FnL 7000 PRO Series Monitor Guide

Version 1.02

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HighPoint FnL Monitor Software

Your Choice – Graphical or Text-only interfaces
HighPoint understands that one size doesn't fit all - when it comes to maintaining critical storage configurations, each customer has specific needs and preferences. We have developed both graphical and text-based management interfaces for the Controllers:

	P Series	**PA Series**	**PB Series**
SRD Series			
SRD7101	√		√
SRD7104	√		√
SRD7204	√		
SRD7140	√		√
SRD7202	√		
SRD7502	√		
SRD7505	√		
SRD7540	√	√	
CRD Series			
CRD7104			√
CRD7505	√		
CRD7101			√
CRD7540	√	√	

To simplify installation and upgrade procedures both interfaces are packaged into a single download, and are available for each operating system platform.

Both management interfaces share universal layouts across all major operating systems, and can be administered locally or remotely via an internet connection. – if you are comfortable with the Windows release, you will have no problem managing NVMe AIC RAID Drive configurations installed for a Linux/Mac distribution.

The Web FnL Monitor Interface (**WebGUI**), is a simple, and intuitive web-based management tool available for Windows/ Linux/ Mac operating systems. It is an ideal interface for customers unfamiliar with RAID technology. The Wizard-like Quick Configuration menu allows even the most novice user to get everything up and running with a few simple clicks. Experienced users can fine tune configurations for specific applications using the Advanced Options menu.

The **CLI** (command line interface) is a powerful, text-only management interface designed for advanced users and professional administrators. The universal command lines work with any platform, and are shared across our entire product line. Comprehensive user guides are available for the CLI, and are included with the most recent product updates available from the SRD7101P&PB /7202P /7204P /7104P&PB /7140P&PB /7502P /7505P /7540P&PA、CRD7104PB/ 7505P/ 7101PB/ 7540P Software Updates webpage.

Using the HighPoint FnL Monitor (WebGUI) Software

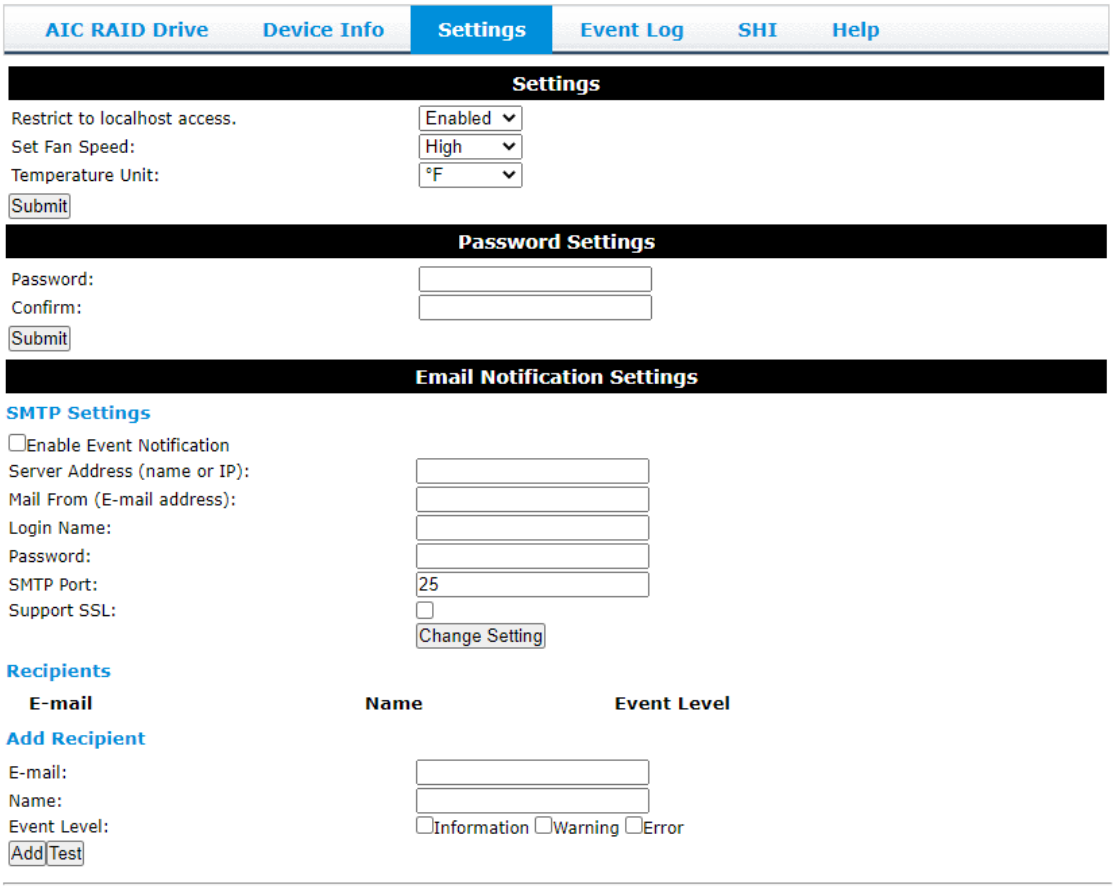
This guide provides an overview of the Web-FnL Monitor graphical user interface, also known as the WebGUI. The WebGUI is an intuitive, yet comprehensive management tool designed for users of any experience level.

Starting the WebGUI

How to login WebGUI in Windows/Mac

Double click the Desktop ICON to start the software using the system's default web browser. It will automatically log-in to the WebGUI.

The password can be set after the first log-in. To change the password, select **Settings>Password Settings** from the menu bar (refer to: Password Setting).



