

# **HighPoint RAID Management Command Line Interface Guide**

*HighPoint*

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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 Windows, Linux and FreeBSD operating systems.

# CLI Command Reference

This chapter discusses the various HighPoint CLI commands: Query, Create, Delete, OCE/ORLM, Rebuild, Verify, Unplug, Switch, Lscard, Rescan, Init, Events, Mail, Task, Set, Clear, 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

```
HPT CLI> query controllers
```

Typical output:

```
HPT CLI > query controllers
ID          Channel      Name
-----
1           8           RocketRAID 4520 SAS Controller
-----
IOP Model   88RC9580 (9580B2)
$DRAM Size  512M
Battery Installed      No
Firmware Version      v1.4.74.22
Battery MotherBoard Status  Not installed
-----
HPT CLI > _
```

## 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:**

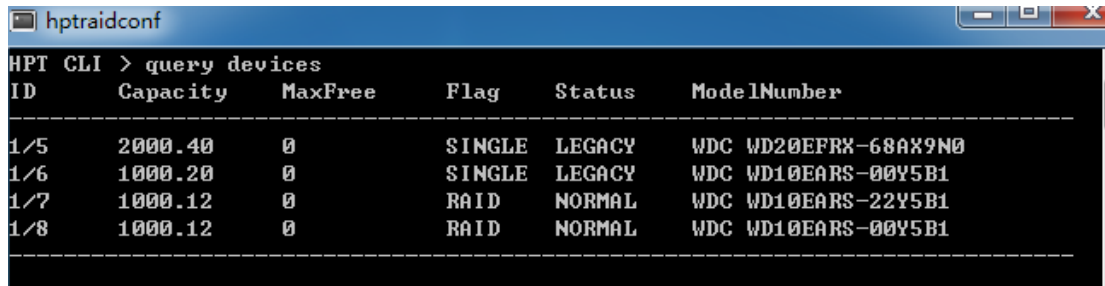
The disk's model number.



## Example

HPT CLI> query devices

Typical output:



```

hptraidconf
HPT CLI > query devices
ID      Capacity  MaxFree  Flag   Status  ModelNumber
-----
1/5     2000.40   0        SINGLE LEGACY  WDC WD20EFRX-68AX9N0
1/6     1000.20   0        SINGLE LEGACY  WDC WD10EARS-00Y5B1
1/7     1000.12   0        RAID   NORMAL  WDC WD10EARS-22Y5B1
1/8     1000.12   0        RAID   NORMAL  WDC WD10EARS-00Y5B1
  
```

### 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

### SATA DISK:

HPT CLI> query devices 1/5

```

HPT CLI > query devices 1/5
Mode Number:      WDC WD20EFRX-68AX9N0
Serial Number:    WD-WMC300032432
Firmware Version: 80.00A80
Capacity(GB):    2000.40      TotalFree(GB): 0
Status:          SINGLE      Flag:          LEGACY
Read Ahead:      enabled     Write Cache:   enabled
TCQ:             --         NCQ:           enabled
-----
                                S.M.A.R.T Attributes
Status: S.M.A.R.T OK.
ID  Name                                     Threshold  Value     Worst     Status
-----
1  Read Error Rate                          51         200      200      OK
3  Spin-up Time                              21         205      173      OK
4  Start/Stop Count                          0          98       98       OK
5  Re-allocated Sector Count                 140        200      200      OK
7  Seek Error Rate                           0          200      200      OK
9  Power-on Hours Count                      0          94       94       OK
A  Spin-up Retry Count                       0          100      100      OK
B  Drive Calibration Retry Count             0          100      100      OK
C  Drive Power Cycle Count                   0          99       99       OK
C0 Power-Off Retract Count                   0          198      198      OK
C1 Emergency Retract Cycle Ct               0          200      200      OK
C2 HDA Temperature                          0          120      86       OK
C4 Relocation Event Count                   0          200      200      OK
C5 Current Pending Sector Count             0          200      200      OK
C6 Off-line Scan Uncorrectable Sector Count 0          100      253      OK
C7 Ultra ATA CRC Error Rate                  0          200      161      OK
C8 Multi-zone Error Rate                     0          100      253      OK
-----

