



# Sun StorageTek™ RAID Manager Software Release Notes

---

Release 5.50.0

Sun Microsystems, Inc.  
[www.sun.com](http://www.sun.com)

Part No. 820-2755-17  
May 2009, Revision A

Submit comments about this document by clicking the Feedback[+] link at: <http://docs.sun.com>

Copyright © 2009 Sun Microsystems, Inc., 4150 Network Circle, Santa Clara, California 95054, U.S.A. All rights reserved.

THIS PRODUCT CONTAINS CONFIDENTIAL INFORMATION AND TRADE SECRETS OF SUN MICROSYSTEMS, INC. USE, DISCLOSURE OR REPRODUCTION IS PROHIBITED WITHOUT THE PRIOR EXPRESS WRITTEN PERMISSION OF SUN MICROSYSTEMS, INC.

This distribution may include materials developed by third parties.

Sun, Sun Microsystems, the Sun logo, Netra, Solaris, Sun Ray, Sun StorEdge, Sun StorageTek, SunSolve, and the Butterfly logo are trademarks or registered trademarks of Sun Microsystems, Inc., and its subsidiaries, 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 architecture developed by Sun Microsystems, Inc.

UNIX is a registered trademark in the U.S. and other countries, exclusively licensed through X/Open Company, Ltd.

This product is covered and controlled by U.S. Export Control laws and may be subject to the export or import laws in other countries. Nuclear, missile, chemical biological weapons or nuclear maritime end uses or end users, whether direct or indirect, are strictly prohibited. Export or reexport to countries subject to U.S. embargo or to entities identified on U.S. export exclusion lists, including, but not limited to, the denied persons and specially designated nationals lists is strictly prohibited.

Use of any spare or replacement CPUs is limited to repair or one-for-one replacement of CPUs in products exported in compliance with U.S. export laws. Use of CPUs as product upgrades unless authorized by the U.S. Government is strictly prohibited.

---

Copyright © 2009 Sun Microsystems, Inc., 4150 Network Circle, Santa Clara, California 95054, Etats-Unis. Tous droits réservés.

CE PRODUIT CONTIENT DES INFORMATIONS CONFIDENTIELLES ET DES SECRETS COMMERCIAUX DE SUN MICROSYSTEMS, INC. SON UTILISATION, SA DIVULGATION ET SA REPRODUCTION SONT INTERDITES SANS L'AUTORISATION EXPRESSE, ECRITE ET PREALABLE DE SUN MICROSYSTEMS, INC.

Cette distribution peut comprendre des composants développés par des tierces parties.

Sun, Sun Microsystems, le logo Sun, Netra, Solaris, Sun Ray, Sun StorageTek, SunSolve, et le logo Butterfly sont des marques de fabrique ou des marques déposées de Sun Microsystems, Inc., et ses filiales, 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.

UNIX est une marque déposée aux Etats-Unis et dans d'autres pays et licenciée exclusivement par X/Open Company, Ltd.

Ce produit est soumis à la législation américaine sur le contrôle des exportations et peut être soumis à la réglementation en vigueur dans d'autres pays dans le domaine des exportations et importations. Les utilisations, ou utilisateurs finaux, pour des armes nucléaires, des missiles, des armes biologiques et chimiques ou du nucléaire maritime, directement ou indirectement, sont strictement interdites. Les exportations ou reexportations vers les pays sous embargo américain, ou vers des entités figurant sur les listes d'exclusion d'exportation américaines, y compris, mais de manière non exhaustive, la liste de personnes qui font objet d'un ordre de ne pas participer, d'une façon directe ou indirecte, aux exportations des produits ou des services qui sont régis par la législation américaine sur le contrôle des exportations et la liste de ressortissants spécifiquement désignés, sont rigoureusement interdites. L'utilisation de pièces détachées ou d'unités centrales de remplacement est limitée aux réparations ou à l'échange standard d'unités centrales pour les produits exportés, conformément à la législation américaine en matière d'exportation. Sauf autorisation par les autorités des Etats-Unis, l'utilisation d'unités centrales pour procéder à des mises à jour de produits est rigoureusement interdite.



