**adaptec**
by PMC

# Adaptec RAID Controller Command Line Utility
## User's Guide

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# Contents

# Getting Started with the Command Line Utility

# 1

**In this chapter...**

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

- Automatically update Windows drivers

- Provides access to the status and event logs of a controller

- Isolate problems and determine their causes

# Installing the Command Line Utility

The ARCCONF command line utility is provided on the Adaptec Installation DVD. The utility is automatically installed in the same directory as Adaptec Storage Manager and must remain there.

**Note:** To install the command line utility on VMware ESX 4.x systems, follow the instructions in *Installing on VMware* on page 11. To install the command line utility on VMware ESX*i* systems, install the Adaptec CIM Provider and Remote ARCCONF instead, following the instructions in *Installing Remote ARCCONF* on page 11.

## Installing on Windows

To install ARCCONF on Windows systems:

**1** Start the computer.

**2** After Windows starts, insert the Adaptec Installation DVD.

The Installation DVD Main Menu opens.

**3** Select **Install Adaptec Storage Manager.**

The Installation wizard opens. (If it doesn't open, select **Browse the CD/DVD**, then click **Autorun.**)

**4** Follow the on-screen instructions to complete the installation.

## Installing on Red Hat, SuSE, or Fedora Linux

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

**1** Start the computer.

**2** After Linux starts, insert the Adaptec Installation DVD.

**3** Mount the Adaptec Installation DVD:

Red Hat: `mount /dev/cdrom /mnt/cdrom`

SuSE: `mount /dev/cdrom /media/cdrom`

Fedora: `mount /dev/hdc /mnt/cdrom`

**4** Change to the Linux manager directory:

Red Hat/Fedora: `cd /mnt/cdrom/ASMCD/linux/manager`

SuSE: `cd /media/cdrom/ASMCD/linux/manager`

**5** Extract the RPM package and install it:

`rpm --install ./StorMan*.rpm`

**6** Unmount the RAID Controller Installation DVD:

Red Hat/Fedora: `umount /mnt/cdrom`

SuSE: `umount /media/cdrom`

## Installing on Debian or Ubuntu Linux

To install ARCCONF on Debian or Ubuntu Linux:

**1**    Insert the Adaptec Installation DVD.

**2**    Mount the Adaptec Installation DVD:

```
mount /dev/cdrom /mnt/cdrom
```

**3**    Change to the Debian manager directory:

```
cd /mnt/cdrom/ASMCD/debian_x86_64/manager
```

**4**    Install the .deb package:

```
dpkg -i storman_6.50-15653_amd64.deb (for 64-bit systems)
```

**5**    Unmount the Adaptec Installation DVD:

```
umount /mnt/cdrom
```

## Installing on Solaris

To install ARCCONF on Solaris systems:

**1**    Insert the Adaptec Installation DVD.

The DVD mounts automatically. (If it doesn't, manually mount the DVD using a command similar to the one shown below. Refer to your operating system documentation for detailed instructions.)

```
mount -F hsfs -o ro/dev/dsk/c1t0d0s2/mnt
```

**2**    Install Adaptec Storage Manager:

```
pkgadd -d/<mount point>/ASMCD/solaris_x86/manager/StorMan.pkg
```

**3**    Follow the on-screen instructions to complete the installation.

**4**    Eject or unmount the Adaptec Installation DVD. Refer to your operating system documentation for detailed instructions.

## Installing on FreeBSD

To install ARCCONF on FreeBSD systems:

**1**    Insert the Adaptec Installation DVD.

**2**    Mount the Adaptec Installation DVD:

```
mount /cdrom /mnt
```

**Note:** Your DVD-ROM drive may have a different device name or path.

**3**    Install Adaptec Storage Manager:

For FreeBSD for x86 (32-bit):

```
pkg_add /<mount point>/ASMCD/freebsd7/manager/StorMan-x86.pkg.tbz
```

For FreeBSD for amd64 (64-bit):

```
pkg_add /<mount point>/ASMCD/freebsd7_x86_64/manager/StorMan-amd64.pkg.tbz
```

where `mount point` is the DVD-ROM mount point.