```

## NVME SSD:

## HPT CLI&gt;query devices 1/E1/1

```
HPT CLI>query devices 1/E1/1
Mode Number:      Samsung SSD 960 EVO 250GB
Serial Number:    S3ESNX0J503825P
Firmware Version: 2B7QCXE7
Capacity(GB):    250.06          TotalFree(GB): 0
Status:          SINGLE          Flag:          LEGACY
PCIe Width:      x4              PCIe Speed:    Gen 3
Temperature(C): 40              Total Bytes Written: 147.46 TB
-----
                          NVMe S. M. A. R. T Attributes
Critical Warning          0x0
Composite Temperature (C) 40
Avaliable Spare          100%
Avaliable Spare Threshold 10%
Precentage Used          51%
Data Units Read          0xbb8601a
Data Units Written       0x12e01eb1
Host Read Commands       0xb6856f20
Host Write Commands      0x488c1810
Controller Busy Time     0x281d
Power Cycles             0x100e
Power On Hours           0x607
Unsafe Shutdowns        0xf36
Media and Data Integrity Errors 0x0
Number of Error Information Log Entries 0x4558
Warning Temperature Time 0x0
Critical Composite Temperature Time 0x0
Temperature Sensor 1 (C) 40
Temperature Sensor 2 (C) 58
Temperature Sensor 3 (C) 0
Temperature Sensor 4 (C) 0
Temperature Sensor 5 (C) 0
Temperature Sensor 6 (C) 0
Temperature Sensor 7 (C) 0
Temperature Sensor 8 (C) 0
-----
HPT CLI>_
```

**SAS DISK:****HPT CLI>query devices 1/16**

HPT CLI&gt;query devices 1/16

```

Mode Number:      TOSHIBA MG04SCA20EN
Serial Number:    65G0A006FP8C
Firmware Version: 0101
Capacity(GB):    2000.40      TotalFree(GB): 0
Status:          SINGLE      Flag:          LEGACY
Read Ahead:      enabled     Write Cache:   enabled
TCQ:             --          NCQ:           --

```

-----  
S. M. A. R. T Attributes

S. M. A. R. T Status OK. Device Temperature: 22 (Celsius)

```

-----
Exception Control and Warning:      Disabled.
Read errors corrected by ECC hardware method 0
Read errors corrected with possible delays 4
Total read errors                   0
Total read errors corrected          0
Total bytes read                     3449445376
Total uncorrected read errors        0
Write errors corrected without substantial delay 0
Write errors corrected with possible delays 0
Total write errors                   0
Total write errors corrected          0
Total bytes written                  3363366912
Total uncorrected write errors        0
Non medium errors                    4379
-----

```

HPT CLI&gt;\_

**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**

HPT CLI> query arrays

Typical output:

```
HPT CLI > query arrays
ID      Capacity<GB>  Type      Status    Block  Sector  Cache      Name
-----
1        1000.12    RAID1    REBUILDING  --    512B    NONE      RAID_1_0
```

**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

HPT CLI> query arrays 1

Typical output:

```
HPT CLI > query arrays 1
ID:          1          Name:          RAID_1_0
Type:        RAID1     Status:        REBUILDING
Capacity(GB): 1000.12  BlockSize:    --
SectorSize:  512B     CachePolicy:  NONE
Progress:    57.80%

ID          Capacity  MaxFree  Flag    Status  ModelNumber
-----
1/8        1000.12    0        NORMAL  CRITICAL  WDC WD10EARS-00Y5B1
1/7        1000.12    0        NORMAL  RAID      WDC WD10EARS-22Y5B1
```

## 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 striped RAID levels. 64KB is default.
- sector=** specifies the logical sector size, in B/KB, for the target array. This option is only valid for striped 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

- **HPT 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**.

- **HPT 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.

