

HighPoint RAID Management

Command Line Interface Guide

HighPoint

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HighPoint Technologies, Inc.

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Conventions

The following conventions are used through this guide:

- **Bold font** is used for what you type on the command line and for the screen output.
- In commands, braces {} around an item indicate that it must be specified.
- In commands, square brackets [] around an item indicate that it is optional.
- In commands, braces with pipes inside {|||} indicate you must specify one option among multiple items.
- In commands, square brackets with pipes inside [| |] indicate you can either specify one option or more options.
- Whenever you type a parameter with a space, it should be enclosed with double quotation marks “”.

Introduction to the HighPoint Command Line Interface

The HighPoint CLI (Command Line Interface) is a command line utility that configures and manages HighPoint RAID controllers via a command line. It is ideal for systems where the browser-based RAID Management utility cannot be used.

Supported Operation Systems and Adapters

The current CLI release supports Linux and FreeBSD operating systems.

Installing the HighPoint CLI on Linux

Before installation, you must log on as root.

The CLI package is provided as a RPM or DEB package, hptraidconf-xxx.rpm or hptraidconf-xxx.deb. You can use rpm or dpkg command to install it:

```
# rpm -i hptraidconf-xxx.rpm  
# dpkg -i hptraidconf-xxx.deb
```

The following file will be installed:

/usr/bin/hptraidconf	- the CLI executable
/usr/share/hpt/hptraidconf-3.x	- CLI support files
/usr/share/man/man1/hptraidconf.1.bz2	- CLI man page

The following commands will uninstall the packages:

```
# rpm -e hptraidconf  
# dpkg -r hptraidconf
```

Installing the HighPoint CLI on FreeBSD

Before installation, you must log on as root.

The CLI package is provided as a .tbz package, hptraidconf-xxx.tbz. You can use pkg_add command to install it:

```
# pkg_add hptraidconf-xxx.tbz
```

The following files will be installed/configured:

/usr/bin/hptraidconf	- link to the CLI executable
/usr/share/hpt/hptraidconf-xxx/*	- package files

The following commands will uninstall the packags:

```
# pkg_delete hptraidconf
```

Running HighPoint CLI

You can run the HighPoint CLI software two ways:

- Entering commands at the CLI prompt
- Entering a string of a single commands on one command line

Using the CLI prompt:

You can enter commands at the main prompt and view the output on-screen.

To use the HighPoint CLI prompt, follow these steps:

- 1 Enter the following command at the shell prompt:

For RR1xxx, RR2xxx, and RR3xxx adapters without out-of-band management:

```
# hptraidconf [-i server-address:port]
```

Here *server-address:port* specifies the network address and TCP port of the RAID management service (hptsvr). By default, localhost:7402 will be used.

For RR3xxx and RR4xxx adapters with out-of-band management:

```
# hptraidconf [-s adapter-id]
```

Here *adapter-id* specifies the adapter to be managed (in case of multiple adapters installed. By default, the first adapter (0) will be used.

- 2 Enter the username and password to log on to the CLI.

Note: The default username is **RAID** and the default password is **hpt**. You cannot change the password using CLI; to change the password you must use the browser based utility.

After successfully logging in, the main prompt of the CLI will be displayed:

HighPoint CLI>

Commands are entered at the CLI prompt. The **CLI Command Reference** section discusses these commands in detail (see page 4).

Using a single command line

You can enter a complete command with parameters at the shell prompt and receive one output result on the screen at a time.

Syntax

```
hptraidconf [-s adapter-id | -i server-address:port] -u {username} -p  
{password} {command}
```

Example

```
# hptraidconf -u RAID -p hpt query controllers
```

Will display information of the controller.

CLI Command Reference

This chapter discusses the various HighPoint CLI commands: Query, Create, Delete, Rename, Rebuild, Device, Verify, Task, Rescan, Events, Reboot, User, Mail, Help and Exit.

