

# Oracle® Solaris 10 8/11 Release Notes

Copyright © 2011, Oracle and/or its affiliates. All rights reserved.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, the following notice is applicable:

U.S. GOVERNMENT END USERS. Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are "commercial computer software" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

This software or hardware and documentation may provide access to or information on content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services.

---

Ce logiciel et la documentation qui l'accompagne sont protégés par les lois sur la propriété intellectuelle. Ils sont concédés sous licence et soumis à des restrictions d'utilisation et de divulgation. Sauf disposition de votre contrat de licence ou de la loi, vous ne pouvez pas copier, reproduire, traduire, diffuser, modifier, breveter, transmettre, distribuer, exposer, exécuter, publier ou afficher le logiciel, même partiellement, sous quelque forme et par quelque procédé que ce soit. Par ailleurs, il est interdit de procéder à toute ingénierie inverse du logiciel, de le désassembler ou de le décompiler, excepté à des fins d'interopérabilité avec des logiciels tiers ou tel que prescrit par la loi.

Les informations fournies dans ce document sont susceptibles de modification sans préavis. Par ailleurs, Oracle Corporation ne garantit pas qu'elles soient exemptes d'erreurs et vous invite, le cas échéant, à lui en faire part par écrit.

Si ce logiciel, ou la documentation qui l'accompagne, est concédé sous licence au Gouvernement des Etats-Unis, ou à toute entité qui délivre la licence de ce logiciel ou l'utilise pour le compte du Gouvernement des Etats-Unis, la notice suivante s'applique:

U.S. GOVERNMENT END USERS. Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are "commercial computer software" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.

Ce logiciel ou matériel a été développé pour un usage général dans le cadre d'applications de gestion des informations. Ce logiciel ou matériel n'est pas conçu ni n'est destiné à être utilisé dans des applications à risque, notamment dans des applications pouvant causer des dommages corporels. Si vous utilisez ce logiciel ou matériel dans le cadre d'applications dangereuses, il est de votre responsabilité de prendre toutes les mesures de secours, de sauvegarde, de redondance et autres mesures nécessaires à son utilisation dans des conditions optimales de sécurité. Oracle Corporation et ses affiliés déclinent toute responsabilité quant aux dommages causés par l'utilisation de ce logiciel ou matériel pour ce type d'applications.

Oracle et Java sont des marques déposées d'Oracle Corporation et/ou de ses affiliés. Tout autre nom mentionné peut correspondre à des marques appartenant à d'autres propriétaires qu'Oracle.

Intel et Intel Xeon sont des marques ou des marques déposées d'Intel Corporation. Toutes les marques SPARC sont utilisées sous licence et sont des marques ou des marques déposées de SPARC International, Inc. AMD, Opteron, le logo AMD et le logo AMD Opteron sont des marques ou des marques déposées d'Advanced Micro Devices. UNIX est une marque déposée d'The Open Group.

Ce logiciel ou matériel et la documentation qui l'accompagne peuvent fournir des informations ou des liens donnant accès à des contenus, des produits et des services émanant de tiers. Oracle Corporation et ses affiliés déclinent toute responsabilité ou garantie expresse quant aux contenus, produits ou services émanant de tiers. En aucun cas, Oracle Corporation et ses affiliés ne sauraient être tenus pour responsables des pertes subies, des coûts occasionnés ou des dommages causés par l'accès à des contenus, produits ou services tiers, ou à leur utilisation.

# Contents

---

<b>Preface</b> .....	13
<b>1 License Updates</b> .....	17
Oracle Solaris License Updated for Java SE Components .....	17
<b>2 Installation Issues</b> .....	19
General Information .....	19
Auto Registration Feature of Oracle Solaris .....	19
Security Patches .....	22
Disaster Recovery Image .....	22
BIOS and Firmware Upgrade .....	23
New Memory Requirements .....	23
Upgrading to Oracle Solaris 10 8/11 .....	23
Support for Products Not Part of the Oracle Solaris OS .....	24
Before You Begin .....	24
EMC PowerPath .....	24
Live Upgrade and Oracle Solaris Zones .....	25
Live Upgrade Restrictions .....	25
Using Live Upgrade With a Zone Root on a ZFS File System .....	26
Upgrading a Trusted Extensions System That Is Configured With Labeled Zones .....	26
Patching Miniroot on SPARC and x86 Compatible Machines .....	28
Oracle Solaris Data Encryption Supplement on Oracle Solaris 10 Releases .....	28
Additional Procedures Required When Installing GNOME Display Manager Patches for the Oracle Solaris 10 8/11 Release .....	28
x86: Systems With an eLx or pceLx NIC Fail Network Configuration .....	29
Default Size of /var File System Might Be Inadequate .....	29
x86: Do Not Upgrade Hewlett-Packard Vectra XU Series Systems With BIOS Version GG.06.13 .....	30

SPARC: Older Firmware Might Need Boot Flash PROM Upgrade .....	31
Solaris Management Console 2.1 Software Is Incompatible With Solaris Management Console 1.0, 1.0.1, and 1.0.2 Software .....	31
x86: Failure of BIOS Device Utility Prevents Installation or Upgrade From Succeeding (6362108) .....	33
Cannot Create an Oracle Solaris Flash Archive When a Non-Global Zone Is Installed (6246943) .....	34
x86: Sun Java Workstation 2100Z Might Panic When Booting From Oracle Solaris 10 DVD (6214356) .....	35
x86: Serial Consoles on Some Sun Fire Systems Do Not Work (6208412) .....	37
x86: Oracle Solaris Installation GUI Might Fail on Systems With Existing x86 fdisk Boot Partitions (6186606) .....	37
Installation Bugs .....	38
Jumpstart Installation Fails on Machines Attached to a SAN (7072761) .....	38
ZFS Root System Might Hang When Swapping to zvol (6898318) .....	39
Installing an Oracle Solaris ZFS Flash Archive (6889459) .....	39
Limitations With Installation of ZFS Flash Archives on an Alternate Boot Environment Using Oracle Solaris Live Upgrade (7055343) .....	40
Localized Installation Note .....	40
x86: Oracle Solaris Flash Archive Installation Fails on Releases Before the Solaris 10 10/08 Release (6735181) .....	40
Some Asian Locales Cannot Be Used for JumpStart Installation (6681454) .....	41
PRODRM Has Problems Deleting prodreg Entry for Trusted Extensions (6616592) .....	41
Upgrade Detailed Patch Analysis Panel Not Scrollable (6597686) .....	42
Linux Partition Does Not Display on the GRUB Menu After Installation of the Oracle Solaris OS (6508647) .....	42
x86: Invalid /sbin/dhccpinfo Error During Installation (6332044) .....	43
x86: System Fails to Boot After JumpStart Installation (6205478) .....	43
Upgrade Issues and Bugs .....	43
SPARC: All Types of M-Series Machines Might Encounter Slight Performance Degradation (7058265) .....	44
lucreate Command Fails on Systems That Do Not Have the SUNWzoneu Package (7061870) .....	44
The iscsi/initiator Service Might End in Maintenance State After Upgrade (6976602) .....	45
Zones in Trusted Extensions Do Not Boot After Performing a Live Upgrade to Oracle Solaris 10 8/11 (7041057) .....	46
lucreate and lumake Fail When Trusted Extensions Is Enabled and Labeled Zones Are	

Not in the Running State (7055968) .....	46
Issues With a DSR Upgrade With Zones (6616788) .....	47
Trusted Extensions Upgrade Issues (6616585) .....	47
System Cannot Communicate With ypbind After an Upgrade (6488549) .....	48
Upgrade Fails on Systems With Zones That Have Been Installed But Not Booted .....	49
Upgrading an Oracle Solaris 10 System With Non-Global Zones to the Solaris 10 10/09 Release Might Cause the Local File System Service to Fail (6428258) .....	49
Device ID Discrepancies After an Upgrade From the Solaris 9 9/04 OS .....	50
Obsolete Uninstallers Not Removed When Live Upgrade Is Used to Upgrade From Previous Releases (6198380) .....	50
Additional Related Locales Might Be Installed .....	51
<b>3 Oracle Solaris Runtime Issues</b> .....	<b>53</b>
General Information .....	53
The <i>rstchown</i> Parameter is Obsolete .....	53
Recommended Adoption of SHA-256 and SHA-512 crypt Plug-ins for Password Encryption .....	53
Common Desktop Environment .....	54
Trusted Stripe Disappears From the Screen After a Resolution Change (6460624) .....	54
x86: <i>kdmconfig</i> Command Does Not Create System Identification Configuration File for Xorg X Server (6217442) .....	54
File Systems .....	55
ZFS Dynamic LUN Expansion Restriction (6241086) .....	55
The <i>config/local_only</i> Property in <i>sendmail</i> Must Not Be Set to <i>true</i> (6970172) .....	56
x86: <i>ata</i> Driver Timeouts During Boot (6586621) .....	56
<i>zoneadm install</i> Command Fails With a ZFS Legacy Mount (6449301) .....	58
ZFS and UNIX/POSIX Compliance Issues .....	58
<i>fdisk -E</i> Command Can Sweep Disk Used by ZFS Without Warning (6412771) .....	58
BrightStor ARCserve Backup Client Agent for UNIX (Solaris) and ZFS Support Issue .....	59
ZFS GUI Should Check for <i>/usr/lib/embedded_su</i> Patch at the Beginning of Each Wizard (6326334) .....	59
Failure to Synchronize File System on Panic (6250422) .....	59
Upgrading From Some Oracle Solaris 10 Releases Requires Remounting of File Systems .....	60
NFSv4 Access Control List Functions Might Work Incorrectly .....	60
System Crash Dump Fails on Devices Greater Than 1 TByte in Size (6214480) .....	61

Hardware-Related Issues and Bugs .....	61
SPARC: System Might Hang if the Elastic Policy is Set (6989192) .....	61
System Panic Might Occur During DR operations for Crypto (7048323) .....	61
SPARC: Disk Warning Is Displayed When Booting the Oracle Solaris OS (7047435) .....	62
SPARC: Dynamic Reconfiguration Operations Fail on an OPL Platform (7060498) .....	62
x86: System Shuts Down If a Disks or Controllers Are Replaced on a Running Machine (7059880) .....	62
SPARC: System Panic Might Occur When Executing Bulk Crypto Operations on sun4v T3 Machines (7041435) .....	63
Message Signaled Interrupt (MSI-X) Cannot Be Retargeted When the apix Module Is Loaded (7058060) .....	63
SPARC: Issuing XIR on Oracle Solaris 10 9/10 OS Causes a Failure to complete trap processing Error (6962156) .....	64
x64: PCI Subsystem ID Changes in ConnectX Firmware 2.6.0 From Mellanox (6810093) .....	64
The ZFS ARC Allocates Memory Inside the Kernel Cage Preventing DR (6522017) .....	65
mpathadm Command Does Not Display Load-Balance Setting Specific to Device .....	66
Registration Tool Prevents Power Management on Some Frame Buffers (6321362) .....	66
Certain USB 2.0 Controllers Are Disabled .....	66
Supported USB Devices and Corresponding Hub Configurations .....	67
x86: Limitations Exist With Certain Device Drivers in the Oracle Solaris 10 OS .....	67
DVD-ROM/CD-ROM Drives on Headless Systems .....	67
x86: Manual Configuration Required to Specify Non-U.S. English Keyboards .....	68
Contention Exists Between Certain Devices That Share the Same Bus (6196994) .....	69
Some DVD-ROM and CD-ROM Drives Fail to Boot the Oracle Solaris 10 OS (4397457) .....	69
Compiler-Related Issues .....	69
SPARC: Copy Relocation Does Not Work (7083331) .....	69
Localization Issues .....	70
Swedish Software Translations Note .....	70
Multiple Input Method Switcher Applications Appear in Trusted Java Desktop System ...	70
Wnn8 Japanese Input Method .....	71
New ChuYin Input Method Not Supported in Upgrade to IIIMF rev.12 (6492129) .....	71
AltGr Key Does Not Work As a Mode Switcher in Some Russian Locales (6487712) .....	71
x86: Arabic Text Not Appearing in ar Locales .....	71
Several Arabic Fonts Do Not Work in GNOME Desktop (6384024) .....	72
Unable to Switch Input Language on Session-Saved Applications (6360759) .....	72

Migration Note for UTF-8 Locales .....	72
Hardware for Some Keyboard Layouts Type 6 and 7 Not Available .....	74
Networking Issues .....	75
BIND 9.6 Denies Recursion To Non-Local Networks (7046009) .....	75
Configuring Tunnels With the Same Source Address (4152864) .....	76
System Domain of Interpretation Is Not Configurable (6314248) .....	76
IP Forwarding Disabled by Default in the Oracle Solaris 10 OS .....	76
Oracle Solaris Commands and Standards .....	77
SPARC: Incorrect Results Are Displayed for the <code>cpustat</code> Command on a T4 1.2 Chip .....	77
<code>windbind</code> Command Fetches Only the First 1000 Active Directory Users .....	77
Changed Man Pages for Trusted Extensions Are in Reference Manual Only .....	77
Bash 3.00 No Longer Sets Some Environment Variables .....	78
New <code>ln</code> Utility Requires <code>-f</code> Option .....	78
New <code>tcsh</code> Version Rejects <code>setenv</code> Variable Names That Use a Dash or an Equal Sign .....	78
STDIO <code>getc</code> Family EOF Condition Behavior Change .....	79
Output Columns of the <code>ps</code> Command Have Been Widened .....	79
Solaris Volume Manager Bugs .....	80
Solaris Volume Manager Does Not Remove Devices Correctly If <code>fdisk</code> Does Not Have Valid Entries .....	80
Solaris Volume Manager <code>metattach</code> Command Might Fail .....	80
Java Desktop System Issues .....	81
Email and Calendar Application .....	81
Login Issues .....	81
Help System .....	82
System-Level Issues .....	82
Problem With Sound Recorder .....	82
Nautilus ACL MASK Is Not Synchronized With Group Permissions (6464485) .....	83
<code>strftime(3c)</code> Should Support GNU Extension in <code>%-m</code> and <code>%-d</code> (6448815) .....	83
x86: Cannot Configure Full-Screen Magnification on Systems With One Video Card .....	83
Certain View Options Might Cause File Manager to Fail (6233643) .....	85
System Administration .....	86
Package Database Contains Path Names That Do Not Exist (7054481) .....	86
SPARC: 64-bit Version of the <code>libsoftcrypto</code> Library Is Slow (7048794) .....	87
<code>patchrm</code> Command Is Not Supported After Applying Patch 144500/144501 (7033240) ...	87
<code>lucreate</code> Introduces Latency on Slower UFS Systems (7051757) .....	87
The Availability Suite Module <code>sdbc</code> Fails to Load During Boot (6952222) .....	87

Oracle Solaris 10 9/10 Clock Stops on Oracle VM 2.2 (6952499) .....	88
SPARC: FKU 137137-xx Patch Does Not Support Third-Party Volume Manager Software .....	88
Oracle Solaris Is Unable to Handle Mode Switches Between Legacy and AHCI Modes for the SATA Controller (6520224) .....	88
32-bit: Possible Error With Applications When Obtaining the File System State on Large File Systems (6468905) .....	89
Using the patchadd Command With the -R Option to Specify an Alternative Root Path From Systems That Are Not Zones Aware Should Be Restricted (6464969) .....	89
Sun Patch Manager Tool 2.0 Incompatible With Previous Versions of the Tool .....	90
Cannot Delete Existing Diskless Clients From the System (6205746) .....	90
SPARC: smosservice delete Command Does Not Successfully Remove All Service Directories (6192105) .....	91
<b>4 End-of-Software Support Statements .....</b>	<b>93</b>
Features Removed in This Release .....	93
Adobe Reader .....	93
des Command .....	93
Features That Might Be Removed in a Future Release .....	93
LP Print Service .....	93
SPARC: Legacy System Support .....	94
rstart Client and rstartd Server .....	94
rdist Command .....	94
crypt Command .....	94
-x and -C Options in the vi, ex, and ed Commands .....	94
sysidtool Framework .....	95
Sun OpenGL Software From Oracle for the SPARC Platform .....	95
WU-ftp Server .....	95
Boot Support in Solaris Volume Manager From Oracle .....	95
ioctl Floppy Driver and fdformat Utility .....	95
tnf Tracing (3TNF) .....	95
Replacing /etc/power.conf and pmconfig With poweradm .....	96
Replacing Trusted Extensions IPv6 CIPSO With CALIPSO .....	96
/etc/hostname.interface Files .....	96
Flash Archive Installation Commands .....	96
x86: lsimega Driver Support .....	97



