request script supplied by package
pkgadd: ERROR: request script did not complete successfully
```

```
Installation of SUNWfrunc was suspended (interaction required).
No changes were made to the system.
```

Workaround: Ignore the error messages.

Error or Warning Messages Might Be Displayed While Installing Non-global Zones With the zoneadm Command

While installing a non-global zone by using the zoneadm command, error or warning messages might be displayed during package installation. The messages are similar to the following example:

```
Preparing to install zone zone1.
Creating list of files to copy from the global zone.
Copying 2348 files to the zone.
Initializing zone product registry.
Determining zone package initialization order.
Preparing to initialize 790 packages on the zone.
Initialized 790 packages on zone.
Zone zone1 is initialized.
```

```
Installation of the following packages generated errors:
SUNWjhrt SUNWmcc SUNWjhdev SUNWnsb SUNWmcon SUNWmpatchmgr
```

```
Installation of the following packages generated warnings:
SUNWj3rt SUNWmc SUNWwbmc SUNWmga SUNWdcInt SUNWlvma SUNWlvmg
SUNWrmui SUNWdoc SUNWpl5m SUNWpmgr
```

Problems about package installation are also recorded in `/export/zone1/root/var/sadm/system/logs/install_log` which contains a log of the zone installation.

Workaround: None.

Note – The non-global zone can still be used even though these messages have been reported. Issues with package installation existed in earlier Solaris Express and Solaris 10 Beta releases. However, no notification about these problems was being generated. Beginning with this Solaris release, these errors are now properly reported and logged.

Adding Regions Fails With the `localeadm` Command (6350486)

The function to add regions in the `localeadm` command no longer works if you create a new configuration file. The Language CD is not detected when you add the following regions:

- Southern Europe
- North America
- Northern Europe

The following error message is displayed:

```
No langcd image has been found in
/cdrom/sol_10_1005_x86_4/Solaris_10/Product
```

```
No langcd image has been found in
/cdrom/sol_10_1005_x86_4 /cdrom/sol_10_1005_x86_4
/cdrom/sol_10_1005_x86_4
/cdrom/sol_10_1005_x86_4
/cdrom/sol_10_1005_x86_4
```

Please enter the path to this image/disk, or enter 'q' to quit:

Workaround: When you are prompted to create a new configuration file, select No. Instead, use the configuration file that was installed in the system.

SPARC: Error Messages Displayed During Dynamic Reconfiguration (6312424)

During dynamic reconfiguration (DR), error messages might be displayed. The messages are displayed if you perform DR while input and output operations are active on devices that are in the DR path. After the messages are displayed, the input and output operations are retried and eventually succeed. The following is a sample that is displayed:

```
Jul 28 12:23:19 qame10-a scsi: [ID 107833 kern.warning] WARNING:
/ssm@0,0/pci@19,700000/SUNW,qlc@2,1/fp@0,0/ssd@w2100000c5056fa13,0 (ssd6):
Jul 28 12:23:19 qame10-a      transport rejected fatal error
```

```
Jul 28 12:22:08 qame10-a scsi: [ID 107833 kern.warning] WARNING:
/ssm@0,0/pci@19,700000/SUNW,qlc@2,1/fp@0,0/ssd@w2100000c5056f9a7,0 (ssd36):
Jul 28 12:22:08 qame10-a      SCSI transport failed: reason 'timeout':
retrying command
```

Workaround: None. Ignore the error messages.

SPARC: Reinitializing Link on a Server in a Storage Area Network Causes Logical Unit Number on All Servers to Reset (6301627)

The command `luxadm -e forcecli` to reinitialize a link on one server causes the logical unit number (LUN) to reset on all servers in the Storage Area Network (SAN). The following sample error message is displayed on the console of one or more servers in a zone within the same SAN environment.

```
Aug 16 13:34:07 ontario-a last message repeated 5 times
Aug 16 13:34:07 ontario-a scsi_vhci: [ID 734749 kern.warning] WARNING:
vhci_scsi_reset 0x0
```

Workaround: None. Ignore the error messages.

Error Messages Displayed by `pkgchk` After You Remove Patches for Zones (6267966)

The `patchadd` and `patchrm` commands work improperly in non-global zones with inherited file systems. Consequently, in those zones, the `pkgchk` command might generate error messages about packages under the following circumstances:

1. In the global zone, you apply patches for the Solaris 10 zone system by using the `patchadd` command.
2. You use the `patchrm` command to remove patches that you just recently applied.
3. In a non-global zone with inherited file systems, you check with the `pkgchk` command for information about a package in any of the removed patches.

The following sample message is displayed when the `pkgchk` command is used on `SUNWcsu` under the circumstances previously listed.

```
# pkgchk SUNWcsu
ERROR: /usr/lib/inet/certdb
      modtime <04/26/05 10:55:26 PM> expected <01/23/05 01:48:24 AM> actual
      file size <36012> expected <42152> actual
      file cksum <37098> expected <19747> actual
ERROR: /usr/lib/inet/certlocal
```

```
modtime <04/26/05 10:55:26 PM> expected <01/23/05 01:48:24 AM> actual  
file size <44348> expected <84636> actual
```

Workaround: None. The errors are harmless. Ignore the error messages.

Race Condition Between EF/kcfd and IPsec Algorithm Availability (6266083)

Systems with the Solaris 10 3/05 HW1 release might cause problems with IPsec. This problem might occur on a freshly installed system or a system that imports a large number of new Service Management Facility (SMF) manifests during the boot. After these booting conditions, IPsec, which is part of `svc:/network/initial:default`, might be initialized prior to the encryption framework, which is part of `svc:/system/cryptosvc:default`. Because authentication or encryption algorithms are not available, creation of IPsec security associations might fail with an error message such as the following:

```
PF_KEY error: type=ADD, errno=22:  
Invalid argument, diagnostic code=40:  
Unsupported authentication algorithm
```

For example, this error might occur when using DR on a Sun Fire E25K system, which involves IPsec services.

Workaround: Before performing operations that use IPsec services, perform the following steps after a boot that imports a large number of new SMF manifests:

1. Issue this command after booting:

```
ipseccalg -s
```

2. If `/etc/inet/secret/ipseckeys` exists on the system, also issue this command:

```
ipseckey -f /etc/inet/secret/ipseckeys
```

Now you can perform actions that create IPsec security associations, such as using DR on a Sun Fire E25K system.

This procedure needs to be repeated only when a large number of new SMF manifests are imported during the boot.

Solaris Product Registry Administration Utility Fails to Launch in a Zone (6220284)

If you attempt to launch the Solaris Product Registry administration utility in a zone, the attempt fails. During the zone installation, `productregistry`, the Solaris Product Registry database, is not duplicated in the zone. Consequently, the utility cannot run in a zone.

Workaround: As superuser, copy the product registry database to the zone.

```
# cp /var/sadm/install/productregistry zone_path/var/sadm/install/
```

In the previous command, *zone_path* is the path to the root directory of the zone that you created.

Cannot Delete Existing Diskless Clients From the System (6205746)

If you use the `smdiskless` command to delete a diskless client, the command fails. The diskless client is not removed from the system databases. The following error message is displayed:

Failing with error EXM_BMS.

Workaround: Unshare the `/export` partition before adding the client.

Net Connect 3.1.1 Installation Fails (6197548)

Installation of Net Connect 3.1.1 fails if you select the product at the beginning of a full Solaris 10 installation. This failure occurs when you are installing by using the Solaris 10 Operating System DVD. At the completion of the OS installation, the following error message is recorded in the Net Connect install log in `/var/sadm/install/logs/`:

```
Installation of SUNWSRSPX failed.  
Error: pkgadd failed for SUNWsrspx  
Install complete. Package: SUNWsrspx
```

Workaround: After the OS installation is completed, follow these steps:

1. Insert the Solaris 10 Operating System DVD or the Solaris 10 Software - CD 4.
2. Change to the directory of the Net Connect product.
3. Run the Net Connect installer.

Note – To download the latest version of the Sun Net Connect software and release notes, go to the Sun Net Connect portal at <https://srsnetconnect.sun.com>.

x86: Default C Library Might Cause Boot Failure When You Install Solaris Flash Archives (6192995)

A boot failure that involves the Solaris Flash archive might occur under the following circumstances:

- You create a Solaris Flash archive on a system that is using a libc C library with certain hardware-support capabilities.
- You install the archive on a clone system that has different hardware-support capabilities.

When you attempt to boot the clone system, the following error message is displayed:

```
WARNING: init exited with fatal signal 9; restarting.
```

Workaround: Follow these steps.

1. Before you create the archive, unmount the `/lib/libc.so.1` library on the master system.

```
# umount /lib/libc.so.1
```

This command enables the master system to use the basic version of the libc C library.

2. Create the Solaris Flash archive on the master system.

For more information about how to create Solaris Flash archives, see the [Solaris 10 6/06 Installation Guide: Solaris Flash Archives \(Creation and Installation\)](#).

3. Mount the `/lib/libc.so.1` library on the master system.

```
# mount -O -F lofs /lib/libc.so.1 /usr/lib/libc/libc_hwcaps.so.1
```

4. Install the Solaris Flash archive on the clone system.

For more information about how to install Solaris Flash archives, see the [Solaris 10 6/06 Installation Guide: Solaris Flash Archives \(Creation and Installation\)](#).

SPARC: smoservice delete Command Does Not Successfully Remove All Directories (6192105)

If you use the `smoservice delete` command to remove a diskless client service, the command does not successfully remove all the service directories.

Workaround: Follow these steps.

1. Make sure that no clients exist that use the service.

```
# unshare /export/exec/Solaris_10_sparc.all
# rm -rf /export/exec/Solaris_10_sparc.all
# rm -rf /export/exec/.copyofSolaris_10_sparc.all
# rm -rf /export/.copyofSolaris_10
# rm -rf /export/Solaris_10
# rm -rf /export/share
# rm -rf /export/root/templates/Solaris_10
# rm -rf /export/root/clone/Solaris_10
# rm -rf /tftpboot/inetboot.sun4u.Solaris_10
```

2. Remove the following entry from the `/etc/bootparams` file.

```
fs1-24 boottype=:os
```

Note – Remove this entry only if this file server does not provide functions or resources for any other services.

3. Remove the following entry from the `/etc/dfs/dfstab` file.

```
share -F nfs -o ro /export/exec/Solaris_8_sparc.all/usr
```

4. Modify the `/var/sadm/system/admin/services/Solaris_10` file.

- If the file server is not Solaris_10, delete the file.
- If the file server is Solaris_10, remove all entries after the first three lines. The deleted lines indicate the service `USR_PATH` and `SPOOLED ROOT` packages in `/export/root/templates/Solaris_10` and the supported platforms.

patchadd Command Does Not Support Installing Patches From an NFS Server (6188748)

If you use the `patchadd` command to install patches across the NFS from another system, the command fails. The following example shows a `patchadd` operation that failed and the error message that is displayed:

```
Validating patches...
```

```
Loading patches installed on the system...
```

```
[...]
```

```
Loading patches requested to install.
```

```
[...]
```

```
Checking patches that you specified for installation.
```

```
[...]
```

```
Approved patches will be installed in this order:
```

```
[...]
```

```
Checking local zones...
```

```
[...]
```

```
Summary for zones:
```

```
[...]
```

```
Patches that passed the dependency check:
```

```
[...]
```

```
Patching global zone
```

```
Adding patches...
```

```
Checking installed patches...
```

```
Verifying sufficient filesystem capacity (dry run method)...
```

```
Installing patch packages...
```

```
Patch Patch_ID has been successfully installed.
```

```
See /var/sadm/patch/Patch_ID/log for details
```

```
Patch packages installed:
```

```
SUNWroute
```

```
[...]  
Adding patches...  
The patch directory  
/dev/.SUNW_patches_0111105334-1230284-00004de14dcb29c7  
cannot be found on this system.  
  
[...]  
  
Patchadd is terminating.
```

Workaround: Manually copy all of the patches to be installed from the NFS server to the local system first. Then use the `patchadd` command to install the patches from the directory on the local system where the patches were copied.

Lucreate Command Does Not Create RAID-1 Volumes (5106987)

If you use the `lucreate` command to create RAID-1 volumes (mirrors) that do not have device entries in the `/dev/md` directory, the command fails. You cannot mirror file systems with the `lucreate` command unless you first create the mirrors with Solaris Volume Manager software.

Workaround: Create the mirrored file systems with Solaris Volume Manager software, then create the new boot environment with the `lucreate` command.

For more information about the `lucreate` command, see the [lucreate\(1M\)](#) or *Solaris 10 6/06 Installation Guide: Solaris Live Upgrade and Upgrade Planning*.

For more information about how to create mirrored file systems with Solaris Volume Manager software, see *Solaris Volume Manager Administration Guide*.

Devices Not Immediately Available in Fabric Zones in a Storage Area Network (5077933)

When a fabric zone in a storage area network (SAN) is created dynamically, that zone's devices might be unavailable at the host side. If you use the command `luxadm -e dump_map` to display data for such devices or host bus adapters, an error message is displayed. See the following example:

```
# luxadm -e dump_map /dev/cfg/c5  
  
Pos  Port_ID Hard_Addr Port_WWN      Node_WWN      Type  
ERROR: Unable to retrieve target port details (QLogic Corp-2312-3)ERROR
```

Listing the status of all the attachment points yields information similar to the following example. In this example, the fabric devices include a tape drive, but no device is indicated in `c5`.

