

# Product Release Notes for 3ware 9750 SATA+SAS 6Gb/s RAID Controller Card

# Release 10.1

# **READ ME FIRST!**

#### Introduction

Thank you for purchasing a LSI 3ware SATA+SAS RAID controller card. This document contains the latest information that may not be included in the Installation or User Guides. Please read this document before you contact Technical Support.

Latest product information, compatibility lists, software upgrades, and OS drivers are available through the LSI World Wide Web site at:

http://www.lsi.com/channel/ChannelDownloads/.

- Select "RAID Controllers" from the "Product Family" pull-down menu and then select your applicable product, such as "3ware SAS 9750-8i".

3ware knowledge base, including frequently asked questions (FAQs), is viewed at: <u>http://www.lsi.com/channel/ChannelDownloads/</u>

- Select "To search the 3ware Knowledge Base, click here."

Product compatibility and interoperability lists can also be found at: <a href="http://www.lsi.com/channel/support/marketing\_resources/index.html">http://www.lsi.com/channel/support/marketing\_resources/index.html</a>

- Select the 'Data & Interoperability' tab.

For specific answers to questions, technical support, or to give feedback about the product, please visit our website at <u>http://www.lsi.com/channel/ContactUs</u>.

LSI also offers support 24 hours a day, 7 days a week at 888-646-4566 or 408-433-4567 in North America. For international customers call 00-44-0118-936-2501 until April 30<sup>th</sup> or 00-800-5745-6442 anytime after April 30<sup>th</sup>, 2010.

For the latest LSI news and support updates or "tweets" sign up on our new Twitter account at: <u>http://twitter.com/LSISupport</u> (beta version).

### Highlights for Release 10.1

- Added operating system (OS) support for:
  - o VMware
  - o FreeBSD
  - o Mac OS X (Intel based Mac only)
  - o OpenSolaris
- New software installer for Linux and FreeBSD
- Updated 3DM 2 and CLI

# Release Details

The release has the following components:

- 3ware PC CD version: 3.00.01.007
- 3ware Mac CD version: 3.01.01.004
- Firmware version: 5.08.00.008
- 3DM 2 version: 2.11.00.009 (v2.11.00.010 for OpenSolaris only)
- CLI version: 2.00.11.008 (v2.00.11.009 for OpenSolaris only)
- FreeBSD 7.x driver version: 10.70.00.007
- Linux driver version: 3.26.00.028 (for supported distributions)
- Linux up-stream driver version: 3.26.02.000 (for newer kernels)
- Mac OS X driver version: 2.2.3 (Intel based Mac only)
- OpenSolaris driver version: 2.3
- Windows Storport driver version: 5.01.00.000

# **Operating System Support**

The following operating systems are supported:

- FreeBSD 7.2 (x86 & amd64)
- Linux (x86 and x86\_64)
  - o Fedora Core 11
  - Red Hat Enterprise Linux 5.4
  - o openSUSE 11.1
  - SUSE Linux Enterprise Server (SLES) 11
  - For other distributions refer to the 3ware knowledge base
  - Specific driver sources for kernels 2.6.8 through 2.6.33
- Mac OS X Leopard (10.5) and Snow Leopard (10.6) (Intel based Mac only)
- OpenSolaris 2009.06 (x86 & amd64)
- VMware ESX/ESXi 4.0/4.0 update-1 (download drivers and instructions from <u>www.lsi.com/channel/ChannelDownloads/</u>)
- Windows 2003, Vista, 2008, and Windows 7 (x86 & x64)

### **Restrictions**

#### Important: Older drivers and software tools are not compatible with this release

If your system contains a 3ware driver and/or software released prior to 10.0, these will not work with the 9750 controller. Older 96xx or 95xx controllers will only work with drivers from earlier releases.

#### No legacy firmware and driver updates for this release

There is no firmware or driver updates for the 9550SXU, 9650SE, and 9690SA controllers in this release. The latest 3ware management tools (CLI & 3DM 2) included in this release can be used to manage these earlier controllers.

