Adaptec RAID Controller
Command Line Utility
User's Guide

CDP-00284-02-A Rev. A
Issue : November 22, 2013
## Revision History

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Adaptec by PMC Product Support
If you have questions about installing or using your Adaptec by PMC product, check this document first—you will find answers to most of your questions. If you need further assistance, use the support options listed below. To expedite your service, have your computer in front of you.

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- The TSID number is included on a white, bar-coded label, like this example:

```
THIS TSID NUMBER WILL BE REQUIRED WHEN CONTACTING TECHNICAL SUPPORT.

TSID: PTNNNNNNYYYYW
(GL) PRODUCT ID: 000000000000000
```

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1 Getting Started with the Command Line Utility

This chapter explains how your Adaptec by PMC® RAID controllers support the use of the ARCCONF command line utility.

This utility allows you to:

- Create and delete logical drives
- Display and modify configuration settings
- Copy configurations from one computer to another
- Recover from a failed physical device and rebuild an affected logical drive
- Flash new firmware and BIOS onto the controller
- Enable the controller to check the removal and connection of any disk drives
- Provides access to the status and event logs of a controller
- Isolate problems and determine their causes

Installing the Command Line Utility

You can install ARCCONF with the Adaptec maxView Storage Manager application. Alternatively, if you prefer to install just the command line utility, without also installing the maxView Storage Manager GUI, you can install just the ARCCONF executable for your operating system.

Follow the instructions in this section to install ARCCONF with maxView Storage Manager. (For more information about maxView Storage Manager, see the maxView Storage Manager User's Guide.)

Note: On FreeBSD systems, you must use ARCCONF to perform storage management tasks. FreeBSD does not support the maxView Storage Manager GUI. For more information, see Downloading the Installation Packages on page 12 and Installing on FreeBSD on page 14.

Downloading the Installation Packages

Complete these steps to download the installation package for your operating system(s) from the Adaptec Web site:

1. Open a browser window, then type start.adaptec.com in the address bar.
2. Select your RAID controller family (Series 7, Series 8, and so on) and controller model.
3. Select Storage Manager Downloads, then select the appropriate installer package from the list; for instance, maxView Storage Manager for Windows x64 or maxView Storage Manager for Linux.
   
   Note: To install ARCCONF without the GUI, select Adaptec ARCCONF Command Line Utility from the list of installers. This package includes the ARCCONF executable for Windows, Linux, Solaris, and FreeBSD.

4. Click Download Now and accept the license agreement.
5. When the download completes, extract the contents of the installer archive file to a temporary location. If the archive includes installers for multiple operating system versions (VMware, for instance), each installer is stored in a separate folder, including one each for 32-bit and 64-bit operating systems.

   Note: If you are installing maxView Storage Manager and ARCCONF on a different machine—for instance, you downloaded the Linux installer onto a Windows machine—copy the installer from the download location to a temporary location on the target machine. Use whatever method you prefer to copy the file: USB flash drive; network transfer; Telnet/SSH; whatever is most convenient.

6. Continue with the installation instructions for your operating system.
Installing on Windows

To install ARCCONF on Windows systems:

1. Open Windows Explorer or My Computer, then change to the directory where the Windows setup program is located (see Downloading the Installation Packages on page 12 for details).

2. Double-click the setup program for your operating system version:

<table>
<thead>
<tr>
<th>Options</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Windows 64-bit</td>
<td>setup_asm_x64.exe</td>
</tr>
<tr>
<td>Windows 32-bit</td>
<td>setup_asm_x86.exe</td>
</tr>
</tbody>
</table>

   The installation wizard opens.

3. Click Next to begin the installation, click I accept..., then click Next.

4. Add the following configuration settings:
   a) CIM Server Port: 5988.
   b) Web Server Port: 8443.
   c) User Name default: Administrator
   d) Operating system password.

5. Click OK on the password verification window and on the CIM Server and Web Server port number verification window.

6. In the Features window, select GUI and Agent and CLI Tools. Optionally, select maxCachePlus, then click Next.

   Note: maxCache Plus is supported on qualifying Adaptec Series Q controllers only. See the Readme for a complete list.

7. Follow the on-screen instructions to complete the installation.

Installing on Red Hat, Cent OS, SuSE, or Fedora Linux

To install ARCCONF on Red Hat, Cent OS, SuSE, or Fedora Linux:

1. In a shell window, change to the directory where the Linux installer package is located (see Downloading the Installation Packages on page 12 for details).

2. To install maxView Storage Manager with maxCache Plus support, run the maxCache Plus installation script, install.sh; otherwise skip to Step 3 on page 13.

   chmod +x install.sh
   ./install.sh

   If the installer detects a qualifying Adaptec Series Q controller and one of the supported Linux operating systems, it installs the maxCache Plus driver software, then it continues with the maxView Storage Manager installation. (See the Readme for a complete list of controllers and operating systems that support maxCache Plus.)

3. To install maxView Storage Manager without maxCache Plus support, run the .bin file for your operating system version:

<table>
<thead>
<tr>
<th>Options</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linux 64-bit</td>
<td>./StorMan-1.02.x86_64.bin</td>
</tr>
<tr>
<td>Linux 32-bit</td>
<td>./StorMan-1.02.i386.bin</td>
</tr>
</tbody>
</table>

4. When prompted for configuration details, enter the following:
   Enter your username [default: root]
   Enter your operating system password
   Enter the CIM Server HTTP Port: [default:5988]
When the installation completes a confirmation message is displayed.

**Installing on Debian or Ubuntu Linux**

To install ARCCONF on Debian or Ubuntu Linux:

1. In a shell window, change to the directory where the Debian or Ubuntu installer package is located (see *Downloading the Installation Packages* on page 12 for details).
2. Install the .deb package for your operating system version (where xxxxx=build number):
   
<table>
<thead>
<tr>
<th>Options</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linux 64-bit</td>
<td>dpkg -i StorMan-1.02-XXXXX_amd64.deb</td>
</tr>
<tr>
<td>Linux 32-bit</td>
<td>dpkg -i StorMan-1.02-XXXXX_i386.deb</td>
</tr>
</tbody>
</table>
3. Enter the following configuration details:
   
   - Enter your username [default: root].
   - Enter your operating system password.
   - Enter the CIM Server HTTP Port: [default:5988].
   
   When the installation completes a confirmation message is displayed.

**Installing on Solaris**

To install ARCCONF on Solaris:

1. On the Solaris machine, change to the directory where the Solaris installer package is located (see *Downloading the Installation Packages* on page 12 for details).
2. Install maxView Storage Manager:
   
   ```
   pkgadd -d StorMan.pkg
   ```
3. At the prompt to continue, select y, then press Enter.
4. Enter the following configuration details:
   
   - Enter your username [default: root].
   - Enter your operating system password.
   - Enter the CIM Server HTTP Port: [default:5988].
   
   When the installation completes a confirmation message is displayed.

**Installing on FreeBSD**

To install ARCCONF on FreeBSD:

1. Copy the arcconf executable from the original download location to your FreeBSD system (see *Downloading the Installation Packages* on page 12 for details):
   
   - `mv arcconf /usr/local/bin`
2. Verify that the file has 'execute' privilege.

