



Trusted Solaris 8 Release Notes

Sun Microsystems, Inc.
901 San Antonio Road
Palo Alto, CA 94303-4900
U.S.A.

Part Number 805-8117-10
December 2000

Copyright 2000 Sun Microsystems, Inc. 901 San Antonio Road, Palo Alto, California 94303-4900 U.S.A. All rights reserved.

This product or document is protected by copyright and distributed under licenses restricting its use, copying, distribution, and decompilation. No part of this product or document may be reproduced in any form by any means without prior written authorization of Sun and its licensors, if any. Third-party software, including font technology, is copyrighted and licensed from Sun suppliers.

Parts of the product may be derived from Berkeley BSD systems, licensed from the University of California. UNIX is a registered trademark in the U.S. and other countries, exclusively licensed through X/Open Company, Ltd.

Sun, Sun Microsystems, the Sun logo, docs.sun.com, AnswerBook, AnswerBook2, Trusted Solaris, Solaris Management Console, and Solaris are trademarks, registered trademarks, or service marks of Sun Microsystems, Inc. in the U.S. and other countries. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. in the U.S. and other countries. Products bearing SPARC trademarks are based upon an architecture developed by Sun Microsystems, Inc.

The OPEN LOOK and Sun™ Graphical User Interface was developed by Sun Microsystems, Inc. for its users and licensees. Sun acknowledges the pioneering efforts of Xerox in researching and developing the concept of visual or graphical user interfaces for the computer industry. Sun holds a non-exclusive license from Xerox to the Xerox Graphical User Interface, which license also covers Sun's licensees who implement OPEN LOOK GUIs and otherwise comply with Sun's written license agreements.

Federal Acquisitions: Commercial Software – Government Users Subject to Standard License Terms and Conditions

DOCUMENTATION IS PROVIDED “AS IS” AND ALL EXPRESS OR IMPLIED CONDITIONS, REPRESENTATIONS AND WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT, ARE DISCLAIMED, EXCEPT TO THE EXTENT THAT SUCH DISCLAIMERS ARE HELD TO BE LEGALLY INVALID.

Copyright 2000 Sun Microsystems, Inc. 901 San Antonio Road, Palo Alto, Californie 94303-4900 Etats-Unis. Tous droits réservés.

Ce produit ou document est protégé par un copyright et distribué avec des licences qui en restreignent l'utilisation, la copie, la distribution, et la décompilation. Aucune partie de ce produit ou document ne peut être reproduite sous aucune forme, par quelque moyen que ce soit, sans l'autorisation préalable et écrite de Sun et de ses bailleurs de licence, s'il y en a. Le logiciel détenu par des tiers, et qui comprend la technologie relative aux polices de caractères, est protégé par un copyright et licencié par des fournisseurs de Sun.

Des parties de ce produit pourront être dérivées du système Berkeley BSD licenciés par l'Université de Californie. UNIX est une marque déposée aux Etats-Unis et dans d'autres pays et licenciée exclusivement par X/Open Company, Ltd.

Sun, Sun Microsystems, le logo Sun, docs.sun.com, AnswerBook, AnswerBook2, Solaris Management Console, et Solaris sont des marques de fabrique ou des marques déposées, ou marques de service, de Sun Microsystems, Inc. aux États-Unis et dans d'autres pays. Toutes les marques SPARC sont utilisées sous licence et sont des marques de fabrique ou des marques déposées de SPARC International, Inc. aux États-Unis et dans d'autres pays. Les produits portant les marques SPARC sont basés sur une architecture développée par Sun Microsystems, Inc.

L'interface d'utilisation graphique OPEN LOOK et Sun™ a été développée par Sun Microsystems, Inc. pour ses utilisateurs et licenciés. Sun reconnaît les efforts de pionniers de Xerox pour la recherche et le développement du concept des interfaces d'utilisation visuelle ou graphique pour l'industrie de l'informatique. Sun détient une licence non exclusive de Xerox sur l'interface d'utilisation graphique Xerox, cette licence couvrant également les licenciés de Sun qui mettent en place l'interface d'utilisation graphique OPEN LOOK et qui en outre se conforment aux licences écrites de Sun.

CETTE PUBLICATION EST FOURNIE “EN L'ETAT” ET AUCUNE GARANTIE, EXPRESSE OU IMPLICITE, N'EST ACCORDEE, Y COMPRIS DES GARANTIES CONCERNANT LA VALEUR MARCHANDE, L'APTITUDE DE LA PUBLICATION A REpondre A UNE UTILISATION PARTICULIERE, OU LE FAIT QU'ELLE NE SOIT PAS CONTREFAISANTE DE PRODUIT DE TIERS. CE DENI DE GARANTIE NE S'APPLIQUERAIT PAS, DANS LA MESURE OU IL SERAIT TENU JURIDIQUEMENT NUL ET NON AVENU.