Warning:

Operations under the Create/Delete commands may destroy data stored in the disks, and the lost data can never be recovered. So you should take special care when executing these commands. The CLI utility will not prompt before each operation is committed.

Query Commands

Syntax

- query controllers
- query devices
- query devices {device_id}
- query arrays
- query arrays {array_id}

query controllers

This command reports controller information.

Example

HighPoint CLI> query controllers

Typical output:

```
HighPoint CLI>query controllers
ID          Channel      Name
1           8            RocketRAID 3522 Controller
-----
IOP Model    IOP341 800MHz
SDRAM Size   256M
Battery Installed No
Firmware Version v1.2.21.23
Battery MotherBoard Status Not installed
-----
```

Note: This release of CLI can only manage one adapter at a time. So there will be only one controller listed even if you have multiple adapters installed.

query devices

This command presents status of all the physical devices to the controllers. It provides a list of device ID, capacity, model number, status and array attributes. Each device's status will be listed as one of the following: NORMAL, DISABLED, SPARE, RAID and BOOT.

Attributes

ID:

A device ID is a string used to represent a disk. It is in the format “controller/port” for SATA controllers, and “controller/channel/device” for PATA controllers. E.g. 1/2 represents the disk on controller 1 port 2; 1/2/1 represents the disk on controller 1 channel 2 master disk; 1/2/2 represents the disk on controller 1 channel 2 slave disk.

Capacity:

The capacity of the disk in GB.

MaxFree:

The Maximum sequence free space on a disk which can be used by creating array.

TotalFree:

The sum of all the free space on a disk which can be used by creating array.

Hard Disk Status:

NORMAL: The disk's status is normal.

DISABLED: The disk's cannot be use. (May be disk failure or removed)

RAID: The disk is a member of some RAID.

SPARE: It is a spare disk

BOOT: It is a boot disk.

ModelNumber:

The disk's model number.

Example

HighPoint CLI> query devices

Typical output:

HighPoint CLI>query devices					
ID	Capacity	MaxFree	Flag	Status	ModelNumber
1/1	249.98	0	RAID	NORMAL	WDC WD2500JS-57MHB1
1/2	249.98	0	RAID	NORMAL	WDC WD2500JS-57MHB1
1/3	249.98	0	RAID	NORMAL	WDC WD2500JS-57MHB1
1/4	249.98	0	RAID	NORMAL	WDC WD2500JS-57MHB1

query devices {device_id}

This command presents information for the specified device.

Attributes

Serial Number:

Disk Serial Number

Read Ahead/Write Cache/TCQ/NCQ Status:

Disk's Read Ahead/Write Cache/TCQ/NCQ status could be enabled/disabled/--(not support)

S.M.A.R.T Attributes:

S.M.A.R.T Attributes detailed information reported by hard disk

Example

HighPoint CLI> query devices 1/1

Typical output:

```
HighPoint CLI>query devices 1/1
Model Number: WDC WD2500JS-57MHB1
Serial Number: WD-WCANKD799345
Capacity(GB): 249.98          TotalFree(GB): 0
Status: RAID                 Flag: NORMAL
Read Ahead: enabled           Write Cache: enabled
TCQ: --                      NCQ: --
-----
                                         S.M.A.R.T Attributes
Status: S.M.A.R.T OK.
ID  Name                           Threshold  Value    Worst   Status
--- 
1  Raw Read Error Rate            51         200      200     OK
3  Spin Up Time                 21         186      179     OK
4  Start Stop Count              0          100      100     OK
5  Reallocated Sector Ct        140        200      200     OK
7  Seek Error Rate              51         200      200     OK
9  Power On Hours               0          98       98      OK
A  Spin Retry Count             51         100      100     OK
B  Calibration Retry Count     51         100      100     OK
C  Power Cycle Count            0          100      100     OK
BE Unknown Attribute            45         63       44      OK
C2 Temperature Celsius          0          114      94      OK
C4 Reallocated Event Count      0          200      200     OK
C5 Current Pending Sector      0          200      200     OK
C6 Offline Uncorrectable        0          200      200     OK
C7 UDMA CRC Error Count        0          200      200     OK
C8 Multi Zone Error Rate       51         200      200     OK
```

query arrays

This command lists information for all configured arrays. It will list each array's ID, capacity, RAID level, and status information.