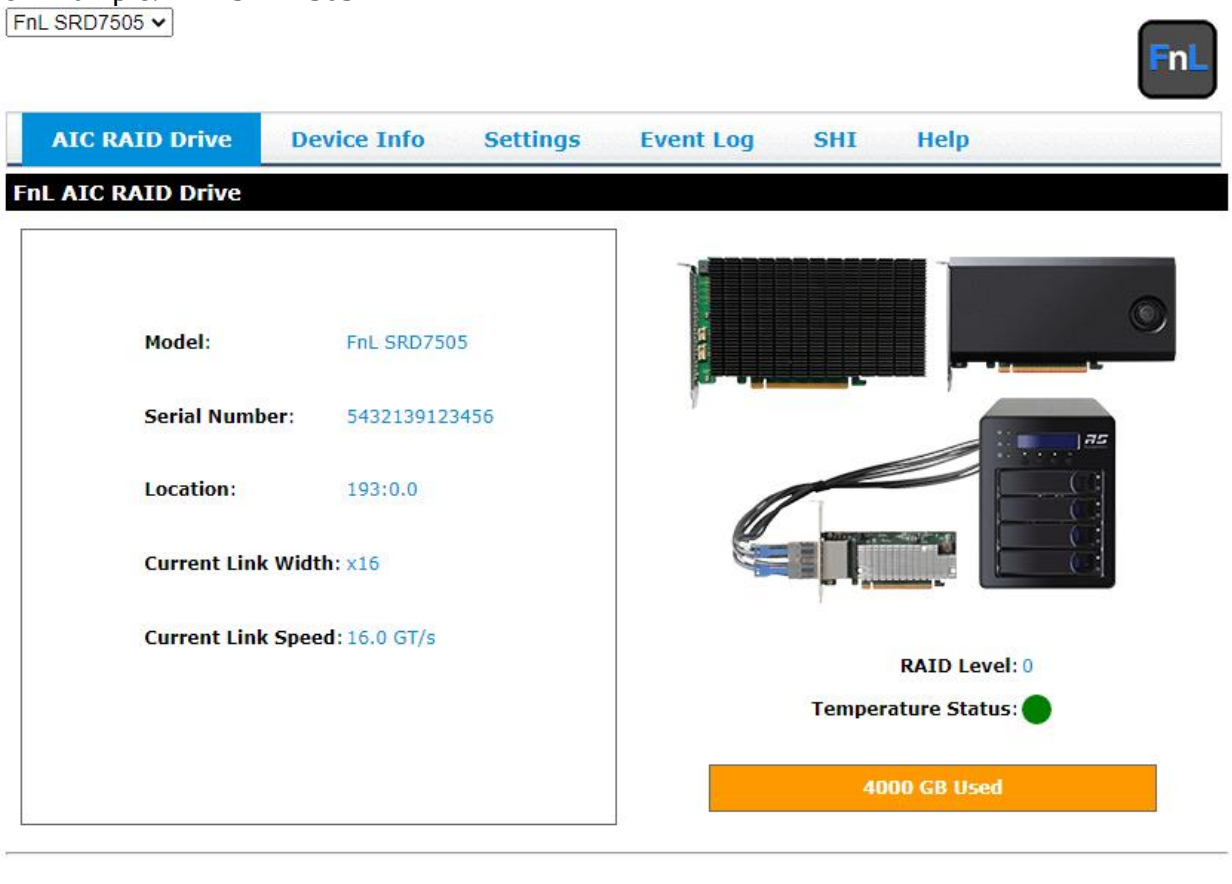
How to login WebGUI in Linux

Enter http://127.0.0.1:7406 into the **browser** to log into the **WebGUI, 7**406 is the WebGUI's Port Number, which can be modified.

Verify the Controller Status

01. The **AIC RAID Drive** Tab will display the overall status of the controller.
02. RAID array and NVMe SSDs are listed under **Device Info**.

For Example: FnL SRD7505

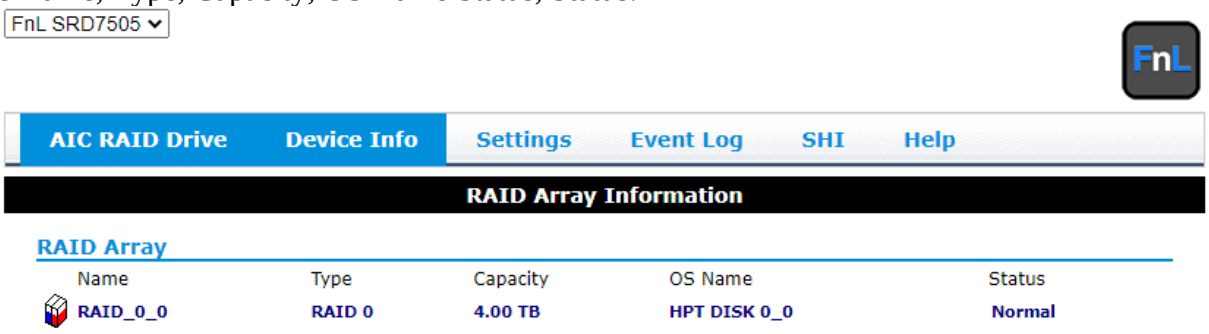


Obtaining Device Information

The Device Info tab is the default page after clicking the tab of the AIC RAID Drive. This page contains information about your RAID arrays and NVMe SSDs.

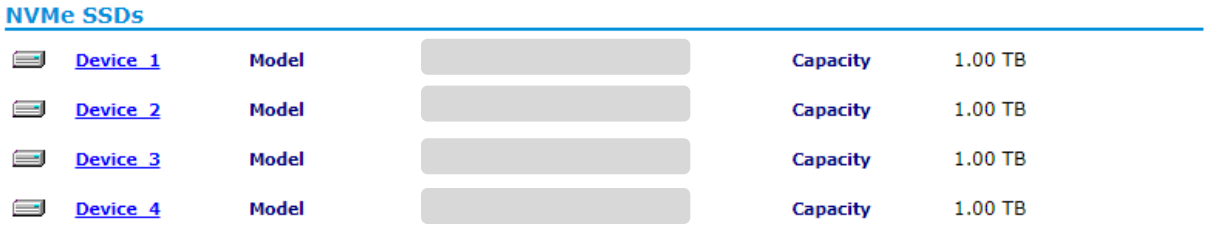
RAID Array

Once an array has been created, the RAID content contained in the board is provided here, such as Name, Type, Capacity, OS Name Status, Status.

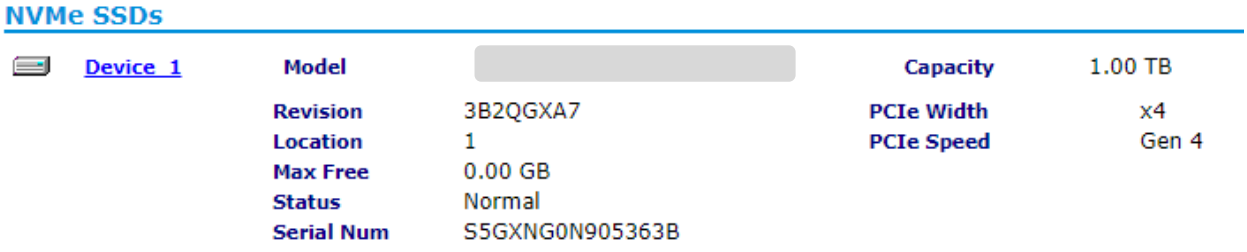


NVMe SSDs

According to the RAID above, here are the NVMe SSD members that make up the RAID. It includes NVMe SSDs' model and capacity.



Click Device 1, it shows the NVMe SSD's details.

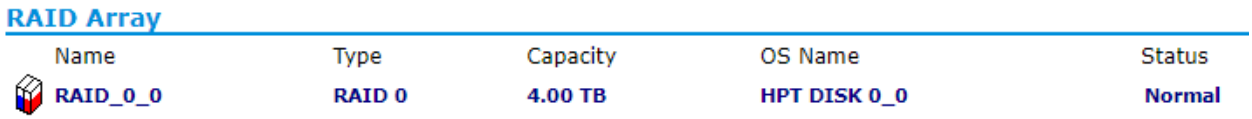


- **Model** — model number of the drive connected
- **Revision —** revised version of drive
- **Location** — which controller and port the drive is in
- **Max Free** — total capacity that is not configured
- **Status —** Current state of drive

- **Serial Num —** Serial number of the drive
- **Capacity** — total capacity of the drive
- **PCIe Width —** PCIe width occupied by the drive
- **PCIe Speed —** Rate of current bandwidth

