



Sun Ray™ Server Software 4.0 Release Notes

for the Solaris™ Operating System

Sun Microsystems, Inc.
www.sun.com

Part No. 33820-0417-05
May 2007, Beta Release

Copyright 2002—2007, Sun Microsystems, Inc., 4150 Network Circle, Santa Clara, California 95054, U.S.A. All rights reserved.

Sun Microsystems, Inc. has intellectual property rights relating to technology embodied in the product that is described in this document. In particular, and without limitation, these intellectual property rights may include one or more of the U.S. patents listed at <http://www.sun.com/patents>, and one or more additional patents or pending patent applications in the U.S. and in other countries.

This document and the product to which it pertains are distributed under licenses restricting their use, copying, distribution, and decompilation. No part of the product or of this 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, Sun Ray, Sun WebServer, Sun Enterprise, Ultra, UltraSPARC, SunFastEthernet, Sun Quad FastEthernet, Java, JDK, HotJava, 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.

Netscape is a trademark or registered trademark of Netscape Communications Corporation.

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.

Use, duplication, or disclosure by the U.S. Government is subject to restrictions set forth in the Sun Microsystems, Inc. license agreements and as provided in DFARS 227.7202-1(a) and 227.7202-3(a) (1995), DFARS 252.227-7013(c)(1)(ii) (Oct. 1998), FAR 12.212(a) (1995), FAR 52.227-19, or FAR 52.227-14 (ALT III), as applicable.

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 2002—2007, Sun Microsystems, Inc., 4150 Network Circle, Santa Clara, California 95054, Etats-Unis. Tous droits réservés.

Sun Microsystems, Inc. a les droits de propriété intellectuels relatants à la technologie incorporée dans le produit qui est décrit dans ce document. En particulier, et sans la limitation, ces droits de propriété intellectuels peuvent inclure un ou plus des brevets américains énumérés à <http://www.sun.com/patents> et un ou les brevets plus supplémentaires ou les applications de brevet en attente dans les Etats-Unis et dans les autres pays.

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 des systèmes 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, Sun Ray, Sun WebServer, Sun Enterprise, Ultra, UltraSPARC, SunFastEthernet, Sun Quad FastEthernet, Java, JDK, HotJava, et Solaris sont des marques de fabrique ou des marques déposées, ou marques de service, de Sun Microsystems, Inc. aux Etats-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 Etats-Unis et dans d'autres pays. Les produits portant les marques SPARC sont basés sur une architecture développée par Sun Microsystems, Inc.

Netscape est une marque de Netscape Communications Corporation aux Etats-Unis et dans d'autres pays.

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 licenciées de Sun qui mettent en place l'interface d'utilisation graphique OPEN LOOK et qui en outre se conforment aux licences écrites de Sun.

LA DOCUMENTATION EST FOURNIE "EN L'ETAT" ET TOUTES AUTRES CONDITIONS, DECLARATIONS ET GARANTIES EXPRESSES OU TACITES SONT FORMELLEMENT EXCLUES, DANS LA MESURE AUTORISEE PAR LA LOI APPLICABLE, Y COMPRIS NOTAMMENT TOUTE GARANTIE IMPLICITE RELATIVE A LA QUALITE MARCHANDE, A L'APTITUDE A UNE UTILISATION PARTICULIERE OU A L'ABSENCE DE CONTREFAÇON.

Contents

Supported Platforms	1
What's New	1
New Admin GUI	1
New OSD	2
Pop-up GUI	2
Kiosk (Controlled Access) Mode	2
Integrated VPN Support	2
NAT Gateway Device Support	2
Supported Features for Trusted Extensions	3
PC/SC-lite Installation	3
Removed or Deprecated Features	5
SCF (Smart Card Framework) API	5
Known Problems and Limitations	5
Solaris 10 Zones	5
Solaris Trusted Extensions Issues	5
Screen Issues	5
Device Issues	6
Installation, Configuration, and Upgrade Issues	6
Reboot Before Running utadm and utconfig	6

Keyboard Issues 7

Auto-Repeat (Bug ID 6244200) 7

L10N Issues 7

Admin GUI Logout 8

Online Help (French) 8

Multibyte Font Display Problem 9

Sun Ray Server Software 4.0 Release Notes for Solaris

Supported Platforms

Sun Ray Server Software 4.0 for Solaris is designed to run on the following operating systems with Solaris SPARC and x86 servers:

- Solaris 10 11/06
- Solaris 10 11/06 with Trusted Extensions

What's New

Sun Ray Server Software 4.0 for Solaris offers the following new features:

New Admin GUI

The Sun Ray Administration Tool (Admin GUI) has been rewritten for the 4.0 release. It uses the Java Server Faces (JSF) technology to dynamically render a Web-based administration interface that complies with the most current Sun branding. The previously used CGI-based rendering logic has been completely removed.