Contents

1. **Trusted Solaris 8 Release Notes** 5

Getting Help 6

Ordering Sun Documents 6

Accessing Sun Documentation Online 6

Supported Hardware 6

Patches and Bug Fixes 7

Significant Changes from the Trusted Solaris 7 Release 9

Trusted Solaris 7 Bugs Fixed in This Release 9

Known Problems with the Software 9

bind and accept do not generate audit records (4256066) 10

The /etc/shadow file can be relabeled (4388344) 10

File system label ranges are not enforced for unlabeled NFS file systems (4150441) 10

Trusted Solaris label encodings file requires coding for ILs (4329208) 10

Label daemon is not locale-aware (4384632) 11

NIS (YP) account cannot see assigned profiles (4384781) 11

The smoservice command fails to create OS server (4378498) 11

SMC auditing is incomplete (4358479) 11

SMC Mounts tool does not recognize Trusted Solaris attributes (4382753) 12

SMC returns error for a valid IPv6 address (4380852) 12

SMC Scheduled Jobs tool supports admin_low jobs only (4385223) 12

Switching between scopes in SMC is not robust (4381198) 13

The TSIX network protocol does not work (4291482) 13

Trusted Solaris 8 does not update the Solaris SUNWrdm package 13

CDE exit sometimes fails (4385479) 13

Drag and drop does not work for OpenLook applications (4095021) 14

Selection Manager restarts in wrong locale (4094175) 14

The swmtool utility does not work (4284167) 14

Trusted Solaris 8 Release Notes

Note - We strongly recommend that you read and use *Trusted Solaris Installation and Configuration* (PN 805-8114-10) to guide you in configuring the Trusted Solaris operating environment. The differences between this secure operating environment and a Solaris operating environment, such as — labels, clearance confirmations, obligatory passwords, security configuration choices, name service domain setup, secure network setup, no superuser — require planning and guidance during installation and configuration.

The Trusted Solaris 8 operating environment is an upgrade of the Trusted Solaris 7 release, and a security-enhanced version of the following software: Solaris 8 Update 1 operating environment, CDE 1.4.1 (Common Desktop Environment), and the Solaris Management Console 2.0 administrative interface. The release incorporates patches to the Trusted Solaris 7 operating environment, the window system (XW), and patches for the Solaris, CDE and Solaris Management Console releases.



Caution - Do not apply patches that may be available for the standard releases of Solaris software, CDE, X Windows, or Solaris Management Console.

The sections are as follows:

- “Getting Help” on page 6
- “Supported Hardware” on page 6
- “Patches and Bug Fixes” on page 7
- “Significant Changes from the Trusted Solaris 7 Release” on page 9
- “Trusted Solaris 7 Bugs Fixed in This Release” on page 9
- “Known Problems with the Software” on page 9

Getting Help

For assistance in using the document set, see the *Trusted Solaris Roadmap* (PN 805-8113-10) document.

The docs.sun.comSM Web site enables you to access Sun technical documentation online. You can browse the docs.sun.com archive or search for a specific book title or subject. The URL is <http://docs.sun.com>.

Ordering Sun Documents

Fatbrain.com, the Internet's most comprehensive professional bookstore, stocks select product documentation from Sun Microsystems, Inc.

For a list of documents and how to order them, visit the Sun Documentation Center on Fatbrain.com at <http://www1.fatbrain.com/documentation/sun>.

Accessing Sun Documentation Online

The docs.sun.comSM Web site enables you to access Sun technical documentation online. You can browse the <http://docs.sun.com> archive or search there for a specific book title or subject.

Supported Hardware

The Trusted Solaris 8 release supports the workstation, server, and peripherals hardware supported by the Solaris 8 release. See also:

- *Solaris 8 Release Notes Supplement for Sun Hardware*
- *Solaris 8 6/00 Sun Hardware Platform Guide* in the *Solaris 8 6/00 on Sun Hardware Collection*
- *Solaris 8 (Intel Platform Edition) 6/00 Hardware Compatibility List*

Patches and Bug Fixes

The Trusted Solaris 8 release includes the following product patches and bug fixes:

TABLE 1-1 Product Patches and Bug Fixes Integrated in Trusted Solaris 8

Product	Patch/Bug Number	Synopsis
CDE 1.4.1	108219-01 108220-01/4257350	dtaction has potential buffer overflow problems
	4337474	CDE exit failed
	4340269	When trying to exit session, get TT_ERR_NO_MATCH error
Solaris Management Console 2.0	4353350	Rights are displayed in wrong order in Rights Tabs
	4335699	Help needs to be up-to-date and accurate
	4353356	Context help slows down user interface
Solaris 8 Update 1	All patches incorporated into the Solaris 8 Update 1 release. See <i>Solaris 8 (SPARC Platform Edition) 6/00 Release Notes Update</i> or <i>Solaris 8 (Intel Platform Edition) 6/00 Release Notes Update</i> for details.	
	103640-34 105402-29/4295834	network: NETPATH security problem in libnsl
	106938-04 106939-04/4299852	network: Four vulnerabilities have been found in BIND.
	107115-05 107116-05/4310991	utility: netpr: Buffer overflow in netpr_send_message()
	107709-07 107710-06/4270182	smartcard: AuthenticationFailureTrap not generated during testing of security
	108301-02 108302-02/4254347	network: in.tftpd stops service and gets stuck in endless loop executing read
	108482-02 108483-02/4282985	network: snoop may be exploited to gain root access
	108529-02/4331306	kernel: Transferring large amounts of data using cpio to a partition on a 20Gbyte disk causes a panic.

TABLE 1-1 Product Patches and Bug Fixes Integrated in Trusted Solaris 8 *(continued)*

Product	Patch/Bug Number	Synopsis
	4237487	utility: libprint has buffer overflows and other security problems
	4302198	kernel: Solaris 8 kernel panic when servicing interrupt from hme device
	4313067	libcurses: setupterm has buffer overflow
	4318294	nisplus: Operations on NIS+ master slow when bug fix 4165775 is introduced
	4324685	smartcard: Error message displayed when smart card is inserted
	4325934	kernel: boot -r with PCMCIA modem cards installed causes a panic on the Sparc Ultra 2
	4330206	kernel: Framebuffers fails to power manage Estar-compliant monitors
	4331401	audit: segmentation violation in au_user_mask()
	4339366	sysadmin: Security vulnerability in ufsrestore allows root compromise
	4341092	network: in.named buffer overflow vulnerabilities
	4343216	smartcard: Security problem in ocfserv
	4344275	audit: Preselection will work in 64-bit mode.
	4353727	AnswerBook2: AB 1.4.2 create admin user interactive shell
	4353965	audit: CDE logout / exit fails with Tooltalk message
	4366956	library: NLSPATH gettext introduces problems when used printf format specifier
	4364261	consolidation: sprintf and gettext do not mix
	4373273	audit: praudit has problems with certain audit records
Trusted Solaris 7 — Trusted Solaris 8 contains all the patches released for Trusted Solaris 7.		

Significant Changes from the Trusted Solaris 7 Release

- See the *Trusted Solaris 8 Transition Guide* for the changes from the Trusted Solaris 7 release to the current release
- See the “What’s New at a Glance” in *Solaris 8 Installation Supplement* for new features that the Trusted Solaris 8 release inherits from the Solaris 8 release.

Trusted Solaris 7 Bugs Fixed in This Release

The following bugs reported in the *Trusted Solaris 7 Release Notes* have been fixed in the Trusted Solaris 8 software:

- (4029612) The `label_encodings` file is protected from reading.
- (4029584) `bltos(3TSOL)` function’s binary to character-coded and character-coded to binary label translation is MT-safe.
- (4055191) `libtsol()` label functions change logging behavior of programs that use the label functions, that is, they change `syslog` parameters.
- (4287445), (4268980) The 64-bit `t6` library routines `t6peek_attr(3NSL)` and `t6last_attr(3NSL)` succeed in the `libbsm` library. The `auditwrite(3TSOL)` library routine works in 64-bit programs.
- (4288647) Preselection in the `libbsm` routines reliably occurs.

Known Problems with the Software

This section identifies known problems in the Trusted Solaris 8 software, describes them, and suggests solutions to them. These bugs may or may not be fixed in a future release.

bind and accept do not generate audit records (4256066)

The system calls `bind` and `accept` are audited through audit events (such as `AUE_SOCKETACCEPT`) in the `nt` (network) audit class. When the network audit class is preselected for auditing, these events do not appear on the audit trail.

Workaround: None. Do not attempt to collect audit records for `bind` and `accept`.

The `/etc/shadow` file can be relabeled (4388344)

If a user mistypes a password for a local account, the label of the `/etc/shadow` file may change. This can cause subsequent login attempts to fail.

Workaround: If you mistype the password for a local account, have the security administrator immediately relabel the `/etc/shadow` file as `ADMIN_LOW`.

File system label ranges are not enforced for unlabeled NFS file systems (4150441)

This is a very unusual situation to be in. This requires that the administrator consciously configure a NFS remote host to be at one label, and the label range to be another.

Workaround: If you do not want to allow the creation of files at the default label for the server, mount the file system as "read-only". That does not affect existing files, but it prevents the creation of files at a label outside the label range.