- **HPT 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

- **HPT CLI> delete 1/3**

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

- **HPT 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

```
HPT 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 or a legacy disk on the controller.

### Example

```
HPT 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

```
HPT 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

**HPT 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**

- **HPT CLI> rebuild 1 start**

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

- **HPT 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**

- **HPT CLI> verify 1 start**

This command starts to verify the array “1”.

- **HPT 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**

- **HPT 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

```
HPT CLI> rescan
```

## Lscard Commands

The lscard command is used to list multi RAID controllers.

### Syntax

```
lscard
```

### Example

```
HPT CLI> lscard
```

Typical output:

```
HPT CLI > lscard
CARD_ID      NAME                                     ACTIVED
-----
0            Controller(1): RR272x_1x                Inactive
1            Controller(2): RR4520                    Active
```

## Switch Commands

The switch command is used to switch active card in multi RAID controllers.

### Syntax

```
switch {card_id}
```

### Example

```
HPT CLI> switch 0
```

Typical output:

```

HPT CLI > lscard
CARD_ID      NAME                                     ACTIUED
-----
0            Controller<1>: RR272x_1x                 Inactive
1            Controller<2>: RR4520                   Active
HPT CLI > switch 0

HPT CLI > lscard
CARD_ID      NAME                                     ACTIUED
-----
0            Controller<1>: RR272x_1x                 Active
1            Controller<2>: RR4520                   Inactive
HPT CLI >

```

## 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

HPT CLI> events

Typical output:

```

HPT CLI > events
1 Inf [11/21/2013 14:44:28]          Array 'RAID_1_0' initializing (background) started.

2 War [11/21/2013 14:44:28]          Plugging device detected.<'SEAGATE ST3146855SS-3LN5Y1G3' at Controller1-Channel6>

3 War [11/21/2013 14:44:24]          Plugging device detected.<'SEAGATE ST3146855SS-3LN5XKZG' at Controller1-Channel5>

4 War [11/21/2013 14:44:24]          Plugging device detected.<'SEAGATE ST3146855SS-3LN461FR' at Controller1-Channel7>

```

## Events clear

This command will clear all the logged events.

### Example

```
HPT CLI> events clear
```

## Events save {file\_name}

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

### Example

```
HPT CLI> events save j:/raidlog.txt
```

This command will save all the events to `j:/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

```
HPT CLI> mail recipient
```

Typical output:

```

HPT CLI > mail recipient
ID   Name      Mail Address      Notify Types
-----
1    RAID      test@somecompany.com  Information Warning Error

```

**Mail recipient add {recipient\_name} {mail\_address}**

**[Inf|War|Err]**

--- Add a not exist recipient

### Example

```
HPT 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](mailto:admin@somecompany.com) about all logged events.

**Mail recipient delete {recipient\_name}**

--- Delete an exist recipient.

### Example

```
HPT CLI> mail recipient delete Ferry
```

**mail recipient test {recipient\_name}**

--- Send a testing mail to specified recipient.

### Example

```
HPT CLI> mail recipient test RAID
```

**mail recipient set {recipient\_name} {Inf|War|Err}**

--- Set the notification type for a recipient.

### Example

```
HPT CLI> mail recipient set admin War Err
```

**mail server**

--- Print the SMTP server information

### Example

**HPT CLI> mail server**

```
HPT CLI>mail server
ServerAddress      Port  ssl  Status  Mail From      User Name
-----
secure.emailsrvr.com465  1    Enabled  yzang@highpoint-tech.comyzang@highpoint-tech.com
```

Typical output:

```
mail server set {server_address} {port} {ssl} {status}
{from_address}
[username] [password]
```

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

{server\_address} – SMTP server address

{port} – port, generally 25

{ssl} – used ssl, '1' for enable and port need 465, '0' for disable

{status} – status, 'e' for enable or 'd' for disable

{from\_address} – mail from address

{username} – username

{password} – the user's password

**Examples:**

```
HPT CLI> mail server set secure.emailsrvr.com 465 1 e name@somecompany.com
name@somecompany.com password
```

```
HPT CLI> mail server set mail.somecompany.com 25 0 e 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:

**HPT CLI> mail server set a smtp.somecompany.com**

--- Change the server address

**HPT CLI> mail server set p 25**

--- Change the port

**HPT CLI> mail server set s d**

--- Disable mail notification

**HPT 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 delete {task\_id}
- task enable {task\_id}
- task disable {task\_id}

### task

This command displays detailed information about all scheduled tasks.

### Example

**HPT CLI> task**



This command displays the current background tasks.