Adobe PostScript™





# Contents

---

## **Sun StorageTek RAID Manager Software Release Notes 1**

### Package Components and Versions in This Release 1

#### Release Package Component Versions 2

#### ▼ To Verify the Driver Version On The System 3

### New Feature In This Release 3

### Supported Operating Systems, Servers, and Storage Systems 3

#### Supported Operating Systems 3

#### Server Support 5

#### Storage System Support 5

### Installing Packages and Patches 6

### Known Issues 6

#### GUI Issues 6

*The Sun StorageTek RAID Manager GUI Does Not Work With Red Hat Enterprise Linux 5 (6582144) 7*

*Cannot Log Into the GUI From the Local Host of an HBA Due to Permissions Issues (6825566) 7*

*It is Not Obvious How to Uniquely Identify a JBOD in the GUI 8*

*The Number of Temperature Sensors Displayed in the GUI Is Different From the Number Displayed in the CLI (6676918) 9*

*The Hot-Spare Information For Logical Drives is Inconsistent Between the CLI and the GUI (6716334) 9*

<i>The GUI Displays a Logical Drive as Optimal But Reports One or More Bad Stripes on the Drive (6722814)</i>	9
<i>The GUI Displays Logical Drives as Failed When a Blade or JBOD is Powered Off</i>	10
<i>After Upgrading the Expander Firmware on a Sun Storage J4500 JBOD, the GUI Continues to Display the Old Firmware Version (6739921)</i>	10
<i>The Backspace and Delete Keys Might Not Work In the GUI (6618707)</i>	10
Operating System Compatibility Issues	11
<i>When Rescanning or Creating a Logical Volume, the VMware ESX Server Technology Might Time Out (6683619)</i>	11
Documentation Issues	11
<i>The Documentation References HBAs But the GUI References Controllers</i>	11
<i>The Documentation References Arrays But the GUI References Logical Drives</i>	12
Release Documentation	12
Service Contact Information	13
Third-Party Web Sites	13

# Sun StorageTek RAID Manager Software Release Notes

---

This document contains important information about the May 2009 release of the Sun StorageTek™ RAID Manager software package or information that was not available at the time the product documentation was published. Read this document so that you are aware of issues or requirements that can affect the installation and operation of the Sun StorageTek RAID Manager software.

This document contains the following topics:

- [“Package Components and Versions in This Release” on page 1](#)
- [“New Feature In This Release” on page 3](#)
- [“Supported Operating Systems, Servers, and Storage Systems” on page 3](#)
- [“Installing Packages and Patches” on page 6](#)
- [“Known Issues” on page 6](#)
- [“Release Documentation” on page 12](#)
- [“Service Contact Information” on page 13](#)
- [“Third-Party Web Sites” on page 13](#)

---

## Package Components and Versions in This Release

This section contains the following topics:

- [“Release Package Component Versions” on page 2](#)
- [“To Verify the Driver Version On The System” on page 3](#)

# Release Package Component Versions

TABLE 1 lists the components and the component versions that are included with this software package release.

**TABLE 1** Release Package March 2009 Component Versions

<b>Component</b>	<b>Version</b>
<b>Windows Server OS</b>	
• Sun StorageTek RAID Manager GUI	5.50.0
• Command-Line Interface	5.50.0
• Background Process	5.50.0
• Driver	5.50.0
<b>Linux OS</b>	
• Sun StorageTek RAID Manager GUI	5.50.0
• Command-Line Interface	5.50.0
• Background Process	5.50.0
• Driver	1.1.5
<b>Solaris 10 OS</b>	
• Sun StorageTek RAID Manager GUI	5.50.0
• Command-Line Interface	5.50.0
• Background Process	5.50.0
• aac Driver	2.2.16
<b>VMware Technology</b>	
• Sun StorageTek RAID Manager GUI	<i>Not supported</i>
• Command-Line Interface	5.50.0
• Background Process	5.50.0
• Driver	1.1.5
<b>RAID HBA Firmware</b>	
• SGXPCIESAS-R-INT-Z	FW build 15872 or later
• SGXPCIESAS-R-EXT-Z	FW build 15872 or later



## ▼ To Verify the Driver Version On The System

- 1. Log into the Sun StorageTek RAID Manager software.**

A list of managed systems is displayed.

