Solaris 10 5/08 Release Notes

![Sun microsystems logo]

Contents

Preface

This document describes the Solaris 10 5/08 operating system. For information about the Solaris 10 3/05, Solaris 10 3/05 HW1, Solaris 10 3/05 HW2, Solaris 10 1/06, Solaris 10 6/06, Solaris 10 11/06, and Solaris 10 8/07, see the "Solaris 10 Release Notes", Sun part number 820–1259.

The *Solaris 10 5/08 Release Notes* contain installation and runtime problem details. Also included are end-of-software support statements for the Solaris 10 Operating System.

Note – For the latest version of the Solaris 10 5/08 Release Notes document, search for Solaris 10 5/08 Release Notes on http://docs.sun.com.

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 5/08 Installation Guide: Basic Installations*

- *Solaris 10 5/08 Installation Guide: Planning for Installation and Upgrade*
- *Solaris 10 5/08 Installation Guide: Solaris Live Upgrade and Upgrade Planning*
- *Solaris 10 5/08 Installation Guide: Network-Based Installations*
- *Solaris 10 5/08 Installation Guide: Custom JumpStart and Advanced Installations*
- *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
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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)
- Support (http://www.oracle.com/us/support/systems/index.html)
- Training (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).
- Get hands-on step-by-step tutorials with Oracle By Example (http://www.oracle.com/technetwork/tutorials/index.html).
- Download Sample Code (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 .login file. Use ls -a to list all files. machine_name% you have mail.
AaBbCc123	What you type, contrasted with onscreen computer output	machine_name% **su** Password:
aabbcc123	Placeholder: replace with a real name or value	The command to remove a file is rm *filename*.
AaBbCc123	Book titles, new terms, and terms to be emphasized	Read Chapter 6 in the *User's Guide*. A *cache* is a copy that is stored locally. Do *not* 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#`

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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

Starting with the Solaris 10 8/07 release, all x86 based systems must now have at least 384 Mbytes of RAM to run the Solaris software.

Changes in Upgrade Support for Solaris Releases

Starting with the Solaris 10 8/07 release, for SPARC systems, you can upgrade the Solaris OS only from the following releases:

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

For x86 systems, you can upgrade the Solaris OS only from the following releases:

- Solaris 9 OS
- Solaris 10 OS

To upgrade releases previous to the Solaris 8 software to the Solaris 10 5/08 software, upgrade to any of the releases in the preceding list first. Then upgrade to the Solaris 10 8/07 release.

SPARC: Supported Memory Configuration for Newboot

Solaris releases that support the SPARC Newboot feature might require SPARC systems with at least 512 Mbytes of memory.

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.

Solaris Live Upgrade and Solaris Zones

Starting with the Solaris 10 8/07 release, Using Solaris Live Upgrade with Solaris zones is supported. For more information about this, search for InfoDoc 72099 on the SunSolve web site.

Solaris Live Upgrade Restrictions

The Solaris 10 5/08 release has the following Solaris Live Upgrade restrictions:

- Solaris Live Upgrade from the Solaris 8 release to the Solaris 10 5/08 release is not supported. Instead, use the standard upgrade procedure or perform a Solaris Live Upgrade from the Solaris 8 OS to the Solaris 9 OS or to the Solaris 10 OS. Then you can perform a Solaris Live Upgrade from the Solaris 9 release or the Solaris 10 release to the 10 5/08.

- To upgrade your current Solaris 9 OS to the Solaris 10 5/08 release using Solaris Live Upgrade, apply the following patches:
    - For SPARC systems– 137477-01 or later
    - For x86 systems– 137478-01 or later

- To upgrade your current Solaris 10 OS to the 10 5/08 release by using Solaris Live Upgrade, apply the following patches:
    - For SPARC systems– 137321-01 or later
    - For x86 systems– 137322-01 or later

These patches include the new p7zip functionality. Unzip the compressed installation images by using this new p7zip utility.

Note – The 'minimum required patch information for Solaris Live Upgrade in Infodoc 72099 is now in Infodoc 206844.

Upgrading a Solaris Trusted Extensions System That is Configured with Labeled Zones

Solaris systems that are configured with Solaris Trusted Extensions use non-global zones. Upgrading these systems is the same as upgrading a Solaris system that uses zones, and has the same issues.

- **ZFS Zones**– Solaris systems with ZFS zones cannot currently be upgraded. For Solaris Trusted Extensions systems with ZFS zones, the alternative is to recreate the zones. To recreate the zones, perform these steps:
    1. First, back up all the data using the `tar -T` command.
    2. Then delete the zones.
    3. Upgrade the system and reconfigure all the zones.
    4. After all the zones are configured, restore all the data.

- **NFSv4 domain**– After upgrade, when you bring up each labeled zone, you will be prompted for the NFSv4 domain. To avoid this prompt, before upgrade add the correct `NFSMAPID_DOMAIN` value in the `/etc/default/nfs` file in each labeled zone. For more information, see CR 5110062.

- **Live Upgrade**– Two bugs affect Live Upgrade of Solaris systems with zones:
    - "`lucreate` and `lumake` Commands Fail on Non-Global Zones (6659451)" on page 39
    - "Incorrect Permissions on `/tmp` in Non-Global Zones After Solaris Live Upgrade (6619278)" on page 40

    These bugs will also affect the Live Upgrade of systems that are configured with Solaris Trusted Extensions. The workarounds are also the same.

- **Name Service**– If your system was configured at install time to use a name service that is different from the name service being used during upgrade, then the global zone may use the correct name service after boot.

    For example, if you specified NIS as the name service to use during system install, but the system was later converted to be an LDAP client, the `luactivate` boot can revert to using NIS as the name service for the global zone. This is due to CR 6569407.

    The workaround is to adjust the `name_service.xml` symbolic link in the `/var/svc/profile` directory to point to the correct xml file corresponding to the name service currently in use. For example, if NIS was specified as the name service during install, then `name_service.xml` will be a symbolic link to `ns_nis.xml`. If the system was subsequently converted to being an LDAP client, and LDAP was the name service in use during Live Upgrade, then run the following command:

    ```
    # ln -fs ns_ldap.xml name_service.xml
    ```

    This should be done before starting Live Upgrade or before running the `lucreate` command. However, if you did not run this command before `lucreate`, then perform the following steps after running the `luactivate` command:

    1. `lumount` the new boot environment:

        ```
        # lumount <BE_name>
        ```
    2. Change to the `/var/svc/profile` directory of the boot environment:

        ```
        # cd /.alt.<BE_name>/var/svc/profile
        ```
    3. Link the `name_service.xml` link as appropriate. For example:

        ```
         # ln -fs ns_ldap.xml name_sevice.xml
        ```
    4. `luumount` the boot environment:

        ```
        # luumount <BE_name>
        ```

    Note – If the system is booted without performing the steps mentioned above, you will need to manually start the appropriate name service-related SMF client services.

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 5, "Installing From the Network With DVD Media (Tasks)," in *Solaris 10 5/08 Installation Guide: Network-Based Installations*
- Chapter 6, "Installing From the Network With CD Media (Tasks)," in *Solaris 10 5/08 Installation Guide: Network-Based Installations*

Solaris Data Encryption Supplement on Solaris 10 Updates

Starting with the Solaris 10 8/07 release, the Solaris Data Encryption Supplement packages are included by default with the Solaris 10 OS software. You no longer need to install and download these packages.

Additional Procedures Required When Installing Patches for Solaris 10 5/08 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.

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

pThe default size of the `/var` file system might be insufficient 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.

```
filesys  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 uname -i	Minimum Firmware Version From prtconf -V
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 InfoDoc 206844 on the SunSolve web site.

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 SUNWdclnt
# 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 SUNWdclnt SUNWlvmr SUNWlvma SUNWlvmg SUNWpmgr \
  SUNWrmui
```

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

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.

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.

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_DTBL
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.

Installation Bugs

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

Some Asian Locales Cannot Be Used for Custom JumpStart (6681454)

Some Asian locales like, th_TH.ISO8859-11, th_TH.TIS620, ko_KR.EUC, ko_KR.UTF-8, zh_TW.EUC, zh_CN.EUC, zh_CN.GBK, and zh_CN.UTF-8 cannot be used while installing with Custom JumpStart. While setting locales in the sysidcfg file using the system_locale keyword, the following error message is displayed:

```
xx_xx.xxxxx is not a valid system locale
```

The JumpStart installation is stopped and Interactive installation starts.

Workaround: Use shorter locale names such as th_TH, ko, ko.UTF-8, zh_TW, zh, zh.GBK, and zh.UTF-8, instead of longer locale names,

SPARC: Solaris 8 Migration Assistant Patch Requirements (6673751)

Upgrading to the Solaris 10 5/08 release when running the co-packaged Solaris 8 Migration Assistant software fails. No error message is displayed. The system panics when a Solaris 8 branded zone is booted.

Workaround: Install the Solaris 8 Migration Assistant patch #128548-02 or later. This patch is recommended for all kernels. The patch #128548-02 or later should also be installed before

installing Solaris 10 8/07 release Kernel patch 127111-05 or later. Revision #128548-04 or later is required for UltraSparc IV based systems running Solaris 8 Migration Assistant. The most recent revision of patch #128548 is recommended in all cases.

- Commands
- Solaris 10 8/07 release Kernel patch 127111-05 or later

PRODRM Has Problems Deleting `prodreg` Entry For Solaris Trusted Extensions (6616592)

While upgrading Solaris Trusted Extensions from the Solaris 10 11/06 or Solaris 10 8/07 release to the current Solaris 10 5/08 release, the `prodreg` entry for Solaris Trusted extensions is not removed. No error message is displayed.

Workaround: After upgrading Solaris Trusted Extensions to the current release, remove the `prodreg` entry manually as follows:

```
# prodreg unregister -f -r -u "Solaris Trusted Extensions" -i 1
```

Reboot Now Button Is Unresponsive (6270371)

After you install the Solaris OS, the Reboot Now button does not work.

Workaround: Perform the following steps:

1. Open a terminal window.
2. Type the following commands:

   ```
   # touch /tmp/.instsuccess
   # pkill -9 java
   ```

The system now reboots and does not require CDs.

Sun Upgrade Detailed Patch Analysis Panel Not Scrollable (6597686)

During a Solaris upgrade, if you select Detailed Analysis to see the patches that will be removed, the panel that displays the patches is not scrollable. The complete list of patches to be removed cannot be viewed.

Workaround: Run the analyze_patches scripts manually:

```
# cd <cdrom>/Solaris_10/Misc
# ./analyze_patches -R rootdir -N netdir -D databasedir
```

The command options are as follows:

-R rootdir	rootdir is the root of the installed system. The default root directory is /.
-N netdir	netdir is the path to the root of the OS image to be installed. /cdrom/cdrom0 is the default path. netdir is the path to the directory that contains the Solaris_10_606 directory. You must use this option if you are running the patch_analyzer from an NFS mount point.
-D databasedir	If the script is called from a directory other than the /Misc directory in the OS image, the program cannot find the database it uses for patch analysis. Use the -D option to supply the path to the database. Without this database, which is located in the Solaris_10_606/Misc/database directory on the OS image, the script will not run correctly.

SPARC: `luupgrade` Fails When Using a CD to Upgrade (6573154)

On a SPARC system, when using a CD (CD1) to upgrade your system by using Live Upgrade, the luupgrade command fails. The following error message is displayed.

```
# luupgrade -u -n s10u4_ABE  -s /cdrom/cdrom0/s0 -j /var/tmp/profile

179536 blocks
miniroot filesystem is <lofs>
Mounting miniroot at </cdrom/cdrom0/s0/Solaris_10/Tools/Boot>
mount: /tmp/miniroot.3694: Device busy
ERROR: Cannot mount miniroot at </cdrom/cdrom0/s0/Solaris_10/Tools/Boot>.
```

Workaround: Choose one of the following workarounds.

- **Workaround 1:** Use the DVD physical media to do luupgrade.

- **Workaround 2:** If the system does not have a DVD drive, then use setup_install_server from CD1 to create an image locally for the upgrade to use. Run the following commands:

  ```
  # cd /cdrom/cdrom0/s0/Solaris_10/Tools
  # ./setup_install_server <local_location>
  # luupgrade -u -n s10u4_ABE -s <local_location>
  ```

Panic in PCIe as `dev_info` Node Has No Parent Data (6517798)

The Solaris OS might panic with a null pointer dereference if the driver.conf file has been modified using the parent attribute. The following error message is displayed:

```
System panic: BAD TRAP: type=31 rp=2a101d31200 addr=8 mmu_fsr=0
occurred in module "pcie" due to a NULL pointer dereference
```

Workaround: Before you install the Solaris 10 8/07 or Solaris 10 5/08 OS on a PCI Express (PCIe) based SPARC system, check if you have modified the `driver.conf` files as described below:

1. Change to the `/kernel/drv` directory.

2. Check if the `parent` attribute is set in the `driver.conf` file. If the `parent` attribute has been set and the last node in the parent has the word `pci` in it, comment out that line. Ensure that you comment out the entire property. For example:

   ```
   # name="ACME,simple" parent="/pci@7c0/pci@0/pci@9"
   # unit-address="3,1" debug-mode=12;
   name="ACME,example" parent="pseudo" instance=1;
   name="ACME,scsi" parent="/pci@7c0/pci@0/pci@9/scsi"
   unit-address="3,1" debug-mode=12;
   ```

3. Repeat step 2 for the `driver.conf` files in the following directories:

   - `/usr/kernel/drv`
   - `/platform/`uname -i`/drv`
   - `/platform/`uname -m`/drv`

4. Install the Solaris 10 8/07 or Solaris 10 5/08 OS.

5. Install patch 127747-01.

6. Change to the directories listed in steps 1 and 3. Uncomment all the lines that were commented out in step 2 in the `driver.conf` files.

The Linux Partition Does Not Display on the GRUB Menu After Installing the Solaris OS (6508647)

If Linux is installed on your disk and you installed the Solaris OS on a separate partition, the Linux partition does not display on the GRUB menu. No error message is displayed.

Workaround: Edit the GRUB menu's `menu.lst` file to add Linux to the GRUB menu. Perform the following steps:

1. Boot the Solaris OS.

2. Edit the `menu.lst` file at `/boot/grub/menu.lst`. For more information, see the *System Administration Guide: Basic Administration*.

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.

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

If you install the Solaris 10 8/07 or Solaris 10 5/08 OS 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.

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 5/08 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: 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 5/08 Installation Guide: Basic Installations*.

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.

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 5/08 release, see "Changes in Upgrade Support for Solaris Releases" on page 17.

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

`lucreate` and `lumake` Commands Fail on Non-Global Zones (6659451)

When the `lucreate` and `lumake` commands are used on non-global zones which are not in the running state, the commands might not execute successfully. The contents of the original non-global zone and the copy might differ. Users might be unable to log in to the zone's console using the `zlogin` command. The following error message is displayed while using the `zlogin` command:

```
zlogin: makeutx failed
```

The diagnostic output of the `lucreate` and `lumake` commands do not display any errors.

Workaround: Ensure that all non-global zones are in the running state before using the `lucreate` and `lumake` commands.

SPARC: Upgrading with Solaris Live Upgrade From Solaris 8 and Solaris 9 Releases Fails (6638175)

Upgrading to the Solaris 10 5/08 release using Solaris Live Upgrade, from the previous Solaris 8 and Solaris 9 releases fails. The install images compression file is now unzipped by using the 7za utility. The SUNWp7zip package is not included in the Solaris 8 and 9 releases. As a result, Solaris Live Upgrade fails.

Workaround: Choose one of the following workarounds:

- **Workaround 1:** To upgrade your current Solaris 9 OS to the Solaris 10 5/08 release using Solaris Live Upgrade, apply the following patches:
  - For SPARC systems– 137477-01 or later
  - For x86 systems– 137478-01 or later
- **Workaround 2:** To upgrade your current Solaris 10 OS to the Solaris 10 5/08 release by using Solaris Live Upgrade, apply the following patches:
  - For SPARC systems– 137321-01 or later
  - For x86 systems– 137322-01 or later

Note – Solaris Live Upgrade from the Solaris 8 release to the Solaris 10 5/08 release is not supported. Instead, use the standard upgrade procedure or perform a Solaris Live Upgrade from the Solaris 8 OS to the Solaris 9 or Solaris 10 OS. Then you can perform a Solaris Live Upgrade from the Solaris 9 or Solaris 10 release to the Solaris 10 5/08 release.

Incorrect Permissions on `/tmp` in Non-Global Zones After Solaris Live Upgrade (6619278)

Various processes running in non-global zones using `/tmp` might crash after the zone has been upgraded using Solaris Live Upgrade. The upgrade process changes permissions on the `/tmp` directory which leads to applications failures. Users will see `drwxr-xr-x` permissions instead of the correct `drwxrwxrwx` permissions.

Workaround: Choose one of the following workarounds:

- **Workaround 1:** Before activating the new boot environment, perform the following steps:
  1. Mount the disk:

     `# mount /dev/dsk/c1t1d0s6 /mnt`
  2. Fix the permissions:

     `# chmod 1777 /mnt/zone/*/root/tmp`
  3. Then unmount the disk:

     `# umount /mnt`

  This workaround fixes all zones at once.
- **Workaround 2:** If you have already booted the new boot environment, log in to the system as the root user. Halt the zone and manually set correct permissions on the `/tmp` directory. Type the following command:

  `# chmod 1777 /path/root/tmp`

  where path is the zone's zonepath.

Issues With DSR Upgrade With Zones (6616788)

Disk space reallocation (DSR) upgrade with zones fails if zones are installed in the `/opt` directory. Upgrade might fail during the restoration of the DSR archive. In some cases, the upgrade might be successful, but the system cannot be rebooted.

Workaround: Ensure that the root file system is not 100% full before upgrade. Remove some files before upgrade so that the root slice is less than 90% full.

