



Sun Ray™ Server Software 4.1 Release Notes

for the Linux Operating System

BETA DRAFT

Sun Microsystems, Inc.
www.sun.com

Part No. 820-3775-06
July 2008, Revision A

Copyright 2002—2008, 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—2008, Sun Microsystems, Inc., 4150 Network Circle, Santa Clara, California 95054, Etats-Unis. Tous droits réservés.

Sun Microsystems, Inc. a les droits de propriété intellectuelle relatants à la technologie incorporée dans le produit qui est décrit dans ce document. En particulier, et sans la limitation, ces droits de propriété intellectuelle 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
Xnewt (Xorg Server)	1
Multimedia Enhancements	2
Remote Hotdesk Authentication	2
Service Tags	2
Service Tags Installation	3
Known Problems and Workarounds	3
Installation, Configuration, and Upgrade Issues	3
Restart Required on RHEL (Bug ID 6481726)	3
SLES Messages and admin_log (Bug ID 6638239)	4
Zen Updater Utility on SLES (Bug ID 6693396)	4
GUI Issues	4
Admin GUI Upgrade (Bug ID 6572246)	4
Remote Access (Bug ID 6508069)	4
Self-Registration GUI (Bug IDs 6533780, 6538083)	5
Audio Issues	5
Low Volume on SuSE Multihead Sessions (Bug ID 6552753)	5
xmms Player Configuration (Bug ID 6473628)	5

Multimedia Issues	6
Multihead Video Hotdesking (Bug ID 6709408)	6
RealPlayer Application (Bug ID 6667704)	6
Keyboard Issues	6
Alt and Meta Keys (Bug ID 6416642)	6
Left Shift Key and System Bell (Bug ID 6687804)	6
Right Shift Key (Bug ID 6633324)	7
XKB on RHEL	7
Numeric Keypad Mapping	7
Keyboard Layout	7
Screen Issues	8
No Screen Lock for Second Linux Session	8
Mass Storage Issues	8
Printing Issues	8
Printing Configuration in RHEL 5 U1 (Bug ID 6643676)	8
L10N Issues	8
Portuguese Locale	9
utselect and utwall	9

Sun Ray Server Software 4.1 Release Notes for Linux

Supported Platforms

Sun Ray Server Software 4.1 for Linux runs on:

- SuSE Linux Enterprise Server (SLES) 10 with Service Pack 1 or later (32-bit and 64-bit)
- Red Hat Enterprise Linux 5 Update 1 (32-bit and 64-bit)

What's New

Sun Ray Server Software 4.1 for Linux offers the following new features:

Xnewt (Xorg Server)

SRSS 4.1 includes a new standalone Xserver, Xnewt, based on Xorg 7.2 community source. Xnewt is designed specifically for Sun Ray DTUs; it is not effective for non-Sun Ray devices.

Xnewt introduces two new extensions, XRandR, XVideo. For details, see the Xnewt(1) man page.

Multimedia Enhancements

This release delivers enhanced multimedia playback capabilities on Sun Ray DTUs by extending Sun Ray architecture to accept H.264 (MPEG-4) and VC-1 (WMV) streams and transmit them directly to Sun Ray 2/2FS/270 DTUs for decoding.

The Sun Ray Server CPU and Windows Server CPU are not utilized to perform the decode. This is the optimal solution for server resource conservation and network bandwidth consumption.

This release leverages the standard (XVideo) interface for general purpose player optimization for Sun Ray 1 and Sun Ray 2 where YUV streams are sent directly to the Sun Ray DTU. This enables improved playback of video formats other than H.264 and VC-1 by reducing the bandwidth required to deliver the decoded video to the Sun Ray DTU. For example, RealPlayer supports the XVideo extension to utilize the accelerated YUV path.

This enhancement is supported on Windows XP and Windows 2003 platforms only. Also, only clips played using Windows Media Player and 11 are supported by this enhancement. Details are described in the *Sun Ray Connector for Window OS Version 2.1 Installation and Administration Guide*.

Remote Hotdesk Authentication

Remote Hotdesk Authentication (RHA) is a new security policy feature, turned on by default.

Before connecting to a pre-existing session, the Authentication Manager now asks the Session Manager to create a temporary new session for authentication of the user. After the user has been successfully authenticated, the Sun Ray DTU is connected directly to the user's session. This authentication does not apply to anonymous Kiosk Mode. Sun Ray Server Software can be configured to turn RHA off, if desired, via the Admin GUI or the -D option to utpolicy.