**Installing on VMware ESX 4.1**

Use the following procedure to install the .vib files for VMware ESX 4.1. Perform the installation on an ESX 4.1 console or from a remote system running a Telnet/SSH client.

1. Copy the following files from the installer download location to your local ESX 4.1 /tmp directory (see *Downloading the Installation Packages* on page 12 for details):
   
   - `vmware-esx-provider-arcconf.vib`
   - `vmware-esx-provider-arcsmis.vib`

   The arcconf.vib is for command line communication.
   The arcsmis.vib is for remote management communication.
2. Stop operations.
3. Check for an existing installation of arcconf.
   esxupdate --vib-view query | grep arcconf

4. Remove the existing installation of arcconf.
   esxupdate -b < arcconf module name > --maintenancemode remove
   When the package is removed, you receive the message "The update completed successfully, but
   the system needs to be rebooted for the changes to be effective".

5. Check for an existing installation of arcsmis.
   esxupdate --vib-view query | grep arcsmis

6. Remove the existing installation of arcsmis.
   esxupdate -b < arcsmis module name > --maintenancemode remove
   When the package is removed, you receive the message "The update completed successfully, but
   the system needs to be rebooted for the changes to be effective."

7. Reboot the system.

8. Stop operations.
   /etc/init.d./ sfcbd-watchdog stop

9. Install the arcconf package.
   esxupdate -b /tmp/vmware-esx-provider-arcconf.vib --nodeps --nosigcheck --maintenancemode update
   When the package is installed, you receive the message "The update completed successfully, but
   the system needs to be rebooted for the changes to be effective."

10. Install the arcsmis package.
    esxupdate -b /tmp/vmware-esx-provider-arcsmis.vib --nodeps --nosigcheck --maintenancemode update
    When the package is installed, you receive the message "The update completed successfully, but
    the system needs to be rebooted for the changes to be effective."

11. Reboot the system.

12. Continue the installation with Installing on a VMware Guest OS on page 16.

Installing on VMware ESXi 5.x

Use the following procedure to install the .vib files for VMware ESXi 5.x. Perform the installation from
a remote system running a Telnet/SSH client. Use a terminal emulator to access the ESXi server remotely.

1. Copy the following files from the installer download location to your local ESXi 5.x /tmp directory
   (see Downloading the Installation Packages on page 12 for details):
   - vmware-esx-provider-arcconf.vib
   - vmware-esx-provider-arcsmis.vib

   The arcconf.vib is for command line communication.
   The arcsmis.vib is for remote management communication.

2. Stop operations.
   /etc/init.d./ sfcbd-watchdog stop

3. Check for existing installation of arcconf.
   esxcli software vib list | grep arcconf

4. Remove the existing arcconf package.
   esxcli software vib remove -n arcconf
   When the package is removed, you receive the message "Reboot Required: false."

5. Check for an existing installation of arcsmis.
   esxcli software vib list | grep arcsmis

6. Remove the existing arcsmis package.
   esxcli software vib remove -n arcsmis
   When the package is removed, you receive the message "Reboot Required: false."
7. Set the acceptance level if this is the first installation of arcconf and arcsmis:
   \texttt{esxcli software acceptance set \--level=CommunitySupported}

8. Install the arcconf package:
   \texttt{esxcli software vib install \--maintenance-mode \--no-sig-check \-v /tmp/vmware-esx-provider-arcconf.vib}
   When the package is installed, you receive the message "Reboot Required: false."

9. Install the arcsmis package:
   \texttt{esxcli software vib install \--maintenance-mode \--no-sig-check \-v /tmp/vmware-esx-provider-arcsmis.vib}
   When the package is installed, you receive the message "Reboot Required: false."

10. Reboot the system.

11. Continue the installation with \textbf{Installing on a VMware Guest OS} on page 16.

**Installing on a VMware Guest OS**

   \textbf{Note:} Complete the steps in \textbf{Installing on VMware ESX 4.1} on page 14 or \textbf{Installing on VMware ESXi 5.x} on page 15 before continuing.

To install ARCCONF on a VMware guest operating system:

1. On the VMware guest OS, change to the directory where the Guest OS installer package is located (see \textbf{Downloading the Installation Packages} on page 12 for details).

2. Type one of the following commands, depending on the operating system:

   \begin{tabular}{|l|l|}
   \hline
   \textbf{Options} & \textbf{Description} \\
   \hline
   Linux 32-bit & ../StorMan-1.02.esx32.bin \\
   Linux 64-bit & ../StorMan-1.02.esx64_64.bin \\
   Windows 32-bit & setup_asm_esx_x86.exe \\
   Windows 64-bit & setup_asm_esx_x64.exe \\
   \hline
   \end{tabular}

**Starting the Command Line Utility**

1. To start ARCCONF, enter one of the following commands:

   \begin{tabular}{|l|l|}
   \hline
   \textbf{Options} & \textbf{Description} \\
   \hline
   Windows & <install_dir>/arcconf.exe \\
   Linux & /usr/<install_dir>/arcconf \\
   Solaris & /usr/StorMan/arcconf \\
   FreeBSD & /<install_dir>/arcconf \\
   VMware & /usr/StorMan/arcconf \\
   \hline
   \end{tabular}

   where \texttt{install\_dir} is the directory where the utility is installed.

2. To see a list of available commands, type ARCCONF at the prompt.
Using the Command Line Utility

This chapter explains how to use the command line utility interactively or in batch mode. With interactive mode, enter commands at the prompt. In batch mode, create scripts and run the script in the appropriate shell, as described in the table below.

Table 1: ARCCONF Batch Environments

<table>
<thead>
<tr>
<th>Environment</th>
<th>Batch File</th>
<th>Run Script</th>
</tr>
</thead>
<tbody>
<tr>
<td>Windows</td>
<td>.bat</td>
<td>CMD.EXE</td>
</tr>
<tr>
<td>Linux/Unix</td>
<td>.sh</td>
<td>sh / bash</td>
</tr>
</tbody>
</table>

In either mode, if your command fails, you immediately see an error message of Command failed. Other script messages that you can get are Command completed successfully, or Command aborted. The return values for each command are the same:

- **0x00**: SUCCESS
- **0x01**: FAILURE - The requested command failed
- **0x02**: ABORT - The command was aborted because parameters failed validation
- **0x03**: INVALID_ARGUMENTS - The arguments are incorrect. (Displays COMMAND help)

To view a list of commands at the command line, type ARCCONF and press Enter.

To access the online help for a specific command, type ARCCONF <command>, then press Enter.

**ARCCONF Commands**

The following commands are available in ARCCONF. The commands are described on the following pages, in alphabetical order.

