



adaptec®

README: maxView Storage Manager & ARCCONF Command Line Utility

DOC-01768-06-A Rev A1

Released

Issue 1: November 24, 2015



Copyright © 2015 PMC-Sierra, Inc. All rights reserved.

The information in this document is proprietary and confidential to PMC-Sierra, Inc. In any event, no part of this document may be reproduced or redistributed in any form without the express written consent of PMC-Sierra, Inc.

PMC-2153191, Issue 1

DOC-01768-06-A Rev A1.

None of the information contained in this document constitutes an express or implied warranty by PMC-Sierra, Inc. as to the sufficiency, fitness or suitability for a particular purpose of any such information or the fitness, or suitability for a particular purpose, merchantability, performance, compatibility with other parts or systems, of any of the products of PMC-Sierra, Inc., or any portion thereof, referred to in this document. PMC-Sierra, Inc. expressly disclaims all representations and warranties of any kind regarding the contents or use of the information, including, but not limited to, express and implied warranties of accuracy, completeness, merchantability, fitness for a particular use, or non-infringement.

In no event will PMC-Sierra, Inc. be liable for any direct, indirect, special, incidental or consequential damages, including, but not limited to, lost profits, lost business or lost data resulting from any use of or reliance upon the information, whether or not PMC-Sierra, Inc. has been advised of the possibility of such damage.

For a complete list of PMC-Sierra's trademarks and registered trademarks, visit: <http://www.pmc-sierra.com/legal/>.

Other product and company names mentioned herein may be the trademarks of their respective owners.

The technology discussed in this document may be protected by one or more patent grants.

**Revision History**

Issue	Issue Date	Details of Change
1	November 2015	Updated maxView readme from P/N DOC-01768-05-A Rev A.e

Contents

.....	6
1 New Features of this Release.....	7
2 Software Versions and Documentation.....	8
2.1 Utility Software.....	8
2.2 Documentation.....	8
2.2.1 Series 6, 7, 8 Controller Documentation.....	8
2.2.2 HBA 1000 Series Product Documentation.....	8
2.2.3 SmartIOC Product Documentation.....	8
3 Installation Notes.....	9
3.1 Installation and Setup.....	9
3.2 Supported Operating Systems.....	9
3.2.1 Series 6, 7, 8 Controllers.....	9
3.2.2 Smart Family Controllers.....	9
3.3 General Setup Notes.....	10
3.4 Remote Access.....	10
3.5 Windows 8 Setup.....	10
3.6 SLES Setup.....	10
3.7 Ubuntu Setup.....	11
3.8 Bootable USB Image Security Warnings.....	11
3.9 RAW Device Setup (Series 6, 7, 8 Only).....	11
3.10 maxView Plugin for VMware vSphere Web Client.....	11
3.11 Uninstallation Issues.....	11
4 Known Limitations.....	12
4.1 Global Limitations.....	12
4.1.1 Login Issues on Windows Domain Server.....	12
4.1.2 Dual-Controller Systems.....	12
4.1.3 Email Notifications.....	12
4.1.4 SGPIO Enclosures.....	12
4.1.5 Non-RAID Mode Controllers.....	12
4.1.6 Browser Issues.....	12
4.1.7 Remote System Access on Linux and Windows.....	13
4.1.8 RAID 10 Segment Order.....	13
4.1.9 RAID 10 Rebuild Order.....	14
4.1.10 Locate Logical Drive Blink LED.....	14
4.1.11 ARCCONF Backward Compatibility.....	14
4.1.12 Updating Hard Disk Firmware on VMware Guest OS.....	14
4.1.13 Creating a Support Archive on a Guest OS.....	14
4.1.14 Hot Swap Issues on VMware CentOS Guest OS.....	14
4.1.15 Enclosure Status Reporting.....	14
4.1.16 PHY Status on Enclosure Backplanes.....	14
4.1.17 Special Characters in Logical Device Names.....	14
4.1.18 Speaker Status on SuperMicro SAS2X28 Enclosures.....	15
4.1.19 Online Help Issues.....	15
4.2 Limitations Specific to Series 6, 7, 8 Controllers.....	15
4.2.1 RAID-Level Migrations.....	15
4.2.2 Hot Spare Issues.....	15
4.2.3 maxCache Device Migration.....	15
4.2.4 ARCCONF maxCache Device Size Issue	15
4.2.5 Power Management Issues.....	15
4.2.6 RAID 50/RAID 60, Max Drives.....	16
4.2.7 Verify with Fix.....	16
4.2.8 ATA Secure Erase.....	16