**Note:** The distribution also includes packages for FreeBSD 8.

**4**    Follow the on-screen instructions to complete the installation.

**5**    Unmount the Adaptec Installation DVD. Refer to your operating system documentation for detailed instructions.

## Installing on VMware

**Note:** Use the following procedure to install ARCCONF on VMware ESX 4.x systems. For command line support on VMware ESXi systems, install Remote ARCCONF instead; see *Installing Remote ARCCONF* on page 11.

To install ARCCONF on VMware ESX 4.x systems:

**1**    Insert the Adaptec Installation DVD.

**2**    Mount the Adaptec Installation DVD:

```
mount -r /dev/cdrom /mnt/cdrom
```

**3**    Change to the ESX manager directory:

```
cd /mnt/cdrom/ASMCD/esx/manager (32-bit)

cd /mnt/cdrom/ASMCD/esx_x64/manager (64-bit)
```

**4**    Extract the Adaptec Storage Manager RPM package and install it:

```
rpm --install ./StorMan*.rpm  (32-bit)

rpm --install --nodeps ./StorMan*.rpm  (64-bit)
```

**Note:** Ignore the message "Application can be started by typing /usr/StorMan/StorMan.sh". VMware does not support the Adaptec Storage Manager GUI.

**5**    Change to the /usr/StorMan directory, then enter this command:

```
chmod +x arcconf
```

# Installing Remote ARCCONF

Use the following procedure to install the Adaptec CIM Provider and Remote ARCCONF on a VMware ESXi 5.0 system or VMware ESXi 4.x system. Remote ARCCONF provides native command line support on VMware Windows and Linux Guest OSs. Optionally, you can enable email notifications when you install Remote ARCCONF on a Linux Guest OS. Email notifications help you monitor activity in your storage space, such as the creation of a logical drive or the failure of a disk drive.

**Note:** The following instructions assume that you have already installed the VMware RAID controller driver. For information on installing or updating the VMware driver, refer to the *Adaptec RAID Controller Installation and User's Guide*.

## Installing the Adaptec CIM Provider

**Note:** To copy the CIM Provider VIB file to the VMware ESXi server (in Step 2 below), you must have access to a remote copy utility, such as WinSCP, putty, or Linux scp.

To install the Adaptec CIM Provider on VMware ESXi systems:

**1** At the VMware ESXi console, press **F2**, enter the root password, enable SSH, then start the ESXi Shell.

**2** Using a remote copy utility, copy the CIM Provider VIB file for your operating system version from the Adaptec Installation DVD to a local directory on the ESXi server. This example uses Linux scp to copy the driver to the /tmp/arcconf-cim directory:

For VMware ESXi 4.0:

```
scp /mnt/cdrom/ASMCD/esxi4_0/cim/vmware-esx-provider-adaptec-18815.vib
root@<esxi-server-ip>:/tmp/arcconf-cim
```

For VMware ESXi 4.1:

```
scp /mnt/cdrom/ASMCD/esxi4_1/cim/arcconf-18815.zip root@<esxi-server-ip>:/
tmp/arcconf-cim
```

For VMware ESXi 5.0:

```
scp /mnt/cdrom/ASMCD/esxi5_0/cim/vmware-esx-provider-arcconf.vib root@<esxi-
server-ip>:/tmp/arcconf-cim
```

**3** At the VMware ESXi console, press **ALT-F1**, then log in as root.

**4** Install the bundle:

For VMware ESXi 4.0:

```
esxupdate -b /tmp/arcconf-cim/vmware-esx-provider-adaptec-18815.vib --nodeps
--nosigcheck --maintenancemode update
```

For VMware ESXi 4.1:

```
esxupdate --bundle=/tmp/arcconf-cim/arcconf-18815.zip --nodeps --nosigcheck -
-maintenancemode update
```

For VMware ESXi 5.0:

```
esxcli software vib install --maintenance-mode --no-sig-check -v /tmp/arcconf-
cim/vmware-esx-provider-arcconf.vib
```

**5** Verify that the CIM Provider is installed:

For VMware ESXi 4.x:

```
esxupdate query
```

If the package installed successfully, you should see a line like this:

```
VMW_ARC_CLI_1.0-ESX-4.1.0-1.0 2011-03-21T18:06:36 ARC CLI provider: ESX
release
```

For VMware ESXi 5.0:

```
esxcli software vib list | grep arcconf
```

If the package installed successfully, you should see a line like this:

```
arcconf   1.00-1   Adaptec   unknown   2011-08-26
```

**6** Continue the installation with *Installing Remote ARCCONF on a Windows Guest OS* on page 13 or *Installing Remote ARCCONF on a Linux Guest OS* on page 14.