---

Removal of QLogic SCSI Ultra160 Device Driver .....	97
32-bit SPARC and x86: libmle Library .....	97
32-bit SPARC: Removal of Asian SunOS4.x BCP .....	97
32-bit SPARC and x86: Removal of Legacy Asian Print Filters .....	97
32-bit SPARC and x86: Removal of Legacy Asian Libraries .....	97
32-bit SPARC and x86: Removal of Legacy Asian Commands .....	98
Diskless Client Functionality .....	98
SPARC: SunOS 4 Binary Compatibility Support .....	98
32-bit x86: sk98sol Driver .....	99
IP-Forwarding SMF Services .....	99
x86: 32-bit X Servers and Drivers .....	99
SYSV3 SCO Compatibility Environment Variable .....	100
passgmt Command .....	100
Locale Administrator .....	101
SIP Express Router (SER) .....	101
Jakarta Tomcat 4 Interfaces in the Oracle Solaris OS .....	101
x86: lx Branded Zone .....	101
SPARC Workstations .....	101
Plotting Commands .....	101
MySQL 4 .....	102
Apache httpd 1.3 .....	102
audit_user Database .....	102
Audit Daemon Interfaces .....	102
Oracle Solaris Audit Commands .....	103
Auditing File Size Statistics and File Size Restriction Interfaces .....	103
Drivers for Various SPARC Compatible Graphics Cards .....	103
Short Form Locales .....	104
Support for Java SE 1.4.2 .....	108
Support for Java SE 5.0 .....	109
@euro Locale Variants .....	109
ucblinks Command .....	109
Xprt Server and Xprint Extension .....	110
xmh Command .....	110
XIE Libraries .....	110
bdfosnf and showsnf Commands .....	110
PostgreSQL 8.1 and 8.2 .....	111

---

Locale Variant cz .....	111
xorgcfg and xorgconfig Utilities .....	111
Oracle Berkeley DB 4.2 .....	111
Some audiorecord and audioplay Application Switches .....	112
Policy Change for Inbound Open-Source and Third-Party, Vendor-Supplied Open-Source Components .....	112
Mozilla 1.X Support .....	112
x86: sbpro Driver .....	112
CacheFS File System .....	112
sdtudctool Command .....	112
ctlmp and ctlconvert_txt Utilities .....	113
genlayouttbl Utility .....	113
Mobile IPv4 .....	113
Gnopernicus .....	113
Xsun Server .....	113
Common Desktop Environment .....	113
Sun Java System Calendar Server Client Applet .....	113
DARPA Trivial Name Server .....	114
I2O Intelligent I/O .....	114
GNOME Viewer for PDF and PostScript Files .....	114
Smartcard Administrative Interface .....	114
iButton Smartcard .....	114
Cyberflex Smartcard .....	114
PAM Smartcard .....	114
OCF/SCF Smartcard Framework .....	115
SCF Smartcard APIs .....	115
Remote Program Load Server Functionality .....	115
Transition From ipge to e1000g NIC Driver as the Default Ethernet Driver for sun-4v Systems .....	115
Solstice Enterprise Agents Support .....	115
32-bit x86: Extended Memory File System Support .....	116
Standard Type Services Framework Support .....	116
SPARC: jfca Driver Support .....	116
zic -s Option Support .....	116
Removable Volume Management Support .....	116
64-bit SPARC: Dual Basic Rate ISDN Interface and Multimedia Codec Chips .....	117

SPARC: Certain Drivers Might Not Be Supported in a Future Oracle Solaris Release .....	117
Automated Security Enhancement Tool Support .....	117
Asian Short dt login Names .....	117
Cfront Runtime Support Library .....	118
Configuration Administrations's fp Plug-In Hardware Options .....	118
Device Allocation Interfaces for the Basic Security Module .....	118
Obsolete Device Driver Interfaces .....	118
Device Management Entries in the power . conf File .....	120
Device Support and Driver Software .....	120
Form and Menu Language Interpreter .....	121
Host Files in /etc/net/ti* .....	121
Kerberos Ticket Lifetime Parameters in the krb5 . conf File .....	121
Korean CID Fonts .....	121
Legacy or Traditional Non-UTF-8 Locales .....	122
Functions in the CPU Performance Counters Library (libcpc) .....	122
libXinput Library .....	123
NIS+ Name Service Type .....	123
nstest Test Program .....	124
Perl Version 5.6.1 .....	124
Solaris Management Console Patch Tool (Patch Manager) .....	124
Solstice Enterprise Agents .....	124
Stand-Alone Router Discovery .....	124
Oracle Sun Fire Link Interfaces .....	125
Java Desktop System Applications .....	125
Token Ring and Fiber Distributed Data Interface Device Types .....	125
WBEM Dynamic Reconfiguration .....	126
XIL Interface .....	126
xetops Utility .....	126
<b>5 Documentation Issues .....</b>	<b>127</b>
<i>System Administration Guide: Oracle Solaris Containers-Resource Management and Oracle Solaris Zones</i> .....	127
Determining the Working Set Size of a Project .....	127
Zones Overview .....	127
luupgrade Command Man Page Has an Incorrect Cross-Reference .....	128

Oracle Solaris Patch List .....	128
<i>System Administration Guide: Naming and Directory Services (NIS+)</i> .....	128
Discontinuation of Swedish Documentation .....	128
Application Server Documentation Refers to Derby Database Instead of Java DB .....	129
Documents on the Software Supplement CD .....	129
<b>A Previously Documented Bugs That Were Fixed in the Oracle Solaris 10 8/11 Release .....</b>	<b>131</b>
Previously Documented Bugs Fixed in This Release .....	131

# Preface

---

This document describes the Oracle Solaris 10 8/11 operating system (OS). For information about prior Oracle Solaris 10 releases, see *Oracle Solaris 10 9/10 Release Notes*.

*Oracle Solaris 10 8/11 Release Notes* contains installation and runtime problem details. Also included are end-of-software support statements for the Oracle Solaris 10 OS.

For the latest version of this document, search for “Oracle Solaris 10 8/11 Release Notes” on <http://www.oracle.com/technetwork/documentation/index.html>.

---

**Note** – This Oracle Solaris release supports systems that use the SPARC and x86 families of processor architectures. The supported systems appear in the *Oracle Solaris OS: Hardware Compatibility Lists*. This document cites any implementation differences between the platform types.

In this document, these x86 related terms mean the following:

- x86 refers to the larger family of 64-bit and 32-bit x86 compatible products.
- x64 relates specifically to 64-bit x86 compatible CPUs.
- "32-bit x86" points out specific 32-bit information about x86 based systems.

For supported systems, see the *Oracle Solaris OS: Hardware Compatibility Lists*.

---

## Who Should Use This Book

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

## Related Books

You might need to refer to the following documentation when you install the Oracle Solaris 10 OS:

- *Java Desktop System Release 3 Solaris 10 Collection*
- *Oracle Solaris 10 8/11 What's New*
- *Oracle Solaris 10 8/11 Installation Guide: Basic Installations*
- *Oracle Solaris 10 8/11 Installation Guide: Planning for Installation and Upgrade*
- *Oracle Solaris 10 8/11 Installation Guide: Solaris Live Upgrade and Upgrade Planning*
- *Oracle Solaris 10 8/11 Installation Guide: Network-Based Installations*
- *Oracle Solaris 10 8/11 Installation Guide: Custom JumpStart and Advanced Installations*
- *Oracle Solaris 10 System Administrator Collection*
- *Oracle Solaris 10 8/11 Patch List*

For information about 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 Oracle Solaris software. 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.

---

## Access to Oracle Support

Oracle customers have access to electronic support through My Oracle Support. For information, visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info> or visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs> if you are hearing impaired.

## Typographic Conventions

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

TABLE P-1 Typographic Conventions

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

TABLE P-2 Shell Prompts *(Continued)*

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



◆ ◆ ◆    1  
CHAPTER 1

# License Updates

---

This chapter provides information on updates to licenses.

## Oracle Solaris License Updated for Java SE Components

The Oracle Solaris license has been updated to include the following section:

### **Included Java SE Components**

The Programs may include or be distributed with certain separately licensed components that are part of Java Platform, Standard Edition ("Java SE"). Java SE and all components associated with it are licensed to you under the terms of the Oracle Binary Code License Agreement for the Java SE Platform Products, and not under this agreement. A copy of the Oracle Binary Code License Agreement for the Java SE Platform Products can be found at <http://www.oracle.com/technetwork/java/javase/terms/license/index.html>



# Installation Issues

---

This chapter provides information and describes issues related to the installation of the Oracle Solaris 10 8/11 release.

---

**Note** – To see previously documented bugs and issues that are fixed and no longer apply to the Oracle Solaris 10 8/11 release, refer to [Appendix A, “Previously Documented Bugs That Were Fixed in the Oracle Solaris 10 8/11 Release.”](#)

---

## General Information

This section provides general information such as behavior changes in the Oracle Solaris 10 8/11 release.

## Auto Registration Feature of Oracle Solaris

The Auto Registration feature was new in the Oracle Solaris 10 9/10 release.

### What Is Auto Registration?

A new Auto Registration screen has been added to the interactive installer to facilitate registering your system using your Oracle support credentials. Installations and network installations made by using the JumpStart feature of Oracle Solaris require a new `auto_reg` keyword in the `sysidcfg` file to control settings during the installation.

With Auto Registration, during the initial reboot after you install or upgrade your system, service tag data about your system is automatically communicated through the existing service tag technology to the Oracle Product Registration System. This data about your system is used, for example, to help Oracle enhance customer support and services. You can learn about service tags at <http://www.oracle.com/technetwork/server-storage/solaris/oracle-service-tag-faq-418684.html>.

By registering with your support credentials using one of the registration options, you can inventory your systems and the major software components installed on them. For instructions on tracking your registered products, see [https://inventory.sun.com/inventory/decommission\\_faq.html](https://inventory.sun.com/inventory/decommission_faq.html). See also [My Oracle Support](#).

You can choose to send your service tag data to the Oracle Product Registration System anonymously. An anonymous registration means that the data sent to Oracle has no link to the name of a customer. You can also choose to disable Auto Registration.

## How to Enable or Modify Auto Registration

Auto Registration is enabled by default. Auto Registration uses support credentials and proxy information that you provide before, during, or after an installation or upgrade of an SPARC or x86 based system.

### Before or During an Installation or Upgrade

- You can add the new `auto_reg` keyword to your `sysidcfg` file prior to an automatic installation or upgrade, such as network installations or JumpStart installations.
- During an interactive installation or upgrade, the installer asks you to provide your support credentials, or to register anonymously.
- You can use a new Live Upgrade command option to provide your support credentials and proxy information, or to register anonymously, during a Live Upgrade. For more information about the Live Upgrade feature of Oracle Solaris, go to [My Oracle Support](#).

---

**Note** – If you are working with a flash archive that is based on at least the Oracle Solaris 10 9/10 release, Auto Registration is enabled by default. The means of providing Auto Registration credential and proxy information depends on which installation or upgrade method is used with the archive.

---

### After an Installation or Upgrade

After an installation or upgrade, a privileged system administrator can use the `regadm` command to administer Auto Registration and to manage a service tag inventory.

## How to Disable Auto Registration

You have the following options for disabling Auto Registration on a SPARC based system or x86 based system, thus preventing data transmission to the Oracle Product Registration System.

### For Automatic Installations

If you are performing an automatic installation or upgrade, for example, if you are using the JumpStart program, you can disable Auto Registration prior to the installation or upgrade as follows:

1. Before you begin the installation or upgrade, edit the `sysidcfg` file to add the `auto_reg` keyword to the file.
2. Proceed with the installation or upgrade.
3. (Optional) After the installation has completed and the system reboots, verify that the Auto Registration feature is disabled.

```
# regadm status
Solaris Auto-Registration is currently disabled
```

## For Hands-On Installations

1. Begin an interactive installation or upgrade.
2. During the interactive installation or upgrade, the installer prompts you to select an automatic reboot. Do *not* select the option to automatically reboot after the installation or upgrade. You need to disable Auto Registration prior to rebooting the system.
3. After the installation is complete but before rebooting the system, open a terminal window as follows:
  - For a GUI installation, right-click to open a terminal window.
  - For a text installation, press the exclamation point (!) to open a terminal window.
4. At the command line, remove the `/a/var/tmp/autoreg_config` file.
5. Reboot the system.

```
# reboot
```

## For Live Upgrade Operations

1. Prior to performing a Live Upgrade operation, open a text editor and create a file that contains the following Auto Registration information:

```
autoreg=disable
```

2. Save this file.
3. Point to this file when you run the `luupgrade` command.

```
luupgrade -k /path/filename
```

## Further Information

For further information about Auto Registration, see the following resources.

TABLE 2-1 Auto Registration Documentation

Question	Resource
Overview of Auto Registration	<a href="#">“Auto Registration Feature of Oracle Solaris” on page 19</a>

TABLE 2-1 Auto Registration Documentation <i>(Continued)</i>	
Question	Resource
How do I view and manage the inventory of my registered products?	Chapter 17, “Working With the Oracle Solaris Auto Registration <code>regadm</code> Command (Tasks),” in <i>System Administration Guide: Basic Administration</i>
How do I set up Auto Registration during an interactive installation?	<i>Oracle Solaris 10 8/11 Installation Guide: Basic Installations</i>
How do I set up the <code>sysidcfg</code> file to enable or disable Auto Registrations for hands-off installations?	“ <code>auto_reg</code> Keyword” in <i>Oracle Solaris 10 8/11 Installation Guide: Network-Based Installations</i>
How do I set up Auto Registration for use with Live Upgrade?	<i>Oracle Solaris 10 8/11 Installation Guide: Solaris Live Upgrade and Upgrade Planning</i>
How do I use the <code>regadm</code> command to modify or enable Auto Registrations separate from an installation or upgrade?	Chapter 17, “Working With the Oracle Solaris Auto Registration <code>regadm</code> Command (Tasks),” in <i>System Administration Guide: Basic Administration</i>
Where can I find further information about My Oracle Support?	My Oracle Support FAQ for Oracle Customers and Partners

## Security Patches

On an x86 platform, after installing the Oracle Solaris 10 8/11 OS or upgrading to the Oracle Solaris 10 8/11 OS, you must install the following security patches.

- 145081-04 or later.
- 119901-11 or later.

The patches are available at [My Oracle Support](#).

## Disaster Recovery Image

Starting with the Oracle Solaris 10 9/10 release, *Oracle Solaris 10 9/10 Installation Guide: Solaris Flash Archives (Creation and Installation)* includes instructions about how to create a flash archive recovery image that can be used to restore a system to its default factory condition. See “Creating and Using a Disaster Recovery Image” in *Oracle Solaris 10 9/10 Installation Guide: Solaris Flash Archives (Creation and Installation)*. This chapter provides the simplest instructions to create a flash archive (FLAR) image that can be loaded onto the target system to recover from a failed disk drive.

## BIOS and Firmware Upgrade

The Oracle Solaris 10 8/11 release is tested on all supported Oracle systems running the latest combinations of the following:

- BIOS and ILOM
- SPARC firmware, OBP, and Hypervisor

For best results using the Oracle Solaris 10 8/11 release, upgrade your BIOS/firmware to the latest release listed in the matrix at <http://www.oracle.com/technetwork/systems/patches/firmware/release-history-jsp-138416.html>.

## New Memory Requirements

The following are the minimum and recommended memory requirements for the Oracle Solaris 10 8/11 release.

- For UFS root file systems:
  - Minimum: 1.5 GB
  - Recommended: 1.5 GB or more
- For ZFS root pools:
  - Minimum: 1.5 GB
  - Recommended: 1.5 GB or more for overall ZFS performance

---

**Note** – You need at least 16 GB of disk space.

---

## Upgrading to Oracle Solaris 10 8/11

You can upgrade to Oracle Solaris 10 8/11 by using the standard upgrade process or by using Live Upgrade. For more information about Live Upgrade, see [My Oracle Support](#).

To upgrade to the Oracle Solaris 10 8/11 release from a release earlier than the Solaris 8 OS, first upgrade to any of the releases in the following list. Then, upgrade to the Oracle Solaris 10 8/11 release.

SPARC: You can upgrade to Oracle Solaris 10 8/11 on SPARC based systems from the following major releases:

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

x86: You can upgrade to Oracle Solaris 10 8/11 on x86 based systems from the following major releases:

- Solaris 9 OS
- Oracle Solaris 10 OS

## Support for Products Not Part of the Oracle Solaris OS

The Oracle Solaris 10 8/11 release has been tested for compatibility with previous releases in line with the Oracle Solaris compatibility guarantee. This means that applications, including third-party applications, which adhere to the Oracle Solaris published ABI will work without modification on the Oracle Solaris 10 8/11 release.

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

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

## Before You Begin

This section contains critical installation issues that you need to be aware of before installing or upgrading to the Oracle Solaris 10 OS. These issues might prevent an installation or upgrade 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.

### EMC PowerPath

Currently released EMC PowerPath versions as of August 18, 2011, are incompatible with the following kernel patches:

- 144500-19
- 144501-19

These kernel patches are already applied in the Oracle Solaris 10 8/11 image.

Until EMC provides a fix for the issue, EMC PowerPath versions released on or before August 18, 2011, should not be installed on a system running Oracle Solaris 8/11. Also, on systems running earlier versions of Oracle Solaris 10, the patches (144500-19 and 144501-19) should not be applied if a version of EMC PowerPath released on or before August 18, 2011, is also installed.



---

EMC have released PowerPath for Solaris 5.3 P02 to fix emc275344.

## Live Upgrade and Oracle Solaris Zones

Starting with the Solaris 10 8/07 release, the use of Live Upgrade with Oracle Solaris Zones is supported. For more information, see InfoDoc 1004881.1 at [My Oracle Support](#).