4.2.9 Series 6 Controller Issues.....	16
4.2.10 Simple Volume Support.....	16
4.2.11 Auto-Volume Support	17
4.2.12 Hot-Removing Disk Drives on Xenserver Guest OS.....	17
4.2.13 Changing Read and Write Cache Settings for Logical Drive.....	17
4.3 Limitations Specific to Smart Family Controllers.....	17
4.3.1 SES Passthrough Commands to Expanders.....	17



Please check the product website for the later versions of this file to ensure you are reviewing the latest information.

This file contains important information about issues and errata that were discovered after completion of the standard product documentation.

In the case of conflict between various parts of the documentation set, this file contains the most current information.



1

New Features of this Release

- Support for Smart Family products: HBA 1000 Series, SmartIOC 2000
- ARCCONF support for HBA 1000 Series products
- Support for new operating systems
- Bugfixes

2 Software Versions and Documentation

2.1 Utility Software

- PMC Adaptec maxView Storage Manager Version 2.00.00 (21811)
- PMC Adaptec ARCCONF Command Line Interface Utility Version 2.00.00 (21811)

2.2 Documentation

2.2.1 Series 6, 7, 8 Controller Documentation

PDF Format (English/Japanese)

- maxView Storage Manager User's Guide
- Adaptec RAID Controller Command Line Utility User's Guide

HTML and Text Format

- maxView Storage Manager Online Help
- maxView Storage Manager README.TXT file

2.2.2 HBA 1000 Series Product Documentation

PDF:

- PMC Adaptec maxView Storage Manager User's Guide for Smart-Family Controllers
- PMC Adaptec HBA 1000 Series Command Line Utility User's Guide

HTML and Text Format:

- maxView Storage Manager for Smart-Family Controllers Online Help
- maxView Storage Manager README.TXT file

2.2.3 SmartIOC Product Documentation

PDF:

- PMC Adaptec maxView Storage Manager User's Guide for Smart-Family Controllers
- PMC Adaptec SmartIOC 2000 Command Line Utility User's Guide

HTML and Text Format:

- maxView Storage Manager for Smart-Family Controllers Online Help
- maxView Storage Manager README.TXT file

3 Installation Notes

3.1 Installation and Setup

Refer to your product documentation for the correct installation and setup details:

- Your product Installation and User's Guide contains complete installation information for your product's drivers.
- The maxView Storage Manager User's Guide for your product contains installation information for the maxView Storage Manager software.
- The Command Line Utility User's Guide for your product contains complete installation for ARCCONF.

3.2 Supported Operating Systems

3.2.1 Series 6, 7, 8 Controllers

Microsoft Windows

- Microsoft® Windows® Server 2012 R2 (64-bit)
- Microsoft® Windows® Server 2008 (32-bit and 64-bit)
- Microsoft® Windows® Server 2008 R2 (64-bit)
- Microsoft® Windows® SBS 2011 (64-bit)
- Microsoft® Windows® 7 (32-bit and 64-bit)
- Microsoft® Windows® 10 (32-bit and 64-bit)
- Microsoft® Windows® 8, Windows 8.1 (32-bit and 64-bit)

Linux:

- Red Hat® Enterprise Linux/CentOS 7.1 (64-bit)
- Red Hat® Enterprise Linux/CentOS 6.6 (32-bit and 64-bit)
- Red Hat® Enterprise Linux/CentOS 5.11 ((32-bit and 64-bit)
- SuSE Linux Enterprise Server 12 (64-bit)
- SuSE Linux Enterprise Server 11,10* (32-bit and 64-bit)
- Debian Linux 7.8 (32-bit and 64-bit)
- Ubuntu Linux 14.10 (32-bit and 64-bit)
- Ubuntu Linux 14.04.1 (32-bit and 64-bit)
- Ubuntu Linux 12.04.3 (32-bit and 64-bit)
- Fedora Linux 21 (32-bit and 64-bit)

See Section [SLES Setup](#) on page 10 for SLES 10 setup issues.

