Oracle® Solaris 11 Express Release Notes

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Contents

Preface

Oracle Solaris 11 Express Release Notes contains installation and runtime problem details for the Oracle Solaris 11 Express operating system (OS). Also included are end-of-software support statements for this Oracle Solaris release.

Note – This 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 *Oracle Solaris OS: Hardware Compatibility Lists* 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 *Oracle Solaris OS: Hardware Compatibility Lists*.

Who Should Use This Book

These release notes are for users and system administrators who install and use the Oracle Solaris 11 Express OS.

Related Books

You might need to refer to the following documentation when you install the Oracle Solaris 11 Express OS:

- *Getting Started With Oracle Solaris 11 Express*
- *Oracle Solaris 11 Express Automated Installer Guide*
- *Oracle Solaris 11 Express Image Packaging System Guide*
- *Oracle Solaris 11 Express System Administrator Collection*

For information about current security alerts and critical patch updates for Oracle Solaris, see `http://www.oracle.com/technology/deploy/security/alerts.htm`.

For some hardware configurations, you might need supplemental hardware-specific instructions for installing the Oracle Solaris OS. If your system requires hardware-specific actions at certain points, the manufacturer of your hardware has provided supplemental Oracle Solaris installation documentation.

Third-Party Web Site References

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

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

Documentation, Support, and Training

See the following web sites for additional resources:

- Documentation (http://docs.sun.com)
- Support (http://www.oracle.com/us/support/systems/index.html)
- Training (http://education.oracle.com)

Oracle Welcomes Your Comments

Oracle welcomes your comments and suggestions on the quality and usefulness of its documentation. If you find any errors or have any other suggestions for improvement, go to http://docs.sun.com and click Feedback. Indicate the title and part number of the documentation along with the chapter, section, and page number, if available. Please let us know if you want a reply.

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/technology/obe/start/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	`user_name@machine_name:current_dir$`
Bash shell, Korn shell, and Bourne shell for superuser	`user_name@machine_name:current_dir#`
C shell	`machine_name%`
C shell for superuser	`machine_name#`

1

Installation Issues

This chapter provides information and describes issues that relate to the installation of the Oracle Solaris 11 Express release.

Accessibility Information

Our goal is to make Oracle products, services, and supporting documentation accessible, with good usability, to the disabled community.

Oracle Solaris Desktop Accessibility

Applications and utilities in the Oracle Solaris Desktop incorporate accessibility features to enable people with disabilities to use the software easily and efficiently. Users with physical disabilities such as low vision or impaired motor skills can use all of the functionality of the Oracle Solaris Desktop, thanks to customization tools that enable you to adjust the appearance and behavior of the desktop.

The *GNOME Desktop Accessibility Guide* describes the accessibility features of the Oracle Solaris Desktop in detail. To access this guide while working with the Oracle Solaris Desktop, choose System in the main menu bar, then choose Help. In the Help window that appears, the *GNOME Desktop Accessibility Guide* is listed on the right side. Click the book title link to display an HTML version of the guide.

You can also search for individual accessibility topics through the Help Search field.

Documentation Accessibility

Our documentation includes features that make information available to users of assistive technology. The product documentation is available in HTML format and contains markup to

facilitate access by the disabled community. For more information, visit the Oracle Accessibility Program web site at http://www.oracle.com/accessibility/.

General Information

This section provides general information such as behavior changes in the Oracle Solaris 11 Express release.

Initial Root Password After Live CD Installation

After a Live CD installation, the root password is initially set to the same password as the user account that is created during installation, but it is created in an expired state. In order to work around the issue described in "Gksu Does Not Report Expired Password (6995127)" on page 30, immediately change the root password upon your first login. To do so, type the su command and enter your password, followed by typing the new root password, twice.

```
$ su
Password:
su: Password for user 'root' has expired
New Password:
Re-enter new Password:
su: password successfully changed for root.
```

Oracle Solaris IPS Repository

When you install or upgrade to the Oracle Solaris 11 Express release, the system initially has one publisher configured: the solaris publisher. This publisher has the following repository origin.

```
http://pkg.oracle.com/solaris/release/
```

Upgrading to the Oracle Solaris 11 Express Release

Use the following procedure to upgrade your OpenSolaris system to the Oracle Solaris 11 Express release. First, you upgrade your OpenSolaris system to the current build in the OpenSolaris release repository. Then, you upgrade that system to the Oracle Solaris 11 Express release.

Note – This procedure can be used whether you have an OpenSolaris release or an OpenSolaris development build installed on your system.

Direct upgrade from the Oracle Solaris 10 OS to the Oracle Solaris 11 Express release is not supported at this time. To upgrade an existing Oracle Solaris 10 system, consider using the Oracle Solaris 10 Containers which allows the existing system's image to be installed into a container on an Oracle Solaris 11 Express system.