Note: An array ID is generally represented by number or set of numbers. For RAID1/0 arrays; each sub-array will be represented by an ID in the format “1-1”, “1-2”. An array ID is used in the command line where an array needs to be specified.

Attributes

Type:

The array's type. (RAID0, RAID1, RAID3, RAID5, RAID6, JBOD, RAID10, RAID50)

Status:

DISABLED: Array is disabled.

EXP/IMG: Array is expanding or migrating.

REBUILDING:	Array is being rebuilt
VERIFYING:	Array is verifying
NEED EXP/IMG:	Expanding/Migrating is not complete
INIT(F)	Initialize array using Foreground mode
INIT(B)	Initialize array using Background mode
UNINITIALIZED	Array is not initialized
CRITICAL	Array is degraded status (no data redundancy)
NORMAL	Array status is normal

Block:

Array Block size

Sector:

Bytes per sector

Cache:

Array Cache Policy

WT: Write Through

WB: Write Back

NONE: No Cache policy enabled

Example**HighPoint CLI> query arrays**

Typical output:

ID	Capacity(GB)	Type	Status	Block	Sector	Cache	Name
1	249.98	RAID1	NORMAL	--	512B	WB	RAID1_1
2	499.96	RAIDO	NORMAL	64k	512B	WB	RAIDO_2

query arrays {array_id}

This command will present information of each disk of a specified array.

Attributes**Progress :**

The progress of array's tasks (verifying, rebuilding, initializing, EXP/MIG)

Example

HighPoint CLI> query arrays 1

Typical output:

```
HighPoint CLI>query arrays 1
ID: 1 Name: RAID1_1
Type: RAID1 Status: NORMAL
Capacity(GB): 249.98 BlockSize: --
SectorSize: 512B CachePolicy: WB
Progress: --
ID Capacity MaxFree Flag Status ModelNumber
-----
1/1 249.98 0 NORMAL RAID WDC WD2500JS-57MHB1
1/2 249.98 0 NORMAL RAID WDC WD2500JS-57MHB1
```

Create Command

This command allows you to create a new RAID array, or add a spare disk, or expand/migrate an existing array.

Syntax

```
create {RAID0|RAID1|RAID10|RAID3|RAID5|RAID6|RAID50|JBOD|spare}
[create-options]
```

Parameters

You can specify one or more create options for this command, separated by space. The options can be typed in any order.

You can specify one or more create options for this command, separated by space. The options can be typed in any order.

disks= specifies member disks which will compose a new array, e.g. disks=1/1,1/2, disks=*. The character * means all available drives.

NOTE:When you enter a complete command with parameters disks=* at the shell prompt, the correct writing is disks="*".

For example:

hptraidconf -u RAID -p hpt create RAID0 disks="*".

init= specifies initialization option (foreground, background, quickinit, keepdata). The default option is create-only. The create-only option is applicable for all the RAID types, which is to create an array without any initialization process.

Initialization is needed for redundant arrays to provide data redundancy.

foreground : Initialize array using foreground mode. This is the recommended method when creating redundant RAID arrays.

background : Initialize array using background mode. The array is accessible during array initialization.

quickinit : Do a quick init.

keepdata : Create RAID array but keep existing data on RAID array. This option should be selected when trying to recover a RAID array.

name= specifies the name for the array being created.