Virtual OS Environments

- VMware ESXi 6.0
- VMware ESXi 5.5, 5.1 U1, 5.1
- Citrix XenServer 6.5 (32-bit GOS only)

Solaris

- Solaris 10 U11
- Solaris 11.2

3.2.2 Smart Family Controllers

Microsoft Windows

- Microsoft® Windows® Server 2012, 2008, SBS 2011 SP2 (32-bit and 64-bit)
- Microsoft® Windows® 10, 8.1, 8, 7 (32-bit and 64-bit)

Linux:

- Red Hat® Enterprise Linux/CentOS 7.1, 7.0 (32-bit and 64-bit)

- Red Hat® Enterprise Linux/CentOS 6.7, 6.6 (32-bit and 64-bit)
- Red Hat® Enterprise Linux/CentOS 5.11, 5.10 (32-bit and 64-bit)
- SuSE Linux Enterprise Server 12 (32-bit and 64-bit)
- SuSE Linux Enterprise Server 11 SP4, SP3 (32-bit and 64-bit)
- Ubuntu Linux 14.04.2, 14.04.1 (32-bit and 64-bit)
- Ubuntu Linux 12.04.5, 12.04.4 (32-bit and 64-bit)

Virtual OS Environments

- VMware ESXi 6.0
- VMware ESXi 5.5

Note:

1. ARCCONF Command Line Utility is supported on 64-bit versions of Microsoft Windows and Linux.
2. Boot USB (offline or pre-boot) for the ARCCONF command line utility and maxView Storage Manager is supported on 32-bit and 64-bit Linux.

3.3 General Setup Notes

- maxView Storage Manager is not backwards-compatible with Series 5 and older Adaptec controller models.
- maxView Storage Manager and legacy Adaptec Storage Manager (ASM) cannot coexist on the same system.
- For Series 6, 7, 8 controllers:
 - maxView Storage Manager is not supported on FreeBSD. Use ARCCONF to create and manage arrays.

3.4 Remote Access

maxView Storage Manager requires the following range of ports to be open for remote access:

- 34570-34580 (TCP)
- 34570 (UDP)
- 34577-34580 (UDP)

See also [Remote System Access on Linux and Windows](#) on page 13 for OS-specific issues and workarounds.

3.5 Windows 8 Setup

To log in and use maxView Storage Manager on a Windows 8 system, you must create a local user account; you cannot use your MS Live account. To create a local user account:

1. Log into your MS Live account.
2. Select Settings->Change PC Settings->Users->Switch to Local user.
3. Provide account details.
4. Start maxView Storage Manager and log in with your local user account credentials.

3.6 SLES Setup

- Series 6, 7, 8 only: Due to a JRE conflict, maxView Storage Manager is not supported on SLES 10 SP2/SP3 (x32, x64), and SLES 10 SP4 (x32).
 WORKAROUND: Install SLES 10 SP4 64-bit then replace the 64-bit JRE with a 32-bit JRE. Alternatively, use ARCCONF for storage management on SLES 10 systems.

- To avoid a problem with launching maxView Storage Manager on SLES 11 x64 systems with DHCP enabled, ensure that the /etc/hosts file maps the server IP address to a valid host name; it is not sufficient to map the IP address to 'localhost'.

3.7 Ubuntu Setup

- To avoid a maxView Login failure on Ubuntu systems, you must ensure that the root user account is enabled. (It is disabled, by default, on Ubuntu 14.04 and later because no password is set.)
For example: `sudo bash; sudo passwd root`
- When upgrading maxView Storage Manager on an existing Ubuntu Linux x64 installation, you must enable the upgrade switch before installing the maxView .deb package:

```
export maxView_Upgrade=true
dpkg -i StorMan-*.deb
```

To uninstall maxView after the upgrade:

```
export maxView_Upgrade=false
dpkg -r storman
```

3.8 Bootable USB Image Security Warnings

When running maxView Storage Manager from the bootable USB image, you may be prompted with one or more with security warnings before maxView launches. In each case, acknowledge the warning and continue.