For more information, see *System Administration Guide: Oracle Solaris Zones, Oracle Solaris 10 Containers, and Resource Management*

▼ How to Upgrade to the Oracle Solaris 11 Express Release

1 **Upgrade all the packages on your OpenSolaris system to the most current version.**

a. **If your preferred publisher is not `opensolaris.org` with an origin of `http://pkg.opensolaris.org/release/`, change the publisher, as follows:**

```
# pkg set-publisher -P -O http://pkg.opensolaris.org/release/ opensolaris.org
```

Note – To view your preferred publisher, perform this command:

```
# pkg publisher
```

---

b. **Update all the packages on the system.**

```
# pkg image-update
```

2 **Reboot the system to boot into the updated boot environment.**

3 **Upgrade to the Oracle Solaris 11 Express release.**

a. **Enable packages on your system to be updated by a new publisher. If your system has the `extra` publisher configured, also enable its packages to be updated by a new publisher.**

```
# pkg set-publisher --non-sticky opensolaris.org
# pkg set-publisher --non-sticky extra
```

b. **Set the preferred publisher to `solaris` with the origin set to `http://pkg.oracle.com/solaris/release/`, as follows:**

```
# pkg set-publisher -P -g http://pkg.oracle.com/solaris/release/ solaris
```

c. **Display the Oracle Solaris 11 Express license.**

```
# pkg image-update 2>&1 | less
```

Note – The pkg image-update command may indicate that the packaging software needs to be updated before proceeding with the update. Follow the directions and then reexecute the previous pkg image-update command.

---

d. If you accept the terms of the Oracle Solaris Express 11 license, upgrade your system and explicitly accept the license.

```
# pkg image-update --accept
```

4   Reboot your system to boot into the updated boot environment.

For more information, see *Oracle Solaris 11 Express Image Packaging System Guide*. Also, see the *pkg*(1) man page.

Renaming of Packages (6186)

Over 1500 packages have been renamed in this release. The old names for the packages have been retained for now and point to the new names. The process of updating packages is an automatic process. You can determine the names of the new packages by looking at the Renamed to line in the output of the pkg info -r SUNWoldpackage command.

For a list of package mappings, classifications, and descriptions, see the following link:

http://hub.opensolaris.org/bin/view/Project+pkg/Renamed

First Packaging Operation After Upgrade Removes Hundreds of Empty Packages (14507)

The first packaging operation after you have upgraded your system to the latest release removes hundreds of empty packages. The removed packages are empty, renamed packages that are being purged from the system.

Workaround: This large-scale removal of empty packages can safely be ignored.

Installation Bugs

The following bugs might occur during or after the installation of the Oracle Solaris 11 Express release.

Users Created During Text Installation Can End Up With an Incorrect Password (6998650)

Either or both, the primary user and the root user, might end up with an invalid password when using the text installer.

Workaround: During installation, you have to enter the root password and the user password before you get to the Summary screen. At this point, make sure you begin the installation without returning to the Users screen. If the installation has already been completed and you are unable to log in using the given password, use one of the following workarounds:

- Re-install the OS.
- Manually modify the /etc/passwd file on the newly installed ZFS pool by booting from an external media.

Installation Fails on the SAS JBOD Device (11999)

During installation, you might see an error message similar to the following:

```
$ more install_log
<AI Oct 15 17:32:50> /tmp/ai_combined_manifest.xml is a valid manifest
<AI Oct 15 17:32:50> Auto reboot enabled
<AI Oct 15 17:33:11> Cannot find the specified disk c7t2d0 on the targetsystem.
<AI Oct 15 17:33:11> Target validation failed
<AI Oct 15 17:33:11> ai target device not found
<AI Oct 15 17:33:11> Auto install failed
/$
```

Workaround: Disconnect one of the dual-path SAS JBOD cables.

x86: Live CD Installation Might Hang on Certain Systems (16216)

A Live CD installation might hang on systems that have 1 gigabyte of memory with an NVIDIA graphics card and multiple e1000g Ethernet drivers.

Workaround: Use one of the following workarounds while performing a Live CD installation:

- Use the vesa option.
- Disable the e1000g Ethernet drivers by adding the -B disable-e1000g=true string to the end of the kernel$ command in the GRUB menu.

SPARC: Text Installer Unusable on Systems Equipped With XVR-2500 Graphics Cards (6961487)

Some of the console features used by the Text Installer are not fully supported on SPARC based systems that are equipped with XVR-2500 graphics cards. As a result, the Text Installer does not display properly on the console of these systems.

Workaround: Use one of the following workarounds:

- Run the Text Installer through a remote console, if available, instead of a local frame buffer console.
- Use the Automated Installer, either booted from media or from a network, to perform the installation.

Renaming a Busy Boot Environment Might Fail (1685)

Renaming a boot environment might fail if it has a dependent clone that is currently mounted or otherwise busy.

A typical example occurs after the live boot environment has been successfully upgraded. If you then try to rename the autogenerated and upgraded boot environment, the renaming fails. The renaming fails because the upgraded boot environment has been activated, and the live boot environment is now its clone.

Workaround: Use the following procedure:

1. Activate the live boot environment.
2. Rename the upgraded boot environment.
3. Activate the upgraded boot environment.

For example, if the live boot environment name is solaris, and the autogenerated name of the upgraded boot environment is solaris-1, use the following commands:

```
# beadm activate solaris
# beadm rename solaris-1 new_name
# beadm activate new_name
```

Automated Installer Fails If ZFS Pool rpool Exists on the System (3783)

If a ZFS pool named rpool is already present on the system because it was manually imported or created by the user during the current boot of the Live CD, the installation process fails. The last message in the installation log file is as follows:

```
Root pool rpool exists, we can't proceed with the installation.
```

This behavior is intentional and ensures that the Automated Installer does not inadvertently corrupt your data.

The Automated Installer recognizes cases when rpool is created by the installer, but the installation process has failed or was interrupted. In such cases, the installer automatically destroys rpool after it is restarted.

Workaround: Choose one of the following workarounds:

- To preserve data in rpool, reboot the system and do not import the pool. The pool remains invisible to the Automated Installer. However, if the pool was created on the target disk, then the pool cannot be preserved.