Solaris Trusted Extensions Upgrade Issues (6616585)

When you upgrade Solaris Trusted Extensions from the Solaris 10 11/06 or Solaris 10 8/07 release to the current Solaris 10 5/08 release, unwanted localized Solaris Trusted Extensions packages are installed on your system. This bug occurs because the Solaris Trusted Extensions installer in the Solaris 10 11/06 or Solaris 10 8/07 releases installs localized packages by default. No error message is displayed.

Workaround: Before upgrading Solaris Trusted Extensions to the current release, remove the following localized Solaris Trusted Extensions packages:

SUNWjdtts	SUNWkdtts
SUNWjmgts	SUNWkmgts
SUNWjtsman	SUNWktsu
SUNWjtsu	SUNWodtts
SUNWtgnome-l10n-doc-ja	SUNWtgnome-l10n-ui-ko
SUNWtgnome-l10n-ui-it	SUNWtgnome-l10n-ui-zhHK
SUNWtgnome-l10n-ui-sv	SUNWtgnome-l10n-ui-es
SUNWtgnome-l10n-doc-ko	SUNWtgnome-l10n-ui-ptBR
SUNWtgnome-l10n-ui-ja	SUNWtgnome-l10n-ui-zhTW
SUNWtgnome-l10n-ui-zhCN	SUNWtgnome-l10n-ui-fr
SUNWtgnome-l10n-ui-de	SUNWtgnome-l10n-ui-ru

System Cannot Communicate With `ypbind` After Upgrade (6488549)

This bug occurs during an upgrade from Solaris 10 Hardware 2 release to the current Solaris 10 5/08 release.

In the Solaris 10 Hardware 2 release, the `name_service.xml` file for any name service, such as NIS, NIS+, FILES, or LDAP is as follows:

```
# ls -l name_service.xml
lrwxrwxrwx   1 root     root     10 Apr 10 16:26 name_service.xml -> ns_files.xml
```

If the name service is NIS, the `name_service.xml` file links to `ns_files.xml`. However, the contents of the `ns_files.xml` are the same as `ns_nis.xml`.

```
# cat /etc/release
                    Solaris 10 3/05 HW2 s10s_hw2wos_05 SPARC
          Copyright 2005 Sun Microsystems, Inc.  All Rights Reserved.
                       Use is subject to license terms.
                          Assembled 26 September 2005
# cd /var/svc/profile
# ls -l name_service.xml ns_files.xml ns_nis.xml
lrwxrwxrwx   1 root    other     12 May 21 04:06 name_service.xml -> ns_files.xml
-r--r--r--   1 root    sys      779 May 21 04:25 ns_files.xml
-r--r--r--   1 root    sys      779 Jan 21  2005 ns_nis.xml
#
# diff ns_files.xml ns_nis.xml
# diff name_service.xml ns_nis.xml
```

In the above output, the ns_nis.xml and ns_files.xml files are the same. This means that the
name_service.xml file symbolically links to the wrong name service file. The
name_service.xml file links to ns_files.xml. Instead, the name_service.xml file should link
to the ns_nis.xml.

Note – The fix for CR 6411084, the SUNWcsr install or postinstall script, creates the correct link
only if name_service.xml is not a link file. If name_service.xml is already a symbolic link file,
as in the Solaris 10 Hardware 2 release, the fix for CR 6411084 will not work.

After an upgrade from Solaris 10 Hardware 2 to the current Solaris 10 5/08 release, the
following message is displayed on the console or logged in the messages file:

```
Oct 23 12:18:45 vt2000a automount[301]: [ID 366266 daemon.error]
can't read nis map auto_master: can't communicate with ypbind - retrying
```

Also, the /network/nis/client:default service is offline.

Workaround: Choose one of the following workarounds:

- **Workaround 1:** Before an upgrade, remove the /var/svc/profile/name_service.xml file.
- **Workaround 2:** After an upgrade, change the /var/svc/profile/name_service.xml link
  to the correct ns_<xxx>.xml file, based on the name service.

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
```

Upgrading a Solaris 10 System with Non-Global Zones to the Solaris 10 5/08 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, Solaris 10 8/07, or the Solaris 10 5/08 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, Solaris 10 8/07, or the Solaris 10 5/08 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
```

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*.

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 `ludelete` 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 `lumake` 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.

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 5/08 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 5/08 software from the following releases:
    - 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/installsvr/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
<xxxxxxxx> 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. <*xxxxxxxx*> 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.

`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 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 - 4 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 'pkginfo | grep staroffice- | awk '{print $2}''
  # pkgadd -d .SUNWstarsuite-*
```

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

```
# pkgrm 'pkginfo | grep starsuite- | awk '{print $2}''
  # pkgadd -d . SUNWstaroffice-*
```

If you use Solaris CDs, the localization packages are included in either Language 1 or 2 CD. The package names are as follows:

- SUNWstaroffice-lang* where lang = es, fr, de, sv, or it
- SUNWstarsuite-lang* where lang = ja, ko, zh-CN, or zh-TW

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.

2
◆ ◆ ◆ **C H A P T E R 2**

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).

Remote Multilevel Login From the Login Screen Is Not Supported in Solaris Trusted Extensions (6616030)

The Remote Login item on the Options menu on the login screen cannot be used to remotely log in to a multilevel Trusted Extensions system. When the label of your system is the same as the label that has been assigned to an unlabeled system, you can log in remotely to that unlabeled system.

Workaround: To log in remotely, see the instructions in Chapter 8, "Remote Administration in Trusted Extensions (Tasks)," in *Oracle Solaris Trusted Extensions Administrator's Procedures*.

Trusted Stripe Disappears From the Screen After Resolution Change (6460624)

When you type the `/usr/X11/bin/xrander -s` command to set a smaller screen resolution, trusted stripe is no longer displayed. This affects the Trusted CDE Desktop but not the Trusted Java DS Desktop. No error message is displayed.

Workaround: After the resolution change, restart the `Workspace Manager`. Select **windows -> Restart Workspace Manager** from the CDE workspace menu and click OK.

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.

   Create an `xorg.conf` file with one of these commands:

   - **/usr/X11/bin/Xorg -configure**
   - **/usr/X11/bin/xorgconfig**
   - **/usr/X11/bin/xorgcfg**

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 5/08 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.

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.

File Systems

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

x86: `raidctl` Fails to Create VDs on Dell SAS6i/R (6669169)

Dell SAS 6 HBA (LSI 1068) firmware versions starting with 0.20.46.00-IR introduce an incompatibility which might prevent `lsiutil` and `raidctl`(1M) commands from successfully configuring virtual drives. After the failure, the physical drives will enter an offline state and not be accessible. The `raidctl`(1M) which is included with the Solaris 10 5/08 release is affected as well as `lsiutil` from version 5.07.04 of the ITImpt package.

The following error message is displayed:

```
# /usr/sbin/raidctl -C "0.3.0 0.4.0" -s 64k 0
Creating RAID volume will destroy all data on spare space of member
disks, proceed (yes/no)?

Operation failed
```

Workaround: Configure virtual drives using the SAS configuration utility. To access the SAS configuration utility, enter Control-C when prompted during the BIOS boot sequence.

x86: `ata` Timeouts During Boot (6586621)

`ata` driver timeouts might occur during system boot on Intel multiprocessor systems. These timeouts occur when the root device is on a drive with the HBA controller bound to the legacy `ata` driver. These timeouts lead to a momentary hang, hard hang, or a panic during system boot with console messages similar to the following:

```
scsi: [ID 107833 kern.warning] WARNING: /pci@0,0/pci-ide@1f,2/ide@0 (ata0):
        timeout: reset bus, target=0 lun=0
scsi: [ID 107833 kern.warning] WARNING: /pci@0,0/pci-ide@1f,2/ide@0 (ata0):
        timeout: early timeout, target=0 lun=0
gda: [ID 107833 kern.warning] WARNING: /pci@0,0/pci-ide@1f,2/ide@0/cmdk@0,0 (Disk0):
        Error for command 'read sector'   Error Level: Informational
gda: [ID 107833 kern.notice]            Sense Key: aborted command
gda: [ID 107833 kern.notice]            Vendor 'Gen-ATA ' error code: 0x3
gda: [ID 107833 kern.warning] WARNING: /pci@0,0/pci-ide@1f,2/ide@0/cmdk@0,0 (Disk0):
        Error for command 'read sector'   Error Level: Informational
gda: [ID 107833 kern.notice]            Sense Key: aborted command
gda: [ID 107833 kern.notice]            Vendor 'Gen-ATA ' error code: 0x3
scsi: [ID 107833 kern.warning] WARNING: /pci@0,0/pci-ide@1f,2/ide@0 (ata0):
        timeout: abort request, target=0 lun=0
scsi: [ID 107833 kern.warning] WARNING: /pci@0,0/pci-ide@1f,2/ide@0 (ata0):
        timeout: abort device, target=0 lun=0
scsi: [ID 107833 kern.warning] WARNING: /pci@0,0/pci-ide@1f,2/ide@0 (ata0):
        timeout: reset target, target=0 lun=0
scsi: [ID 107833 kern.warning] WARNING: /pci@0,0/pci-ide@1f,2/ide@0 (ata0):
        timeout: reset bus, target=0 lun=0
scsi: [ID 107833 kern.warning] WARNING: /pci@0,0/pci-ide@1f,2/ide@0 (ata0):
        timeout: early timeout, target=0 lun=0
gda: [ID 107833 kern.warning] WARNING: /pci@0,0/pci-ide@1f,2/ide@0/cmdk@0,0 (Disk0):
        Error for command 'read sector'   Error Level: Informational
gda: [ID 107833 kern.notice]            Sense Key: aborted command
gda: [ID 107833 kern.notice]            Vendor 'Gen-ATA ' error code: 0x3
gda: [ID 107833 kern.warning] WARNING: /pci@0,0/pci-ide@1f,2/ide@0/cmdk@0,0 (Disk0):
```

Workaround: Choose one of the following workarounds:

Note – To avoid performance degradation, workaround 3 or workaround 4 should only be used temporarily until workaround 5 can be used .

- **Workaround 1:** Enable AHCI in BIOS if available on the system. Enabling this setting requires a reinstall of the Solaris OS.

- **Workaround 2:** Install Solaris on a disk on a controller which does not use the `ata` driver.

- **Workaround 3:** Disable MP in the BIOS setup so that a single processor is active.

- **Workaround 4:** Disable MP in Solaris so that a single processor is active. Perform the following steps from the Grand Unified Bootloader (GRUB) menu:

1. Type e to edit your selected Solaris entry.

2. Navigate to the line that begins with kernel.

3. Type e to switch to the GRUB edit mode.

4. Append -kd to the line.

5. Press Enter to accept the change.

6. Type b to boot the selected Solaris entry.

7. At the kbmd prompt, type the following command:

   ```
   use_mp/W 0 :c
   ```

8. If you are performing a system boot, proceed to Step 10, otherwise install the Solaris 10 5/08 software.

9. At the end of the installation, reboot the system. Repeat steps 1 through 7.

10. To make this change permanent so that the above steps do not need to be repeated for subsequent boots, do the following:

    Become the super user, when the system boot is completed.

11. Open the /etc/system file.

12. Add the following line:

    ```
    set use_mp = 0
    ```

- **Workaround 5:** Disable microcode update. Type the following command:

  ```
  # mv /platform/i86pc/ucode /platform/i86pc/ucode.disabled
  ```

  Microcode update can be invoked manually after the system is up:

  ```
  # ucodeadm -u /platform/i86pc/ucode.disabled/intel-ucode.txt
  ```

zoneadm install Fails With a ZFS Legacy Mount (6449301)

If a non-global zone is initially configured with a ZFS file system to be mounted with theadd fs subcommand and specifies mountpoint=legacy, the subsequent zone installation fails. The following error message is displayed.

```
ERROR: No such file or directory:
cannot mount </zones/path/root/usr/local> in non-global zone to install:
the source block device or directory </path/local> cannot be accessed
```

Workaround: Add access to a ZFS file system after installing the non-global zone.

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

`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.

ZFS and Third-Party Backup Product Issues

The following are the issues with the Veritas NetBackup and Brightstor ARCserve Backup 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 8/07 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.

BrightStor ARCserve Backup Client Agent for UNIX (Solaris) and ZFS Support

The BrightStor ARCserve Backup (BAB) Client Agent for UNIX (Solaris) can be used to backup and restore ZFS files.

However, ZFS NFSv4-style ACLs are not preserved during backup. Traditional UNIX file permissions and attributes are preserved.

Workaround: If you want to preserve 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 BAB to backup the `tar` or `cpio` archive.

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

If you add the `SUNWzfsg` package from a Solaris 10 8/07 or Solaris 10 5/08 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.

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*.

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

After you upgrade an NFSv4 server from Solaris Express 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.

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 `smosservice` Command to Add OS Services Results in Insufficient Disk Space Message (5073840)

If you use the `smosservice` 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 `smosservice` command.

Hardware–Related Issues and Bugs

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

SPARC: SCSI Second Disk Fails to Attach After Solaris Live Upgrade (6684776)

Some desktop systems might lose access to disks, other than their root disks, while using Solaris Live Upgrade to upgrade from the Solaris 10 8/07 release to the Solaris 10 5/08 release. This occurs due to a bug in the power management system.

The following error message is displayed:

```
System can't access disk.
```

Workaround: Disable power management on the system. Perform the following steps:

1. Edit the /etc/power.conf configuration file and change the autopm entry from default to disable.

2. Update the power settings with the pmconfig -r command.

3. Reboot the system.

x86: Cannot Enable MPxIO (6664694)

x64 systems using the LSI SAS PCI-E host bus adapters (HBAs) such as SG-XPCIE8SAS-E-Z, SG-XPCIE4SAS-Z, SG-XPCIE4SAS3-Z, and SG-PCIE8SAS-Z, cannot enable MPxIO if more than 4 Gbytes of RAM is installed.

To confirm whether your system is affected, type the command prtpicl -v. Search the output of this command for devices using either pci1000,56 or pci1000,58 compatible properties, and where a pcie-capid-reg property exists and the revision-id property is less than or equal to 2. For example:

```
pci1000,56 AND pcie-capid-reg exists AND revision-id <= 2
```

or

```
pci1000,58 AND pcie-capid-reg exists AND revision-id <= 2
```

Workaround: Download and install patch 125082-13 from http://sunsolve.sun.com.

64-bit SPARC: DR Operations Involving Lowest CPU ID Fail (6663570)

Dynamic reconfiguration (DR) operations involving the lowest CPU ID might cause the domain to panic. The following error message is displayed:

```
panic[cpu40]/thread=2a1008ebca0: BAD TRAP: type=10 rp=xxxxxxx addr=xxxxxxx mmu_fsr=0
```

Workaround: Do not use DR to identify the system board hosting the CPU with the lowest CPU ID. Use the prtdiag command to identify the CPU with the lowest CPU ID.

SPARC: 19.55% Performance Regression for the NCP Device Driver (6660074)

Performance regression occurs for the Niagara Crypto Provider (NCP) device driver on Sun SPARC Enterprise T5220 machines with the Solaris 10 5/08 release. No error message is displayed.

Workaround: Add the following line to the `/platform/sun4v/kernel/drv/ncp.conf` configuration file:

```
ncp-threads-per-core=6;
```

64-bit SPARC: Some DR Commands Fail (6614737)

The DR commands, `deleteboard`(8) and `moveboard`(8), might hang if any of the following conditions exist:

- A dual in-line memory module (DIMM) has been degraded.
- The domain contains system boards with different memory sizes.

No error message is displayed.

Workaround: If a DR command hangs, reboot the domain to recover.

Avoid performing DR operations if any of the listed conditions exist.

To identify if the system contains degraded memory, use the XSCF `showstatus` command. To identify if the domain contains system boards with different memory sizes, use the XSCF `showdevices` command. You can also use the `prtdiag` command on the domain to display the list of memory sizes of the system boards.

The (ZFS) ARC Allocates Memory Inside The Kernel Cage Preventing DR (6522017)

ZFS can potentially allocate kernel memory across all system boards on systems with very large memory configurations. One free system board is required for dynamic memory reconfiguration so that the memory from the board to be dynamically reconfigured can be copied to the free board. The dynamic memory reconfiguration means that you cannot dynamically reconfigure memory on systems with very large memory configurations that have ZFS running. High-end SunFire servers can relocate kernel pages so that this issue is avoided. These servers must have kernel page relocation (KPR) enabled for domains with more than 32 cores. No error message is displayed

Workaround: Reduce the amount of kernel memory that ZFS can allocate by setting the `zfs_arc_max` parameter in the `/etc/system` file. The following example sets the maximum size to 512 Mbytes.