If the option is omitted, the utility will assign a default name for the array.

src= specifies an existing array to be expanded/migrated. All data on the source array will be redistributed online to the target array. If this parameter is omitted, a new array is created.

capacity= specifies the capacity, in size of MB, for the target array.
Maximum capacity is default.

bs= specifies the block size, in KB, for the target array. This option is only valid for stripped RAID levels. 64KB is default.

sector= specifies the logical sector size, in B/KB, for the target array.
This option is only valid for stripped RAID levels. 512 Bytes is default.

matrix=n*m
(RAID50 only) specifies the number of RAID5's members (n) and the number of RAID0's members (m).

cp=
Cache policy options.
WB: write back.
WT: write through.
NONE: none cache policy.

Examples

■ **HighPoint CLI> create RAID0 name=myraid0 disks=1/3,1/4**

This command instructs the system to create an RAID 0 array using the disks attached to controller 1 channels 3 and 4, and name it **myraid0**.

■ **HighPoint CLI> create RAID5 disks=* src=1**

This command instructs the controller to expand an existing array using all the available disks to a **RAID5** array.

■ **HighPoint CLI> create spare disks=1/4**

This command indicates that you will set the disk on controller 1 channel 4 to be a spare disk.

Delete Command

This command allows you to delete an existing RAID array or remove a spare disk. After deletion, the original array and all data on it will be lost. All the member disks will be listed as available single disks.

Syntax

```
delete {array_or_spare_ID}
```

Examples

■ **HighPoint CLI> delete 1/3**

This command indicates to remove the spare disk on controller 1 channel 3.

■ **HighPoint CLI> delete 1**

This command indicates to delete the array whose id is “**1**”. You can query the array ID before the deletion.

Unplug Command

This command allows you to remove an array or disk from a running system without shutting down.

Syntax

```
unplug {array_id or device_id}
```

Example

HighPoint CLI> unplug 1

This command instructs the controller to disconnect the array “**1**” and then you can disconnect the drives safely.

Init Commands

You can use init commands to initialize disks or arrays. **A drive must be initialized first before being used to create arrays.**

Syntax

- init {device_id}
- init {array_id} {start|stop}

init {device_id}

This command initialize a disk for first use on the controller.

Example

HighPoint CLI> init 1/3

This command instructs the controller to initialize the disk on controller 1 channel 3. All data on the disk will be destroyed.

Init {array_id} {start|stop}

This command starts/stops initialization process on a redundant array.

Example

HighPoint CLI> init 1 stop

This command instructs the controller to stop initialization process on array 1. You can continue the initialization at a later time.

Rebuild Commands

You can use rebuild commands to rebuild a RAID1, RAID1/0 or RAID5 array when it is critical or broken.

Syntax

- rebuild {array_id} {device_id}
- rebuild {array_id} {start|stop}

rebuild {array_id} {device_id}

This command allows you to add the specified disk to a broken array and rebuild it.

Example

HighPoint CLI> rebuild 1 1/3

This command instructs the controller to add the disk “**1/3**” to rebuild the array “**1**”. You can use the query commands first to verify the device ID and the array ID information before the rebuild command.

Rebuild {array_id} {start|stop}

This command allows you to start or stop the rebuilding process on the specified array. After you stopped a rebuilding process, you can resume it at a later time by the rebuild start command.

Examples

- **HighPoint CLI> rebuild 1 start**

This command starts the rebuilding process on the array “1”.

- **HighPoint CLI> rebuild 1 stop**

This command stops the rebuilding process on the array “1”.

Verify Command

Syntax

- **verify {array_id} {start|stop}**

This command starts or stops the verify process on the specified array.

Examples

- **HighPoint CLI> verify 1 start**

This command starts to verify the array “1”.

- **HighPoint CLI> verify 1 stop**

This command stops the verify process on the array “1”.

OCE/ORLM Command

Syntax

- **OCE/ORLM {array_id} {start|stop}**

This command starts or stops the **Online Capacity Expand/ Online RAID Level Migration** process on the specified array.

Examples

- **HighPoint CLI> OCE/ORLM 1 stop**

This command stops OCE/ORLM process on array “1”. You can resume the process at later time.