Table 2: ARCCONF Commands

<table>
<thead>
<tr>
<th>atapassword</th>
<th>getsmartstats</th>
<th>romupdate</th>
</tr>
</thead>
<tbody>
<tr>
<td>consistencycheck</td>
<td>getstatus</td>
<td>saveconfig</td>
</tr>
<tr>
<td>copyback</td>
<td>getversion</td>
<td>savemodulearchive</td>
</tr>
<tr>
<td>create</td>
<td>identify</td>
<td>setalarm</td>
</tr>
<tr>
<td>delete</td>
<td>imageupdate</td>
<td>setcache</td>
</tr>
<tr>
<td>driverupdate</td>
<td>key</td>
<td>setconfig</td>
</tr>
<tr>
<td>expanderlist</td>
<td>modify</td>
<td>setcontrollermode</td>
</tr>
<tr>
<td>failover</td>
<td>phynerrorlog</td>
<td>setcustommode</td>
</tr>
<tr>
<td>getconfig</td>
<td>playconfig</td>
<td>setmaxcache</td>
</tr>
<tr>
<td>getlogs</td>
<td>rescan</td>
<td>setname</td>
</tr>
<tr>
<td>getperform</td>
<td>resetstatistics</td>
<td>setncq</td>
</tr>
</tbody>
</table>

**Note:** In the command syntax descriptions, <> indicates a required parameter and [] indicates an optional parameter.

**arcconf atapassword**

**Description**

Sets or clears the Secure Erase password for SATA drives. See arcconf task for more information about Secure Erase.
Syntax

ARCCONF ATAPASSWORD <Controller#> SET <new password> <Channel# ID#> ...
ARCCONF ATAPASSWORD <Controller#> CLEAR <current password> <Channel# ID#> ...

Parameters

**new password | current password**
Channel/ID lists the space-delimited channel number and device number (ID) pairs for each drive on which to set or clear the password.

**Channel/ID**
Lists the space-delimited channel number and device number (ID) pairs for each drive on which to set or clear the password.

Examples

ARCCONF ATAPASSWORD 1 SET uR8ryx 0 1
ARCCONF ATAPASSWORD 1 CLEAR uR8ryx 0 1

arccconf consistencycheck

Description
Toggles the background consistency check modes of the controller.

Syntax

ARCCONF CONSISTENCYCHECK <Controller#> <on|off|period <DAYS>> [noprompt]

Parameters

**Controller#**
Controller number.

**On**
Turns background consistency check on.

**Period <DAYS>**
Sets the number of days to complete the background consistency check. The minimum value is 10 days (quick), the maximum is 365 days (slow). Setting the period automatically turns background consistency check on.

**Noprompt**
Optional parameter that suppresses the confirmation prompt.

Examples

ARCCONF CONSISTENCYCHECK 1 PERIOD 30
ARCCONF CONSISTENCYCHECK 1 OFF
arcconf copyback

**Description**

Enables or disables the copyback feature, which attempts to keep drives in the original slot order after rebuilds.

**Syntax**

ARCCONF COPYBACK <Controller#> <ON|OFF>

**Parameters**

**Controller#**

The controller number

On enables the copyback feature

Off disables the copyback feature

**Examples**

ARCCONF COPYBACK 1 ON

arcconf create

**Description**

Creates a new logical drive, maxCache Container, or JBOD and, optionally, enables logical drive read caching, write caching, and maxCache SSD caching. You must provide the channel and device ID of the physical devices.

On redundant logical drives, ARCCONF performs autosynchronization.

ARCCONF presents JBODs as physical devices, not logical drives.

**Syntax**

ARCCONF CREATE <Controller#> <LOGICALDRIVE|MAXCACHE> [Options] <Size> <RAID#> <CHANNEL# DRIVE#> [CHANNEL# DRIVE#] ... [noprompt] [nologs]

ARCCONF CREATE <Controller#> LOGICALDRIVE RVOLUME <LD#> <LD#> [LD#] ... [noprompt] [nologs]

ARCCONF CREATE <Controller#> JBOD <CHANNEL# DRIVE#> [CHANNEL# DRIVE#] ... [noprompt] [nologs]

**Parameters**

**Controller#**

The controller number.
**Logical Drive**

Logical Drive indicates the logical drive stripe size with the following options:

- **Stripesize <STRIPE>**—Allows the logical drive stripe size to be built. Optional parameters for specifying a stripe size. STRIPE is specified in kilobytes 16, 32, 64, 128, 256, 512 and 1024 are supported. The default is 256KB.
- **Legs <LEG>**—Optional parameters for specifying number of legs. Value is an integer.
- **LEG**—Number of legs for RAID level 50 or 60.
  - RAID 50—2-16 legs, 3-32 drives/leg, 128 drives max.
  - RAID 60—2-16 legs, 4-16 drives/leg, 128 drives max.
- **Name <NAME>**—Optional parameter for specifying the alias name of a logical device that is displayed in the utilities. Value is a string of up to 16 characters.
- **Priority <PRIORITY>**—Initialization Priority for logical drive to be created. Valid options are: HIGH, MED, or LOW.
- **Method <METHOD>**—Initialization method for the logical drive. Valid options include: BUILD, CLEAR, QUICK, SKIP. Use SKIP for recovery only (to skip the initialization step).
- **Rcache**—Sets the logical drive read cache mode:
  - RON - read cache on
  - ROFF - read cache off
- **Wcache**—Sets the logical drive write cache mode:
  - WT - write-through disabled
  - WB - write-back enabled
  - WBB - write-back enabled (when protected by battery or flash backup module)
- **MaxCacheReadCache**—Sets the logical drive SSD read cache mode:
  - ION - maxCache on
  - IOFF - maxCache off
- **MaxCacheWriteCache**—Sets the logical drive SSD write cache mode:
  - ION - maxCache on
  - IOFF - maxCache off
- **MaxCacheWritePolicy**—Sets the maxCache write cache policy:
  - WB - write back enabled. maxCache will store the data on the SSD and write it back to the hard disks when there is little or no impact on performance. This is the default policy.
  - INSTWB - instant write back enabled. In addition to the default policy, maxCache will create “dirty pages” on-the-fly for full-stripe writes if there is room on the SSD and the number of dirty pages is below the threshold.
  - WT - write through enabled. Similar to instant write back, but full-stripe writes go to both the cache and hard disk and no dirty pages are created on-the-fly.

This argument is valid only if MaxCacheWriteCache is ION.

**Note:** For more information about write cache policy, see `arconf setmaxcache` on page 36.

**Size**

Indicates the size of the logical drive in megabytes. Use MAX to set size to available space.

**RAID#**

Indicates the RAID level for the new logical drive: 0, 1, 1E, 10, 5, SEE, 50, 6, 60, and volume are supported. For maxCache, 0, 1, 1E, 5 and Simple_Volume are supported.

**Channel# Drive#**

Lists the space-delimited channel number and device number pairs for each device to add to the logical drive or maxCache Container. For maxCache, the devices must be SSDs.

**Rvolume**

RAID level for a RAID volume logical drive.
### LD#
Logical drive numbers for two or more logical drives to be concatenated into the RAID volume.

#### Noprompt
No prompt for confirmation

#### Examples

```
ARCCONF CREATE 1 LOGICALDRIVE STRIPESIZE 64 MAX 0 1 0 2 0 3 2 NOPROMPT
ARCCONF CREATE 1 JBOD 0 1 NOPROMPT
```

### arcconf delete

#### Description
Deletes a logical drive, JBOD, or maxCache logical device. All data stored on the logical drive or JBOD will be lost. Spanned drives cannot be deleted with this function.

