Sun Ray™ Server Software 3 Release Notes

for the Linux Operating System

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Sun Ray Server Software 3 Release Notes

Sun Ray Server Software 3 is an incremental release of Sun Ray Server Software. It is designed to run on Solaris 8 and 9 and Trusted Solaris (TSOL) 8 7/03, as well as on the three flavors of Linux listed in the next section. Changes, improvements, and problems are described in the following sections.

Note – This is a living document that is subject to updates as new information becomes available. For the latest version, please see `docs.sun.com`.

What's New

Sun Ray Server Software 3 is the first release to offer support for platforms other than Solaris. SRSS 3 supports three Linux platforms:

- Sun Java Desktop System 2 for x86
- Red Hat Enterprise Linux Advanced Server 3 for x86, at the SP3 (Service Pack 3) level or later
- SuSE Linux Enterprise Server 8 Service Pack 3 for x86

Note – All x86 architectures are 32-bit only.

In addition to the new platform support, this release includes the following new features:

- Support for low-bandwidth Sun Ray deployment
- PS/SC Muscle Smart Card API
  Available on Solaris

Linux Support Limitations

The following services, capabilities, and functions are available on Solaris but not on Linux in the SRSS 3 release:

- Hotdesking with authenticated smart cards
- Non-Smart Card Mobility (NSCM)
- Sun Ray SNMP modules
- CAM (kiosk mode) is not supported on Linux in SRSS 3 but is still available on Solaris.

Known Issues

Kernel Module Installation

If the `utio` and `utadem` kernel modules do not install successfully, use the following procedure:

```
# cd /lib/modules/‘uname -r‘/build
# make cloneconfig
# make dep clean
# cd /usr/src/SUNWut/<utio or utadem>
# make clean
# make
# make install
# /etc/init.d/utsyscfg stop
# /etc/init.d/utsyscfg start
```

Failover Groups

Do not configure machines running Solaris in the same failover group with machines running any Linux variant.

Self-Registration GUI

The self-registration GUI does not accept NIS Unix logins on Linux.

Keyboard Issues

Caps Lock

In some applications running on SuSE or JDS, the Caps Lock key does not work.

French Key Mapping

In the Fr locale, some users may find incorrect key mapping sequences for special characters that use diaereses. A fix for this problem is in progress but not yet verified.

Screen Issues

Font Display Problems

In multibyte locales using pre-1.5 releases of JRE, Java tools such as `utsetings`, `utmhconfig`, and the Registration GUI do not work properly in certain Linux distributions. JRE 1.5, however, can be used with these tools for proper font display.

To fix this problem, create a `guijre` symlink in `/etc/opt/SUNWut` to point to an appropriate JRE release.

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

The Registration GUI, `utsettings`, and `utmhconfig` will now be launched using the specified JRE.

Screen Saver May Trigger Warnings

On Red Hat Linux, and perhaps on other Linux variants, invoking the screen saver causes error messages like the following to be displayed:

```
Xlib: extension XFree86-misc missing on Display...
```

This problem has nothing to do with Sun Ray; it is a screen saver configuration issue. The workaround is to edit the `/usr/lib/X11/app-defaults/XScreenSaver` file, setting the value of *captureStderr* to False.

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. For a workaround, start a `screensaver` daemon for the second session manually, to enable screen locking and stop SRSS from using `xlock`:

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

Xlock Problem on SuSE Linux

A user who locks the screen manually using the menu then hot desks the session is presented with the usual password screen to unlock the session. After the user enters the password and gains access to the session, a second screen lock may appear after 10 to 20 seconds. This second screen lock will be an `xlock`, and may present a black screen.

To return to the `xlock` password screen, the user has to press a key on the keyboard (not just jiggle the mouse). However, once the password is entered the second time, the user gets access to the session, and no further screen locking should occur.

Gnome Issues

Gnome Version Conflicts

If a common home directory is mounted on machines with different Gnome versions, conflicts between or among the versions cause unpredictable behavior. Do not try to use multiple Gnome versions with a common home directory.

Gnome Display Manager Privilege Issues

Many Linux systems come configured with liberal administrative privileges for non-root users. You most likely do *not* want these privileges offered to users who login using a SunRay DTU. Please review the man pages for `pam_console`, `console.perms`, and `console.apps`. It is also a good idea to edit the `/etc/security/console.perms` file to remove display numbers from the definition of *console*. If a definition exists for *xconsole*, it should be removed entirely.

For example, a line that reads:

```
<console>=tty[0-9][0-9]* vc/[0-9][0-9]* :[0-9].[0-9] :[0-9]
```

should instead read:

```
<console>=tty[0-9][0-9]* vc/[0-9][0-9]*
```

And a line such as:

```
<xconsole>=:[0-9].[0-9] :[0-9]
```

should be removed altogether.

Linux GDM for SRSS 3

After services are restarted on certain Linux implementations using a private interconnect, DTUs may loop between OSD icons 1 and 22D several times before connecting to their sessions.

This behavior is inconvenient; however, the bug resides in the Linux Gnome display manager, not in the Sun Ray server software. The `gdmdynamic -d` process, which cleans up the GDM displays but not the complete session, takes longer than expected to complete execution for each display.

Manual Installation of SRSS GDM Fails for RHAS

The GDM RPM delivered by the SRSS3 image depends on the files `libcrypto.so.0.9.6` and `libssl.so.0.9.6`, which are available on JDS and SuSE but not on RHAS Linux. Because these files are not available, manual installation of the SRSS GDM RPM fails on RHAS Linux.

