



# OpenSolaris Release Notes

Release 9.5.1

(Supporting 3ware 9690SA and 9650SE controllers)

**READ ME FIRST!**

## *Introduction*

Thank you for purchasing the AMCC 3ware SAS/SATA RAID Controllers. This document describes important recommendations that are not included in the Installation and User Guides. In order to better assist you, please read this document prior to calling technical support.

For additional information, see our web site at:

<http://www.3ware.com/products/index.asp>

User Documentation:

<http://www.3ware.com/support/userdocs.asp>

Knowledgebase:

<http://www.3ware.com/KB/kb.asp>

Software Downloads:

<http://www.3ware.com/support/download.asp>

System and Drive Compatibility Lists:

[http://www.3ware.com/products/sys\\_compatibility.asp](http://www.3ware.com/products/sys_compatibility.asp)

Service and Support:

<http://www.3ware.com/support/index.asp>

Main U.S. Phone: 800-840-6055 (US only) or 858-535-6517

European Phone: 00 44 (0)118 936 25 01



### ***Release Highlights***

- Support OpenSolaris release 2008.11

### ***Release Details***

The release is comprised of the following components:

- Firmware version: 4.06.00.004
  - 3BM (3ware BIOS Manager) version: 4.05.00.015
  - Bootloader version: 3.08.00.001 (factory installed)
  - BBU (Battery Backup Unit) version: 2.00.00.023
- CLI version: 2.00.08.013
- OpenSolaris 2008.11 driver version: 1.0

### ***Operating System Support***

- OpenSolaris 2008.11 (32-bit and 64-bit x86)

### **Notes**

**Remember to check the AMCC web site for the latest updates** and to sign up for the AMCC 3ware Technical Newsletter: <http://www.3ware.com/support/index.asp>.

#### ***Motherboard and hard drive compatibility***

Please refer to AMCC's hardware compatibility list for tested configurations. This list will be updated on a regular basis. The hardware compatibility list is located at: [http://www.3ware.com/products/sys\\_compatibility.asp](http://www.3ware.com/products/sys_compatibility.asp).

### **Bugs Fixed and Enhancements**

- Add support for OpenSolaris 2008.11 (x86 and x86\_64)

### **Corrections to the 3ware SAS/SATA RAID Software User Guide, Version 9.5.1**

***In Chapter 8, on page 126, in the section "Rapid RAID Recovery," text incorrectly states:***

***"If all of a unit's capacity is being used, there is no real advantage to Rapid RAID Recovery, but the more your unit's capacity is under-utilized, the less time a rebuild, initialization or verify will take if you enable Rapid RAID Recovery."***

**Correction:** In fact, although the benefit of Rapid RAID Recovery to **rebuids** is reduced when all of a unit's capacity is being used, Rapid RAID Recovery still provides benefits to array verification and to initialization after an unclean shutdown, regardless of the disk usage.

*In Chapter 8, on page 126, in the section "Rapid RAID Recovery," text incorrectly states:*

"Currently Rapid RAID Recovery only works with FAT, FAT32 and NTFS file systems. Linux or FreeBSD file systems such as Ext3 are not yet supported."

**Correction:** Rapid RAID Recovery is OS and file system independent, since this feature tracks areas of the unit where write activity occurs. File systems such as FAT, FAT32, NTFS, and XFS are ideally suited to this implementation. File systems such as EXT2 and EXT3 that write inodes over the entire disk defeat this approach for faster rebuilds. This issue is being researched. Protection against unclean shutdowns to provide a fast verification and initialization is the same regardless of the file system.

*In Chapter 11, "Managing an Enclosure," on page 206, text incorrectly states:*

Enclosure management features in 3ware software are available for enclosures with expanders that support SCSI Enclosure Services 2 (SES-2).

**Note:** The SAFTE (SCSI Accessed Fault Tolerant Enclosure) specification is not supported at this time.

**Correction:** In fact, while that is true for the 9690SA controllers, CCU-based enclosure support for the 9650SE controllers is SAF-TE

*In Chapter 13, "Troubleshooting," on page 252, text incorrectly states that if you want to disable command logging, you can do so using the CLI.*

**Correction:** To disable command logging, you set the environment variable TW\_CLI\_LOG to OFF.



## **Errata**

### ***Important: Administrator knowledge is required***

Due to the behavior of OpenSolaris, many tasks need administrator knowledge and privilege to operate correctly. These types of system administration tasks are beyond the scope of this document. For information and procedures, see the OpenSolaris system documentation at:

[http://opensolaris.org/os/community/documentation/doc\\_index/sysadmin/](http://opensolaris.org/os/community/documentation/doc_index/sysadmin/)

### ***Erroneous messages in system syslog***

When a unit under the 3ware RAID controller is formatting or writing data, the following errors might appear in the system syslog. These error messages are not harmful and can be ignored. We will address this in a later release.

```
WARNING: tw0: Invalid field in CDB cdb(6) 1a 00 03 00 24 00
WARNING: tw0: Invalid command opcode opcode=0x5E cdb(10) 5e 00 00 00 00
00 00 00 08 00
```

### ***Scheduled background tasks are not fully supported in this release***

Using CLI to schedule tasks such as verify, rebuild and migration to run at a user defined time and date, is not supported in this release. This feature will be supported in a later release.

### ***Power Management is not fully supported in this release***

Our driver does not fully support all the features of power management in this release. There are certain cases where a 'reboot' might not work correctly. When this happens, a full system shutdown is required. Some of these cases include firmware upgrade and drive removal.

### ***OpenSolaris and multiple LUNs***

By default, an OpenSolaris host is configured for one LUN per SCSI target. If you are going to create an array on an AMCC 3ware RAID controller with multiple LUNs, you need to manually enable multiple LUN support. See the OpenSolaris system documentation at:

[http://docs.sun.com/source/819-1274-13/appd\\_solaris.html#66564](http://docs.sun.com/source/819-1274-13/appd_solaris.html#66564)