```
# cfgadm -al

Ap_Id      Type      Receptacle  Occupant    Condition
:
:
c5         fc-fabric  connected   unconfigured unknown
usb0/1     unknown   empty       unconfigured ok
:
:
```

Workaround: After configuring the fabric-connected devices, reinitialize the link to the devices by using the `luxadm -e forcelp /dev/cfg/c5` command. For the previous example, you would type the following:

```
# luxadm -e forcelp /dev/cfg/c5
```

SPARC: Stopping the System by Using Keyboard Sequences Might Cause a System Panic (5061679)

If you attempt to stop the system by pressing keyboard sequences such as Stop-A or L1-A, the system might panic. An error message similar to the following example is displayed:

```
panic[cpu2]/thread=2a100337d40: pcisch2 (pci@9,700000):
consistent dma sync timeout
```

Workaround: Do not use keyboard sequences to force the system to enter OpenBoot PROM.

Using the ipfs Command With -w Option Fails (5040248)

The `ipfs` command saves and restores information about the state of the Network Address Translation (NAT) and packet-filtering state tables. This utility prevents network connections from being disrupted if the system reboots. If you issue the command with the `-w` option, `ipfs` fails to save the kernel state tables. The following error message is displayed:

```
state:SIOCSTGET: Bad address
```

Workaround: None.

kill -HUP Does Not Always Cause the Agent to Reread the snmpd.conf Configuration File (4988483)

After modifying the contents of `snmpd.conf`, you can issue the command `kill -HUP snmp Process ID`. This command stops the `snmp` process. The command then sends a signal to the System Management Agent's master agent (`snmpd`) to reread `snmpd.conf` and implement the modifications that you introduced. The command might not always cause the master agent to reread the configuration file. Consequently, using the command might not always activate modifications in the configuration file.

Instead of using `kill -HUP`, restart the System Management Agent after adding modifications to `snmpd.conf`. Perform the following steps:

1. Become superuser.
2. Type the following command:

```
# /etc/init.d/init.sma restart
```

x86: Pressing the F4 Key During BIOS Bootup Fails to Boot the Service Partition (4782757, 5051157)

You are booting a Sun LX50 which has a Service partition and Solaris 10 OS on x86 is installed. Pressing the F4 function key to boot the Service partition, when given the option, causes the screen to go blank. The system then fails to boot the Service partition.

Workaround: Do not press the F4 key when the BIOS Bootup Screen is displayed. After a time-out period, the Current Disk Partition Information screen is displayed. Select the number in the Part# column that corresponds to type=DIAGNOSTIC. Press the Return key. The system boots the Service partition.

Solaris WBEM Services 2.5 Daemon Cannot Locate com.sun.Application Programming Interface Providers (4619576)

The Solaris WBEM Services 2.5 daemon cannot locate providers that are written to the `com.sun.wbem.provider` interface or to the `com.sun.wbem.provider20` interface. Even if you create a `Solaris_ProviderPath` instance for a provider that is written to these interfaces, the Solaris WBEM Services 2.5 daemon does not locate the provider.

Workaround: To enable the daemon to locate such a provider, stop and restart the Solaris WBEM Services 2.5 daemon.

```
# /etc/init.d/init.wbem stop  
  
# /etc/init.d/init.wbem start
```

Note – If you use the javax API to develop your provider, you do not need to stop and restart the Solaris WBEM Services 2.5 daemon. The Solaris WBEM Services 2.5 daemon dynamically recognizes javax providers.

Some com.sun Application Programming Interface Method Invocations Fail Under XML/HTTP Transport Protocol (4497393, 4497399, 4497406, 4497411)

If you choose to use the com.sun application programming interface rather than the javax application programming interface to develop your WBEM software, only Common Information Model (CIM) remote method invocation (RMI) is fully supported. Other protocols, such as XML/HTTP, are not guaranteed to work completely with the com.sun application programming interface.

The following table lists examples of invocations that execute successfully under RMI but fail under XML/HTTP:

Method Invocation	Error Message
CIMClient.close()	NullPointerException
CIMClient.execQuery()	CIM_ERR_QUERY_LANGUAGE_NOT_SUPPORTED
CIMClient.getInstance()	CIM_ERR_FAILED
CIMClient.invokeMethod()	XMLERROR: ClassCastException

Cannot Modify File-System Mount Properties With Solaris Management Console Mounts and Shares Tool (4466829)

The Solaris Management Console Mounts and Shares tool cannot modify mount options on system-critical file systems such as root (/), /usr, and /var.

Workaround: Choose one of the following workarounds:

- Use the remount option with the mount command.

```
# mount -F file-system-type -o remount,  
additional-mount-options \  
device-to-mount mount-point
```

Note – Mount property modifications that are made by using the `-o remount` option with the `mount` command are not persistent. In addition, all mount options that are not specified in the *additional-mount-options* portion of the previous command inherit the default values that are specified by the system. See the man page [mount_ufs\(1M\)](#) for more information.

- Edit the appropriate entry in the `/etc/vfstab` file to modify the file-system mount properties, then reboot the system.

System-Specific Issues

This chapter describes issues specific to Sun midrange and high-end servers. Current Sun servers are part of the Sun Fire system family. Older servers are part of the Sun Enterprise system family.

Note – The Sun Validation Test Suite release notes are now a separate document and can be found at <http://www.sun.com/>.

Note – Some of the issues and bugs in this chapter have been fixed in subsequent Solaris 10 releases. If you have upgraded your Solaris software, certain issues and bugs in this chapter might no longer apply. To see which bugs and issues no longer apply to your specific Solaris 10 software, refer to [Appendix A, “Table of Integrated Bug Fixes in the Solaris 10 Operating System.”](#)

Dynamic Reconfiguration on Sun Fire High-End Systems

This section describes major domain-side DR bugs on the following Sun Fire high-end systems that run the Solaris 10 software:

- Sun Fire 25K
- Sun Fire 20K
- Sun Fire 15K
- Sun Fire 12K

For information about DR bugs on Sun Management Services, see the *SMS Release Notes* for the SMS version that is running on your system.

Known Software and Hardware Bugs

The following software and hardware bugs apply to Sun Fire high-end systems.

Network Device Removal Fails When a Program Is Holding the Device Open (5054195)

If a process is holding open a network device, any DR operation that would involve that device fails. Daemons and processes that hold reference counts stop DR operations from completing.

Workaround: As superuser, perform the following steps:

1. Remove or rename the `/rplboot` directory.
2. Shut down NFS services.

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

3. Shut down Boot Server services.

```
# sh /etc/init.d/boot.server stop
```

4. Perform the DR detach operation.

5. Restart NFS services.

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

6. Restart Boot Server services.

```
# sh /etc/init.d/boot.server start
```

Deleteboard Shows Leakage Error (4730142)

Warnings might be displayed when a DR command is executing on a system that is configured with the SunSwift PCI card, Option 1032. These warnings appear on domains that are running either the Solaris 8, Solaris 9, or Solaris 10 software. The following warning is an example:

```
Aug 12 12:27:41 machine genunix: WARNING:
vmem_destroy('pcisch2_dvma'): leaked
```

These warnings are benign. The Direct Virtual Memory Access (DVMA) space is properly refreshed during the DR operation. No true kernel memory leak occurs.

Workaround: To prevent the warning from being displayed, add the following line to `/etc/system`:

```
set pcisch:pci_preserve_iommu_tsb=0
```

GigaSwift Ethernet MMF Link Fails With CISCO 4003 Switch After DR Attach

The link fails between a system with a Sun GigaSwift Ethernet MMF Option X1151A and certain CISCO switches. The failure occurs when you attempt to run a DR operation on such a system that is attached to one of the following switches:

- CISCO WS-c4003 switch (f/w: WS-C4003 Software, Version NmpSW: 4.4(1))
- CISCO WS-c4003 switch (f/w: WS-C4003 Software, Version NmpSW: 7.1(2))
- CISCO WS-c5500 switch (f/w: WS-C5500 Software, Version McpSW: 4.2(1) and NmpSW: 4.2(1))

This problem is not seen on a CISCO 6509 switch.

Workaround: Use another switch. Alternatively, you can consult Cisco for a patch for the listed switches.

Dynamic Reconfiguration on Sun Fire Midrange Systems

This section describes major issues that are related to DR on the following Sun Fire midrange systems:

- Sun Fire E6900
- Sun Fire E4900
- Sun Fire E6800
- Sun Fire E4810
- Sun Fire E4800
- Sun Fire E3800

Minimum System Controller Firmware

Table 3–1 shows acceptable combinations of Solaris software and System Controller (SC) firmware for each Sun Fire midrange system to run DR.

Note – To best utilize the latest firmware features and bug fixes, run the most recent SC firmware on your Sun Fire midrange system. For the latest patch information, see <http://sunsolve.sun.com>.

TABLE 3–1 Minimum SC Firmware for Each Platform and Solaris Release

Platform	Solaris Release	Minimum SC Firmware
Sun Fire E6900/E4900 with UltraSPARC IV+	Solaris 10 3/05 HW1 (a limited release) or Solaris 10 1/06	5.19.0

TABLE 3-1 Minimum SC Firmware for Each Platform and Solaris Release (Continued)

Platform	Solaris Release	Minimum SC Firmware
E6900/E4900 without UltraSPARC IV+	Solaris 9 4/04	5.16.0
Sun Fire 6800/4810/4800/3800	Solaris 9 4/04	5.16.0
Sun Fire 6800/4810/4800/3800	Solaris 9	5.13.0

You can upgrade the system firmware for your Sun Fire midrange system by connecting to an FTP or HTTP server where the firmware images are stored. For more information, refer to the README and Install.info files. These files are included in the firmware releases that are running on your domains. You can download Sun patches from <http://sunsolve.sun.com>.

Known DR Software Bugs

This section lists important DR bugs.

Network Device Removal Fails When a Program Is Holding the Device Open (5054195)

If a process is holding open a network device, any DR operation that would involve that device fails. Daemons and processes that hold reference counts stop DR operations from completing.

Workaround: As superuser, perform the following steps:

1. Remove or rename the /rplboot directory.
2. Shut down NFS services.

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

3. Shut down Boot Server services.

```
# sh /etc/init.d/boot.server stop
```

4. Perform the DR detach operation.
5. Restart NFS services.

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

6. Restart Boot Server services.

```
# sh /etc/init.d/boot.server start
```

Cannot Unconfigure cPCI Board With a Disabled Port 0 (4798990)

On Sun Fire midrange systems, a CompactPCI (cPCI) I/O board cannot be unconfigured when Port 0 (P0) on that board is disabled. This problem exists in Solaris 10 and Solaris 9 software. It also exists in Solaris 8 software that has one or more of the following patches installed:

- Patch ID 108528–11 through 108528–29
- Patch ID 111372–02 through 111372–04

The error also occurs only during DR operations that involve cPCI boards. An error message similar to the following example is displayed:

```
# cfgadm -c unconfigure N0.IB7
cfgadm: Hardware specific failure: unconfigure N0.IB7: Device
busy:/ssm@0,0/pci@1b,700000/pci@1
```

N0.IB7 is a CompactPCI I/O Board with P0 disabled.

Workaround: Disable the slots instead of Port 0.

Sun Enterprise 10000 Release Notes

This section describes issues that involve the following features on the Sun Enterprise 10000 server:

- System Service Processor requirement
- Dynamic reconfiguration (DR)
- InterDomain Networks (IDNs)
- Solaris Operating System on Sun Enterprise 10000 domains

Note – The Solaris 10 software can be run on individual domains within a Sun Enterprise 10000 system. However, the Sun Enterprise 10000 System Service Processor is not supported by this release.

System Service Processor Requirement

The SSP 3.5 software is required on your System Service Processor (SSP) to support the Solaris 10 software. Install the SSP 3.5 on your SSP first. Then you can install or upgrade to the Solaris 10 OS on a Sun Enterprise 10000 domain.

The SSP 3.5 software is also required so that the domain can be properly configured for DR Model 3.0.

Dynamic Reconfiguration Issues

This section describes different issues that involve dynamic reconfiguration on Sun Enterprise 10000 domains.

DR Model 3.0

You must use DR 3.0 on Sun Enterprise 10000 domains that run the Solaris OS beginning with the Solaris 9 12/03 release. DR model 3.0 refers to the functionality that uses the following commands on the SSP to perform domain DR operations:

- addboard
- moveboard
- deleteboard
- showdevices
- rcfgadm

You can run the `cfgadm` command on domains to obtain board status information. DR model 3.0 also interfaces with the Reconfiguration Coordination Manager (RCM) to coordinate the DR operations with other applications that are running on a domain.

For details about DR model 3.0, refer to the *Sun Enterprise 10000 Dynamic Reconfiguration User Guide*.

DR and Bound User Processes

For this Solaris release, DR no longer automatically unbinds user processes from CPUs that are being detached. You must perform this operation before initiating a detach sequence. The drain operation fails if CPUs are found with bound processes.

Network Device Removal Fails When a Program Is Holding the Device Open (5054195)

If a process is holding open a network device, any DR operation that would involve that device fails. Daemons and processes that hold reference counts stop DR operations from completing.

Workaround: As superuser, perform the following steps:

1. Remove or rename the `/rplboot` directory.
2. Shut down NFS services.

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

3. Shut down Boot Server services.

```
# sh /etc/init.d/boot.server stop
```

4. Perform the DR detach operation.
5. Restart NFS services.

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

6. Restart Boot Server services.

```
# sh /etc/init.d/boot.server start
```

Enabling DR 3.0 Requires an Extra Step in Certain Situations (4507010)

The SSP 3.5 software is required for a domain to be properly configured for DR 3.0. After upgrading your SSP to SSP 3.5, when DR 3.0 is enabled on the domain, run the following command:

```
# devfsadm -i ngdr
```

InterDomain Networks

For a domain to become part of an InterDomain Network, all boards with active memory in that domain must have at least one active CPU.

OpenBoot PROM Variables

Before you issue the boot net command from the OpenBoot PROM prompt (OK), verify that the local-mac-address? variable is set to false. This setting is the factory default setting. If the variable is set to true, you must ensure that this value is an appropriate local configuration.



Caution – A local-mac-address? that is set to true might prevent the domain from successfully booting over the network.

In a netcon window, you can use the following command at the OpenBoot PROM prompt to display the values of the OpenBoot PROM variables:

```
OK printenv
```

To reset the local-mac-address? variable to the default setting, use the setenv command:

```
OK setenv local-mac-address? false
```

Dynamic Reconfiguration on Sun Enterprise Midrange Systems

This section contains the latest information about dynamic reconfiguration (DR) functionality for the following midrange servers that are running the Solaris 10 software:

- Sun Enterprise 6x00
- Sun Enterprise 5x00
- Sun Enterprise 4x00
- Sun Enterprise 3x00

For more information about Sun Enterprise Server Dynamic Reconfiguration, refer to the *Dynamic Reconfiguration User's Guide for Sun Enterprise 3x00/4x00/5x00/6x00 Systems*. The Solaris 10 release includes support for all CPU/memory boards and most I/O boards in the systems that are mentioned in the preceding list.

Supported Hardware

Before proceeding, make sure that the system supports dynamic reconfiguration. If your system is of an older design, the following message appears on your console or in your console logs. Such a system is not suitable for dynamic reconfiguration.