## Live Upgrade Restrictions

For Live Upgrade to operate correctly, a limited set of patch revisions must be installed for a given OS version. Make sure that you have the most recently updated patch list by consulting [My Oracle Support](#). The Oracle Solaris 10 8/11 release has the following Live Upgrade restrictions:

- To upgrade your current Solaris 8 OS to the Oracle Solaris 10 8/11 release using Live Upgrade, note the following information:
  - SPARC: Using Live Upgrade to upgrade from the Solaris 8 release to the Oracle Solaris 10 8/11 release is supported. For step-by-step procedures on how to use Live Upgrade, see [My Oracle Support](#).
  - x86: Using Live Upgrade to upgrade from the Solaris 8 release to the Oracle Solaris 10 8/11 release is not supported. Instead, use the standard upgrade procedure or use Live Upgrade to upgrade from the Solaris 8 OS to the Solaris 9 OS or to the Oracle Solaris 10 OS. Then you can use Live Upgrade to upgrade from the Solaris 9 release or the Oracle Solaris 10 release to the Oracle Solaris 10 8/11 release.

---

**Note** – The use of Live Upgrade to upgrade from Solaris 8 to the Solaris 10 5/08, Solaris 10 10/08, Solaris 10 5/09, and Solaris 10 10/09 releases is supported. Refer to Infodoc 1019995.1 at [My Oracle Support](#).

---

- To upgrade your current Solaris 9 OS to the Solaris 10 10/09 release using Live Upgrade, apply the following patches:
  - SPARC: 137477-01 or later
  - x86: 137478-01 or later
- To upgrade your current Oracle Solaris 10 OS to the Oracle Solaris 10 8/11 release by using Oracle Solaris Live Upgrade, apply the following patches:
  - SPARC: 137321-01 or later
  - x86: 137322-01 or later

These patches provide the new p7zip functionality. Live Upgrade requires p7zip functionality in order to support an upgrade to Oracle Solaris 10 8/11.

---

**Note** – The minimum required patch information for the live boot environment prior to using Live Upgrade is provided in Infodoc 1004881.1 at [My Oracle Support](#).

---

## Using Live Upgrade With a Zone Root on a ZFS File System

The Oracle Solaris 10 8/11 release provides the ability to install a ZFS root file system and configure a zone root on Oracle Solaris ZFS. Typically, you can create and configure a zone root on ZFS as you wish. If you plan to use Oracle Solaris Live Upgrade with ZFS and zone configurations, review the following information:

- To use Oracle Solaris Live Upgrade with zone configurations that are supported in the Oracle Solaris 10 8/11 release, you must first upgrade your system to the Oracle Solaris 10 8/11 release by using the standard upgrade program.
- Then, with Live Upgrade, you can either migrate your UFS root file system with zone roots to a ZFS root file system or you can upgrade or patch your ZFS root file system and zone roots.
- You cannot migrate unsupported zone configurations from a previous Oracle Solaris 10 release directly to the Oracle Solaris 10 8/11 release.

For a detailed description of supported zone configurations to be upgraded or patched in the Oracle Solaris 10 8/11 release, see “[Migrating to a ZFS Root File System or Updating a ZFS Root File System \(Live Upgrade\)](#)” in *Oracle Solaris ZFS Administration Guide*.

For complete instructions on setting up these configurations, see “[Oracle Solaris Installation and Live Upgrade Requirements for ZFS Support](#)” in *Oracle Solaris ZFS Administration Guide*.

Review the information in this chapter before you begin your migration to a ZFS root file system or before setting up zones on a system with a ZFS root file system. Follow the recommended procedure exactly to set up zones on a system with a ZFS root file system to ensure that you can use Live Upgrade on that system.

## Upgrading a Trusted Extensions System That Is Configured With Labeled Zones

Oracle Solaris systems that are configured with the Trusted Extensions feature use non-global zones. The process of upgrading these systems is the same as upgrading an Oracle Solaris system that uses zones and has the same issues.

- **ZFS zones**– Oracle Solaris systems with ZFS zones cannot currently be upgraded. For Trusted Extensions systems with ZFS zones, the alternative is to re-create the zones. Perform these steps:

1. Back up all the data by using the `tar -T` command.
  2. Delete the zones.
  3. Upgrade the system and reconfigure all the zones.
  4. Restore all the data.
- **NFSv4 domain** – After upgrading your system, 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.
  - **Name Service** – If your system was configured during installation to use a name service that is different from the name service being used during the 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 a system installation 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 (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 installation, 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 command should be issued 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. Use `lumount` to mount 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_service.xml
```
4. Use `luumount` to unmount the boot environment:
 

```
# luumount BE-name
```

---

**Note** – If the system is booted without performing these steps, you will need to manually start the appropriate name service-related Service Management Facility (SMF) client services.

---

## Patching Miniroot on SPARC and x86 Compatible Machines

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

See the following chapters for the detailed steps:

- Chapter 5, “Installing From the Network With DVD Media (Tasks),” in *Oracle Solaris 10 8/11 Installation Guide: Network-Based Installations*
- Chapter 6, “Installing From the Network With CD Media (Tasks),” in *Oracle Solaris 10 8/11 Installation Guide: Network-Based Installations*
- Chapter 7, “Patching the Miniroot Image (Tasks),” in *Oracle Solaris 10 8/11 Installation Guide: Network-Based Installations*

## Oracle Solaris Data Encryption Supplement on Oracle Solaris 10 Releases

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

## Additional Procedures Required When Installing GNOME Display Manager Patches for the Oracle Solaris 10 8/11 Release

Apply the following patches to resolve problems that were reported in CR 6277164 and CR 6214222:

- SPARC: Patch ID 119366-05
- x86: Patch ID 119367-05

The sections that follow provide further steps that you must perform to completely resolve the reported problems. For more information, read the Special Install Instructions section of the patch README for these patches.

## x86: Systems With an elx or pcelx NIC 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 the network configuration on systems that do not have elx or pcelx NICs.

## Default Size of /var File System Might Be Inadequate

The default size of the /var file system might be insufficient if the /var file system is located on a separate slice. If so, 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 for either the installation program GUI or the text installer:

- If you are using the Oracle Solaris installation program GUI, follow these steps.
  1. Begin the installation.
  2. From Select Type of Install, select Custom Install.

The Oracle 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. Set the Size column entry for the /var file system to double the disk space size.

For example, if the installation program assigns 40 MB of space, change the Size value to 80.
  6. Complete the installation.
- If you are using the text installer, follow these steps.
  1. Begin the installation.
  2. From Select Type of Install, select Custom Install.

Several screens are displayed 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. Set the Size column entry for the `/var` file system to double the disk space size.

For example, if the installation program assigns 40 MB of disk space, change the Size value to 80.

7. Complete the installation.

- If you are using the 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 MB.

```
filesys c0t0d0s5 256 /var
```

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

The Oracle 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 Oracle 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 this Oracle 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 instead of the network or CD-ROM drive as your bootable device.

## SPARC: Older Firmware Might Need Boot Flash PROM Upgrade

On SPARC based systems, the Oracle Solaris 10 OS runs in 64-bit mode only. Some Sun-4u systems might need to be upgraded to a higher level of OpenBoot firmware in the flash PROM to run the OS in 64-bit mode. The following systems from Oracle 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 Oracle 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 2-2** Minimum Firmware Versions Required to Run 64-bit Oracle Solaris Software on UltraSPARC Systems

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

Systems not listed in the table do not need a flash PROM update. For instructions on how to perform a flash PROM update, see any edition of the Solaris 8 Sun Hardware Platform Guide at <http://download.oracle.com/docs/cd/E19455-01/>.

---

**Note** – Upgrading firmware on both SPARC and x86 based systems can lead to significant performance improvements. To apply a firmware update, follow the instructions in the README file of the corresponding firmware. See also patch-related information at [My Oracle Support](#).

---

## Solaris Management Console 2.1 Software Is Incompatible With Solaris Management Console 1.0, 1.0.1, and 1.0.2 Software

The 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 Oracle 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. The Solaris Management Console software might exist on your system if you previously 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 the Solaris Management Console software.
- If you did not uninstall the Solaris Management Console 1.0, 1.0.1, or 1.0.2 software before you upgraded to the Oracle 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 provided in Step 3 of the following steps:

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

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

If the package 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 order provided below.

---

**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 Oracle Solaris Management Console 2.1 packages and dependent packages in the order provided below.

---

**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 SUNWrmi
# pkgrm SUNWlvmg
# pkgrm SUNWlvma
# pkgrm SUNWlvmr
# pkgrm SUNWdcInt
# pkgrm SUNWmga
# pkgrm SUNWmgapp
# pkgrm SUNWmcdev
# pkgrm SUNWmcex
# pkgrm SUNWwbmc
# pkgrm SUNWmc
# pkgrm SUNWmcc
# pkgrm SUNWmccom
```

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

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

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

## x86: Failure of BIOS Device Utility Prevents Installation or Upgrade From Succeeding (6362108)

In certain cases, the utility for BIOS devices (`/sbin/biosdev`) might fail and prevent a successful installation or upgrade. The failure can occur in 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, proceed with your Oracle Solaris installation or upgrade.

## Cannot Create an Oracle Solaris Flash Archive When a Non-Global Zone Is Installed (6246943)

Starting with the current Oracle Solaris release, an Oracle Solaris flash archive cannot be properly created on a system when a non-global zone is already installed. The Oracle Solaris flash feature is currently incompatible with Oracle Solaris Zones (also known as Oracle Solaris Containers).

Do not use the `flar create` command to create an Oracle Solaris flash archive in these instances:

- In any non-global zone
- In the global zone if any non-global zones are installed on the system

If you create an Oracle Solaris flash archive in either instance, the resulting archive might not install properly when the archive is deployed.

**Workaround:** You might be able to create an Oracle Solaris flash archive of a system that has installed zones if they are all halted. For more information, see [http://opensolaris.org/os/community/zones/faq/flar\\_zones/](http://opensolaris.org/os/community/zones/faq/flar_zones/).

## x86: Sun Java Workstation 2100Z Might Panic When Booting From Oracle Solaris 10 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 Oracle Solaris 10 Operating System DVD. After the kernel banner is displayed, the following message is very quickly flashed:

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

Then, the system automatically resets.

Choose one of the following workarounds.

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

1. During system boot, press F2 at the prompt.

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

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

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

---

**Note** – The screen might display more than one attachment type, 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 the BIOS setup.

The system restarts.

**Workaround 2:** Update the DVD combo drive's firmware to version R1.12. This workaround 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 guide for steps to remove the drive properly.
2. Connect the drive to a system that is running Microsoft Windows and 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 Aopen's Download Center. Tests confirm that version R1.12 resolves the panic issue. It cannot be confirmed whether subsequent firmware revisions also resolve the problem.

---

## **x86: Serial Consoles on Some Sun Fire Systems Do Not Work (6208412)**

The serial console (`ttya`) on the following Sun Fire systems from Oracle 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 system.
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** – Simultaneously pressing the Stop and N keys at system boot to reset the low-level firmware to default settings does not work on these systems.

---

## **x86: Oracle Solaris Installation GUI Might Fail on Systems With Existing x86 fdisk Boot Partitions (6186606)**

The Oracle Solaris installation GUI might fail on a system with an existing x86 fdisk boot partition. The failure occurs if the existing x86 boot partition was created with the Oracle Solaris text 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
```

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 Oracle Solaris installation GUI, follow these steps:

1. Begin the installation.  
The prompt to select an installation type is displayed.
2. 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 prompts on the screens as appropriate for your system.
4. On the Fdisk Selection screen, select the disk that contains the x86 boot partition.
5. Remove the x86 boot partition by changing it to UNUSED in the pull-down menu.
6. Add the x86 boot partition back by changing UNUSED back to x86 boot.
7. Continue the installation.

## Installation Bugs

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

### Jumpstart Installation Fails on Machines Attached to a SAN (7072761)

Jumpstart installation of the Oracle Solaris 8/11 operating system fails on machines that are attached to a SAN. The reason is because on a server with SAN based storage, Oracle Solaris 8/11 does not parse the rootdisk option correctly.

You might see error messages similar to the ones shown in the following example.

```
STK-UniversalXport-0760 doesn't have a VTOC label
STK-FLEXLINE380-0760 doesn't have a VTOC label
STK-FLEXLINE380-0760 doesn't have a VTOC label
LSI-MR9261-8i-2.90 doesn't have a VTOC label
other doesn't have a VTOC label
Warning: Could not find matching rule in rules.ok
```

**Workaround:** Install the Oracle Solaris 8/11 operating system manually.

## ZFS Root System Might Hang When Swapping to zvol (6898318)

The ZFS root system can hang during installation or post installation when the system swaps to a ZFS swap volume.

Choose one of the following workarounds.

### Workaround 1:

- Set the `primarycache` property on the ZFS swap volume. For example:

```
# zfs set primarycache=metadata rpool/swap
```

### Workaround 2:

- Create a raw swap partition and remove the ZFS swap volume.

1. Create a slice and activate as a swap device.

For example:

```
# swap -a /dev/dsk/c0t0d0s1
```

2. Add an entry for this swap device in the `/etc/vfstab` file.

For example:

```
/dev/dsk/c0t0d0s1 - - swap - no -
```

3. Delete the ZFS swap volume.

- a. Delete the ZFS swap volume.

For example:

```
# swap -d /dev/zvol/dsk/rpool/swap
```

- b. Remove the ZFS swap entry from the `/etc/vfstab` file.

## Installing an Oracle Solaris ZFS Flash Archive (6889459)

If you create and install an Oracle Solaris ZFS flash archive, install the following recommended patches:

- SPARC: 119534-24, 140914-02
- x86: 119535-24 or later, 140915-02

## Limitations With Installation of ZFS Flash Archives on an Alternate Boot Environment Using Oracle Solaris Live Upgrade (7055343)

Starting with the Oracle Solaris 10 8/11 release, you can use the `luupgrade` command to install a ZFS flash archive to an alternate boot environment. You can also get this feature on a system running Oracle Solaris 10 9/10 by applying the relevant patches listed for CR 6868012. However, installing a ZFS flash archive has the following limitations:

- The master system on which the flash archive is created and the clone system on which the flash archive will be installed should be at the same kernel patch level. Otherwise, the flash archive installation might fail because of errors from `zfs receive`. For example, if a ZFS flash archive is created on a system that runs Oracle Solaris 10 8/11, ensure that the clone system is also at the Oracle Solaris 10 8/11 kernel patch level.
- On systems that run on the Oracle Solaris 9/10 release, the flash archive installation will fail if the master system on which the flash archive is created has descendant datasets under the root dataset. For example, if the master system has a separate `/var` dataset, the ZFS flash archive created from the master system fails to install to an alternate boot environment on a system where the current boot environment is Oracle Solaris 10 9/10. However, this limitation does not apply to systems that run on the Oracle Solaris 10 8/11 release.

---

**Note** – Starting with the Oracle Solaris 10 9/10 release, ZFS flash archive installation to alternate boot environment is supported.

---

## Localized Installation Note

The localized Oracle Solaris installer always runs in the EUC or ISO8859 locales. Therefore, the installation log is written in EUC or ISO8859 encoding.

**Workaround:** While performing a localized command-line interface (CLI) installation by using a terminal window, the locale on the terminal must be either the EUC or ISO8859 locale.

## x86: Oracle Solaris Flash Archive Installation Fails on Releases Before the Solaris 10 10/08 Release (6735181)

If you are installing an Oracle Solaris flash archive from a system running a release before the Solaris 10 10/08 release, the archive fails to install. Starting with the Solaris 10 10/08 release, the archive can be installed. On prior releases, the following error message is displayed:



```
bootadm: biodev command failed for disk:
/dev/dsk/<c0t2d0s0>.
bootadm: ls_bootdisk(): cannot determine BIOS disk ID "hd?" for disk:
/dev/dsk/<c0t2d0s0>
bootadm: get_grubroot(): cannot get (hd?, ?,?) for menu. menu not on bootdisk:
/dev/rdisk/<c0t2d0s0>
```

**Workaround:** Choose one of the following workarounds:

- Install an Oracle Solaris flash archive from at least the Solaris 10 10/08 release.
- If you need to install an Oracle Solaris flash archive from a previous release, boot from the previous release and extract the archive.

## Some Asian Locales Cannot Be Used for JumpStart Installation (6681454)

The following Asian locales cannot be used while installing the Oracle Solaris OS with JumpStart: 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. 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 the 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.

## PRODRM Has Problems Deleting prodreg Entry for Trusted Extensions (6616592)

While upgrading Trusted Extensions from the Solaris 10 11/06 or Solaris 10 8/07 release to the Solaris 10 10/08, Solaris 10 5/09, Solaris 10 10/09, or Oracle Solaris 9/10 release, the prodreg entry for Trusted Extensions is not removed. No error message is displayed.

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

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

## Upgrade Detailed Patch Analysis Panel Not Scrollable (6597686)

During an Oracle Solaris upgrade, if you select Detailed Analysis to view which patches 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 as follows:

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

The command options are:

- 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 and is also the path to the directory that contains the `Solaris_10_606` directory. `/cdrom/cdrom0` is the default path. You must use this option if you are running `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 in the OS image, the script will not run correctly.

## Linux Partition Does Not Display on the GRUB Menu After Installation of the Oracle Solaris OS (6508647)

If Linux is installed on your system and you installed the Oracle Solaris OS in a separate partition, the Linux partition does not display in 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 Oracle Solaris OS.
2. Edit the `menu.lst` file at `/boot/grub/menu.lst`. For more information, see the [System Administration Guide: Basic Administration](#).

---

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

If you install the Solaris 10 10/09 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: System Fails to Boot After JumpStart Installation (6205478)

If you use the JumpStart installation method to install the Oracle Solaris OS on an x86 based system and you 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 JumpStart profile, remove the `filesys` keyword entry which configures slice 2 as the overlap slice. For example, you would remove a keyword entry that is similar to the following:

```
filesys c0t0d0s2 all overlap
```

After you remove the entry, perform the JumpStart installation.

## Upgrade Issues and Bugs

---

**Note** – For the latest information about upgrade support starting with the Oracle Solaris 10 8/11 release, see [“Upgrading to Oracle Solaris 10 8/11” on page 23](#).

---

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

## SPARC: All Types of M-Series Machines Might Encounter Slight Performance Degradation (7058265)

After updating to Oracle Solaris 10 8/11, all types of M-series machines might encounter slight performance degradation. The performance degradation was introduced as a result of the fix for CR 6919646.

CR 6919646 addresses the issue of M-series machines hanging as a result of inconsistent translation lookaside buffer (TLB) entries. For example, applications like the Oracle Database software might repeatedly trap on ISM addresses due to inconsistent TLB entries in the hardware. When this problem occurs, the affected applications cannot proceed on the occupied CPUs unless the system is rebooted, or until the TLBs are flushed randomly by other kernel activities.

---

### Note –

- CR 6919646 is fixed in the Oracle Solaris 10 8/11 release.
  - The fix for CR 7058265 is expected to be delivered with a kernel patch in the near future.
- 

## Lucreate Command Fails on Systems That Do Not Have the SUNWzoneu Package (7061870)

The `lucreate` command fails on systems that do not have the `SUNWzoneu` package, for example, Solaris 8, Solaris 9, and Oracle Solaris 10 systems installed with `SUNWcreq` metacluster.

You might see error messages similar to the ones shown in the following example:

```
Error message:      #lucreate -n u10
Analyzing system configuration.
Updating boot environment description database on all BEs.
Updating system configuration files.
Creating configuration for boot environment <u10>.
Source boot environment is <s10_u9>.
Creating file systems on boot environment <u10>.
Populating file systems on boot environment <u10>.
Analyzing zones.
Duplicating ZFS datasets from PBE to ABE.
Creating snapshot for <newpool/ROOT/s10_u9> on <newpool/ROOT/s10_u9@u10>.
Creating clone for <newpool/ROOT/s10_u9@u10> on <newpool/ROOT/u10>.
Mounting ABE <u10>.
Generating file list.
Finalizing ABE.
Fixing zonepaths in ABE.
Unmounting ABE <u10>.
Fixing properties on ZFS datasets in ABE.
Reverting state of zones in PBE <s10_u9>.
```

```

Making boot environment <u10> bootable.
ERROR: Unable to mount non-global zones of ABE <u10>: cannot make ABE bootable.
ERROR: Unable to make boot environment <u10> bootable.
ERROR: Unable to populate file systems on boot environment <u10>.
Removing incomplete BE <u10>.
ERROR: Cannot make file systems for boot environment <u10>.

```

## The iscsi/initiator Service Might End in Maintenance State After Upgrade (6976602)

The `svc:/network/iscsi/initiator:default` SMF service might end in the maintenance state during the first boot after upgrading from any of the Oracle Solaris 10 update releases (from Solaris 10 1/06 through Solaris 10 10/09) to Oracle Solaris 10 9/10 or Oracle Solaris 10 8/11. This situation arises when the `svc:/network/iscsi/initiator:default` service starts before the completion of the `svc:/system/manifest-import:default` service.

You might see error messages similar to the ones shown in the following example:

```

Jul 12 16:39:22 svc.startd[7]: svc:/network/iscsi/initiator:default:
Method "/lib/svc/method/iscsid" failed with exit status 1.
Jul 12 16:39:22 svc.startd[7]: svc:/network/iscsi/initiator:default:
Method "/lib/svc/method/iscsid" failed with exit status 1.
Jul 12 16:39:22 svc.startd[7]: svc:/network/iscsi/initiator:default:
Method "/lib/svc/method/iscsid" failed with exit status 1.
Jul 12 16:39:22 svc.startd[7]: network/iscsi/initiator:default failed:
transitioned to maintenance (see 'svcs -xv' for details)

```

```

# svcs -xv
svc:/network/iscsi/initiator:default (?)
State: maintenance since Tue Jul 12 16:29:38 2011
Reason: Start method failed repeatedly, last exited with status 1.
  See: http://sun.com/msg/SMF-8000-KS
  See: /var/svc/log/network-iscsi-initiator:default.log
Impact: This service is not running.

```

```

# tail /var/svc/log/network-iscsi-initiator:default.log
[ Jul 12 16:39:22 Executing start method ("/lib/svc/method/iscsid") ]
Usage: /lib/svc/method/iscsid { start | stop }
[ Jul 12 16:39:22 Method "start" exited with status 1 ]
[ Jul 12 16:39:22 Executing start method ("/lib/svc/method/iscsid") ]
Usage: /lib/svc/method/iscsid { start | stop }
[ Jul 12 16:39:22 Method "start" exited with status 1 ]
[ Jul 12 16:39:22 Executing start method ("/lib/svc/method/iscsid") ]
Usage: /lib/svc/method/iscsid { start | stop }
[ Jul 12 16:39:22 Method "start" exited with status 1 ]

```

**Workaround:** Clear the maintenance state of the `iscsi/initiator` service. The service is automatically started with the correct arguments. For example:

```
# svcadm clear svc:/network/iscsi/initiator:default
```

## Zones in Trusted Extensions Do Not Boot After Performing a Live Upgrade to Oracle Solaris 10 8/11 (7041057)

In a Trusted Extensions environment with labeled zones, the zones remain in the installed state and do not boot when they are in the newly created boot environment. If the zones are booted manually, errors occur depending on the `lofs` mounts present in the zones.

**Workaround:** To boot the zones in the Alternate Boot Environment (ABE), perform the following steps in the zone of the ABE:

1. Delete the file that displays the `lofs` mount error during booting of the zone because it has the same `inode` number as in the Primary Boot Environment (PBE).
2. Manually copy the file from the Primary Boot Environment (PBE). This copy ensures that the files have different `inode` numbers.

## Lucreate and lumake Fail When Trusted Extensions Is Enabled and Labeled Zones Are Not in the Running State (7055968)

If you run the `lucreate` or the `lumake` command on a system running Trusted Extensions, the commands might fail if the system has labeled non-global zones and the zones are not in running state.

For example, consider the following `lucreate` command:

```
lucreate -c OLD_BE -n NEW_BE -m:/dev/dsk/c0t0d0s3:ufs
```

You might see error messages similar to the ones shown in the following example:

```
Making boot environment <NEW_BE> bootable.  
ERROR: The mount point </.alt.tmp.b-2cc.mnt> is not a valid ABE mount point  
      (no /etc directory found).  
ERROR: You must use the <-m> option to specify the mount point of the  
      ABE where to create the /etc/vfstab file.  
Usage: luedvfstab -i ABE_icf_file -m ABE_mount_point -n BE_name  
ERROR: Unable to configure /etc/vfstab file on ABE <NEW_BE>: cannot make ABE bootable.  
ERROR: Unable to make boot environment <NEW_BE> bootable.  
ERROR: Unable to populate file systems on boot environment <NEW_BE>.  
Removing incomplete BE <NEW_BE>.  
ERROR: Cannot make file systems for boot environment <NEW_BE>.
```

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

## Issues With a DSR Upgrade With Zones (6616788)

A disk space reallocation (DSR) upgrade with zones fails if any zones are installed in the /opt directory. The 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:** Make sure that the root file system is not 100 percent full before the upgrade. If necessary, remove some files before the upgrade so that the root slice is less than 90 percent full.

## Trusted Extensions Upgrade Issues (6616585)

When you upgrade Trusted Extensions from the Solaris 10 11/06 or Solaris 10 8/07 release to the Solaris 10 10/08, Solaris 10 5/09, or Solaris 10 10/09 release, unwanted localized Trusted Extensions packages are installed on your system. This bug occurs because the Trusted Extensions installer in the Solaris 10 11/06 and Solaris 10 8/07 releases installs localized packages by default. No error message is displayed.

**Workaround:** Before upgrading Trusted Extensions to the current release, remove the following localized 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 an Upgrade (6488549)

This bug occurs during an upgrade from the Solaris 10 Hardware 2 (HW2) release to the Solaris 10 10/09 release.

In the Solaris 10 HW2 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` file 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 preceding 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` file.

---

**Note** – The fix for CR 6411084, the SUNWcsr installation or postinstallation 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 Solaris 10 10/09 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 Systems 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 an Oracle Solaris 10 System With Non-Global Zones to the Solaris 10 10/09 Release Might Cause the Local File System Service to Fail (6428258)

Upgrading a Solaris 10 3/05 or Solaris 10 1/06 system with non-global zones to the Solaris 10 10/09 release 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 an Oracle Solaris 10 system with non-global zones to the Solaris 10 10/09 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-K5
  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 an Upgrade From the Solaris 9 9/04 OS

In this Oracle Solaris release, Volume Manager displays device ID output in a new format. The Solaris 9 9/04 OS, which introduced device ID support in disk sets, does not recognize the new format. When you upgrade to the Oracle 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 the Solaris 9 9/04 OS, configuration changes made to disk sets after the upgrade might not be available to the Solaris 9 9/04 OS. For more information, see [Chapter 25, “Troubleshooting Solaris Volume Manager \(Tasks\),”](#) in *Solaris Volume Manager Administration Guide*.

## Obsolete Uninstallers Not Removed When Live Upgrade Is Used to Upgrade From Previous Releases (6198380)

If you use Live Upgrade to upgrade from a Solaris 8 or Solaris 9 release to the Oracle Solaris 10 OS, obsolete uninstaller programs are not removed. These uninstaller programs from previous releases 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.

## 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 Oracle 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.



# Oracle Solaris Runtime Issues

---

This chapter describes Oracle Solaris runtime issues that are known problems.

---

**Note** – To see previously documented bugs and issues that are fixed and no longer apply to the Oracle Solaris 10 8/11 release, refer to [Appendix A, “Previously Documented Bugs That Were Fixed in the Oracle Solaris 10 8/11 Release.”](#)

---

## General Information

This section provides general information and recommendations while running the Oracle Solaris 10 8/11 OS.

### The *rstchown* Parameter is Obsolete

The *rstchown* parameter that was previously set in the `/etc/system` file is obsolete. If you set this parameter in the `/etc/system` file, it is ignored.

This parameter has been replaced by the ZFS *rstchown* file system property and a general file system mount option.

For more information, see [Oracle Solaris ZFS Administration Guide](#) and `mount(1M)`.

### Recommended Adoption of SHA–256 and SHA–512 `crypt` Plug-ins for Password Encryption

An additional pair of `crypt(3C)` plug-ins, based on the SHA–256 and SHA–512 digest algorithms, has been available in the Oracle Solaris 10 OS since the Oracle Solaris 10 10/08 release. These plug-ins provide a `crypt(3C)` hash that uses FIPS 140-2 approved algorithms and discontinues using MD5–based hashes.

Adopt the SHA-256 or SHA-512 password hashing algorithms whenever all your systems in the LDAP domain are running at least the Oracle Solaris 10 10/08 release. These algorithms should not be used in an LDAP domain if your systems are running Oracle Solaris releases prior to the Oracle Solaris 10 10/08 release.

For information about how to change the password algorithm, see “[Changing the Password Algorithm \(Task Map\)](#)” in *System Administration Guide: Security Services* “[Changing the Password Algorithm \(Task Map\)](#)” in *System Administration Guide: Security Services*.

## Common Desktop Environment

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

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

When you type the `/usr/X11/bin/xrandr -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 Desktop System Desktop. No error message is displayed.

**Workaround:** Use one of the following workarounds:

- After the resolution change, restart the Workspace Manager. Select Windows → Restart Workspace Manager from the CDE workspace menu and click OK.
- Disable the RANDR extension by adding extension RANDR to the `TrustedExtensionsPolicy` file.

---

**Note** – The `xdpyinfo` command might still list this extension, but the extension is disabled.

---

For more information, see the [TrustedExtensionsPolicy\(4\)](#) man page.

### 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. Create an `xorg.conf` file and store the file in the JumpStart directory of the JumpStart server.

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

For instructions about how to perform a JumpStart installation, see the *Oracle Solaris 10 8/11 Installation Guide: Custom JumpStart and Advanced Installations*. Chapter 4 includes information about the JumpStart rules file. Chapter 5 contains a section about finish scripts.

## File Systems

The following file system bugs apply to this Oracle Solaris 10 release.

### ZFS Dynamic LUN Expansion Restriction (6241086)

A logical unit number (LUN) does not expand dynamically in an existing ZFS storage pool. To dynamically expand a LUN in an existing ZFS storage pool by using the `autoexpand` property or the `zpool online -e` command, you must contact [My Oracle Support](#) for the required patches.

**Workaround:** Consider the following workarounds:

- Attach a larger LUN to the pool by using the `zpool attach` command. After the larger LUN is resilvered, detach the smaller LUN by using the `zpool detach` command.
- Replace the smaller LUN with a larger LUN by using the `zpool replace` command.

## The config/local\_only Property in sendmail Must Not Be Set to true (6970172)

The sendmail patch 142436-03 and its revisions 04 to 08, modifies the config/local\_only property to true.

```
$ svcprop -p config/local_only smtp:sendmail
true
```

This modification allows sendmail to accept requests only from the local host.

**Workaround:** After adding patch 142436-03 or its revisions 04 to 08, in order for sendmail to accept requests from other hosts, make the following changes:

1. Reset the config/local\_only property to false.

```
# svccfg -s svc:/network/smtp:sendmail setprop config/local_only=false
```

2. Refresh and restart the sendmail service.

```
# svcadm refresh smtp:sendmail
# svcadm restart smtp:sendmail
```

## x86: ata Driver 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, a 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 reinstallation of the Oracle Solaris OS.
- **Workaround 2:** Install the Oracle Solaris OS on a disk on a controller that 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 the Oracle Solaris OS so that a single processor is active. Perform the following steps from the GRUB menu:
  1. Type `e` to edit your selected entry.
  2. Navigate to the line that begins with “kernel.”
  3. Type `e` to switch to GRUB edit mode.
  4. Append `-kd` to the line.
  5. Press Enter to accept the change.
  6. Type `b` to boot the selected 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 10/09 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:
    - a. Become the superuser when the system boot is completed.
    - b. Open the `/etc/system` file.
    - c. Add the following line:
 

```
set use_mp = 0
```
- **Workaround 5:** Disable the microcode update. Type the following command:
 

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

The microcode update can be invoked manually after the system is up by typing the following command:

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

## zoneadm install Command Fails With a ZFS Legacy Mount (6449301)

If a non-global zone is initially configured with a ZFS file system to be mounted with the `add fs` subcommand and the configuration 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, ZFS does not meet the POSIX compliance tests under the following conditions:

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

### Related CRs:

- 6362314
- 6362156
- 6361650

## fdisk -E Command 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.

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

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

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

**Workaround:** 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 back up the `tar` or `cpio` archive.

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

If you add the `SUNWzfs` package from a Solaris 10 10/09 release to a system that runs a release prior to the Solaris 10 6/06 release that 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 release prior to the Solaris 10 6/06 release.

## Failure to Synchronize File System on Panic (6250422)

If a host panics when file system I/O is being sent to a target that is connected by using the Oracle 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 a journaling file system such as UFS. Starting with the Oracle Solaris 10 OS, UFS logging is enabled by default. For more information about UFS, see “[What’s New in Oracle Solaris File Systems?](#)” in *System Administration Guide: Devices and File Systems*.

## Upgrading From Some Oracle Solaris 10 Releases Requires Remounting of File Systems

For all Oracle Solaris 10 releases, after you upgrade an NFSv4 server, 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. If the unmounting fails, you might need to forcibly unmount the file system by using the `umount -f` command. Alternatively, you can reboot the client.

## NFSv4 Access Control List Functions Might Work Incorrectly

NFSv4 access control list (ACL) functions might work incorrectly if clients and servers in the network are installed with different Oracle 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 Oracle Solaris 10 Beta software
- A server that is running Oracle Solaris 10 software

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

Operation	Client Oracle Solaris 10 OS	Server Oracle Solaris 10 OS	Result
get ACL	Oracle Solaris 10 Beta	Oracle Solaris 10 OS	Fabricated ACL *
get ACL	Oracle Solaris 10 OS	Oracle Solaris 10 Beta	Works correctly
set ACL	Oracle Solaris 10 Beta	Oracle Solaris 10 OS	Works correctly
set ACL	Oracle Solaris 10 OS	Oracle Solaris 10 Beta	Error: EOPNOTSUP

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

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

A system cannot generate a crash dump on a partition that is equal to or greater than 1 Tbyte in size. If a partition of this size is on a system, the following might occur after the system boots following 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.

## Hardware-Related Issues and Bugs

The following hardware-related issues and bugs apply to this Oracle Solaris 10 release.

### SPARC: System Might Hang if the Elastic Policy is Set (6989192)

sun4v systems running the Oracle Solaris 10 8/11 operating system that have the power management (PM) elastic policy set on the ILOM service processor might hang when you log in or execute commands.

**Workaround:** Do not set the PM elastic policy on a system that is running the Oracle Solaris 10 8/11 operating system. Instead, use the PM performance policy.

### System Panic Might Occur During DR operations for Crypto (7048323)

When performing dynamic reconfiguration (DR) operations for crypto on T2 platforms, the system might shut down because of a system panic.

You might see error messages similar to the ones shown in the following example:

```
panic[cpu0]/thread=30159724a00: mutex_destroy: bad mutex,
lp=300bde6a190 owner=301eb4cc100 thread=30159724a00

000002a106c675f0 n2cp:n2cp_cwq_q_unconfigure+c4 (300bdd6d000, 300bde6a030, 1000,
300bde6a190, 1122f40, 0)
%l0-3: 000000000180c000 0000000000000000 00000000018baf10 00000000018bac00
```

```
%l4-7: 0000000000000000 0000000000000000 0000000000000000 00000007bb8c00  
000002a106c676a0 n2cp:n2cp_offline_cpu+150 (300bde6a018, 2000, 300bdd6d000, 0, 0
```

**Workaround:** Unload the n2cp driver.

## SPARC: Disk Warning Is Displayed When Booting the Oracle Solaris OS (7047435)

When a hard disk drive is hot-plugged and you boot the Oracle Solaris OS, the following warning message is displayed:

```
'genunix: WARNING: preconfig failed: disk' when configure hard disk drive for removal
```

Ignore this warning message.

## SPARC: Dynamic Reconfiguration Operations Fail on an OPL Platform (7060498)

Dynamic reconfiguration (DR) operations might fail on an OPL platform when a memory board is being removed from a domain.

You might see error messages similar to the ones shown in the following example:

```
unconfigure SB3: Device busy: dr@0:SB3::pci6  
XSB#01-3 could not be unconfigured from DomainID 2 due to operating system error.
```

**Workaround:** Execute the DR operations after disabling the fmd service. For example:

1. Disable the fmd service.  