#### Syntax

```
ARCCONF DELETE <Controller#> LOGICALDRIVE <LogicalDrive#> <LD#> <LD#> [noprompt]
ARCCONF DELETE <Controller#> JBOD <CHANNEL# DRIVE#> [CHANNEL# DRIVE#] ... [noprompt]
ARCCONF DELETE <Controller#> LOGICALDRIVE|JBOD ALL [noprompt]
ARCCONF DELETE <Controller#> MAXCACHE
```

#### Parameters

- **Controller#**
  Controller# is the controller number

- **LogicalDrive#**
  LogicalDrive# is the number of the logical drive to be deleted.

- **LogicalDrive|JBOD ALL**
  Deletes all logical drives or JBODs.

- **MAXCACHE**
  Deletes the maxCache Container.

- **Noprompt**
  Optional parameter that suppresses alert messages.

#### Examples

```
ARCCONF DELETE 1 LOGICALDRIVE 1 2 3
ARCCONF DELETE 1 JBOD ALL
```

### arcconf driverupdate

#### Description
Updates Windows device drivers. When given a directory name, it will attempt to update a driver to the version found in the given directory.

**Note:** This command is available only on Windows systems.
Syntax

ARCCONF DRIVERUPDATE <DirName>

Parameters

Driverupdate <DirName>
Directory path containing the driver that you want to update.

Examples

ARCCONF DRIVERUPDATE C:\WINDOWS\ALL

arcconf expanderlist

Description

Returns a list of disk drive expanders on a controller.

Syntax

ARCCONF EXPANDERLIST <Controller#>

Parameters

Controller#  
Controller number.

Examples

ARCCONF EXPANDERLIST 1
arcconf failover

**Description**

Turns automatic failover on and off.

**Syntax**

ARCCONF FAILOVER <Controller#> <on|off>

**Parameters**

- **Controller#**
  The controller number.
- **On**
  Turns the controller failover mode on.
- **Off**
  Turns the controller failover mode off.

**Examples**

ARCCONF FAILOVER 1 ON

arcconf getconfig

**Description**

Lists information about controllers, logical drives, physical drives, and flash backup systems. This information includes (but is not limited to) the following:

- Controller type, status, and mode
- BIOS, boot block, device driver, and firmware versions
- Logical drive status, RAID level and size
- maxCache status, fetch and flush rate policy, read/write balance, SSD information
- Device type, device ID, presence of PFA
- Physical device state
- Enclosure information: fan, power supply, and temperature status
- Flash backup information (for AFM-700 flash backup module): status, charge level, temperature readings, max voltage, current, estimated life, errors, and serial number

**Syntax**

ARCCONF GETCONFIG <Controller#> [AD|LD [LD#]|PD|MC|AL]

**Parameters**

- **Controller#**
  Controller number
AD/LD/PD/AL
- AD—Adapter information only
- LD—Logical drive information only
- PD—Physical device information only
- MC—maxCache information only
- AL—All information (optional)

Examples

ARCCONF GETCONFIG 1 AD

arcconf getlogs

Description
Provides access to controller status and event logs and usage statistics, including:
- DEVICE—A log of device errors that the controller encountered.
- DEAD—A log that records any occurrences of defunct devices.
- EVENT—A log of special events that may have occurred (rebuilds, LDMs, etc.).
- STATS—A log of controller usage statistics.

Syntax
ARCCONF GETLOGS <Controller#> <Type> [clear|tabular]

Parameters

Controller#
Controller number. Clear clears the specified log.

Type
One of the following:
- DEVICE
- DEAD
- EVENT
- STATS

Clear
Clears the specified log.

Note: This option is valid only for the DEVICE, DEAD, and EVENT log types.

Tabular
Displays the log or statistics in tabular format.

Examples

ARCCONF GETLOGS 1 DEVICE
ARCCONF GETLOGS 1 STATS Tabular
arcconf getperform

Description
Fetches the parameters that define a logical drive performance mode. Default is the current mode.

Syntax
ARCCONF GETPERFORM <Controller#> [Performance Mode] [Save [Filename]] [Nologs]

Parameters
Controller#
Controller number.

Performance Mode
One of the following:
• 1 - Default/Dynamic mode
• 2 - OLTP/Database
• 3 - Big Block Bypass mode
• 4 - User defined mode

Save
Saves the performance mode parameters in a file.

Filename
Name of the file in which to save the parameters. If not specified, the default filename is PerformanceMode.cfg.

Nologs
 Suppresses creation of logs for this command.

Examples
ARCCONF GETPERFORM 1 2

arcconf getsmartstats

Description
Displays SMART statistics for the hard drives and Solid State Drives (SSDs) on a controller.

Note: For more information about SMART statistics, see the maxView Storage Manager User's Guide.

Syntax
ARCCONF GETSMARTSTATS <Controller#> [Tabular]

Parameters
Controller#
Controller number.

Tabular
Creates output in tabular format.
Examples

ARCCONF GETSMARTSTATS 1
ARCCONF GETSMARTSTATS 1 TABULAR

arcconf getstatus

Description

The GETSTATUS function displays the status of any background command that is currently running, including information about the most recent rebuild, synchronization, logical-drive migration, and compaction/expansion. The information includes the type of operation, status, logical drive number, logical drive size, and percentage of the operation completed.

Note:
1. GETSTATUS reports currently active operations for both ARCCONF commands and commands issued from maxView Storage Manager.
2. GETSTATUS reports verify, clear, initialize, and secure erase operations on physical devices.
3. GETSTATUS reports the status of controller rescan operations.
4. GETSTATUS only reports active operations. It does not display information if the operation is completed.

Syntax

ARCCONF GETSTATUS <Controller#>

Parameters

Controller#
Controller# is the controller number

Examples

ARCCONF GETSTATUS 1

arcconf getversion

Description

Lists version information for all controllers or a specific controller’s software components, including information about the BIOS, driver, firmware currently running, and firmware that will run after a reboot.

Note: The firmware version that will run after a reboot is called the “staged” firmware.

Syntax

ARCCONF GETVERSION (use this for information on all controllers)
ARCCONF GETVERSION <Controller#> (use this for information on a specific controller)

Parameters

Controller#
Controller# is the controller number
Examples

ARCCONF GETVERSION

arcconf identify

Description
Identifies a physical or logical device by blinking its LEDs.

Syntax
ARCCONF IDENTIFY <Controller#> LOGICALDRIVE <LogicalDrive#>
ARCCONF IDENTIFY <Controller#> DEVICE <Channel#> <ID>

Parameters
Controller#
Controller number

Channel/ID
Number of the logical drive to be identified

Channel#
Channel number for the device to be identified

Device#
Device number for the device to be identified

Examples
ARCCONF IDENTIFY 1 DEVICE 0 0
ARCCONF IDENTIFY 1 ALL

arcconf imageupdate

Description
Allows new firmware to be flashed to the hard drive.

Syntax: Physical Device Usage
ARCCONF IMAGEUPDATE <Controller#> DEVICE <Channel#> ID# ChunkSize# Filename> [Mode#] [noprompt]

Parameters
Controller#
Controller number.

Channel#
Channel number of the device to be updated.

ID#
Device number of the device to be updated.
ChunkSize

Chunk size, in bytes, to be used to update the firmware.