```
HPT 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

```
■ HPT CLI> task rebuild 1 name=test once start=10/8/2005 time=12:35:46
```

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

```
■ HPT CLI> task rebuild 4 name=myraid4 daily=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.

```
■ HPT CLI> task rebuild 3 name=myraid3 weekly=2 interval=3 start=2/8/2004
end=2/22/2008 time=13:49:58
```

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

```
■ HPT CLI> task rebuild 2 name=myraid2 monthly=3 interval=4 start=2/8/2004
end=2/8/2006 time=12:30:33
```

This command adds a task schedule named `myraid3` to rebuild the array “2” at 12:30:33 on the 3<sup>rd</sup> day of a month every 4 months from 2/8/2004 to 2/8/2006.

```
HPT 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 delete {task\_id}

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

### Example

```
HPT CLI> task delete 2
```

This command will delete the task "2".

### task enable {task\_id}

This command will enable a disabled task.

### Example

```
HPT 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

```
HPT 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:

```
HPT CLI > set
-----
                Show the system settable parameters.
-----
[AR] Auto Rebuild                Disable
[CE] Continue Rebuild On Error   Enable
[AA] Audible Alarm               Enable
[RP] Rebuild Priority             Medium
[SD] Spindown Idle Disk <minutes> Disable
[BP] Beeper                      Enable
-----
```

**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**

```
HPT CLI> set RP=50
```

**set AR={y|n}**

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

**Example**

```
HPT CLI> set AR=y
```

**set AA={y|n}**

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

**Example**

```
HPT CLI> set AA=y
```

**set SS={y|n}**

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

**Example**

```
HPT CLI> set SS=y
```

**set DS={seconds(1-4)}**

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

**Example**

```
HPT CLI> set DS=2
```

**set CE={y|n}**

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

**Example**

```
HPT CLI> set CE=y
```

**set BP={y|n}**

- Set enable or disable beeper.

**Example**

```
HPT 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**

```
HPT CLI> set SD=10
```

**set IT={y|n}**

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

**Example**

```
HPT CLI> set IT=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

```
HPT CLI> set 1/2 tcq=y ra=y
```

```
HPT CLI> set 1/2 ncq=n
```

```
HPT CLI> set 1/2 wc=y
```

```
HPT CLI> set 1/2 ra=y
```

Please note that each command allows at most one argument.

### set PUIS= {y|n} disks={device id}

- set disk's PUIS feature

### Example:

```
HPT CLI> set PUIS=y disks= 1/1,1/2
```

```
HPT CLI> set PUIS=y disks=*
```

### 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

```
HPT CLI>set 1 name=my_arr
```

```
HPT CLI>set 1 init=y
```

```
HPT CLI>set 1 cp=none
```

Please note that each command allows at most one argument.

## Help Commands

### Syntax

- `help`
- `help {command}`

### help

- Show generic help about this utility.

### Example

```
HPT CLI> help
```

### help {command}

- Show help about a specific command.

### Example

```
HPT CLI> help create
```

## Exit Command

### Syntax

```
exit
```

Exit from the interactive mode and close to the window.

## Clear Commands

This command is used to clear screen.

## **Syntax**

clear/cls/cr

## Appendix A Revision History

<b>Version</b>	<b>Date</b>	<b>Updates</b>
1.0.0	2013/12/20	First release.
1.0.2	2014/08/08	Fix some text errors in file.
1.0.3	2015/01/07	Fix some example mistakes.
1.0.4	2015/01/08	Update Copyright.
1.0.5	2015/01/09	Update task command sample.
1.0.6	2015/01/12	Fix a date mistake.
1.0.7	2015/12/03	Update set command sample.