## Installing Remote ARCCONF on a Windows Guest OS

**Note:** The following instructions assume that you have already created a virtual machine in VMware and installed the Windows Guest OS. To run Remote ARCCONF on Windows, you must be logged in as Administrator.

To install Remote ARCCONF on a Windows Guest OS:

**1** On a Windows machine, insert the Adaptec Installation DVD.

**2** Start the Remote Desktop Connection utility, then connect to the Windows Guest OS on VMware. (You will be asked for credentials when you connect.)

**3** Navigate to the ASMCD\remote_arcconf\windows directory on the installation DVD, then copy the setup program, setup_remote_arcconf_x32.exe, to a local directory on the Windows Guest OS.

**4** Double-click **setup_remote_arcconf_x32.exe**.

The installation wizard opens.

**5** Click **Next** to begin the installation, click **I accept the terms...**, then click **Next**.

**6** To accept the default installation location, click **Next**. To choose a different location, click **Change**, select a location, then click **Next**.

The Hypervisor Credentials window opens.

**7** Enter the Hypervisor login credentials: IP address, port, username, password, then click **Next**:



**Note:** For the CIMOM port, the default value (5989) is recommended for most installations.

**8** Click **Install**, then **Finish**.

**9** Verify the installation: in the Windows Guest OS, open a Command Prompt as Administrator, then type:

```
arcconf help
```

A list of commands displays if the installation was successful.

**Note:** You will see the message "Unable to get credentials for ESX CIMOM" if you entered the Hypervisor credentials incorrectly during installation. Use the ARCCONF SETVMCREDENTIAL command to reset the credentials; for details, see page 36.

## Installing Remote ARCCONF on a Linux Guest OS

Use the following procedure to install Remote ARCCONF on a Linux Guest OS, and to enable email notifications in your system. Use email notifications to send messages to select email addresses when an event occurs in your storage space, such as the creation of a logical drive or the failure of a disk drive.

After you install Remote ARCCONF on the Linux Guest OS, you can use the configUtil.sh utility to manage email notifications in your system, such as adding or removing email recipients or modifying SMTP server settings; see *Managing Email Notifications on a Linux Guest OS* on page 15 for more information.

**Note:** The following instructions assume that you have already created a virtual machine in VMware and installed the Linux Guest OS. You must have root privilege on the Linux Guest OS to install Remote ARCCONF.

**Note:** To copy the installer from the installation DVD to the Linux Guest OS (in Step 2 below), you must have access to a remote copy utility, such as WinSCP, putty, or Linux scp.

To install Remote ARCCONF on a Linux Guest OS:

**1** On a Windows or Linux machine, insert the Adaptec Installation DVD.

**2** Navigate to the ASMCD/remote_arcconf/linux directory then, using a remote copy utility (such as WinSCP or Linux scp), copy the 32-bit or 64-bit installer to a local directory on the Linux Guest OS. The installers are:

```
remote-arcconf-7.20-18825.i386.bin (32-bit)

remote-arcconf-7.20-18825.x86_64.bin (64-bit)
```

**3** Give the installer execute privilege:

```
chmod +x remote-arcconf-7.20-18825.i386.bin (32-bit)

chmod +x remote-arcconf-7.20-18825.x86_64.bin (64-bit)
```

**4** Run the installer program:

```
./remote-arcconf-7.20-18825.i386.bin (32-bit)

./remote-arcconf-7.20-18825.x86_64.bin (64-bit)
```

**5** Press **Enter** to accept the license terms.

**6** Press **Enter** again to choose Option 2: CLI and Email Notification components.

**Note:** Choose Option 1 to install just the CLI component.

**7** Enter the Hypervisor login credentials (or use the default credentials), one prompt at a time; press **Enter** after each prompt:

```
Enter Hypervisor IP address     [default:127.0.0.1]:172.18.46.101
Enter Hypervisor User name    [default:root]:
Enter Hypervisor Password       [default:root]:passwd
Enter Hypervisor CIMOM port [default:5989]:
```