3.9 RAW Device Setup (Series 6, 7, 8 Only)

On Adaptec Series 7 and Adaptec Series 8 controllers, a RAW Pass Through device is analogous to a JBOD, supported by Adaptec Series 6 controllers and older. Any drive without Adaptec RAID metadata is exposed to the OS as a RAW Pass Through device. To remove the Adaptec metadata and convert the drive to a RAW device, use the Uninitialize command in maxView Storage Manager; any existing data on the drive is destroyed. (You can also run `uninit` from the BIOS or ARCCONF.) For more information about working with RAW devices, see 'controller modes' in the CLI User's Guide, and BIOS 'general settings' in the RAID Controller Installation and User's Guide.

3.10 maxView Plugin for VMware vSphere Web Client

The maxView Plugin for VMware vSphere Web Client is supported on VMware 5.5 and 6.0.

3.11 Uninstallation Issues

- For Series 6, 7, 8 controllers, when uninstalling maxView Storage Manager on Fedora Linux, the OS displays a series of warning messages about missing files. These messages can be ignored; the uninstallation completes successfully.
WORKAROUND: To avoid the warnings, uninstall maxView with `./StorMan-1.06-21032.i386.bin --remove` rather than `rpm -e StorMan`.
- When using the 'Modify' option to uninstall maxView Storage Manager on Windows, the 'Adaptec' folder is not removed from the file system.

4 Known Limitations

4.1 Global Limitations

4.1.1 Login Issues on Windows Domain Server

If the maxView login account doesn't have local administrative rights, login will fail with an error message: 'Invalid Username or Password'. On domain servers running later versions of Microsoft Windows Server, where no local administrator exists or can be created, maxView login is not possible. Use ARCCONF to create and manage arrays.

4.1.2 Dual-Controller Systems

In dual-controller systems, the controller order in maxView Storage Manager and the BIOS differs. Example: with an Adaptec 72405 and 7805 installed, the BIOS reports the 72405 as controller 1 and the 7805 as controller 2; in the GUI, the controller order is reversed.

4.1.3 Email Notifications

- On Linux systems, we recommend adding the SMTP host name to the `/etc/hosts` file. Doing so ensures that email notifications will succeed if you specify the email server in maxView Storage Manager by host name. Otherwise, email notifications (including test messages) may fail if the DNS is unable to resolve the host name.
WORKAROUND: specify the email server in maxView Storage Manager by IP address.
- On CentOS 5.9 x64, email notifications may not be sent for logical drive creations, degraded logical drives, or logical drives that are rebuilding or fully rebuilt.

4.1.4 SGPIO Enclosures

In this release, maxView Storage Manager does not show connector information for SGPIO enclosures.

4.1.5 Non-RAID Mode Controllers

maxView Storage Manager can "see" RAID controllers operating in HBA mode, Auto-Volume mode, and Simple Volume mode (Adaptec Series 7, Adaptec Series 8, Smart Family controllers only). However, to change the controller mode on Adaptec Series 7/8 controllers, you must use ARCCONF or the BIOS. With Adaptec Smart-Family controllers, you can also change the controller mode with maxView Storage Manager.

4.1.6 Browser Issues

To run maxView Storage Manager on the supported browsers. Javascript must be enabled.