Array Information: Normal Status

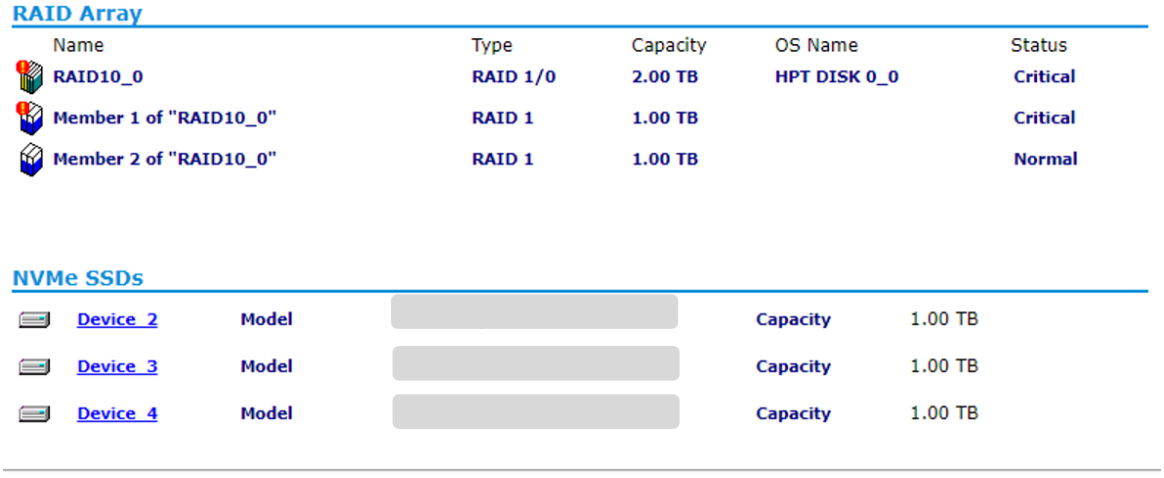
RAID status – the RAID array's status may change depending on the status of the disks.



Arrays and NVMe SSDs with the **Normal** status are healthy and functioning properly

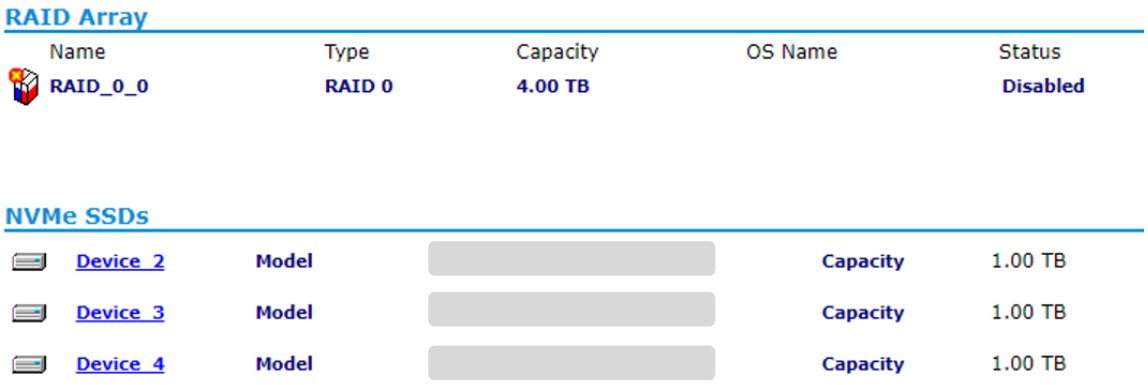
Array Information: Critical Status

Arrays in the **Critical** status can be accessed and utilized, but are no longer fault tolerant.



Array Information: Disabled Status

Disk Status – if any disks were added or removed, or if a disk is no longer responding, the status will change.



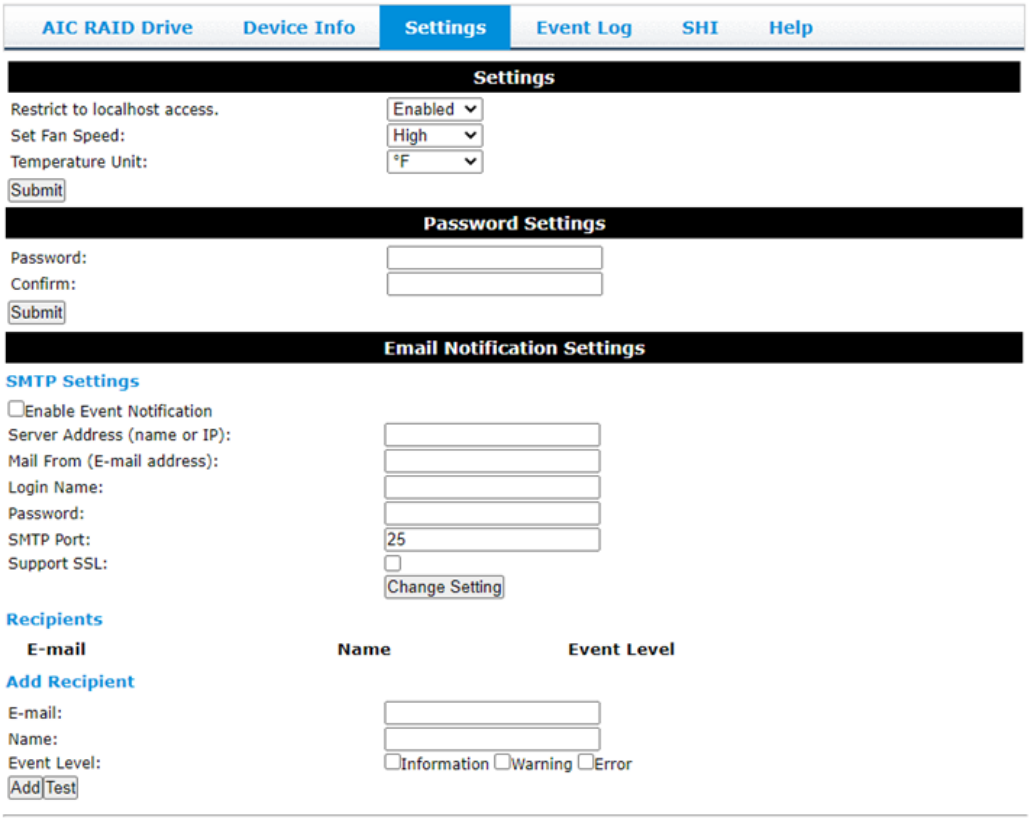
An array with the **Disabled** status means that the RAID level does not have enough disks to function.

- Your data will be inaccessible
- Rebuilding will not trigger, since the RAID array does not have enough parity data to rebuild.

Settings

Using this tab, you can change the following:

- Settings
- Password Settings
- Email Notification Settings



Settings

- Restrict to localhost access
- Set Fan Speed
- Temperature Unit

Note：Fan speed function support products：SRD7101A / 7202 / 7505 / 7140 / 7540 / 7502 CRD7104F / CRD7505，This function is only supported by Windows and Mac, not Linux

Restrict to localhost access (default: Enabled)

Remote access to the controller will be restricted when enabled; other users in your network will be unable to remotely log in to the HRM.

Set Fan Speed (default: High)
The default fan speed is High， you can adjust the speed of the fan，
There are 5 levels [Auto, Off, Low, Medium and High]

Temperature Unit (default: °F)
The default temperature unit is Fahrenheit, you can change it to Celsius.

Password Settings

Setting your HRM password

Under Password Setting, type your new password, confirm it, then click **Submit**.

Recovering your HRM password

If you forget your password, you can delete the file hptuser.dat. Then, restart the computer and open the WEBGUI to set a new password.