- If you do not want to preserve data in rpool, destroy the pool before you start the Automated Installer by using the following command:

  ```
  # zpool destroy -f rpool
  ```

Distribution Constructor Does Not Recognize ZFS File System Mount Points for Build Areas (3947)

If a system has an Oracle Solaris ZFS file system, the Distribution Constructor does not recognize or treat a build area as a ZFS file system in the following cases:

- A new subdirectory of the ZFS file system is specified as a build area, but the mount point is specified instead of the zpool.

- The build area already exists as a ZFS file system, but the mount point is specified instead of the zpool.

For example, consider the following zpool:

```
$ zfs list disk2_pool/ib/pia
```

If the following command is run, where the build area in slim_cd.xml is specified as <build_area>/export/home/ib/pia</build_area>:

```
# distro_const build -p 1 slim_cd.xml
```

The following message error message is displayed:

```
/export/home/ib/pia: No such file or directory
/export/home/ib/pia: No such file or directory
Checkpointing is not available
Rerun the build without -p
```

Workaround: Make the following change in the Distribution Constructor manifest:

Change <build_area>/export/home/ib/pia</build_area> to
<build_area>disk2_pool/ib/pia</build_area>.

Only the First GRUB `menu.lst` Entry of the Source Boot Environment Is Created When You Create a New Boot Environment (4061)

When a new boot environment is created, it has only one entry in the GRUB `menu.lst` file regardless of how many entries the source boot environment has. The source boot environment's first `menu.lst` entry is used to create the entry for the new boot environment. All other entries are ignored. This issue occurs when you create the new boot environment either through the `beadm` command or the `pkg update` command.

If you need other entries for the new boot environment, they are not available.

Workaround: Edit the `/rpool/boot/grub/menu.lst` file and copy the desired entries from the original boot environment. Replace the boot environment name in the source entries with the name of the target boot environment.

Exception Message Generated by the Distribution Constructor Upon Successful Termination (4589)

The Distribution Constructor might display the following error message after successfully performing its function:

```
Unhandled exception in thread started by
Error in sys.excepthook:

Original exception was:
```

Workaround: This error message is displayed just before termination and can be safely ignored.

Creating Multiple Pools With the Same Name Confuses the ZFS Boot Process (5270)

The Automated Installer always creates a ZFS root pool with the name `rpool`. The ZFS boot process becomes confused if more than one Oracle Solaris instance is installed on the same disk. Only the Automated Installer is affected by this bug. The GUI Installer does not support creating multiple Oracle Solaris instances on one disk.

Workaround: If you need to install more than one instance of Oracle Solaris on a system, make sure that each instance is installed on a separate disk.

`installadm create-service` Should Have an Option to Specify IP Address Passed to DHCP Config (6922)

The Automated Installer does not support multihomed servers.

Workaround: Do not use the Automated Installer on a server with multiple network connections. If you do need to use the Automated Installer, modify the following data sources:

- DHCP

  Consider:
  - Which subnet to configure
  - Which router to provide
  - Which boot file location to provide

  Note – You must manually maintain the DHCP entries by modifying the macro values of `BootSvrA` and `BootFile` as needed.

- mDNS

  Consider which IP address to advertise for the Automated Installer web server

  ---
  Note – You must ensure client routing to the IP address advertised by the `dns-sd` process that is running on the Automated Installer server.

- GRUB

  Consider:
  - Which `install_media` IP address to provide
  - Which `install_svc_address` IP address to provide

  Note – You must edit the `/tftpboot/menu.lst.`*`<service-name>`* file accurately.

- WAN boot

  Consider which network to place the `wanboot.conf` files.

  Note – This issue can be resolved by creating symbolic links with `ln -s <src> <tgt>` for all networks served in the `/etc/netboot` directory.

See the following bugs for additional information:

- `installadm` tools do not support installation servers that have mutiple subnets (6182).
- Custom `wanboot.conf` files are ignored in Automated Installation servers with multiple NIC cards (7115).
- `installadm` command should allow users to choose which subnets to use (7149).

setup-service lookup and delete-service dns-sd Fail If the Service Name Length Is Longer Than 59 Characters (7802)

If an Automated Installer service name is longer than 59 characters, the `dns-sd` process continues to run even after the `delete-service` command is executed. If the service name is longer than 64 characters, then the `create-service` command fails and leaves orphaned files that cannot be tracked by any of the Automated Installer services.

Workaround: Do not use Automated Installer service names longer than 59 characters.

Automated Installation Fails If Slice 0 Is Configured on a Client With Less Than 8 Gigabytes of Disk Space (8575)

The Automated Installation fails because it runs out of space in slice 0 of the target device. The following error message is displayed:

```
Auto install failed
```

Workaround: Choose one of the following workarounds:

- Create slice 0 on the target device, and allocate more than 8 gigabytes of disk space to the slice.
- If there is another slice with more than 8 gigabytes of disk space, change the Automated Installation manifest to use that slice. For example, to use slice 4 of your target device `c0t0d0`, add the following lines to your Automated Installation manifest:

```
<ai_target_device>
<target_device_name>c0t0d0</target_device_name>
<target_device_install_slice_number>4</target_device_install_slice_number>
</ai_target_device>
```

x86: `DM_CTYPE` Attribute Is Set to `unknown` for SATA Controllers Handled by the `sata` Driver (6558646)