Note: For SATA drives, the chunk size must be a multiple of 512.

Filename

Name of the firmware update file.

Mode

Firmware update mode.

Valid values for physical devices are:

- 3-(SATA) Download with offsets and save image for immediate and future use
- 7-(SAS) Download microcode with offsets, save, and activate

Noprompt

Optional parameter that suppresses alert messages.

Examples

ARCCONF IMAGEUPDATE 1 DEVICE 0 83 16384 ados.lod 3

arcconf key

Description

Loads a feature key onto an Adaptec controller.

Syntax

ARCCONF KEY <Controller#> SET <Key#>

Parameters

Controller#

The controller number.

Key#

The key number provided by PMC.

Examples

ARCCONF KEY 1 SET ABCD EFGH IJKL MNOP QRST UVWX

arcconf modify

Description

Morphs a logical device from one raid level to another (RAID Level Migration). Expands a logical device from original to one with larger capacity (Online Capacity Expansion). Can be used to make mirrored sets.

Syntax

MODIFY <Controller#> FROM <LogicalDrive#> TO [Options] <Size> <RAID#> <CHANNEL# DRIVE#> [CHANNEL# DRIVE#] [noprompt]
Parameters

**Controller#**
The controller number

**From**
Indicates that the logical drive to be modified will follow

**LogicalDrive#**
The logical drive number

**TO**
Indicates that the modifications will follow

Options:
- **Stripesize**—indicates the stripe size in KB. Options are 16, 32, 64, 128, 256, 512, and 1024. The default is 256KB.
- **init_priority**—is the priority level of the modification. Options are low, med, and high.
- **Legs**—is the number of subarrays for a RAID level-50 or RAID level 60 array. Possible values are 2-16 legs and 3-16 drives/leg (to 48 drives maximum).

**Size** is one of the following values:
- **MAX** indicates that you want to use all available space on the disk.
- **Desired size in MB.**

**RAID#** is the RAID level for the logical drive: 0, 1, 5, 5EE, or 10.

**Note:** The `CHANNEL#` and `DRIVE#` parameters is the list of devices that will contain the target modification object. Channel and Drive are repeatable parameters.

**Channel#** is the channel number for the device.

**Drive#** is the device_ID (device number) for the device.

**Noprompt** is an optional parameter that overrides the user prompt.

**Example**

```
ARCCONF MODIFY 1 FROM 2 TO 2048 0 0 123 0 124 0 117
```

**arccconf phyerrorlog**

**Description**
Displays PHY error logs for physical devices on a controller or expander PHYs.

**Syntax**

```
ARCCONF PHYERRORLOG <Controller#> DEVICE <Channel# ID#>
ARCCONF PHYERRORLOG <Controller#> DEVICE ALL
ARCCONF PHYERRORLOG <Controller#> EXPANDER <ExpanderID#> <PHY#>
ARCCONF PHYERRORLOG <Controller#> EXPANDER <ExpanderID#> ALL
```

**Parameters**

**Controller#**
Controller number.

**Channel/ID**
Channel and number of the physical device on the controller.

**ExpanderID#**
Expander identifier.
PHY#
PHY identifier.

ALL
Displays PHY error log for all physical devices or expander PHYs.

Examples

ARCCONF PHYERRORLOG 1 DEVICE 0 0
ARCCONF PHYERRORLOG 1 EXPANDER 1 ALL

arcconf playconfig

Description

Note: This command is supported on Windows systems only.

Configures a controller using a XML server template file produced by the SAVECONFIG command (see arcconf saveconfig on page 32). Use this command to deploy the same controller configuration on multiple servers in your storage space.

Note:

1. The XML server template file (default, saveconfig.xml) is editable. For example, you may need to change the disk drive capacity, logical drive size, or RAID level.
2. Drives from the same vendor with slightly different capacities (147GB vs 150GB, for instance) are considered interchangeable. If the interchange results in a change in logical drive capacity, the drive is scaled, as needed. For example, if the new drives have 4% more capacity due to vendor or model changes, then all logical drives are increased in size by 4%.
3. Be sure to check the log file to verify that the controller was configured successfully. The exit codes, shown below, indicate the success or failure of the operation and if the system needs to be rebooted.

<table>
<thead>
<tr>
<th>Code</th>
<th>Value</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUCCESS</td>
<td>0</td>
<td>Configuration succeeded, no reboot is required.</td>
</tr>
<tr>
<td>FAILURE_GENERAL</td>
<td>1</td>
<td>An error occurred and the configuration could not be completed.</td>
</tr>
<tr>
<td>SUCCESS_REBOOT</td>
<td>2</td>
<td>Configuration succeeded, but a reboot is required.</td>
</tr>
</tbody>
</table>

Syntax

ARCCONF PLAYCONFIG <Input XML File> [LogFile] [FORCE ALL|LOGICALSIZE]

Parameters

Input XML File
The pathname of the server template file. The default server template file is available at C:\PMCS\Logs\saveconfig.xml.

LogFile
Sets the pathname of the error log file. By default, the error log is available at C:\PMCS\Logs\playconfig.log.
FORCE
Forces deployment of the server even if the controller does not support all features, or the drive capacity does not match the configuration in the input XML file. Use FORCE ALL to force deployment of all features; use FORCE LOGICALSIZE to force deployment of just the logical drives.

Examples

ARCCONF PLAYCONFIG server1_config.xml playconfig.log FORCE ALL

arcconf rescan

Description
Enables the controller to check for the removal of any disk drives in the ready state and to check for the connection of any new disk drives to the controller. Controller rescan runs in the background, asynchronously. When rescan is started, a message is displayed stating that the process is running in the background and may take 10 minutes to complete. Another message is displayed if a rescan is started while one is already in progress. Rescan status can be obtained with ARCONF getstatus; see arcconf getstatus on page 26 for more information.

Syntax

ARCONF RESCAN <Controller#>

Parameters

Controller#
The controller number

Examples

ARCONF RESCAN 1

arcconf resetstatisticscounters

Description
Resets statistics counters for a controller. Use this command to clear the counters and create fresh statistics.

Syntax

ARCONF RESETSTATISTICSCOUNTERS <Controller#>

Parameters

Controller#
The controller number

Examples

ARCONF RESETSTATISTICSCOUNTERS 1
arcconf romupdate

Description

Allows new firmware and BIOS to be flashed to the controller. A reboot is required for the new firmware to take effect.

Note:

1. This command is supported in Windows and Linux only.

Syntax

ARCCONF ROMUPDATE <Controller#> <BaseName> [Newversion <build#> [Force] [noprompt]]

Parameters

Controller#
The controller number

BaseName
The name of the ROM image basename or the fully qualified name if you have a set of controller ROM images.

Note: All UFI files must be in the same directory prior to invoking ARCCONF.

Newversion <build#>
Specifies the version of the firmware build.

Force
An optional parameter used to force a down-level firmware update.

Noprompt
An optional parameter that suppresses the confirmation prompt.

Examples

ARCCONF ROMUPDATE 1 AC2200
ARCCONF ROMUPDATE 1 AC220001.UFI
ARCCONF ROMUPDATE 1 AS483C newversion 12345 force noprompt

arcconf saveconfig

Description

Note: This command is supported on Windows systems only.