- 2. Select the system for which you want to view driver version information.**

A list of controllers (HBAs) installed in the system is displayed.

- 3. Right-click on an HBA and select Properties.**

The Properties window is displayed.

- 4. Click the Versions tab and review the value in the Driver field.**

---

## New Feature In This Release

This release of the Sun StorageTek RAID Manager software provides support for the Windows 2008 operating system.

---

## Supported Operating Systems, Servers, and Storage Systems

The operating systems, servers, and storage systems that have been tested and qualified to work with the Sun StorageTek RAID Manager software are described in this section. This section contains the following topics:

- [“Supported Operating Systems” on page 3](#)
- [“Server Support” on page 5](#)
- [“Storage System Support” on page 5](#)

## Supported Operating Systems

The Sun StorageTek RAID Manager software supports, at minimum, the following operating system versions.

**TABLE 2** Supported Operating System Versions

Operating System/Technology	Supported Versions
Solaris 10 OS for the x64 and x86 (32-bit and 64-bit) platforms	<ul style="list-style-type: none"><li>• Solaris 10 10/08 (s10u6)</li><li>• Solaris 10 5/08 (s10u5)</li><li>• Solaris 10 8/07 (s10u4)</li></ul>
Solaris 10 OS for the SPARC (64-bit) platform	<ul style="list-style-type: none"><li>• Solaris 10 10/08 (s10u6)</li><li>• Solaris 10 5/08 (s10u5)</li></ul>
Linux OS	<ul style="list-style-type: none"><li>• RHEL 5 Server, 32-bit and 64-bit</li><li>• RHEL 5 Advanced Platform, 32-bit and 64-bit</li><li>• Red Hat Enterprise Linux (RHEL) 4 ES, 32-bit and 64-bit</li><li>• RHEL 4 AS Update 5, 32-bit and 64-bit</li><li>• SUSE Linux Enterprise Server (SLES) 10, SP1</li><li>• SUSE Linux Enterprise Server (SLES) 9, SP4</li></ul>
Microsoft Windows OS	<ul style="list-style-type: none"><li>• Windows Server 2008 Enterprise Edition 32-bit or 64-bit</li><li>• Windows Server 2008 Standard Edition 32-bit or 64-bit</li><li>• Windows Server 2008 Enterprise Edition 32-bit or 64-bit</li><li>• Windows Server 2003 Standard Edition 32-bit or 64-bit</li></ul>

---

**Note** – The Sun StorageTek RAID Manager graphical user interface (GUI) does not support VMware technology. If your operating system is running on top of VMware technology (even if the OS is supported, as described in [TABLE 2](#)), use the command-line interface and the BIOS Configuration utility to perform storage management activities. This is due to the VMware technology presenting a generic iSCSI attach point, preventing the use of the GUI. For more information about using the command-line interface, see the *Uniform Command-Line Interface User's Guide* at: <http://docs.sun.com/app/docs/prod/stortek.raid.hba#hic>

---

---

**Note** – For up-to-date operating system version support, visit <http://support.intel.com/support/go/sunraid.htm>.

---

# Server Support

TABLE 3 lists the servers supported by the Sun StorageTek RAID Manager software.

TABLE 3 Supported Servers and Workstations

Server	Supported OS
<b>SPARC Servers</b>	
Sun Fire™ V445	Solaris
Sun Fire V215 and V245	Solaris
Sun Fire T2000	Solaris
Sun SPARC Enterprise M4000/M5000 FF1,FF2	Solaris
Sun SPARC Enterprise M8000/M9000 32-bit, 64-bit	Solaris
Sun SPARC Enterprise T5120 and T5220	Solaris
Sun SPARC Enterprise T5140 and T5240	Solaris
<b>x64 Servers</b>	
Sun Fire X4140	Solaris, Linux, and Windows
Sun Fire X4240	Solaris, Linux, and Windows
Sun Fire X2100 M2	Solaris, Linux, and Windows
Sun Fire X2200 M2	Solaris, Linux, and Windows
Sun Fire X4150	Solaris, Linux, and Windows
Sun Fire X4440	Solaris, Linux, and Windows
Sun Fire X4450	Solaris, Linux, and Windows
Sun Fire X4600 and X4600 M2	Solaris, Linux, and Windows
Sun Fire X4100 M2 and X4200 M2	Solaris, Linux, and Windows