**Note:** For the CIMOM port, the default value (5989) is recommended for most installations.

**8** Enter the setup information for email notifications, one prompt at a time; press **Enter** after each prompt:

```
Enter CIM Listener Port [default: 49152]:
Enter SMTP Server Address [default: 0.0.0.0]:  172.18.45.100
Enter SMTP Server Port [default: 25]:
Enter From Email Address [default: blank]:   client@pmc-sierra.com
Do you want to use Secure Mail Server? (yes/no) [default: yes]:
Enter Username [default: root]:
Enter Password [default: root]:
```

The installer begins loading the software onto the Linux Guest OS. After displaying a series of messages, it prompts for email recipients and the notification type.

**9** Enter the recipient information, one prompt at a time; press **Enter** after each prompt:

```
Do you want to add Recipients? (yes/no)[default: no]: yes
Enter Recipient e-mail address: client@pmc-sierra.com
Enter Notification Type (I/W/E) [default: E]: I
Do you want to add Recipients? (yes/no)[default: no]:
```

**Note:** For Notification Type, I=Error, Warning & Informational, W=Error & Warning, E=Error.

**10** When you see the message "Installation Completed Successfully," reboot the system.

**11** Verify the installation: in the Linux Guest OS, open a terminal window as root, then type:

```
arcconf help
```

A list of commands displays if the installation was successful.

**Note:** You will see the message "Unable to get credentials for ESX CIMOM" if you entered the Hypervisor credentials incorrectly during installation. Use the ARCCONF SETVMCREDENTIAL command to reset the credentials; for details, see page 36.

**12** Continue with *Managing Email Notifications on a Linux Guest OS* on page 15.

## Managing Email Notifications on a Linux Guest OS

After you install Remote ARCCONF on a Linux Guest OS, you can use the configUtil.sh utility to manage email notifications in your system, such as adding or removing email recipients or configuring SMTP server settings.

To manage email notifications on a Linux Guest OS:

**1** Change to the /usr/RemoteArcconf directory, then type this command:

```
chmod +x configUtil.sh
```

**2** Run configUtil.sh:

```
./configUtil.sh
```

**3** Choose any of the following options from the menu:

```
---------------------------------------------------------------------------

1) Get SMTP Server Details          2) Set SMTP Server Details
3) Get Event Listener Port          4) Set Event Listener Port
5) Get Recipient Information         6) Set Recipient Information
7) Update Recipient Information      8) Delete Recipient Information
9) Exit

---------------------------------------------------------------------------

Enter your choice:
```

**4** Make changes, as needed (for example, add a recipient, delete a recipient), then select option **9** to exit.

**5** Restart the arcaend daemon if you made any changes:

```
/etc/init.d/arcaend restart
```

**Note:** Alternatively, to start/stop/restart arcaend, run 'service arcaend start|stop|restart'.

# Starting the Command Line Utility

To start ARCCONF, enter one of the following commands:

- Windows—`<install_dir>\arcconf.exe`

- Linux—`/usr/<install_dir>/arcconf`

- Solaris—`/usr/StorMan/arcconf`

- FreeBSD—`/<install_dir>/arcconf`

- VMware ESX—`/usr/StorMan/arcconf`

- VMware ESXi—`/usr/RemoteArcconf/arcconf`

where `Install_dir` is the directory where the utility is installed.

To see a list of available commands, type ARCCONF at the prompt. The utility command functions are detailed in the next chapter, *Using the Command Line Utility*.

# Using the Command Line Utility

# 2

**In this chapter...**

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. For example:

| Environment | Batch File | Run Script |
|---|---|---|
| Windows | .bat | CMD.EXE |
| Linux/Unix | .sh | sh / bash |

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)
```

Available commands are described on the following pages, in alphabetical order. To access a list of commands, type ARCCONF and press **Enter.**

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

# ARCCONF Commands

Perform the following functions from the command line:

| ARCCONF COMMANDS | | | |
|---|---|---|---|
| atapassword | getsmartstats | resetstatisticscounters | setncq |
| copyback | getstatus | romupdate | setperform |
| create | getversion | saveconfig | setpower |
| datascrub | identify | savesupportarchive | setpriority |
| delete | imageupdate | setalarm | setstate |
| driverupdate | key | setcache | setstatsdatacollection |
| failover | modify | setconfig | setvmcredential |
| getconfig | playconfig | setmaxcache | task |
| getlogs | rescan | setname | |

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

## arcconf atapassword

Sets or clears the Secure Erase password for SATA drives. See *arcconf setvmcredential* on page 36 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 is the case-senstive password string.

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
```

## arcconf copyback

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# is the controller number

On enables the copyback feature

Off disables the copyback feature

### Example

```
ARCCONF COPYBACK 1 ON
```

## arcconf create

Creates a new logical drive or JBOD and, optionally, enables read caching and write caching on the logical device, 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.