The Automated Installer allows you to select a target disk for the installation by specifying the disk selection criteria in the Automated Installer manifest. One criteria that you can define in the manifest is the type of disk controller. To do so, use the `target_device_type` disk selection tag. The following values are currently supported:

- SCSI
- ATA
- Fibre Channel
- USB

Information about the controller type is currently not available for SATA drivers with a device name in c#t#d# format. Such drivers are managed by the Oracle Solaris SATA framework. Information about the disk controller type can be obtained from the Automated Installer client by running the Target Discovery test driver with root privileges when the Automated Installer is booted. In the following example, note that the controller type is under the `ctype` column:

```
# /opt/install-test/bin/test_td -dv
Disk discovery
Total number of disks: 1
-------------------------------------------------------------------------------
 num |    name|    vendor|  ctype| mtype| rem| lbl| bsize|#of blocks|size [MB]|
-------------------------------------------------------------------------------
   1 |*  c7d0|   unknown|    ata| FIXED|  No|  VF|   512|1953520128|   953867|
-------------------------------------------------------------------------------
```

Workaround: Use other disk selection criteria to select the desired SATA disk. See the sata(7D) man page for information.

Automated Installer Manifests Are Installed World-Readable (15362)

The XML manifest files used by the Automated Installer are readable by any user on the Automated Installer server. These files are openly accessible over the network through the Automated Installer HTTP manifest service. Passwords that are provided as part of the configuration manifest are not secure.

Workaround: Choose one of the following workarounds:

- To limit readability of the manifests on the Automated Installer server, use the following command:

  ```
  # chmod -R og-r /var/ai/*/AI_data
  ```

- Access to manifests over HTTP can be restricted by using the IP Filter feature of Oracle Solaris, which helps limit access to the manifest service ports to only specific networks or clients.

- During the first boot after installation of a system using the Automated Installer, log in and change the passwords that were configured by using the Automated Installer. For best security, boot the system to single-user mode. On SPARC based systems, add the -s option to the boot command. On x86 based systems and x64 based systems, edit the GRUB menu interactively, and append the -s option to the kernel$ command.

Upgrade Bugs

This section describes upgrade bugs. Some bugs might occur while you are upgrading to the Oracle Solaris 11 Express release. Other bugs might occur after you have completed upgrading.

Migrating an `ncrs` Attached Driver to the `glm` Driver

The ncrs driver for certain LSI/Symbios parallel SCSI host bus adapters (HBA) is no longer supported in the current Oracle Solaris release. The glm driver is available and can support the same adapters as the ncrs driver.

To migrate to the glm driver, follow these steps:

1. Follow the steps up to 3c in the procedure, "How to Upgrade to the Oracle Solaris 11 Express Release" on page 13.

2. If you accept the terms of the Oracle Solaris 11 Express license, upgrade your system, and explicitly accept the license. Also, explicitly specify a new boot environment name.

   ```
   # pkg image-update --accept --be-name solaris-glm-1
   ```

3. Mount the new boot environment.

   ```
   # beadm mount solaris-glm-1 /mnt
   ```

4. Use the awk command to change any instances of ncrs in the old boot environment's /etc/driver_aliases file to glm. These entries should be appended to the new boot environment's /mnt/etc/driver_aliases file.

   ```
   # awk '$1 == "ncrs" { print "glm", $2 }' \
   /etc/driver_aliases >> /mnt/etc/driver_aliases
   ```

5. Update the boot archive of the new boot environment.

   ```
   # bootadm update-archive -R /mnt
   ```

6. Unmount the new boot environment.

   ```
   # beadm unmount solaris-glm-1
   ```

7. Reboot your system to boot into the updated boot environment.

`image-update` Results in Driver Removal of Policy Warnings (9568)

While you are upgrading a system to the Oracle Solaris 11 Express release, you might see messages similar to the following for various drivers:

```
driver (aggr) upgrade
(removal of policy'read_priv_set=net_rawaccess
 write_priv_set=net_rawaccess) failed: minor node spec required.
```

Workaround: Ignore the messages.

Driver Action Gets Confused by `driver_aliases` Entries Not Covered by an Action (10630)

While you are upgrading a system to the Oracle Solaris 11 Express release, you might see messages similar to the following:

```
The 'pcieb' driver shares the alias
'pciexclass,060400' with the 'pcie_pci' driver,
but the system cannot determine how the latter was delivered.
Its entry on line 2 in /etc/driver_aliases has been commented out.
If this driver is no longer needed, it may be removed by booting into the
'solaris-2' boot environment and invoking 'rem_drv pcie_pci'
as well as removing line 2 from /etc/driver_aliases or,
before rebooting, mounting the 'Solaris-2' boot environment
and running 'rem_drv -b <mountpoint>pcie_pci' and removing line 2
from <mountpoint>/etc/driver_aliases.
```

Workaround: Ignore the messages.

`image-update` Produces Warnings About the `etc/sma/snmp/mibs` Directory (10778)

While you are upgrading a system to the Oracle Solaris 11 Express release, you might see warning messages similar to the following:

```
Warning - directory etc/sma/snmp/mibs not empty
Contents preserved in
/tmp/tmpCfxHEd/var/pkg/lost+found/etc/sma/snmp/mibs-20100604T013846Z
```

Workaround: Ignore the messages.

Missing `xfs` Service Causes `inetd` Errors After You Upgrade From OpenSolaris 2009.06 (11602)

When you boot your system for the first time after upgrading from the OpenSolaris 2009.06 release to the current release, you might see messages similar to the following: :

```
inetd[5503]: Failed to update state of instance
svc:/application/x11/xfs:default in repository: entity not found
Failed to get instance
```

Workaround: Ignore the messages.