```
set zfs_arc_max = 0x20000000
```

`mpathadm` Does Not Display Load-Balance Setting Specific to Device

The `mpathadm show logical-unit` subcommand lists the load balancing global configuration value for the `Current Load Balance` property. However, entries in the `csi_vhci.conf` that change the load-balance type for a specific product are not reflected in the `mpathadm` output even when the setting is active.

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 `DDI_SUSPEND` code in your `detach()` function, you should return `DDI_FAILURE`.

Power Management   This functionality is unavailable to USB devices. Do not create power management components. Write your driver so that `pm_raise_power()` and `pm_lower_power()` 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: 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 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 - 5 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 70. 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.

x86: Unexpected SIGTRAP Signal Causes dbx Debugger to Hang (6546562)

When the dbx debugger is being used on the Solaris 10 OS on x86 platforms to debug a program that raises or delivers signals that have signal handlers, dbx might receive an unexpected SIGTRAP signal from the kernel that causes the debugger to hang. This situation can occur when dbx is single stepping, running to a breakpoint, collecting runtime checking (RTC) data, or performing any other activity that depends on signal trapping.

In some cases, dbx displays a warning of an unexpected SIGTRAP signal when it hangs. For example:

```
dbx: internal warning: unexpected SIGTRAP!
```

In other cases, dbx indicates receipt of a SEGV signal. For example:

```
signal SEGV (no mapping at the fault address) in main at line 29 in file "test.c"
```

In this case, when the user types the cont -sig SEGV command to continue execution with the SEGV signal, dbx displays the warning of the unexpected SIGTRAP.

This bug is introduced into the Solaris 10 OS on x86 platforms when kernel patch 127112 is installed.

Workaround: Do not install kernel patch 127112. Uninstall the kernel patch if it has already been installed. For more information about this bug, see the Sun Studio Support News page at http://developers.sun.com/sunstudio/support/troubleshooting/index.jsp.

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.

Multiple Input Method Switcher Applications Appear in Trusted Java DS

When you log in to the Trusted Java DS with UTF-8 or Asian locales, the Input Method Switcher application, iiim-panel, appears per label by default. Thus in multiple label environment, multiple iiim-panel appears, which could be confusing to the user.

No error message is displayed.

Workaround: Stop using the iiim-panel. Perform the following steps:

- Right-click on iiim-panel and select Preference. The Input Method Preference Editor, iiim-properties, is displayed.
- Select None or Attach to Each Application from the Input Method Status and Switcher Placement list in the General tab.
- Press Apply or Click the OK button.

To switch the input language, you can also use Hotkey. To enable Hotkey, perform the following steps:

- Go to Misc tab in the iiim-properties.
- Select the Enable Language/Script choice window using Hotkey option.
- Press Apply or Click the OK button.

Note – When Attach to each application is selected, the language switcher list will not be displayed for GTK applications. You can switch input language by using Hotkey.

Wnn8 Japanese Input Method

Wnn8 Japanese Input method cannot be used if the Wnn8 servers are not enabled.

Workaround: Enable the Wnn8 servers:

```
# svcadm enable wnn8/server
```

In addition, select Wnn8 as the Japanese Language engine by running the `iiim-properties` command.

Input Method Cannot Be Enabled With Primary Administrator Rights (6475081)

A user who has the Primary Administrator right can not use the input method for specific locales which prevents that user from entering characters normally. The input method status is not displayed in the workspace. No error message is displayed.

Workaround: Add the following lines to the `/etc/security/exec_attr` file:

```
Primary Administrator:solaris:cmd:::/usr/bin/csh:uid=0;gid=0
Primary Administrator:solaris:cmd:::/usr/bin/ksh:uid=0;gid=0
Primary Administrator:solaris:cmd:::/usr/bin/sh:uid=0;gid=0
```

For information about the file format, see the `exec_attr`(4) man page.

New ChuYin Input Method Not Supported in Upgrade to IIIMF rev.12 (6492129)

When you upgrade the OS to the Solaris 10 6/06 or Solaris 10 11/06 release, the input method framework and individual input methods get upgraded from rev.10 to rev.12. However, ChuYin is not in the list of supported input methods. Also, you cannot use the function keys F2 and F3 to switch methods

Workaround: Use PinYin to type traditional Chinese characters with Hanyu PinYin. Use `Ctrl+Shift` to switch input methods.

`AltGr` Does Not Work As Mode Switcher in Some Russian Locales (6487712)

The `AltGr` key does not work as a mode switcher for the Russian Xsun layout in `ru_RU.KOI8-R` and `ru_RU.ANSI1251` locales.

Workaround 1: Switch to the `ru_RU.UTF-8` or the `ru_RU.ISO8859-5` locale.

Workaround 2: Use IIIMF instead of the Russian keyboard layout.

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.

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.

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 (Java DS). No error message is displayed.

Workaround:

Click mouse button 1 on the background workspace or Launch Menu before clicking any application.

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.

Migration Note to UTF-8 locales

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 —disbable-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 LANG environment variables to the current shell.

Hardware for Some Keyboards Layouts Type 6 and 7 Not Available

Software support for some keyboard layouts has been added to the Solaris OS. This software gives users greater flexibility for keyboard input by modifying standard U.S. keyboard layouts to their own language needs.

Currently, no hardware is available for the following keyboard layout types:

Albania	Belarus
Belarus	French Canadian
Croatia	Czech
Denmark	Estonia
Hungary	Iceland
Latvia	Lithuania
Malta UK	Malta US

Poland	Brazil Portuguese
Romania	Serbia and Montenegro
Slovakia	Slovenia

Workaround: Choose one of the following workarounds:

- **Workaround 1:** To take advantage of this keyboard software, set up keyboard input using the kbd -s command line utility. For desktop sessions with the UTF-8 locale environment, use Input Method Preference Editor. If the required keyboard layout is not included in the kbd -s utility, use Workaround 2.

- **Workaround 2:** Modify the /usr/openwin/share/etc/keytables/keytable.map file. For example, for the 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.

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.ISO8859-1
# export LC_COLLATE
```

Then start sorting.

Networking Issues

The following networking bugs apply to the Solaris 10 release.

nxge **Driver Panics in** nxge_fflp_stat_update **(6644276)**

Running kstat on the nxge driver might cause a system panic. However, this condition is rarely encountered.

Workaround: Do not run kstat on the nxge driver.

SPARC: NFS/RDMA Connection Errors (6229077)

Connection errors might occur between an NFS server and client that are using Remote Direct Memory Access (RDMA). Because of these errors, the buffer pool resources are exhausted and the system panics. The following error message is displayed:

```
rpcib: WARNING: rib_rbuf_alloc: No free buffers!
```

Workaround: Choose one of the following workarounds:

- Configure the NFS server to enable TCP. In the /etc/default/nfs file, change (NFSD_PROTOCOL=tcp).

- Mount the NFS file system from the client side with the proto=tcp mount option.

For more information, see the mount_nfs(1M) and nfs(4) man pages.

Login Fails on iSCSI Target With Two Portals and One Bad Portal (6476060)

If an iSCSI target or an array returns more than one IP address as part of its send target response, the initiator takes into account only the last address in the list and not the first one, as it used to prior to this release. As a result, if the last IP address is bad or invalid, the connection to this target fails.

Workaround: Return the different target portal group tags (TPGT) for each entry in its send target response. The initiator tries to establish a connection to all the IP addresses so that the connection succeeds.

System Domain of Interpretation Is Not Configurable (6314248)

The system Domain of Interpretation (DOI) is not configurable. When the Solaris Management Console is used to create a new trusted network template, the Solaris Management Console sets the DOI to 0 and Solaris Trusted Extensions does not function correctly. Various error messages are displayed.

Workaround: Set the DOI to **1** using the Solaris Management Console.

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.

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.

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.

KDC Daemons Fail to Start (6623803)

If Kerberos is configured to use the LDAP backend for the Kerberos database, krb5kdc/kadmind will fail to start when run through SMF. krb5kdc/kadmind will be in the maintenance state.

Workaround: Type the following command:

```
echo "something" >/var/krb5/principal
```

Note – Do not use this workaround unless the Kerberos LDAP database backend is being used. If the default db2 backend is being used, this workaround will destroy the Kerberos database.

Nonpassword Logins Fail With pam_ldap Enabled (6365896)

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.

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.

Solaris Commands and Standards

The following section describes behavior changes in certain commands and standards in Solaris 10 OS.

Changed Man Pages for Solaris Trusted Extensions Are in Reference Manual Only

The following Solaris Trusted Extensions man pages are revised for this release:

- `add_allocatable(1M)`
- `remove_allocatable(1M)`
- `label_to_str(3TSOL)`
- `tsol_getrhtype(3TSOL)`
- `tnzonecfg(4)`

The revised man pages cannot be viewed using the `man` command. To view the revised man pages, see the *Solaris Trusted Extensions Reference Manual*.

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 Japanse) 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 A5*x*00, 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 metadevice 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.

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 issues.

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
   ```

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.

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.

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:

    ```
    % export PATH=/usr/sfw/bin:$PATH
    ```

3. To start the StarOffice software, issue the following command:

    ```
    % 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.

Nautilus ACL MASK is Not in Sync With Group Permissions (6464485)

The Group permissions in the Permissions tab should be the same as the Mask permissions in the Access Tab, but on some occasions they appear out of sync.

Workaround: Click the Close button, and then click Reload. View the file properties again. The Group permissions and the Mask permissions will now be in sync again. The permissions are set to what you changed the Mask to in the previous step.

`strftime`(3c) Should Support GNU Extension in %-m And %-d (6448815)

The Java DS menu bar and some applications, like Evolution, incorrectly display Chinese date. The incorrect date is displayed in the `%-m M %-d D` format where M and D are the month and date in Chinese respectively.

Workaround: Perform the following steps:

1. Backup the `/usr/share/locale/LC_MESSAGES/gnome-panel*.mo` file.

2. Download `gnome-panel.gnome-2-16.zh_CN.po` from `http://l10n.gnome.org/POT/gnome-panel.gnome-2-16/gnome-panel.gnome-2-16.zh_CN.po` and save it under the `/tmp` directory.

3. Edit the file `gnome-panel.gnome-2-16.zh_CN.po` and replace all occurrences of `%-m` with `%Om`, and `%-d` with `%e`.

4. Generate a new `gnome-panel.gnome-2-16.zh_CN.po` file.

   ```
   msgfmt -v -o gnome-panel.gnome-2-16.zh_CN.mo /tmp/gnome-panel.gnome-2-16.zh_CN.po
   ```

   Copy the file back to the `/usr/share/locale/LC_MESSAGES/` directory.

5. Log out of the system and re-login.

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.

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.

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.

System Administration

This section describes system administration bugs in Solaris 10 OS.

SPARC: Solaris Volume Manager GUI Fails to Start (6671736)

The Solaris Volume Manager GUI fails to start successfully. However, no system panic is detected.

Workaround: Remove the following lines from the `/var/sadm/smc/toolboxes/smc/smc.tbx` file.

```
<ToolBoxURL>
    <URL>file:/var/sadm/smc/toolboxes/tsol_files/tsol_files.tbx</URL>
</ToolBoxURL>
<ToolBoxURL>
    <URL>file:/var/sadm/smc/toolboxed/tsol_ldap/tsol_ldap.tbx</URL>
</ToolBoxURL>
```

Cannot Log In to Solaris Management Console After Enabling Solaris Trusted Extensions (6639493)

The Solaris Management Console hangs and does not allow root login to the Solaris Management Console after enabling Solaris Trusted Extensions. The following error message might be displayed the Solaris Management Console hangs:

```
Configuring the Management Server...
```

Workaround: Perform the following steps:

1. Configure Solaris Trusted Extensions and start the Solaris Management Console.
2. Choose Open ToolBox from the Console menu.
3. Select `localhost` if it is listed.
4. If `localhost` is not listed, then type `localhost`.
5. Choose the Policy=TSOL toolbox.
6. Log in again to the Solaris Management Console as root.
7. (Optional) If the second login to the Solaris Management Console fails, repeat steps 1 through 5 by typing `127.0.0.1` instead of `localhost` in step 3.

`zoneadm attach` Command Might Fail (6550154)

When you attach a zone, if the original host and the new host have packages at the same patch level but at different intermediate patch histories, the zone attach might fail. Various error messages are displayed. The error message depends on the patch histories of the two hosts.

Workaround: Ensure that the original host and the new host machines have had the same sequence of patch versions applied for each patch.

Solaris is Unable to Handle Mode Switches Between Legacy and AHCI Modes for the SATA Controller (6520224)

In systems which have an AHCI compliant SATA controller, the BIOS setup typically enables the controller to be set in either AHCI, legacy, or RAID modes. Solaris supports AHCI and legacy modes.

The SATA mode setting in BIOS must not be changed after an initial Solaris installation. The SATA mode setting must also not be changed before or after a Solaris upgrade. If the SATA mode BIOS setting is modified after installing Solaris, the system will reset and fail to boot without indicating what led to the failure.

Workaround: If boot failure is encountered as a result of changing the BIOS setting, revert back to the original setting in order to boot Solaris.

Deferred Activation Patching (6486471)

Starting with patch 119254-42 and 119255-42, the patch installation utilities, `patchadd` and `patchrm`, have been modified to change the way that certain patches delivering new features or existing files that are incompatible with the running system are handled. This utilities modification affects the installation of these patches on any Solaris 10 release. These "deferred-activation" patches handle the large scope of change delivered in Kernel patches better.

In deferred Activation patching, a loopback file system, `lofs`, is used to create a copy of the root file system. The original files being patched are copied to a safe location and the `lofs` copy of the root file system is patched. Then the original file is `lofs` mounted back over the new file as it is patched. This means the running system remains consistent over the duration of patching, new features are not active and any incompatible change is hidden until the user reboots.

Users must reboot as soon as possible after applying a Deferred Activation Patch, but they do not have to reboot immediately, they can still add further patches then reboot.

The patch README provides instructions on which patches require a reboot.

Note – Sun strongly recommends that patch operations are carried out in a single-user mode, especially when this is recommended by the patch README.

If you are running non-global zones or have `lofs` disabled, consider the following points when installing or removing deferred-activation patches:

- All non-global zones must be in a halted state for this patch operation. You must halt the non-global zone before applying the patch.

- Deferred-activation patching requires the loopback file system, `lofs` in order to complete successfully. Systems running Sun Cluster 3.1 or Sun Cluster 3.2 are likely to have `lofs` turned off because of restrictions on HA-NFS functionality when `lofs` is enabled. Therefore, before a deferred-activation patch is installed, you must re-enable the loopback file system by performing the following steps.

    1. Remove or comment out the following line in the `/etc/system` file:

       `exclude:lofs`

    2. Reboot your system.

    3. Install the patch.

    4. After you have completed the patch installation operation, restore or uncomment the same line from the `/etc/system` file.

    5. Reboot the system to resume normal operations.

No error message is displayed.

Workaround: Sun recommends Solaris Live Upgrade to manage patching. Solaris Live Upgrade prevents the problems of patching a running system. Solaris Live Upgrade reduces the amount of downtime involved in patching and reduces risk by providing fallback capability if problems occur. For more information, see *Solaris 10 5/08 Installation Guide: Solaris Live Upgrade and Upgrade Planning*.

Possible Error With 32-bit Applications Getting File System State on Large File Systems (6468905)

When run on large file systems, for example ZFS, applications using `statvfs(2)` or `statfs(2)` to get information about the state of the file system exhibit an error. The following error message is displayed:

```
Value too large for defined data type
```

Workaround: Applications should use `statvfs64()` instead.

Using `patchadd` With the `-R` Option To Specify an Alternative Root Path From Systems That Are Not Zones Aware Should Be Restricted (6464969)

On systems running a Solaris release that is not zones aware, using `patchadd -R`, or any command that accepts the `-R` option to specify an alternate root path for a global zone that has non-global zones installed, will not work.

In contrast with the error message that is displayed by using the `luupgrade [-t, -T, -p, -P]` command, no error message regarding the use of appropriate command-level restrictions is displayed in this instance.

There is no indication that the `-R` option did not work. As a result of the failure of the command, Solaris 10 packages or patches are not installed on any of the installed non-global zones.

This problem occurs while installing and uninstalling packages or patches.

Note – The `-R` option works if the alternate boot environment has configured non-global zones, but no installed non-global zones. However, to avoid a potential problem, or if you are not sure whether there are any installed non-global zones used as the alternate root path, restrict the use of the `-R` option in all instances.

For more information, see the following man pages :

- `patchadd`(1M)
- `patchrm`(1M)
- `pkgadd`(1M)
- `pkgrm`(1M)

Workaround 1: Upgrade the OS to at least the Solaris 10 1/06 release.

If you are running the Solaris 10 3/05 release, install the following patches to enable the use of commands that accept the `-R` option to create an alternate root path:

- Patch ID 119254-19 for SPARC based systems
- Patch ID 119255-19 for x86 based systems

Workaround 2: Restrict the use of the `patchadd -R` command or any command that accepts the `-R` option to create an alternate root path.

Instead, boot the alternate root, for example, the Solaris 10 release, as the active OS. Then install and uninstall the Solaris 10 packages and patches without using the `-R` option.

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.

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.

SPARC: `smosservice delete` Command Does Not Successfully Remove All Directories (6192105)

If you use the smosservice 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.

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.

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`

3

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.oracle.com/us/sun`.

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.

Note – This information applies only to DR as it runs on the servers listed in this section. For information about DR on other servers, see the Release Notes or Product Notes documents or sections that describe those servers.

Known Software and Hardware Bugs

The following software and hardware bugs apply to Sun Fire high-end systems.

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

Note – This information applies only to DR as it runs on the servers listed in this section. For information about DR on other servers, see the Release Notes or Product Notes documents or sections that describe those servers.

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
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 NO.IB7
cfgadm: Hardware specific failure: unconfigure N0.IB7: Device
busy:/ssm@0,0/pci@1b,700000/pci@1
```

NO.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`

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 6*x*00
- Sun Enterprise 5*x*00
- Sun Enterprise 4*x*00
- Sun Enterprise 3*x*00

