



Sun Ray™ Server Software 4.1 Release Notes

for the Solaris™ Operating System

BETA DRAFT

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Sun Ray Server Software 4.1 Release Notes for Solaris

Supported Platforms

Sun Ray Server Software 4.1 for Solaris is designed to run on the following operating systems with Solaris SPARC and x86 servers:

- Solaris 10 5/08 or higher SPARC and X86
- Solaris 10 5/08 or higher SPARC and X86 with Trusted Extensions

[TABLE 1](#) summarizes which versions of Sun Ray Server Software are compatible with which operating system versions.

TABLE 1 Sun Ray Server Software vs. Operating System Versions

| Sun Ray Server Software | Solaris 10 | Trusted Solaris |
|-------------------------|---|--|
| 4.0 | Solaris 10 11/06 or higher SPARC and x86 | Solaris 10 11/06 or higher SPARC and x86 with Solaris Trusted Extensions |
| 4.1 | Solaris 10 5/08 or higher SPARC and x86 | Solaris 10 5/08 or higher SPARC and x86 with Solaris Trusted Extensions |

Solaris Trusted Extensions Patch Requirements

The following patches, which are available on the SunSolve website, must be installed prior to Sun Ray Software installation in a Solaris Trusted Extensions environment:

TABLE 1 Required Patches for Solaris Trusted Extensions

| Platform | Patch Number |
|----------|--------------------|
| SPARC | 126363-05 or later |
| X86 | 126364-05 or later |

Note – For known issues concerning Solaris Trusted Extensions, see [“Solaris Trusted Extensions Issues”](#) on page 10.

What’s New

Sun Ray Server Software 4.1 for Solaris 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 and is now the default Xserver for SRSS on Solaris. It is not effective for non-Sun Ray devices.

Xnewt introduces two new extensions, XRandR and XVideo; however, 8-bit visual is no longer supported. Use `utxconfig` to configure the preferred Xserver for 8-bit support (Xsun). For details, see the `Xnewt(1)` and `utxconfig(1)` man pages.

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 on Solaris 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 10 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:

```
# pkgrm SUNWutsvt
```

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

SRSS installs the Add-On package but not the main Service Tags packages, which are installed by default with Solaris 10 5/08 or later.

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

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

Known Problems and Limitations

GUI Issues

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.

Admin GUI Upgrade (Bug ID 6572246)

The 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.

Multimedia Issues

Media enhancements currently lack the following functionality:

- Low bandwidth
- 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.**

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.

SunMC (Bug ID 6507891)

The Sun Ray SunMC module does not detect the status of the Admin GUI correctly and will always report the Admin GUI as not running, whether it is running or not.

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 and later releases are supported only in the global zone.

Note – Attempts to install SRSS 4.1 in S10 local zones generate error messages.

Installation, Configuration, and Upgrade Issues

Note – Upgrade is not supported in the Beta release.

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.

Alt and Meta Keys (Bug ID 6416642)

Alt and Meta keys are swapped when XKB is enabled.

Kiosk Issues

Set Kiosk Application Type Correctly (Bug ID 6533804)

Some Kiosk session types allow additional applications to be launched. Within the Admin GUI, you can specify a new Kiosk application either by entering a path to an executable or by specifying a path to an application descriptor (a file that lists the various properties for the application).

At the moment, the Admin GUI cannot automatically determine the type (executable vs. descriptor), so you must specify the type correctly in the Admin GUI when adding a new application.

If you specify an incorrect type, the Kiosk session cannot start up correctly, and the affected DTUs will hang, typically with a 26D error.

If you encounter such an error, the workaround is to check the specified types in the Admin GUI and correct the settings, if necessary.

Multihead CDE Kiosk Sessions (Bug ID 6645931)

Multihead CDE kiosk sessions are not working with CDE patch 11928{0|1}-14. CDE-based Kiosk sessions hang during startup on Sun Ray DTUs in a multihead configuration. The DTUs show a black screen for approximately 15 minutes, after which the session starts normally.