### Errata

**Possible Data Loss When a Drive is Rapidly Removed and Reinserted (SCR-00548)** If a drive is removed while unwritten data exists in the drive based write cache, the immediate actions of the system administrator could lead to the unrecoverable loss of that cache data. When a drive is pulled with active I/O running, wait at least 10 seconds before reinserting the drive. This provides enough reaction time for the controller to handle the threatened data and ultimately store it safely for further use.

#### Redundant Array Goes Offline Due to Errors on a Single SATA Drive (SCR-00419)

A large number of errors due to a single SATA drive may cause timeouts on other drives, leading to the entire redundant RAID array going offline. Replace the failing drive as soon as possible to prevent this issue.

#### **Controller Goes Offline During Test if Write Cache Disabled (SCR-00819)**

The problem is limited to overlapping writes that simultaneously reside in the write queue with request sizes of 256KB and larger with the controller write cache disabled. Refer to the following KB article for a workaround and the firmware fix: http://3ware.com/KB/article.aspx?id=15698

#### Driver for Fedora Core 11 Does Not Load on Primary Storage (SCR-00521)

Due to a Fedora installer issue, the Fedora Core 11 operating system does not load the latest 3ware driver when you install the operating system on a 3ware controller. Run the workaround as documented in the install.txt file that is included on the storage medium that contains the driver software.

# Tools from 3ware CD Menu Do Not Run with Fedora Core 10 & 11 (SCR-01781)

The workaround is to run the tools directly from a command line instead as root.

#### Local Time Issue with openSUSE 11.1 and SLES 11 (SCR- 02164)

On openSUSE 11.1 and SLES 11, a system set for local time will post asynchronous event notification (AEN) messages with a GMT timestamp. This difference in time will delay the start of scheduled events that include (but are not limited to) rebuilds, verifies, initializations, and migrations. This problem has been fixed with openSUSE 11.2. At the

time of this writing, there is no solution for the SLES 11 distribution. SLES 11 systems set to GMT time will not be affected by this problem.

#### SUSE Driver Does Not Load Automatically for Secondary Storage (SCR-02166)

Due to SUSE Linux Enterprise Server (SLES) 11 restrictions, the 3ware driver fails to load on boot even after the mkinitrd command is executed. As a workaround, edit the /etc/init.d/boot.local file in the distribution to add either of the the following commands:

insmod /lib/modules/<kernel version>/kernel/drivers/scsi/3w-sas.ko
modprobe --allow-unsupported 3w-sas

While other supported Linux distributions should not be affected, the same procedure may be used. For Redhat or Fedora, edit the /etc/rc.d/rc.local file instead.

# Units Created While BBU Battery Capacity Test is Running Results in an Error (SCR-00503)

If unit creation in 3BM is attempted while the BBU capacity test is running, 3BM will report "Parameter not changeable" since the write cache cannot be enabled until after the test is completed. Refer to the user guide for more details, if needed.

# **3ware 9750 is Not Detected Correctly with certain Supermicro X7 series motherboards (SCR-00283)**

If the error "PCI Vendor and Device IDs do not match" appears during POST and the 9750 controller's messages are not displayed, upgrade the motherboard to the latest Supermicro BIOS. Refer to <u>http://3ware.com/KB/article.aspx?id=15595</u> for more information.

**3ware 9750 shown in BIOS but freezes at boot on Supermicro X8DA3 motherboard** Upgrade the motherboard to the latest Supermicro BIOS attached at: http://3ware.com/KB/article.aspx?id=15693

**3DM 2 does not inform the user that a reboot is required if a link speed is changed** (SCR-00698). CLI will issue a message to indicate this. 3DM 2 currently does not.

#### SATA drive spindle speeds are reported incorrectly (SCR-00262)

This occurs for both direct connect and expander based SATA drives. SAS drives are not affected.

#### No warning if more than 32-units are available (SCR-00673)

If more than 32-units are attached to the controller no warning message is reported that the maximum number of units allowed by the firmware and software was exceeded. Drives associated with the subsequent units will appear with a "u?" designation in 3DM 2 and CLI. In the 3BM, the units will be marked "incomplete".