```
Hot Plug not supported in this system
```

The following I/O boards are not currently supported:

- Type 2 (graphics)
- Type 3 (PCI)
- Type 5 (graphics and SOC+)

Software Notes

This section provides general software information about DR.

Enabling Dynamic Reconfiguration

To enable dynamic reconfiguration, you must set two variables in the `/etc/system` file. You must also set an additional variable to enable the removal of CPU/memory boards. Perform the following steps:

1. Log in as superuser.
2. Edit the `/etc/system` file by adding the following lines:

```
set pln:pln_enable_detach_suspend=1
set soc:soc_enable_detach_suspend=1
```

3. To enable the removal of a CPU/memory board, add this line to the file:

```
set kernel_cage_enable=1
```

Setting this variable enables the memory unconfiguration operation.

4. Reboot the system to apply the changes.

Quiesce Test

You start the quiesce test with the following command:

```
# cfgadm -x quiesce-test sysctr10:slot number
```


On a large system, the quiesce test might run for up to a minute. During this time no messages are displayed if `cfgadm` does not find incompatible drivers.

Disabled Board List

Attempting to connect a board that is on the disabled board list might produce an error message:

```
# cfgadm -c connect sysctrl0:slotnumber
```

```
cfgadm: Hardware specific failure: connect failed:
board is disabled: must override with [-f][-o enable-at-boot]
```

To override the disabled condition, two options are available:

- Using the force flag (`-f`)


```
# cfgadm -f -c connect sysctrl0:slot number
```
- Using the enable option (`-o enable-at-boot`)


```
# cfgadm -o enable-at-boot -c connect sysctrl0:slot
number
```

To remove all boards from the disabled board list, choose one of two options depending on the prompt from which you issue the command:

- From the superuser prompt, type:


```
# eeprom disabled-board-list=
```
- From the OpenBoot PROM prompt, type:


```
OK set-default disabled-board-list
```

For further information about the `disabled-board-list` setting, refer to the “Specific NVRAM Variables” section in the *Platform Notes: Sun Enterprise 3x00, 4x00, 5x00, and 6x00 Systems* manual. This manual is part of the documentation set in this release.

Disabled Memory List

Information about the OpenBoot PROM `disabled-memory-list` setting is published in this release. See “Specific NVRAM Variables” in the *Platform Notes: Sun Enterprise 3x00, 4x00, 5x00, and 6x00 Systems* in the Solaris on Sun Hardware documentation.

Unloading Detach-Unsafe Drivers

If you need to unload detach-unsafe drivers, use the `modinfo` line command to find the module IDs of the drivers. You can then use the module IDs in the `modunload` command to unload detach-unsafe drivers.

Self-Test Failure During a Connect Sequence

Remove the board from the system as soon as possible if the following error message is displayed during a DR connect sequence:

```
cfgadm: Hardware specific failure: connect failed: firmware operation error
```

The board has failed self-test, and removing the board avoids possible reconfiguration errors that can occur during the next reboot.

The failed self-test status does not allow further operations. Therefore, if you want to retry the failed operation immediately, you must first remove and then reinsert the board.

Known Bugs

The following list is subject to change at any time.

Network Device Removal Fails When a Program Is Holding the Device Open (5054195)

If a process is holding open a network device, any DR operation that would involve that device fails. Daemons and processes that hold reference counts stop DR operations from completing.

Workaround: As superuser, perform the following steps:

1. Remove or rename the `/rplboot` directory.
2. Shut down NFS services.

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

3. Shut down Boot Server services.

```
# sh /etc/init.d/boot.server stop
```

4. Perform the DR detach operation.
5. Restart NFS services.

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

6. Restart Boot Server services.

```
# sh /etc/init.d/boot.server start
```

Memory Interleaving Set Incorrectly After a Fatal Reset (4156075)

Memory interleaving is left in an incorrect state when a Sun Enterprise5 x500 server is rebooted after a fatal reset. Subsequent DR operations fail. The problem only occurs on systems with memory interleaving set to min.

Workaround: Choose one of the following options:

- To clear the problem, manually reset the system at the OK prompt.
- To avoid the problem, set the NVRAM memory-interleave property to max.

The second option causes memory to be interleaved whenever the system is booted. However, this option might be unacceptable because a memory board that contains interleaved memory cannot be dynamically unconfigured. See [“Cannot Unconfigure a CPU/Memory Board That Has Interleaved Memory \(4210234\)”](#) on page 155.

Cannot Unconfigure a CPU/Memory Board That Has Interleaved Memory (4210234)

To unconfigure and subsequently disconnect a CPU board with memory or a memory-only board, first unconfigure the memory. However, if the memory on the board is interleaved with memory on other boards, the memory cannot currently be unconfigured dynamically.

Memory interleaving can be displayed by using the `prtdiag` or the `cfgadm` commands.

Workaround: Shut down the system before servicing the board, then reboot afterward. To permit future DR operations on the CPU/memory board, set the NVRAM `memory-interleave` property to min. See also [“Memory Interleaving Set Incorrectly After a Fatal Reset \(4156075\)”](#) on page 155 for a related discussion about interleaved memory.

Cannot Unconfigure a CPU/Memory Board That Has Permanent Memory (4210280)

To unconfigure and subsequently disconnect a CPU board with memory or a memory-only board, first unconfigure the memory. However, some memory cannot currently be relocated. This memory is considered permanent.

Permanent memory on a board is marked “permanent” in the `cfgadm` status display:

```
# cfgadm -s cols=ap_id:type:info
Ap_Id Type Information
ac0:bank0 memory slot3 64Mb base 0x0 permanent
ac0:bank1 memory slot3 empty
ac1:bank0 memory slot5 empty
ac1:bank1 memory slot5 64Mb base 0x40000000
```

In this example, the board in slot3 has permanent memory and so cannot be removed.

Workaround: Shut down the system before servicing the board, then reboot afterward.

cfgadm Disconnect Fails When Running Concurrent cfgadm Commands (4220105)

If a `cfgadm` process is running on one board, an attempt to simultaneously disconnect a second board fails. The following error message is displayed:

```
cfgadm: Hardware specific failure:  
disconnect failed: nexus error during detach:address
```

Workaround: Run only one `cfgadm` operation at a time. Allow a `cfgadm` operation that is running on one board to finish before you start a `cfgadm` disconnect operation on a second board.

End-of-Software Support Statements

This chapter lists end-of-software support statements.

Features That Might Be Removed in a Future Release

The following features might not be supported in a future release of the Solaris software.

Solstice Enterprise Agents Support

The following Solstice Enterprise Agents (SEA) agents, libraries, and packages might not be supported in a future Solaris release:

- SEA-based SNMP master agent and sub agents
- `libssagent` and `libssasnm` libraries
- `SUNWsacom`, `SUNWsasnm`, `SUNWmibii` packages

The System Management Agent (SMA) provides similar functionality for the aforementioned sources.

Mozilla 1.X Support

The Mozilla 1.X software might not be supported in a future Solaris release. Equivalent software is expected to be available in a future release.

32-bit x86: Extended Memory File System Support

The extended memory file system (`xmemfs`) might not be supported in a future Solaris release.

For more information, see the `xmemfs(7FS)` man page.

Standard Type Services Framework Support

Standard Type Service Framework (STSF) might not be available in a future Solaris release.

This includes the following:

- `libST` and `libXst` libraries
- `xstls` command
- `stfsloader` service
- XST extension to Xsun and Xorg servers

You can find this functionality in one of the following alternative sources:

- `libX11`
- `libXft2`

SPARC: jfca Driver Support

The JNI Fibre Channel Adapter (jfca) driver might not be available in a future Solaris release.

For more information, see the `jfca(7D)` man page.

zic -s Option Support

The `-s` option in the `zic` command might not be available in a future Solaris release.

For more information, see the `zic(1M)` man page.

Removable Volume Management Support

The volume management daemon (`vold`), volume management file system (`volfs`), and the associated volume management commands might not be included in a future Solaris release.

Automatic mounting and unmounting of removable media will continue to be supported.

For more information, see the `vold(1M)` and `volfs(7FS)` man pages.

32-bit x86: Controller Devices and Drivers

The following devices might not be supported in a future Solaris release:

- IBM PC ServeRAID SCSI
- IBM ServeRAID II Ultra SCSI

- IBM ServeRAID-3 Ultra2 SCSI

In addition, device drivers written for these controllers might not be supported.

64-bit SPARC: Dual Basic Rate ISDN Interface and Multimedia Codec Chips

T5900FC Dual Basic Rate ISDN Interface (DBRI) and associated multimedia codec chips might not be supported in a future Solaris release. In addition, device drivers written for these devices might not be supported.

SPARC: Certain Drivers Might Not be Supported in a Future Solaris Release

The following drivers might not be supported in a future Solaris release:

- SUNWrtvc: Device driver for the SunVideo real-time video capture and compression card
- SUNWdial: Streams module for the Dials and Buttons devices
- SUNWdialh: Header files for the Dials and Buttons devices

Automated Security Enhancement Tool Support

The checksum functionality provided by Automated Security Enhancement Tool (ASET) in the `/usr/aset` directory might not be available in a future Solaris release.

You can find this functionality in one of the following alternative sources:

- The basic audit reporting tool, `bart`, in Solaris 10 OS
- The Solaris Security Toolkit found at <http://www.sun.com/software/security/jass/>
- The Solaris Fingerprint Database found at <http://sunsolve.sun.com/pub-cgi/show.pl?target=content/content7>

Asian Short dtlogin Names

The following Asian short locale names might not be listed in the `dtlogin` language list in a future release:

- `zh`
- `ko`
- `zh_TW`

Beginning with Solaris 8 release, new ISO-standard locale names have been provided, including the following locale names:

- `zh_CN.EUC`
- `zh_CN.GBK`
- `zh_CN.UTF-8`
- `ko_KR.EUC`
- `ko_KR.UTF-8`
- `zh_TW.EUC`

Audit Daemon Interfaces

The following interfaces that are used by the Solaris audit daemon might not be supported in a future release:

- `auditsvc(2)`
- `audit_data(4)`

Cfront Runtime Support Library

The library `libc.so.3` is the runtime support library for programs that are compiled by the Cfront C++ compiler C++ 3.0. Neither the compiler nor programs that are created by the compiler run on Solaris 10 OS. The library might not be supported in a future release of Solaris.

Configuration Assistant's fp Plug-in Hardware Options

The following options of the configuration administration's (`cfgadm`) fp plug-in might not be supported in a future Solaris release:

- `show_FCP_dev`
- `unusable_FCP_dev`

Device Allocation Interfaces For the Basic Security Module

The following components of the device allocation mechanism of the Basic Security Module might not be included in a future release of the Solaris software:

- `mkdevalloc(1M)`
- `mkdevmaps(1M)`
- `/etc/security/dev`

Obsolete Device Driver Interfaces

Some device driver interfaces (DDI) might not be supported in a future release.

The following table lists the DDI interfaces that might not be supported, along with the preferred DDI interface alternatives.

Obsolete Interface	Preferred Interface
mmap	devmap
identify	set to nulldev
copyin	ddi_copyin
copyout	ddi_copyout
ddi_dma_addr_setup	ddi_dma_addr_bind_handle
ddi_dma_buf_setup(9F)	ddi_dma_buf_bind_handle
ddi_dma_curwin	ddi_dma_getwin
ddi_dma_free	ddi_dma_free_handle
ddi_dma_htoc	ddi_dma_addr[buf]_bind-handle
ddi_dma_movwin	ddi_dma_getwin
ddi_dma_nextseg	ddi_dma_nextcookie
ddi_dma_nextwin	ddi_dma_nextcookie
ddi_dma_segtocookie	ddi_dma_nextcookie
ddi_dma_setup	ddi_dma_*_handle
ddi_dmae_getlim	ddi_dmae_getattr
ddi_getlongprop	ddi_prop_lookup
ddi_getlongprop_buf	ddi_prop_lookup
ddi_getprop	ddi_prop_get_in
ddi_getproplen	ddi_prop_lookup
ddi_iopb_alloc	ddi_dma_mem_alloc
ddi_iopb_free	ddi_dma_mem_free
ddi_mem_alloc	ddi_dma_mem_alloc
ddi_mem_free	ddi_dma_mem_free

Obsolete Interface	Preferred Interface
ddi_map_regs	ddi_regs_map_setup
ddi_prop_create	ddi_prop_update
ddi_prop_modify	ddi_prop_update
ddi_segmap	see devmap
ddi_segmap_setup	devmap_setup
ddi_unmap_regs	ddi_regs_map_free
free_pktiopb	scsi_free_consistent_buf
get_pktiopb	scsi_alloc_consistent_buf
makecom_g0	scsi_setup_cdb
makecom_g0_s	scsi_setup_cdb
makecom_g1	scsi_setup_cdb
makecom_g5	scsi_setup_cdb
scsi_dmafree	scsi_destroy_pkt
scsi_dmaget	scsi_init_pkt
scsi_pktalloc	scsi_init_pkt
scsi_pktfree	scsi_destroy_pkt
scsi_realloc	scsi_init_pkt
scsi_resfree	scsi_destroy_pkt
scsi_slave	scsi_probe
scsi_unslave	scsi_unprobe
ddi_peek{c,s,l,d}	ddi_peek{8,16,32,64}
ddi_poke{c,s,l,d}	ddi_poke{8,16,32,64}
in{b,w,l}	ddi_get{8,16,32}
out{b,w,l}	ddi_put{8,16,32}
repins{b,w,l}	ddi_rep_get{8,16,32}
repouts{b,w,l}	ddi_rep_put{8,16,32}

Device Management Entries in `power.conf`

The Device Management entries in the `power.conf` file might not be supported in a future release. Similar capability is provided by the Automatic Device Power Management entries in the Solaris 10 software.

For more information, see the `power.conf(4)` man page.

Device Support and Driver Software

The following table lists devices and driver software that might not be supported in a future release.

TABLE 4-1 Device and Driver Software

Name of Physical Device	Name of Driver	Type of Card
AMI MegaRAID host bus adapter, first generation	mega	SCSI RAID
Compaq 53C8x5 PCI SCSI, and Compaq 53C876 PCI SCSI	cpqncr	SCSI HBA
Compaq SMART-2/P Array Controller and Compaq SMART-2SL Array Controller	smartii	SCSI RAID controller

Form and Menu Language Interpreter

The Form and Menu Language Interpreter (FMLI) commands are obsolete and might not be supported in a future Solaris release. The obsolete commands include the following:

- `/usr/bin/fmli`
- `/usr/bin/vsig`

Host Files in `/etc/net/ti*`

The host files in `/etc/net/ti*` are no longer consulted in the Solaris Operating System, though these files remain in the Solaris software. In a future Solaris release, these host files might be entirely removed.

Java 2 Platform, Standard Edition 1.4

Java 2 Platform, Standard Edition (J2SE Platform) 1.4 might not be included in a future Solaris release. J2SE 5.0 software, the default Java version in the Solaris 10 OS, is a compatible replacement for J2SE 1.4 technology.

Kerberos Ticket Lifetime Parameters in `krb5.conf`

The Kerberos Ticket Lifetime parameters, `max_life` and `max_renewable_life`, might no longer be supported in a future release of the Solaris OS. These parameters are in the `appdefaults` section of the `/etc/krb5/krb5.conf` file. Instead of these parameters, use `max_lifetime` and `renew_lifetime` in the `libdefaults` section of `/etc/krb5/krb5.conf`.

Korean CID Fonts

Korean CID fonts might not be supported in a future release. You can use the Korean TrueType fonts that are included in the Solaris software as a replacement for Korean CID fonts.

Legacy or Traditional Non-UTF-8 Locales

Sun is adopting Unicode for character encoding. Therefore, except for `zh_CN.GB18030` and `C` locales, non-UTF-8 locales might be removed as the Java Desktop System login locale in a future Solaris release.

Functions in the CPU Performance Counters Library (`libcpc`)

Hardware performance counters enable the measurement of many different hardware events that are related to CPU behavior. The following functions in the CPU Performance Counters library (`libcpc`) might not be supported in a future Solaris OS release:

<code>cpc_access</code>	<code>cpc_bind_event</code>
<code>cpc_count_sys_events</code>	<code>cpc_count_usr_events</code>
<code>cpc_event_accum</code>	<code>cpc_event_diff</code>
<code>cpc_eventtostr</code>	<code>cpc_getcciname</code>
<code>cpc_getcpuref</code>	<code>cpc_getcpuver</code>
<code>cpc_getnpic</code>	<code>cpc_getusage</code>
<code>cpc_pctx_bind_event</code>	<code>cpc_pctx_invalidate</code>
<code>cpc_pctx_rele</code>	<code>cpc_pctx_take_sample</code>
<code>cpc_rele</code>	<code>cpc_seterrfn</code>
<code>cpc_shared_bind_event</code>	<code>cpc_shared_close</code>

<code>cpc_shared_open</code>	<code>cpc_shared_rele</code>
<code>cpc_shared_take_sample</code>	<code>cpc_strtoevent</code>
<code>cpc_take_sample</code>	<code>cpc_version</code>
<code>cpc_walk_names</code>	

New functions have been added to the library in Solaris 10 OS. Developers who have code that utilizes the interfaces in the preceding list should instead use the following corresponding new functions:

<code>cpc_open</code>	<code>cpc_close</code>
<code>cpc_set_create</code>	<code>cpc_set_destroy</code>
<code>cpc_set_add_request</code>	<code>cpc_set_request_preset</code>
<code>cpc_buf_create</code>	<code>cpc_buf_destroy</code>
<code>cpc_bind_curlwp</code>	<code>cpc_bind_pctx</code>
<code>cpc_bind_cpu</code>	<code>cpc_unbind</code>
<code>cpc_set_sample</code>	<code>cpc_buf_sub</code>
<code>cpc_buf_add</code>	<code>cpc_buf_copy</code>
<code>cpc_buf_zero</code>	<code>cpc_buf_get</code>
<code>cpc_buf_set</code>	<code>cpc_buf_hrttime</code>
<code>cpc_buf_tick</code>	<code>cpc_walk_requests</code>
<code>cpc_walk_events_all</code>	<code>cpc_walk_events_pic</code>
<code>cpc_walk_attrs</code>	<code>cpc_enable</code>
<code>cpc_disable</code>	<code>cpc_caps</code>
<code>cpc_npic</code>	<code>cpc_cpuref</code>
<code>cpc_cciname</code>	<code>cpc_seterrhdlr</code>

See the `cpc(3CPC)` man page for details.

libXinput Library

The `libXinput.so.0` library might not be provided in a future release of the Solaris software. The `libXinput.so.0` library was provided for backward compatibility with X11R4 applications

that were built by using the draft standard X Input API of Solaris 2.1 and Solaris 2.2. The X11 standard X Input Extension library, libXi, was integrated in Solaris 2.3.

All applications that rely on the libXi API should be built by using the libXi shared library for future compatibility and standards conformance.

Network Information Service Plus (NIS+) Name Service Type

NIS+ might not be supported in a future release. Tools to aid in the migration from NIS+ to LDAP are available in the Solaris 9 software. For more information, visit <http://www.sun.com/directory/nisplus/transition.html>.

nstest Test Program

The `nstest` is an interactive DNS test program to construct and send DNS queries. This program might no longer be supported in a future Solaris OS release. The same functionality that is provided by this test program is available by using the `dig` and `nslookup` commands.

Perl Version 5.6.1

Perl version 5.6.1 might not be supported in a future Solaris OS release. Perl version 5.8.4, the default version in the Solaris 10 OS, is not binary compatible with Perl version 5.6.1. However, the earlier version is still retained in this Solaris release. Customized modules that are installed by the customer must be rebuilt and reinstalled to use Perl version 5.8.4. Modify any scripts that require the use of version 5.6.1 to specifically use version 5.6.1 of the interpreter instead of version 5.8.4. The interpreters of the respective Perl versions are located in the following directories:

Perl 5.6.1 `/usr/perl5/5.6.1/bin/perl`

Perl 5.8.4 `/bin/perl, /usr/bin/perl, or /usr/perl5/bin/perl`

Solaris Management Console Patch Tool (Patch Manager)

The Solaris Management Console patch tool, Patch Manager, might not be available in a future release.

Solstice Enterprise Agents

Solstice Enterprise Agents might not be supported in a future release.

Standalone Router Discovery

The `/usr/sbin/in.rdisc` implementation of the IPv4 ICMP Router Discovery protocol might not be supported in a future release of the Solaris software. A near-equivalent version of this protocol, which is implemented as a component of `/usr/sbin/in.routed`, supports an enhanced administrative interface. The `/usr/sbin/in.routed` component supports the implementation of Routing Information Protocol (RIP) version 2. The `/usr/sbin/in.routed` component also has the ability to distinguish Mobile IP advertisements from Router Discovery messages.

Sun Fire Link Interfaces

The Sun Fire Link Interfaces might no longer be supported in a future Solaris release.

Sun Java Desktop System Applications

The following applications in the Java DS, Release 3, might be removed from a future release.

- Sun Java Calendar Preview
- GNOME Keyboard Layout Switcher
- JDS Diagram Editor
- JDS Java Text Editor
- JDS Java Dictionary
- JDS Disk Analyzer
- JDS Image Organizer
- JDS Mr. Project

Token Ring and Fiber Distributed Data Interface Device Types

Support for token ring (DL_TPR) and Fiber Distributed Data Interface (FDDI) device types in generic LAN driver (GLD) might be removed in a future Solaris release. After the removal is implemented, drivers for token ring or FDDI that rely on this support in GLD cease to function. However, other drivers or applications that do not use this support are not affected. To test whether a driver relies on GLD, run the following script:

```
#!/bin/sh
#
# Test a driver binary for use of GLD
#
for file
do
    /usr/ccs/bin/nm $file | /bin/awk '
    /\|gld_register$/      { isgld=1; }
    END {
        if (isgld)
            print file, "uses GLD";
        else
            print file, "does not use GLD";
    }' file=$file
done
```

For more information about generic LAN driver, see the [gld\(7D\)](#) man page as well as “Writing Device Drivers”.

WBEM-based Dynamic Reconfiguration

The feature known as WDR - Web-Based Enterprise Management Dynamic Reconfiguration - might not be supported in a future release of the Solaris Operating System. WDR is currently supported on Sun Fire midrange and high-end systems.

XIL Interface

The XIL interface might not be supported in a future release. An application that uses XIL causes the following warning message to be displayed:

```
WARNING: XIL OBSOLESCENCE
This application uses the Solaris XIL interface
which has been declared obsolete and may not be
present in version of Solaris beyond Solaris 9.
Please notify your application supplier.
The message can be suppressed by setting the environment variable
"_XIL_SUPPRESS_OBSOLETE_MSG."
```

xetops Utility

The xetops utility might not be supported in a future release. The xetops utility converts an Asian text file to a PostScript file. This conversion enables Asian characters to be printed on PostScript printers that do not have resident Asian fonts.

Similar capability is provided in the mp command, which has been enhanced to support all of the native Asian encodings with more options and functionality.

x86: Xsun DDX Modules, Library, and Related Files

Certain DDX modules for Xsun might be removed from a future Solaris release. These modules are used when you configure the Xsun X server on the kdmconfig screen, Video Device Selection, by selecting an entry that is not prefixed with “XF86.” The files affected by this notice include the following:

- Files in the `/usr/openwin/server/modules` directory whose names do not have the `ddxSUNWxf86` prefix
- The `/usr/openwin/server/lib/libaccel.so.1` library
- Files with the `.xga` suffix under the `/usr/openwin/share/etc/devdata/SUNWaccel/boards` directory

Sun recommends that for your preferred X server, use the Xorg X server whose DDX modules provide comparable functionality to the Xsun X server. However, if you use the Xsun X server, you can still use the XFree86 DDX modules. These are modules with the prefix `ddxSUNWxf86` and whose entries in the kdmconfig screen, Video Device Selection, begin with “XF86.” These modules provide comparable functionality to the Xsun DDX modules that might be removed.

Documentation Issues

This chapter describes known issues that are related to documentation.

Documents on the Software Supplement CD

Beginning with Solaris 10 Operating System, the Supplement CD no longer exists. The documents that were formerly supplied on the Supplement CD can now be found at <http://www.oracle.com/technetwork/indexes/documentation/index.html>. The rest of the CD's contents reside elsewhere in the Solaris kit or on Sun Microsystems' web site.

System Administration Guide: Basic Administration

This section describes corrections to specific chapters in the System Administration Guide: Basic Administration.

Note – Beginning with the Solaris 10 1/06 release, this section no longer applies to the Solaris documentation.

Managing Diskless Clients (Tasks)

In Step 4 of “How to Add a Diskless Client,” the command to verify whether a diskless client has been added should read as follows:

4. Verify that the diskless clients were installed.