- Due to a certificate bug in Firefox 31.x, maxView login may fail on RHEL systems with a "Secure Connection" error. (Firefox 31.1 is the default browser on RHEL 6.6; on RHEL 7.1, it is 31.4.)
WORKAROUND: Upgrade to Firefox 36.
- With the default Security setting in Microsoft Internet Explorer 10 and 11, you may be unable to login to maxView Storage Manager or experience certain GUI display issues in the maxView online Help system.
WORKAROUND: Change the default Security setting from High (or Medium-High) to Medium. Alternative: add the GUI IP address to the trusted sites list.
- With Google Chrome, the scrollbar resets itself to the top after selecting a drive in the Logical Drive wizard. To select another drive, you must scroll back down to the drive location.
- With Microsoft Internet Explorer 10, the controller firmware update wizard does not show the f/w update file name when the upload completes. To refresh the display, click Next then Back.
- We do not recommend using multiple browsers simultaneously on the same maxView instance. Doing so may cause display issues or freezes; to restore maxView, refresh the display by pressing F5.

4.1.7 Remote System Access on Linux and Windows

To avoid remote system access failures from Linux and Windows clients running maxView Storage Manager, check and update one or all of the following system and network settings:

Windows:

- Ensure that the DNS server information is properly configured

RHEL/Linux:

- Set server.properties file permissions to at least read-only at all levels
 1. Stop all maxView services.
 2. Set the Permissions of server.properties file to read and write or read-only
 3. at all levels (Owner, Group and Others). Apply and close.
 4. Restart all services in the given order - cim, agent, tomcat
 5. Now try to remote login to this system from any other system
- Check/update these network settings:
 1. Disable SELinux
 2. Disable firewall.
 3. Disable the ipv6 in the system, if ipconfig shows both ipv4 and ipv6 address.
 4. Remove the virtual bridge virbr0, if present
 5. Enter local ip address in 'localip' parameter in server.properties file

4.1.8 RAID 10 Segment Order

maxView Storage Manager and the Ctrl-A BIOS report the wrong segment order for RAID 10s, regardless of the order in which the drives are selected.

Example 1: Create RAID 10 with 2 SDDs and 2 HDDs in maxView Storage Manager:

(1a) ARCCONF and maxView Storage Manager see the following RAID segment order:

```
Device 2 (S1)
Device 1 (H2)
Device 3 (S2)
Device 0 (H1)
```

(1b) the BIOS/CTRL-A sees the following RAID segment order:

```
Device 2 (S1)
Device 1 (H2)
Device 0 (H1)
Device 3 (S2)
```

(1c) the correct and expected RAID segment order is:

```
Device 2 (S1)
Device 0 (H1)
Device 3 (S2)
Device 1 (H2)
```

Example 2: Create RAID 10 with 2 SDDs and 2 HDDs with ARCCONF:

(2a) the BIOS/CTRL-A sees the following RAID segment order:

```
Device 0 (H1)
Device 2 (S1)
Device 1 (H2)
Device 3 (S2)
```

(2b) ARCCONF and maxView Storage Manager see the correct RAID segment order:

```
Device 2 (S1)
Device 0 (H1)
Device 3 (S2)
Device 1 (H2)
```

4.1.9 RAID 10 Rebuild Order

With a degraded RAID 10 logical drive, the drive is rebuilt one leg at a time, not in parallel.

4.1.10 Locate Logical Drive Blink LED

In maxView Storage Manager, Locate Logical Drive continues to blink the LED for a pulled physical drive in the array after the locate action is stopped. (For unpulled drives, the blinking stops.) This issue is not seen with ARCCONF.

4.1.11 ARCCONF Backward Compatibility

ARCCONF is backward compatible with older Adaptec controller models. As a result, the ARCCONF user's guide and online help show command options that are not supported by newer Adaptec controllers, like the Adaptec Series 7 and Adaptec Series 8 or later products.

Example: With ARCCONF SETMAXCACHE, Adaptec Series 7 and Series 8 controllers do not support ADDTOPOOL or REMOVEFROMPOOL

4.1.12 Updating Hard Disk Firmware on VMware Guest OS

Updating the firmware for a SAS hard disk drive with ARCCONF/maxView can crash (PSOD) the VMware Guest OS. This issue is seen with SAS hard drives only; with SATA drives, the firmware update completes successfully.

4.1.13 Creating a Support Archive on a Guest OS

To create a support archive on a VMware or (Adaptec Series 6, 7, 8 only) XenServer Guest OS, use maxView Storage Manager only. Creating a support archive with ARCCONF is not supported in this release.