**Note:** maxCache write caching can be enabled only with the assistance of Adaptec by PMC support. Contact your service representative for information about enabling the maxCache write caching feature.

### Syntax

```
ARCCONF CREATE <Controller#> LOGICALDRIVE [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# is the controller number

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 informattion about write cache policy, see setmaxcache on .

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, 5EE, 50, 6, 60, and volume are supported.

Channel# Drive# lists the space-delimited channel number and device number pairs for each device to add to the logical drive.

Rvolume is the RAID level for a RAID volume logical drive.

LD# is the 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 datascrub

Toggles the background consistency check modes of the controller.

### Syntax

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

### Parameters

Controller# is the controller number.

On turns background consistency check on.

Off turns background consistency check off.

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 automaically turns background consistency check on.

Noprompt is an optional parameter that suppresses the confirmation prompt.

### Examples

```
ARCCONF DATASCRUB 1 PERIOD 30
ARCCONF DATASCRUB 1 OFF
```

## arcconf delete

Deletes a logical drive or JBOD. 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]
```

### Parameters

Controller# is the controller number

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

LogicalDrive|JBOD ALL deletes all logical drives or JBODs.

Noprompt is an optional parameter that suppresses alert messages.

### Examples

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

## arcconf driverupdate

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> is the directory path containing the driver that you want to update.

**Example**

```
ARCCONF DRIVERUPDATE C:\WINDOWSALL
```

## arcconf failover

Turns automatic failover on and off.

**Syntax**

```
ARCCONF FAILOVER <Controller#> <on|off>
```

**Parameters**

Controller# is the controller number.

On turns the controller failover mode on.

Off turns the controller failover mode off.

**Example**

```
ARCCONF FAILOVER 1 ON
```

## arcconf getconfig

Lists information about the controllers, logical drives, and physical devices. This information can include (but is not limited to) the following items:

- Controller type
- BIOS, boot block, device driver, and firmware versions
- Logical drive status, RAID level and size,
- maxCache status (enabled/disabled), fetch and flush rate policy (low, medium, high), and read/write balance
- Device type, device ID, presence of PFA, SSD status (SSD or not, part of maxCache pool, maxCache pool compatibility)
- Physical device state
- Number of Solid State Disks (SSDs) assigned to maxCache pool, maximum number of SSDs that can be assigned to maxCache pool
- Enclosure information: fan, power supply, and temperature status

**Syntax**

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

**Parameters**

Controller# is the controller number

AD/LD/PD/AL options:

- AD—Adapter information only
- LD—Logical drive information only
- PD—Physical device information only
- AL—All information (optional)

### Example

```
ARCCONF GETCONFIG 1 AD
```

## arcconf getlogs

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# is the controller number.

Type is 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 getsmartstats

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

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

### Syntax

```
ARCCONF GETSMARTSTATS <Controller#> [Tabular]
```

**Parameters**

Controller# is the controller number.

Tabular creates output in tabular format.

**Examples**

```
ARCCONF GETSMARTSTATS 1

ARCCONF GETSMARTSTATS 1 TABULAR
```

## arcconf getstatus

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 the Adaptec Storage Manager.

2  GETSTATUS reports verify, clear, initialize, and secure erase operations on physical devices.

3  GETSTATUS only reports active operations. It does not display information if the operation is completed.

**Syntax**

```
ARCCONF GETSTATUS <Controller#>
```

**Parameters**

Controller# is the controller number

**Example**

```
ARCCONF GETSTATUS 1
```

## arcconf getversion

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# is the controller number

**Example**

```
ARCCONF GETVERSION
```

## arcconf identify

Identifies a physical or logical device by blinking its LEDs.