Saves the controller configuration to a XML server template file, including the controller type, operational settings, physical drive size, logical drive size, RAID level, and more. Use this file with the PLAYCONFIG command to deploy the same controller configuration to other servers in your storage space; see arcconf playconfig on page 30 for more information.

Note: Be sure to check the log file to verify that the configuration XML file was created successfully. The exit codes, shown below, indicate the success or failure of the operation.

<table>
<thead>
<tr>
<th>Code</th>
<th>Value</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUCCESS</td>
<td>0</td>
<td>Configuration XML generated successfully.</td>
</tr>
</tbody>
</table>
**Meaning/Value/Code**

<table>
<thead>
<tr>
<th>Code</th>
<th>Value</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>FAILURE_GENERAL</td>
<td>1</td>
<td>An error occurred and the configuration XML could not be generated.</td>
</tr>
</tbody>
</table>

**Syntax**

`ARCCONF SAVECONFIG [Input XML File] [LogFile]`

**Parameters**

**Input XML File**
The pathname of the server template file. The default name (if you omit this parameter) is `C:\PMCS\Logs\saveconfig.xml`.

**LogFile**
The pathname of the error log file. By default, the error log is available at `C:\PMCS\Logs\saveconfig.log`.

**Examples**

`ARCCONF SAVECONFIG server1_config.xml C:\LOGS\SERVER1.LOG`

**arcconf savesupportarchive**

**Description**

Saves configuration and status information to help Adaptec Customer Support diagnose a problem with your system. Saved information includes (but is not limited to) device logs, drive logs, event logs, error logs, controller logs, and SSD SMART statistics. (For more information about SMART statistics, see `arcconf getsmartstats` on page 25.)

The log files are saved in the Support folder in the standard logs directory for your operating system (`/var/log` for Linux, the maxView Storage Manager install directory on Windows, and so on).

**Note:** Unlike the Save Support Archive feature in maxView Storage Manager, this command does not create a zip (“archive”) file. It simply saves the support files and logs in the Support folder.

**Syntax**

`ARCCONF SALESUPPORTARCHIVE`

**Parameters**

None.

**Examples**

`ARCCONF SALESUPPORTARCHIVE`

**arcconf setalarm**

**Description**

Sets the state of the controller audible alarm, if present.
ARCCONF SETALARM <Controller#> <on|off|silence|test>  

Parameters  

**Controller#**  
The controller number  

**On**  
Enables the alarm  

**Off**  
Disables the alarm  

**Silence**  
Quiets the currently sounding alarm  

**Test**  
Triggers the alarm  

Examples  

ARCCONF SETALARM 1 TEST  
ARCCONF SETALARM 1 SILENCE  

**arcconf setcache**  

Description  
Changes a logical drive's cache mode.  

Syntax  

ARCCONF SETCACHE <Controller#> LOGICALDRIVE <LogicalDrive#> <logical mode> [noprompt] [nologs]  
ARCCONF SETCACHE <Controller#> DEVICE <Channel> <ID> <physical mode> [nologs]  

Parameters  

**Controller#**  
The controller number  

**LogicalDrive#**  
The number of the logical drive whose cache will be altered  

**Logical mode**  
Logical drive cache mode:  
- RON - read cache on  
- ROFF - read cache off  
- WT - write through disabled  
- WB - write back enabled  
- WBB - write back enabled (when protected by battery or flash backup module)  

**Channel/ID**  
Lists the space-delimited channel number and device number pairs for each device to add to the logical drive.
Physical device cache modes

- WT - write through disabled
- WB - write back enabled

Examples

ARCCONF SETCACHE 1 LOGICALDRIVE 1 RON
ARCCONF SETCACHE 1 DEVICE 0 0 WB

arcconf setconfig

Description

Resets the controller configuration. Logical drives are deleted, hard disks are reset to the READY state, cache contents are lost, and controller settings are reset to default values.

Syntax

ARCCONF SETCONFIG <Controller#> DEFAULT [noprompt]

Parameters

Controller#
The controller number

Default
Restores the controller's default configuration.

Noprompt
No prompt for confirmation.

Examples

ARCCONF SETCONFIG 1 DEFAULT

arcconf setcontrollermode

Description

Sets the controller operating mode to one of the following:

- RAID: Expose RAW (default)—All RAID functions of the controller are enabled. Attached drives without Adaptec meta-data are surfaced to the host operating system as RAW Pass Through devices (similar to JBODs on legacy Adaptec controllers).
- Auto Volume Mode—All RAID functions of the controller are enabled. Attached drives without Adaptec meta-data, but with an OS partition, are surfaced to the host operating system as RAW devices, where the RAID layer of the controller firmware is bypassed when the host issues commands to the device. Attached drives without Adaptec meta-data and without OS partitions, are automatically configured as Simple Volumes (single drives with Adaptec meta-data), with these settings:
  - Controller read caching is set to “Enabled” for rotating media.
  - Controller write caching is set to “Enabled (write-back) when protected by battery/ZMM” for rotating media.
  - maxCache SSD read and write caching is enabled and the write caching policy is set to "write back" for rotating media.
  - Caching for non-rotating media is disabled.
By using DRAM caching, Auto Volume Mode can help reduce latency and accelerate performance, especially if combined with a custom performance mode, such as Big Block Bypass (see `arcconf setperform` on page 39 for more information).

- **HBA Mode**—The intent of this mode is to allow the RAID controller to act and be used as an HBA. All attached drives are surfaced as RAW devices. Changing into HBA mode is allowed only if there are no drives with Adaptec meta-data attached to the controller. Uninitialize the drives before changing to HBA mode (see `arcconf uninit` on page 44). Uninitialized drives are also compatible with any HBA and can be exchanged with drives on the motherboard's SATA interface.

  **Note:** In HBA Mode, a hot-plugged new drive is automatically configured as a Raw device (see `arcconf uninit` on page 44). When a Raw device is pulled from the system, the controller does not delete internal data structures associated with the drive. However, the missing RAW device is not remembered across rescans.

- **RAID: Hide RAW**—All RAID functions of the controller are enabled, but RAW devices are not exposed to the operating system.

You must reboot the controller after you change the controller mode.

**Syntax:**

```
ARCCONF SETCONTROLLERMODE <Controller#> <Controller Mode> [nologs]
```

**Parameters**

- **Controller#**
  Controller number.

- **Controller Mode**
  One of the following values:
  - 0 - RAID: Expose RAW
  - 1 - Auto Volume Mode
  - 2 - HBA Mode
  - 3 - RAID: Hide RAW

- **nologs**
  Suppresses log output for the command.

**Examples**

```
ARCCONF SETCONTROLLERMODE 1 2
ARCCONF SETCONTROLLERMODE 1 0
```

**arcconf setmaxcache**

**Description**

Enables/disables maxCache SSD caching for one or more logical drives; updates the maxCache write cache policy and “dirty page” threshold (data not committed to disk); adds Solid State Drives to the maxCache pool and removes SSDs from the pool; sets the maxCache read/write balance and cache fetch/flush rate; clears the maxCache pool.