The workaround is to use the command `rpm -i --nodeps` to install the GDM RPM on RHAS.

Audio Issues

Audio and USB Driver Installation Fail on Some JDS Systems

Because of a kernel mismatch, systems with more than one processor running Java Desktop Release 2 do not install audio (`utadem`) and usb (`utio`) modules.

To check for this problem, run the following commands:

```
# /sbin/lsmod |grep utio
# /sbin/lsmod |grep utadem
```

If the problem exists, these commands will not list the modules.

The workaround is:

```
# cd /lib/modules/'uname -r'/build
# make cloneconfig
# make dep clean

# cd /usr/src/SUNWut/utio
# make clean
# make
# make install

# cd /usr/src/SUNWut/utadem
# make clean
# make
# make install

# /etc/init.d/utsyscfg stop
# /etc/init.d/utsyscfg start
```

Real Player on JDS Release 2

The default version of Real Player shipped with JDS 2 does not work correctly on Sun Ray.

The workaround is to upgrade the Real Player to the following version, which is available at the Real Player website, `http://www.real.com:`

`rp8.linux2.0.libc6.i38c.cs2.rpm`

utwall Audio Problem

utwall uses the SOX play command to play audio files; however, the SLES 8 distribution does not bundle the SOX player.

To fix this problem, install the SOX RPM `sox-12.17.3` from the SRSS 3 Supplemental Directory.

Other Known Issues

DHCP Service on Red Hat Advanced Server

When DHCP service is removed from Startup Services on SRSS 3 for RHAS, the DHCP daemon does not start as expected after a reboot.

The workaround is to restart the DHCP server manually after rebooting:

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

Documentation

Sun Ray Server Software documentation has been revised, expanded, and improved for the SRSS 3 release.

Separate Documentation Sets for Solaris and Linux

Although similar in many respects, the SRSS 3 implementations on Solaris and on Linux differ enough to justify separate documentation; therefore, the SRSS 3 CD contains complete documentation sets for both types of operating environment, labeled accordingly.

Easy to Find What You Want

The PDF files for the manuals are extensively indexed and cross-referenced to provide multiple entry points when you actually need to look at the documentation. Hypertext links are provided for:

- Items in the PDF navigation bar
- Table of Contents entries
- List of Figures entries
- List of Tables entries
- Index entries
- Pertinent cross-references

In addition, you can use the native Adobe Acrobat search facility to find any text string.

Documentation Errata

This section lists known errors in the documentation for Sun Ray Server Software 3. It also lists differences between earlier versions of the manuals sent for translation and the final English language versions represented by the PDF files on the SRSS 3 CD and available at `docs.sun.com`.

Installation and Configuration Guides

Revised Procedures

To Rebuild the Primary Server Administration Data Store

This procedure has been significantly revised since initial copy was sent to L10N for translation.

To Replace a Primary Server

This procedure has been removed from the installation guides.

Administration Guides

Resetting and Restarting Sun Ray Services

In early versions, including those submitted for translation, the text surrounding Figure 3-5 incorrectly refers to the Reset and Restart buttons that were used in SRSS 2.0. The correct terminology for SRSS 3 is Warm Restart for what was previously called Reset (to restart Sun Ray services and preserve all sessions) and Cold Restart for what was formerly called Restart (to terminate all sessions and restart Sun Ray services).

New Front Matter

Tables of Figures and of Tables have been added to the English language versions.

Device Links

A paragraph describing mass storage device links has been added to Chapter 4 of the English language versions.

USB Services

The English language version contains new material in the CLI on *Enabling and Disabling USB Devices*. The equivalent section in the Admin GUI chapter is called *Managing USB Services*.

Timeout Definition

In the versions submitted for translation, timeout is defined only in terms of disconnected card sessions in CAM (Controlled Access Mode). The timeout value specifies how long any session (not just a card session) remains resident on a Sun Ray server before being terminated.

Linux Version

Extra Chapter Included

The chapter on mobile sessions, which are available only on Solaris platforms in this release, was inadvertently included in the globalized version sent out for translation.

Extra Sections Included

Some sections of the CLI, Administration Tool, and Peripheral Devices chapters were mistakenly included in versions submitted for translation.

- Mass storage devices can be used in SRSS 3 only in Solaris implementations, and discussions of NSCM and Solaris printers do not belong in the Linux version of the Administrator's Guide.
- Explicit references to Solaris have been removed and, where necessary, generic descriptions substituted, as, for example, under "Printer Setup".
- Solaris Lock Screen for Detached Sessions does not belong in the Linux Administrator's Guide.

man Pages

New man Pages

The following man pages were added to the product after final documents were sent to L10 for translation:

- utpreserve

Note – The `utpreserve` man page is available only from the SRSS 3 CD.

Linux Version

Items Mistakenly Included in Linux Version

In the version of the *Sun Ray Server Software 3 Reference Manual for the Linux Operating System* sent for translation, the following man pages for commands not supported in the Linux implementation were mistakenly included:

- `libusb`
- `sunray`
- `utdisk`
- `utdiskctl`
- `utdiskadm`
- `uteject`
- `utkiosk`
- `utload`
- `utmount`
- `utmountd`
- `utumount`
- `utstoraged`

In addition, some valid man pages mention unsupported features, the most notable example of which is non-smart card mobility, mentioned on the `utdetach` man page.