For **Windows** Users:

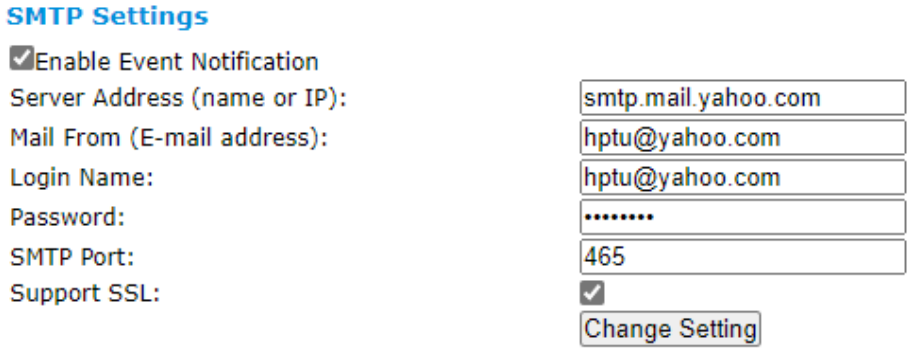
1. Open **File Explorer**
2. Navigate to **C:/Windows/**
3. Delete **hptuser**.**dat**
4. Reboot

Email Notification Settings

- SMTP Settings
- Adding Recipients

You can instruct the controller to send an email out to the recipients of your choosing when certain events trigger (for more information, see Event Log Tab).

SMTP settings



To set up email alerts:

Using a **Yahoo Mail** account as an example:

01. Check the **Enable Event Notification** box.
02. Enter the ISP server address name or SMTP name

    For example: **smtp.mail.yahoo.com**
03. Type in the email address of the **sender** (email account that is going to **send** the alert)

    For example: **hptu@yahoo.com**
04. Type in the account name and password of the sender
05. Type in the SMTP port (default: **25**)
06. Check the **support SSL** box if SSL is supported by your ISP (note the port value will change to **465**).

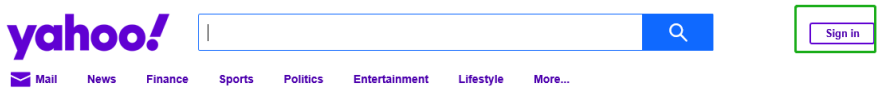
Email Precautions

If you want to receive notification mail using a Webmail account, you may need to modify the mailbox's permissions. The following example is for a Yahoo webmail account.

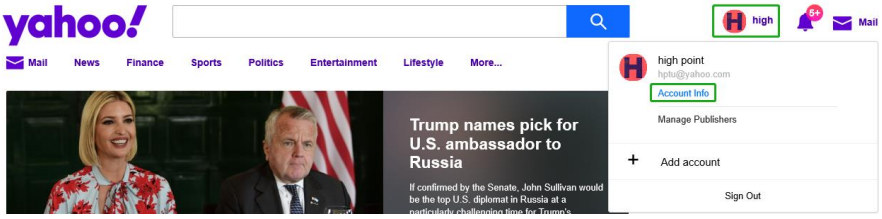
Yahoo Setting:
To change permission settings, please refer to the following link:
https://help.yahoo.com/kb/account/SLN27791.html?impressions=true

Procedure:

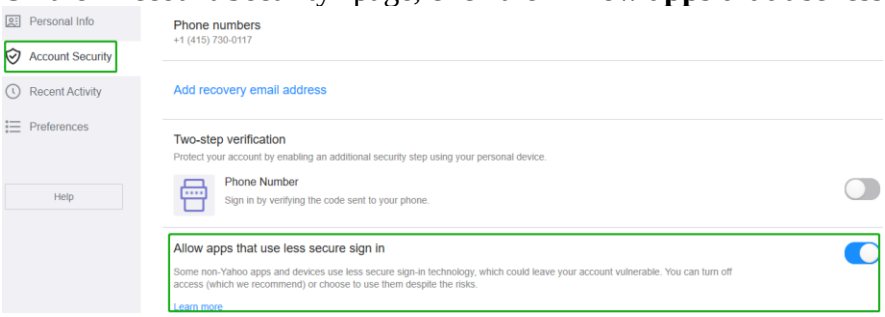
01. Log in to yahoo email; click "**Sign in**" to log in:
    https://www.yahoo.com



02. After a successful login, click "**Account Info**" under the user name：



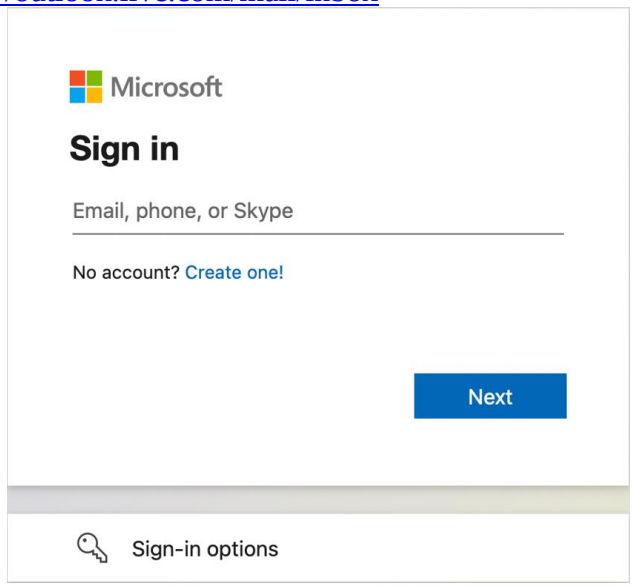
03. Go to the "**Account Info**" page, click "**Account Security**".
On the "Account Security" page, click the "**Allow apps that use less secure sign in**" button:



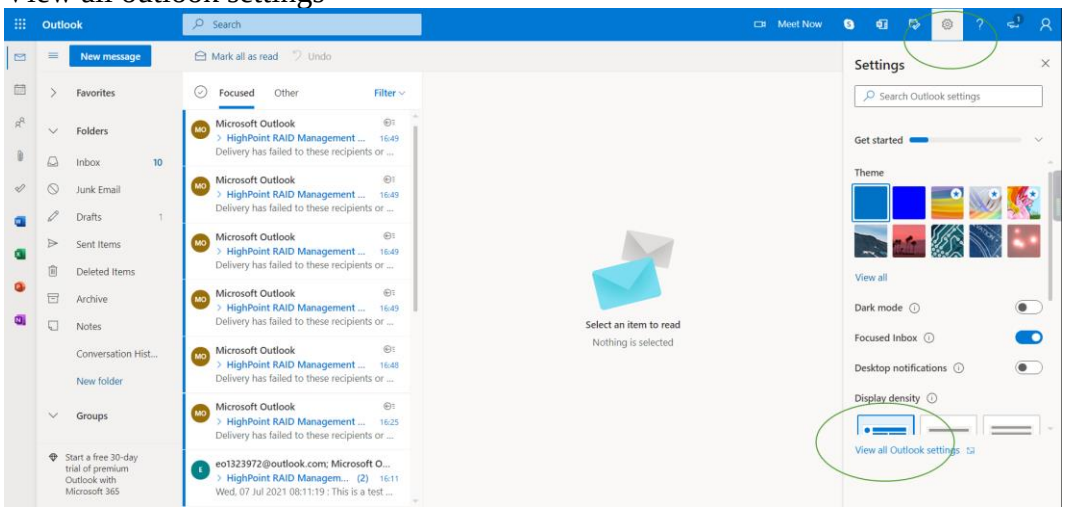
Note: If you are having trouble configuring notification for your Email account, please contact our Technical Support Department.