```
# /usr/sadm/bin/smdiskless list -H host-name:898 --
```

Solaris 10 Start Here and Solaris 10 Installation Guides

Note – Beginning with the Solaris 10 1/06 release, this section no longer applies to the Solaris documentation.

The Solaris 10 Start Here and Solaris 10 Installation Guides incorrectly indicate that Sun Java Enterprise System is installed by default in the Solaris 10 release. To install Sun Java Enterprise System with the Solaris 10 OS, you must perform a custom installation.

The following documents incorrectly state that Sun Java Enterprise System is installed by default during a Solaris 10 installation.

Solaris 10 Installation Guide: Basic Installations

- Planning for a Solaris Installation From CD or DVD Media (Tasks) — Checklist for Installation
- Installing With the Solaris Installation Program (Tasks)
 - Step 9 of SPARC: To Install or Upgrade With the Solaris Installation Program
 - Step 17 of x86: To Install or Upgrade With the Solaris Installation Program

Solaris 10 Installation Guide: Network-Based Installations

- Solaris Installation and Upgrade (Roadmap) — Task Map: Installing or Upgrading the Solaris Software
- Gathering Information Before Installation or Upgrade (Planning)
 - Checklist for Installation
 - Checklist for Upgrading

Solaris 10 Installation Guide: Solaris Live Upgrade and Upgrade Planning

- Solaris Installation and Upgrade (Roadmap) — Task Map: Installing or Upgrading the Solaris Software
- Gathering Information Before Installation or Upgrade (Planning) — Checklist for Upgrading

Solaris 10 Installation Guide: Custom JumpStart and Advanced Installations

See Solaris Installation and Upgrade (Roadmap) — Task Map: Installing or Upgrading the Solaris Software.

Solaris 10 Start Here

See Install the Solaris 10 OS.

Solaris 10 Documentation and Man Pages

The company S2io has changed its name to Neterion. All references to S2io in the Solaris 10 documentation and man pages should read Neterion.

Table of Integrated Bug Fixes in the Solaris 10 Operating System

The tables in this appendix list bugs in these Release Notes that have been fixed in the Solaris 10 OS. For bugs that no longer apply to your Solaris 10 OS, refer to the table that corresponds to the specific release that you are using.

Note – The tables are only partial lists. Other fixed bugs in the operating system that were not previously documented in the Release Notes are excluded from these tables. For a complete list, refer to the Solaris 10 Operating System Patch List. The Patch List identifies bugs that have been fixed by specific patches that were applied to the current release. The list includes bugs that have not been documented in the Release Notes.

Fixed and Integrated Bugs

TABLE A-1 Bugs Fixed in the Solaris 10 1/06 Software

CR Number	Title
6363262	Numerous Mozilla Menu Entries Are Garbled in the Russian Locale
6348316	Systems With Multiple CPUs Might Hang During Installation or System Boot
6346843	Bulgarian Locale Uses Russian Character Map
6336069	Error Occurs When You Upgrade a Solaris Live Upgrade Boot Environment With CD or DVD Media
6314583	Serbian Locale Uses Russian Character Map
6303564	SUNWceuow Package Improperly Upgraded if Symbolic Links to Solaris OS Are Changed
6222925	Installation Fails When You Install Solaris Flash Archive on Empty Boot Environment With Solaris Live Upgrade
6221374	svccfg import Subcommand Does Not Refresh Dependent Services

TABLE A-1 Bugs Fixed in the Solaris 10 1/06 Software (Continued)

CR Number	Title
6219932	Compose Key Sequences Might Not Work When You Use X Keyboard Extension in Some Locales
6219176	pat chadd Fails to Reapply Patches to Newly Installed Packages
6218158	Java Error Messages Are Displayed After a Solaris 10 OS Installation
6216195	Non-Global Zones Created After Patching Global Zones Are Not Accessible by Remote Login Services
6215847	Solaris 10 Installation Disc Ejects When You Install the Solaris Flash Archive
6215739	Solaris GUI Installation Program Fails If You Configure Nonprimary Interface and Enable DHCP
6209619	Using USB 2.0 Hubs With USB 1.x Devices Might Cause System Panic
6208656	Solaris Installation GUI Might Fail When You Install Solaris Flash Archive
6204987	EHCI Driver Unusable in Certain Motherboards
6203680	Using FireWire-1394 Storage Devices Might Cause System Panic
6200924	Pausing USB Audio Devices During Play or Record Operation Might Cause System Deadlock
6189823	localeadm -l Does Not List Installed Korean Locale Packages
6173972	Some Keyboard Keys Not Functioning With Num Lock Key On
5090222	SPARC: GigaSwift Fast and Gigabit Ethernet Devices With Revision IDs Lower Than 32 Might Cause System Panic
5087588	Installation Logs Might Be Incomplete or Inaccurate
5062026	SPARC: Panics That Occur During Suspend and Resume Cycles Might Cause the System to Hang
5062018	Systems With Active Kernel Debugger Might Panic During Suspend/Resume Cycles
5042573	Some UTF-8 Locales Are Unavailable in the Common Desktop Environment Login Service
5042195	Only Part of the Disk Is Usable by fdisk or format Commands
4992478	Permissions for Mount Points Not Preserved in Created Boot Environment
4915974	Solstice DiskSuite Configurations Not Converted to Solaris Volume Manager Format When You Upgrade With Solaris Live Upgrade
4720192, 6215918	/dev and /devices/pseudo Permissions Set Incorrectly After Installation

TABLE A-1 Bugs Fixed in the Solaris 10 1/06 Software (Continued)

CR Number	Title
4640568	Systems With Multiple Interfaces Recognize All Interfaces as Usable After Installation or Upgrade
4506562	Solaris Bandwidth Manager Sometimes Causes System Panic During DR Operations

Solaris 10 Operating System Patch List

The patches that are listed in this appendix have been applied to the Solaris 10 Operating System in one of the following ways:

- SolStart
These patches are located in the `/var/sadm/patch` directory on an installed system.
- Freshbits technology
These patches were applied when the Solaris 10 OS was created. Therefore, these patches are not located in the `/var/sadm/patch` directory.

The `showrev -p` command provides a list of all patches that were applied to the installed system, regardless of how they were applied. The Solaris 10 software includes a known and tested level of patches. However, patches cannot be backed out of the Solaris 10 release.

SPARC Patch List

- 117447-01 – SunOS 5.10: `/usr/sbin/ntpdate` patch
- 117463-02 – SunOS 5.10: `passwdutil` Patch
- 117465-02 – SunOS 5.10: `fwtmp` Patch
- 118346-04 – SunOS 5.10: `libnsl` Patch
- 118348-01 – SunOS 5.10: `fcode` Patch
- 118367-03 – SunOS 5.10: `csch` Patch
- 118371-07 – SunOS 5.10: `elfsign` Patch
- 118373-01 – SunOS 5.10: `mpstat` Patch
- 118557-03 – SunOS 5.10: `platform/sun4u/kernel/drv/sparcv9/su` patch
- 118560-01 – SunOS 5.10: `patch usr/bin/telnet`
- 118564-02 – SunOS 5.10: `patch /usr/lib/libproc.so.1`

- 118566-01 – SunOS 5.10: patch usr/sbin/ping
- 118666-05 – J2SE 5.0: update 6 patch
- 118667-05 – J2SE 5.0: update 6 patch, 64bit
- 118676-02 – SunOS 5.10: patch for Solaris make and sccs utilities
- 118683-01 – SunOS 5.10: Patch for assembler
- 118706-01 – SunOS 5.10: Creator and Creator3D: FFB Graphics Patch
- 118707-04 – SunOS 5.10: Expert3D IFB Graphics Patch
- 118708-12 – SunOS 5.10: Sun XVR-1200 and Sun XVR-600 Graphics Accelerator Patch
- 118711-02 – SunOS 5.10: M64 Graphics Patch
- 118712-09 – SunOS 5.10: Sun XVR-100 Graphics Accelerator Patch
- 118731-01 – SunOS 5.10: /usr/sbin/zonecfg patch
- 118733-03 – SunOS 5.10: snmpdx patch
- 118735-01 – SunOS 5.10: patch usr/sbin/rpc.nisd_resolv
- 118777-04 – SunOS 5.10: Sun GigaSwift Ethernet 1.0 driver patch
- 118812-03 – SunOS 5.10: Netra ntwdt driver patch
- 118814-01 – SunOS 5.10: patch platform/sun4u/kernel/tod/sparcv9/todsg
- 118815-03 – SunOS 5.10: awk patch
- 119578-24 – SunOS 5.10: FMA Patch
- 118822-30 – SunOS 5.10: kernel Patch
- 118824-01 – SunOS 5.10: patch usr/bin/sparcv9/sort
- 118830-01 – SunOS 5.10: hme patch
- 120900-04 – SunOS 5.10: libzonecfg Patch
- 121133-02 – SunOS 5.10: zones library and zones utility patch
- 119254-24 – SunOS 5.10: Install and Patch Utilities Patch
- 118833-17 – SunOS 5.10: kernel patch
- 118842-01 – SunOS 5.10: dada patch
- 118870-01 – SunOS 5.10: nss_ldap patch
- 118872-02 – SunOS 5.10: ksh patch
- 118879-01 – SunOS 5.10: dhcp daemon patch
- 118884-01 – SunOS 5.10: atomic.h patch
- 118890-02 – SunOS 5.10: llib-lc patch
- 118918-17 – SunOS 5.10: Solaris Crypto Framework patch
- 118925-03 – SunOS 5.10: unistd header file patch

- 118929-05 – SunOS 5.10: config files patch
- 118945-01 – SunOS 5.10: Sun Gigabit Ethernet 3.0 driver patch
- 118959-02 – SunOS 5.10: patch usr/bin/lastcomm and usr/bin/acctcom
- 118965-01 – X11 6.8.0: Xorg
- 118981-03 – SunOS 5.10: Sun Quad FastEthernet qfe driver
- 119042-09 – SunOS 5.10: usr/sbin/svccfg patch
- 119059-13 – X11 6.6.2: Xsun patch
- 119063-01 – SunOS 5.10: libXpm patch
- 119065-01 – SunOS 5.10: fc-cache patch
- 119070-04 – SunOS 5.10: Netra-CP2300 Patch
- 119073-03 – SunOS 5.10: ldapclient patch
- 119081-20 – SunOS 5.10: CD-ROM Install Boot Image Patch
- 119090-19 – SunOS 5.10: Sun iSCSI Device Driver and Utilities
- 119115-17 – Mozilla 1.7 patch
- 119117-17 – Evolution 1.4.6 patch
- 119130-20 – SunOS 5.10: Sun Fibre Channel Device Drivers
- 119143-02 – SunOS 5.10: patch lib/libinetutil.so.1
- 119201-12 – SunOS 5.10: OS Localization message patch
- 119213-07 – NSS_NSPR_JSS 3.11: NSPR 4.6.1 / NSS 3.11 / JSS 4.2
- 119246-15 – SunOS 5.10: Manual Page updates for Solaris 10
- 119252-11 – SunOS 5.10: System Administration Applications Patch
- 121734-04 – SunOS 5.10: patch to support addition of new UTF-8 locales
- 119262-03 – SunOS 5.10: Patch for Central European Region locale issues
- 119276-06 – SunOS 5.10: Patch for Northern Europe Region locale issues
- 119278-09 – CDE 1.6: dtlogin patch
- 119280-04 – CDE 1.6: Runtime library patch for Solaris 10
- 119282-01 – CDE1.6:: GNOME/CDE Menu for Solaris 10
- 119284-01 – CDE 1.6: sdtwsinfo patch
- 119286-01 – CDE 1.6: dtterm libDtTerm patch
- 119309-03 – SunOS 5.10: PGX32 Graphics
- 119313-06 – SunOS 5.10: WBEM Patch
- 119315-05 – SunOS 5.10: Solaris Management Applications Patch
- 119317-01 – SunOS 5.10: SVr4 Packaging Commands (usr) Patch

- 120460-07 – GNOME 2.6.0:: GNOME libs Patch
- 119368-04 – GNOME 2.6.0: Printing Technology Patch
- 119372-02 – GNOME 2.6.0:: GNOME common development tools and libraries Patch
- 119397-03 – SunOS 5.10: Patch for North American Region locale issues
- 119399-03 – SunOS 5.10: Patch for Central American Region locale issues
- 119401-06 – SunOS 5.10: Patch for Western Europe Region locale issues
- 119404-03 – SunOS 5.10: Patch for South American Region locale issues
- 119407-06 – SunOS 5.10: Patch for Eastern Europe Region locale issues
- 122212-03 – GNOME 2.6.0:: GNOME JUMBO Patch
- 119410-03 – GNOME 2.6.0:: GNOME Applets Patch
- 119414-10 – GNOME 2.6.0:: GNOME Accessibility Libraries Patch
- 119416-01 – GNOME 2.6.0:: GNOME Text-To-Speech Engine Patch
- 119418-02 – GNOME 2.6.0:: GNOME On-screen Keyboard Patch
- 119420-01 – SunOS 5.10: Thai locale patch
- 119470-07 – SunOS 5.10: Sun Enterprise Network Array firmware and utilities
- 119534-07 – SunOS 5.10: Flash Archive Patch
- 119538-04 – GNOME 2.6.0: Window Manager Patch
- 119540-04 – GNOME 2.6.0:: GNOME Dtlogin configuration Patch
- 119544-03 – GNOME 2.6.0:: GNOME streaming media framework Patch
- 119546-04 – APOC 1.1: APOC Configuration Agent Patch
- 119548-04 – GNOME 2.6.0:: GNOME Multi-protocol instant messaging client Patch