```
# svcadm disable fmd
```
2. Perform the DR operations.
3. Enable the fmd service.  

```
# svcadm enable fmd
```

## x86: System Shuts Down If ata Disks or Controllers Are Replaced on a Running Machine (7059880)

Hot-plug is not supported for ata devices. A system panic occurs and the system shuts down if ata disks or controllers are removed or replaced on a running machine. Also, do not use the modunload command to unload the ata driver.

## SPARC: System Panic Might Occur When Executing Bulk Crypto Operations on sun4v T3 Machines (7041435)

When executing bulk crypto operations, a system panic message is displayed in the `common/os/cpu.c` file on sun4v T3 machines and the system shuts down.

You might see error messages similar to the ones shown in the following example:

```
panic[cpu57]/thread=3015d0a2580: assertion failed:
t->t_affinitycnt > 0, file: ../../common/os/cpu.c, line: 461

000002a1007d4830 genunix:assfail+78 (1122cb8, 1122c00, 0, 135e400, 1cd, 1981800)
%l0-3: 000003006157e000 0000000000STEP DETECTED PANIC
```

**Workaround:** Disable `ulcwq` by adding the following line in the `/platform/sun4v/kernel/drv/n2cp.conf` file:

```
n2cp-use-ulcwq=0;
```

After modifying the `n2cp.conf` file, reboot the system or run the `update_drv n2cp` command.

## Message Signaled Interrupt (MSI-X) Cannot Be Retargeted When the apix Module Is Loaded (7058060)

MSI-X cannot be retargeted when the `apix` module is loaded. When you use the `dladm set-linkprop` command to specify CPUs for a NIC, the `dladm show-linkprop` command does not reflect the updated CPU information for the NIC.

**Workaround:** Use the `pcitool` command.

```
pcitool path-of-root-complex -i interrupt -w targeted-CPU
```

**For example:**

```
# pcitool /pci@400 -i b -w 8
```

The following output is displayed:

```
# 0x7,0xb -> 0x8,0xb
```

For information about the `pcitool` command, refer to the [pcitool\(1M\)](#) man page.

## SPARC: Issuing XIR on Oracle Solaris 10 9/10 OS Causes a Failure to complete trap processing Error (6962156)

The Oracle Solaris 10 9/10 release includes a new feature that provides enhanced observability of CPU performance data through `kstats`. This feature is disabled by default, and enabled by adding the `set cu_flags=1` entry to the `/etc/system` file and rebooting the system. Before enabling this feature on any Mx000 SPARC OPL platform, update the OBP platform firmware to XCP1093 or later. Failure to update the OBP platform firmware before enabling the feature can result in a subsequent failure of an externally initiated reset (XIR), cause OBP to hang, or cause the `kmdb` command to fail.

For further information, refer to the README file that accompanies the XCP1093 firmware at the download site.

## x64: PCI Subsystem ID Changes in ConnectX Firmware 2.6.0 From Mellanox (6810093)

Upgrading the ConnectX firmware to version 2.6.0 or higher on a running system might cause problems in some HCAs and x64 platforms. This issue affects only Mellanox-branded HCAs. Sun-branded PCIe HCAs, EMs, and NEMs, and SPARC platforms are not affected.

You might be unable to boot the system or the system might hang during boot. `ibd` (IPoverIB) instance numbers might change and prevent the system from booting and plumbing `ibd` devices.

Choose one of the following workarounds.

**Workaround 1:** Before rebooting the system after updating the firmware using `cxflash`, remove the `ibdx` instances from the `/etc/path_to_inst` file and the `/dev` directory. Perform the following steps:

1. Log in as the root user and list the relevant devices.

The device tree information might look like the following example:

```
# ls -R /devices | grep 15b3
/devices/pci@0,0/pci10de,5d@e/pci15b3,634a@0
/devices/pci@0,0/pci10de,5d@e/pci15b3,634a@0/ibport@1,ffff,ipib
/devices/pci@0,0/pci10de,5d@e/pci15b3,634a@0/ibport@1,ffff,ipib:ibd
/devices/pci@0,0/pci10de,5d@e/pci15b3,634a@0/ibport@2,ffff,ipib
/devices/pci@0,0/pci10de,5d@e/pci15b3,634a@0/ibport@2,ffff,ipib:ibd1
/devices/pci@0,0/pci10de,5d@e/pci15b3,634a@0:devctl
```

---

**Note** – Device specifics vary depending on the Mellanox-branded card installed.

---

2. Edit the `path_to_inst` file.



- a. Make a backup copy of the existing `path_to_inst` file.
 

```
# cp /etc/path_to_inst /etc/path_to_inst.backup
```
- b. In the `path_to_inst` file, search for lines that contain `ibd` and `hermon`, and delete those lines. Save and close the file.
3. Remove the entries in the `/dev` directory.
 

```
# rm /dev/ibd?*
```
4. Reboot the system.

The system boots normally, and the corresponding device tree looks like this:

```
# ls -R /devices | grep 15b3
/devices/pci@0,0/pci10de,5d@e/pci15b3,5@0
/devices/pci@0,0/pci10de,5d@e/pci15b3,5@0/ibport@1,ffff,ipib
/devices/pci@0,0/pci10de,5d@e/pci15b3,5@0/ibport@1,ffff,ipib:ibd0
/devices/pci@0,0/pci10de,5d@e/pci15b3,5@0/ibport@2,ffff,ipib
/devices/pci@0,0/pci10de,5d@e/pci15b3,5@0/ibport@2,ffff,ipib:ibd1
/devices/pci@0,0/pci10de,5d@e/pci15b3,5@0:devctl
```

**Workaround 2:** If you reboot the system before updating the `path_to_inst` file and the `/dev` directory, the system might hang. In such a case, perform the following steps:

1. Power off the system and remove the HCA from the bus.
2. Reboot the system without the HCA installed.
3. Once the system is back on, follow steps 2 and 3 in Workaround 1.
4. Power off the system.
5. Reinstall the HCA.
6. Reboot the system.

If the system reboots but the `ibd` interfaces do not automatically plumb, you might have to manually rename the `/etc/hostname.ibd<?>` files to reflect the current device configuration.

## 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 Sun Fire 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:zfs_arc_max = 0x20000000
```

## **mpathadm Command 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` file 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 Frame Buffers (6321362)**

If the background processes for the registration tool are left running, the Elite3D and Creator3D frame buffers stop power management. This failure reduces 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
```

## **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.oracle.com/technetwork/server-storage/solaris/overview/usb-faq-140616.html>.

## Supported USB Devices and Corresponding Hub Configurations

This Oracle Solaris 10 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 3-1 USB Devices and Configurations

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

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

This release of Oracle Solaris 10 for x86 platforms has the following limitations related to certain drivers and interfaces:

- **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 drive remain in 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 drive, use the `volcheck` command 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 remain in full power mode.

## x86: Manual Configuration Required to Specify Non-U.S. 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, the installation will use the default keyboard specification, which is inconsistent with the system's actual keyboard type.

Choose one of the following workarounds.

**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 screen is displayed, press Esc.

---

**Note** – The information on the Proposed Window System Configuration For Installation screen, 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:** To change the keyboard type on a system that is already running the Oracle 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.

## 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 preceding list.

## Some DVD-ROM and CD-ROM Drives Fail to Boot the Oracle Solaris 10 OS (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 the Sun SCSI DVD-ROM drive (X6168A). With marginal media, the DVD-ROM occasionally experiences timeout errors. The only exceptions are Oracle 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)

## Compiler-Related Issues

The following compiler-related issue applies to this Oracle Solaris 10 release.

### SPARC: Copy Relocation Does Not Work (7083331)

The copy relocation technique does not work in case of a partially initialized bss. As a result, applications that run on SPARC might not execute. The applications might fail to start or read incorrect data values at runtime.

To fix this issue, apply patch 147436-01.

## Localization Issues

This section describes localization issues that apply to Oracle Solaris 10 OS.

### Swedish Software Translations Note

Swedish software translations are no longer updated since the Solaris 10 8/07 release except for translations provided by communities. Therefore, updated messages are displayed in English.

**Workaround:** None.

### Multiple Input Method Switcher Applications Appear in Trusted Java Desktop System

When you log in to the Trusted Java Desktop System with UTF-8 or Asian locales, the Input Method Switcher application, `iim-panel`, appears per label by default. Therefore, in a multiple-label environment, multiple `iim-panel`s appear, which could be confusing to the user.

No error message is displayed.

**Workaround:** Stop using the `iim-panel`. Perform the following steps:

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

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

1. Go to the Misc tab in the `iim-properties` editor.
2. Select the Enable Language/Script Choice window using the Hotkey option.
3. Click the Apply or OK button.

---

**Note** – Once Attach to Each Application is selected, the language switcher list will not be displayed for GTK applications. You can switch the input language by using Hotkey.

---

## Wnn8 Japanese Input Method

The 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.

## 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 are 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. Press Control-Shift to switch input methods.

## AltGr Key Does Not Work As a 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.

Choose one of the following workarounds.

**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.

## x86: Arabic Text Not Appearing in ar Locales

If your x86 system is using Xorg as the default X server, 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 the `/usr/dt/config/Xservers` file.

- 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.

## Several Arabic Fonts Do Not Work in GNOME Desktop (6384024)

When you select certain Arabic fonts in the GNOME desktop, the characters do not display. This problem appears when you select fonts for applications, the desktop, or the window title by 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 when mouse button 1 is clicked first after login. This problem occurs with the Java Desktop System. No error message is displayed.

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

## Migration Note for UTF-8 Locales

When migrating to UTF-8 locales, the files affect the method that you use to import or export data.



## Emails Saved as Portable Format

Modern email messages 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, you must convert the encoding. For example, to convert a plain text file encoded in Traditional Chinese big5 to UTF-8, you would run the following command:

```
iconv -f big5 -t UTF-8 input-filename > output-filename
```

You can also use File System Examiner for the encoding conversion.

You can use 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, you must convert the encoding. 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. 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 the 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 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 box:

```
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, you would type 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 that 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, type the following command:

```
eng LANG=locale LC_ALL=locale GNOME-TERMINAL --disable-factory.
```

Instead of opening a new terminal window in a legacy locale, you can switch the locale setting from UTF-8 to a legacy locale in the current terminal window. Change the encoding through the Set Character Encoding menu in the terminal window. Then, you must also set the LANG and LC\_ALL environment variables to the current shell.

## Hardware for Some Keyboard Layouts Type 6 and 7 Not Available

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

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

---

Albania	Latvia
Belarus	Lithuania
Brazil Portugese	Malta UK
Croatia	Malta US
Czech	Poland
Denmark	Romania
Estonia	Serbia and Montenegro
French Canadian	Slovakia
Hungary	Slovenia
Iceland	

---

Choose one of the following workarounds.

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

## Networking Issues

The following networking issues apply to this Oracle Solaris 10 release.

### BIND 9.6 Denies Recursion To Non-Local Networks (7046009)

With the BIND 9.6-ESV-R3 release, the default recursive server settings significantly restrict servers that were previously able to recursively query non-local networks.

**Workaround:** Create access control lists (ACLs) that match hosts and networks that should be allowed access to cache and recursion on the servers.

For example:

```
acl "trusted" {
    192.168.0.0/16;
    10.153.154.0/24;
    localhost;
    localnets;
};

options {
    ...
    allow-query { any; };
    allow-recursion { trusted; };
    allow-query-cache { trusted; };
    ...
};
```

In this example, the `trusted` ACL includes `192.168.0.0/16` and `10.153.154.0/24` as sample networks that would require access. You must replace these sample networks with networks

that correctly reflect your environment. These ACLs enable anyone to query your server for authoritative data, but only those hosts within the trusted ACL will have access to your cache and recursion.

## Configuring Tunnels With the Same Source Address (4152864)

When two tunnels are configured with the same tunnel source address, packets are not received on the second tunnel. This problem is a serious issue for 6to4 tunnels.

**Workaround:** Do not configure a 6to4 tunnel and an automatic tunnel (atun) with the same tunnel source address. For information about automatic tunnels and the atun command, refer to the tun(7M) man page.

## 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 console sets the DOI to 0 and 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 the Oracle Solaris 10 OS

In this 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, you must manually perform additional configuration steps.

**Workaround:** The routeadm command 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.

# Oracle Solaris Commands and Standards

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

## SPARC: Incorrect Results Are Displayed for the `cpustat` Command on a T4 1.2 Chip

The `cpustat` command might return incorrect results on a T4 1.2 chip. There could be a mismatch between event names and their corresponding values.

The Oracle Solaris OS programs the performance counter register to count a particular event. Some event names and description of what the event count has changed in the T4 1.2 chip. The Oracle Solaris PCBE module has to match these new values.

To fix this issue, apply patch 7047568.

## `winbind` Command Fetches Only the First 1000 Active Directory Users

This bug occurs when using the Samba server with `winbind` in an Active Directory environment. The Solaris 10 10/09 release includes the Samba 3.0.28 software version. When querying all the users or more than 1000 users from the Active Directory server, `winbind` fetches only the first 1000 results.

**Workaround:** None.

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

The following 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 3.00 No Longer Sets Some Environment Variables

The Oracle Solaris 10 OS includes Bash 3.00. This shell no longer automatically exports the following variables to the environment:

- HOME
- HOSTNAME
- HOSTTYPE
- MACHTYPE
- OSTYPE
- PATH
- SHELL
- TERM

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 the Oracle 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` Version Rejects `setenv` Variable Names That Use a Dash or an Equal Sign

In the Oracle 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 equal sign. Scripts that contain `setenv` lines and that work in earlier Oracle Solaris versions might generate errors in the current release. The following error message is displayed:

setenv: Syntax error

For more information, refer to the `tcsh` man page for the Oracle 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 unless 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 the `fseek()` or `clearerr()` function on the stream to read additional data after the EOF condition has been reported.

## 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. Scripts should no longer assume fixed output columns.

**Workaround:** Scripts should use the `-o` option of the `ps` command.

For more information, see the `ps(1)` man page.

## Solaris Volume Manager Bugs

The following Solaris Volume Manager bugs apply to the Oracle Solaris 10 8/11 release.

### Solaris Volume Manager Does Not Remove Devices Correctly If `fdisk` Does Not Have Valid Entries

The `bcm_sata` SATA HBA driver supports SATA disks and SATA ATAPI devices. The driver supports RD1000, which is a removable SATA ATAPI device. The volume manager (`vol`) does not create a node when the media in RD1000 does not have valid entries in `fdisk`. Therefore, the `rmformat` command does not perform as expected.

**Workaround:** Use the following workaround:

1. Turn off the volume manager (`vol`).  

```
# /etc/init.d/volmgt stop
```
2. Run the following commands as needed:
  - `fdisk`
  - `rmformat`
  - `format`
  - `newfs`
  - `mount`
3. Restart the volume manager.  

```
# /etc/init.d/volmgt start
```

### 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 the Oracle Solaris installation programs, see the Oracle Solaris 10 Installation Guides.

---

## Java Desktop System Issues

This section describes issues that apply to the Java Desktop System (Java DS) in the Oracle Solaris 10 OS.

### Email and Calendar Application

This section describes issues related to the Email and Calendar application.

#### Problem With Changing Authentication Type (6246543)

After you change the authentication type for the incoming mail server, the Email and Calendar application might not work correctly.