### Syntax

```
ARCCONF IDENTIFY <Controller#> LOGICALDRIVE <LogicalDrive#>

ARCCONF IDENTIFY <Controller#> DEVICE <Channel#> <ID>
```

### Parameters

Controller# is the controller number

LogicalDrive# is the number of the logical drive to be identified

Channel# is the channel number for the device to be identified

Device# is the device number for the device to be identified

### Examples

```
ARCCONF IDENTIFY 1 DEVICE 0 0

ARCCONF IDENTIFY 1 ALL
```

## arcconf imageupdate

Allows new firmware to be flashed to the hard drive.

### Syntax

```
ARCCONF IMAGEUPDATE <Controller#> DEVICE <Channel# ID# ChunkSize# Filename>
[Mode#] [noprompt]
```

### Parameters

Controller# is the controller number

Channel# is the channel number of the device to be updated

ID# is the device number of the device to be updated

ChunkSize# is the 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 is the name of the firmware update file

Mode# is the firmware update mode. Valid values are:

● 3-(SATA) Download with offsets and save image for immediate and future use

● 7-(SAS) Download microcode with offsets, save, and activate

Noprompt is an optional parameter that suppresses alert messages.

### Example

```
ARCCONF IMAGEUPDATE 1 DEVICE 0 83 16384 ados.lod 3
```

## arcconf key

Loads a feature key onto an Adaptec controller.

### Syntax

```
ARCCONF KEY <Controller#> SET <Key#>
```

### Parameters

Controller# is the controller number

Key# is the key number provided by Adaptec

### Example

```
ARCCONF KEY 1 SET ABCD EFGH IJKL MNOP QRST UVWX
```

## arcconf modify

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# is the controller number

From indicates that the logical drive to be modified will follow

LogicalDrive# is 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 device_ID 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
```

## arcconf playconfig

Configures a controller using a XML server template file produced by the SAVECONFIG command (see ). 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.

| Code | Value | Meaning |
|------|-------|---------|
| SUCCESS | 0 | Configuration succeeded, no reboot is required. |
| FAILURE_GENERAL | 1 | An error occurred and the configuration could not be completed. |
| SUCCESS_REBOOT | 2 | Configuration succeeded, but a reboot is required. |

### Syntax

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

### Parameters

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

LogFile is 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.

### Example

```
ARCCONF PLAYCONFIG server1_config.xml playconfig.log FORCE ALL
```

## arcconf rescan

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. The command returns when the rescan is complete.

### Syntax

```
ARCCONF RESCAN <Controller#>
```

### Parameters

Controller# is the controller number

### Example

```
ARCCONF RESCAN 1
```

## arcconf resetstatisticscounters

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

### Syntax

```
ARCCONF RESETSTATISTICSCOUNTERS <Controller#>
```

### Parameters

Controller# is the controller number.

### Example

```
ARCCONF RESETSTATISTICSCOUNTERS 1
```

## arcconf romupdate

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 function is only supported in Windows and Linux.
2 Be sure to copy the *.UFI update files from the DVD and not from the BIOS/Firmware update diskettes.

### Syntax

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

### Parameters

Controller# is the controller number

BaseName is 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. If you are copying UFI files from floppy images, be sure to check all images.

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

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

Noprompt is 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

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 page 27 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.

| Code | Value | Meaning |
|---|---|---|
| SUCCESS | 0 | Configuration XML generated successfully. |
| FAILURE_GENERAL | 1 | An error occurred and the configuration XML could not be generated. |

### Syntax

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

### Parameters

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

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

### Example

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

## arcconf savesupportarchive

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 23.)

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

**Note:** Unlike the Save Support Archive feature in Adaptec 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 SAVESUPPORTARCHIVE
```

**Parameters**

None.

**Example**

ARCCONF SAVESUPPORTARCHIVE

## arcconf setalarm

Sets the state of the controller audible alarm, if present.

**Syntax**

ARCCONF SETALARM <Controller#> <on|off|silence|test>

**Parameters**

Controller# is 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

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# is the controller number

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

Logical drive cache modes:

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

## arcconf setconfig

Resets the controller's configuration. Logical drives are deleted, hard disks are reset to the READY state, and any controller settings are reset to default values.