Trusted Solaris label encodings file requires coding for ILs (4329208)

Although Trusted Solaris 8 does not support information labels (ILs), the `label_encodings(4)` command fails with the following error if the `label_encodings` file omits information about ILs.

```
# chk_encodings label_encodings
Label encodings conversion error at line 37:
  Can't find INFORMATION LABELS specification.
  Found instead: "SENSITIVITY LABELS:".
label_encodings: label encodings syntax check failed.
```

Workaround: Copy a valid SENSITIVITY LABELS: section in your label_encodings file, and rename it to INFORMATION LABELS: :

```
INFORMATION LABELS:
...
WORDS:
...
REQUIRED COMBINATIONS:
...
COMBINATION CONSTRAINTS:
...
```

Label daemon is not locale-aware (4384632)

The label daemon, `labeld`, always operates in the C locale.

Workaround: In locales where upper/lower case are not a direct mapping of the C locale, the classification and word names, short names, and alternate names in the `label_encodings(4)` file and all string labels in all databases *must be in upper case only*. Also, all labels must be entered in upper case only.

NIS (YP) account cannot see assigned profiles (4384781)

Execution attributes for commands/actions in profiles in NIS maps are not seen.

Workaround: Define profiles and execution attributes for actions/commands in the files (local) scope for NIS clients. Or, use NIS+ for your site's naming service.

The smoservice command fails to create OS server (4378498)

The SMC commands `smoservice` and `smdiskless` do not work correctly.

Workaround: Set up diskless service manually. On the OS server, name and allocate the client disk partitions during the installation program.

SMC auditing is incomplete (4358479)

The Rights and Serial Manager do not produce auditing records. There is a Solaris bug for this: 4357512. The Groups Manager audits modifications only. The tools to

handle trusted network databases, Interface Manager and Security Families, are not audited.

Workaround: None. Do not expect to collect audit records for SMC tools.

SMC Mounts tool does not recognize Trusted Solaris attributes (4382753)

Trusted Solaris security attributes, such as `allowed=all`, cannot be set or viewed on a mounted file system using the SMC Mounts tool.

Workaround: Mount file systems and view the mounts on your system by using the `mount(1M)` command.

SMC returns error for a valid IPv6 address (4380852)

When using the Trusted Solaris Management Console, Computers and Networks, Security Families tool, an entry like the following is rejected:

```
IP address:  2::45:b00:20ff:fe78
Prefix length: 127
template: tsol
```

Workaround: Do not use double colons. For example, enter the above IP address in SMC as follows:

```
IP address:  2:0:0:0:45:b00:20ff:fe78
Prefix length: 127
template: tsol
```

SMC Scheduled Jobs tool supports `admin_low` jobs only (4385223)

The SMC Scheduled Jobs tool always runs at `ADMIN_LOW` even if the SMC client is running at a normal user label, like `CONFIDENTIAL`. The SMC server runs at `ADMIN_LOW` and does not consider the client's sensitivity label.

No error message is generated but the `cron` entry is stored at a label below the user's minimum label.

Workaround: To create cron jobs at labels other than ADMIN_LOW, use the `crontab(1)` command.

Switching between scopes in SMC is not robust (4381198)

If you use two different scopes during one invocation of SMC, entries can get saved into the wrong scope.

Workaround: Do not switch back and forth between scopes when using the SMC tools. When changing scope, quit and restart the SMC client.

The TSIX network protocol does not work (4291482)

The TSIX network protocol does not work.

Workaround: Use the TSOL network protocol.

Trusted Solaris 8 does not update the Solaris SUNWrdr package

Read the files in `SUNWrdr` for information on the basic Solaris 8 environment.

Workaround: For late-breaking news, use this book, *Trusted Solaris 8 Release Notes*.

CDE exit sometimes fails (4385479)

After a user clicks the EXIT icon on the front panel to exit, the system does not return to the login screen. Instead it just hangs with a gray screen. This bug is in base Xserver (4068021, 4378762).

Workaround:

1. Assume the admin role on another machine.
2. In the admin role, `rlogin` to the hung machine.
3. Find and kill the Xsun process.

```
$ ps -ef | grep Xsun
      Xsun_proc_id
$ kill Xsun_proc_id
```

Drag and drop does not work for OpenLook applications (4095021)

Drag and drop operations do not work reliably for OpenLook applications.

Workaround: Use the copy and paste keys with OpenLook applications.

Selection Manager restarts in wrong locale (4094175)

If the selection manager process dies for any reason, it is automatically restarted. When it is restarted, it inherits the C locale instead of the locale it was originally started with.

Workaround: Log out and log back in.

The swmtool utility does not work (4284167)

The `swmtool(1M)` utility does not work in the Trusted Solaris 8 operating environment.

Workaround: Use the `pkgadd(1M)` utility. Or change the following line in `/var/sadm/system/admin/INST_RELEASE` to read Solaris:

```
# OS=Trusted Solaris
OS=Solaris
```