**Workaround:** Restart the Email and Calendar application.

### 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 host name is set up correctly in the `/etc/hosts` file. Perform the following steps:

1. Set the host name 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 host name 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 opens instead.

**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 in Java Desktop System 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, type the following command:

```
% gnome-cleanup exit
```

5. Log in again.

Your GNOME preferences are now reset.

## Problem 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 Synchronized With Group Permissions (6464485)

The Group permissions in the Permissions tab should be the same as the Mask permissions in the Access Tab, but sometimes 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.

## strftime(3c) Should Support GNU Extension in %-m and %-d (6448815)

The Java Desktop System menu bar and some applications, such as Evolution, incorrectly display the 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. Back up the `/usr/share/locale/LC_MESSAGES/gnome-panel*.mo` file.
2. Download the `gnome-panel.gnome-2-16.zh_CN.po` file from [http://l10n.gnome.org/POT/gnome-panel.gnome-2-16/gnome-panel.gnome-2-16.zh\\_CN.po](http://l10n.gnome.org/POT/gnome-panel.gnome-2-16/gnome-panel.gnome-2-16.zh_CN.po) and save the file in the `/tmp` directory.
3. In the `gnome-panel.gnome-2-16.zh_CN.po` file, replace all occurrences of `%-m` with `%0m`, 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
```
5. Copy the file back to the `/usr/share/locale/LC_MESSAGES/` directory.
6. Log out of the system and log in again.

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

If your Oracle Solaris 10 x86 based 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 values 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 dt login, follow these steps:
    - a. In the dt login 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
```

This command creates the `xorg.conf.new` file 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 file by adding 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 noted 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 Gnome Display Manager:
    - a. Type **svcadm enable application/gdm2-login**.
    - b. Reboot the system.
  - If you are using dt login, 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 the 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.

## 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:

- - The application nautilus has quit unexpectedly
- The Catalog view encountered an error while starting up
- The Image Collection view encountered an error while starting up

**Workaround:** None. When these errors occur, restart File Manager or click the Restart Application button on the crash dialog box.

## System Administration

This section describes system administration bugs in this Oracle Solaris 10 OS.

### Package Database Contains Path Names That Do Not Exist (7054481)

When you run the `pkgchk -n` command after an upgrade or after performing a Live Upgrade, you might find that several packages contain path names that do not exist. Because of package history issues, the `/var/sadm/install/contents` file might not correctly reflect the state of some of the upgraded packages for which the files were removed.

You might see error messages similar to these examples:

```
ERROR: /usr/jdk/instances/jdk1.6.0/bin/jhsearch
pathname does not exist
```

**Workaround:** Remove the paths from the contents database.

1. Make sure you are in single-user mode with the root role.
2. Remove the paths for any files in the package that cause errors.

```
# removef package path
```

3. Commit the changes.

```
# removef -f package
```

For example:

```
# removef SUNWjhdev /usr/jdk/instances/jdk1.6.0/bin/jhsearch
# removef SUNWjhdev /usr/jdk/instances/jdk1.6.0/bin/jhindexer
# removef -f SUNWjhdev
```

## SPARC: 64-bit Version of the libsoftcrypto Library Is Slow (7048794)

The 64-bit version of the `libsoftcrypto` library runs slowly because it does not use the T4 crypto instructions. As a result, applications that use the 64-bit version of the `libsoftcrypto` library can encounter performance degradation.

## `patchrm` Command Is Not Supported After Applying Patch 144500/144501 (7033240)

If you install kernel patch 144500 on a SPARC based system or patch 144501 on an x86 based system, the existing ZFS storage pools on the system are upgraded. However, if you use the `patchrm` command to remove the patch after the root pool is upgraded, the system does not boot because the upgraded pool version does not match the running OS. Therefore, if the root pool is upgraded and the patch is removed, the system does not boot.

If an existing nonroot pool is upgraded and the patch is removed, the SMF local file system service goes into maintenance mode because the local ZFS mounts will fail. Therefore, if a non-root pool is upgraded and the patch is removed, the local ZFS mounts fails.



---

**Caution** – Do not remove this kernel update (KU) patch with the `patchrm` command.

---

## Lucreate Introduces Latency on Slower UFS Systems (7051757)

Performing a live upgrade on a slower UFS system by using the `lucreate` command takes more time.

## The Availability Suite Module `sdbc` Fails to Load During Boot (6952222)

In this Oracle Solaris 10 release, the `sdbc` module fails to load during boot and gives the following error message:

```
[ID 819705 kern.notice]/usr/kernel/drv/sparcv9/sdbc: undefined symbol  
WARNING: mod_load: cannot load module 'sdbc'
```

**Workaround:** Install patch 123246-07 for SPARC based systems and patch 123247-07 for x86 based systems.

## Oracle Solaris 10 9/10 Clock Stops on Oracle VM 2.2 (6952499)

Virtual machines (VMs) that are running Oracle Solaris 10 9/10 guests can be subject to the following problems:

- The time of day clock can stop moving forward.
- Sleep can hang.
- The guest VM can hang entirely.

**Workaround:** The Oracle Solaris guests must be pinned to physical CPUs. Pin the domain's virtual CPUs to the host's physical CPUs as follows:

```
# xm vcpu-pin domain vcpu cpus
```

See the `xm(1)` man page for more information.

## SPARC: FKU 137137-xx Patch Does Not Support Third-Party Volume Manager Software

The FKU 137137-xx patch does not support third-party volume manager software, with some exceptions. This lack of support is due to prepatch, postpatch, and postbackout implementation. If you use unsupported third-party volume manager software, you cannot apply the FKU patch. The following error message is displayed during patch installation:

```
unsupported root slice type xxxxx
```

Note that the Fujitsu and Veritas Volume Manager software is supported.

**Workaround:** None.

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

On systems that have an AHCI compliant SATA controller, the BIOS setup typically enables the controller to be set in AHCI, legacy, or RAID modes. The Oracle Solaris OS supports AHCI and legacy modes.

The SATA mode setting in BIOS must not be changed after an initial Oracle Solaris installation. The SATA mode setting must also not be changed before or after an Oracle Solaris upgrade. If the SATA mode BIOS setting is modified after the Oracle Solaris 10 OS is installed, the system will reset and fail to boot without indicating what led to the failure.



**Workaround:** If a boot failure occurs as a result of changing the BIOS setting, revert back to the original setting in order to boot the Oracle Solaris OS.

## 32-bit: Possible Error With Applications When Obtaining the File System State on Large File Systems (6468905)

When run on large file systems, for example, ZFS, applications using the `statvfs(2)` or `statfs(2)` functions 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 the `statvfs64()` function instead.

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

On systems running an Oracle Solaris OS release that is not zones aware, using the `patchadd -R` command, 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 case.

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

This problem occurs while you are 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 any installed non-global zones are used as the alternate root path, restrict the use of the `-R` option in all cases.

---

For more information, see the following man pages :

- [patchadd\(1M\)](#)

- [patchrm\(1M\)](#)
- [pkgadd\(1M\)](#)
- [pkgrm\(1M\)](#)

Choose one of the following workarounds.

**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:

- SPARC: Patch ID 119254-19
- x86: Patch ID 119255-19

**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 Oracle Solaris 10 release, as the active OS. Then install and uninstall the Oracle Solaris 10 packages and patches without using the `-R` option.

## Sun Patch Manager Tool 2.0 Incompatible With Previous Versions of the Tool

A system that runs Sun Patch Manager 2.0 can manage remote systems that run Patch Manager, including Sun Patch Manager 1.0.

However, a system with an earlier version of Patch Manager cannot manage remote systems that run Patch Manager 2.0. Earlier versions include the following:

- Sun Patch Manager Base Software 1.x
- Sun Patch Manager 1.0

---

**Note** – Common Information Model/Web Based Enterprise Management (CIM/WBEM) support for Patch Manager 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 diskless client.

## SPARC: smoservice delete Command Does Not Successfully Remove All Service Directories (6192105)

If you use the smoservice delete command to remove a diskless client service, the command does not successfully remove all the service directories.

**Workaround:** Follow these steps:

1. Make sure that no clients exist that use the service.

```
# unshare /export/exec/Solaris_10_sparc.all
# rm -rf /export/exec/Solaris_10_sparc.all
# rm -rf /export/exec/.copyofSolaris_10_sparc.all
# rm -rf /export/.copyofSolaris_10
# rm -rf /export/Solaris_10
# rm -rf /export/share
# rm -rf /export/root/templates/Solaris_10
# rm -rf /export/root/clone/Solaris_10
# rm -rf /tftpboot/inetboot.sun4u.Solaris_10
```

2. If this file server does not provide functions or resources for any other services, remove the following entry from the /etc/bootparams file.

```
fs1-24 boottype=:os
```

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 running the Oracle Solaris 10 OS, delete the file.
- If the file server is running the Oracle Solaris 10 OS, remove all entries after the first three lines. The deleted lines specify the service USR\_PATH and SPOOLED\_ROOT packages in /export/root/templates/Solaris\_10 and the supported platforms.



# End-of-Software Support Statements

---

This chapter provides end-of-software support statements for the Oracle Solaris OS.

## Features Removed in This Release

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

### Adobe Reader

Adobe Reader is not available in this release. The `gpdf` open source PDF viewer is set as the default PDF viewer automatically.

### des Command

The `des(1)` command is no longer supported in this release. Instead, use the `encrypt(1)` command, which provides access to new and secure algorithms.

## Features That Might Be Removed in a Future Release

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

### LP Print Service

The LP print service might not be included in a future Oracle Solaris release.

## SPARC: Legacy System Support

- Support for legacy systems that have included the UltraSPARC I, II, IIe, III, IIIi, III+, IV, and IV+ processor architectures, as reported by the Oracle Solaris `psrinfo -pv` command, might be removed from a future Oracle Solaris release. All SPARC Enterprise M-Series servers and SPARC T-Series servers will continue to be supported.

---

**Note** – Oracle Solaris 10 will continue to be a supported operating system for these affected platforms as per the current Oracle lifetime support policy.

---

- The following SPARC workstations might not be supported in a future Oracle Solaris release:
  - Ultra 2, 3, 5, 10, 30, 60, and 80
  - Sun Blade 100, 500, 1000, 1500, 2000, and 2500

Continue using the Oracle Solaris 10 OS for the remaining life of the hardware. Then, migrate to either an x64 workstation or a Sun Ray desktop.

## rstart Client and rstartd Server

The `rstart` client and `rstartd` server might not be included in a future Oracle Solaris release. To start an X Window system program on another machine, use the X11 forwarding feature of the `ssh(1)` command.

## rdist Command

The `rdist` command might be removed in a future Oracle Solaris release.

## crypt Command

The `crypt(1)` command might be removed in a future Oracle Solaris release. Instead, you can use the `encrypt(1)` command, which provides access to new and secure algorithms, to protect your files.

The `encrypt(1)` command is available starting from this Oracle Solaris 10 release.

## -x and -C Options in the vi, ex, and ed Commands

The `-x` and `-C` options for the `vi(1)`, `ex(1)`, and `ed(1)` commands might be removed in a future Oracle Solaris release. Instead, you can use the `encrypt(1)` command, which provides access to new and secure algorithms, to protect your files.

The `encrypt(1)` command is available starting from this Oracle Solaris 10 release.

## **sysidtool Framework**

Managing the configuration of an Oracle Solaris instance by using the `sysidtool(1M)` framework might not be possible in a future Oracle Solaris release. You can use the `smf(5)` system configuration framework for managing the configuration of an Oracle Solaris instance.

## **Sun OpenGL Software From Oracle for the SPARC Platform**

The Sun OpenGL software from Oracle for the SPARC platform might no longer be included in a future Oracle Solaris release. Instead, you can use the Mesa implementation of `libGL` or the Nvidia OpenGL provided for Nvidia graphics devices on the x64 platform, which provide the same functionality.

## **WU-ftp Server**

The Oracle Solaris FTP server based on `WU-ftp` might not be available in a future release of the Oracle Solaris OS. The `WU-ftp` server might be replaced with a new FTP server.

## **Boot Support in Solaris Volume Manager From Oracle**

The ability to boot from a Solaris Volume Manager (SVM) metadvice might not be supported in the next release of the Oracle Solaris OS.

## **ioctl Floppy Driver and fdformat Utility**

The `ioctl` (`fdio`) floppy driver and the `fdformat` utility might be removed in the next Oracle Solaris release. However, the support for the USB floppy will continue.

---

**Note** – The floppy drivers `fd` and `fdc` are already removed.

---

## **tnf Tracing (3TNF)**

The `tnf` tracing (3TNF) facility might not be available in a future Oracle Solaris release. Instead, use `dttrace(1M)` for tracing purposes.

## Replacing `/etc/power.conf` and `pmconfig` With `poweradm`

The `/etc/power.conf` configuration file and the `pmconfig(1M)` utility might be replaced with the `poweradm(1M)` command in a future Oracle Solaris release. The number of properties that can be configured with the `poweradm(1M)` command will be minimal.

## Replacing Trusted Extensions IPv6 CIPSO With CALIPSO

Oracle might replace the IPv6 Commercial Internet Protocol Security Option (CIPSO) implementation with the IETF CALIPSO standard in a future Oracle Solaris release.

Commercial Internet Protocol Security Option (CIPSO), defined in FIPS PUB 188, is a standard for IPv4. The Trusted Extensions feature of Oracle Solaris has a proprietary IPv6 implementation of CIPSO because no CIPSO equivalent standards existed for IPv6 when Trusted Extensions was released.

IETF has now produced a CIPSO equivalent standard for IPv6, called Common Architecture Label IPv6 Security Option (CALIPSO) or RFC 5570.

The current CIPSO IPv4 support is not affected. CIPSO and CALIPSO are used by Trusted Extensions only.

## `/etc/hostname.interface` Files

The `/etc/hostname.interface` files that are used to store persistent network configuration might be removed in a future Oracle Solaris release.

## Flash Archive Installation Commands

The following flash archive installation commands might not be included in a future Oracle Solaris release:

- `flar(1M)`
- `flarcreate(1M)`

In addition, installations performed by using the `flash_archive(4)` file format might not be supported.



## x86: lsimega Driver Support

The `lsimega(7d)` driver might not be included in a future release. If you are using devices that are driven by `lsimega(7d)`, migrate to `glm(7d)` or upgrade to more recent hardware.

## Removal of QLogic SCSI Ultra160 Device Driver

The `qus` device driver might be removed from a future Oracle Solaris release. The `qus` device driver supports the QLogic Ultra160 SCSI host bus adapter.

## 32-bit SPARC and x86: libmle Library

The `libmle` library might not be included in a future Oracle Solaris release.

## 32-bit SPARC: Removal of Asian SunOS4.x BCP

The support for all versions of Asian SunOS4 BCP might not be included in a future Oracle Solaris release. However, you can continue to use all versions of Asian SunOS4 BCP in Oracle Solaris 10 branded zones.

## 32-bit SPARC and x86: Removal of Legacy Asian Print Filters

The following legacy Asian print filters might not be included in a future Oracle Solaris release:

- `big5.epson.filter(1)`
- `cns.epson.filter(1)`
- `jprconv(1)`
- `jpostprint(1)`
- `jtops(1)`
- `thaifilter(1)`

For text to PS conversion, use the `mp(1)` filter.

## 32-bit SPARC and x86: Removal of Legacy Asian Libraries

The following legacy Asian libraries, including their `xctype` macros, might not be included in a future Oracle Solaris release:

- `libcle`

- `libhle`
- `libkle`

Instead of these libraries, use the standard functions `iconv(3C)` and `wctype(3C)`. Note that you might be able to use these libraries in Oracle Solaris 10 branded zones.

## 32-bit SPARC and x86: Removal of Legacy Asian Commands

The following Asian legacy commands might not be included in a future Oracle Solaris release:

- EUC capable `mailx(1)`, `talk(1)`, `in.comsat(1M)`, and `install_comsat(1M)` under the `/usr/SUNWale/bin` directory
- Legacy utilities such as `jaio.h(7i)`, `jtty(1)`, `kanji(1)`, `evftobdf(1)`, `runb5(1)`, and `mkcodetab(1)`
- Legacy code set that include the following converters:
  - `ja locale` – `euctoibmj` `ibmjtoeuc` `euctojis` `jistoec` `euctosj` `sjtoeuc` `jistosj` `sjtojis`
  - `ko locale` – `wansungtojohap` `johaptowansung` `comptonb` `nbtocomp` `comptopack` `packtocomp`
  - `zh locale` – `cgbtoeuc` `euctocgb` `cnstoeuc` `euctocns`
  - `zh_TW locale` – `big5toeuc` `euctobig5` `cnsconv`

Use the `iconv(1)` command instead of the legacy code set converters. Note that you might be able to use these commands in Oracle Solaris 10 branded zones.

## Diskless Client Functionality

The diskless client functionality might not be supported. The following commands might be affected:

- `smdiskless(1M)`
- `smoservice(1M)`

## SPARC: SunOS 4 Binary Compatibility Support

All versions of the SunOS 4 binary compatibility support might not be included in a future Oracle Solaris release. However, the support for all versions of SunOS 4 binaries will continue when used in Oracle Solaris 10 branded zones.