Outlook Setting：

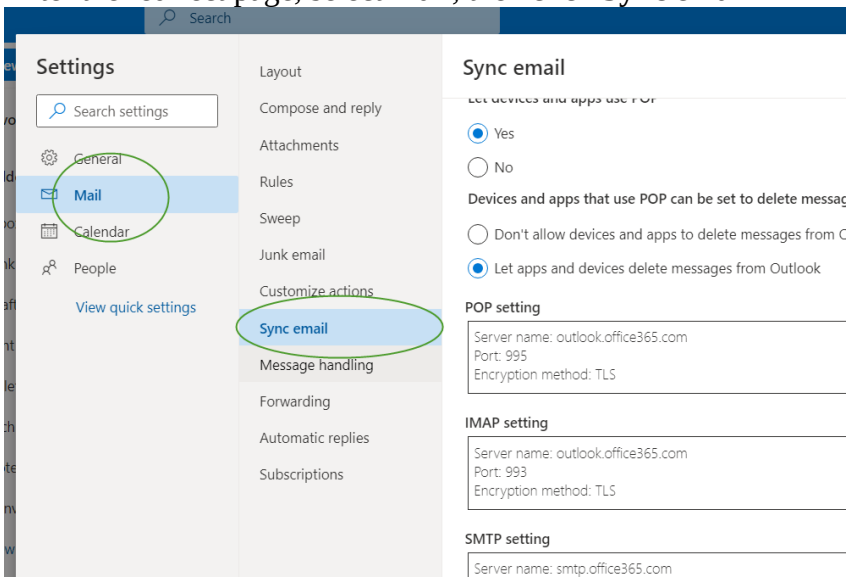
01. Sign in to mail and set it up, Login email address link:
https://outlook.live.com/mail/inbox



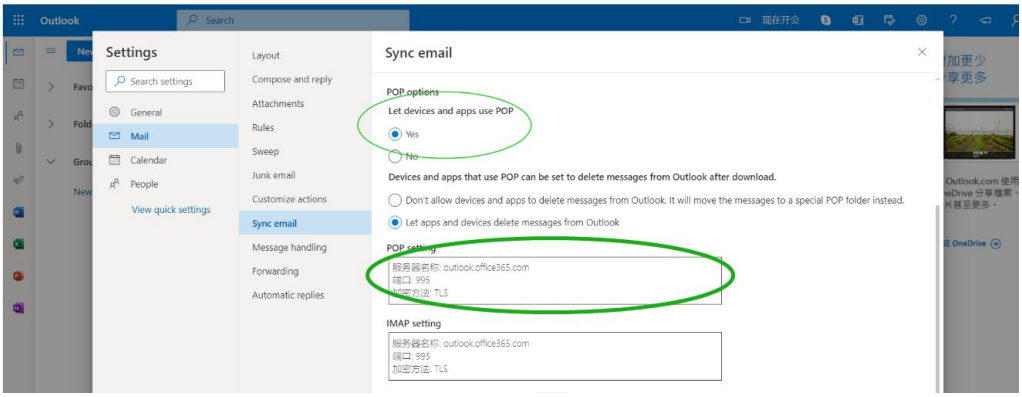
02. Click Settings in the upper right corner, select the lower left corner:
View all outlook settings



03. Enter the redirect page, select **mail**, then click **Sync email**



04. Let devices and apps use pop select '**yes**'
05. choose 'Let app and devices delete messages from Outlook'
Note: The screenshot below can be used as a reference. The POP setting is the mailbox server.



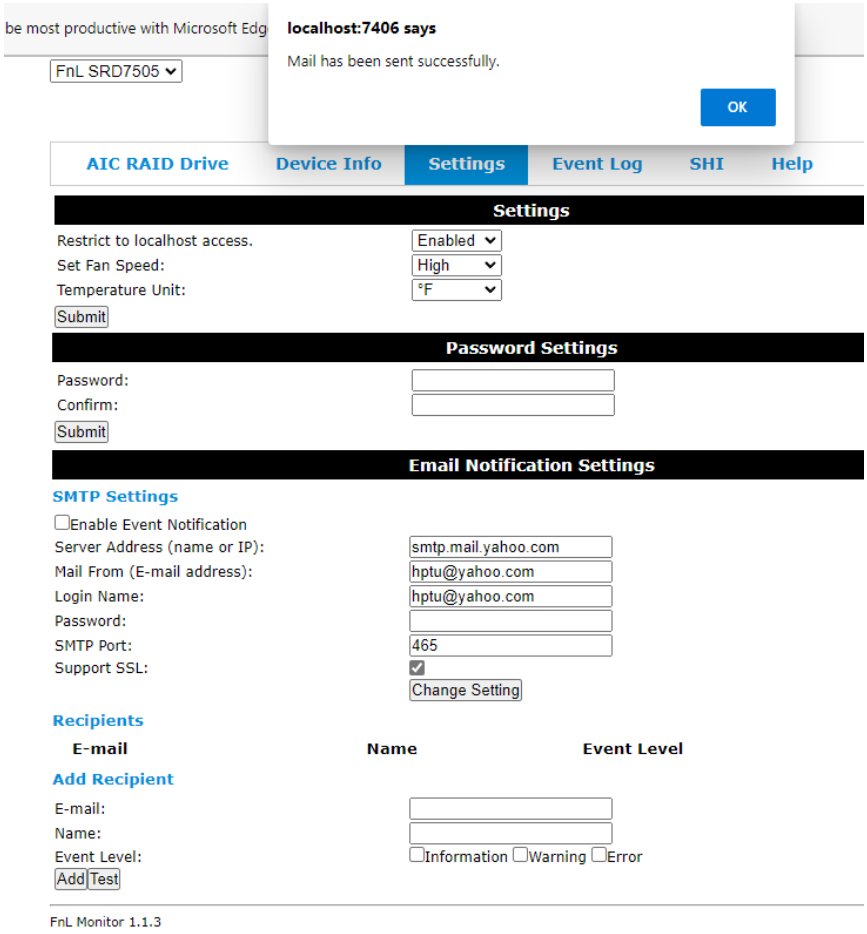
Note: If you are having trouble configuring notification for your Email account, please contact our Technical Support Department

How to Add Recipients

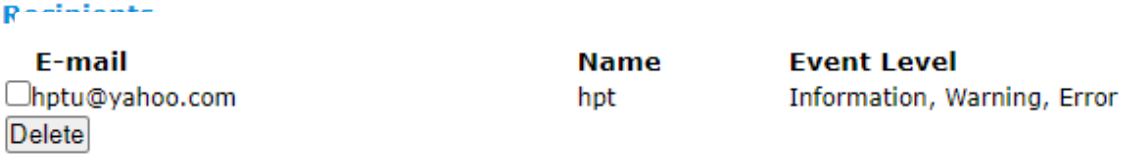
You can add multiple email addresses as receivers of a notice.

01. Type the email of the recipient in the **E-mail** text box
02. Type the name of the recipient in the Name text box
03. Set which type(s) of events will trigger an email using the respective Event Level check boxes.

04. (**Optional**) Click **test** to confirm the settings are correct by sending out a test email.



05. Click **add** to add the recipient to 'recipient list'
06. The added recipient will display in under **Recipients**



The email will include the output recorded in the event log.