## Storage System Support

The Sun StorageTek RAID Manager software works with the following storage systems:

- Sun Storage J4200
- Sun Storage J4400
- Sun Storage J4500

---

# Installing Packages and Patches

The software installation procedures are described in the *Sun StorageTek RAID Manager Software User Guide* (part number 820-1177-*nn*). Refer to that document for the latest installation procedures except where noted in [“Known Issues”](#) on page 6.

---

## Known Issues

This section provides information about known issues and bugs filed against this product release. This section contains the following topics:

- [“GUI Issues”](#) on page 6
- [“Operating System Compatibility Issues”](#) on page 11
- [“Documentation Issues”](#) on page 11

## GUI Issues

This section contains the known issues related to the Sun StorageTek RAID Manager GUI. This section contains the following topics:

- [“The Sun StorageTek RAID Manager GUI Does Not Work With Red Hat Enterprise Linux 5 \(6582144\)”](#) on page 7
- [“Cannot Log Into the GUI From the Local Host of an HBA Due to Permissions Issues \(6825566\)”](#) on page 7
- [“It is Not Obvious How to Uniquely Identify a JBOD in the GUI”](#) on page 8
- [“The Number of Temperature Sensors Displayed in the GUI Is Different From the Number Displayed in the CLI \(6676918\)”](#) on page 9
- [“The Hot-Spare Information For Logical Drives is Inconsistent Between the CLI and the GUI \(6716334\)”](#) on page 9
- [“The GUI Displays a Logical Drive as Optimal But Reports One or More Bad Stripes on the Drive \(6722814\)”](#) on page 9
- [“The GUI Displays Logical Drives as Failed When a Blade or JBOD is Powered Off”](#) on page 10
- [“After Upgrading the Expander Firmware on a Sun Storage J4500 JBOD, the GUI Continues to Display the Old Firmware Version \(6739921\)”](#) on page 10

- [“The Backspace and Delete Keys Might Not Work In the GUI \(6618707\)”](#) on page 10

## *The Sun StorageTek RAID Manager GUI Does Not Work With Red Hat Enterprise Linux 5 (6582144)*

The Sun StorageTek RAID Manager GUI will not launch when installed on the Red Hat Enterprise Linux (RHEL) 5 operating system. The Sun StorageTek RAID Manager software requires the Java Runtime Environment (JRE) libraries and Java SE 6.0, which are not a part of the standard RHEL 5 installation at Sun.

**Workaround** – To run the Sun StorageTek RAID Manager GUI on RHEL 5, do the following:

1. **Ensure that `libXp.so.6` is in the `LD_LIBRARY_PATH` variable.**
2. **Obtain and install the following package from the RHEL5 CD:**

```
xorg-x11-deprecated-libs-6.8.1-23.i386.rpm
```

## *Cannot Log Into the GUI From the Local Host of an HBA Due to Permissions Issues (6825566)*

If you install the SPARC version of the Sun StorageTek RAID Manager software package on an x86 system, you will encounter permissions issues when attempting to log into the GUI from the x86 local host on which the HBA resides. However, you will be able to log into the GUI from the x86 local host when managing a remote HBA that resides on another system.

**Workaround** – Do the following:

1. **Uninstall the SPARC version of the Sun StorageTek RAID Manager software package from the x86 system.**
2. **Do one of the following:**
  - Obtain the Sun StorageTek RAID Manager CD for x86 systems from the HBA ship kit.
  - Obtain the Sun StorageTek RAID Manager for x86 systems software package from:  
<http://support.intel.com/support/go/sunraid.htm>
3. **Install the Sun StorageTek RAID Manager for x86 software package on the x86 system.**

## *It is Not Obvious How to Uniquely Identify a JBOD in the GUI*

If you have multiple JBODs attached to a RAID HBA, you may need to distinguish a specific JBOD in the stack through the GUI.