## 32-bit x86: sk98sol Driver

The `sk98sol` driver for SysKconnect/Marvell SK-Net gigabit Ethernet devices might be removed in a future Oracle Solaris release.

## IP-Forwarding SMF Services

IP-forwarding SMF services manage system-wide forwarding configuration. The following IP-forwarding SMF services might be removed in a future Oracle Solaris release:

- `svc:/network/ipv4-forwarding:default`
- `svc:/network/ipv6-forwarding:default`

## x86: 32-bit X Servers and Drivers

The 32-bit versions of the following X servers for x86 platforms might not be included in a future Oracle Solaris release:

- Xephyr
- Xorg
- Xvfb
- Xvnc

---

**Note** – SPARC platforms provide only the 64-bit versions of these servers.

---

Any Xorg loadable module, including video drivers, input device drivers, and extensions, that are not provided in a 64-bit version will not be used. If a usable video driver is not found, Xorg will use the `vesa` driver.

The following table shows x86 video devices that include the Xorg drivers in 32-bit versions.

Video Device	Driver Name
Alliance Promotion	<code>apm</code>
Ark Logic	<code>ark</code>
Chips & Technologies	<code>chips</code>
3Dlabs/TI glint	<code>glint</code>
Number Nine Imagine 128	<code>i128</code>
Intel i740	<code>i740</code>

Video Device	Driver Name
NeoMagic	neomagic
Rendition Verite	rendition
S3	s3
S3 ViRGE & Trio3D	s3virge
S3 Savage	savage
Silicon Motion	siliconmotion
SiS & XGI	sis
3Dfx	tdfx
DEC 21039/TGA	tga
Tseng Labs	tseng

The man pages for each driver give more information on the supported devices. If you want to build and support the driver yourself, the source for these drivers is available from the X.Org foundation at <http://www.x.org/>.

## **SYSV3 SCO Compatibility Environment Variable**

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

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

## **passmgmt Command**

The passmgmt command might be removed in a future Oracle Solaris release. You can use the following commands instead, which provide the same functionality:

- [useradd\(1M\)](#)
- [userdel\(1M\)](#)
- [usermod\(1M\)](#)
- [roleadd\(1M\)](#)
- [roledel\(1M\)](#)

- `rolemod(1M)`

## Locale Administrator

The `localeadm(1M)` command might not be available in a future Oracle Solaris release.

## SIP Express Router (SER)

SER and SERWeb might not be included in a future Oracle Solaris release.

## Jakarta Tomcat 4 Interfaces in the Oracle Solaris OS

Jakarta Tomcat 4 might not be included in a future Oracle Solaris release. You can migrate to either Jakarta Tomcat 5.5 or Jakarta Tomcat 6, which provide the same functionality.

## x86: lx Branded Zone

The lx brand uses the branded zones framework to enable Linux binary applications to run unmodified on a machine with an Oracle Solaris OS kernel.

Support for the lx branded zone might be removed in a future Oracle Solaris Zones release.

## SPARC Workstations

The following SPARC workstations might not be supported in a future Oracle Solaris release:

- Ultra 2, 3, 5, 10, 30, 60, 80
- Sun Blade 100, 500, 1000, 1500, 2000, 2500

Continue using the Oracle Solaris 10 OS for the remaining life of the hardware. Then, migrate to either an x64 workstation or a Sun Ray desktop.

## Plotting Commands

The following plotting commands might not be supported in a future Oracle Solaris release:

- `aedplot`
- `atoplot`
- `bgplot`

- `crtplot`
- `dumbplot`
- `gigipplot`
- `hp7221plot`
- `hpplot`
- `implot`
- `plot`
- `plottoa`
- `vplot`
- `t300`
- `t300s`
- `t4013`
- `t450`
- `tek`

In addition, the `-g` option of LPR might no longer be supported in a future Oracle Solaris release.

## MySQL 4

MySQL 4 RDBMS might not be supported in a future Oracle Solaris release. You can migrate to MySQL 5.1, which provides the same functionality.

## Apache httpd 1.3

Apache httpd 1.3 might not be supported in a future Oracle Solaris release. You can migrate to Apache httpd 2 which provides the same functionality.

## audit\_user Database

The `audit_user(4)` database and the `getuusernam(3BSM)` accessor functions might be removed in a future Oracle Solaris release. The per-user audit preselection flags might be specified differently.

## Audit Daemon Interfaces

The following interfaces that are used by the Oracle Solaris audit daemon might not be supported in a future release:

- `auditsvc(2)`
- `audit_data(4)`

## Oracle Solaris Audit Commands

The following Oracle Solaris audit interfaces might be replaced with an equivalent functionality in a future release of Oracle Solaris:

- `audit_control(4)`
- `audit_startup(1M)`
- `bsmconv(1M)`
- `bsmrecord(1M)`
- `bsmunconv(1M)`

## Auditing File Size Statistics and File Size Restriction Interfaces

The auditing file size statistics and file size restriction interfaces `getfsize` and `setfsize`, consisting of the similarly named subcommands within the `auditon(2)` system call and the options to the `auditconfig(1M)` command, might not be supported in a future Oracle Solaris release.

## Drivers for Various SPARC Compatible Graphics Cards

The following drivers for graphics cards on the SPARC platform might not be included in a future Oracle Solaris release.

Card/Device	Driver Name
Creator, Creator3D	<code>ffb</code>
Elite3D	<code>afb</code>
Expert3D, Expert3D Lite	<code>ifb</code>
GX, GXplus, TurboGX, TurboGXplus	<code>cg6</code>
PGX	<code>m64</code>
PGX32	<code>gfxp</code>
PGX64	<code>m64</code>
Sun Blade 100/150 on-board graphics	<code>m64</code>
Ultra 3 laptop on-board graphics	<code>m64</code>
Ultra 5/10 on-board graphics	<code>m64</code>
XVR-200	<code>mko</code>

Card/Device	Driver Name
XVR-500	i fb
XVR-600	j fb
XVR-1000	g fb
XVR-1200	j fb
XVR-2500	k fb
XVR-4000	zulu

## Short Form Locales

The following table lists locales that might be removed in a future Oracle Solaris release. The table also lists the corresponding replacement locales.

Locales to be Obsoleted	Replacement Locales
ar	ar_EG.IS08859-6
bg_BG	bg_BG.IS08859-5
ca	ca_ES.IS08859-1
ca_ES	ca_ES.IS08859-1
cs	cs_CZ.IS08859-2
cs_CZ	cs_CZ.IS08859-2
da	da_DK.IS08859-1
da_DK	da_DK.IS08859-1
da.IS08859-15	da_DK.IS08859-15
de	de_DE.IS08859-1
de_AT	de_AT.IS08859-1
de_CH	de_CH.IS08859-1
de_DE	de_DE.IS08859-1
de.IS08859-15	de_DE.IS08859-15
de.UTF-8	de_DE.UTF-8
el	el_GR.IS08859-7



Locales to be Obsoleted	Replacement Locales
eL_GR	eL_GR.IS08859-7
eL_sun_eu_greek	eL_GR.IS08859-7
eL_UTF-8	eL_CY.UTF-8
en_AU	en_AU.IS08859-1
en_CA	en_CA.IS08859-1
en_GB	en_GB.IS08859-1
en_IE	en_IE.IS08859-1
en_NZ	en_NZ.IS08859-1
en_US	en_US.IS08859-1
es	es_ES.IS08859-1
es_AR	es_AR.IS08859-1
es_BO	es_BO.IS08859-1
es_CL	es_CL.IS08859-1
es_CO	es_CO.IS08859-1
es_CR	es_CR.IS08859-1
es_EC	es_EC.IS08859-1
es_ES	es_ES.IS08859-1
es_GT	es_GT.IS08859-1
es.IS08859-15	es_ES.IS08859-15
es_MX	es_MX.IS08859-1
es_NI	es_NI.IS08859-1
es_PA	es_PA.IS08859-1
es_PE	es_PE.IS08859-1
es_PY	es_PY.IS08859-1
es_SV	es_SV.IS08859-1
es.UTF-8	es_ES.UTF-8
es_UY	es_UY.IS08859-1
es_VE	es_VE.IS08859-1

Locales to be Obsolete	Replacement Locales
et	et_EE.IS08859-15
et_EE	et_EE.IS08859-15
fi	fi_FI.IS08859-1
fi_FI	fi_FI.IS08859-1
fi.IS08859-15	fi_FI.IS08859-15
fr	fr_FR.IS08859-1
fr_BE	fr_BE.IS08859-1
fr_CA	fr_CA.IS08859-1
fr_CH	fr_CH.IS08859-1
fr_FR	fr_FR.IS08859-1
fr.IS08859-15	fr_FR.IS08859-15
fr.UTF-8	fr_FR.UTF-8
he	he_IL.IS08859-8
he_IL	he_IL.IS08859-8
hr_HR	hr_HR.IS08859-2
hu	hu_HU.IS08859-2
hu_HU	hu_HU.IS08859-2
is_IS	is_IS.IS08859-1
it	it_IT.IS08859-1
it.IS08859-15	it_IT.IS08859-15
it_IT	it_IT.IS08859-1
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.IS08859-13
lt_LT	lt_LT.IS08859-13
lv	lv_LV.IS08859-13

Locales to be Obsoleted	Replacement Locales
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
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

Locales to be Obsoleted	Replacement Locales
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
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

## Support for Java SE 1.4.2

Support for Java Platform, Standard Edition (Java SE) 1.4.2 might be removed in a future Oracle Solaris release. To receive critical fixes, consider the following options:

- Migrate to Java SE for Business 1.4.2.
- Migrate to the latest Java SE release.

For information about the technology support and EOL policy for Java SE, see <http://www.oracle.com/technetwork/java/eol-135779.html>.

## Support for Java SE 5.0

Support for Java SE 5.0 might be removed in a future Oracle Solaris release. To receive critical fixes, consider the following options:

- Migrate to Java SE for Business 5.0
- Migrate to the latest Java SE release

For information about technology support and EOL policy, see <http://www.oracle.com/technetwork/java/eol-135779.html>.

## @euro Locale Variants

The following @euro locale variants might be removed in a future Oracle Solaris release:

ca_ES.ISO8859-15@euro	fr_BE.ISO8859-15@euro
de_AT.ISO8859-15@euro	fr_BE.UTF-8@euro
de_DE.ISO8859-15@euro	fr_FR.ISO8859-15@euro
de_DE.UTF-8@euro	fr_FR.UTF-8@euro
el_GR.ISO8859-7@euro	it_IT.ISO8859-15@euro
en_IE.ISO8859-15@euro	it_IT.UTF-8@euro
es_ES.ISO8859-15@euro	nL_BE.ISO8859-15@euro
es_ES.UTF-8@euro	nL_NL.ISO8859-15@euro
fi_FI.ISO8859-15@euro	pt_PT.ISO8859-15@euro

Use the corresponding non-variant locales.

## ucblinks Command

The ucblinks feature that created SunOS 4.x device name links in the /dev directory might not be supported in a future Oracle Solaris release. The current release uses SunOS 5.x device names.

The following table lists the SunOS 4.x device name links that might be removed.

SunOS 4.x Device Name	Device Type
/dev/[r]fd%d	fd floppy

SunOS 4.x Device Name	Device Type
/dev/[r]sr%d	sd/atapi cdrom
/dev/[r]sd%d	sd disk
/dev/[r]n%d	st tape

The following table lists the current SunOS 5.x device name links.

SunOS 5.x Device Name	Device Type
/dev/[r]diskette	fd floppy
/dev/[r]dsk/*	sd/atapi cdrom
/dev/[r]dsk/*	sd disk
/dev/rmt/*	st tape

## Xprt Server and Xprint Extension

The Xprt server and Xprint extension to the X Window System might no longer be included in a future Oracle Solaris release. The libXp library will remain for binary compatibility. This library enables existing users of this software to continue printing over the network to Xprt servers running Oracle Solaris 10 and prior releases, or Xprint implementations on other platforms.

## xmh Command

The xmh command might no longer be included in a future Oracle Solaris release. Thunderbird and Evolution are the supported email applications.

## XIE Libraries

X Imaging Extension (XIE) libraries might no longer be included in a future Oracle Solaris release.

## bdf tosnf and showsnf Commands

The bdf tosnf and showsnf commands might no longer be included in a future Oracle Solaris release.

## PostgreSQL 8.1 and 8.2

PostgreSQL versions 8.1 and 8.2 might not be supported in a future Oracle Solaris release.

---

**Note** – PostgreSQL 8.1 and all its interfaces are obsoleted in the Oracle Solaris 10 OS. You must migrate your applications to a later PostgreSQL version available in the Oracle Solaris OS.

---

## Locale Variant cz

The `cz` short variant for the Czech locale might be removed in a future Oracle Solaris release. Use the following Czech locales instead:

- `cs_CZ`
- `cs_CZ.ISO8859-2`
- `cs_CZ.UTF-8`
- `cs_CZ.UTF-8@euro`

## xorgcfg and xorgconfig Utilities

The `xorgcfg` and `xorgconfig` utilities for generating `xorg.conf` files might no longer be available in a future Oracle Solaris release.

The Xorg(1) server does not require an `xorg.conf(4)` file in many cases and will autoconfigure itself if the file is not present. Use one of the following alternative methods to generate an `xorg.conf` file for customization if the default configuration does not meet your needs:

- When the server is not already running, `/usr/X11/bin/Xorg -configure` provides a sample configuration file for the currently detected hardware in the system.
- When the Xorg server is started without a configuration file, the `xorg.conf` data that Xorg automatically generates is logged in the `/var/log/Xorg.0.log` log file. The `xorg.conf` data might also be copied to an `xorg.conf` file for customization.
- Users of NVIDIA graphics devices should use the provided `nvidia-settings(1)` and `nvidia-xconfig(1)` utilities to generate or update device-specific configurations.
- Users of Sun graphics devices for the SPARC platform should use the `fbconfig(1)` utility to generate or update device-specific configurations.

## Oracle Berkeley DB 4.2

Oracle Berkeley DB 4.2 might not be supported in a future Oracle Solaris release.

## Some audiorecord and audioplay Application Switches

The `-p` and `-b` switches in both the `audiorecord` and `audioplay` applications, as well as the `-m` switch in `audiorecord` might be removed in a future Oracle Solaris release.

If a filename is not specified on the command line and standard input and output is not a TTY, both applications will exit with an error. Any changes to audio volume settings made by these applications are not persistent from one instance to the next. If you want to adjust audio device settings, migrate to the `mixerctl(1)` and `gnome-volume-control(1)` applications.

## Policy Change for Inbound Open-Source and Third-Party, Vendor-Supplied Open-Source Components

When the open-source community stops the development of inbound open-source components such as Mozilla projects, Oracle will also stop all the development and support activities of that product version. Component End of Life announcements will appear in the Release Notes document.

## Mozilla 1.X Support

Starting from the Solaris 10 10/08 release, the Mozilla 1.X software is no longer supported as a result of the new inbound open-source components policy change. Users should upgrade to Firefox.

## x86: sbpro Driver

The Sound Blaster Pro device driver (`sbpro`) for Sound Blaster Pro, Sound Blaster 16, and Sound Blaster AWE32 ISA devices might not be supported in a future Oracle Solaris release.

## CacheFS File System

The CacheFS file system might not be supported in a future Oracle Solaris release.

## sdtudctool Command

The `sdtudctool` command might not be available in a future Oracle Solaris release. For more information, see User Defined Characters Migration Guide at [http://developers.sun.com/global/products\\_platforms/solaris/reference/techart/UDCGuide.html](http://developers.sun.com/global/products_platforms/solaris/reference/techart/UDCGuide.html)



## **cttmp and ctlconvert\_txt Utilities**

The `/usr/openwin/bin/cttmp` and `/usr/openwin/bin/ctlconvert_txt` utilities might not be supported in a future Oracle Solaris release. Use the `mp(1)` print filter or another suitable printing mechanism.

## **genlayouttbl Utility**

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

## **Mobile IPv4**

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

## **Gnopernicus**

Gnopernicus, the Java Desktop System Screen Reader might not be available in a future Oracle Solaris release. Use the Orca Screen Reader instead.

## **Xsun Server**

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

## **Sun Java System Calendar Server Client Applet**

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

## DARPA Trivial Name Server

The DARPA trivial name server, `in.tnamed(1M)`, might not be available in a future Oracle 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 Oracle Solaris release. This technology 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 Oracle Solaris release. A replacement application might be provided to enable viewing of PDF and PostScript files.

## Smartcard Administrative Interface

The Smartcard administrative graphical interface `sdtsmartcardadmin(1M)` might not be available in a future Oracle Solaris release. The same functionality is available through the `smartcard(1M)` command.

## iButton Smartcard

The Dallas Semiconductor iButton Java Card Smartcard and OpenCard Framework (OCF) terminal driver, as described in the `ocf_ibutton(7d)` man page, might not be supported in a future Oracle Solaris release. Migrate to other Smartcard devices that are supported by the `libpcsc-lite(3LIB)` utility.

## Cyberflex Smartcard

The Cyberflex Smartcard might not be supported by the `pam_smartcard(5)` and `smartcard(1M)` commands in a future Oracle Solaris release. Migrate to other Smartcard devices and cards that are supported by the `libpcsc-lite(3LIB)` utility.

## PAM Smartcard

The PAM Smartcard module `pam_smartcard(5)` might not be available in a future Oracle Solaris release.