Rescan Command

This command will rescan all of the physical devices attached to the RAID controller.

Syntax

rescan

Example

HighPoint CLI> rescan

SAF-TE Commands

The SAF-TE command is used to manage SAF-TE enclosures. This command only works when you have SAF-TE enclosure information properly configured in HighPoint RAID management service.

To use HighPoint RAID management service with SAF-TE enclosures, a customized configuration file (/etc/I2csep.conf) is needed. By default no config file is setup; you can copy one of the provided configuration file under /usr/share/hpt/hptsvr-xxx/ (*.conf) to /etc/I2csep.conf to enable support for SAF-TE enclosures. The RAID management service (hptsvr) needs to be restarted when the configuration file is updated.

Syntax

- SAF-TE
- SAF-TE set {property_index} value

SAF-TE

This command will display the enclosure status information.

Example

HighPoint CLI> SAF-TE

Typical output:

Index	Name	Value	Status	Editable
0	Temperature	38		False
1	Fan Speed	2960		False
2	Temperature Limit	60		True

SAF-TE set {property_index} value

This command updates the value of a specified enclosure property.

Example

HighPoint CLI> SAF-TE set 2 66

Events Commands

The CLI system will automatically record three types of events: Information (shortened to “Inf”), Warning (shortened to “War”), and Error (shortened to “Err”) on the screen output. These commands allow you to query, save, or clear the logged events.

Syntax

- events
- events clear
- events save {file_name}

events

This command will display a list of all the logged events.

Example

HighPoint CLI> events

Typical output:

```
HighPoint CLI>events
1 Inf [01/01/2002 01:37:14] RAID 0 Array 'RAIDO_2' has been created successfully
36, 3; Disk 2:WDC WD2500JS-57MHB1-WD-WCANKE051275, 4).

2 Inf [01/01/2002 01:37:06] RAID 1 Array 'RAID1_1' has been created successfully
45, 1; Disk 2:WDC WD2500JS-57MHB1-WD-WCANKE051283, 2).

3 Inf [01/01/2002 01:36:58] Array 'RAIDO_0' has been deleted successfully.

4 Inf [01/01/2002 01:27:21] User RAID logged on system.

5 Inf [01/01/2002 01:19:05] User RAID logged on system.

6 Inf [01/01/2002 00:44:05] RAID 0 Array 'RAIDO_0' has been created successfully
45, 1; Disk 2:WDC WD2500JS-57MHB1-WD-WCANKE051283, 2; Disk 3:WDC WD2500JS-57MHB1-WD-
1-WD-WCANKE051275, 4).

7 Inf [01/01/2002 00:43:40] Array 'RAID_0_0' has been deleted successfully.

8 Inf [01/01/2002 00:43:38] User RAID logged on system.

9 Inf [01/01/2002 00:42:12] User RAID logged on system.
```

Events clear

This command will clear all the logged events.

Example

HighPoint CLI> events clear

events save {file_name}

This command will save all the logged events as a plain text file.

Example

HighPoint CLI> events save /tmp/raidlog.txt

This command will save all the events to /tmp/**raidlog.txt**.

Mail Commands

Syntax

- mail recipient
- mail recipient add {recipient_name} {mail_address} [Inf|War|Err]
- mail recipient delete {recipient_name}
- mail recipient test {recipient_name}
- mail recipient set {recipient_name} {Inf|War|Err}
- mail server
- mail server set {server_address} {port} {status} {from_address}
[username] [password]
- mail server set {a|p|s|m|u|t} {value}

mail recipient

--- List all the mail recipients

Example

HighPoint CLI> mail recipient

Typical output:

ID	Name	Mail Address	Notify Types
1	RAID	admin@somecompany.com	Information Warning Error
2	Kate	Kate@somecompant.com	Information Warning

Mail recipient add {recipient_name} {mail_address} [Inf|War|Err]

--- Add a not exist recipient

Example

HighPoint CLI> mail recipient add admin admin@somecompany.com Inf War Err

This command will setup the RAID system to send mail to admin@somecompany.com about all logged events.