**Note:** Before you can enable maxCache SSD caching, you must assign at least one SSD to the maxCache pool.

**Syntax: Read Caching**

```
ARCCONF SETMAXCACHE <Controller#> LOGICALDRIVE <LogicalDrive#> READCACHE <ENABLE|DISABLE>
```
Syntax: Write Caching

ARCCONF SETMAXCACHE <Controller#> LOGICALDRIVE <LogicalDrive#> WRITECACHE <ENABLE|DISABLE> [WRITEPOLICY <policy>]
ARCCONF SETMAXCACHE <Controller#> LOGICALDRIVE ALL WRITECACHE DISABLE [WRITEPOLICY <policy>]
ARCCONF SETMAXCACHE <Controller#> DIRTYPAGETHRESHOLD <dirtyPageThreshold#>
ARCCONF SETMAXCACHE <Controller#> WBCVALID <ENABLE|DISABLE>

General Usage

ARCCONF SETMAXCACHE <Controller#> <ADDTOPOOL|REMOVEFROMPOOL> <Channel# Device#>
ARCCONF SETMAXCACHE <Controller#> RWBALANCE <Read#> <Write#>
ARCCONF SETMAXCACHE <Controller#> FLUSHANDFETCHRATE <FlushAndFetchRate#>
ARCCONF SETMAXCACHE <Controller#> CLEAR

Parameters

Controller#
The controller number.

LogicalDrive#
The number of the logical drive. You can specify one or more logical drives.

Channel#
The channel number for the SSD.

Device#
The device number for the SSD.

Read#/Write#
The read/write ratio for invalidating data on the SSD. When the ratio is reached, the page is removed
from the cache. Values range from 1-10 for each parameter.

FlushAndFetchRate#
The read cache fetch rate from 1 to 1000: 1-50=Low, 51-100=Medium, 101-1000=High. The default is 100.

Note: The lower the rate the longer the page is kept on the SSD before it is flushed from the cache.

dirtyPageThreshold#
Controls the amount cache space allocated to “dirty” data; that is, data that has not been committed
to disk. The threshold value ranges from 1-100 (percent). Once the percentage of dirty pages crosses
the threshold, the data are flushed to disk.

WBCVALID ENABLE|DISABLE
Enables and disables write caching in non-redundant maxCache. Applies to all logical drives.

Policy
maxCache write cache policy:
- WB - write back enabled. maxCache will store the data on the SSD and write it back to the hard disks
  when there is little or no impact on performance. This is the default policy.
- INSTWB - instant write back enabled. In addition to the default policy, maxCache will create dirty
  pages on-the-fly for full-stripe writes if there is room on the SSD and the number of dirty pages is
  below the threshold.
- WT - write through enabled. Similar to instant write back, but full-stripe writes go to both the cache
  and hard disk and no dirty pages are created on-the-fly.

Clear
Clears the maxCache pool.
Examples

ARCCONF SETMAXCACHE 1 LOGICALDRIVE 1 READCACHE ENABLE
ARCCONF SETMAXCACHE 1 LOGICALDRIVE 1 WRITECACHE ENABLE WRITEPOLICY WT
ARCCONF SETMAXCACHE 1 DIRTYPAGETHRESHOLD 50
ARCCONF SETMAXCACHE 1 ADDTOPOOL 0 1
ARCCONF SETMAXCACHE 1 REMOVEFROMPOOL 0 1 0 2
ARCCONF SETMAXCACHE 1 RWBALANCE 4 1
ARCCONF SETMAXCACHE 1 FLUSHANDFETCHRATE 200
ARCCONF SETMAXCACHE 1 CLEAR

arcconf setname

Description
Renames a logical drive.

Syntax
ARCCONF SETNAME <Controller#> LOGICALDRIVE <LogicalDrive#> <New Name>

Parameters
Controller#
Controller number

LogicalDrive#
The number of the logical drive to be renamed

New Name
The new name of the logical drive

Examples

ARCCONF SETNAME 1 LOGICALDRIVE 1 BACKUP_A

arcconf setncq

Description
Changes the controller’s Native Command Queuing (NCQ) setting to enabled or disabled. This setting affects the SATA disk drives on the controller. It takes effect when the SATA drives are restarted.

Syntax
ARCCONF SETNCQ <Controller#> ENABLE|DISABLE

Parameters
Controller#
The controller number

Examples

ARCCONF SETNCQ 1 ENABLE
arcconf setperform

Description
Changes controller settings based on the application type.

Syntax
ARCCONF SETPERFORM <Controller#> <Performance Mode> [nologs]

Parameters
Controller#
The controller number

Performance Mode

<table>
<thead>
<tr>
<th>Setting</th>
<th>Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (DYNAMIC/Default)</td>
<td>Performance criteria adjusts automatically based on controller usage, RAID level, and disk drive type.</td>
</tr>
<tr>
<td>2 (OLTP/Database)</td>
<td>Performance criteria is optimized for transaction-oriented applications such as data entry and retrieval.</td>
</tr>
<tr>
<td>3 (Big Block Bypass)</td>
<td>DRAM write cache is bypassed based on IO write size; performance is optimized for serving Web pages and retrieving data.</td>
</tr>
<tr>
<td>4 (User-Defined)</td>
<td>User-defined performance mode. Contact Adaptec support for more information.</td>
</tr>
</tbody>
</table>

Examples
ARCCONF SETPERFORM 1 2
ARCCONF SETPERFORM 1 3

arcconf setpower

Description
Changes power management settings for disk drives on a controller or logical drive.

Syntax
ARCCONF SETPOWER <Controller#> Stayawake DISABLE | <starttime> <endtime>
ARCCONF SETPOWER <Controller#> Spinup <internal#> <external#>

Parameters
Controller#
The controller number

Stayawake
Sets the stayawake period for the disk drives on the controller. During the stayawake period, the disk drives always operate at their peak spin rate.

Disable
Is a keyword that disables the stayawake period for the disk drives on a controller.
**starttime**
Specifies the beginning of the stayawake period, in the form HHMM (24-hour format).

**endtime**
Specifies the end of the stayawake period, in the form HHMM (24-hour format).

**Spinup**
Sets the spin-up limits for the controller—the maximum number of drives that the controller may spin up at one time.

**internal#**
The maximum number of internal drives that the controller may spin up at one time, from 0-20.

**external#**
The maximum number of external drives (such as the drives in a JBOD) that the controller may spin up at one time, from 0-20.

**LogicalDrive#**
The logical drive number.

**Slowdown st#**
Sets the disk drive slow-down timer, in minutes. Valid values are 0 (never), 3, 5, 10, 20, 30, 60, 120, 180.

**Poweroff pt#**
Sets the disk drive power-off timer, in minutes. Valid values are 0 (never), 3, 5, 10, 20, 30, 60, 120, 180.

**Verify vt#**
Sets the period of inactivity, in hours, after which an inactive drive (a drive that’s already powered down) is restarted to verify its operating condition. Once the check is completed, the drive is powered down and returns to its inactive state. Valid values are 0 (never), 1, 2, 3, 8, 12, 24.

**Note:** For the Slowdown, Poweroff, and Verify timers, st# must be less than pt#, and pt# must be less than vt#. You can set one or more timers, in any order, in a single command. Keep in mind that the Verify timer, vt#, is specified in hours; the other two timers are specified in minutes.