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
   ```

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.

4

End-of-Software Support Statements

This chapter lists end-of-software support statements.

Note – The Solaris 10 OS media kit contains not only the Solaris 10 OS software, but also an extensive set of bonus software. The information provided on http://www.oracle.com/us/support/systems/operating-systems/index.html lists the components of the Solaris 10 OS media kit. It also shows the support provided for these components under the SunSpectrum program and Sun Software Support contracts.

Features That Might Be Removed in a Future Release

The following features might not be supported in a future release of the Solaris software.

`genlayouttbl` Utility

The genlayouttbl(1) utlity which provides complex text layout data to the CDE/Motif GUI toolkit might not be available in a future release.

Mobile IP

The Mobile IPv4 feature described in the mipagent(1M) man page, might not be available in a future Solaris release.

Gnopernicus

Gnopernicus, the Java DS Screen Reader might not be available in a future Solaris release. Users should use the Orca Screen Reader instead.

Xsun Server

The Xsun server for the X Window System might not be available in a future Solaris release. Users should migrate to the Xorg server.

Features such as Display Postscript (DPS) and X Image Extension (XIE) that are available in Xsun but not in Xorg might no longer be included.

Common Desktop Environment

The Common Desktop Environment (CDE) might not be available in a future Solaris release. Users should migrate to the Java Desktop System.

CDE Image Viewer

CDE's Image Viewer `sdtimage` might not be available in a future Solaris release. Users should migrate to GNOME Open `gnome-open`, to open image files.

Sun Java System Calendar Server Client Applet

The Sun Java System Calendar Server client applet, `Now` applet, might not be available in a future Solaris release.

DARPA Trivial Name Server

The DARPA trivial name server, `in.tnamed`(1M), might not be available in a future Solaris release. The Internet domain name server `named`(1M) provides similar functionality.

I2O Intelligent I/O

The I2O intelligent I/O driver framework and all corresponding drivers might not be supported in a future Solaris release. This includes the `i2o_bs`(7D), and `i2o_scsi`(7D) drivers and all I2O related functionality.

GNOME Viewer for PDF and PostScript Files

The GNOME viewer for PDF and PostScript files, might not be available in a future Solaris release. A replacement application is expected to enable viewing of PDF and PostScript files.

The Graphical Smartcard Admin Interface

The graphical Smartcard admin interface sdtsmartcardadmin(1M) may not be available in future Solaris releases. The same functionality is available in the smartcard(1M) command.

`iButton` Smartcard

The Dallas Semiconductor `iButton` Java Card Smartcard and OpenCard Framework (OCF) terminal driver, as described in ocf_ibutton(7d) might not be supported in future Solaris releases. Users should migrate to other Smartcard devices that are supported by libpcsclite(3lib).

Cyberflex Smartcard

The Cyberflex Smartcard might not be supported by the pam_smartcard(5) and smartcard(1m) commands in future Solaris releases. Users should migrate to other Smartcard devices and cards that are supported by libpcsclite(3lib).

PAM Smartcard

The PAM Smartcard module pam_smartcard(5) might not be available in future Solaris releases.

OCF/SCF Smartcard Framework

The OCF/SCF Smartcard framework may not be available in a future Solaris releases. The functionality of ocfserv(1M) will be provided by pcscd(1M). The card provisioning functionality of smartcard(1M) will be provided by muscletool(1M). The driver configuration functionality provided by smartcard(1M) is generally not necessary with pcscd(1M), however, when required system administrators can edit the reader.conf(4) file.

SCF Smartcard APIs

The SmartCard Framework (SCF) interfaces exported by libsmartcard and smartcard.jar may not be available in future Solaris releases. These interfaces are now obsolete. New C applications should be written to use the PS/SC interfaces exported from libpscslite(3lib). There is no planned replacement for the SCF Java interfaces at this time.

Remote Program Load Server Functionality

The Remote Program Load (RPL) server functionality available through rpld(1M) and rpld.conf(4) may not be available in a future release of Solaris.

Transition From `ipge` to `e1000g` NIC Driver as the Default Ethernet Driver for Sun4V Systems

The ipge driver and all its SUNWipge packages for Sun4V systems might not be available in a future release of Solaris. Starting with the Solaris 10 8/07 release, Ontario and other SPARC based platforms transition from ipge to e1000g drivers. The e1000g driver will be the default Ethernet driver for all Sun platforms that use Intel 1G chipsets.

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 libssasnmp 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 Framwork (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_resalloc	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 will 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:

cpc_access	cpc_bind_event
cpc_count_sys_events	cpc_count_usr_events
cpc_event_accum	cpc_event_diff
cpc_eventtostr	cpc_getcciname
cpc_getcpuref	cpc_getcpuver
cpc_getnpic	cpc_getusage
cpc_pctx_bind_event	cpc_pctx_invalidate
cpc_pctx_rele	cpc_pctx_take_sample
cpc_rele	cpc_seterrfn
cpc_shared_bind_event	cpc_shared_close

cpc_shared_open	cpc_shared_rele
cpc_shared_take_sample	cpc_strtoevent
cpc_take_sample	cpc_version
cpc_walk_names	

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:

cpc_open	cpc_close
cpc_set_create	cpc_set_destroy
cpc_set_add_request	cpc_set_request_preset
cpc_buf_create	cpc_buf_destroy
cpc_bind_curlwp	cpc_bind_pctx
cpc_bind_cpu	cpc_unbind
cpc_set_sample	cpc_buf_sub
cpc_buf_add	cpc_buf_copy
cpc_buf_zero	cpc_buf_get
cpc_buf_set	cpc_buf_hrtime
cpc_buf_tick	cpc_walk_requests
cpc_walk_events_all	cpc_walk_events_pic
cpc_walk_attrs	cpc_enable
cpc_disable	cpc_caps
cpc_npic	cpc_cpuref
cpc_cciname	cpc_seterrhndlr

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
- Java DS Diagram Editor
- Java DS Java Text Editor
- Java DS Java Dictionary
- Java DS Disk Analyzer
- Java DS 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.

5

Documentation Issues

This chapter describes known issues that are related to documentation.

Solaris ZFS Administration Guide

The description of the `compression` property in Table ZFS Native Property Descriptions under Managing ZFS File Systems is incorrect:

Controls the compression algorithm used for this dataset. Currently, you can select lzjb, gzip, or gzip-N. Enabling compression on a file system with existing data only compresses new data. Existing data remains uncompressed. This property can also be referred to by its shortened column name, compress.

The description should now read as follows:

Enables or disables compression for this dataset. The values are on, off, and lzjb. Currently, setting this property to the lzjb algorithm has the same effect as setting this property to on. The default value is off. Enabling compression on a file system with existing data only compresses new data. Existing data remains uncompressed. This property can also be referred to by its shortened column name, compress.

System Administration Guide: IP Services

The title of the procedure to ensure unique MAC addresses is SPARC: How to Ensure That the MAC Address of an Interface Is Unique, in Solaris 10 3/05 ONLY . This procedure applies to all Solaris 10 Update releases and so the title should read as SPARC: How to Ensure That the MAC Address of an Interface Is Unique.

System Administration Guide: Naming and Directory Services (NIS+)

Starting with the Solaris 10 8/07 release, the Solaris OS does not have two separate hosts files. The `/etc/inet/hosts` file is now a single hosts file that contains both IPv4 and IPv6 entries. You need not maintain IPv4 entries in two hosts files that always require synchronization. For backward compatibility, the `/etc/inet/ipnodes` file is replaced with a symbolic link of the same name to the `/etc/inet/hosts` file. For more information, see the `hosts`(4) man page. NIS clients and servers can communicate using either IPv4 or IPv6 RPC transports.

Discontinuation of Swedish Documentation

Starting with the Solaris 10 8/07 release, documents will not be translated into Swedish. For all the latest information, see the English documents on `http://www.oracle.com/technetwork/indexes/documentation/index.html`.

Application Server Documentation Refers to Derby Database Instead of Java DB

Application Server documentation refers to the Java DB database as "Derby." Replace all references to "Derby" with Java DB. The database is installed to `/usr/appserver/javadb`.

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.

6

What's New in Solaris 10 5/08

This section describes new features and enhancements in the Solaris 10 5/08 release.

x86: PowerNow! Support for AMD Family 10h Processors

This device management enhancement is new in the Solaris 10 5/08 release.

This feature introduces support for AMD's PowerNow! technology into Solaris for AMD Family 10h Processors. This support will enable Solaris administrators to manage the power consumption of their AMD processors by lowering the processor frequency during idle periods.

For more information on how to enable Solaris CPU power management, see `power.conf(4)`.

A APPENDIX A

◆ ◆ ◆ **APPENDIX A**

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 OS Software

CR Number	Title
6579866	Trusted Administrative Roles Other Than Root Not Authorized to Connect to the X Window Server
6579845	Trusted $HOME Ownership Incorrect When Administrative Role Created
6571030	Unsupported Options in the `ddi_dma_mem_alloc`(9F) Man Page
6565136	Release Notes Do Not Display in Thunderbird Help
6564548	Trusted CDE Screen Lock Logs Out the User
6558400	SAN 4.4.13 Emulex Error With Patch 119914-12
6554915	`iscsitgtd` Double Frees on Target Creation With an Alias
6550104	Trusted Java DS Workspace Does Not Start on Initial Change of Label

TABLE A–1   Bugs Fixed in the Solaris 10 OS Software   *(Continued)*

CR Number	Title
6546892	Cannot Switch Roles on Trusted Java DS
6495454	Trusted Stripe Crashes When Users Change Roles
6494427	Locales Problem After Upgrading a System With Non-Global Zones Installed
6486416	Secure Attention Key or Hot Key Does Not Work on x86 Systems
6483258	Failed Unconfigure Command `cfgadm` Might Succeed Later Without Notice
6481697	Auxilliary Window Fails to Open With Asian And Wnn Input Methods
6478436	Solaris Trusted Extensions Administration Tools Display Incorrect Labels
6471594	Solaris Management Console Updates the `tnrhdb` File But Does Not Run `tnctl` to Update the Trusted Host Cache
6467756	Some Compose Key Inputs Do Not Work on GTK Applications
6466526	Upgrade to Solaris 10 11/06 or Changing Specific Device Configurations Might Break PCI/PCIe Hotplug Administration
6463842	Japanese 106 keyboard Cannot Be Set Through `kdmconfig`
6463576	`Arabic6.kt` Keytable Does Not Contain Arabic Symbols
6462945	Mouse Pointer and the `dtfile` Icon Are Not Displayed When You Drag the `dtfile` Icon
6460106	Uninstallation of Solaris Trusted Extensions Fails
6456888	`zpool` `Scrubbing` Leads to Memory Exhaustion and a System Hang
6454140	Zones With an `fs` Resource Defined With a Type of `lofs` Cannot Be Upgraded to Solaris 10 11/06
6452077	DR: `cfgadm -c configure` Command Fails on Slot of Starcat and Silverstone
6447833	Solaris Management Console CLI Commands Do Not Process the Solaris Trusted Extensions Options
6444457, 6444791	Upgrade of System With Zones Installed Fails
6438372	Input Method Switcher Does Not Work in Trusted Java DS Environment
6437617	Zone Creation Error With `SUNWgnome-a11y-libs-share`
6432114	Cannot Login Using GDM Unless Clearance is Set to `admin_high`
6429880	Deadkeys Not Working With GTK Applications on Xsun in EMEA UTF-8 Locales
6429860	Adding ZFS Patch Solaris 10 11/06 System Causes Spurious Warning Messages
6428334	`qlc.conf` Configuration File Not Updated While Upgrading to Solaris 10 11/06 Release

TABLE A–1   Bugs Fixed in the Solaris 10 OS Software   *(Continued)*

CR Number	Title
6421471	Memory Leaks with ECC and RSA Cipher Suites
6421275	Upgrade From Solaris 10 to Solaris 10 11/06 Gives SMF Errors on Reboot and Contains Solaris Package Issues That Might Impact Patching
6421216	ufsrestore Does Not Use acl_set() For Setting ACLs
6414648	Overlapping Devices Might be Added to a ZFS Storage Pool
6411690	Installing a Solaris Flash Archive Causes Sun4v System to Hang
6397893	Creating a Solaris Flash Archive Fails When the End User Solaris Software Group is Installed
6397251	SVM Upgrade Fails From Solaris 9 9/05 OS to Solaris 10 11/06 or to Solaris Express
6388988	IIIMF Packages Might Not be Installed
6387317	Keycode 50 Does Not Work for European Keyboard Layouts
6379955	Solaris Not Sending a PRLI to Tape Device
6378956	smosservice or smdiskless Is Broken Due to wbem Issues
6377485	iSCSI Initiator Does Not Handle LUN Address Reporting Properly
6377106	Java Problem Prevents Accessibility Environment for Speech From Setting Up Correctly
6372197	After Installing the OS with a Solaris Flash Archive, Problem With Displaying Console
6371273	LUN Numbers Greater Than 256 Are Treated Differently by 2–Gbyte and 4-Gbyte QLogic HBAs
6363449	BIOS Hangs on Reboot After Using ZFS on Sun Ultra 20 or Sun Fire X2100
6363365	Upgrade Hangs on Sun Blade 1500 Workstations
6363262	Numerous Mozilla Menu Entries Are Garbled in the Russian Locale
6361672	Locale Problem Occurs After You Upgrade a System That Contains Zones
6358227	Postinstallation Problems With Whole Root Zone, Diskless Client, and Solaris Live Upgrade
6351923	Time Settings Might Cause Key Combinations to Fail to Start Assistive Technologies in the Sun Java Desktop System
6350869	Generic LAN Driver Version 3 Fails to Set Field Length of Logical Link Control Frames
6350819	Problem With Choosing a Terminal Type When Installing Solaris 10 1/06 Software
6350486	Adding Regions Fails With the localeadm Command
6348316	Systems With Multiple CPUs Might Hang During Installation or System Boot

TABLE A–1   Bugs Fixed in the Solaris 10 OS Software   *(Continued)*

CR Number	Title
6347707	Problems With dbx Debugger While Processing 64-bit Objects
6346843	Bulgarian Locale Uses Russian Character Map
6346204	Undetected Write Errors in NFSv4 Client With Full File System
6340714	Launch Menu Cannot Be Opened With Ctrl-Esc
6340509	Custom JumpStart Profile Test Fails With Locale Keyword
6336069	Error Occurs When You Upgrade a Solaris Live Upgrade Boot Environment With CD or DVD Media