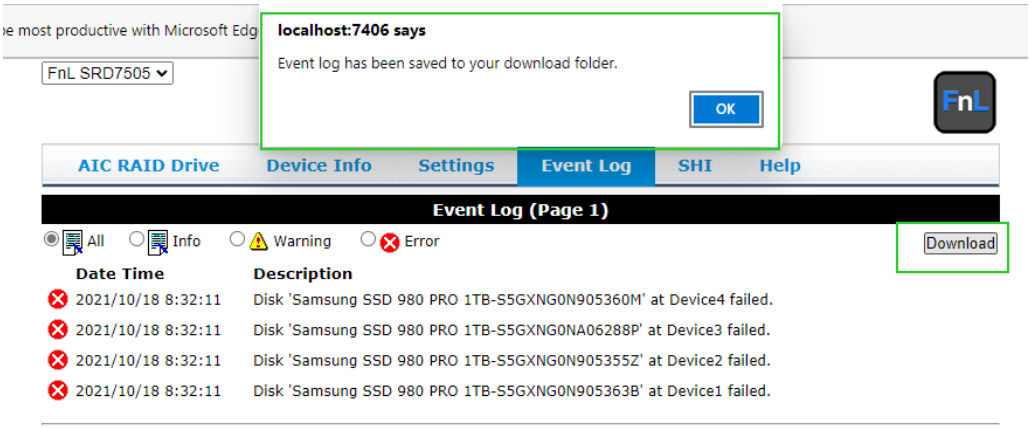
Event Log

In the Event Log tab, you can see log entries associated with the HighPoint device. The event log provides useful information when troubleshooting your set up.

In the event tab, there are four options available:

- Prev – View previous log page
- Next – View next log page
- Type of events – All, Info, Warning, Error
- Download – Save the log file on your computer

The following image shows a downloaded page reminder.



SHI (Storage Health Inspector)

SHI outputs information collected using SMART (Self-Monitoring Analysis and Reporting Technology) Hard Drive Technology. The data provided on this tab helps you to anticipate any disk failures based on a variety of monitored hard disk properties.

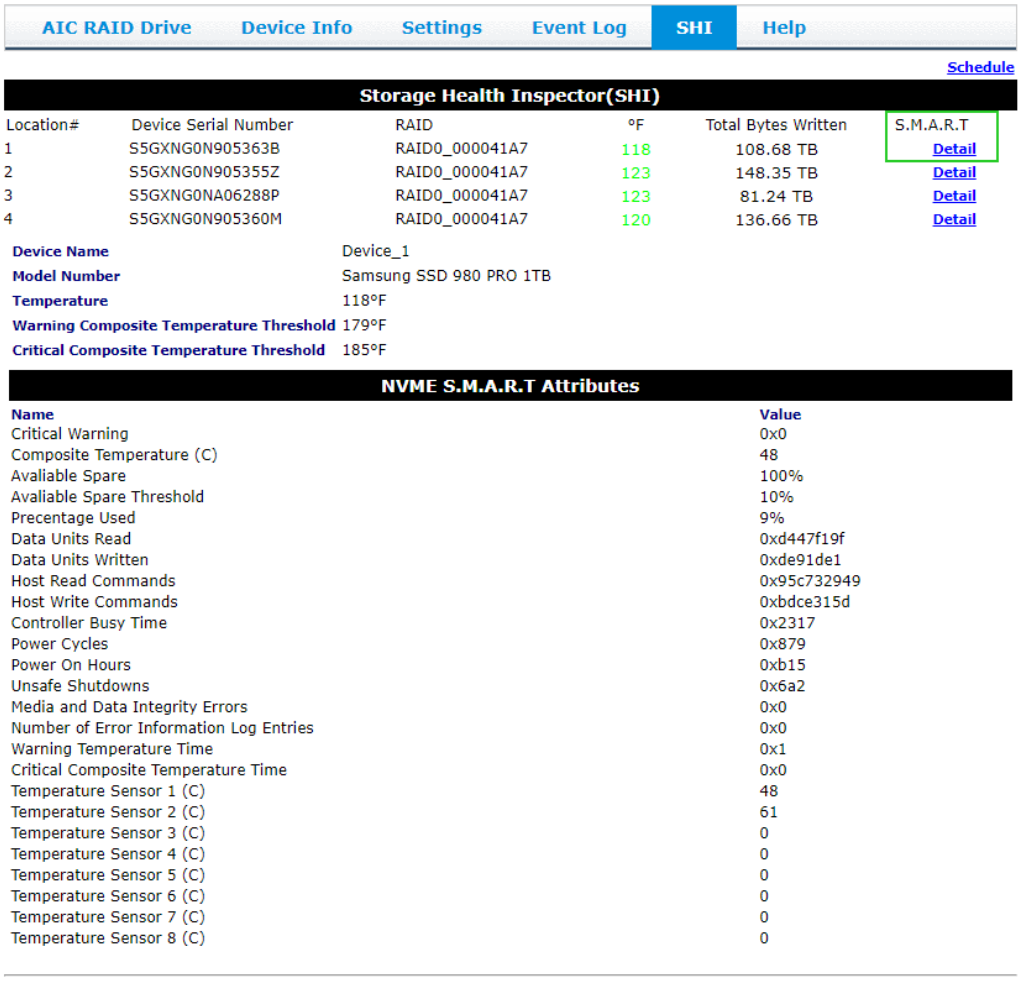
In the event tab, there are two options available:

- S.M.A.R.T Details
- Schedule a task (Task list and Health Inspector Scheduler)

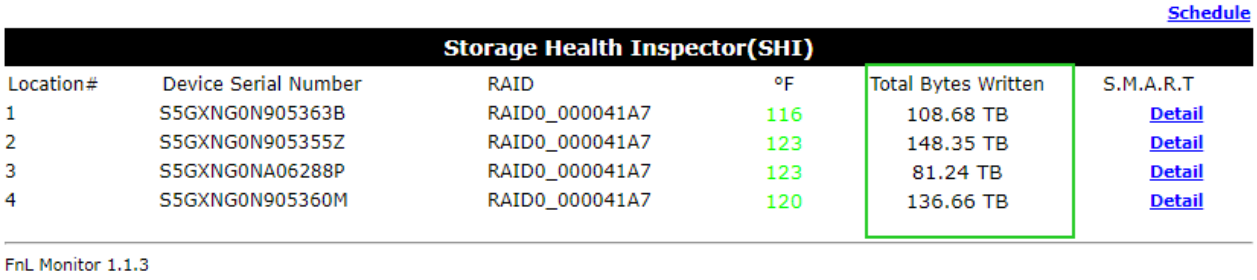
How to Enable SMART Monitoring

To access the SMART attributes of an individual disk:

01. Log in to the WebGUI
02. Select the proper controller using the drop-down menu on the top left
03. Click the **SHI** tab
04. Click **Detail** on the desired disk:



The **TBW** (Total Bytes Written) information can be used to monitor the lifespan of the NVMe drives.

