Sun Ray™ Server Software 4.1 Release Notes

for the Linux Operating System

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Contents

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 provides enhanced multimedia playback capabilities that extend the Sun Ray architecture to accept H.264 (MPEG-4) and VC-1 (WMV9) streams and transmit them directly to Sun Ray 2/2FS/270 DTUs for decoding. In this case, neither the Sun Ray Server CPU nor Windows Server CPU is used for decoding. This is the optimal solution for conservation of server resource and network bandwidth.

For other types of video streams, this release leverages the standard (XVideo) interface on both Sun Ray 1 and Sun Ray 2 DTUS for general purpose player optimization, sending YUV streams directly to the 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 only for clips played using Windows Media Player 10 and 11 on Windows XP and Windows 2003 platforms. 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

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
```

Shutdown/Restart Options (Bug ID 6716548)

SRSS installation removes Shutdown/Restart options from the console; however, users can open a terminal and execute these commands.

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
- Multiple streams at the same time

Slow Maximized XVideo Playback in RealPlayer (Bug ID 6638225)

When video is played in an enlarged size (RealPlayer maximized mode), the user's X session responds very slowly, especially to menu requests.

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

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.

Xnewt CPU Utilization

Running `utswitch` from your gnome-terminal window (to switch to another Sun Ray server) while using Xnewt with the XKB extension enabled for a Sun Ray session, may generate repeated new lines in the window, causing the Xnewt to consume extra CPU resources. This only happens when you press the `Return` key a bit too long when entering the `utswitch` command.

Workarounds include:

- Using the `utselect` GUI tool instead.
- Disabling the `Repeat` key for the user through the keyboard preference menu.
- Disabling XKB for the user with the `utxconfig -k off` option
- Changing the system default by including the `-a` option to the `utxconfig` command above.

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

Resizing Multihead Session (Bug ID 6635409)

When resizing the screens for a multihead session, you must resize all the screens manually to the same size.

This can be done easily from the Desktop Preference menu.

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
```

USB Operations Fail After Idle Timeout Limit

If a user fails to access a given session for longer than the screen lock idle timeout interval while an application is accessing a USB device — for instance, while copying a large number of files to or from a USB flash drive — the session will be locked. With RHA, NSCM, and authenticated smart cards, this means the session detaches, and all USB devices disconnect from the session. This can interrupt or abort the application access to the device.

Workarounds include:

- Advising users to monitor their USB device usage to avoid being timed out
- Setting the timeout interval value high enough to allow I/O to complete before the interval elapses
- Disabling the screen saver
- Disabling RHA

Caution – Disabling RHA is less desirable because it removes an extra level of security.

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
```

Multibyte Font Display Problem (6737158)

In multibyte locales using pre-1.6 releases of JRE, Java-based Sun Ray tools such as `utsettings` GUI do not work properly. Proper multibyte font display requires JRE 1.6.

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_1.6> guijre
```