The workaround is to move the `/usr/dt/lib/dtobsolete` binary, which is responsible for displaying a warning that CDE is obsolete and will be removed in a future minor release of Solaris. For example:

```
# mv /usr/dt/lib/dtobsolete /usr/dt/lib/dtobsolete.gone
```

Note – Please warn affected users by other means if you move away this program.

Sessions May Hang After CAM Migration

Procedures for preserving existing CAM configurations and migrating to Kiosk Mode are documented in chapters 4 and 7 of the Sun Ray Server Software 4.0 Installation and Configuration Guide. However, after performing the documented procedures, using `utconfig -k` and `utcammigrate -u`, you may find that sessions that should be Kiosk sessions according to policy appear hung and show only a black screen.

To recover from this condition, terminate these sessions. To ensure that all affected sessions are terminated, perform a cold restart of the Sun Ray server group.

Unconfiguring Kiosk Mode Disables Kiosk Policy

If Kiosk mode is enabled for smart card and/or for non-card sessions, then disabling Kiosk mode (using `utconfig -u -k`) also disables the Kiosk policy.

This behavior may be surprising in a failover group, where Kiosk policy is disabled for the entire group when Kiosk Mode is unconfigured on any server in the group.

Before unconfiguring Kiosk Mode on any host in a failover group, disable Kiosk policy, and perform a cold restart of the server group.

To perform maintenance tasks on Kiosk user accounts without unconfiguring Kiosk Mode completely, use the `/opt/SUNWkio/bin/kioskuseradm` tool instead of `utconfig`.

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
```

Java Applications `utsettings`, `utmhconfig` (Bug ID 6635934)

Users who enable Assistive Technologies under JDS may not be able to run Java-based applications such as `utsettings` and `utmhconfig`.

The workaround for Beta is to disable Assistive Technology from the Preferences menu. Java applications should then run normally.

The alternative is to download and install the latest Java distribution, Version 6 Update 6. After installation create a symbolic link so that `/etc/opt/SUNWut/guijre` points to the install location. This version of Java works with Assistive Technologies turned on.

Choose Host from List (Bug ID 6638939)

The Choose Host from List option does not work for XDMCP sessions with Xnewt.

Solaris Trusted Extensions Issues

Audio

Remove the setuid-0 bit on the utaudio binary.

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

Volume Control (Bug ID 6481380)

The volume control applet on the panel doesn't work in Trusted JDS.

To adjust the volume, use the three volume keys on the keyboard or launch the Sun Ray Settings GUI by pressing `Shift+Props`.

Flash Disk Allocation (Bug ID 6562880)

Allocating flash disk with UFS file system second time does not work.

The workaround is to hot-plug the device.

Multihead Screen Lock (Bug ID 6713236)

In multihead trusted CDE session, if screen is locked manually by invoking screen lock, then the session cannot be retrieved.

Multihead Role Assumption (Bug ID 6709982)

In a multihead trusted JDS session, role assumption does not work until `utmhscreen` is removed.

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.

Mount Points (Bug ID 6538004)

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

utsettings GUI in Trusted JDS

In Audio Output and Audio Input, mouse clicks cannot be used to enable/disable the check boxes; however, the following keys can be used for navigation:

- Tab to move to an option
- Space to select the option

xscreensaver Links

Verify that following links are created so that `xscreensaver` can work correctly:

```
# ln -s /usr/openwin/bin/xscreensaver /usr/bin/xscreensaver
# ln -s /usr/openwin/bin/xscreensaver-command /usr/bin/xscreensaver-command
# ln -s /usr/openwin/bin/xscreensaver-demo /usr/bin/xscreensaver-demo
```

Xinerama

Xinerama is not supported by Solaris Trusted Extensions.

L10N Issues

Portuguese Locale

To enable the Portuguese locale, use the `pkgadd` command to install these packages:

```
# pkgadd -d . SUNWputes
# pkgadd -d . SUNWputo
```