Upgrade to the Latest Release With Little Spare Memory Fails (9388)

When you update all the installed packages, the operation might fail due to too little memory.

Workaround: Use one or more of the following options to complete the procedure successfully:

- Before performing the update, close as many programs as possible.
- Before performing the image-update, update the packaging software. Then when you perform the image-update, use the `-f` option to reduce the memory required. The `-f` option skips the client up-to-date check when updating all installed packages.

  ```
  # pkg install SUNWipkg
  # pkg list package/pkg 2> /dev/null && pkg install package/pkg
  # pkg image-update -f
  ```
- Terminate the window system by using the `svcadm disable -t` gdm command. Perform the operation on the console or when you are logged in remotely.
- Start the system in single-user mode before performing the update.
- Add more swap space or more RAM to the system.

Zones Cloned by Using `zoneadm clone` Can Cause a Snapshot Name Collision When You Activate a Boot Environment (10990)

The use of the `zoneadm clone` command to create zones can cause a snapshot name collision, which can lead to a failure or an infinite loop when you activate a boot environment. Although this bug has been fixed in this release, you may encounter this issue while upgrading from OpenSolaris 2009.06 to the Oracle Solaris 11 Express release.

Workaround: Before using image-update to update your system to the Oracle Solaris 11 Express release, run the zoneadm detach command for each zone in the OpenSolaris 2009.06 boot environment.

To reattach the zones:

1. Update the image.

   ```
   # pkg image-update
   ```

2. Boot into the boot environment that was created by image-update.

3. Run the zoneadm attach -u command for each zone in the new boot environment.

Note – After using this workaround, the boot environment you updated from no longer has zones attached to it.

2

Runtime Issues

This chapter describes runtime issues that are known problems in the Oracle Solaris 11 Express release.

General Information

This section provides general information that pertains to runtime issues in the Oracle Solaris 11 Express release.

Performing Oracle Solaris Administration Tasks as a Privileged User

Performing Oracle Solaris administration tasks often requires elevated privileges. A recommended practice is to delegate privileges or rights to specific user accounts rather than provide root or superuser access for all administration purposes.

In this Oracle Solaris release, consider the following methods for performing administration tasks as a privileged user:

- Role-based access control - A special user account called a role can be assigned a rights profile to specify which tasks a role can perform. Users only can assume the roles for which they are authorized. In this Oracle Solaris release, the root account is set up as a role by default. This means you can designate which users are authorized to log into the root account. After a privileged user is added to the root role, use the su command and the root password to access the root privileges.

   The initial user created during the installation is automatically authorized to assume the root role and is also put in the initial sudoers file. In addition, that user is granted the Software Installation rights profile, which includes commands like pkg and beadm. For such commands, the user need not assume the root role. Instead, the user can invoke a subshell.

For example, pfsh, from which to invoke these commands. It is no longer necessary to use the pfexec command. Alternatively, the user can run the graphical equivalent of these commands, such as Package Manager. In this case, the user is prompted for the root password. The root password is initially set to the same password as the user account that is created during installation, but it is already expired. You will be immediately prompted to reset the root password. For more information about the expired password, see "Gksu Does Not Report Expired Password (6995127)" on page 30.

- Using sudo-based access control - You grant root capabilities by creating an /etc/sudoers file with the visudo command and adding any entry for each privileged user by following the syntax that is described in the *sudoers.4* man page. For example, the following syntax grants privileged access to user otto for all commands on the system, but he must supply his user password:

```
otto  ALL=(ALL) ALL
```

An user that is granted administration privileges by an entry in the /etc/sudoers file then runs a command with sudo similar to the following:

```
$ sudo pkg update
```

System Administration

This section describes system administration bugs in the Oracle Solaris 11 Express release.

System Hangs During iSCSI Boot After Installation on an iSCSI Device (6974162)

After you install the Oracle Solaris 11 Express release on an iSCSI device for iSCSI boot, the system might hang. You might be unable to log in to the system.

Workaround: Before the reboot, follow these steps to manually disable the svc:/network/physical:nwam service and then enable the svc:/network/physical:default service.

In this release, the default.xml Automated Installer manifest resides in the /var/ai/<port_number>/AI_data/default.xml directory and contains the following section:

```
<service name="network/physical" version="1" type="service">
<instance name="nwam" enabled="true"/>
<instance name="default" enabled="false"/>
</service>
```

To obtain the port number in the /var/ai/<port_number>/AI_data/default.xml directory, type the following command:

```
# installadm list -n <install_service>
```

To disable the NWAM service and to enable the default service, make the following changes to the `default.xml` AI manifest:

- Change the line `<instance name="nwam" enabled="true"/>` as follows:

  ```
  <instance name="nwam" enabled="false"/>
  ```

- Change the line `<instance name="default" enabled="false"/>` as follows:

  ```
  <instance name="default" enabled="true"/>
  ```

If you do not have the permission to configure the manifest on the installation server, you can use the following workaround on the client system. Use this workaround before the initial reboot after you install the current release on the iSCSI device.

1. Mount the iSCSI boot device.

   ```
   # beadm mount solaris /a
   ```

2. Modify the `/a/etc/svc/profile/sc_profile.xml` file by deleting the following lines:

   ```
   <service name="network/physical" version="1" type="service">
   <instance name="nwam" enabled="true"/>
   <instance name="default" enabled="false"/>
   </service>
   ```

3. Unmount the iSCSI device.

   ```
   # beadm unmount solaris
   ```

4. Reboot the system.

Default dumpadm Configuration Is Not Set to Capture Crash Dumps (5003)

The `dumpadm` configuration in this release is not configured to save crash dumps on reboot after panic.