6334517	Problems With dtlogin When Using UTF-8 Locales
6330840	x86: Removal of Agilent Fibre Channel HBA Driver Package Fails When Upgrading to Solaris 10 8/07 Release
6329929	Problems Configuring Preferences With the GNOME On-Screen Keyboard
6329642	Loadkeys Warnings Appear When System Is Booted From Solaris OS DVD
6319383	Some Language Input Does Not Work Correctly on Non-U.S. Keyboard Layouts
6316245	Wrong MAC Address is Displayed When There is More Than One Ethernet Card
6314583	Serbian Locale Uses Russian Character Map
6303564	SUNWceuow Package Improperly Upgraded if Symbolic Links to Solaris OS Are Changed
6301627	Reinitializing Link on a Server in a Storage Area Network Causes Logical Unit Number on All Servers to Reset
6300863	Solaris Install Launcher Exiting Causes Reboots
6288488	du Reports Wrong Size Information on RAID-Z
6278039	GNOME Applications Fail With dtremote
6277164	Resolving Issues With the GNOME Display Manager
6273030	Full-Screen Magnification and Keyboard Accessibility Features Not Working
6267922	Outdated List of Allowed Applications for Solaris OS
6263122	Upgrade Option Unavailable if the Root (/) File System Is a RAID-1 Volume (Mirror)
6247943	$PATH issues
6245563	Problems When Using Keyboard Indicator
6241052	Patchadd Fails When Installing Patches From the UpgradePatches Directory
6227666	CD Quality, Lossless Mode Fails at Start of Recording

TABLE A–1 Bugs Fixed in the Solaris 10 OS Software   *(Continued)*

CR Number	Title
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
6215527	Login Process Might Hang in Certain Asian Non-UTF-8 Locales
6219932	Compose Key Sequences Might Not Work When You Use X Keyboard Extension in Some Locales
6219176	`patchadd` 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
6214222	Resolving Issues With AccessKeyMouseListeners
6211279	Desktop Icons Invisible on Second Desktop System
6209619	Using USB 2.0 Hubs With USB 1.x Devices Might Cause System Panic
6209566	GNU Image Manipulation Program Missing From the Graphics Menu
6209092	`kdmconfig` Program Runs Twice After Initial Installation
6208656	Solaris Installation GUI Might Fail When You Install Solaris Flash Archive
6205881	`kdmconfig` Instructions to Configure Xorg X Server Are Incomplete
6204987	EHCI Driver Unusable in Certain Motherboards
6204976	Problems When Saving Attachments With Localized Content
6203727	Remote Connection Problems
6203680	Using FireWire–1394 Storage Devices Might Cause System Panic
6203010, 5105006	Cannot Delete Files Outside of Home Directory
6200999	Cannot Specify User Preferences for Roaming Access in Mozilla Browser
6200924	Pausing USB Audio Devices During Play or Record Operation Might Cause System Deadlock
6197548	Net Connect 3.1.1 Installation Fails
6192644	Keyboard Shortcuts Fail

TABLE A–1 Bugs Fixed in the Solaris 10 OS Software *(Continued)*

CR Number	Title
6192995	Default C Library Might Cause Boot Failure When You Install Solaris Flash Archives
6189823	`localeadm -l` Does Not List Installed Korean Locale Packages
6188748	`patchadd` Command Does Not Support Installing Patches From an NFS Server
6178669	Program That Configures Keyboard, Display, and Mouse Not Working for X Server
6173972	Some Keyboard Keys Not Functioning With Num Lock Key On
5106987	`lucreate` Command Does Not Create RAID-1 Volumes
5100134	Print Services Have Offline Settings by Default
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
5084183	`keyserv` Daemon Disables Some File System Services
5077933	Devices Not Immediately Available in Fabric Zones in a Storage Area Network
5077631	Special Keyboard Keys Do Not Work
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
5043369, 4873161	Soft System-Shutdown is Not Supported in Solaris OS on x86
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
5040248	Using the `ipfs` Command With `-W` Option Fails
5030842	Some Systems With USB 2.0 Hardware Might Hang or Panic
5027771	X Server Unable to Open Mouse Device in Sun LX50 Servers
5002175	Solaris 10 OS Installation Program Might Not Display Special Case Panels Properly
5001908	Using Two Adaptec SCSI Card 39320D Cards on a Sun Fire V65x Server Might Cause the System to Panic
4996542	Modifier Keys Do Not Function Correctly
4992478	Permissions for Mount Points Not Preserved in Created Boot Environment
4977300	Chinese and Korean Characters Are Printed In a Box

TABLE A–1 Bugs Fixed in the Solaris 10 OS Software   *(Continued)*

CR Number	Title
4937266	Cannot Type Multibyte Characters in Text Editor 2.9.1
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
4704046	Error Messages Might Be Seen When Installing Solaris By Using a Network Image
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
4441469	RTM_IFINFO Message Has Different Sizes on 32-bit and 64-bit Compilations
2136811	Need Itinerary so That Interrupted `scrub` or `resilver` Doesn't Have to Restart
Issue	Volume Control Option Not Working
Issue	NFS Version 4 Introduces New Prompt at First System Boot
Issue	StarOffice Patch Application Requires Additional Steps
Issue	Support for Intel Integrated i810 and i815 Graphics Chipsets
Issue	Error or Warning Messages Might Be Displayed While Installing Non-global Zones With the `zoneadm` Command
Issue	Sun Remote Services Net Connect Supported Only in the Global Zone
Issue	Login Screen Marks UTF-8 Locales as Recommended

◆ ◆ ◆   **A P P E N D I X   B**

Solaris 10 Operating System Patch List

In this appendix, the Solaris 10 5/08 patch list provides a list of patches pre-applied to the Solaris 10 5/08 release. Patches released after the Solaris 10 5/08 release can be found on the My Oracle Support.

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

- **124337-01 – SunOS 5.10: FUJITSU PCI Fibre Channel Driver 3.0 miniroot patch**
- **117465-02 – SunOS 5.10: fwtmp Patch**
- **118367-04 – SunOS 5.10: csh Patch**
- **118566-01 – SunOS 5.10: patch usr/sbin/ping**
- **118666-15 – JavaSE 5.0: update 14 patch (equivalent to JDK 5.0u14)**
- **118667-15 – JavaSE 5.0: update 14 patch (equivalent to JDK 5.0u14), 64bit**
- **118676-03 – SunOS 5.10: patch for Solaris make and sccs utilities**
- **118683-02 – SunOS 5.10: Patch for assembler**

- **118705-01 – SunOS 5.10: XVR-1000 GFB Graphics Patch**
- **118706-01 – SunOS 5.10: Creator and Creator3D: FFB Graphics Patch**
- **118707-05 – SunOS 5.10: Expert3D IFB Graphics Patch**
- **118708-17 – SunOS 5.10: Sun XVR-1200 and Sun XVR-600 Graphics Accelerator Patch**
- **118711-03 – SunOS 5.10: M64 Graphics Patch**
- **118712-20 – SunOS 5.10: Sun XVR-100 Graphics Accelerator Patch**
- **118717-02 – SunOS 5.10: Sun Video Timing Information Patch**
- **118718-01 – SunOS 5.10: Generic Framebuffer configuration Graphics Patch**
- **118735-01 – SunOS 5.10: patch usr/sbin/rpc.nisd_resolv**
- **118777-12 – SunOS 5.10: Sun GigaSwift Ethernet 1.0 driver patch**
- **118814-01 – SunOS 5.10: patch platform/sun4u/kernel/tod/sparcv9/todsg**
- **118824-01 – SunOS 5.10: patch usr/bin/sparcv9/sort**
- **118918-24 – SunOS 5.10: Solaris Crypto Framework patch**
- **120900-04 – SunOS 5.10: libzonecfg Patch**
- **121133-02 – SunOS 5.10: zones library and zones utility patch**
- **119254-53 – SunOS 5.10: Install and Patch Utilities Patch**
- **119042-10 – SunOS 5.10: svccfg & svcprop patch**
- **119578-30 – SunOS 5.10: FMA Patch**
- **118833-36 – SunOS 5.10: kernel patch**
- **118842-01 – SunOS 5.10: dada patch**
- **118884-01 – SunOS 5.10: atomic.h patch**
- **118945-01 – SunOS 5.10: Sun Gigabit Ethernet 3.0 driver patch**
- **118959-03 – SunOS 5.10: patch usr/bin/lastcomm and usr/bin/acctcom**
- **118981-03 – SunOS 5.10: Sun Quad FastEthernet qfe driver**
- **119059-40 – 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**
- **119081-25 – SunOS 5.10: CD-ROM Install Boot Image Patch**
- **119090-25 – SunOS 5.10: Sun iSCSI Device Driver and Utilities**
- **119115-33 – Mozilla 1.7 patch**
- **119117-42 – Evolution 1.4.6 patch**
- **119130-33 – SunOS 5.10: Sun Fibre Channel Device Drivers**

- **119143-02 – SunOS 5.10: patch lib/libinetutil.so.1**
- **119201-29 – SunOS 5.10: OS Localization message patch**
- **119213-16 – NSS_NSPR_JSS 3.11.8: NSPR 4.6.8 / NSS 3.11.8 / JSS 4.2.5**
- **119246-32 – SunOS 5.10: Manual Page updates for Solaris 10**
- **124628-05 – SunOS 5.10: CD-ROM Install Boot Image Patch**
- **119252-22 – SunOS 5.10: System Administration Applications Patch**
- **126538-01 – SunOS 5.10: i.manifest and r.manifest patch**
- **124393-06 – CDE 1.6: Dtlogin smf patch**
- **123611-03 – X11 6.6.2: Trusted Extensions patch**
- **119280-17 – CDE 1.6: Runtime library patch for Solaris 10**
- **119278-20 – CDE 1.6: dtlogin patch**
- **121734-07 – SunOS 5.10: patch to support addition of new UTF-8 locales**
- **119262-07 – SunOS 5.10: Patch for Central European Region locale issues**
- **119276-09 – SunOS 5.10: Patch for Northern Europe Region locale issues**
- **119282-01 – CDE1.6:: GNOME/CDE Menu for Solaris 10**
- **119284-01 – CDE 1.6: sdtwsinfo patch**
- **119286-02 – CDE 1.6: dtterm libDtTerm patch**
- **119309-03 – SunOS 5.10: PGX32 Graphics**
- **124188-02 – SunOS 5.10: Trusted Solaris Attributes Patch**
- **121308-12 – SunOS 5.10: Solaris Management Console Patch**
- **119313-19 – SunOS 5.10: WBEM Patch**
- **119315-12 – SunOS 5.10: Solaris Management Applications Patch**
- **119317-01 – SunOS 5.10: SVr4 Packaging Commands (usr) Patch**
- **120460-13 – GNOME 2.6.0:: GNOME libs Patch**
- **119368-05 – GNOME 2.6.0: Printing Technology Patch**
- **119372-02 – GNOME 2.6.0:: GNOME common development tools and libraries Patch**
- **119397-07 – SunOS 5.10: Patch for North America Region locale issues**
- **119399-07 – SunOS 5.10: Patch for Central American Region locale issues**
- **119401-09 – SunOS 5.10: Patch for Western Europe Region locale issues**
- **119404-07 – SunOS 5.10: Patch for South American Region locale issues**
- **119407-08 – SunOS 5.10: Patch for Eastern Europe Region locale issues**
- **122212-25 – GNOME 2.6.0:: GNOME Desktop Patch**
- **119410-05 – GNOME 2.6.0:: GNOME Applets Patch**

- **119414-14 – GNOME 2.6.0:: GNOME Accessibility Libraries Patch**
- **119416-01 – GNOME 2.6.0:: GNOME Text-To-Speech Engine Patch**
- **119418-04 – GNOME 2.6.0:: GNOME On-screen Keyboard Patch**
- **119420-01 – SunOS 5.10: Thai locale patch**
- **119470-13 – SunOS 5.10: Sun Enterprise Network Array firmware and utilities**
- **120199-11 – SunOS 5.10: sysidtool patch**
- **119534-13 – SunOS 5.10: Flash Archive Patch**
- **119538-14 – GNOME 2.6.0: Window Manager Patch**
- **119540-07 – GNOME 2.6.0:: GNOME Dtlogin configuration Patch**
- **119544-03 – GNOME 2.6.0:: GNOME streaming media framework Patch**
- **120099-08 – APOC 1.2: Sun Java(tm) Desktop System Configuration Shared Libraries**
- **119546-08 – APOC 1.2: APOC Configuration Agent Patch**
- **119548-12 – GNOME 2.6.0:: GNOME Multi-protocol instant messaging client Patch**
- **119555-04 – SunOS 5.10: Software to support QLogic Ultra3 SCSI host bus adapters**
- **119570-01 – SunOS 5.10: lw8 Patch**
- **119574-02 – SunOS 5.10: su patch**
- **119583-01 – SunOS 5.10: memory classification header file patch**
- **119598-08 – GNOME 2.6.0:: GNOME Screen Reader and Magnifier Patch**
- **119601-12 – SunOS 5.10: Patch for European Region JDS messages**
- **119603-08 – SunOS 5.10: Patch for Asian Region JDS messages**
- **119605-08 – SunOS 5.10: Patch for Japanese JDS messages**
- **119648-03 – SunOS 5.10: vlan driver patch**
- **119703-11 – S10: localeadm 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**
- **120272-17 – SunOS 5.10: SMA patch**
- **122640-05 – SunOS 5.10: zfs genesis patch**
- **126897-02 – SunOS 5.10: Fault Manager Patch**
- **127755-01 – SunOS 5.10: Fault Manager patch**
- **125503-02 – SunOS 5.10: package-move-of-IP-objects patch**
- **125547-02 – SunOS 5.10: zoneadm indirect dependency patch**
- **126419-01 – SunOS 5.10: umountall patch**

- **120011-14 – SunOS 5.10: kernel patch**
- **119757-11 – SunOS 5.10: Samba patch**
- **119764-06 – SunOS 5.10 : ipmitool patch**
- **119766-02 – SunOS 5.10 : SunFreeware man pages patch**
- **119771-02 – SunOS 5.10: Asian CCK locales patch**
- **119783-05 – SunOS 5.10: bind patch**
- **119797-17 – SunOS 5.10:: CDE Localization message patch**
- **119810-05 – SunOS 5.10: International Components for Unicode Patch**
- **119812-05 – X11 6.6.2: Freetype patch**
- **119814-19 – SunOS 5.10: OS Japanese manpages patch**
- **119844-07 – SunOS 5.10: Patch for Southern Europe Region locale issues**
- **119845-05 – SunOS 5.10: Patch for Australasia Region locale issues**
- **119890-03 – GNOME 2.6.0: search tool Patch**
- **119900-04 – GNOME 2.6.0:: GNOME libtiff - library for reading and writing TIFF Patch**
- **119903-02 – OpenWindows 3.7.3: Xview Patch**
- **119906-12 – GNOME 2.6.0: Virtual File System Framework patch**
- **119955-05 – CDE 1.6: Tooltalk Runtime patch for Solaris 10**
- **119963-08 – SunOS 5.10: Shared library patch for C++**
- **119974-09 – SunOS 5.10: fp plug-in for cfgadm**
- **119986-03 – SunOS 5.10: clri patch**
- **119988-01 – SunOS 5.10: sed patch**
- **120038-01 – SunOS 5.10: sadc patch**
- **120044-01 – SunOS 5.10: psrset 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**
- **120094-18 – X11 6.6.2: xscreensaver patch**
- **120101-01 – SunOS 5.10: libsmedia patch**
- **120195-02 – SunOS 5.10: patch schpc sc_gptwocfg gptwo_pci**
- **120201-05 – X11 6.8.0: Xorg client libraries patch**
- **120222-26 – SunOS 5.10: Emulex-Sun LightPulse Fibre Channel Adapter driver**
- **120235-01 – SunOS 5.10: Live Upgrade Zones Support Patch**

- **120256-01 – SunOS 5.10: hci1394 Patch**
- **120282-03 – GNOME 2.6.0:: GNOME CD Player Utility Patch**
- **120284-06 – GNOME 2.6.0:: GNOME CORBA ORB and component framework**
- **120286-02 – GNOME 2.6.0:: GNOME text editor Patch**
- **120288-03 – 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**
- **120346-09 – SunOS 5.10: Common Fibre Channel HBA API and Host Bus Adapter Libraries**
- **120348-02 – SunOS 5.10: Fibre Channel HBA Port utility**
- **121975-01 – CDE 1.6: Xsession patch**
- **120410-28 – SunOS 5.10: Internet/Intranet Input Method Framework patch**
- **120412-08 – SunOS 5.10: Simplified Chinese locale patch**
- **120414-20 – SunOS 5.10: Asian CCK locales patch**
- **120450-01 – SunOS 5.10: get_netmask Utility Patch**
- **120454-02 – 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**
- **120462-11 – SunOS 5.10: FUJITSU PCI GigabitEthernet 2.0 patch**
- **120543-11 – SunOS 5.10: Apache 2 Patch**
- **120560-02 – SunOS 5.10: sun4u platform links patch**
- **120704-01 – SunOS 5.10 : smartcard man patch**
- **120706-02 – SunOS 5.10: XIL 1.4.2 Loadable Pipeline Libraries**
- **120719-02 – SunOS 5.10 : SunFreeware gzip patch**
- **120732-01 – SunOS 5.10 : libusb patch**
- **120739-04 – GNOME 2.6.0:: GNOME PDF Viewer based on Xpdf**
- **120741-01 – SunOS 5.10: seg_map header file patch**
- **120753-05 – SunOS 5.10: Microtasking libraries (libmtsk) patch**