To physically identify a JBOD that has an indicator light, do the following:

- 1. Log into the Sun StorageTek RAID Manager software.**
- 2. Right-click on a JBOD controller management device (RAID HBA).**

A drop-down menu is displayed.

- 3. From the drop-down menu, choose Blink Enclosure.**

This causes the indicator light on the JBOD to flash.

For Sun JBODs, you can also use the identifier number on the JBOD to physically identify it. Do the following:

- 1. Determine the identifier number on the JBOD and write the number down for your reference.**

[TABLE 4](#) lists the types of identifiers used by the GUI per Sun JBOD, and lists the location of the identifier sticker per JBOD.

**TABLE 4** Identifier Numbers for Sun JBODs

<b>JBOD Model</b>	<b>Identifier</b>	<b>Physical Location of Sticker</b>	<b># of Digits in the Identifier</b>
Sun Storage J4200	SysSN	Front-left side of the JBOD	10
Sun Storage J4400	SysSN	Front-left side of the JBOD	10
Sun Storage J4500	BaseWWN	Rear of the JBOD	16

- 2. Log into the Sun StorageTek RAID Manager software.**

- 3. Do one of the following:**

- Look to the right of the enclosure name in the Physical Devices section of the main window. The Sun JBOD identifier is displayed.
- Right-click on a JBOD controller management device (RAID HBA), and select Properties from the drop-down menu. The Sun identifier is displayed in the Properties window.

## *The Number of Temperature Sensors Displayed in the GUI Is Different From the Number Displayed in the CLI (6676918)*

When you use the `aarconf getconfig` command through the CLI, only one enclosure temperature sensor is displayed, while in the GUI, several temperature sensors for that same enclosure are displayed (fans, power supplies, and so on).

**Workaround** -If you need detailed temperature information about an enclosure, use the GUI.

## *The Hot-Spare Information For Logical Drives is Inconsistent Between the CLI and the GUI (6716334)*

When you use the `aarconf getconfig` command through the CLI, logical drives that you know are protected by hot-spares are listed with a value indicating they are not being protected by hot-spares. From the Logical Devices view of the GUI, however, those same logical drives are shown with the correct value, indicating they are being protected by hot-spares.

**Workaround** -The GUI shows the accurate value. To manage and view hot-spares, use the GUI.

## *The GUI Displays a Logical Drive as Optimal But Reports One or More Bad Stripes on the Drive (6722814)*

In the Logical Devices view of the GUI, a logical drive might be displayed as optimal but may have a yellow warning status icon next to it due to one or more bad stripes on the drive. This condition occurs when the GUI encounters either of the following conditions:

- During a rebuild operation, the GUI discovers an irrecoverable medium error on one of the source drives in an array.
- After you follow the procedure to verify and fix a logical drive, as described in the *Sun StorageTek RAID Manager Software User's Guide* (820-1177-xx), the GUI discovers an irrecoverable medium error on the same logical block address (LBA) of multiple array members.

A bad stripe entry in the GUI does not mean the logical drive or container in the array is degraded. Instead, it means the logical drive and all members of the array are available, but some of the stripes are bad due to irrecoverable medium errors. This causes less space on the drive and in the array to be readable.

**Workaround** - None, as you can continue to use the logical drive. To remove the bad stripe entry, you must initialize the array by using the `clear` command. However, performing this operation erases all data on the drive.

### *The GUI Displays Logical Drives as Failed When a Blade or JBOD is Powered Off*

If a disk subsystem, such as a blade or JBOD, is powered off separately from a host, the operating system (OS) continues to detect the logical drives of that powered-off disk subsystem. This is because the logical drives already existed prior to powering off the blade or JBOD. In this situation, the OS expects the logical drives could return to their operating status at any time. Therefore, the GUI displays the logical drives as failed, assuming no physical drives are present.

**Workaround** - This is expected behavior in the event that a disk subsystem is powered off separately from a host. To return the logical drives to their operating status, reapply power to the disk subsystem.