Workaround: Use the `dumpadm -y` command to enable crash dumps at boot time.

```
# dumpadm -y
```

Desktop Issues

This section describes desktop issues related to the Oracle Solaris 11 Express release.

Brasero Crashes Upon Burning an ISO Image (6988688)

An ISO image that is burned on a CD might not produce a bootable image. Bug Buddy might generate a crash report.

Workaround: Ignore the crash report.

Unresponsive Scroll Bar in Thunderbird (17274)

The scroll bar in the top pane of the main window in Thunderbird is sometimes not completely visible. Also, you might be unable to use the left button on your mouse to move the scroll bar.

Workaround: Use one of the following workarounds:

- Use the middle button on your mouse to move the scroll bar.
- Change the theme.
- Generate a full view of the scroll bar. Follow these steps:
  1. Open a new tab in Thunderbird.
  2. Click the new tab.
  3. Click the original tab.

Gksu Does Not Report Expired Password (6995127)

When you start an application that requires root privileges, you are prompted to provide your root password. If your root password has expired, typing the expired password has no effect, and you cannot start the application. No error message is displayed.

Workaround: Reset the root password in a terminal window before you try to restart the application.

Distorted Text Seen in the Lock Screen Dialog Box for the pt_BR.UTF-8 Locale (6986685)

When you log in to a desktop session in the pt_BR.UTF-8 locale, the X screen saver displays some distorted text.

Workaround: Ignore the distorted text.

Localization Issues

This section describes localization issues that apply to the Oracle Solaris 11 Express release.

Japanese Characters Might Not Display Correctly in Java Applications

Due to the limited size of the Live CD, the Japanese IPA Mincho font is not included on the Live CD. As a result, depending on which font family is used, a Chinese font might be used for Japanese text in Java applications.

Workaround: Install the Japanese IPA Mincho font as follows:

```
# pkg install system/font/truetype/ipafont-mincho
```

Live CD Includes Only One Locale Per Language

Due to the limited size of the Live CD, the Live CD now includes only one UTF-8 locale per language. For example, for Spanish, only one locale, es_ES.UTF-8 locale (system/locale/es_es package), is available on the Live CD. The other Spanish UTF-8 locales are available in the pkg.oracle.com repository.

The following locales are available on the Live CD, and their locale variants are available in the repository:

ar_EG de_DE el_GR en_US es_ES fr_FR it_IT nl_NL pt_BR ru_RU sr_RS zh_CN zh_TW

Workaround: Install additional locales from the repository. For example:

```
# pkg install system/locale/es
```

Input Method Preference Editor Help Fails to Load (8880)

In some locales, the online help for the Input Method Preference Editor, iiim-properties fails to load with an XML parser error.

Workaround: Follow these steps:

1. Install the data/docbook package.

   ```
   # pkg install data/docbook
   ```
2. Manually execute the following script:

```
# /usr/share/sgml/docbook/docbook-catalog-install.sh
```

◆ ◆ ◆   **C H A P T E R   3**

Documentation Issues

This chapter describes known issues that are related to the Oracle Solaris 11 Express release documentation.

Additional Exclusive-IP net Resource Information

The additional information provided in this section relates to Chapter 16, "Non-Global Zone Configuration (Overview)," in *System Administration Guide: Oracle Solaris Zones, Oracle Solaris 10 Containers, and Resource Management*.

In this release, a new allowed-address property to the zonecfg net resource limits the set of configurable IP addresses that can be used by an exclusive-IP zone. In addition, the defrouter property is now supported for exclusive-IP zones.

```
# zonecfg -z my-zone
zonecfg:my-zone> set ip-type=exclusive
zonecfg:my-zone> add net
zonecfg:my-zone:net> set allowed-address=11.1.1.32/24
zonecfg:my-zone:net> set physical=vnic0
zonecfg:my-zone:net> set defrouter=11.1.1.1
zonecfg:my-zone:net> end
```

For more information, see the zonecfg(1M) man page.

4

End-of-Software Support Statements

This chapter lists end-of-software support statements as of the Oracle Solaris 11 Express release.

Features That Might Be Removed in a Future Release

The following features might not be supported in a future release.

`Audiovia97` Driver

The Audiovia97 driver might be removed in a future Oracle Solaris release.

32-bit x86: Kernel Hardware Support

Support for the 32–bit only x86 hardware might be removed from a future Oracle Solaris release. You can either upgrade your hardware or continue to use the Oracle Solaris 11 Express release or other previous Oracle Solaris releases.

Support for running 32-bit applications and libraries will continue. Only 32-bit kernel support is affected here.

32-bit x86: X Servers and Drivers

32–bit versions of the Xorg, Xephyr, Xvfb, Xdmx, and Xvnc X servers might be removed in a future Oracle Solaris release.

> **Note** – These X servers are already not included for SPARC platforms.

Any Xorg loadable module (including video drivers, input device drivers, and extensions) that is not provided in a 64–bit version cannot be used in such a release. When a usable video driver is not found, Xorg will generally fall back to the vesa driver.