- 119555-03 – SunOS 5.10: Software to support QLogic Ultra3 SCSI host bus adapters
- 119570-01 – SunOS 5.10: lw8 Patch
- 119573-02 – SunOS 5.10: cachefs patch
- 119574-02 – SunOS 5.10: su patch
- 119580-02 – SunOS 5.10: libcpc Patch
- 119583-01 – SunOS 5.10: memory classification header file patch
- 119586-02 – SunOS 5.10: pcbe Patch
- 119593-01 – SunOS 5.10: net-svc patch
- 119598-05 – GNOME 2.6.0:: GNOME Screen Reader and Magnifier Patch
- 119601-06 – SunOS 5.10: Patch for European Region JDS messages
- 119603-05 – SunOS 5.10: Patch for Asian Region JDS messages
- 119605-05 – SunOS 5.10: Patch for Japanese JDS messages

- 119648-01 – SunOS 5.10: vlan driver patch
- 119685-05 – SunOS 5.10: svc.startd patch
- 119703-05 – SunOS 5.10: Patch for localeadm issues
- 119712-04 – SunOS 5.10: usr/sbin/in.routed Patch
- 119721-02 – SunOS 5.10: usr/lib/efcode/sparcv9/interpreter patch
- 119876-05 – SunOS 5.10: FJSV,GPUU platform links patch
- 119728-03 – SunOS 5.10: FJSV,GPUU platform fmd.conf patch
- 119757-02 – SunOS 5.10: Samba patch
- 119764-03 – SunOS 5.10 : ipmitool patch
- 119766-02 – SunOS 5.10 : SunFreeware man pages patch
- 119771-01 – SunOS 5.10: Asian CCK locales patch
- 119783-01 – SunOS 5.10 : bind patch
- 119797-07 – SunOS 5.10:: CDE Localization message patch
- 119810-02 – SunOS 5.10: International Components for Unicode Patch
- 119812-01 – X11 6.6.2: Freetype patch
- 119814-08 – SunOS 5.10: OS Japanese manpages patch
- 119824-01 – SunOS 5.10: prstat patch
- 119826-01 – SunOS 5.10: libadm.so.1 patch
- 119844-04 – SunOS 5.10: Patch for Southern Europe Region locale issues
- 119845-02 – SunOS 5.10: Patch for Australasia Region locale issues
- 119850-17 – SunOS 5.10: mpt radioictl libpicsbl libpiclfrudr
- 119852-03 – SunOS 5.10: unix branding patch
- 119890-03 – GNOME 2.6.0: search tool Patch
- 119892-01 – GNOME 2.6.0: gimp Patch
- 119900-02 – GNOME 2.6.0:: GNOME libtiff - library for reading and writing TIFF Patch
- 119903-01 – OpenWindows 3.7.3: Xview Patch
- 119906-04 – GNOME 2.6.0: Virtual File System Framework patch
- 119955-03 – CDE 1.6: Tooltalk Runtime patch for Solaris 10
- 119963-05 – SunOS 5.10: Shared library patch for C++
- 119974-03 – SunOS 5.10: fp plug-in for cfgadm
- 119981-09 – SunOS 5.10: libc_psr patch
- 119982-05 – SunOS 5.10: ufsboot patch
- 119984-03 – SunOS 5.10: devfsadm patch

- 119985-02 – SunOS 5.10: perl patch
- 119986-03 – SunOS 5.10: clri patch
- 119988-01 – SunOS 5.10: sed patch
- 120032-02 – SunOS 5.10: libresolv.so patch
- 120036-03 – SunOS 5.10: libldap patch
- 120038-01 – SunOS 5.10: sadc patch
- 120044-01 – SunOS 5.10: psrset patch
- 120046-01 – SunOS 5.10: nfsmapid patch
- 120048-03 – SunOS 5.10: fss patch
- 120050-02 – SunOS 5.10: usermod patch
- 120052-01 – SunOS 5.10: pam unix cred library patch
- 120056-02 – SunOS 5.10: hpc3130 Patch
- 120061-02 – SunOS 5.10: glm patch
- 120062-01 – SunOS 5.10: localedef Patch
- 120064-01 – SunOS 5.10: stdio_iso.h Patch
- 120068-01 – SunOS 5.10: in.telnetd Patch
- 120085-01 – SunOS 5.10: in.ftpd patch
- 120094-06 – X11 6.6.2: xscreensaver patch
- 120099-03 – APOC 1.1: Sun Java(tm) Desktop System Configuration Shared Libraries
- 120101-01 – SunOS 5.10: libsmmedia patch
- 120128-02 – SunOS 5.10: xargs patch
- 120182-02 – SunOS 5.10: Sun Fibre Channel Host Bus Adapter Library
- 120195-02 – SunOS 5.10: patch schpc sc_gptwocfg gptwo_pci
- 120196-02 – SunOS 5.10: patch libprtdiag_psr.so.1
- 120198-04 – SunOS 5.10: patch libpiclfrutree.so.1
- 120199-04 – SunOS 5.10: sysidtool Patch
- 120201-02 – X11 6.8.0: Xorg client libraries patch
- 120222-09 – SunOS 5.10: Emulex-Sun LightPulse Fibre Channel Adapter driver
- 120235-01 – SunOS 5.10: Live Upgrade Zones Support Patch
- 120253-02 – SunOS 5.10: svc-cvcd Patch
- 120256-01 – SunOS 5.10: hci1394 Patch
- 120272-05 – SunOS 5.10: SMA patch
- 120282-02 – GNOME 2.6.0:: GNOME CD Player Utility Patch

- 120284-02 – GNOME 2.6.0:: GNOME CORBA ORB and component framework
- 120286-02 – GNOME 2.6.0:: GNOME text editor Patch
- 120288-02 – GNOME 2.6.0:: GNOME terminal Patch
- 120292-01 – SunOS 5.10 : mysql patch
- 120294-01 – SunOS 5.10 : mysql man patch
- 120311-02 – SunOS 5.10: FRESHBIT ONLY PATCH: For deletes file
- 120329-02 – SunOS 5.10: rexec patch
- 121453-02 – SunOS 5.10: Sun Update Connection Client Foundation
- 120335-04 – SunOS 5.10: Sun Update Connection Client Localization
- 120338-05 – SunOS 5.10: Asian CCK locales patch
- 120346-03 – SunOS 5.10: Common Fibre Channel HBA API Library
- 121975-01 – CDE 1.6: Xsession patch
- 120410-10 – SunOS 5.10: Internet/Intranet Input Method Framework patch
- 120412-04 – SunOS 5.10: Simplified Chinese locale patch
- 120414-09 – SunOS 5.10: Asian CCK locales patch
- 120450-01 – SunOS 5.10: get_netmask Utility Patch
- 120454-01 – GNOME 2.6.0:: GNOME Apoc GConf Adapter Patch
- 120456-01 – GNOME 2.6.0:: GNOME image viewer Patch
- 120458-01 – GNOME 2.6.0:: GNOME configuration Patch
- 120462-06 – SunOS 5.10: FUJITSU PCI GigabitEthernet 2.0 patch
- 120467-04 – SunOS 5.10: LP patch
- 120469-04 – SunOS 5.10: kerberos patch
- 120473-01 – SunOS 5.10: nss_compat patch
- 120543-02 – SunOS 5.10: Apache Patch
- 120560-02 – SunOS 5.10: sun4u platform links patch
- 120618-01 – SunOS 5.10: mailx patch
- 120629-02 – SunOS 5.10: libpool patch
- 120661-04 – SunOS 5.10: rpcmod patch
- 120664-01 – SunOS 5.10: tl driver patch
- 120704-01 – SunOS 5.10 : smartcard man patch
- 120706-02 – SunOS 5.10: XIL 1.4.2 Loadable Pipeline Libraries
- 120719-01 – SunOS 5.10 : gzip patch
- 120732-01 – SunOS 5.10 : libusb patch

- 120737-01 – SunOS 5.10: FX patch
- 120739-02 – GNOME 2.6.0:: GNOME PDF Viewer based on Xpdf
- 120741-01 – SunOS 5.10: seg_map header file patch
- 120744-02 – SunOS 5.10: web console locale patch (de/es/fr/ja/ko/zh)
- 120753-02 – SunOS 5.10: Microtasking libraries (libmtsk) patch
- 120780-02 – SunOS 5.10: ixgb patch
- 120807-01 – SunOS 5.10: rpc.mdcommd patch
- 120809-01 – SunOS 5.10: metaclust patch
- 120811-02 – SunOS 5.10: FUJITSU PCI Fibre Channel Driver 3.0 patch
- 120812-10 – OpenGL 1.5: OpenGL Patch for Solaris
- 120815-01 – SunOS 5.10: dmfe patch
- 120816-01 – SunOS 5.10: at and batch Patch
- 120824-04 – SunOS 5.10: usr/platform/SUNW,Sun-Fire-T200/lib/libprtdiag_psr.so.1 Patch
- 120830-04 – SunOS 5.10: vi and ex patch
- 120844-01 – SunOS 5.10: platform/sun4v/kernel/drv/sparcv9/glvx patch
- 120845-01 – SunOS 5.10: auditd patch
- 120849-04 – SunOS 5.10: Sun PCI-E Gigabit Ethernet Adapter Patch
- 120873-03 – SunOS 5.10: xscreensaver localization message patch
- 120887-05 – SunOS 5.10: cdrw patch
- 120889-01 – SunOS 5.10: librac patch
- 120928-07 – SunOS 5.10: Sun XVR-2500 Graphics Accelerator Patch
- 120984-01 – SunOS 5.10: nss_user.so.1 Patch
- 120986-04 – SunOS 5.10: mkfs and newfs patch
- 120988-01 – SunOS 5.10: grpck Patch
- 120990-02 – SunOS 5.10: net-physical Patch
- 120992-02 – SunOS 5.10: nfs_clnt.h and nfs4_clnt.h Patch
- 120994-01 – SunOS 5.10: elf_amd64.h Patch
- 121002-02 – SunOS 5.10: pax patch
- 121004-01 – SunOS 5.10: sh patch
- 121006-01 – SunOS 5.10: libkadm5 and kadmind patch
- 121008-01 – SunOS 5.10: ufsrestore patch
- 121010-01 – SunOS 5.10: rpc.metad patch
- 121012-01 – SunOS 5.10: traceroute patch

- 121036-01 – GNOME 2.6.0: base libraries patch
- 121081-05 – SunOS 5.10: Connected Customer Agents 1.1.0
- 121095-01 – GNOME 2.6.0.: GNOME EXIF tag parsing library for digital cameras
- 121104-01 – Adobe Acrobat Reader patch
- 121118-06 – SunOS 5.10_sparc, Sun Update Connection Client, System Edition 1.0.4
- 121128-01 – SunOS 5.10: lofs patch
- 121130-01 – SunOS 5.10: librcm.so.1 patch
- 121132-01 – SunOS 5.10: cryptmod patch
- 121136-01 – Adobe Acrobat Reader patch
- 121189-02 – SunOS 5.10: Sun GigaSwift Ethernet 1.0 driver patch
- 121211-01 – SunOS 5.10: Sun Java Web Console (Lockhart) Patch
- 121215-01 – SunOS 5.10: ipsecconf patch
- 121229-01 – SunOS 5.10: libssl patch
- 121233-01 – SunOS 5.10: gsscred patch
- 121235-01 – SunOS 5.10: rcapd patch
- 121236-01 – SunOS 5.10: ncp patch
- 121239-01 – SunOS 5.10: libgss patch
- 121242-02 – SunOS 5.10: web console locale patch (it/sv)
- 121265-02 – SunOS 5.10: libc_psr_hwcapi1.so.1 patch
- 121286-02 – SunOS 5.10: libfru.so.1 and libfrureg.so.1 patch
- 121288-01 – SunOS 5.10: svcs patch
- 121296-01 – SunOS 5.10: fgrep Patch
- 121302-01 – SunOS 5.10: /platform/SUNW,A70/kernel/misc/sparcv9/platmod patch
- 121308-04 – SunOS 5.10: Solaris Management Console Patch
- 121336-02 – SunOS 5.10: FUJITSU ULTRA LVD SCSI Host Bus Adapter Driver 1.0 patch
- 121337-01 – SunOS 5.10: tlimod patch
- 121394-01 – SunOS 5.10: aio_impl.h patch
- 121406-01 – SunOS 5.10: ikeadm patch
- 121428-03 – SunOS 5.10: Live Upgrade Zones Support Patch
- 121430-10 – SunOS 5.8 5.9 5.10: Live Upgrade Patch
- 121474-01 – SunOS 5.10: audit_event patch
- 121487-01 – CDE 1.6: dtmail patch
- 121556-01 – SunOS 5.10: SUNW,Netra-CP3010 platform patch

- 121557-01 – SunOS 5.10: SUNW,Netra-CP3010 usr/platform patch
- 121558-01 – SunOS 5.10: SUNW,Netra-CP3010 platform patch
- 121559-01 – SunOS 5.10: Netra-CP3010 libprtdiag_psr patch
- 121561-03 – SunOS 5.10: keymap patch
- 121580-01 – SunOS 5.10: daktari and cherrystone header files patch
- 121606-01 – GNOME 2.6.0: Python patch
- 121620-02 – SunOS 5.10: Patch for mediaLib in Solaris
- 121667-02 – SunOS 5.10 : pilot-link header patch
- 121669-01 – SunOS 5.10: SunFreeware pilot-link man pages patch
- 121675-06 – SunOS 5.10: Japanese Input System ATOK patch
- 121693-02 – SunOS 5.10: chicago audio patch
- 121694-01 – SunOS 5.10: elfexec patch
- 121721-01 – SunOS 5.10: SVM header files patch
- 121802-01 – SunOS 5.10: mouse device consms patch
- 121868-03 – X11 6.6.2: keytable patch
- 121870-01 – X11 6.6.2: xterm patch
- 121901-01 – SunOS 5.10: i.manifest r.manifest class action script patch
- 121905-01 – SunOS 5.10: audit header files patch
- 121921-02 – SunOS 5.10: libumem library patch
- 121923-01 – GNOME 2.6.0:: GNOME CD Burner patch
- 121944-01 – SunOS 5.10: SunFire libpsvcpolicy libraries patch
- 121946-01 – SunOS 5.10: Error processing FRU tree: IO error patch
- 121947-01 – SunOS 5.10: New Keyboards software needed
- 121953-02 – SunOS 5.10: Localization patch for new EMEA FIGGS locales
- 121977-01 – CDE 1.6: Dtlogin patch
- 122005-01 – SunOS 5.10 : SunFreeware growisofs man pages
- 122009-01 – SunOS 5.10: SunFreeware cdrtools patch
- 122011-01 – SunOS 5.10: SunFreeware cdrtools man pages patch
- 122027-03 – SunOS 5.10: bge driver patch
- 122029-01 – SunOS 5.10: NIS+ nis patch
- 122031-01 – SunOS 5.10: cgsix Patch
- 122032-02 – SunOS 5.10: Update timezones patch
- 122064-01 – CDE 1.6: Tooltalk ttsession patch for Solaris 10

- 122083-01 – SunOS 5.10: fsck mirrored patch
- 122085-01 – SunOS 5.10: nispasswd patch
- 122087-01 – SunOS 5.10: LTC1427-connected fan device driver patch
- 122119-03 – SunOS 5.10: Patch for North African locale issues
- 122130-01 – SunOS 5.10: Patch to update SUNWlocaledefsrc files
- 122172-06 – SunOS 5.10: swap swapadd isaexec patch
- 122174-03 – SunOS 5.10: dumpadm patch
- 122183-01 – SunOS 5.10: logadm timestamp patch
- 122195-02 – SunOS 5.10: pkgadd assertion patch
- 122204-01 – GNOME 2.6.0: configuration framework Patch
- 122206-02 – GNOME 2.6.0: On-screen Keyboard Patch
- 122208-01 – GNOME 2.6.0: Removable Media Patch
- 122210-01 – GNOME 2.6.0: GNOME Media Player Patch
- 122215-01 – SunOS 5.10: syslogd patch
- 122231-01 – SunOS 5.10 Sun Connection agents, transport certificate update
- 122239-01 – SunOS 5.10: Apache 2 mod_perl Perl cgi patch
- 122251-01 – SunOS 5.10: librestart.so.1 patch
- 122253-01 – SunOS 5.10: scsi patch
- 122255-03 – SunOS 5.10: etc/flash/precreation/caplib patch