Mail recipient delete {recipient_name}

--- Delete an exist recipient.

Example

HighPoint CLI> mail recipient delete Ferry

mail recipient test {recipient_name}

--- Send a testing mail to specified recipient.

Example

HighPoint CLI> mail recipient test RAID

mail recipient set {recipient_name} {Inf|War|Err}

--- Set the notification type for a recipient.

Example

HighPoint CLI> mail recipient set admin War Err

mail server

--- Print the SMTP server information

Example

HighPoint CLI> mail server

Typical output:

ServerAddress	Port	Status	Mail From	User Name
192.168.1.1	25	Disabled	sq@tom.com	

mail server set {server_address} {port} {status} {from_address}

[username] [password]

--- Use this command to configure mail server settings.

{server_address} – SMTP server address

{port} – port, generally 25

{status} – status, ‘e’ for enable or ‘d’ for disable

{from_address} – mail from address

{username} – username

{password} – the user’s password

Examples:

HighPoint CLI> mail server set mail.somecompany.com 25 e admin@somecompany.com

HighPoint CLI> mail server set mail.somecompany.com 25 d admin@somecompany.com

mail server set {a|p|s|m|u|t} {value}

--- Use this to separate set your mail server value

Parameters

a – SMTP server address

p – port, generally 25

s – status, ‘e’ for enable or ‘d’ for disable

m – mail from address

u – username

t – user’s password

Examples:

HighPoint CLI> mail server set a smtp.somecompany.com

--- Change the server address

HighPoint CLI> mail server set p 25

--- Change the port

HighPoint CLI> mail server set s d

--- Disable mail notification

HighPoint CLI> mail server set s e

--- Enable mail notification

Task Commands

When an array requires regularly verification or rebuilding, you can use the task commands to automate this process in the background. As long as you have the appropriate privileges, you can add new tasks, and modify or delete existing tasks.

Syntax

- task
- task rebuild {array_id} {name=} {once|daily|monthly|weekly}={day} interval={interval} start=mm/dd/yyyy end=mm/dd/yyyy time=hh:mm:ss
- task verify {array_id} {name=} {once|daily|monthly|weekly}={day} interval={interval} start=mm/dd/yyyy end=mm/dd/yyyy time=hh:mm:ss
- task smart {device_id} {m|h} {interval}
- task delete {task_id}
- task enable {task_id}
- task disable {task_id}

task

This command displays detailed information about all scheduled tasks.

Example

HighPoint CLI> task

This command displays the current background tasks.

HighPoint CLI> task rebuild {array_id} {name=} {once|daily|weekly|monthly}={day} interval={interval} start=mm/dd/yyyy end=mm/dd/yyyy time=hh:mm:ss

This command allows you to schedule the frequency by once, daily, weekly or monthly and the detailed time range to rebuild a specified array. The first **mm/dd/yyyy** specifies the task start date, while the second **mm/dd/yyyy** specifies

the task end date.

Note:

When you add a task to rebuild a selected array **once**, the parameter **{day}** should be omitted.

Examples

■ **HighPoint CLI> task rebuild 1 once start=10/8/2005, 12:35:46**

This command adds a task schedule named **myraid1** to rebuild the array "1" at **12:35:46** on **10/8/2005**. The rebuild frequency is set to **once**.

■ **HighPoint CLI> task rebuild 4 daily interval=2 start=2/8/2005 end=2/22/2005 time=13:49:58**

This command adds a task schedule named **myraid4** to rebuild the array "4" at **13:49:58** every **2** days from **2/8/2005** to **2/22/2005**.

■ **HighPoint CLI> task rebuild 3 weekly=2 interval=3 start=2/8/2004 end=2/22/2008 time=13:49:58 RAID““**

This command adds a task schedule named **myraid3** to rebuild the array "3" at **13:49:58** on **Monday** (the **2nd** day in a week) every **3** weeks from **2/8/2004** to **2/22/2008**.