New OSD

On Screen Display icons have been revised to present a clearer depiction of connectivity and other issues; however, the icon codes and DHCP codes remain the same. They are described in Tables B-1 and B-2 in the *Sun Ray Server Software 4.0 Administrator's Guide*.

Pop-up GUI

The Pop-up Graphical User Interface allows the entry of network configuration parameters for a Sun Ray DTU from the attached keyboard. It is described in Chapter 7 of the *Sun Ray Server Software 4.0 Administrator's Guide*.

Kiosk (Controlled Access) Mode

The previous Controlled Access Mode (CAM) functionality has been replaced by Kiosk Mode. Instructions for preserving old CAM configuration data and converting to the new Kiosk Mode are included in the *Sun Ray Software 4.0 for Solaris Installation and Configuration Guide*.

Integrated VPN Support

Sun Ray Server Software with the most recent firmware provides a VPN solution for remote users that does not require a separate VPN router. This functionality is supported only on Sun Ray 2 hardware:

- Sun Ray 2
- Sun Ray 2FS
- Sun Ray 270

NAT Gateway Device Support

Peripheral devices are now supported when the Sun Ray DTU is behind a NAT gateway.

Supported Features for Trusted Extensions

SRSS 4.0 supports the following features for Solaris 10 with Trusted Extensions:

- SRSS installation and configuration
- Audio
- Mass storage
- Authenticated smart cards

PC/SC-lite Installation

Sun Ray Server Software provides the industry-standard PC/SC-lite API to enable access to smart cards and smart card readers connected to Sun Ray DTUs.

To Install PC/SC-lite, please follow the instructions below.

▼ To Install PC/SC-lite

Note – Packages for PC/SC-lite are located in the Supplemental directory.

In a Solaris Trusted Extensions environment, perform the following instructions as root from ADMIN_LOW (global zone):

1. Remove the following packages from the Sun Ray Server:

```
SUNWsrcbp
SUNWocfd
SUNWocfh
SUNWocfr
SUNWpcslite
SUNWpcslite-devel
SUNWjcom
```

Note – If you are in a Solaris Trusted Extensions environment, follow steps 2 and 3; otherwise, skip to step 4.

2. Add shared multilevel port 5999 to the global zone.

This is necessary in order to have access from the local zone.

a. Start the SMC GUI.

```
# smc &
```

b. Under Management Tools-Select hostname: Scope=Files, Policy=TSOL option.

c. Select System Configuration->Computers and Networks
->Trusted Network Zones->global.

d. From the menu bar, Select Action->Properties.

e. Under Multilevel Ports for Shared IP Addresses, click Add.

f. Add 5999 as Port Number, Select TCP as Protocol and click OK.

g. Under Multilevel Ports for Zone's IP Addresses, click Add.

h. Add 5999 as Port Number, Select TCP as Protocol and click OK.

3. Verify that these ports are listed as shared ports by running the following command:

```
# /usr/sbin/tninfo -m global
```

4. Install the PC/SC-lite package into the global zone.

```
# pkgadd -d . SUNWpcsc
```

If not in a Solaris Trusted Extensions environment, ignore the reference to global zone in step 4, and simply perform the pkgadd procedure.

5. Verify that **pcscd daemon** (/usr/lib/smartcard/pcscd) is running.

If not, run the following command or reboot the system:

```
# /usr/sbin/svcadm enable pcscd
```

6. Install Sun Ray PC/SC-lite components:

```
# pkgadd -d . SUNWpcscdtu
```

Removed or Deprecated Features

SCF (Smart Card Framework) API

The Sun-proprietary SCF API has been removed from the SRSS 4.0 release.

Known Problems and Limitations

Solaris 10 Zones

S10 uses zones to permit multiple virtualized operating system environments to coexist in a single instance of Solaris, allowing processes to run in isolation from other activity on the system for added security and control. SRSS 4.0 is supported only in the global zone.

Note – Attempts to install SRSS 4.0 in S10 local zones generate appropriate error messages.