### Syntax

```
ARCCONF SETCONFIG <Controller#> DEFAULT [noprompt]
```

### Parameters

Controller# is the controller number

Default restores the controller 's default configuration.

Noprompt: No prompt for confirmation.

### Example

```
ARCCONF SETCONFIG 1 DEFAULT
```

## arcconf setmaxcache

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:** maxCache write caching can be enabled only with the assistance of Adaptec by PMC support. Contact your service representative for information about enabling the maxCache write caching feature.

**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
```

Write Caching:

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

General:

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

**Parameters**

Controller# is the controller number.

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

Channel# is the channel number for the SSD.

Device# is the device number for the SSD.

Read#/Write# is 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# is 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.

Policy is 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.

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

Renames a logical drive.

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

**Parameters**

Controller# is the controller number

LogicalDrive# is the number of the logical drive to be renamed

New Name is the new name of the logical drive

### Example
```
ARCCONF SETNAME 1 LOGICALDRIVE 1 BACKUP_A
```

## arcconf setncq

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# is the controller number.

### Example
```
ARCCONF SETNCQ 1 ENABLE
```

## arcconf setperform

Changes controller settings based on the application type.

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

### Parameters
Controller# is the controller number.

Performance Mode is 1 (DYNAMIC/Default), 2 (OLTP/Database), or 3 (Big Block Bypass):

- When set to Dynamic, performance criteria adjusts automatically based on controller usage, RAID level, and disk drive type.

- When set to OLTP/Database, performance criteria is optimized for transaction-oriented applications, such as data entry and retrieval.

- When set to Big Block Bypass, DRAM write cache is bypassed based on IO write size; performance is optimized for serving Web pages and retrieving data.

### Examples
```
ARCCONF SETPERFORM 1 2
ARCCONF SETPERFORM 1 3
```

## arcconf setpower

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#>
```

```
ARCCONF SETPOWER <Controller#> LD <LogicalDrive#> DISABLE|[SLOWDOWN <st#>]
[POWEROFF <pt#>] [VERIFY <vt#>]
```

### Parameters

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

external# is 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# is 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

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# is the controller number.

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 is: 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

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> [LOGICALDRIVE
<LD#>[LD#] ... ] [noprompt]

ARCCONF SETSTATE <Controller#> LOGICALDRIVE <LD#> OPTIMAL [ADVANCED <option>]
[noprompt]
```

**Parameters**

Controller# is the controller number.

Channel# is the channel number for the drive.

Device# is the device number for the device.

LD# is the 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)

ADVANCED <option> is an 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

Enables or disables statistics collection for a controller. To display the statistics, use the *arcconf getlogs* command (see ).

### Syntax

```
ARCCONF SETSTATSDATACOLLECTION <Controller#> Enable|Disable
```

### Parameters

Controller# is the controller number.

Enable turns statistics collection on.

Disable turns statistics collection off.

### Example

```
ARCCONF SETSTATSDATACOLLECTION 1 ENABLE
```

## arcconf setvmcredential

Resets the Hypervisor login credentials for VMware Guest OSs running Remote ARCCONF.

**Note:** This command is available for VMware Guest OSs running Remote ARCCONF only.

### Syntax

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

### Parameters

Esxip  is the Hypervisor IP address.

Esxcimomport  is the Hypervisor CiMOM port number.

Esxuserid  is the Hypervisor user name.

Esxpassword is the Hypervisor password.

### Example

```
ARCCONF SETVMCREDENTIAL 172.18.46.101 5989 root passwd
```

## arcconf task

Performs a task on a logical drive or a physical drive.

### Syntax

```
ARCCONF TASK
TASK START <Controller#> LOGICALDRIVE <LogicalDrive#> <options> [noprompt]
TASK STOP  <Controller#> LOGICALDRIVE <LogicalDrive#>
TASK START <Controller#> DEVICE <Channel> <ID> <options> [noprompt]
TASK STOP  <Controller#> DEVICE <Channel> <ID>
```

### Parameters

Controller# is the controller number

LogicalDrive# is the 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).
  - secureerase [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 18 for details about setting the password.

### Examples

```
ARCCONF TASK START 1 LOGICALDRIVE 1 VERIFY
ARCCONF TASK START 1 DEVICE 0 0 INITIALIZE
```