■ **HighPoint CLI> task rebuild 2 monthly=3 interval=4 start=2/8/2004 end=2/8/2006 time=12:30:33**

This command adds a task schedule to rebuild the array "2" at **12:30:33** on the **3rd** day of a month every **4** months from **2/8/2004** to **2/8/2006**.

HighPoint CLI>task verify {array_id} {name=} {once|daily|weekly|monthly}={day} interval={interval} start=mm/dd/yyyy end=mm/dd/yyyy time=hh:mm:ss

This command allows you to schedule a verify task. The usage of this command is the same as adding a rebuild task schedule.

task smart {device_id} {m|h} interval={interval}

This command allows you set periodic S.M.A.R.T. status checking on a device.

Example

HighPoint CLI> task smart 1/2 m interval=30

This command will instruct the controller to check S.M.A.R.T. status on controller 1 channel 2 every 30 minutes.

task delete {task_id}

This command allows you to delete a scheduled task. You can query the task ID by **task** command.

Example

HighPoint CLI> task delete 2

This command will delete the task **"2"**.

task enable {task_id}

This command will enable a disabled task.

Example

HighPoint CLI> task enable 1

This command will enable the disabled task **"1"**.

task disable {task_id}

This command will disable a scheduled task manually.

Example

HighPoint CLI> task disable 1

This command will disable the scheduled task**"1"**.

Set Commands

Note: Not all controllers and drivers support this command.

Syntax

- set [name]={value}
- set

set

Show the system settable parameters.

Typical output:

```
HighPoint CLI>set
-----
      Show the system setable parameters.

[AR] Auto Rebuild          No
[CE] Continue Rebuild On Error  No
[RP] Rebuild Priority       High
[SD] Spindown Idle Disk (minutes) 10
[BP] Beeper                 enabled
```

set RP={0-100}

Change rebuilding priority. If controller is not specified, this command will set the global rebuilding priority.

Note:

[0-12]	Lowest
[13-37]	Low
[38-67]	Medium
[68-87]	High
[>88]	Highest

Example

```
HighPoint CLI> set RP=50
```

set AR={y|n}

- Set enable or disable to the [Auto Rebuild] parameter.

Example

```
HighPoint CLI> set AR=y
```

set AA={y|n}

- Set enable or disable to the [Audible Alarm] parameter.

Example

```
HighPoint CLI> set AA=y
```

set SS={y|n}

- Set enable or disable to the [Staggered Spinup] parameter.

Example

HighPoint CLI> set SS=y

set DS={seconds(1-4)}

- Set the value(1-4) of [Delay between spinup] parameter.

Example

HighPoint CLI> set DS=2

set CE={y|n}

- Set enable or disable to the [Continue Rebuilding On Error] parameter.

Example

HighPoint CLI> set CE=y

set BP={y|n}

- Set enable or disable beeper.

Example

HighPoint CLI> set BP=y

set SD={minutes}

- Set value of [Spindown Idle Disk]

[1-10]	10
[11-20]	20
[21-30]	30
[31-60]	60
[61-120]	120
[121-180]	180
[181-240]	240

Example

HighPoint CLI> set SD=10

set IT={y|n}

- Set enable or disable to the [INT 13 support] parameter.

Example

HighPoint CLI> set IT=y

set NC={y|n}

- Set enable or disable to the [NCQ] parameter.

Example

HighPoint CLI> set NC=y

set {device id} tcq={y|n} ncq={y|n} wc={y|n} ra={y|n} smart={y|n}

- Set parameters of device

The options are:

- tcq={y|n}
Set enable or disable to the tcq parameter.
- ncq={y|n}
Set enable or disable to the ncq parameter.
- wc={y|n}
Set enable or disable to the wc parameter.
- ra={y|n}
Set enable or disable to the ra parameter.
- smart={y|n}
Set enable or disable to the smart parameter.