## OCF/SCF Smartcard Framework

The OCF/SCF Smartcard framework might not be available in a future Oracle Solaris release. 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 accordingly.

## SCF Smartcard APIs

The SmartCard Framework (SCF) interfaces exported by `libsmartcard` and `smartcard.jar` might not be available in a future Oracle Solaris release. These interfaces are now obsolete. New C applications should be written to use the PS/SC interfaces exported from `libpscs-lite(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)` might not be available in a future Oracle Solaris release.

## Transition From `ipge` to `e1000g` NIC Driver as the Default Ethernet Driver for sun-4v Systems

The `ipge` driver and all its `SUNWipge` packages for sun4v systems might not be available in a future Oracle Solaris release. Starting with the Solaris 10 8/07 release, Ontario and other SPARC based platforms transition from `ipge` to `e1000g` drivers. The `e1000g` driver is the default Ethernet driver for all Oracle 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 Oracle Solaris release:

- SEA-based SNMP master agent and subagents
- `libssagent` and `libssasnmp` libraries
- `SUNWsacom`, `SUNWsasnm`, `SUNWmibii` packages

The System Management Agent (SMA) provides similar functionality for these resources.

## 32-bit x86: Extended Memory File System Support

The extended memory file system (`xmemfs`) might not be supported in a future Oracle Solaris release.

For more information, see the `xmemfs(7FS)` man page.

## Standard Type Services Framework Support

The Standard Type Services Framework (STSF) might not be available in a future Oracle Solaris release.

This framework 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 Oracle Solaris release. For more information, see the `jfca(7D)` man page.

## zic -s Option Support

The `-s` option of the `zic` command might not be available in a future Oracle Solaris release. For more information, see the `zic(1M)` man page.

## Removable Volume Management Support

The volume management daemon (`volld`), volume management file system (`volfs`), and the associated volume management commands might not be included in a future Oracle Solaris release. Automatic mounting and unmounting of removable media will continue to be supported.

For more information, see the `volld(1M)` and `volfs(7FS)` man pages.

## 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 Oracle Solaris release. In addition, device drivers written for these devices might not be supported.

## SPARC: Certain Drivers Might Not Be Supported in a Future Oracle Solaris Release

The following drivers might not be supported in a future Oracle Solaris release:

- `SUNWrtrvc` – 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 the Automated Security Enhancement Tool (ASET) in the `/usr/aset` directory will be deprecated in a subsequent release. To replicate the functionality, use the Basic Audit Reporting Tool (BART), which is available at `/usr/bin/bart`.

## Asian Short `dtlogin` Names

The following Asian short locale names might not be listed in the `dtlogin` language list in a future release:

- `ko`
- `zh`
- `zh_TW`

Beginning with the Solaris 8 release, the following ISO-standard locale names are provided:

- `ko_KR.EUC`
- `ko_KR.UTF-8`
- `zh_CN.EUC`
- `zh_CN.GBK`
- `zh_CN.UTF-8`
- `zh_TW.EUC`

## Cfront Runtime Support Library

The `libc.so.3` library 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 the Oracle Solaris 10 OS. The library might not be supported in a future release of Oracle Solaris.

## Configuration Administrations's fp Plug-In Hardware Options

The following options of the configuration administration (`cfgadm`) fp plug-in might not be supported in a future Oracle 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 Oracle Solaris release:

- `mkdevalloc(1M)`
- `mkdevmaps(1M)`
- `/etc/security/dev`

## Obsolete Device Driver Interfaces

Some device driver interfaces (DDI) might not be supported in a future Oracle Solaris release.

The following table lists the DDIs that might not be supported, along with the preferred DDI alternatives.

Obsolete Interface	Preferred Interface
<code>mmap</code>	<code>devmap</code>
<code>identify</code>	set to <code>nulldev</code>
<code>copyin</code>	<code>ddi_copyin</code>
<code>copyout</code>	<code>ddi_copyout</code>

Obsolete Interface	Preferred Interface
<code>ddi_dma_addr_setup</code>	<code>ddi_dma_addr_bind_handle</code>
<code>ddi_dma_buf_setup(9F)</code>	<code>ddi_dma_buf_bind_handle</code>
<code>ddi_dma_curwin</code>	<code>ddi_dma_getwin</code>
<code>ddi_dma_free</code>	<code>ddi_dma_free_handle</code>
<code>ddi_dma_htoc</code>	<code>ddi_dma_addr[buf]_bind-handle</code>
<code>ddi_dma_movwin</code>	<code>ddi_dma_getwin</code>
<code>ddi_dma_nextseg</code>	<code>ddi_dma_nextcookie</code>
<code>ddi_dma_nextwin</code>	<code>ddi_dma_nextcookie</code>
<code>ddi_dma_segtocookie</code>	<code>ddi_dma_nextcookie</code>
<code>ddi_dma_setup</code>	<code>ddi_dma *_handle</code>
<code>ddi_dmae_getlim</code>	<code>ddi_dmae_getattr</code>
<code>ddi_getlongprop</code>	<code>ddi_prop_lookup</code>
<code>ddi_getlongprop_buf</code>	<code>ddi_prop_lookup</code>
<code>ddi_getprop</code>	<code>ddi_prop_get_in</code>
<code>ddi_getproplen</code>	<code>ddi_prop_lookup</code>
<code>ddi_iopb_alloc</code>	<code>ddi_dma_mem_alloc</code>
<code>ddi_iopb_free</code>	<code>ddi_dma_mem_free</code>
<code>ddi_mem_alloc</code>	<code>ddi_dma_mem_alloc</code>
<code>ddi_mem_free</code>	<code>ddi_dma_mem_free</code>
<code>ddi_map_regs</code>	<code>ddi_regs_map_setup</code>
<code>ddi_prop_create</code>	<code>ddi_prop_update</code>
<code>ddi_prop_modify</code>	<code>ddi_prop_update</code>
<code>ddi_segmap</code>	see <code>devmap</code>
<code>ddi_segmap_setup</code>	<code>devmap_setup</code>
<code>ddi_unmap_regs</code>	<code>ddi_regs_map_free</code>
<code>free_pktiopb</code>	<code>scsi_free_consistent_buf</code>
<code>get_pktiopb</code>	<code>scsi_alloc_consistent_buf</code>
<code>makecom_g0</code>	<code>scsi_setup_cdb</code>

Obsolete Interface	Preferred Interface
makecom_g0_s	scsi_setup_cdb
makecom_g1	scsi_setup_cdb
makecom_g5	scsi_setup_cdb
scsi_dmafree	scsi_destroy_pkt
scsi_dmaget	scsi_init_pkt
scsi_pktalloc	scsi_init_pkt
scsi_pktfree	scsi_destroy_pkt
scsi_realloc	scsi_init_pkt
scsi_resfree	scsi_destroy_pkt
scsi_slave	scsi_probe
scsi_unslave	scsi_unprobe
ddi_peek{c,s,l,d}	ddi_peek{8,16,32,64}
ddi_poke{c,s,l,d}	ddi_poke{8,16,32,64}
in{b,w,l}	ddi_get{8,16,32}
out{b,w,l}	ddi_put{8,16,32}
repins{b,w,l}	ddi_rep_get{8,16,32}
repouts{b,w,l}	ddi_rep_put{8,16,32}

## Device Management Entries in the power.conf File

The Device Management entries in the power.conf file might not be supported in a future Oracle Solaris release. Similar capability is provided by the Automatic Device Power Management entries in the Oracle Solaris OS.

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 Oracle Solaris 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
IBM PC ServeRAID SCSI, IBM ServeRAID II UltraSCSI, and IBM ServeRAID-3 Ultra2 SCSI	chs	SCSI RAID

## Form and Menu Language Interpreter

The Form and Menu Language Interpreter (FMLI) commands are obsolete and might not be supported in a future Oracle 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 checked in the Oracle Solaris OS, although these files remain in the software. In a future Oracle Solaris release, these host files might be removed.

## Kerberos Ticket Lifetime Parameters in the krb5.conf File

The Kerberos Ticket Lifetime parameters, `max_life` and `max_renewable_life`, might no longer be supported in a future Oracle Solaris release. 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 the `/etc/krb5/krb5.conf` file.

## Korean CID Fonts

Korean CID fonts will not be supported in a future Oracle Solaris release. You can use the Korean TrueType fonts that are included in the Oracle Solaris OS as a replacement for Korean CID fonts.

## Legacy or Traditional Non-UTF-8 Locales

Oracle is adopting Unicode for character encoding. Therefore, non-UTF-8 locales might be removed as Java Desktop System login locales in a future Oracle 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 Oracle Solaris release:

---

<code>cpc_access</code>	<code>cpc_pctx_rele</code>
<code>cpc_bind_event</code>	<code>cpc_pctx_take_sample</code>
<code>cpc_count_sys_events</code>	<code>cpc_rele</code>
<code>cpc_count_usr_events</code>	<code>cpc_seterrfn</code>
<code>cpc_event_accum</code>	<code>cpc_shared_bind_event</code>
<code>cpc_event_diff</code>	<code>cpc_shared_close</code>
<code>cpc_eventtostr</code>	<code>cpc_shared_open</code>
<code>cpc_getcciname</code>	<code>cpc_shared_rele</code>
<code>cpc_getcpuref</code>	<code>cpc_shared_take_sample</code>
<code>cpc_getcpuver</code>	<code>cpc_strtoevent</code>
<code>cpc_getnpic</code>	<code>cpc_take_sample</code>
<code>cpc_getusage</code>	<code>cpc_version</code>
<code>cpc_pctx_bind_event</code>	<code>cpc_walk_names</code>
<code>cpc_pctx_invalidate</code>	

---

New functions have been added to the library in the Oracle Solaris 10 OS. Developers who have code that utilizes the interfaces in the preceding list should instead use the following corresponding new functions:

---

<code>cpc_open</code>	<code>cpc_close</code>
<code>cpc_set_create</code>	<code>cpc_set_destroy</code>

---

---

<code>cpc_set_add_request</code>	<code>cpc_set_request_preset</code>
<code>cpc_buf_create</code>	<code>cpc_buf_destroy</code>
<code>cpc_bind_curlwp</code>	<code>cpc_bind_pctx</code>
<code>cpc_bind_cpu</code>	<code>cpc_unbind</code>
<code>cpc_set_sample</code>	<code>cpc_buf_sub</code>
<code>cpc_buf_add</code>	<code>cpc_buf_copy</code>
<code>cpc_buf_zero</code>	<code>cpc_buf_get</code>
<code>cpc_buf_set</code>	<code>cpc_buf_hrttime</code>
<code>cpc_buf_tick</code>	<code>cpc_walk_requests</code>
<code>cpc_walk_events_all</code>	<code>cpc_walk_events_pic</code>
<code>cpc_walk_attrs</code>	<code>cpc_enable</code>
<code>cpc_disable</code>	<code>cpc_caps</code>
<code>cpc_npics</code>	<code>cpc_cpuref</code>
<code>cpc_cciname</code>	<code>cpc_seterrhdlr</code>

---

See the `cpc(3CPC)` man page for details.

## libXinput Library

The `libXinput.so.0` library might not be provided in a future Oracle Solaris release. 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 the Solaris 2.1 and Solaris 2.2 releases. The X11 standard X Input Extension library, `libXi`, was integrated in the Solaris 2.3 release.

All applications that rely on the `libXi` API should be built by using the `libXi` shared library for future compatibility and standards conformance.

## NIS+ Name Service Type

NIS+ might not be supported in a future Oracle Solaris release. Tools to aid in the migration from NIS+ to LDAP are available in the Solaris 9 software.

## **ns test Test Program**

The ns test program is an interactive DNS test program to construct and send DNS queries. This program might no longer be supported in a future Oracle Solaris 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 Oracle Solaris release. Perl version 5.8.4, the default version in the Oracle Solaris 10 OS, is not binary compatible with Perl version 5.6.1. However, the earlier version is still retained in this 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 Management Console patch tool, Patch Manager, might not be available in a future Oracle Solaris release.

## **Solstice Enterprise Agents**

Solstice Enterprise Agents might not be supported in a future Oracle Solaris release.

## **Stand-Alone Router Discovery**

The /usr/sbin/in.rdisc implementation of the IPv4 ICMP Router Discovery protocol might not be supported in a future Oracle Solaris release. 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 can also distinguish Mobile IP advertisements from Router Discovery messages.

## Oracle Sun Fire Link Interfaces

The Oracle Sun Fire Link Interfaces might no longer be supported in a future Oracle Solaris release.

## Java Desktop System Applications

The following applications in Java Desktop System Release 3 might be removed from a future Oracle Solaris release.

- Calendar Preview
- Diagram Editor
- Disk Analyzer
- GNOME Keyboard Layout Switcher
- Java Dictionary
- Java Text Editor
- Mr. Project
- Calendar Preview

## 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 Oracle Solaris release. After the removal is implemented, drivers for token ring or FDDI devices 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 Dynamic Reconfiguration

The WBEM Dynamic Reconfiguration (WDR) feature might not be supported in a future Oracle Solaris release. WDR is currently supported on Oracle's Sun Fire midrange and high-end systems.

## XIL Interface

The XIL interface might not be supported in a future Oracle Solaris 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 Oracle Solaris 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 by the mp command, which has been enhanced to support all of the native Asian encodings with more options and functionality.

## Documentation Issues

---

This chapter describes known issues that are related to Oracle Solaris documentation.

### *System Administration Guide: Oracle Solaris Containers-Resource Management and Oracle Solaris Zones*

#### **Determining the Working Set Size of a Project**

In the section “[Determining the Working Set Size of a Project](#)” in *System Administration Guide: Oracle Solaris Containers-Resource Management and Oracle Solaris Zones*, there is a typographical error in the following sentence:

“While the cap on user1 is 6 s, in every 5-second sample interval the RSS decreases and I/O increases as rcpd pages-out some of the workload's memory”.

It should read as follows:

“While the cap on user1 is 6 gigabytes, in every 5-second sample interval the RSS decreases and I/O increases as rcpd pages-out some of the workload's memory.”

#### **Zones Overview**

In the section “[Zones Overview](#)” in *System Administration Guide: Oracle Solaris Containers-Resource Management and Oracle Solaris Zones*, a note should be added.

The note should read as follows:

“Solaris 10 Containers (non-global zones) do not support statically linked binaries.”

## Luupgrade Command Man Page Has an Incorrect Cross-Reference

The `luupgrade(1M)` command man page has an incorrect cross-reference.

In the description about how to use the `-k` option with the `luupgrade` command, the man page incorrectly states that valid keywords for `autoreg_file` can be found in the `sysidcfg(4)` man page. However, the `autoreg_file` file does not use the same keywords as the `sysidcfg` file.

For correct information about the valid keywords for use in the `autoreg_file` file, see “[Auto Registration Feature of Oracle Solaris](#)” on page 19.

## Oracle Solaris Patch List

Oracle Solaris patch lists are not documented in the release notes. For information about the patch list for the Oracle Solaris 10 8/11 release, see [Oracle Solaris 10 8/11 Patch List](#).

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

Starting with the Solaris 10 8/07 release, the Oracle 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 by 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 at <http://download.oracle.com/docs/cd/E19253-01/>.



## Application Server Documentation Refers to Derby Database Instead of Java DB

Application Server documentation refers to the Java DB database as “Derby.” All references to “Derby” should be read as referring to Java DB. The database is installed in `/usr/appserver/javadb`.

## Documents on the Software Supplement CD

Starting with the Oracle Solaris 10 OS, 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/documentation/solaris-10-192992.html>. The remaining contents reside elsewhere in the Oracle Solaris kit.



## Previously Documented Bugs That Were Fixed in the Oracle Solaris 10 8/11 Release

---

This appendix lists several bugs that were documented in the release notes of previous Oracle Solaris releases that have been fixed in the Oracle Solaris 10 8/11 release.

### Previously Documented Bugs Fixed in This Release

CR Number	Title
6858233	Auto-layout problem in DSR upgrade from s9u7_09 to s10u8_02 fails.
6593071	Keyboard Layout is prompted even though there is not an attached keyboard
6751843	/usr/sbin/shutdown -y -g0 -i6 does not shutdown the system
6638175	Needed to install 7zip on Solaris 8/9/10 Systems for live upgrade to s10u5 or later.
6967825	Panic "sync initiated" can hang attempting a crash dump
6741682	Unable to boot into 32-bit kernel by issuing reboot command
6668666	zpool command should put a bootblock on a disk added as a mirror of a root pool vdev
6712352	Duplicate partitions are not correctly counted by vold
6365986	SYSADV5: pam_ldap behaves differently for non-password based account management
6978760	Thunderbird crashes when select Page Setup or Print Contact/Address Book
6210240	Race condition in JFCA (Fast path (disk) and slow path(tape))
6229077	NFS/RDMA: rib_rbuf_alloc: No free buffers at server
6184000	Routes cannot be created on failed interfaces
6288620	Keyboard Shortcuts in Mozilla 1.7 in ES Locale Are Unusual and Ambiguous
5054195	Network Device Removal Fails When a Program Is Holding the Device Open

## Previously Documented Bugs Fixed in This Release

---

CR Number	Title
6850013	RDS Driver Upgrade to Version 3
6968855	Change in the Default Behavior Whe a Root User Resets Password