Service Tags

Service Tags is a Sun-wide strategic effort for registering Sun software and hardware. Service Tags support in Sun Ray will allow users to register Sun Ray Software. These entries can then be harvested and fed back to Sun from customer installation.

Service Tags Installation

In addition to the normal SRSS installation, the SRSS installer also installs the Service Tags Add-On package, `SUNWutsvt`. This registers the SRSS product with Service Tags; however, the SRSS uninstaller does not uninstall the Service Tags Add-On.

To uninstall this package, run the following command:

```
# rpm -e SUNWutsvt-1.0-*.rpm
```

To configure/enable/disable the Service Tags feature, see:
`/etc/opt/SUNWutsvt/utsvtd.conf.defaults`

With Service Tags, customers can register Sun products to Sun Connection automatically, for instance, by selecting Discover & Register at:
<https://sunconnection.sun.com/inventory>.

Linux customers should install Service Tags packages manually.

For further information on Sun Service Tags installation and configuration, see:
<http://wikis.sun.com/display/ServiceTag/Sun+Service+Tag+FAQ>

Known Problems and Workarounds

Installation, Configuration, and Upgrade Issues

Note – Upgrade is not supported in the Beta release.

Restart Required on RHEL (Bug ID 6481726)

After Sun Ray Server Software installation on RHEL, Sun Ray Services must be restarted with the following command after the Sun Ray Server is rebooted:

```
# /opt/SUNWut/sbin/utrestart -c
```

SLES Messages and admin_log (Bug ID 6638239)

In SLES, messages and admin_log files are not generated.

The workaround is to look for these messages in /var/log/messages.

Zen Updater Utility on SLES (Bug ID 6693396)

The Zen updater utility starts when multihead is created in this environment.

GUI Issues

Admin GUI Upgrade (Bug ID 6572246)

The 4.0 Admin GUI requires a Web container that supports the Java Servlet and Java Server Pages (JSP) standards; earlier versions did not. Due to this change, Apache Tomcat 5.5 (or higher) has to be installed on the system, and the `utconfig` script has therefore been extended to ask for the location of an existing Tomcat instance.

If you perform an upgrade from a previous Sun Ray Server Software version (using a preserve file, for example), you must run `utconfig -w` after you have completed the upgrade. The `utconfig -w` command will prompt you for the Admin GUI settings, including the location of the Tomcat installation, after which the Admin GUI will be started automatically.

Remote Access (Bug ID 6508069)

Disabling remote access can result in an empty page.

The `utconfig -w` command allows you to enable or disable remote access to the Admin GUI. If remote access is disabled (the default), you must access the Admin GUI via `http://localhost:1660` or `http://127.0.0.1:1660`.

Accessing the Admin GUI via `http://<servername>:1660` will not work in this case and will result in an empty browser page. If you want to access the Admin GUI via `http://<servername>:1660`, you must enable remote access.

Self-Registration GUI (Bug IDs 6533780, 6538083)

If the wrong username or password is entered, the self-registration GUI does not allow text to be entered.

The workaround is to press the `Exit` button to relaunch the self-registration GUI.

Occasionally use of the self-registration GUI can result in a Java core dump, although registration continues to work as expected, and no other adverse side effects are observed. However, if `coreadm` is configured to name core dumps uniquely, disk space usage should be monitored.

Audio Issues

Low Volume on SuSE Multihead Sessions (Bug ID 6552753)

On SuSE, sometimes audio volume is very low in a multihead session.

The workaround is to create and use a new audio device by setting the `AUDIODEV` and `UTAUDIODEV` variables to the newly-created audio device.

`xmms` Player Configuration (Bug ID 6473628)

To configure an `xmms` player to play mp3 files, perform the following steps.:

- 1. Change the preferences on `xmms` output plugin to add more buffering.**
- 2. Change the buffer size to 10000 ms and the Pre-Buffer percent to 90.**
When you run `xmms`, from command line or menu, click on the `O` (letter `O`) on the left side of the panel to bring up the Preferences menu.
- 3. Under the Audio I/O Plugins button, select Output Plugin OSS Driver and press the Configure button.**
- 4. Select Buffering.**
 - a. The default Buffer size is 3000 ms. Change this to 10000 ms.**
 - b. The default Pre-buffer percent is 25. Change this to 90.**
- 5. Press OK, then Press OK on the Preferences panel.**
- 6. Exit `xmms` and restart it.**

Multimedia Issues

Media enhancements currently lack the following functionality:

- Low bandwidth environment
- Xinerama
- Multiple Streams at the same time

Multihead Video Hotdesking (Bug ID 6709408)

When a session is started on a multihead group and then hotdesked to a smaller multihead group or a single DTU, video may appear on the wrong screen.