The Xorg drivers in the following x86 video devices, currently provided only in 32–bit versions might be affected:

apm	Alliance Promotion
ark	Ark Logic
chips	Chips & Technologies
glint	3DLabs/T1 Glint
i128	Number Nine Imagine 128
i740	Intel i740
neomagic	NeoMagic
rendition	Rendition Verite
s3	S3
s3virge	S3 ViRGE & Trio3D
savage	S3 Savage
siliconmotion	Silicon Motion
sis	SiS & XGI
tdfx	3Dfx
tga	DEC 21039/TGA
tseng	Tseng Labs

For more information, see the man page for each driver. You can find the sources for the drivers at the X.Org Foundation (http://www.x.org).

Features Removed in the Current Release

The following features have been removed in the current Oracle Solaris release.

32-bit: Codeina Application

The Codeina application has been removed in this Oracle Solaris release. This application assisted users to install Fluendo media codec plugins to play media formats such as MPEG and Windows Media. You can continue to get Fluendo media codec plugins from the Fluendo website at `http://www.fluendo.com`.

PostgreSQL Versions 8.2, 8.3, and 8.4

PostgreSQL versions 8.2, 8.3, and 8.4, and their associated additions, have been removed in this Oracle Solaris release.

x86: Oracle Solaris Zones `lx` Brand

Support for the `lx` branded zone has been removed in this Oracle Solaris release.

Support for the `lx` brand will continue in the Oracle Solaris 10 releases.

Removal of Drivers

The following drivers and their associated man pages have been removed in this Oracle Solaris release.

- `adp`
- `cadp`
- `cqhpc`
- `cadp160`
- `hpfc`
- `skfp`
- `symhisl`

The drivers and man pages are still available in the Oracle Solaris 10 release.

Short Form Locales

The following table lists locales that have been removed in this Oracle Solaris release. The table also lists the corresponding locales that provide the same locale data and that must be used instead.

Locale to Be Obsoleted	Replacement Locale
ar	ar_EG.ISO8859-6
bg_BG	bg_BG.ISO8859-5
ca	ca_ES.ISO8859-1
ca_ES	ca_ES.ISO8859-1
cs	cs_CZ.ISO8859-2
cs_CZ	cs_CZ.ISO8859-2
da	da_DK.ISO8859-1
da_DK	da_DK.ISO8859-1
da.ISO8859-15	da_DK.ISO8859-15
de	de_DE.ISO8859-1
de_AT	de_AT.ISO8859-1
de_CH	de_CH.ISO8859-1
de_DE	de_DE.ISO8859-1
de.ISO8859-15	de_DE.ISO8859-15
de.UTF-8	de_DE.UTF-8
el	el_GR.ISO8859-7
el_GR	el_GR.ISO8859-7
el.sun_eu_greek	el_GR.ISO8859-7
el.UTF-8	el_CY.UTF-8
en_AU	en_AU.ISO8859-1
en_CA	en_CA.ISO8859-1
en_GB	en_GB.ISO8859-1
en_IE	en_IE.ISO8859-1
en_NZ	en_NZ.ISO8859-1
en_US	en_US.ISO8859-1
es	es_ES.ISO8859-1
es_AR	es_AR.ISO8859-1
es_BO	es_BO.ISO8859-1

Locale to Be Obsoleted	Replacement Locale
es_CL	es_CL.ISO8859-1
es_CO	es_CO.ISO8859-1
es_CR	es_CR.ISO8859-1
es_EC	es_EC.ISO8859-1
es_ES	es_ES.ISO8859-1
es_GT	es_GT.ISO8859-1
es.ISO8859-15	es_ES.ISO8859-15
es_MX	es_MX.ISO8859-1
es_NI	es_NI.ISO8859-1
es_PA	es_PA.ISO8859-1
es_PE	es_PE.ISO8859-1
es_PY	es_PY.ISO8859-1
es_SV	es_SV.ISO8859-1
es.UTF-8	es_ES.UTF-8
es_UY	es_UY.ISO8859-1
es_VE	es_VE.ISO8859-1
et	et_EE.ISO8859-15
et_EE	et_EE.ISO8859-15
fi	fi_FI.ISO8859-1
fi_FI	fi_FI.ISO8859-1
fi.ISO8859-15	fi_FI.ISO8859-15
fr	fr_FR.ISO8859-1
fr_BE	fr_BE.ISO8859-1
fr_CA	fr_CA.ISO8859-1
fr_CH	fr_CH.ISO8859-1
fr_FR	fr_FR.ISO8859-1
fr.ISO8859-15	fr_FR.ISO8859-15
fr.UTF-8	fr_FR.UTF-8

Locale to Be Obsoleted	Replacement Locale
he	he_IL.ISO8859-8
he_IL	he_IL.ISO8859-8
hr_HR	hr_HR.ISO8859-2
hu	hu_HU.ISO8859-2
hu_HU	hu_HU.ISO8859-2
is_IS	is_IS.ISO8859-1
it	it_IT.ISO8859-1
it.ISO8859-15	it_IT.ISO8859-15
it_IT	it_IT.ISO8859-1
it.UTF-8	it_IT.UTF-8
ja	ja_JP.eucJP
ko	ko_KR.EUC
ko.UTF-8	ko_KR.UTF-8
lt	lt_LT.ISO8859-13
lt_LT	lt_LT.ISO8859-13
lv	lv_LV.ISO8859-13
lv_LV	lv_LV.ISO8859-13
mk_MK	mk_MK.ISO8859-5
nl	nl_NL.ISO8859-1
nl_BE	nl_BE.ISO8859-1
nl.ISO8859-15	nl_NL.ISO8859-15
nl_NL	nl_NL.ISO8859-1
no	nb_NO.ISO8859-1
no_NO	nb_NO.ISO8859-1
no_NO.ISO8859-1@bokmal	nb_NO.ISO8859-1
no_NO.ISO8859-1@nynorsk	nn_NO.ISO8859-1
no_NY	nn_NO.ISO8859-1
pl	pl_PL.ISO8859-2