Solaris Trusted Extensions Issues

Screen Issues

Hotdesking (Bug ID 6501261)

The following error message is sometimes displayed upon hotdesking or power cycling the DTU:

```
Action:LockDisplay[Error] Request to service this action has failed.  
A tooltalk connection could not be established.
```

If a blank screen is presented without a screen lock, then enter the password to unlock the screen and access the session.

Device Issues

Audio (Bug ID 6540145)

Remove the setuid-0 bit on the utaudio binary.

```
$ chmod u-s /opt/SUNWut/bin/utaudio
```

otherwise utaudio processes started by users in the local zone do not get cleaned up when the users log out of their Sun Ray sessions.

Sun Multiple Slices/Partitions (Bug ID 6535611)

Sun Ray mass storage handles a single slice or partition for use by the Trusted Extensions device allocation framework; however, the Sun Ray mass storage code needs to be able to handle multiple slices/partitions for Trusted Extensions.

Mount Points (Bug ID 6538004)

Mount points for USB mass storage devices with HSFS file systems are not removed correctly.

Installation, Configuration, and Upgrade Issues

Reboot Before Running utadm and utconfig

In SRSS 3.1 and later, Sun Ray services are started only on the first reboot after installation. Consequently, after you install Sun Ray Server Software, you must reboot the Sun Ray Server before running utadm and utconfig.

Keyboard Issues

Auto-Repeat (Bug ID 6244200)

On Solaris 10 with XKB enabled, auto-repeat may not work as expected in the CDE environment. Use of XKB with CDE is not recommended.

L10N Issues

L10N packages are not installed by default; however, they are included in the `Supplemental` directory and can be installed manually with the `rpm -i` command. The following packages are available:

TABLE 1 L10N Packages

Language	Package(s)
For French	SUNWfuta, SUNWfutes, SUNWfuto, SUNWfutwa, SUNWfutwh
For German	SUNWdutes, SUNWduto
For Italian	SUNWiutes, SUNWiuto
For Japanese	SUNWjuta, SUNWjutes, SUNWjuto, SUNWjutwa, SUNWjutwh
For Korean	SUNWkutes, SUNWkuto
For Portuguese	SUNWputes, SUNWputo
For Simplified Chinese	SUNWcuta, SUNWcutes, SUNWcuto, SUNWcutwa, SUNWcutwh
For Spanish	SUNWeutes, SUNWeuto
For Traditional Chinese	SUNWhutes, SUNWhuto

- **For French, Japanese, Simplified Chinese locales, restart the Administration GUI after installing the Admin GUI locale packages:**

```
# /opt/SUNWut/lib/utwebadmin restart
```

- **To display the locale correctly in the Admin GUI, adapt your browser's language preferences, and select the desired locale (fr, ja, or zh_CN).**

For example, for Mozilla, go to Tools -> Options -> Advanced -> Edit Languages.

Admin GUI Logout

Admin GUI logout does not work in the French locale. The workaround is:

1. Remove the following line:

```
onClick="#{login.logoutMessage}"
```

from the `logoutLink` section of the

`/opt/SUNWut/webadmin/webapps/ut/jsp/misc/Masthead.jsp` file:

```
<f:facet name="logoutLink">
  <ui:hyperlink id="logout"
    action="#{login.logout}"
    immediate="true"
    onClick="#{login.logoutMessage}"
    tooltip="#{msg.masthead_logout_link_tooltip}"
    target="_top"/>
</f:facet>
```

2. Restart the Admin GUI:

```
# /opt/SUNWut/lib/utwebadmin restart
```

Online Help (French)

The following workaround enables the help text to display in the French locale, although left-pane navigation may continue to display in English.

1. Copy the files `toc.xml` and `index.xml` from the English online help location:

```
# cp /opt/SUNWut/webapps/ut/html/en/help/toc.xml \
/opt/SUNWut/webapps/ut/html/fr/help
# cp /opt/SUNWut/webapps/ut/html/en/help/index.xml \
/opt/SUNWut/webapps/ut/html/fr/help
```

2. Restart the Admin GUI:

```
# /opt/SUNWut/lib/utwebadmin restart
```

Multibyte Font Display Problem

In multibyte locales using pre-1.5 releases of JRE, Java-based Sun Ray tools such as `utsettings`, `utmhconfig`, and the Registration GUI do not work properly. Proper multibyte font display requires JRE 1.5.

The workaround is to create a `guijre` symbolic link in `/etc/opt/SUNWut` to point to an appropriate JRE release, for instance:

```
# ln -s </path_to_jre_1.5> guijre
```

The Registration GUI, `utsettings`, and `utmhconfig`, can then be launched with the specified JRE.