### *After Upgrading the Expander Firmware on a Sun Storage J4500 JBOD, the GUI Continues to Display the Old Firmware Version (6739921)*

This occurs only on Solaris systems.

**Workaround** - Do either of the following:

- From the Device Properties page in the GUI, click the Rescan button. Upon scan completion, the new firmware version will be displayed.
- Reboot the Solaris host system and then log into the GUI. The new firmware version will be displayed on the Device Properties page.

### *The Backspace and Delete Keys Might Not Work In the GUI (6618707)*

When trying to rename a logical volume through the GUI on the Solaris OS, the Backspace and/or Delete keys might not work.

**Workaround** - Drag the mouse over the old logical volume name until the name is highlighted, and then type the new name. The new name will replace the old one.



# Operating System Compatibility Issues

This section contains the known VMware issue.

## *When Rescanning or Creating a Logical Volume, the VMware ESX Server Technology Might Time Out (6683619)*

If you rescan or create a logical volume in a RAID HBA to which multiple JBODs are connected, the VMWare ESX Server technology might time out.

**Workaround** - None. This issue is related to a bug in the VMWare drive, tracked in the VMWare bug, PR#267814.

## Documentation Issues

This section describes issues releasted to the user documentation. This section contains the following topics:

- [“The Documentation References HBAs But the GUI References Controllers” on page 11](#)
- [“The Documentation References Arrays But the GUI References Logical Drives” on page 12](#)

## *The Documentation References HBAs But the GUI References Controllers*

In the *Sun StorageTek RAID Manager Software User’s Guide*, several procedures tell you to click an HBA in order to complete certain tasks. When you try to complete those tasks through the GUI, you actually have to click a controller, not an HBA. This causes confusion.

**Workaround** – Review the “Terminology Used in This Guide” section of the *Sun StorageTek RAID Manager Software User’s Guide*. This section explains that an HBA is also known as a controller, adapter, board or card. For consistency, the documentation always uses the word HBA but these alternative terms can be substituted.

## *The Documentation References Arrays But the GUI References Logical Drives*

When you create an array using the BIOS Configuration Utility, the Sun StorageTek RAID Manager software displays the array as a logical drive. The documentation describes arrays, not logical drives.

**Workaround** – There is no workaround.

---

## Release Documentation

The following is a list of documents related to the Sun StorageTek RAID Manager software. For any document number with *nn* as a version suffix, use the current version.

**TABLE 5** Release Documentation

<b>Application</b>	<b>Title</b>	<b>Part Number</b>	<b>Format</b>
Hardware Installation	<i>Sun StorageTek SAS RAID HBA Installation Guide Eight-Port, Internal HBA</i>	820-1847- <i>nn</i>	Documentation CD PDF HTML
	<i>Sun StorageTek SAS RAID HBA Installation Guide Eight-Port, External HBA</i>	820-1260- <i>nn</i>	Documentation CD PDF HTML
Command-line utility	<i>Uniform Command-Line Interface User's Guide</i>	820-2145- <i>nn</i>	Documentation CD PDF HTML
RAID Management	<i>Sun StorageTek RAID Manager Software User's Guide</i>	820-1177- <i>nn</i>	Documentation CD PDF HTML

In addition, the Sun StorageTek RAID Manager software includes online help.

For Sun StorageTek SAS RAID HBA hardware information, refer to the *Sun StorageTek SAS RAID HBA Installation Guide Eight-Port, Internal HBA* or *Sun StorageTek SAS RAID HBA Installation Guide Eight-Port, External HBA*.

You can search for these documents online at:

<http://docs.sun.com/app/docs/prod/stortek.raid.hba#hic>

---

## Service Contact Information

If you need help installing or using this product, go to the following website:

<http://www.sun.com/service/contacting>

---

## Third-Party Web Sites

Sun is not responsible for the availability of third-party Web sites mentioned in this document. Sun does not endorse and is not responsible or liable for any content, advertising, products, or other materials that are available on or through such sites or resources. Sun will not be responsible or liable for any actual or alleged damage or loss caused by or in connection with the use of or reliance on any such content, goods, or services that are available on or through such sites or resources.