While playing a video on the visible screen, when the mouse is dragged to the edge resulting in a screen swap, one or more frames will display on the new screen.

The workaround is to cause a redraw of the affected area of the screen:

- 1. Drag a window over the video frame image.**
- 2. Maximize and minimize a window.**

RealPlayer Application (Bug ID 6667704)

Sometimes RealPlayer application exits with core dump while using XVideo to play a video clip.

This problem is caused by memory corruption in the RealPlayer process. The fix is beyond the scope of Sun Ray release.

Keyboard Issues

Alt and Meta Keys (Bug ID 6416642)

The Alt and Meta keys are swapped when XKB is enabled.

Left Shift Key and System Bell (Bug ID 6687804)

When XKB is enabled, the Left Shift key and system bell do not work.

The workaround is as follows:

From Computer -> Control Center:

1. Disable Shortcuts -> Desktop -> Search.
2. Enable Sound -> SystemBeep.

Right Shift Key (Bug ID 6633324)

In SLES 10, the Right Shift does not work.

The workaround is to disable the following shortcut:

From Computer -> Control Center:

1. Select Personal.
2. Select Shortcuts.
3. Select E-mail.
4. Disable it by pressing the Backspace key.

XKB on RHEL

In RHEL, the following message is displayed after enabling XKB feature; however, the feature works as expected.

```
Error activating XKB configuration.  
Probably internal X server problem.
```

Numeric Keypad Mapping

Numeric keypad mapping does not work properly in Java-based Sun Ray tools such as `utsettings`, `utmhconfig`, and the registration GUI.

The workaround is to set the environment variable `_AWT_USE_TYPE4_PATCH` to `false`, as follows:

```
# setenv _AWT_USE_TYPE4_PATCH false
```

Keyboard Layout

`setxkbmap` cannot be used to set layouts for keyboards on Sun Ray DTUs.

Screen Issues

No Screen Lock for Second Linux Session

A user who creates two Linux sessions cannot create a screen lock for the second session. When SRSS needs to lock the screen, it uses `xlock` for the second session. When the user tries to lock the screen from the menu, nothing happens. The workaround is to start a screensaver daemon for the second session manually, to enable screen locking and stop SRSS from using `xlock`.

```
# /usr/X11R6/bin/xscreensaver -nosplash &
```

Mass Storage Issues



Caution – Failure to run `utdiskadm -r` before unplugging mass storage devices will cause loss of data. Make sure your users run `utdiskadm -r` before they unplug any mass storage device.

```
% /opt/SUNWut/bin/utdiskadm -r device_name
```

Printing Issues

Printing Configuration in RHEL 5 U1 (Bug ID 6643676)

Printing configuration fails in RHEL 5 Update 1. Local printing is not supported in this environment.

L10N Issues

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.

Portuguese Locale

To enable the Portuguese locale, use the `rpm -i` command to install the following package:

```
# rpm -i SUNWputo-4.1-01.i386.rpm
```

utselect and utwall

In the Simplified Chinese, Traditional Chinese, and Korean locales, `utselect` and `utwall` do not work properly in Linux distributions.

A workaround for this issue is to remove the `utselect` and `utwall` catalog files from the appropriate locale sub-directory. This brings up `utselect` and `utwall` in English.

For the Simplified Chinese locale:

```
# rm /opt/SUNWut/lib/locale/zh_CN/LC_MESSAGES/utselect.mo
# rm /opt/SUNWut/lib/locale/zh_CN/LC_MESSAGES/utwall.mo

# rm /opt/SUNWut/lib/locale/zh_CN.utf8/LC_MESSAGES/utselect.mo
# rm /opt/SUNWut/lib/locale/zh_CN.utf8/LC_MESSAGES/utwall.mo
```

For the Traditional Chinese locale:

```
# rm /opt/SUNWut/lib/locale/zh_TW/LC_MESSAGES/utselect.mo
# rm /opt/SUNWut/lib/locale/zh_TW/LC_MESSAGES/utwall.mo
```

For the Korean locale:

```
# rm /opt/SUNWut/lib/locale/ko_KR.utf8/LC_MESSAGES/utselect.mo
# rm /opt/SUNWut/lib/locale/ko_KR.utf8/LC_MESSAGES/utwall.mo
```