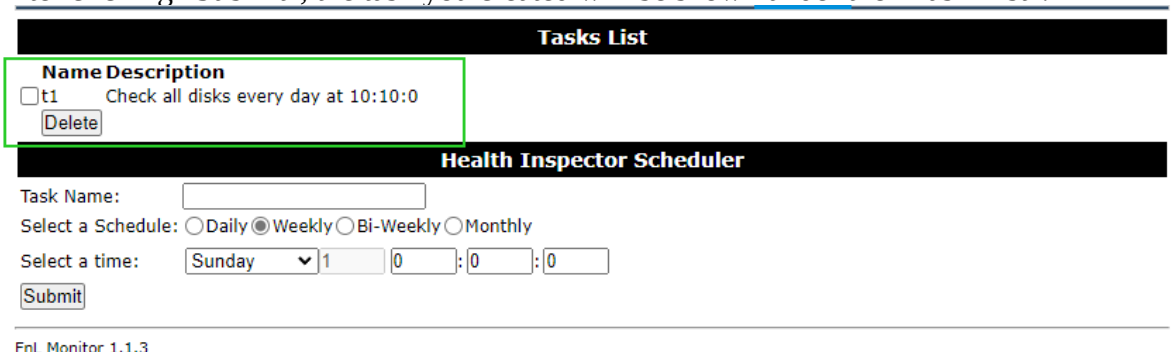


How to Use the Health Inspector Scheduler

The **Health Inspector Scheduler** (**HIS**) enables you to schedule disk/array checkups to ensure disks/array are functioning optimally.
If you want to check the disk status on a daily, weekly, or monthly basis, you can enable this using the **HIS** function.

For example:

01. Set the 'Task Name' to 't1', select the schedule as 'Daily', and set the time to 10:10:0
02. After clicking "Submit", the task you created will be shown under the "Task List".

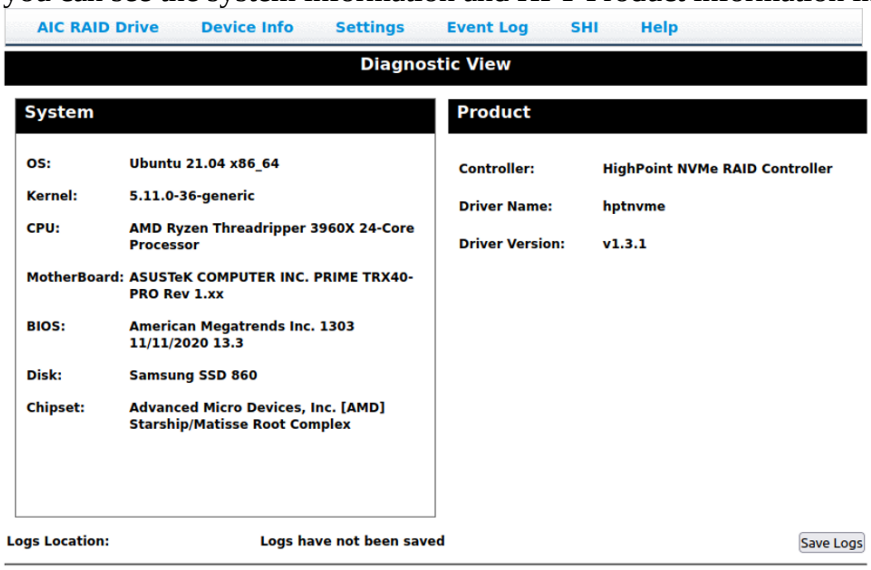


Log collecting

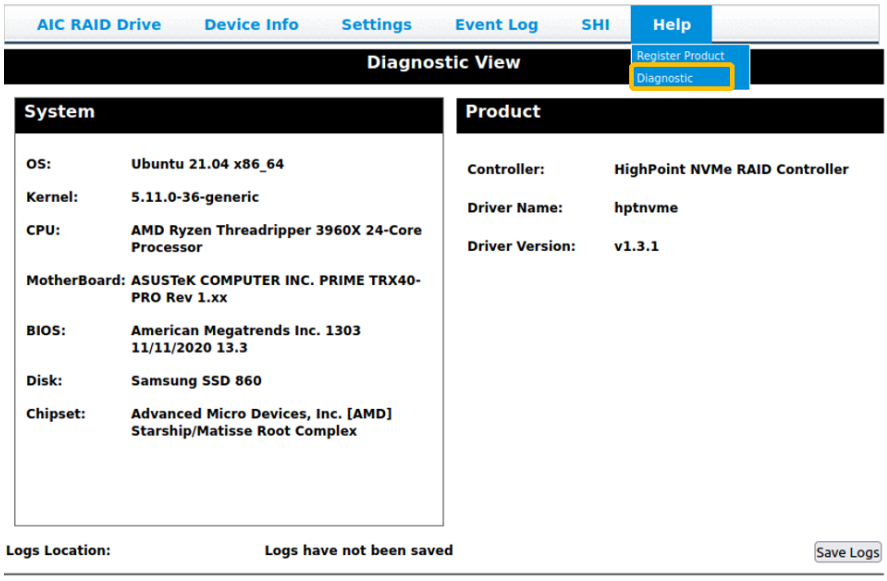
Note: This function is only supported by Linux.

Diagnostic view

1. Start the WEBGUI, Diagnostic view will appear when Driver or HPT card does not effect, you can see the system information and HPT Product information in this view.

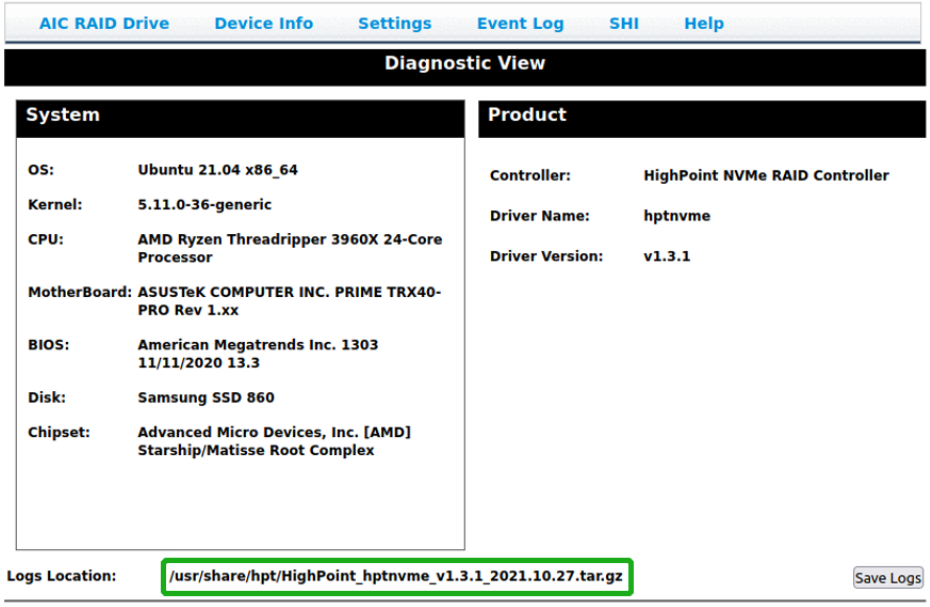


2. You can also click '**Help**'→'**Diagnostic**' to enter the diagnostic view.



Log saving

Enter the Diagnostic view, click '**Save Logs**', your log information will be collected. '**Logs Location**' will display the location of the saving path.



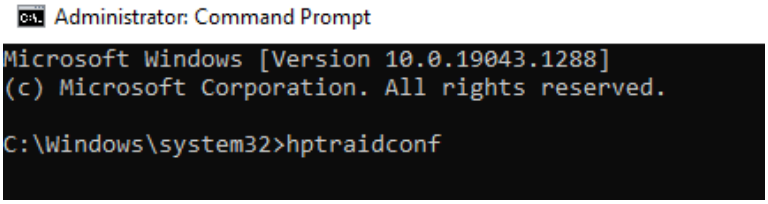
If you have problems in use, please submit the log to our online service (https://www.highpoint-tech.com/websupport/).