Example

HighPoint CLI> set 1/2 tcq=y ncq=n wc=y ra=y

set {array id} name={name} cp={wt|wb|none}

The options are:

- {array id}
The array ID.

- name={name}

Set the array name. This is an option to rename an array.

- cp={wt|wb|none}

Set the cache policy of an array.

Example

```
HighPoint CLI>set 1 name=my_arr init=y cp=none
```

Pmstat Commands

Note: Only the IOP controllers and drivers support this command.

Syntax

- pmstat
- pmstat {on|off}
- pmstat summary
- pmstat show {device id}

pmstat

Show the performance monitor status.

Typical output:

```
HighPoint CLI>pmstat
Performance monitor is: Disable
HighPoint CLI>
```

Pmstat {on|off}

Turn on or off the performance monitor.

Typical output:

```
HighPoint CLI>pmstat on
HighPoint CLI>pmstat
Performance monitor is: Enable
HighPoint CLI>
```

Pmstat summary

Show performance monitor info.

Typical output:

Disk	Instant KB/s	IOP/s	Average	KB/s	IOP/s	Pending I/O	Active I/O
1/1	1252	156		1240	155	22	2
1/2	1297	162		1240	155	3	2
1/3	1255	156		1236	154	2	2
1/4	1270	158		1249	156	4	2

Pmstat show {device id}

Show device's performance monitor info.

Typical output:

Disk	Instant KB/s	IOP/s	Average	KB/s	IOP/s	Pending I/O	Active I/O				
1/1	533	64		413	49	0	0				
Top 10 rsp time											
TimeStamp	RspTime	LBA	Sectors								
[003A39446D]	6089303	[000002AA80]	80								
[003A394645]	6094032	[0000040A80]	80								
[00429F5C2E]	95256	[0016AD5510]	70								
[00429F6F3E]	91012	[0016AD5580]	80								
[004563364F]	106599	[001D115580]	80								
[00406FE9CB]	84314	[0010D2AA80]	80								
[00450FFD8A]	83684	[001C995510]	70								
[00456333C5]	106542	[001D115520]	60								
[003C680856]	89794	[00055EA800]	80								
[003C6806B8]	89449	[00055EEA80]	80								
RspTime (ms)	I/O Count										
1	36539										
2	15867										
3	294										
4	337										
5	550										
6	815										
7	1218										
8	1293										
9	1280										
10	1302										

Help Commands

Syntax

- help
- help {command}

help

- Show generic help about this utility.

Example

HighPoint CLI> help

help {command}

- Show help about a specific command.

Example

HighPoint CLI> help create

Exit Command

Syntax

exit

Exit from the interactive mode and return to the shell.

Appendix A Revision History

Version	Date	Updates
3.6-1	2012/09/13	Add support RAID6. Add support FreeBSD 9.0.
3.5-2	2011/09/28	Fix query arrays show legacy device. Fix Audible Alarm bugs. Support rr2680 rr274x 3x.
3.4-1	2009/12/24	Fix S.M.A.R.T information bugs. Fix set NCQ bugs.
3.3-2	2009/08/06	Support RR44xx
3.3-1	2009/03/18	Bug fix release
3.2-1	2009/02/05	Add deb packages
3.1-1	2008/07/07	Support all RR2xxx,3xxx,4xxx adapters.
3.0-1	2008/01/18	Port to support adapters with out-of-band management feature. Not compatible with earlier versions.
2.3-4	2007/03/09	Add port multiplier support. Add serial number display.
2.3-3	2006/11/20	Use static link. Show more fields in controller information.
2.3-1	2006/08/08	Add RR3xxx adapter support.
2.2-1	2006/03/01	Fix email command error.
2.1-3	2005/11/25	Add RAID50 support Add deb package for Debian installation.
2.1-1	2005/08/08	Use static link.
2.0-2	2005/06/30	Minor fixes.
2.0-1	2005/04/08	First release for RR2220 adapter.