- 122259-01 – SunOS 5.10: SunFreeware gnu esp ghostscript patch
- 122261-01 – SunOS 5.10: SunFreeware ghostscript man pages patch
- 122418-01 – SunOS 5.10: Fix Garbled Message Issues for Ru
- 122420-01 – SunOS 5.10: Simplified Chinese locale patch
- 122422-02 – SunOS 5.10: add missing locale files for Mozilla
- 122470-01 – GNOME 2.6.0: GNOME Java Help Patch
- 122487-02 – SunOS 5.10: Patch for Middle Eastern Region locale issue
- 122513-01 – SunOS 5.10: devfsadm SUNW_cfg_link.so patch
- 122515-01 – SunOS 5.10: boston platform patch
- 122517-01 – SunOS 5.10:
- 122519-01 – SunOS 5.10: fruadm patch
- 122521-01 – SunOS 5.10: locator patch
- 122523-01 – SunOS 5.10: seattle platform patch
- 122525-01 – SunOS 5.10: seattle patch

- 122535-01 – SunOS 5.10: llib-lcrypto patch
- 122537-01 – SunOS 5.10: libpiclenvmon.so.1 patch
- 122539-02 – SunOS 5.10: volmgt and bsmconv patch
- 122637-01 – SunOS 5.10: zonename patch
- 122640-05 – SunOS 5.10: zfs genesis patch
- 122662-01 – SunOS 5.10: libzonecfg patch
- 122646-01 – SunOS 5.10: zlogin patch
- 122650-02 – SunOS 5.10: zfs tools patch
- 122652-02 – SunOS 5.10: utilities patch
- 122658-02 – SunOS 5.10: zonecfg patch
- 122660-02 – SunOS 5.10: zoneadm zoneadmd patch
- 122669-01 – Evolution 1.4.6: Cryptographic Library patch
- 122735-01 – CDE 1.6: backdrops patch
- 122750-01 – SunOS 5.10: /lib/svc/method/fs-root patch
- 122752-03 – SunOS 5.10: FMA snmp patch
- 122754-01 – SunOS 5.10: Exacct catalogue patch
- 122856-01 – SunOS 5.10: sendmail patch
- 122860-01 – SunOS 5.10: SCN Update Manager localization patch
- 123015-01 – SunOS 5.10: ps patch
- 123017-01 – SunOS 5.10: inetd patch
- 123066-01 – SunOS 5.10: libmeta.so.1 patch
- 123121-02 – SunOS 5.10: libwsreg.so.1 Patch
- 123358-01 – SunOS 5.10: jumpstart and live upgrade compliance patch

Note – The Oracle Solaris 10 6/06 software contains script/special patches which do not deliver bug fixes or new features but deliver changes that are required as a result of issues with the creation of the update image. As a result, the following script/special patches are not made available for customers because they are not required outside of creating the Update release.

- 119077-10 – SunOS 5.10: SPECIAL PATCH: For EDITABLE Files
- 119079-13 – SunOS 5.10: Script Patch
- 119088-06 – SunOS 5.10: SPECIAL PATCH: qlc Script Patch to replace package scripts
- 119092-07 – SunOS 5.10: SPECIAL PATCH: iSCSI Script Patch to replace package scripts
- 120224-02 – SunOS 5.10: SPECIAL PATCH: Emulex-Sun Fibre Channel Adapter driver

- 120274-01 – SunOS 5.10: SPECIAL PATCH: For postinstall File
- 120344-01 – SunOS 5.10: SPECIAL PATCH: Common Fibre Channel HBA API Library Script Patch
- 120416-04 – SunOS 5.10: SPECIAL PATCH: class action scripts patch
- 120452-01 – SunOS 5.10: SPECIAL PATCH: For editable files only
- 120690-01 – SunOS 5.10: SPECIAL PATCH : For depend File
- 120746-01 – SunOS 5.10_sparc, SUNWswmt patch
- 120825-01 – SunOS 5.10: SPECIAL PATCH: FJSVpiclu depend file
- 120837-01 – SunOS 5.10: SPECIAL PATCH: For DEPEND Files
- 120932-01 – Solaris 10 U1: Live Upgrade to S10U1 fails due to checkinstall script
- 120934-01 – Solaris 10 U1: Live Upgrade to S10U1 fails due to SUNWccrrr postinstall
- 121061-01 – SunOS 5.10: motd Patch
- 121306-02 – SunOS 5.10: SPECIAL PATCH: For package level scripts only
- 121463-05 – GNOME 2.6.0: GNOME Accessibility Libraries Patch
- 121549-01 – SunOS 5.10: SPECIAL PATCH: FJSVdrdr.us r.mainfest file
- 121575-01 – SunOS 5.10: SPECIAL PATCH: For package level scripts only
- 121671-01 – GNOME 2.6.0: SPECIAL PATCH for SUNWPython package
- 121778-12 – SunOS 5.10: Script Patch
- 121780-11 – SunOS 5.10: SPECIAL PATCH: For EDITABLE Files
- 122021-01 – SunOS 5.10: SPECIAL PATCH: For depend File
- 122180-01 – SunOS 5.10: Patch for North African locale issues
- 122225-01 – SunOS 5.10_sparc, SPECIAL PATCH: For Script Files
- 122263-01 – SunOS 5.10: SPECIAL PATCH: fp plug-in for cfgadm
- 122416-01 – SunOS 5.10: SPECIAL PATCH: depend file patch
- 122700-02 – GNOME 2.6.0: GNOME libs CAS Patch
- 122763-01 – SunOS 5.10: SunVideo 1.4 procedural patch
- 123123-02 – SunOS 5.10_sparc, SPECIAL PATCH: For Script Files
- 123140-01 – SunOS 5.10: SPECIAL PATCH: For package level scripts only

x86 Patch List

- 120901-03 – SunOS 5.10_x86: libzonecfg patch
- 121334-04 – SunOS 5.10_x86: zoneadmd, zlogin and zoneadm patch
- 119255-24 – SunOS 5.10_x86: Install and Patch Utilities Patch
- 121127-02 – SunOS 5.10_x86: umountall.sh Patch
- 113000-07 – SunOS 5.10_x86: SUNWgrub patch
- 117181-01 – SunOS 5.10_x86: /kernel/drv/pcscsi patch
- 117435-02 – SunOS 5.10_x86: biosdev patch
- 117448-01 – SunOS 5.10_x86: patch usr/sbin/ntpdate
- 117464-01 – SunOS 5.10_x86: passwdutil Patch
- 117466-01 – SunOS 5.10_x86: fwtmp Patch
- 118344-11 – SunOS 5.10_x86: Fault Manager Patch
- 118347-04 – SunOS 5.10_x86: libnsl Patch
- 118368-03 – SunOS 5.10_x86: csh Patch
- 118372-07 – SunOS 5.10_x86: elfsign Patch
- 118374-01 – SunOS 5.10_x86: mpstat Patch
- 118561-01 – SunOS 5.10_x86: patch usr/bin/telnet
- 118567-01 – SunOS 5.10_x86: ping Command Patch
- 118668-05 – J2SE 5.0_x86 update 6 patch
- 118669-05 – J2SE 5.0_x86 update 6 patch, 64bit
- 118677-02 – SunOS 5.10_x86: patch for Solaris make and sccs utilities
- 118732-01 – SunOS 5.10_x86: /usr/sbin/zonecfg patch
- 118734-03 – SunOS 5.10_x86: patch libssagent.so.1 and libssasnmp.so.1
- 118736-01 – SunOS 5.10_x86: usr/sbin/rpc.nisd_resolv Patch
- 118778-04 – SunOS 5.10_x86: Sun GigaSwift Ethernet 1.0 driver patch
- 118816-03 – SunOS 5.10_x86: /usr/xpg4/bin/awk patch
- 118825-01 – SunOS 5.10_x86: sort patch
- 118844-30 – SunOS 5.10_x86: kernel Patch
- 121264-01 – SunOS 5.10_x86: cadp160 driver patch
- 118855-14 – SunOS 5.10_x86: kernel patch
- 118871-01 – SunOS 5.10_x86: nss_ldap patch
- 118873-02 – SunOS 5.10_x86: ksh patch
- 118880-01 – SunOS 5.10_x86: dhcp daemon patch

- 118885-01 – SunOS 5.10_x86: atomic.h patch
- 118891-02 – SunOS 5.10_x86: llib-lc patch
- 118919-16 – SunOS 5.10_x86: Solaris Crypto Framework patch
- 118960-02 – SunOS 5.10_x86: patch usr/bin/acctcom and usr/bin/lastcomm
- 118966-21 – X11 6.8.0_x86: Xorg patch
- 118997-08 – SunOS 5.10_x86: format patch
- 119043-09 – SunOS 5.10_x86: usr/sbin/svccfg patch
- 119060-12 – X11 6.6.2_x86: Xsun patch
- 119062-01 – X11 6.8.0_x86: font patch
- 119064-01 – SunOS 5.10_x86: libXpm patch
- 119066-01 – SunOS 5.10_x86: fc-cache patch
- 119074-03 – SunOS 5.10_x86: ldapclient patch
- 119082-20 – SunOS 5.10_x86: CD-ROM Install Boot Image Patch
- 119091-19 – SunOS 5.10_x86: Sun iSCSI Device Driver and Utilities
- 119116-17 – Mozilla 1.7_x86 patch
- 119118-17 – Evolution 1.4.6_x86 patch
- 119131-20 – SunOS 5.10_x86: Sun Fibre Channel Device Drivers
- 119144-02 – SunOS 5.10_x86: patch lib/libinetutil.so.1
- 119202-12 – SunOS 5.10_x86: OS Localization message patch
- 119214-07 – NSS_NSPR_JSS 3.11_x86: NSPR 4.6.1 / NSS 3.11 / JSS 4.2
- 119247-15 – SunOS 5.10_x86: Manual Page updates for Solaris 10
- 119253-12 – SunOS 5.10_x86: System Administration Applications Patch
- 121735-04 – SunOS 5.10_x86: patch to support addition of new UTF-8 locales
- 119277-06 – S10_x86: Patch for Northern Europe Region locale issues
- 119279-09 – CDE 1.6_x86: dtlogin patch
- 119281-04 – CDE 1.6_x86: Runtime library patch for Solaris 10
- 119283-01 – CDE1.6_x86:: GNOME/CDE Menu for Solaris 10_x86
- 119285-01 – CDE 1.6_x86: sdtwsinfo patch
- 119287-01 – CDE 1.6_x86: dtterm libDtTerm patch
- 119314-07 – SunOS 5.10_x86: WBEM Patch
- 119316-05 – SunOS 5.10_x86: Solaris Management Applications Patch
- 119318-01 – SunOS 5.10_x86: SVr4 Packaging Commands (usr) Patch
- 120461-07 – GNOME 2.6.0_x86:: GNOME libs Patch

- 119369-04 – GNOME 2.6.0_x86: Printing Technology Patch
- 119373-02 – GNOME 2.6.0_x86:: GNOME common development tools and libraries Patch
- 119398-02 – S10_x86: Patch for North American Region locale issues
- 119400-02 – S10_x86: Patch for Central American Region locale issues
- 119402-05 – S10_x86: Patch for Western Europe Region locale issues
- 119405-02 – 5.10_x86: Patch for South American Region locale issues
- 119406-02 – SunOS 5.10_x86: Patch for Central European Region locale issues
- 119408-05 – SunOS 5.10_x86: Patch for Eastern Europe Region locale issues
- 122213-03 – GNOME 2.6.0_x86:: GNOME Image Editor Patch
- 119411-03 – GNOME 2.6.0_x86:: GNOME Applets Patch
- 119415-10 – GNOME 2.6.0_x86:: GNOME Accessibility Libraries Patch
- 119417-01 – GNOME 2.6.0_x86:: GNOME Text-To-Speech Engine Patch
- 119419-02 – GNOME 2.6.0_x86:: GNOME On-screen Keyboard Patch
- 119421-01 – SunOS 5.10_x86: Thai locale patch
- 119471-05 – SunOS 5.10_x86: Sun Enterprise Network Array firmware and utilities
- 119535-07 – SunOS 5.10_x86: Flash Archive Patch
- 119539-04 – GNOME 2.6.0_x86: Window Manager Patch
- 119541-04 – GNOME 2.6.0_x86:: GNOME Dtlogin configuration Patch
- 119545-03 – GNOME 2.6.0_x86:: GNOME streaming media framework Patch
- 119547-04 – APOC 1.1_x86: APOC Configuration Agent Patch
- 119549-04 – GNOME 2.6.0_x86:: GNOME Multi-protocol instant messaging client Patch
- 119575-02 – SunOS 5.10_x86: su patch
- 119594-01 – SunOS 5.10_x86: net-svc patch
- 119599-05 – GNOME 2.6.0_x86:: GNOME Screen Reader and Magnifier Patch
- 119602-06 – SunOS 5.10_x86: Patch for European Region JDS messages
- 119604-05 – SunOS 5.10_x86: Patch for Asian Region JDS messages
- 119606-05 – SunOS 5.10_x86: Patch for Japanese Region JDS messages
- 119649-01 – SunOS 5.10_x86: vlan driver patch
- 119686-05 – SunOS 5.10_x86: lib/svc/bin/svc.startd Patch
- 119704-05 – SunOS 5.10_x86: Patch for localeadm issues
- 119713-04 – SunOS 5.10_x86: usr/sbin/in.routed Patch
- 119758-02 – SunOS 5.10_x86: Samba patch

- 119765-03 – SunOS 5.10_x86: ipmitool patch
- 119767-02 – SunOS 5.10_x86: SunFreeware man pages patch
- 119772-01 – SunOS 5.10_x86: Asian CCK locales patch
- 119784-01 – SunOS 5.10_x86 : bind patch
- 119798-07 – SunOS 5.10_x86:: CDE Localization message patch
- 119811-02 – SunOS 5.10_x86: International Components for Unicode Patch
- 119813-02 – X11 6.6.2_x86: Freetype patch
- 119815-08 – SunOS 5.10_x86: OS Japanese manpages patch
- 119825-01 – SunOS 5.10_x86: prstat patch
- 119827-01 – SunOS 5.10_x86: libadm.so.1 Patch
- 119853-03 – SunOS 5.10_x86: unix branding patch
- 119891-03 – GNOME 2.6.0_x86: search tool Patch
- 119893-01 – GNOME 2.6.0_x86: gimp Patch
- 119901-02 – GNOME 2.6.0_x86:: GNOME libtiff - library for reading and writing TIFF Patch
- 119904-01 – Openwindows 3.7.3_x86: Xview Patch
- 119907-04 – GNOME 2.6.0_x86: Virtual File System Framework patch
- 119956-02 – CDE 1.6_x86: Tooltalk Runtime patch for Solaris 10
- 119961-02 – SunOS 5.10_x86, x64, Patch for assembler
- 119964-06 – SunOS 5.10_x86: Shared library patch for C++_x86
- 119975-02 – SunOS 5.10_x86: fp plug-in for cfgadm
- 119987-03 – SunOS 5.10_x86: clri patch
- 119989-01 – SunOS 5.10_x86: sed patch
- 120010-01 – SunOS 5.10_x86: rmformat patch
- 120033-02 – SunOS 5.10_x86: libresolv.so.2 patch
- 120037-03 – SunOS 5.10_x86: libldap patch
- 120039-01 – SunOS 5.10_x86: sar patch
- 120045-01 – SunOS 5.10_x86: psrset patch
- 120047-01 – SunOS 5.10_x86: nfsmapid patch
- 120051-02 – SunOS 5.10_x86: usermod patch
- 120053-01 – SunOS 5.10_x86: pam unix cred library patch
- 120063-01 – SunOS 5.10_x86: localedef Patch
- 120065-01 – SunOS 5.10_x86: stdio_iso.h Patch
- 120069-01 – SunOS 5.10_x86: in.telnetd Patch

- 120086-01 – SunOS 5.10_x86: patch usr/sbin/in.ftpd
- 120095-06 – X11 6.6.2_x86: xscreensaver patch
- 120100-03 – APOC 1.1_x86: Sun Java(tm) Desktop System Configuration Shared Libraries