Locale to Be Obsoleted	Replacement Locale
pl_PL	pl_PL.ISO8859-2
pl.UTF-8	pl_PL.UTF-8
pt	pt_PT.ISO8859-1
pt_BR	pt_BR.ISO8859-1
pt.ISO8859-15	pt_PT.ISO8859-15
pt_PT	pt_PT.ISO8859-1
ro_RO	ro_RO.ISO8859-2
ru	ru_RU.ISO8859-5
ru.koi8-r	ru_RU.KOI8-R
ru_RU	ru_RU.ISO8859-5
ru.UTF-8	ru_RU.UTF-8
sh	bs_BA.ISO8859-2
sh_BA	bs_BA.ISO8859-2
sh_BA.ISO8859-2@bosnia	bs_BA.ISO8859-2
sh_BA.UTF-8	bs_BA.UTF-8
sk_SK	sk_SK.ISO8859-2
sl_SI	sl_SI.ISO8859-2
sq_AL	sq_AL.ISO8859-2
sr_CS	sr_ME.UTF-8 or sr_RS.UTF-8
sr_CS.UTF-8	sr_ME.UTF-8 or sr_RS.UTF-8
sr_SP	sr_ME.ISO8859-5 or sr_RS.ISO8859-5
sr_YU	sr_ME.ISO8859-5 or sr_RS.ISO8859-5
sr_YU.ISO8859-5	sr_ME.ISO8859-5 or sr_RS.ISO8859-5
sv	sv_SE.ISO8859-1
sv_SE	sv_SE.ISO8859-1
sv.ISO8859-15	sv_SE.ISO8859-15
sv.UTF-8	sv_SE.UTF-8
th	th_TH.TIS620

Locale to Be Obsoleted	Replacement Locale
th_TH	th_TH.TIS620
th_TH.ISO8859-11	th_TH.TIS620
tr	tr_TR.ISO8859-9
tr_TR	tr_TR.ISO8859-9
zh	zh_CN.EUC
zh.GBK	zh_CN.GBK
zh_TW	zh_TW.EUC
zh.UTF-8	zh_CN.UTF-8

OpenWindows Libraries

The OpenWindows libraries have been removed in this Oracle Solaris release. Applications that use OpenWindows toolkits such as XView and OpenLook Intrinsic Toolkit (OLIT) no longer run in this release. However, applications that use OpenWindows Libraries can be run in Oracle Solaris 10 Containers, if needed.

32-bit: ncrs Driver for Certain LSI/Symbios Parallel SCSI HBAs

The ncrs driver for certain LSI/Symbios parallel SCSI HBAs is no longer supported in the current Oracle Solaris release. You can migrate to the glm driver.

For information about the glm driver , see the glm(7D) man page.

For information about how to migrate from an ncrs driver to the glm driver, see "Migrating an ncrs Attached Driver to the glm Driver" on page 22.

bsmconv and bsmunconv Commands

The bsmconv and bsmunconv commands have been removed in this Oracle Solaris release. These commands were used to enable and disable the Oracle Solaris Auditing and Device Allocation features.

To enable the Oracle Solaris Auditing feature in this release, use the audit-s command. To disable the feature, use the audit-t command.

To enable and disable the Device Allocation feature in this release, use the following service:

```
svc:/system/device/allocate
```

For more information, see the device_allocate(1M) man page.

SYSV3 SCO Compatibility Environment Variable

Support for the SYSV3 SCO compatibility environment variable has been removed in this Oracle Solaris release. The following commands might be affected:

- df
- echo
- expr
- sh
- tar
- uname

passmgmt Command

The passmgmt command has been removed in this Oracle Solaris release. You can use the following commands, which provide the same functionality:

- useradd(1M)
- userdel(1M)
- usermod(1M)
- roleadd(1M)
- roledel(1M)
- rolemod(1M)

graph and spline Commands

The graph and spline commands have been removed in this Oracle Solaris release.

libinetcfg Library Interfaces

The libinetcfg library interfaces have been removed in this Oracle Solaris release. You can use the libipadm library interfaces instead.

x86: 32–Bit dom0 (6851808)

The Oracle Solaris 11 Express release no longer delivers the 32-bit version of the Sun xVM hypervisor for use as a dom0. Support for 32–bit and 64–bit guest domUs remains unaffected on the 64–bit version of the hypervisor delivered in this release.

Workaround: The options for users still interested in virtualization on 32–bit machines are as follows:

- Oracle Solaris Zones and Oracle Solaris 10 Containers
- Oracle VM VirtualBox for Oracle Solaris 10, Linux, Windows, and other guest operating systems

  For more information about the supported guest operating systems, see http://www.virtualbox.org/manual/ch03.html#2956856.

MySQL 5.0

MySQL has ended the active development and support for MySQL Database Server Version 5.0. Extended support is available only for customers with a MySQL subscription. For more information, see http://www.mysql.com/about/legal/lifecycle/#calendar. According to the MySQL Lifecycle Policy, only security and severity level 1 issues will continue to be fixed for MySQL 5.0. For more information about the MySQL Lifecycle Policy, see http://www.mysql.com/about/legal/lifecycle/#policy.