README.TXT

Adaptec maxView Storage Manager Adaptec Command Line Interface Utility (ARCCONF)

as of December 4, 2012

Please review this file for 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.

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1. New Features in this Release

- maxView Storage Manager, Web-based storage management software; replaces Adaptec Storage Manager (ASM) JAVA client
- Support for maxView Storage Manager GUI and ARCCONF command line utility on VMware Guest OSs
- Support for Adaptec Series 7 and Adaptec Series 6 controllers
- ARCCONF command line utility feature update

2. Software Versions and Documentation

2.1 Utility Software

- Adaptec maxView Storage Manager Version 1.1
- Adaptec ARCCONF Command Line Interface Utility Version 1.1
- 2.2 Documentation on this DVD

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

3. Installation and Setup

3.1 Installation Instructions

The Adaptec SAS RAID Controllers Installation and User's Guide contains complete installation information for the controllers and drivers. The Adaptec RAID Controllers Command Line Utility User's Guide contains complete installation information for ARCCONF. The maxView Storage Manager User's Guide contains complete installation information for the maxView Storage Manager software.

3.2 Supported Operating Systems

Microsoft Windows:

- o Windows Server 2012, 2008, 32-bit and 64-bit
- o Windows Server 2008 R2, 64-bit
- o Windows Storage Server 2008 R2 (all versions)
- o Windows SBS $2\overline{0}11$ (all versions)
- o Windows 7, Windows 8, 32-bit and 64-bit

Linux:

- o Red Hat Enterprise Linux 6.2, 5.8, IA-32 and x64 o SuSE Linux Enterprise Server 11, 10, IA-32 and x64
- o Debian Linux 6.0, IA-32 and x64
- o Ubuntu Linux 12.04, 11.04, 10.04, IA-32 and x64
- o Fedora Linux 16, 15, 14, IA-32 and x64
- o CentOS 6.2, 5.8

VMware:

- o VMware ESX 4.1
- o VMware ESXi 5.1

Solaris:

- o Solaris 10 U9
- o Solaris 11 Express*

3.3 General Setup Notes

- In this release, maxView Storage Manager supports Adaptec Series 7 and Adaptec Series 6 controllers only. It is not backwards compatible with older Adaptec controller models.
- maxView Storage Manager is not supported on FreeBSD. Use ARCCONF to create and manage arrays.
- maxView Storage Manager and legacy ASM and cannot coexist on the same system.

3.4 Remote Access

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

```
o 34570-34580 (TCP)
```

- o 34570 (UDP)
- o 34577-34580 (UDP)

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 Linux Setup

To ensure that the maxView Storage Manager CIM Server initializes and starts correctly on systems with SELINUX enabled, enter the following commands, as root:

- # cd /usr/StorMan/pegasus/bin
- # chcon -t textrel_shlib_t /usr/StorMan/pegasus/lib/libpegcommon.so.1
 (or chcon -t textrel_shlib_t /usr/StorMan/pegasus/lib/lib* if any other binary
 relocation failed)
 - 3.7 Changing maxView Login Credentials

To change maxView Storage Manager's login credentials after changing the OS-level username/password for the Administrator's account:

1. Run changecredentials.exe (in the max View Storage Manager installation directory):

changecredentials.exe <new_username> <new_password>

2. Start maxView Storage Manager and login with the new credentials.

4. Known Limitations

4.1 Hot Spares

After using a hot spare to successfully rebuild a redundant logical drive, maxView Storage Manager will continue to report the drive as a global hot spare. To remove the hot spare designation, delete it in maxView Storage Manager.

4.2 Event Messages

maxView Storage Manager displays incomplete event messages for logical drive members that are hot unplugged from an enclosure. The event messages do not include the enclosure number or serial number.

4.3 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.

4.4 Email Notifications on CentOS

On CentOS 5.8 x64, email notifications may not be sent for logical drive creations, degraded logical drives, or logical drives that are rebuilding or fully rebuilt.

4.5 SGPIO Enclosures

In this release, $\max View\ Storage\ Manager\ does\ not\ show\ connector\ information\ for\ SGPIO\ enclosures.$

4.6 Uninitializing Physical Devices

To "uninitialize" a physical drive, use ARCCONF or the BIOS. maxView Storage Manager does not support the uninitialize action in this release.

4.7 Non-RAID Mode Controllers

maxView Storage Manager can "see" RAID controllers operating in HBA mode or Auto-Volume mode (Adaptec Series 7 controllers only). However, to change the controller mode, you must use ARCCONF or the BIOS.

4.8 RAID-Level Migrations

- We do not recommend performing a RAID-level migration (RLM) or Online Capacity Expansion (OCE) on a logical drive with maxCache SSD caching enabled.
- 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.

4.9 Display and Refresh Issues

- When using maxView Storage Manager and the CLI concurrently, configuration changes may not appear in the maxView Storage Manager GUI until you refresh the display by pressing F5.
- Configuration changes may not appear in the GUI immediately.

4.10 Browser Issues

- With Microsoft Internet Explorer 8.0.7601, maxView Storage Manager displays two 'Unassign Spare' icons on the ribbon, in the Physical Disk group; one on the first row, the other on the second. Only the one on the first row is enabled.
- 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.
- With Apple Safari, the controller firmware update wizard supports loading only one f/w update file at a time. Trying to load multiple files fails with an "invalid size" error.

4.11 Remote System Issues

On Linux, maxView Storage Manager may fail to connect with remote Linux or Solaris systems, returning an "Add system operation Failed" message. To avoid this problem, add the local host IP address in the property 'localip' in the configuration file /usr/StorMan/config/server.properties; for example, localip=10.16.32.25. The remote system will read this IP address if it does not find a proper IP address during the connection process.

4.12 Power Management Issues

- Power management is not supported under FreeBSD.
- In maxView Storage Manager, the power management setting in the Logical Drive Creation wizard is not saved after the logical drive is created. It is always disabled. WORKAROUND: enable power management for the logical

drive with the Set Properties operation.

4.13 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 3-32 drives/leg (64 total) RAID 60 4-16 drives/leg (32 total)
```

4.14 RAID 10 Rebuild Order

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

4.15 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. The logical drive is Quick initialized

4.16 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 Adaptec Series 7 controllers. Examples: with Adaptec Series 7, ARCCONF CREATE does not support 16KB and 32KB stripe sizes or RAID 5EE; with ARCCONF SETMAXCACHE, Adaptec Series 7 does not support ADDTOPOOL or REMOVEFROMPOOL.

4.17 Online Help Issues

In the maxView Storage Manager online help, some links show the full file path to the topic, rather than the topic title. The link itself is unaffected.

4.18 Uninstallation Issues

- If a previous version of maxView Storage Manager is installed on a system, you must remove it before beginning a new installation. You cannot upgrade an existing installation.
- When using the installer's 'Modify' option to uninstall maxView Storage Manager, the 'Adaptec' folder is not deleted from the file system.
- Uninstall Program, on the Windows Control Panel, incorrectly reports the size of maxView Storage Manager as 611MB if you previously removed individual components (like ARCCONF) with the installer's 'Modify' option.

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