**Examples**

```
ARCCONF SETPOWER 1 STAYAWAKE DISABLE
ARCCONF SETPOWER 1 SPINUP 4 4
ARCCONF SETPOWER 1 LD 2 POWEROFF 60
ARCCONF SETPOWER 1 LD 2 SLOWDOWN 20 POWEROFF 60 VERIFY 12
```

**arcconf setpriority**

**Description**
Changes a task’s execution priority or a controller’s global background task priority.

**Syntax**

```
ARCCONF SETPRIORITY <Controller#> [TASK ID] <New Priority> [current]
```

**Parameters**

**Controller#**
The controller number
**Task ID**
Task ID is the number of the task to be changed. Use arcconf getstatus to obtain the task ID. Omit this parameter to set the controller’s global background task priority; that is, the execution priority for all tasks on the controller.

**New Priority**
LOW, MEDIUM, or HIGH.

**Current (keyword)**
Applies a global task priority change to running tasks. By default, a global priority change does not apply to running tasks.

**Examples**

ARCCONF SETPRIORITY 1 <task_id> HIGH
ARCCONF SETPRIORITY 1 LOW CURRENT

**arcconf setstate**

**Description**
Changes the state of a physical device or logical device from its current state to the designated state.

**Syntax**

ARCCONF SETSTATE <Controller#> DEVICE <Channel#> <Device#> <State> [MAXCACHE] [LOGICALDRIVE <LD#>[LD#] ... ] [noprompt]
ARCCONF SETSTATE <Controller#> LOGICALDRIVE <LD#> OPTIMAL [ADVANCED <option>] [noprompt]

**Parameters**

**Controller#**
The controller number

**Channel#**
The channel number for the drive.

**Device#**
Device number for the device.

**LD#**
Logical drive number.

**State**
- HSP—Create a hot spare from a ready drive
- RDY—Remove a hot spare designation
- DDD—Force a drive offline (to Failed)

**MAXCACHE**
Optional keyword for maxCache devices only. Include if State is HSP or RDY, and the hot spare is for a maxCache device.

**ADVANCED <option>**
Optional keyword/option pair. Set option to Nocheck to force a logical drive to the Optimal state without performing a consistency check.

**Noprompt:**
No prompt for confirmation.
Examples

ARCCONF SETSTATE 1 DEVICE 0 0 HSP LOGICALDRIVE 1 2 3
ARCCONF SETSTATE 1 DEVICE 0 0 RDY LOGICALDRIVE 2
ARCCONF SETSTATE 1 LOGICALDRIVE 1 OPTIMAL ADVANCED nocheck

arcconf setstatsdatacollection

Description
Enables or disables statistics collection for a controller. To display the statistics, see `arcconf getlogs` on page 24.

Syntax
ARCCONF SETSTATSDATA_COLLECTION <Controller#> Enable|Disable

Parameters
- **Controller#**
  - The controller number
- **Enable**
  - Turns statistics collection on.
- **Disable**
  - Turns statistics collection off.

Examples

ARCCONF SETSTATSDATA_COLLECTION 1 ENABLE

arcconf setvmcredential

Description
Resets the Hypervisor login credentials for VMware Guest OSs.

Syntax
SETVMCREDENTIAL <Esxip> <Esxcimomport> <Esxuserid> <Esxpassword> [noprompt]

Parameters
- **Esxip**
  - Hypervisor IP address.
- **Esxcimomport**
  - Hypervisor CiMOM port number.
- **Esxuserid**
  - Hypervisor user name.
- **Esxpassword**
  - Hypervisor password.
Examples

ARCCONF SETVMCREDENTIAL 172.18.46.101 5989 root passwd

arcconf task

Description

Performs a task on a logical drive, physical drive, or maxCache logical device.

Syntax: General Usage

`ARCCONF TASK`

Task Start: `TASK START <Controller#> LOGICALDRIVE <LogicalDrive#> <options> [noprompt]`

Task Stop: `TASK STOP <Controller#> LOGICALDRIVE <LogicalDrive#>`

Task Start: `TASK START <Controller#> DEVICE <Channel> <ID> <options> [noprompt]`

Task Stop: `TASK STOP <Controller#> DEVICE <Channel> <ID>`

Syntax: maxCache Usage

`ARCCONF TASK`

Task Start: `TASK START <Controller#> MAXCACHE COHERENCYCHECK [ONCE|ALWAYS]`

Task Start: `TASK START <Controller#> MAXCACHE <VERIFY_FIX|VERIFY>`

Task Stop: `TASK STOP <Controller#> MAXCACHE`

Parameters

**Controller#**
The controller number

**LogicalDrive#**
Number of the logical drive in which the task is to be performed

- Logical drive options:
  - `verify_fix (Verify with fix)`—verifies the logical drive redundancy and repairs the drive if bad data is found.
  - `verify`—verifies the logical drive redundancy without repairing bad data.
  - `clear`—removes all data from the drive.

- Physical device options:
  - `verify_fix`—verifies the disk media and repairs the disk if bad data is found.
  - `verify`—verifies the disk media without repairing bad data.
  - `clear`—removes all data from the drive.
  - `initialize`—returns a drive to the READY state (erases the metadata).
  - `secure erase [password]`—removes all data from the drive in a secure fashion to prevent any possible recovery of the erased data. See `arcconf atapassword` on page 17 for details about setting the password.

**MAXCACHE options:**

- `coherencycheck`—compares valid pages of the maxCache Container with their corresponding logical drive storage. Once is the default.
- `verify_fix (Verify with fix)`—verifies the maxCache Container redundancy and repairs the logical drive if bad data is found.
- `verify`—verifies the maxCache Container redundancy without repairing bad data.
## Examples

```
ARCCONF TASK START 1 LOGICALDRIVE 1 VERIFY
ARCCONF TASK START 1 DEVICE 0 0 INITIALIZE
ARCCONF TASK START MAXCACHE COHERENCYCHECK ONCE
```

## arcconf uninit

### Description

Uninitializes one or more physical drives. The uninitialize command clears Adaptec meta-data and any OS partitions from a drive; existing data on the drive is destroyed. Drives can uninitialized only if they are in the Raw or Ready state (that is, not part of any logical drive). A drive in the Raw state has no Adaptec meta-data but may or may not have an OS partition.

**Note:** Uninitialized drives are compatible with any HBA and can be exchanged with drives on the motherboard’s SATA interface. For more information about uninitialized devices, see `arcconf setcontrollermode` on page 35.

### Syntax:

```
ARCCONF UNINIT <Controller#> <CHANNEL# DRIVE#> [Channel# Drive#] ... [nologs]
ARCCONF UNINIT <Controller#> ALL [nologs]
```

### Parameters

- **Controller#**
  Controller number.

- **Channel#**
  The channel number of the device to be uninitialized.

- **Drive#**
  The drive number of the device to be uninitialized.

- **ALL**
  Uninitializes all physical devices in the Raw or Ready state.

- **nologs**
  Suppresses log output for the command.

### Examples

```
ARCCONF UNINIT 1 0 12 0 13
ARCCONF 1 ALL
```