- **120807-01 – SunOS 5.10: rpc.mdcommd patch**

- **120811-08 – SunOS 5.10: FUJITSU PCI Fibre Channel Driver 3.0 patch**
- **120812-23 – OpenGL 1.5: OpenGL Patch for Solaris**
- **120815-01 – SunOS 5.10: dmfe patch**
- **120816-01 – SunOS 5.10: at and batch Patch**
- **120830-06 – SunOS 5.10: vi and ex patch**
- **120873-06 – SunOS 5.10: xscreensaver localization message patch**
- **120889-01 – SunOS 5.10: librac patch**
- **120928-23 – SunOS 5.10: Sun XVR-2500 Graphics Accelerator Patch**
- **120984-01 – SunOS 5.10: nss_user.so.1 Patch**
- **120988-01 – SunOS 5.10: grpck Patch**
- **120992-02 – SunOS 5.10: nfs_clnt.h and nfs4_clnt.h Patch**
- **120994-01 – SunOS 5.10: elf_amd64.h Patch**
- **121004-03 – SunOS 5.10: sh patch**
- **121012-02 – SunOS 5.10: traceroute patch**
- **121036-02 – GNOME 2.6.0: base libraries patch**
- **121081-06 – SunOS 5.10: Connected Customer Agents 1.1.0**
- **121095-02 – GNOME 2.6.0:: GNOME EXIF tag parsing library for digital cameras**
- **121104-02 – Adobe Acrobat Reader patch**
- **121118-13 – SunOS 5.10: Sun Update Connection System Client 1.0.10**
- **121128-01 – SunOS 5.10: lofs patch**
- **121130-01 – SunOS 5.10: librcm.so.1 patch**
- **121136-01 – Adobe Acrobat Reader patch**
- **121296-01 – SunOS 5.10: fgrep Patch**
- **121336-04 – 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**
- **121430-22 – SunOS 5.8 5.9 5.10: Live Upgrade Patch**
- **121428-09 – SunOS 5.10: Live Upgrade Zones Support 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**

- **121561-04 – SunOS 5.10: keymap patch**
- **121606-02 – GNOME 2.6.0: Python patch**
- **121620-03 – 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**
- **125287-02 – SunOS 5.10: Japanese X locale update**
- **121675-11 – SunOS 5.10: Japanese Input System ATOK patch**
- **121677-05 – SunOS 5.10: Japanese Input System Wnn patch**
- **121870-01 – X11 6.6.2: xterm patch**
- **121923-01 – GNOME 2.6.0:: GNOME CD Burner 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**
- **121977-03 – CDE 1.6: dtlogin resources 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**
- **122031-01 – SunOS 5.10: cgsix Patch**
- **122083-02 – SunOS 5.10: fsck mirrored patch**
- **122085-01 – SunOS 5.10: nispasswd patch**
- **122087-01 – SunOS 5.10: LTC1427-connected fan device driver patch**
- **122119-05 – SunOS 5.10: Patch for Arabic Fonts**
- **122130-03 – SunOS 5.10: Patch to update SUNWlocaledefsrc files**
- **122172-06 – SunOS 5.10: swap swapadd isaexec patch**
- **122174-03 – SunOS 5.10: dumpadm patch**
- **122204-02 – GNOME 2.6.0: configuration framework Patch**
- **122208-01 – GNOME 2.6.0: Removable Media Patch**
- **122210-01 – GNOME 2.6.0:: GNOME Media Player Patch**
- **122231-01 – SunOS 5.10 Sun Connection agents, transport certificate update**
- **122239-01 – SunOS 5.10: Apache 2 mod_perl Perl cgi patch**
- **122259-01 – SunOS 5.10: SunFreeware gnu esp ghostscript patch**
- **122261-01 – SunOS 5.10: SunFreeware ghostscript man pages patch**
- **122376-01 – SunOS 5.10: prex patch**

- **122408-01 – SunOS 5.10: libmtmalloc patch**
- **122418-01 – SunOS 5.10: Fix Garbled Message Issues for Ru**
- **122422-03 – SunOS 5.10: add missing locale files for Mozilla**
- **122424-01 – SunOS 5.10: Mozilla default bookmarks patch**
- **122470-02 – GNOME 2.6.0:: GNOME Java Help Patch**
- **122487-06 – SunOS 5.10: Patch for Middle Eastern Region locale issue**
- **122515-01 – SunOS 5.10: boston platform patch**
- **122517-04 – SunOS 5.10: Sun Fire V215/V245 platmod patch**
- **122669-01 – Evolution 1.4.6: Cryptographic Library patch**
- **122675-01 – SunOS 5.10 : SunFreeware samba man pages patch**
- **122735-01 – CDE 1.6: backdrops patch**
- **122754-01 – SunOS 5.10: Exacct catalogue patch**
- **122761-01 – SunOS 5.10: Sun Update Connection Bootstrapper**
- **122860-05 – SunOS 5.10: SCN Update Manager localization patch**
- **122911-10 – SunOS 5.10: Apache 1.3 Patch**
- **122958-03 – GNOME 2.6.0: RealPlayer media application**
- **123003-03 – SunOS 5.10: SAM module patch**
- **124171-07 – SunOS 5.10: SCN Base cacao module patch**
- **123630-03 – SunOS 5.10: HTTP proxy settings patch**
- **123005-07 – SunOS 5.10: Basic Registration Update**
- **123011-01 – SunOS 5.10: BR desktop icon patch**
- **123015-01 – SunOS 5.10: ps patch**
- **123121-02 – SunOS 5.10: libwsreg.so.1 Patch**
- **123132-01 – SunOS 5.10: more patch**
- **123162-02 – GNOME 2.6.0:: GNOME Java Run Time Patch**
- **123186-02 – SunOS 5.10: NIS yp utilities patch**
- **123194-01 – SunOS 5.10: cron patch**
- **123252-01 – SunOS 5.10: platform/SUNW,Netra-T2000 patch**
- **123271-01 – SunOS 5.10: iwscn patch**
- **123301-01 – SunOS 5.10: i2c_svc patch**
- **123319-01 – SunOS 5.10: sysacct patch**
- **123322-01 – SunOS 5.10: pwconv patch**
- **123326-01 – SunOS 5.10: tail patch**

- **123328-01 – SunOS 5.10: expr patch**
- **123332-01 – SunOS 5.10: tftp and in.tftpd patch**
- **123358-02 – SunOS 5.10: jumpstart and live upgrade compliance patch**
- **123406-02 – SunOS 5.10: svc-zones patch**
- **123494-04 – X11 6.6.2: fontconfig patch**
- **123520-01 – SunOS 5.10: basename & dirname patch**
- **123526-01 – SunOS 5.10: libcurses patch**
- **123590-08 – SunOS 5.10: PostgresSQL patch**
- **123647-02 – SunOS 5.10: gcc patch**
- **123661-04 – SunOS 5.10: Basic Registration Localization**
- **123893-04 – SunOS 5.9 5.10: Common Agent Container (cacao) runtime 2.1 upgrade patch 04**
- **123908-01 – SunOS 5.10: ar patch**
- **123912-02 – SunOS 5.10: ppriv patch**
- **123938-01 – GNOME 2.6.0: GNU Transport Layer Security Library Patch**
- **124149-11 – SunOS 5.10: Sun XVR-300 Graphics Accelerator Patch**
- **124153-02 – SunOS 5.10: Solaris Management Applications Localization patch**
- **124179-01 – SunOS 5.10: Sun Update Connection Bootstrapper Localization**
- **124237-01 – SunOS 5.10: ftp patch**
- **124325-01 – SunOS 5.10: rcm modules patch**
- **124363-01 – SunOS 5.10: /usr/bin/stardict patch**
- **124395-01 – CDE1.6: dtaction patch**
- **124397-02 – CDE1.6: libDtWidget patch**
- **124399-01 – CDE1.6: dtfile patch**
- **124401-01 – CDE1.6: dtpad patch**
- **124403-01 – CDE1.6: dtstyle patch**
- **124405-01 – CDE1.6: sdtfprop patch**
- **124444-01 – SunOS 5.10: mountd patch**
- **124457-01 – X11 6.6.2: xdm patch**
- **124599-01 – SunOS 5.10: Fujitsu PRIMEPOWER ESF redact script**
- **124630-16 – SunOS 5.10: System Administration Applications, Network, and Core Libraries Patch**
- **124924-01 – SunOS 5.10: vold patch**
- **124939-03 – SunOS 5.10 5.10_x86: JDMK 5.1 patch**

- 124943-01 – SunOS 5.10: SunFreeware gzip man pages patch
- 124997-01 – SunOS 5.10: /usr/bin/tip patch
- 124999-01 – SunOS 5.10: mc-us3 driver patch
- 125022-01 – SunOS 5.10: usr/sbin/sar patch
- 125045-01 – X11 6.6.2: Xft patch
- 125075-01 – SunOS 5.10: svc-volfs patch
- 125166-10 – SunOS 5.10: Qlogic ISP Fibre Channel Device Driver
- 125167-01 – SunOS 5.10: gssd patch
- 125171-02 – SunOS 5.10: dad driver patch
- 125172-01 – SunOS 5.10: llc2 driver patch
- 125174-02 – SunOS 5.10: tl driver patch
- 125184-05 – SunOS 5.10: Sun Fibre Channel Device Drivers
- 125211-01 – SunOS 5.10: SunFreeware zlib patch
- 125213-02 – SunOS 5.10 : SunFreeware zlib man pages patch
- 125215-02 – SunOS 5.10: SunFreeware wget patch
- 125217-01 – SunOS 5.10: SunFreeware wget man pages patch
- 125279-05 – CDE1.6: dtsession patch
- 125281-02 – CDE1.6: sdtimage patch
- 125285-03 – SunOS 5.10: Japanese font patch
- 125293-03 – SunOS 5.10: Japanese iconv patch
- 125332-02 – JDS 3: Macromedia Flash Player Plugin Patch
- 125388-01 – SunOS 5.10: SNIA Multipath Management API and Multipathing Utilities
- 125474-01 – X11 6.8.0: Xorg client libraries patch
- 125499-01 – SunOS 5.10: chmod chown Patch
- 125505-01 – SunOS 5.10: daktari and cherrystone header files patch
- 125531-02 – GNOME 2.6.0: File System Examiner Patch
- 125533-06 – GNOME 2.6.0: Trusted Extension Runtime Patch
- 125537-01 – GNOME 2.6.0:: GNOME post script viewer
- 125539-03 – Mozilla 1.7: Mozilla Firefox Web browser
- 125541-02 – Mozilla 1.7: Mozilla Thunderbird email client
- 125543-02 – GNOME 2.6.0:: GNOME panel applets
- 125545-01 – GNOME 2.6.0:: GNOME Performance Meter
- 125549-01 – SunOS 5.10: logins patch

- **125551-01 – SunOS 5.10: librestart patch**
- **125719-10 – X11 6.8.0: Xorg server patch**
- **125725-02 – X11 6.6.2: xinerama patch**
- **125731-02 – SunOS 5.10: XML and XSLT libraries patch**
- **125891-01 – SunOS 5.10: libc_psr_hwcap.so.1 patch**
- **125894-01 – SunOS 5.10: cut patch**
- **125898-01 – SunOS 5.10: locator patch**
- **125905-01 – SunOS 5.10: keytables patch**
- **125952-04 – Sun Java Web Console 3.0.2: Support for Application Server 8.2 EE**
- **126117-02 – CDE 1.6: DtPower patch**
- **126119-01 – CDE 1.6: sys-suspend patch**
- **126133-02 – SunOS 5.10: sshd patch**
- **126206-04 – SunOS 5.10: zebra ripd quagga patch**
- **126260-01 – SunOS 5.10: logadm patch**
- **126262-01 – SunOS 5.10: prctl patch**
- **126363-03 – SunOS 5.10: X Window System changes - Solaris Trusted Extensions**
- **126365-06 – SunOS 5.10:: CDE Desktop changes - Solaris Trusted Extensions**
- **126425-01 – SunOS 5.10: fsckall patch**
- **126428-01 – SunOS 5.10: e1000g patch**
- **126430-01 – SunOS 5.10: libcurses patch**
- **126440-01 – SunOS 5.10: rm patch**
- **126442-01 – SunOS 5.10: ac97.h patch**
- **126444-01 – SunOS 5.10: sys/regset.h patch**
- **126530-01 – SunOS 5.10: SNIA Multipath Management API Libraries and scsi_vhci driver**
- **126540-02 – SunOS 5.10: libumem library patch**
- **126542-02 – SunOS 5.10: snmpdx and mibiisa patch**
- **126544-01 – SunOS 5.10: snmpdx manifest patch**
- **126546-01 – SunOS 5.10: Bash patch**
- **126585-02 – SunOS 5.10: auto_ef patch**
- **126630-02 – SunOS 5.10: tcsh patch**
- **126649-01 – SunOS 5.10: sulogin patch**
- **126653-01 – SunOS 5.10: md patch**
- **126655-01 – SunOS 5.10: poll driver patch**

- **126657-01 – SunOS 5.10: timex patch**
- **126674-01 – SunOS 5.10: libssl patch**
- **126738-02 – SunOS 5.10: Patch for European Region TJDS messages**
- **126740-02 – SunOS 5.10: Patch for Asian Region TJDS messages**
- **126742-01 – SunOS 5.10: Patch for Japanese TJDS messages**
- **126868-01 – SunOS 5.10: SunFreeware bzip2 patch**
- **127127-11 – SunOS 5.10: kernel patch**
- **127541-01 – X11 6.8.0: xman patch**
- **127638-01 – CDE 1.6: dtterm patch**
- **127724-01 – SunOS 5.10: xntpd patch**
- **127726-01 – SunOS 5.10: getent patch**
- **127737-01 – SunOS 5.10: fifofs patch**
- **127752-01 – SunOS 5.10: SUNW,Netra-CP3060 platform symlinks patch**
- **127759-01 – SunOS 5.10: sar -c incorrectly reports averages due to 32bit truncation Patch**
- **127762-01 – SunOS 5.10: libtsol Patch**
- **127784-01 – SunOS 5.10: SunFreeware bzip2 man pages patch**
- **127853-01 – SunOS 5.10: sad driver patch**
- **127856-01 – SunOS 5.10: hme patch**
- **127866-02 – SunOS 5.10: ufs hang patch**
- **127868-01 – SunOS 5.10: mv patch**
- **127872-01 – SunOS 5.10: mailx patch**
- **127878-01 – SunOS 5.10: usr/bin/du patch**
- **127882-02 – SunOS 5.10: sendmail and mail(1) patch**
- **127884-01 – SunOS 5.10: awk patch**
- **127888-06 – SunOS 5.10: ipf patch**
- **127892-04 – SunOS 5.10: UFS utilities patch**
- **127914-01 – SunOS 5.10: lofiadm patch**
- **127922-03 – SunOS 5.10: cpio Patch**
- **127959-01 – SunOS 5.10: rpcsec patch**
- **127970-01 – SunOS 5.10: find patch**
- **127974-01 – SunOS 5.10: in.routed patch**
- **127976-04 – SunOS 5.10: in.mpathd Patch**
- **127980-01 – SunOS 5.10: KMF Patch**

- **127986-01 – SunOS 5.10: rpc.metad patch**
- **127994-01 – SunOS 5.10: xargs patch**
- **127997-01 – SunOS 5.10: libfru patch**
- **127998-01 – SunOS 5.10: kssladm patch**
- **128000-01 – SunOS 5.10: in.ftpd patch**
- **128004-01 – SunOS 5.10: headerfile patch**
- **128006-04 – SunOS 5.10: usbsksp patch**
- **128008-01 – SunOS 5.10: libaio Patch**
- **128292-01 – SunOS 5.10: rsm Patch**
- **128294-02 – SunOS 5.10: rpcmod patch**
- **128296-01 – SunOS 5.10: pcfs and pc_node.h patch**
- **128298-01 – SunOS 5.10: se patch**
- **128300-03 – SunOS 5.10: zoneinfo patch**
- **128304-03 – SunOS 5.10: ehci and scsa2usb patch**
- **128306-03 – SunOS 5.10: devfs patch**
- **128310-01 – SunOS 5.10: hsfs patch**
- **128316-01 – SunOS 5.10: efcode.cleanup.sh patch**
- **128318-01 – SunOS 5.10: ssh-keygen patch**
- **128322-01 – SunOS 5.10: dhcpagent patch**
- **128324-02 – SunOS 5.10: ixgb driver patch**
- **128326-01 – SunOS 5.10: sip patch**
- **128328-01 – SunOS 5.10: usbms patch**
- **128330-01 – SunOS 5.10: pax patch**
- **128332-01 – SunOS 5.10: conskbd patch**
- **128334-01 – SunOS 5.10: ibd patch**
- **128340-01 – SunOS 5.10: in.iked patch**
- **128342-01 – SunOS 5.10: ksh and sh patch**
- **128350-01 – SunOS 5.10: dhcpmgr.so.1 patch**
- **128402-02 – SunOS 5.10: etc/default/kbd patch**
- **128410-01 – SunOS 5.10: mc-us3i driver patch**
- **136699-01 – X11 6.6.2: Xvnc patch**
- **136724-01 – GNOME 2.6.0:: GNOME Help Viewer Patch**
- **136839-01 – Service Tags**

- **136882-01 – SunOS 5.10: ImageMagick patch**
- **136885-03 – SunOS 5.10: iscsi patch**
- **136998-02 – SunOS 5.10: PostgreSQL 8.2 core patch**
- **137000-02 – SunOS 5.10: PostgreSQL 8.2 documentation patch**
- **137002-01 – SunOS 5.10: PostgreSQL 8.2 TCL binding library patch**
- **137004-02 – SunOS 5.10: PostgreSQL 8.2 source code**
- **137017-01 – SunOS 5.10: crontab patch**
- **137019-01 – SunOS 5.10: snmpXdmid patch**
- **137021-01 – SunOS 5.10: format patch**
- **137023-01 – SunOS 5.10: time.h patch**
- **137028-01 – SunOS 5.10: pcihp patch**
- **137030-01 – SunOS 5.10: praudit patch**
- **137032-01 – SunOS 5.10: namefs patch**
- **137034-01 – SunOS 5.10: ttymon patch**
- **137036-01 – SunOS 5.10: cdrw patch**
- **137046-01 – SunOS 5.10: Flash Archive patch**
- **137048-01 – SunOS 5.10: etc/flash/precreation/caplib patch**
- **137049-01 – SunOS 5.10: audio1575 driver patch**
- **137080-01 – SunOS 5.10: libpng Patch**
- **137084-01 – SunOS 5.10: setfacl patch**
- **137086-01 – SunOS 5.10: zoneadmd patch**
- **137088-01 – SunOS 5.10: tar patch**
- **137090-01 – SunOS 5.10: rmc_comm, rmclomv patch**
- **137091-01 – SunOS 5.10: arp patch**
- **137093-01 – SunOS 5.10: logindevperm patch**
- **137095-01 – SunOS 5.10: libfmd_snmp.so.1 patch**
- **137097-01 – SunOS 5.10: inetd-upgrade patch**
- **137099-01 – SunOS 5.10: pcie patch**
- **137102-01 – SunOS 5.10: flowacct patch**
- **137115-01 – SunOS 5.10: SUNWcsr postinstall patch**
- **137147-03 – SunOS 5.10: libexpat patch**
- **137274-01 – SunOS 5.10: etc/mnttab patch**
- **137276-01 – SunOS 5.10: uucico patch**

- **137278-01 – SunOS 5.10: ipsecconf patch**
- **137280-01 – SunOS 5.10: dld patch**
- **137282-01 – SunOS 5.10: intpexec patch**
- **137321-01 – SunOS 5.10: p7zip patch**

Note – The Oracle Solaris 10 5/08 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 to download from My Oracle Support, because they are not required outside of creating the Update release.