4.1.14 Hot Swap Issues on VMware CentOS Guest OS

Due to a limitation with the VMware CentOS Guest OS network configuration, maxView Storage Manager does not show newly added or removed hot swap drives. (ARCCONF sees the configuration change but maxView does not.)

WORKAROUND: (1) reboot the system or restart maxView services; (2) adjust the network configuration; contact Adaptec Support for more information.

4.1.15 Enclosure Status Reporting

Enclosure status, in maxView Storage Manager, is event-driven. As a result, enclosures can have a "Degraded" status even if related resources (fan, temperature, power) are performing normally (Optimal status). For instance, the Enclosure status changes to "Degraded" if the system reports an "Enclosure device not responding ..." event, even if other sensor values are normal.

4.1.16 PHY Status on Enclosure Backplanes

In the Controller Properties window, maxView Storage Manager shows the Connector Info as "unknown" for all PHYs on an enclosure-based backplane (for instance, a backplane attached to connector 1).

4.1.17 Special Characters in Logical Device Names

Special characters are permitted in logical device names in maxView Storage Manager, the BIOS, and ARCCONF. However, with Linux ARCCONF (create, setname), special characters must be "escaped" to ensure proper interpretation. For example:

```
ARCCONF SETNAME 1 LOGICALDRIVE 1 arc_drive%\$12\&
```

4.1.18 Speaker Status on SuperMicro SAS2X28 Enclosures

SuperMicro SAS2X28 enclosures do not propagate the speaker status to maxView Storage Manager. As a result, maxView always displays the speaker status as Off.

4.1.19 Online Help Issues

When opening the maxView Storage Manager help from a remote Linux system (eg, over a VPN), the help window may fail to open with a 'can't establish connection to server' message.

WORKAROUND: replace 127.0.0.1:8443 in the URL with <system_ip_address>;8443

4.2 Limitations Specific to Series 6, 7, 8 Controllers

4.2.1 RAID-Level Migrations

- The following RAID-level migrations (RLM) are supported in this release:
 - RAID 0 to RAID 5
 - RAID 0 to RAID 10
 - RAID 5 to RAID 6
 - RAID 6 to RAID 5
 - RAID 10 to RAID 5
 - RAID 5 to RAID 10
 - RAID 1 to RAID 5
 - SIMPLE VOLUME to RAID 1
 - RAID 1 to SIMPLE VOLUME
- When migrating a Simple Volume to RAID 1, maxView Storage Manager reports the logical drive state as Impacted (rather than Reconfiguring); this is normal.
- We do not recommend performing a RAID-level migration or Online Capacity Expansion (OCE) on a logical drive with maxCache SSD caching enabled.
NOTE: maxView Storage Manager grays out the options for logical drives with maxCache enabled. ARCCONF terminates the task.
- Always allow a RAID-level migration to complete before creating a support archive file. Otherwise, the support archive will include incorrect partition information. Once the migration is complete, the partition information will be reported correctly.

4.2.2 Hot Spare Issues

- After using a global hot spare to rebuild a redundant logical drive, maxView Storage Manager displays an erroneous event message: "Deleted dedicated hot spare drive for logical device". In fact, the message should read "Logical device X is no longer protected by hot spare drive Y".
- maxView Storage Manager allows you to un-assign a global hot spare drive while copyback is in progress. This procedure is not recommended.

4.2.3 maxCache Device Migration

Only one maxCache Device is supported per controller. Moving the maxCache Device (all underlying SSDs) from one controller to another (assuming both controllers support maxCache) is supported only if (1) the new controller does not have a maxCache Device or any other maxCache Device with a conflicting device number and (2) only after a clean shutdown on the old controller.

4.2.4 ARCCONF maxCache Device Size Issue

ARCCONF supports >2TB maxCache Devices if you create the device with the 'max' parameter. However, the functional limit for the maxCache Device is 2TB, which is also the limit in maxView Storage Manager.

4.2.5 Power Management Issues

- Power management is not supported on FreeBSD.

