



Sun Ray™ Server Software 4.0 Release Notes

for the Linux Operating System

Sun Microsystems, Inc.
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Sun Ray Server Software 4.0

Release Notes for Linux

Supported Platforms

This version of Sun Ray Server Software runs on the following versions of the Linux operating system:

- SuSE Linux Enterprise Server (SLES) 9 with Service Pack 3 or later (32-bit and 64-bit)
 - All packages are required and must be installed.
 - During installation, select Full Installation.
 - Be sure to install tftp.
- Red Hat Enterprise Linux Advanced Server (RHEL AS) 4 Update 3 or later (32-bit and 64-bit)
 - All packages are required and must be installed.

What's New

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

New Admin GUI

The Sun Ray Administration 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*.

Optional 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*.

Although this feature can be useful in certain implementations, such as employees using Sun Ray DTUs for access to their corporate web site from home, it can also be undesirable in other environments. SRSS 4.0 therefore contains two versions of the DTU firmware.

- The default version of the firmware, installed in the standard location:
`/opt/SUNWut/lib/firmware`

This version does not contain the configuration capability. The standard install mechanisms using `utadm` and `utfwadm` will install the default version.

- The configurable version firmware, installed in:
`/opt/SUNWut/lib/firmware_gui`

To use the firmware that includes configuration, the administrator must run `utfwadm` to install the firmware, using the `-f` option.

Integrated VPN Support

Sun Ray Server Software with the most recent firmware provides a VPN solution that does not require remote users to have separate VPN routers. It does require, however, that the corporate network utilize Cisco gateways that support the Cisco EasyVPN protocol. It also requires the optional Pop-up GUI firmware.

Integrated VPN support is available only on Sun Ray 2 DTUs:

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

Kiosk (Controlled Access) Mode

Kiosk mode is now supported on Linux platforms. Kiosk Mode policy can be overridden for a user's smart card token or for a DTU's pseudo-token. For details, see Chapter 10 of the *Sun Ray Server Software Administrator's Guide for Linux*.

NAT Gateway Device Support

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

What's Changed

`utgstatus`

From this release onward, the `utgstatus` command displays server information only for trusted hosts.

Self-Registration GUI Enhancement

In this release, the self-registration GUI has been enhanced for compatibility with PAM authentication. For details, see the man pages for `pam` and `pam.conf`. The self-registration GUI uses the PAM service name `utselfreg`. No specific PAM configuration is added to `/etc/pam.conf` for this service, so it defaults to the *other* PAM service, as described on the `pam.conf` man page.

Known Problems and Workarounds

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
```

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.

Apache Tomcat Out of Memory Error (Bug ID 6558040)

Apache Tomcat runs within the Java Virtual Machine (JVM) of the Java Runtime Environment (JRE). The JVM can be executed as client or server VM. In general the server VM reserves more memory and starts up more slowly than the client VM, but the server VM runs faster than the client VM over time.

Executing Tomcat in the client VM can cause out of memory issues on some systems. If you encounter any out of memory issues when accessing the Admin GUI, configure Tomcat explicitly to run the Admin GUI in the server VM:

1. **Modify the `jre.options` property in the `webadmin.conf` file (see `/etc/opt/SUNWut/webadmin/webadmin.conf`) as follows:**

```
jre.options=-server
```

2. **Restart the Admin GUI to apply the new setting:**

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

Note – If your system is a server-class machine (at least two CPUs and at least two GB of physical memory), the server VM will automatically be used even if you do not specify the server setting. For further details, see:
<http://java.sun.com/j2se/1.5.0/docs/guide/vm/server-class.html>

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 and USB Drivers

If you update the Linux OS after SRSS is installed, you need to rebuild the I/O drivers as follows in order to restore audio functionality:

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

# cd /usr/src/SUNWut/utdisk
# make
# make install

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

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

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.

Keyboard Issues

Alt and Meta Keys

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

XKB Features on a Second DTU

XKB-related features do not function when a user logs in to a second DTU with the same user ID.

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
```

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-4.0-05.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
```