- **119079-13 – SunOS 5.10: Script Patch**
- **119088-11 – SunOS 5.10: SPECIAL PATCH: SUNWqlc package install updates patch**
- **119092-10 – SunOS 5.10: SPECIAL PATCH: iSCSI Script Patch to replace package scripts**
- **120224-07 – 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**
- **120416-06 – 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 SUNWccccrr postinatall**
- **121061-01 – SunOS 5.10: motd Patch**
- **121306-02 – SunOS 5.10: SPECIAL PATCH: For package level scripts only**
- **121463-08 – 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**
- **121679-02 – SunOS 5.10: SPECIAL PATCH: Japanese Input System Wnn patch**
- **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**
- **122416-06 – SunOS 5.10: SPECIAL PATCH: class action scripts 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**
- **123144-01 – GNOME 2.6.0:: GNOME RealPlayer CAS Patch**
- **123259-12 – SunOS 5.10: SPECIAL PATCH: For SCRIPT patch**
- **123535-01 – APOC 1.2: depend patch**
- **123628-01 – SunOS 5.10: SPECIAL PATCH: fp Script Patch to replace install components**
- **123872-02 – SunOS 5.10_sparc, SPECIAL PATCH: For Script Files**
- **124093-02 – SunOS 5.10: SPECIAL PATCH: For package level scripts only**
- **124141-01 – CDE 1.6: SPECIAL PATCH: For SCRIPT patch**
- **124166-01 – SunOS 5.10 : SPECIAL PATCH: Script patch for 120272-06**
- **125095-15 – SunOS 5.10: SPECIAL PATCH: For SCRIPT patch**
- **125097-15 – SunOS 5.10: SPECIAL PATCH: For EDITABLE files**
- **125275-01 – SunOS 5.10 5.10_x86: JDMK 5.1 patch**
- **125312-01 – SunOS 5.10: SPECIAL PATCH: For 120719-02 patch**
- **125314-01 – SunOS 5.10: SPECIAL PATCH: For 123590-02 patch**
- **125317-01 – SunOS 5.10: SPECIAL PATCH: For 125215-01 patch**
- **125398-04 – SunOS 5.10: SPECIAL PATCH: Japanese CAS scripts update for ZONE**
- **125535-03 – Openwindows 3.7.3: SPECIAL PATCH: CAS scripts patch for ZONE**
- **125721-05 – X11 6.6.2: SPECIAL PATCH: CAS scripts patch for ZONE**
- **125733-01 – SunOS 5.10: SPECIAL PATCH: For 125731-01. SCRIPT patch**
- **125735-01 – SunOS 5.10: SPECIAL PATCH: For 123590-03 patch**
- **125978-08 – SunOS 5.10: SPECIAL PATCH: For package level scripts only**
- **126121-01 – CDE 1.6: SPECIAL PATCH: For SCRIPT patch**
- **126123-01 – CDE 1.6: SPECIAL PATCH: For SCRIPT patch**
- **126212-01 – SunOS 5.10: SPECIAL PATCH: depend files patch**
- **126639-07 – SunOS 5.10: SPECIAL PATCH: For SCRIPT patch**

- **126918-01 – SunOS 5.10: TRUSTED EXTENSIONS SCRIPT PATCH**
- **127685-02 – CDE 1.6: SPECIAL PATCH: For SCRIPT patch**
- **128010-10 – SunOS 5.10: SPECIAL PATCH: For SCRIPT patch**
- **128011-10 – SunOS 5.10: SPECIAL PATCH: For EDITABLE files**
- **128355-09 – SunOS 5.10: SPECIAL PATCH: Script patch for SFW 10 and Solaris 10 update 5 build 10**
- **137142-02 – SunOS 5.10: Fujitsu special patch**

x86 Patch List

- **120901-03 – SunOS 5.10_x86: libzonecfg patch**
- **121334-04 – SunOS 5.10_x86: zoneadmd, zlogin and zoneadm patch**
- **119255-53 – SunOS 5.10_x86: Install and Patch Utilities Patch**
- **126420-01 – SunOS 5.10_x86: umountall 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**
- **117466-01 – SunOS 5.10_x86: fwtmp Patch**
- **118344-14 – SunOS 5.10_x86: Fault Manager Patch**
- **118368-04 – SunOS 5.10_x86: csh Patch**
- **118567-01 – SunOS 5.10_x86: ping Command Patch**
- **118668-15 – JavaSE 5.0_x86: update 14 patch (equivalent to JDK 5.0u14)**
- **118669-15 – JavaSE 5.0_x86: update 14 patch (equivalent to JDK 5.0u14), 64bit**
- **118677-03 – SunOS 5.10_x86: patch for Solaris make and sccs utilities**
- **118736-01 – SunOS 5.10_x86: usr/sbin/rpc.nisd_resolv Patch**
- **118778-11 – SunOS 5.10_x86: Sun GigaSwift Ethernet 1.0 driver patch**
- **118825-01 – SunOS 5.10_x86: sort patch**
- **121264-01 – SunOS 5.10_x86: cadp160 driver patch**
- **122035-05 – SunOS 5.10_x86: awk nawk Patch**
- **123840-04 – SunOS 5.10_x86: Fault Manager Patch**
- **119043-10 – SunOS 5.10_x86: svccfg & svcprop patch**
- **118855-36 – SunOS 5.10_x86: kernel patch**
- **118885-01 – SunOS 5.10_x86: atomic.h patch**
- **118919-21 – SunOS 5.10_x86: Solaris Crypto Framework patch**

- **118960-03 – SunOS 5.10_x86: patch usr/bin/acctcom and usr/bin/lastcomm**
- **119060-39 – X11 6.6.2_x86: Xsun patch**
- **119064-01 – SunOS 5.10_x86: libXpm patch**
- **119066-01 – SunOS 5.10_x86: fc-cache patch**
- **119082-25 – SunOS 5.10_x86: CD-ROM Install Boot Image Patch**
- **119091-26 – SunOS 5.10_x86: Sun iSCSI Device Driver and Utilities**
- **119116-33 – Mozilla 1.7_x86 patch**
- **119118-42 – Evolution 1.4.6_x86 patch**
- **119131-33 – SunOS 5.10_x86: Sun Fibre Channel Device Drivers**
- **119144-02 – SunOS 5.10_x86: patch lib/libinetutil.so.1**
- **119202-29 – SunOS 5.10_x86: OS Localization message patch**
- **119214-16 – NSS_NSPR_JSS 3.11.8_x86: NSPR 4.6.8 / NSS 3.11.8 / JSS 4.2.5**
- **119247-32 – SunOS 5.10_x86: Manual Page updates for Solaris 10**
- **124629-06 – SunOS 5.10_x86: CD-ROM Install Boot Image Patch**
- **119253-25 – SunOS 5.10_x86: System Administration Applications Patch**
- **126539-01 – SunOS 5.10_x86: i.manifest and r.manifest patch**
- **124394-06 – CDE 1.6_x86: Dtlogin smf patch**
- **123612-03 – X11 6.6.2_x86: Trusted Extensions patch**
- **119281-17 – CDE 1.6_x86: Runtime library patch for Solaris 10**
- **119279-20 – CDE 1.6_x86: dtlogin patch**
- **121735-07 – SunOS 5.10_x86: patch to support addition of new UTF-8 locales**
- **119277-08 – SunOS 5.10_x86: Patch for Northern Europe Region locale issues**
- **119283-01 – CDE1.6_x86:: GNOME/CDE Menu for Solaris 10_x86**
- **119285-01 – CDE 1.6_x86: sdtwsinfo patch**
- **119287-02 – CDE 1.6_x86: dtterm libDtTerm patch**
- **124189-02 – SunOS 5.10_x86: Trusted Solaris Attributes Patch**
- **121309-12 – SunOS 5.10_x86: Solaris Management Console Patch**
- **119314-20 – SunOS 5.10_x86: WBEM Patch**
- **119316-12 – SunOS 5.10_x86: Solaris Management Applications Patch**
- **119318-01 – SunOS 5.10_x86: SVr4 Packaging Commands (usr) Patch**
- **120461-13 – GNOME 2.6.0_x86:: GNOME libs Patch**
- **119369-05 – GNOME 2.6.0_x86: Printing Technology Patch**
- **119373-02 – GNOME 2.6.0_x86:: GNOME common development tools and libraries Patch**

- **119398-06 – SunOS 5.10_x86: Patch for North America Region locale issues**
- **119400-06 – SunOS 5.10_x86: Patch for Central American Region locale issues**
- **119402-08 – SunOS 5.10_x86: Patch for Western Europe Region locale issues**
- **119405-06 – SunOS 5.10_x86: Patch for South American Region locale issues**
- **119406-05 – SunOS 5.10_x86: Patch for Central European Region locale issues**
- **119408-08 – SunOS 5.10_x86: Patch for Eastern Europe Region locale issues**
- **122213-25 – GNOME 2.6.0_x86:: GNOME Desktop Patch**
- **119411-05 – GNOME 2.6.0_x86:: GNOME Applets Patch**
- **119415-14 – GNOME 2.6.0_x86:: GNOME Accessibility Libraries Patch**
- **119417-01 – GNOME 2.6.0_x86:: GNOME Text-To-Speech Engine Patch**
- **119419-04 – GNOME 2.6.0_x86:: GNOME On-screen Keyboard Patch**
- **119421-01 – SunOS 5.10_x86: Thai locale patch**
- **119471-11 – SunOS 5.10_x86: Sun Enterprise Network Array firmware and utilities**
- **120200-11 – SunOS 5.10_x86: sysidtool patch**
- **119535-13 – SunOS 5.10_x86: Flash Archive Patch**
- **119539-14 – GNOME 2.6.0_x86: Window Manager Patch**
- **119541-07 – GNOME 2.6.0_x86:: GNOME Dtlogin configuration Patch**
- **119545-03 – GNOME 2.6.0_x86:: GNOME streaming media framework Patch**
- **120100-08 – APOC 1.2_x86: Sun Java(tm) Desktop System Configuration Shared Libraries**
- **119547-08 – APOC 1.2_x86: APOC Configuration Agent Patch**
- **119549-12 – GNOME 2.6.0_x86:: GNOME Multi-protocol instant messaging client Patch**
- **119575-02 – SunOS 5.10_x86: su patch**
- **119599-08 – GNOME 2.6.0_x86:: GNOME Screen Reader and Magnifier Patch**
- **119602-12 – SunOS 5.10_x86: Patch for European Region JDS messages**
- **119604-08 – SunOS 5.10_x86: Patch for Asian Region JDS messages**
- **119606-08 – SunOS 5.10_x86: Patch for Japanese Region JDS messages**
- **119649-03 – SunOS 5.10_x86: vlan driver patch**
- **119704-11 – S10_x86: Patch for localeadm issues**
- **120273-19 – SunOS 5.10_x86: SMA patch**
- **122641-06 – SunOS 5.10_x86: zfs genesis patch**
- **127756-01 – SunOS 5.10_x86: Fault Manager patch**
- **125504-02 – SunOS 5.10_x86: package-move-of-IP-objects patch**

- **125548-02 – SunOS 5.10_x86: zoneadm indirect dependency patch**
- **126424-03 – SunOS 5.10_x86: bootadm patch**
- **120012-14 – SunOS 5.10_x86: kernel patch**
- **119758-11 – SunOS 5.10_x86: Samba patch**
- **119765-06 – SunOS 5.10_x86: ipmitool patch**
- **119767-02 – SunOS 5.10_x86: SunFreeware man pages patch**
- **119772-02 – SunOS 5.10_x86: Asian CCK locales patch**
- **119784-05 – SunOS 5.10_x86: bind patch**
- **119798-17 – SunOS 5.10_x86:: CDE Localization message patch**
- **119811-05 – SunOS 5.10_x86: International Components for Unicode Patch**
- **119813-07 – X11 6.6.2_x86: Freetype patch**
- **119815-19 – SunOS 5.10_x86: OS Japanese manpages patch**
- **119827-02 – SunOS 5.10_x86: libadm.so.1 Patch**
- **119891-03 – GNOME 2.6.0_x86: search tool Patch**
- **119901-04 – GNOME 2.6.0_x86:: GNOME libtiff - library for reading and writing TIFF Patch**
- **119904-02 – Openwindows 3.7.3_x86: Xview Patch**
- **119907-12 – GNOME 2.6.0_x86: Virtual File System Framework patch**
- **119956-04 – CDE 1.6_x86: Tooltalk Runtime patch for Solaris 10**
- **119961-02 – SunOS 5.10_x86, x64, Patch for assembler**
- **119964-08 – SunOS 5.10_x86: Shared library patch for C++_x86**
- **119975-08 – 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**
- **120039-01 – SunOS 5.10_x86: sar patch**
- **120045-01 – SunOS 5.10_x86: psrset patch**
- **120063-01 – SunOS 5.10_x86: localedef Patch**
- **120065-01 – SunOS 5.10_x86: stdio_iso.h Patch**
- **120095-18 – X11 6.6.2_x86: xscreensaver patch**
- **120102-01 – SunOS 5.10_x86: patch usr/lib/libsmedia.so.1**
- **120202-06 – X11 6.8.0_x86: Xorg client libraries patch**
- **120223-26 – SunOS 5.10_x86: Emulex-Sun LightPulse Fibre Channel Adapter driver**
- **120236-01 – SunOS 5.10_x86: Live Upgrade Zones Support Patch**
- **120283-03 – GNOME 2.6.0_x86:: GNOME CD Player Utility Patch**

- **120285-06 – GNOME 2.6.0_x86:: GNOME CORBA ORB and component framework**
- **120287-02 – GNOME 2.6.0_x86:: GNOME text editor Patch**
- **120289-03 – 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**
- **120347-09 – SunOS 5.10_x86: Common Fibre Channel HBA API and Host Bus Adapter Libraries**
- **120349-02 – SunOS 5.10_x86: Fibre Channel HBA Port utility**
- **120351-04 – SunOS 5.10_x86: Asian CCK locales patch**
- **121976-01 – CDE 1.6_x86: Xsession patch**
- **120411-28 – SunOS 5.10_x86: Internet/Intranet Input Method Framework patch**
- **120413-08 – SunOS 5.10_x86: Simplified Chinese locale patch**
- **120415-20 – SunOS 5.10_x86: Asian CCK locales patch**
- **120451-01 – SunOS 5.10_x86: Get netmask Utility Patch**
- **120455-02 – 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**
- **120536-15 – SunOS 5.10_x86: Updated video drivers and fixes**
- **120544-11 – SunOS 5.10_x86: Apache 2 Patch**
- **120705-01 – SunOS 5.10_x86: smartcard man patch**
- **120720-02 – SunOS 5.10_x86 : SunFreeware gzip patch**
- **120733-01 – SunOS 5.10_x86: libusb patch**
- **120740-04 – GNOME 2.6.0_x86:: GNOME PDF Viewer based on Xpdf**
- **120742-01 – SunOS 5.10_x86: seg_map header file patch**
- **120754-05 – 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**
- **120817-01 – SunOS 5.10_x86: at and batch patch**
- **120831-06 – SunOS 5.10_x86: vi and ex patch**

- **120874-06 – SunOS 5.10_x86: xscreensaver localization message patch**
- **120890-01 – SunOS 5.10_x86: librac patch**
- **120985-01 – SunOS 5.10_x86: nss_user.so.1 Patch**
- **120989-01 – SunOS 5.10_x86: grpck Patch**
- **120993-02 – SunOS 5.10_x86: nfs_clnt.h and nfs4_clnt.h Patch**
- **121005-03 – SunOS 5.10_x86: sh patch**
- **121013-02 – SunOS 5.10_x86: traceroute patch**
- **121037-02 – GNOME 2.6.0_x86: base libraries patch**
- **121082-06 – SunOS 5.10_x86: Connected Customer Agents 1.1.0**
- **121096-02 – GNOME 2.6.0_x86:: GNOME EXIF tag parsing library for digital cameras**
- **121119-13 – SunOS 5.10_x86: Sun Update Connection System Client 1.0.10**
- **121129-01 – SunOS 5.10_x86: lofs patch**
- **121131-01 – SunOS 5.10_x86: librcm.so.1 patch**
- **121134-02 – SunOS 5.10_x86: power patch**
- **121297-01 – SunOS 5.10_x86: fgrep patch**
- **121300-03 – SunOS 5.10_x86: caplib patch**
- **121395-01 – SunOS 5.10_x86: aio_impl.h. patch**
- **121431-21 – SunOS 5.8_x86 5.9_x86 5.10_x86: Live Upgrade Patch**
- **121429-09 – SunOS 5.10_x86: Live Upgrade Zones Support Patch**
- **121488-02 – CDE 1.6_x86: dtmail patch**
- **121562-04 – SunOS 5.10_x86: keymap patch**
- **121571-04 – S10_x86: Patch for Austrialasia Region locale issues**
- **121572-06 – S10_x86: Patch for South Europe Region locale issues**
- **121604-02 – SunOS 5.10_x86: libcfgadm.so.1, scsi.so.1 patch**
- **121607-02 – GNOME 2.6.0_x86: Python patch**
- **121621-03 – 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**
- **125288-02 – SunOS 5.10_x86: Japanese X locale update**
- **121676-11 – SunOS 5.10_x86: Japanese Input System ATOK patch**
- **121678-05 – SunOS 5.10_x86: Japanese Input System Wnn patch**
- **121805-03 – SunOS 5.10_x86: GRUB patch**
- **121871-01 – X11 6.6.2_x86: xterm patch**

- **121924-01 – GNOME 2.6.0_x86:: GNOME CD Burner patch**
- **121954-02 – SunOS 5.10_x86: Localization patch for new EMEA FIGGS locales**
- **121978-03 – CDE 1.6_x86: dtlogin resources 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**
- **122078-03 – SunOS 5.10_x86: NIS yp utilities patch**
- **122084-02 – SunOS 5.10_x86: fsck mirrored patch**
- **122086-01 – SunOS 5.10_x86: nispasswd patch**
- **122120-05 – SunOS 5.10_x86: Patch for Arabic Fonts**
- **122131-03 – S10_x86: Patch to update SUNWlocaledefsrc files**
- **122175-03 – SunOS 5.10_x86: dumpadm patch**
- **122205-02 – GNOME 2.6.0_x86: configuration framework patch**
- **122209-01 – GNOME 2.6.0_x86: Removable Media Patch**
- **122211-01 – GNOME 2.6.0_x86:: GNOME Media Player Patch**
- **122240-01 – SunOS 5.10_x86: Apache 2 mod_perl Perl cgi patch**
- **122248-01 – SunOS 5.10_x86: patch clmb**
- **122260-01 – SunOS 5.10_x86: SunFreeware gnu esp ghostscript patch**
- **122262-01 – SunOS 5.10_x86: SunFreeware ghostscript man pages patch**
- **122365-01 – SunOS 5.10_x86: bscbus, bscv driver patch**
- **122409-01 – SunOS 5.10_x86: libmtmalloc patch**
- **122419-01 – SunOS 5.10_x86: Fix Garbled Message Issues for Ru**
- **122423-03 – SunOS 5.10_x86: add missing locale files for Mozilla**
- **122425-01 – SunOS 5.10_x86: Mozilla default bookmarks patch**
- **122471-02 – GNOME 2.6.0_x86:: GNOME Java Help Patch**
- **122488-05 – SunOS 5.10_x86: Patch for Middle Eastern Region locale issue**
- **122522-01 – SunOS 5.10_x86: locator patch**
- **122655-05 – SunOS 5.10_x86: jumpstart and live upgrade compliance patch**