- 120102-01 – SunOS 5.10_x86: patch usr/lib/libsmmedia.so.1
- 120129-02 – SunOS 5.10_x86: patch usr/bin/xargs
- 120183-02 – SunOS 5.10_x86: Sun Fibre Channel Host Bus Adapter Library
- 120200-04 – SunOS 5.10_x86: sysidtool Patch
- 120202-03 – X11 6.8.0_x86: Xorg client libraries patch
- 120223-09 – SunOS 5.10_x86: Emulex-Sun LightPulse Fibre Channel Adapter driver
- 120236-01 – SunOS 5.10_x86: Live Upgrade Zones Support Patch
- 120273-06 – SunOS 5.10_x86 : SMA patch
- 120283-02 – GNOME 2.6.0_x86:: GNOME CD Player Utility Patch
- 120285-02 – GNOME 2.6.0_x86:: GNOME CORBA ORB and component framework
- 120287-02 – GNOME 2.6.0_x86:: GNOME text editor Patch
- 120289-02 – GNOME 2.6.0_x86:: GNOME terminal Patch
- 120293-01 – SunOS 5.10_x86 : mysql patch
- 120295-01 – SunOS 5.10_x86 : mysql man patch
- 120312-01 – SunOS 5.10_x86: FRESHBIT ONLY PATCH: For deletes file
- 120313-01 – SunOS 5.10_x86: SPECIAL PATCH: For EDITABLE Files
- 120330-02 – SunOS 5.10_x86: rexec patch
- 121454-02 – SunOS 5.10_x86: Sun Update Connection Client Foundation
- 120336-04 – SunOS 5.10_x86: Sun Update Connection Client Localization
- 120347-03 – SunOS 5.10_x86: Common Fibre Channel HBA API Library
- 120351-04 – SunOS 5.10_x86: Asian CCK locales patch
- 121976-01 – CDE 1.6_x86: Xsession patch
- 120411-10 – SunOS 5.10_x86: Internet/Intranet Input Method Framework patch
- 120413-04 – SunOS 5.10_x86: Simplified Chinese locale patch
- 120415-09 – SunOS 5.10_x86: Asian CCK locales patch
- 120451-01 – SunOS 5.10_x86: Get netmask Utility Patch
- 120455-01 – GNOME 2.6.0_x86:: GNOME Apoc GConf Adapter Patch
- 120457-01 – GNOME 2.6.0_x86:: GNOME image viewer Patch
- 120459-01 – GNOME 2.6.0_x86:: GNOME configuration Patch
- 120468-04 – SunOS 5.10_x86: LP patch

- 120474-01 – SunOS 5.10_x86: nss_compat patch
- 120536-11 – SunOS 5.10_x86: Updated video drivers and fixes
- 120544-02 – SunOS 5.10_x86 : Apache Patch
- 120630-02 – SunOS 5.10_x86: libpool patch
- 120705-01 – SunOS 5.10_x86: smartcard man patch
- 120720-01 – SunOS 5.10_x86 : gzip patch
- 120733-01 – SunOS 5.10_x86: libusb patch
- 120740-02 – GNOME 2.6.0_x86:: GNOME PDF Viewer based on Xpdf
- 120742-01 – SunOS 5.10_x86: seg_map header file patch
- 120745-02 – SunOS 5.10_x86: web console locale patch (de/es/fr/ja/ko/zh)
- 120754-02 – SunOS 5.10_x86: Microtasking libraries (libmtsk) patch
- 120771-01 – SunOS 5.10_x86: UDC patch
- 120808-01 – SunOS 5.10_x86: rpc.mdcommd match
- 120810-01 – SunOS 5.10_x86: metaclust patch
- 120817-01 – SunOS 5.10_x86: at and batch patch
- 120831-04 – SunOS 5.10_x86: vi and ex patch
- 120846-01 – SunOS 5.10_x86: auditd patch
- 120874-03 – SunOS 5.10_x86: xscreensaver localization message patch
- 120888-05 – SunOS 5.10_x86: cdrw patch
- 120890-01 – SunOS 5.10_x86: librac patch
- 120985-01 – SunOS 5.10_x86: nss_user.so.1 Patch
- 120987-04 – SunOS 5.10_x86: mkfs, newfs, other ufs utils patch
- 120989-01 – SunOS 5.10_x86: grpck Patch
- 120991-02 – SunOS 5.10_x86: net-physical Patch
- 120993-02 – SunOS 5.10_x86: nfs_clnt.h and nfs4_clnt.h Patch
- 120995-01 – SunOS 5.10_x86: elf_amd64.h Patch
- 121003-02 – SunOS 5.10_x86: pax patch
- 121005-01 – SunOS 5.10_x86: sh patch
- 121007-01 – SunOS 5.10_x86: libkadm5 and kadmind patch
- 121009-01 – SunOS 5.10_x86: ufsrestore patch
- 121011-01 – SunOS 5.10_x86: rpc.metad patch
- 121013-01 – SunOS 5.10_x86: traceroute patch
- 121037-01 – GNOME 2.6.0_x86: base libraries patch

- 121044-02 – X11 6.8.0_x86: Mesa patch
- 121082-05 – SunOS 5.10_x86: Connected Customer Agents 1.1.0
- 121096-01 – GNOME 2.6.0_x86:: GNOME EXIF tag parsing library for digital cameras
- 121119-06 – SunOS 5.10_x86, Sun Update Connection Client, System Edition 1.0.4
- 121129-01 – SunOS 5.10_x86: lofs patch
- 121131-01 – SunOS 5.10_x86: librcm.so.1 patch
- 121134-01 – SunOS 5.10_x86: power patch
- 121212-01 – SunOS 5.10_x86: Sun Java Web Console (Lockhart) Patch
- 121216-01 – SunOS 5.10_x86: ipsecconf patch
- 121230-01 – SunOS 5.10_x86: libssl patch
- 121234-01 – SunOS 5.10_x86: gsscred patch
- 121240-01 – SunOS 5.10_x86: libgss patch
- 121243-02 – SunOS: 5.10_x86: web console locale patch (it/sv)
- 121287-01 – SunOS 5.10_x86: pcn patch
- 121289-02 – SunOS 5.10_x86: patch /usr/bin/svcs patch
- 121297-01 – SunOS 5.10_x86: fgrep patch
- 121300-01 – SunOS 5.10_x86: caplib patch
- 121309-04 – SunOS 5.10_x86: Solaris Management Console Patch
- 121395-01 – SunOS 5.10_x86: aio_impl.h. patch
- 121407-01 – SunOS 5.10_x86: ikeadm patch
- 121429-03 – SunOS 5.10_x86: Live Upgrade Zones Support Patch
- 121431-10 – SunOS 5.8_x86 5.9_x86 5.10_x86: Live Upgrade Patch
- 121475-01 – SunOS 5.10_x86: audit_event patch
- 121488-01 – CDE 1.6_x86: dtmail patch
- 121562-03 – SunOS 5.10_x86: keymap patch
- 121571-01 – SunOS 5.10_x86: Patch for Australasia Region locale issues
- 121572-03 – SunOS 5.10_x86: Patch for Southern Europe Region locale issues
- 121604-01 – SunOS 5.10_x86: libcfgadm.so.1 patch
- 121607-01 – GNOME 2.6.0_x86: Python patch
- 121621-02 – SunOS 5.10_x86: Patch for mediaLib in Solaris
- 121668-02 – SunOS 5.10_x86 : pilot-link header patch
- 121670-01 – SunOS 5.10_x86: SunFreeware pilot-link man pages patch
- 121676-06 – SunOS 5.10_x86: Japanese Input System ATOK patch

- 121696-02 – SunOS 5.10_x86: devfsadm patch
- 121722-03 – SunOS 5.10_x86: SVM header files patch
- 121805-02 – SunOS 5.10_x86: GRUB patch
- 121869-03 – SunOS 5.10_x86: keytable patch
- 121871-01 – X11 6.6.2_x86: xterm patch
- 121902-01 – SunOS 5.10_x86: i.manifest r.manifest class action script patch
- 121906-01 – SunOS 5.10_x86: audit header files patch
- 121922-02 – SunOS 5.10_x86: libumem library patch
- 121924-01 – GNOME 2.6.0_x86:: GNOME CD Burner patch
- 121948-01 – SunOS 5.10_x86: New keyboards software needed for S11 and S10 U2
- 121954-02 – SunOS 5.10_x86: Localization patch for new EMEA FIGGS locales
- 121978-01 – CDE 1.6_x86: Dtlogin patch
- 122006-01 – SunOS 5.10_x86 : SunFreeware growisofs man page
- 122010-01 – SunOS 5.10_x86: SunFreeware cdrtools patch
- 122012-01 – SunOS 5.10_x86: SunFreeware cdrtools man pages patch
- 122030-01 – SunOS 5.10_x86: NIS+ nis patch
- 122033-02 – SunOS 5.10_x86: Update timezones patch
- 122035-03 – SunOS 5.10_x86: awk nawk Patch
- 122065-01 – CDE 1.6_x86: Tooltalk ttession patch for Solaris 10
- 122078-01 – SunOS 5.10_x86: ypxfrd ypxfrd_server patch
- 122082-01 – SunOS 5.10_x86: perl format string patch
- 122084-01 – SunOS 5.10_x86: fsck mirrored patch
- 122086-01 – SunOS 5.10_x86: nispasswd patch
- 122120-03 – SunOS 5.10_x86: Patch for Arabic Fonts
- 122131-01 – S10_x86: Patch to update SUNWlocaledefsrc files
- 122173-04 – SunOS 5.10_x86: swap swapadd patch
- 122175-03 – SunOS 5.10_x86: dumpadm patch
- 122184-01 – SunOS 5.10_x86: logadm timestamp patch
- 122196-03 – SunOS 5.10_x86: pkgadd assertion patch
- 122205-01 – GNOME 2.6.0_x86: configuration framework patch
- 122207-02 – GNOME 2.6.0_x86: On-screen Keyboard patch
- 122209-01 – GNOME 2.6.0_x86: Removable Media Patch
- 122211-01 – GNOME 2.6.0_x86:: GNOME Media Player Patch

- 122216-01 – SunOS 5.10_x86: syslogd patch
- 122232-01 – SunOS 5.10_x86 Sun Connection agents, transport certificate update
- 122240-01 – SunOS 5.10_x86: Apache 2 mod_perl Perl cgi patch
- 122248-01 – SunOS 5.10_x86: patch clmb
- 122252-01 – SunOS 5.10_x86: librestart.so.1 patch
- 122260-01 – SunOS 5.10_x86: SunFreeware gnu esp ghostscript patch
- 122262-01 – SunOS 5.10_x86: SunFreeware ghostscript man pages patch
- 122419-01 – SunOS 5.10_x86: Fix Garbled Message Issues for Ru
- 122421-01 – SunOS 5.10_x86: Simplified Chinese locale patch
- 122423-02 – SunOS 5.10_x86: add missing locale files for Mozilla
- 122471-01 – GNOME 2.6.0_x86:: GNOME Java Help Patch
- 122488-02 – SunOS 5.10_x86: Patch for Middle Eastern Region locale issue
- 122522-01 – SunOS 5.10_x86: locator patch
- 122528-01 – SunOS 5.10_x86: mech_krb5.so.1 patch
- 122530-01 – SunOS 5.10_x86: nge patch
- 122532-01 – SunOS 5.10_x86: volmgt and bsmconv patch
- 122534-01 – SunOS 5.10_x86: ktkit_warn patch
- 122536-01 – SunOS 5.10_x86: llib-lcrypto patch
- 122638-01 – SunOS 5.10_x86: zonename patch
- 122641-06 – SunOS 5.10_x86: zfs genesis patch
- 122663-04 – SunOS 5.10_x86: libzonecfg patch
- 122647-03 – SunOS 5.10_x86: zlogin patch
- 122653-02 – SunOS 5.10_x86: utilities patch
- 122655-04 – SunOS 5.10_x86: jumpstart and live upgrade compliance patch
- 122659-03 – SunOS 5.10_x86: zonecfg patch
- 122661-01 – SunOS 5.10_x86: zoneadm patch
- 122665-04 – SunOS 5.10_x86: rnode.h/systm.h/zone.h header file patch
- 122670-01 – Evolution 1.4.6_x86: Cryptographic Library patch
- 122736-01 – CDE 1.6_x86: backdrops patch
- 122746-01 – SunOS 5.10_x86: bootadm patch
- 122748-01 – SunOS 5.10_x86: gda patch
- 122753-03 – SunOS 5.10_x86: fma snmpd patch
- 122755-01 – SunOS 5.10_x86: libexacct.so.1 fma patch

- 122829-02 – SunOS 5.10_x86: lsimega driver patch
- 122857-02 – SunOS 5.10_x86: sendmail patch
- 122861-01 – SunOS 5.10_x86: SCN Update Manager localization patch
- 123014-01 – SunOS 5.10_x86: pcb.h patch
- 123016-01 – SunOS 5.10_x86: ps patch
- 123018-01 – SunOS 5.10_x86: inetd patch
- 123067-01 – SunOS 5.10_x86: libmeta.so.1 patch
- 123122-02 – SunOS 5.10_x86: usr/lib/libwsreg.so.1 Patch

Note – The Oracle Solaris 10 6/06 software contains script/special patches which do not deliver bug fixes or new features but deliver changes that are required as a result of issues with the creation of the update image. As a result, the following script/special patches are not made available for customers because they are not required outside of creating the Update release.

- 119078-08 – SunOS 5.10_x86: SPECIAL PATCH: For EDITABLE Files
- 119080-12 – SunOS 5.10_x86: SPECIAL PATCH: For Script Files
- 119089-06 – SunOS 5.10_x86: SPECIAL PATCH: qlc Script Patch to replace package scripts
- 119093-07 – SunOS 5.10_x86: SPECIAL PATCH: iSCSI Script Patch to replace package scripts
- 120225-02 – SunOS 5.10_x86: SPECIAL PATCH: Emulex-Sun Fibre Channel Adapter driver
- 120275-02 – SunOS 5.10_x86: SPECIAL PATCH: For postinstall File
- 120314-01 – SunOS 5.10_x86: SPECIAL PATCH: For SCRIPT Files
- 120345-01 – SunOS 5.10_x86: SPECIAL PATCH: Common Fibre Channel HBA API Library Script Patch
- 120417-04 – SunOS 5.10_x86: SPECIAL PATCH: class action scripts patch
- 120453-01 – SunOS 5.10_x86: SPECIAL PATCH: For editable files only
- 120691-01 – SunOS 5.10_x86: SPECIAL PATCH : For depend File
- 120747-01 – SunOS 5.10_x86: SUNWswmt patch
- 120838-01 – SunOS 5.10_x86: SPECIAL PATCH: For DEPEND Files
- 120933-01 – Solaris 10_x86: Live Upgrade to S10U1 fails due to checkinstall script
- 120935-01 – Solaris 10_x86: Live Upgrade to S10U1 fails due to SUNWccrrr postinstall
- 121062-01 – SunOS 5.10_x86: motd Patch
- 121307-02 – SunOS 5.10_x86: SPECIAL PATCH: For package level scripts only
- 121464-05 – GNOME 2.6.0_x86:: GNOME Accessibility Libraries Patch

- 121576-01 – SunOS 5.10_x86: SPECIAL PATCH: For package level scripts only
- 121672-01 – GNOME 2.6.0_x86: SPECIAL PATCH for SUNWPython package
- 121779-10 – SunOS 5.10_x86: SPECIAL PATCH: For Script Files
- 121781-10 – SunOS 5.10_x86: SPECIAL PATCH: For EDITABLE Files
- 122022-01 – SunOS 5.10_x86: SPECIAL PATCH: For depend File
- 122181-01 – SunOS 5.10_x86: Patch for North African locale issues
- 122226-01 – SunOS 5.10_x86, SPECIAL PATCH: For Script Files
- 122264-01 – SunOS 5.10_x86: SPECIAL PATCH: fp plug-in for cfgadm
- 122417-01 – SunOS 5.10_x86: SPECIAL PATCH: depend file patch
- 122701-02 – GNOME 2.6.0_x86:: GNOME libs CAS Patch
- 123124-02 – SunOS 5.10_x86, SPECIAL PATCH: For Script Files
- 123141-01 – SunOS 5.10_x86: SPECIAL PATCH: For package level scripts only