- Capturing support logs from maxView or ARCCONF will spin up drives when power management is active. This behavior is by design.
- For logical drives comprised of SSDs only, the Power Tab in maxView Storage Manager is disabled.
- The Logical Drive Creation wizard does not save the power management settings after the logical drive is created. It is always disabled.

WORKAROUND: Enable power management for the logical drive from the Set Properties window.

4.2.6 RAID 50/RAID 60, Max Drives

The maximum number of drives in a RAID 50 or RAID 60 differ between maxView Storage Manager, ARCCONF, and the BIOS:

- BIOS and ARCCONF: 128 drives max
RAID 50 - From 2-16 legs with 3-32 drives/leg
RAID 60 - From 2-16 legs with 4-16 drives/leg
- maxView Storage Manager:
Assumes 2 legs for RAID 50/RAID 60 (non-selectable)
RAID 50 2-32 drives/leg (64 total)
RAID 60 2-16 drives/leg (32 total)

4.2.7 Verify with Fix

In maxView Storage Manager and ARCCONF, the Verify with Fix operation is NOT available when:

1. The logical drive has a non-redundant RAID level
2. Other tasks are in progress on the logical drive
3. The logical drive is in a non-optimal or impacted state

4.2.8 ATA Secure Erase

In ARCCONF, the ATA Secure Erase operation cannot be aborted. Once started, it continues to completion.

NOTE: ATA Secure Erase is also available in the Ctrl-A BIOS. and maxView Storage Manager.

4.2.9 Series 6 Controller Issues

The following issues are seen only with Adaptec Series 6 RAID controllers:

- In maxView Storage Manager, the Preserve Cache option on the Set Properties window is not supported on Series 6 RAID controllers. Attempting to set this option for the Series 6 controller fails.
- Renaming a RAID volume disables the write-cache (if enabled). You cannot re-enable the write-cache in maxView Storage Manager.
WORKAROUND: Use ARCCONF to enable the write-cache.
- In a VMware Guest OS under VMware 5.x, maxView Storage Manager and ARCCONF do not detect existing logical drive partitions. As a result, attempting to delete, clear, or erase the logical drive may fail.
- On Series 6 controllers, maxView Storage Manager deletes partitioned JBODs without issuing a warning message.
- Series 6 controllers do not support the ARCCONF GETPERFORM command.

4.2.10 Simple Volume Support

- In this release, you can create a maximum of 128 Simple Volumes in maxView Storage Manager, ARCCONF, or the BIOS.
- When a Simple Volume fails, the status remains unchanged after drive replacement.
WORKAROUND: Manually delete the Simple Volume to remove it.

4.2.11 Auto-Volume Support

- Changing a controller into Auto-Volume mode (ARCCONF/BIOS) is not supported if the configuration includes any logical device type other than Simple Volume, including a maxCache Device. The mode switch from RAID mode to Auto-Volume mode is blocked if any other type of logical volume exists (including maxCache). After switching to Auto-Volume mode, you can create and delete Simple Volumes only in maxView Storage Manager and ARCCONF.
- In Auto-Volume mode, only the first 128 RAW drives are converted to Simple Volumes; the rest of the RAW drives remain unchanged. If you uninitialize a Ready drive while the controller is in Auto-Volume mode, the firmware converts the drive automatically until the Simple Volume count reaches the maximum.

4.2.12 Hot-Removing Disk Drives on Xenserver Guest OS

XenServer does not support "hot-removal" of disk drives from a partitioned logical drive. As a result, if you hot remove a disk from a logical drive, the Guest OS becomes inaccessible because the drive partition remains visible to the OS instead of being cleared.

WORKAROUND: Reboot the XenServer host, detach the failed partition, then restart the VM.

4.2.13 Changing Read and Write Cache Settings for Logical Drive

maxView Storage Manager does not allow you to change the read-cache and write-cache settings for a logical drive in one step. You must click OK after each change.

4.3 Limitations Specific to Smart Family Controllers

4.3.1 SES Passthrough Commands to Expanders

SES passthrough commands to expanders fail.