- **122670-01 – Evolution 1.4.6_x86: Cryptographic Library patch**
- **122676-01 – SunOS 5.10_x86: SunFreeware samba man pages patch**
- **122736-01 – CDE 1.6_x86: backdrops patch**
- **122748-01 – SunOS 5.10_x86: gda patch**
- **122755-01 – SunOS 5.10_x86: libexacct.so.1 fma patch**

- 122762-01 – SunOS 5.10_x86: Sun Update Connection Bootstrapper
- 122829-02 – SunOS 5.10_x86: lsimega driver patch
- 122861-05 – SunOS 5.10_x86: SCN Update Manager localization patch
- 122912-10 – SunOS 5.10_x86: Apache 1.3 Patch
- 122959-04 – GNOME 2.6.0_x86: RealPlayer media application
- 123004-03 – SunOS 5.10_x86: SAM module patch
- 124187-07 – SunOS 5.10_x86: SCN Base cacao module patch
- 123631-03 – SunOS 5.10_x86: HTTP proxy settings patch
- 123006-07 – SunOS 5.10_x86: Basic Registration Update
- 123012-01 – SunOS 5.10_x86: BR desktop icon patch
- 123016-01 – SunOS 5.10_x86: ps patch
- 123122-02 – SunOS 5.10_x86: usr/lib/libwsreg.so.1 Patch
- 123133-01 – SunOS 5.10_x86: more patch
- 123163-02 – GNOME 2.6.0_x86:: GNOME Java Run Time Patch
- 123195-01 – SunOS 5.10_x86: cron patch
- 123323-01 – SunOS 5.10_x86: pwconv patch
- 123327-01 – SunOS 5.10_x86: tail patch
- 123329-01 – SunOS 5.10_x86: expr patch
- 123333-01 – SunOS 5.10_x86: tftp and in.tftpd patch
- 123407-02 – SunOS 5.10_x86: svc-zones patch
- 123495-04 – X11 6.6.2_x86: fontconfig patch
- 123521-01 – SunOS 5.10_x86: dirname & basename patch
- 123527-01 – SunOS 5.10_x86: libcurses patch
- 123591-08 – SunOS 5.10_x86: PostgresSQL patch
- 123614-01 – X11 6.6.2_x86: OpenGL patch
- 123648-02 – SunOS 5.10_x86: gcc patch
- 123662-04 – SunOS 5.10_x86: Basic Registration Localization
- 123896-04 – SunOS 5.9_x86 5.10_x86: Common Agent Container (cacao) runtime 2.1 upgrade patch 04
- 123913-01 – SunOS 5.10_x86: ppriv patch
- 123939-01 – GNOME 2.6.0_x86: GNU Transport Layer Security Library Patch
- 124154-02 – SunOS 5.10_x86: Solaris Management Applications Localization patch
- 124180-01 – SunOS 5.10_x86: Sun Update Connection Bootstrapper Localization
- 124238-01 – SunOS 5.10_x86: ftp patch

- **124326-01 – SunOS 5.10_x86: rcm modules patch**
- **124364-01 – SunOS 5.10_x86: /usr/bin/stardict patch**
- **124396-01 – CDE 1.6_x86: dtaction patch**
- **124398-02 – CDE 1.6_x86: libDtWidget patch**
- **124400-01 – CDE 1.6_x86: dtfile patch**
- **124402-01 – CDE 1.6_x86: dtpad patch**
- **124404-01 – CDE 1.6_x86: dtstyle patch**
- **124406-01 – CDE 1.6_x86: sdtfprop patch**
- **124445-01 – SunOS 5.10_x86: mountd patch**
- **124458-01 – X11 6.6.2_x86: xdm patch**
- **124631-16 – SunOS 5.10_x86: System Administration Applications, Network, and Core Libraries Patch**
- **124925-01 – SunOS 5.10_x86: vold patch**
- **124939-03 – SunOS 5.10 5.10_x86: JDMK 5.1 patch**
- **124944-01 – SunOS 5.10_x86: SunFreeware gzip man pages patch**
- **124998-01 – SunOS 5.10_x86: /usr/bin/tip patch**
- **125023-01 – SunOS 5.10_x86: usr/sbin/sar patch**
- **125046-01 – X11 6.6.2_x86: Xft patch**
- **125076-01 – SunOS 5.10_x86: svc-volfs patch**
- **125165-10 – SunOS 5.10_x86: Qlogic ISP Fibre Channel Device Driver**
- **125168-01 – SunOS 5.10_x86: gssd patch**
- **125173-01 – SunOS 5.10_x86: llc2 patch**
- **125175-02 – SunOS 5.10_x86: tl driver patch**
- **125185-05 – SunOS 5.10_x86: Sun Fibre Channel Device Drivers**
- **125212-01 – SunOS 5.10_x86: SunFreeware zlib patch**
- **125214-02 – SunOS 5.10_x86: SunFreeware zlib man pages patch**
- **125216-02 – SunOS 5.10_x86: SunFreeware wget patch**
- **125218-01 – SunOS 5.10_x86: SunFreeware wget man pages patch**
- **125280-05 – CDE1.6_x86: dtsession patch**
- **125282-02 – CDE 1.6_x86: sdtimage patch**
- **125286-03 – SunOS 5.10_x86: Japanese font patch**
- **125294-03 – SunOS 5.10_x86: Japanese iconv patch**
- **125333-02 – JDS 3_x86: Macromedia Flash Player Plugin Patch**
- **125365-02 – SunOS 5.10_x86: adpu320 driver patch**

- **125389-01 – SunOS 5.10_x86: SNIA Multipath Management API and Multipathing Utilities**
- **125475-01 – X11 6.8.0_x86: Xorg client libraries patch**
- **125500-01 – SunOS 5.10_x86: chmod chown Patch**
- **125532-02 – GNOME 2.6.0_x86: File System Examiner Patch**
- **125534-06 – GNOME 2.6.0_x86: Trusted Extension Runtime Patch**
- **125538-01 – GNOME 2.6.0_x86:: GNOME post script viewer**
- **125540-03 – Mozilla 1.7_x86: Mozilla Firefox Web browser**
- **125542-02 – Mozilla 1.7_x86: Mozilla Thunderbird email client**
- **125544-02 – GNOME 2.6.0_x86:: GNOME panel applets**
- **125546-01 – GNOME 2.6.0_x86:: GNOME Performance Meter**
- **125550-01 – SunOS 5.10_x86: logins patch**
- **125552-01 – SunOS 5.10_x86: librestart patch**
- **125720-20 – X11 6.8.0_x86: Xorg server patch**
- **125726-02 – X11 6.6.2_x86: xinerama patch**
- **125732-02 – SunOS 5.10_x86: XML and XSLT libraries patch**
- **125895-01 – SunOS 5.10_x86: cut patch**
- **125901-01 – SunOS 5.10_x86: audiohd patch**
- **125906-01 – SunOS 5.10_x86: keytables patch**
- **125907-01 – SunOS 5.10_x86: pcn driver patch**
- **125953-04 – Sun Java Web Console 3.0.2_x86: Support for Application Server 8.2 EE**
- **126118-02 – CDE 1.6_x86: DtPower patch**
- **126120-01 – CDE 1.6_x86: sys-suspend patch**
- **126134-02 – SunOS 5.10_x86: sshd Patch**
- **126207-04 – SunOS 5.10_x86: zebra ripd quagga patch**
- **126261-01 – SunOS 5.10_x86: logadm patch**
- **126263-01 – SunOS 5.10_x86: prctl patch**
- **127128-11 – SunOS 5.10_x86: kernel patch**
- **126269-01 – SunOS 5.10_x86: This patch corrects deletes in SUNWtsg and SUNWtsu in 127128-05**
- **126364-04 – SunOS 5.10_x86: X Window System changes - Solaris Trusted Extensions**
- **126366-06 – SunOS 5.10_x86:: CDE Desktop changes - Solaris Trusted Extensions**
- **126426-01 – SunOS 5.10_x86: fsckall patch**
- **126431-01 – SunOS 5.10_x86: libcurses patch**

- **126441-01 – SunOS 5.10_x86: rm patch**
- **126443-01 – SunOS 5.10_x86: ac97.h and audioixp.h patch**
- **126529-01 – SunOS 5.10_x86: SNIA Multipath Management API Libraries and scsi_vhci driver**
- **126541-02 – SunOS 5.10_x86: libumem library patch**
- **126543-02 – SunOS 5.10_x86: snmpdx and mibiisa patch**
- **126545-01 – SunOS 5.10_x86: snmpdx manifest patch**
- **126547-01 – SunOS 5.10_x86: Bash patch**
- **126586-02 – SunOS 5.10_x86: auto_ef patch**
- **126631-02 – SunOS 5.10_x86: tcsh patch**
- **126650-01 – SunOS 5.10_x86: sulogin patch**
- **126654-01 – SunOS 5.10_x86: md patch**
- **126656-01 – SunOS 5.10_x86: poll driver patch**
- **126658-01 – SunOS 5.10_x86: timex patch**
- **126739-02 – S10_x86: Patch for European Region TJDS messages**
- **126741-02 – SunOS 5.10_x86: Patch for Asian Region TJDS messages**
- **126743-01 – S10_x86: Patch for Japanese TJDS messages**
- **126869-02 – SunOS 5.10_x86: SunFreeware bzip2 patch**
- **127542-01 – X11 6.8.0_x86: xman patch**
- **127639-01 – CDE 1.4_x86: dtterm patch**
- **127725-01 – SunOS 5.10_x86: xntpd patch**
- **127727-01 – SunOS 5.10_x86: getent patch**
- **127738-01 – SunOS 5.10_x86: fifofs patch**
- **127754-01 – SunOS 5.10_x86: pcicfg Patch**
- **127760-01 – SunOS 5.10_x86: sar patch**
- **127764-01 – SunOS 5.10_x86: libtsol patch**
- **127785-01 – SunOS 5.10_x86: SunFreeware bzip2 man pages patch**
- **127854-01 – SunOS 5.10_x86: sad driver patch**
- **127867-02 – SunOS 5.10_x86: ufs patch**
- **127869-01 – SunOS 5.10_x86: mv patch**
- **127873-01 – SunOS 5.10_x86: mailx patch**
- **127879-01 – SunOS 5.10_x86: usr/bin/du patch**
- **127883-02 – SunOS 5.10_x86: sendmail and mail(1) patch**
- **127885-01 – SunOS 5.10_x86: awk patch**

- **127889-06 – SunOS 5.10_x86: ipf patch**
- **127891-02 – SunOS 5.10_x86: nge patch**
- **127915-01 – SunOS 5.10_x86: lofiadm patch**
- **127923-03 – SunOS 5.10_x86: cpio patch**
- **127960-01 – SunOS 5.10_x86: rpcsec patch**
- **127965-04 – SunOS 5.10_x86: UFS utilities patch**
- **127971-01 – SunOS 5.10_x86: find patch**
- **127975-01 – SunOS 5.10_x86: in.routed patch**
- **127977-04 – SunOS 5.10_x86: in.mpathd Patch**
- **127981-01 – SunOS 5.10_x86: KMF Patch**
- **127995-01 – SunOS 5.10_x86: xargs patch**
- **127999-01 – SunOS 5.10_x86: kssladm patch**
- **128001-01 – SunOS 5.10_x86: in.ftpd patch**
- **128005-01 – SunOS 5.10_x86: dlpi header patch**
- **128007-04 – SunOS 5.10_x86: usbsksp patch**
- **128009-01 – SunOS 5.10_x86: libaio.so.1 patch**
- **128293-01 – SunOS 5.10_x86: rsm patch**
- **128295-02 – SunOS 5.10_x86: rpcmod patch**
- **128297-01 – SunOS 5.10_x86: pcfs patch**
- **128301-03 – SunOS 5.10_x86: zoneinfo timezones patch**
- **128303-02 – SunOS 5.10_x86: libpicldevtree patch**
- **128305-03 – SunOS 5.10_x86: ehci and scsa2usb patch**
- **128307-03 – SunOS 5.10_x86: devfs patch**
- **128309-02 – SunOS 5.10_x86: Broadcom NetXtreme II 5708S driver patch**
- **128311-01 – SunOS 5.10_x86: hsfs patch**
- **128319-01 – SunOS 5.10_x86: ssh-keygen patch**
- **128323-01 – SunOS 5.10_x86: dhcpagent patch**
- **128325-02 – SunOS 5.10_x86: ixgb driver patch**
- **128327-01 – SunOS 5.10_x86: sip patch**
- **128329-01 – SunOS 5.10_x86: usbms patch**
- **128331-01 – SunOS 5.10_x86: pax patch**
- **128333-01 – SunOS 5.10_x86: conskbd patch**
- **128335-01 – SunOS 5.10_x86: ibd patch**

- **128338-01 – SunOS 5.10_x86: aac patch**
- **128339-01 – SunOS 5.10_x86: biosint patch**
- **128341-01 – SunOS 5.10_x86: in.iked patch**
- **128343-01 – SunOS 5.10_x86: ksh and sh patch**
- **128351-01 – SunOS 5.10_x86: dhcpmgr.so.1 Patch**
- **128403-02 – SunOS 5.10_x86: etc/default/kbd patch**
- **128412-01 – SunOS 5.10_x86: vuidm patch**
- **136700-01 – X11 6.6.2_x86: Xvnc patch**
- **136714-01 – SunOS 5.10_x86: cmlb patch**
- **136715-01 – SunOS 5.10_x86: sysevent_conf_mod.so patch**
- **136725-01 – GNOME 2.6.0_x86:: GNOME Help Viewer Patch**
- **136840-01 – Service Tags: SunOS 5.10_x86**
- **136883-01 – SunOS 5.10_x86: ImageMagick patch**
- **136886-03 – SunOS 5.10_x86: iscsi patch**
- **136999-02 – SunOS 5.10_x86: PostgreSQL 8.2 core patch**
- **137001-02 – SunOS 5.10_x86: PostgreSQL 8.2 documentation patch**
- **137003-01 – SunOS 5.10_x86: PostgreSQL 8.2 TCL binding library patch**
- **137005-02 – SunOS 5.10_x86: PostgreSQL 8.2 source code**
- **137018-01 – SunOS 5.10_x86: crontab patch**
- **137020-01 – SunOS 5.10_x86: snmpXdmid patch**
- **137022-01 – SunOS 5.10_x86: format patch**
- **137024-01 – SunOS 5.10_x86: time.h patch**
- **137029-01 – SunOS 5.10_x86: pcihp patch**
- **137031-01 – SunOS 5.10_x86: praudit patch**
- **137033-01 – SunOS 5.10_x86: namefs patch**
- **137035-01 – SunOS 5.10_x86: ttymon patch**
- **137037-01 – SunOS 5.10_x86: cdrw patch**
- **137047-01 – SunOS 5.10_x86: amd8111s patch**
- **137081-01 – SunOS 5.10_x86: libpng Patch**
- **137085-01 – SunOS 5.10_x86: setfacl patch**
- **137087-01 – SunOS 5.10_x86: zoneadmd patch**
- **137089-01 – SunOS 5.10_x86: tar patch**
- **137092-01 – SunOS 5.10_x86: arp patch**

- **137094-01 – SunOS 5.10_x86: logindevperm patch**
- **137096-01 – SunOS 5.10_x86: libfmd_snmp.so.1 patch**
- **137098-01 – SunOS 5.10_x86: inetd-upgrade patch**
- **137103-01 – SunOS 5.10_x86: flowacct patch**
- **137104-01 – SunOS 5.10_x86: libdladm.so.1 patch**
- **137116-01 – SunOS 5.10_x86: SUNWcsr/postinstall patch**
- **137148-03 – SunOS 5.10_x86: libexpat patch**
- **137275-01 – SunOS 5.10_x86: etc/mnttab patch**
- **137277-01 – SunOS 5.10_x86: uucico patch**
- **137279-01 – SunOS 5.10_x86: ipsecconf patch**
- **137281-01 – SunOS 5.10_x86: dld patch**
- **137283-01 – SunOS 5.10_x86: intpexec patch**
- **137322-01 – SunOS 5.10_x86: p7zip patch**

Note – The Oracle Solaris 10 5/08 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 to download from My Oracle Support, because they are not required outside of creating the Update release.

- **119080-12 – SunOS 5.10_x86: SPECIAL PATCH: For Script Files**
- **119089-11 – SunOS 5.10_x86: SPECIAL PATCH: SUNWqlc package install updates patch**
- **119093-10 – SunOS 5.10_x86: SPECIAL PATCH: iSCSI Script Patch to replace package scripts**
- **120225-07 – 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**
- **120417-06 – 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 SUNWccccrr postinstall**
- **121062-01 – SunOS 5.10_x86: motd Patch**
- **121307-02 – SunOS 5.10_x86: SPECIAL PATCH: For package level scripts only**
- **121464-08 – 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**
- **121680-02 – SunOS 5.10_x86: SPECIAL PATCH: Japanese Input System Wnn patch**
- **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**
- **122417-06 – SunOS 5.10_x86: SPECIAL PATCH: class action scripts 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**
- **123145-01 – GNOME 2.6.0_x86:: GNOME RealPlayer CAS Patch**
- **123261-12 – SunOS 5.10_x86: SPECIAL PATCH: For SCRIPT patch**
- **123536-01 – APOC 1.2_x86: depend patch**
- **123627-01 – SunOS 5.10_x86: SPECIAL PATCH: fp Script Patch to replace install components**
- **123873-02 – SunOS 5.10_x86, SPECIAL PATCH: For Script Files**
- **124094-02 – SunOS 5.10_x86: SPECIAL PATCH: For package level scripts only**
- **124142-01 – CDE 1.6_x86: SPECIAL PATCH: For SCRIPT patch**
- **124167-01 – SunOS 5.10_x86 : SPECIAL PATCH: Script patch for 120273-07**
- **125096-15 – SunOS 5.10_x86: SPECIAL PATCH: For SCRIPT patch**
- **125098-14 – SunOS 5.10_x86: SPECIAL PATCH: For EDITABLE files**
- **125275-01 – SunOS 5.10 5.10_x86: JDMK 5.1 patch**
- **125313-01 – SunOS 5.10_x86: SPECIAL PATCH: For 120720-02 patch**
- **125315-01 – SunOS 5.10_x86: SPECIAL PATCH: For 123591-02 patch**
- **125316-01 – SunOS 5.10_x86: SPECIAL PATCH: For 125216-01 patch**
- **125399-04 – SunOS 5.10_x86: SPECIAL PATCH: Japanese CAS scripts update for ZONE**

- **125536-03 – Openwindows 3.7.3_x86: SPECIAL PATCH: CAS script patch for ZONE**
- **125694-02 – SunOS 5.10_x86: SPECIAL PATCH: For package level scripts only**
- **125722-05 – X11 6.6.2_x86: SPECIAL PATCH: CAS script patch for ZONE**
- **125724-01 – X11 6.6.2_x86: SPECIAL PATCH: CAS scripts to install symlink for OpenGL**
- **125734-02 – SunOS 5.10_x86: SPECIAL PATCH: For 125732-01. SCRIPT patch**
- **125736-01 – SunOS 5.10_x86: SPECIAL PATCH: For 123591-03 patch**
- **125979-08 – SunOS 5.10_x86: SPECIAL PATCH: For package level scripts only**
- **126122-01 – CDE 1.6_x86: SPECIAL PATCH: For SCRIPT patch**
- **126124-01 – CDE 1.6_x86: SPECIAL PATCH: For SCRIPT patch**
- **126213-01 – SunOS 5.10_x86: SPECIAL PATCH: depend files patch**
- **126640-07 – SunOS 5.10_x86: SPECIAL PATCH: For SCRIPT patch**
- **126919-01 – SunOS 5.10_x86: Trusted Extensions pam.conf modified patch SPECIAL PATCH: For package level scripts only**
- **127686-02 – CDE 1.6_x86: SPECIAL PATCH: For SCRIPT patch**
- **128012-10 – SunOS 5.10_x86: SPECIAL PATCH: For SCRIPT patch**
- **128013-10 – SunOS 5.10_x86: SPECIAL PATCH: For EDITABLE files**
- **128356-09 – SunOS 5.10_x86: SPECIAL PATCH: Script patch for SFW 10 and Solaris 10 update 5 build 10**
- **128399-01 – SunOS 5.10_x86: SPECIAL PATCH: For SCRIPT patch - IHV-bin gate**
- **137083-01 – SunOS 5.10_x86: SPECIAL PATCH: For SCRIPT patch IHV gate**