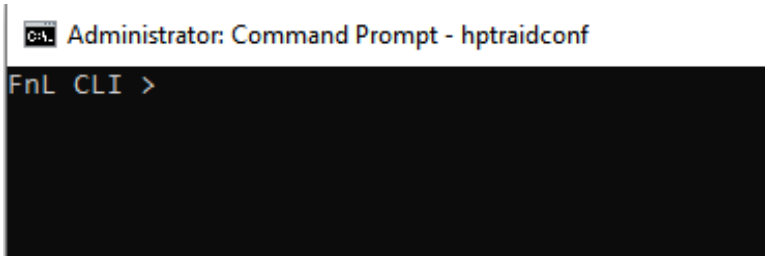
Using the HighPoint Command Line Interface (CLI)

Note: CLI function only supports Windows and Linux, not Mac

How to use the CLI in Windows

Method1: Run '**Command Prompt'** as **Administrator** and enter **hptraidconf** and press Enter

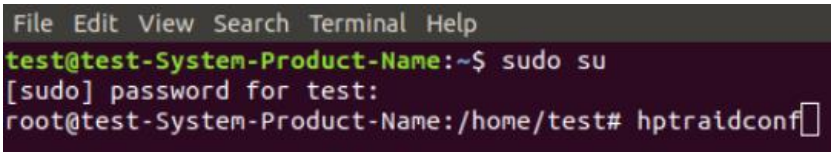




Method2：Click '**Start**' to find the **FnL Monitor** folder, and click on **hptraidconf**

How to use the CLI in a Linux system

Open '**Terminal**' and enter root permissions, then execute the command '**hptraidconf**' to enter the CLI



CLI Command Reference

This chapter discusses the various HighPoint CLI commands: query, switch, events, mail, task, set, clear, help and exit.
The following example is for a Windows system:

Query Commands

Syntax：

query drives
query devices | query devices {devices_id} |
query arrays | query arrays {array_id}

query drives

This command will provide the status of the drives. It provides a list of Vender ID, Product ID, SN, Number of PHY, Status. Each drive's status will be listed as one of the following: ACTIVE, INACTIVE.

Example:

FnL CLI> query drives

```
FnL CLI > query drives
ID   VendorID       ProductID      SN                 NumberOfPYH    Status
------------------------------------------------------------------------------
1    HPT            FnL SRD7505                       4              ACTIVE
2    HPT            FnL SRD7505    5432139123456      4              INACTIVE
```

Attributes:

Vender ID:

A vendor ID is an abbreviation for the company name.

Product ID：

Product ID refers to the name of the drive that is connected to the motherboard； E.g. FnL SRD7505 represents the drive is 7505 product.

SN：

Serial Number is the product serial number, it is used to protect the user's genuine rights and interests, enjoy legitimate services.

Number of PHY：

The number it displays represents the number of disks that are accessed and recognized.

Status：

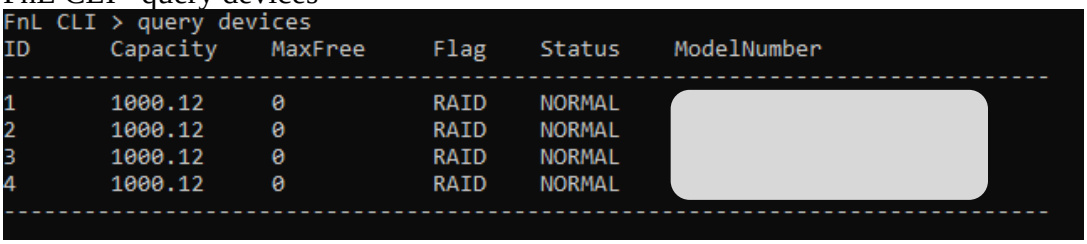
If you pick up a single drive, you will see the status is ACTIVE, if you pick up a double drives, you will see the two status are ACTIVE and INACTIVE;

query devices

This command will provide the status of each physical device hosted by the controller. It provides a list of device ID’s, capacity, maxfrree, flag, status, and model number. Each device’s flag will be listed as one of the following: SINGLE, RAID. Each device’s status will be listed as one of the following: NORMAL, LEGACY.

Example:

FnL CLI> query devices



Attributes:

ID:

A device ID is a string used to represent a 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.

Flag:

Shows whether the disk is **SINGLE** or has been created **RAID**.

Status:

This will display the disk status (1 of 2 possible states):

- NORMAL: The disk's status is normal.
- RAID: The disk is a member of a RAID array.

Model Number:

The disk's model number.

query devices {device_id}

This command presents information for the specified device.

Attributes:

Mode Number:
The disk's model number.

Serial Number:
The disk's Serial number.

Firmware Version:
The disk's Firmware version.

Capacity：
The disk's capacity.

Status：
The disk's status.

Flag:
Shows whether the disk is **SINGLE** or has been created **RAID**.

PCIe Width：
The disk's PCIe width.

PCIe Speed:
The disk's PCIe speed.

Temperature：
The disk's temperature and setting temperature threshold.

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

Example:
FnL CLI> query devices 1

```
FnL CLI > query devices 1
Mode Number:
Serial Number:      S5GXNG0N905363B
Firmware Version:   3B2QGXA7
Capacity(GB):   1000.12             TotalFree(GB):  0
Status:         RAID                Flag:           NORMAL
PCIe Width:     x4                  PCIe Speed:     Gen 4
Temperature (F):                                95
Warning Composite Temperature Threshold (F):    179
Critical Composite Temperature Threshold (F):   185
--------------------------------------------------------------------------------
                            S.M.A.R.T Attributes
S.M.A.R.T Status OK.
Name                                  Value
--------------------------------------------------------------------------------
Critical Warning                    : 0x0
Composite Temperature (C)           : 35
Available Spare                     : 100%
Available Spare Threshold           : 10%
Percentage Used                     : 9%
Data Units Read                     : 0xd447f19f
Data Units Written                  : 0xde91de1
Host Read Commands                  : 0x95c73299e
Host Write Commands                 : 0xbdce315d
Controller Busy Time                : 0x2317
Power Cycles                        : 0x87f
Power On Hours                      : 0xb16
Unsafe Shutdowns                    : 0x6a8
Media and Data Integrity Errors     : 0x0
Number of Error Information Log Entries   : 0x0
Warning Temperature Time            : 0x1
Critical Composite Temperature Time       : 0x0
Temperature Sensor 1 (C)            : 35
Temperature Sensor 2 (C)            : 43
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
--------------------------------------------------------------------------------
```

query arrays

This command lists information for all configured arrays. It will list each array's ID, capacity, type, status, blocks, sector, cache and name.

Attributes:

Status:

- NORMAL: Array status is normal
- CRITICAL: Array is in a degraded status (no data redundancy)
- DISABLED: Array status is disabled, and the RAID maybe be broken.

Block:

Array Block size.

Sector:

Bytes per sector.

Cache:

Array Cache Policy
NONE: No Cache policy enabled

Example:

FnL CLI> query arrays

```
FnL CLI > query arrays
ID    Capacity(GB)    Type        Status    Block  Sector   Cache          Name
-------------------------------------------------------------------------------
1          4000.49    RAID0       NORMAL     512k    512B    NONE  RAID0_000041A7
```

```
FnL CLI > query arrays
ID    Capacity(GB)    Type        Status    Block  Sector   Cache          Name
-------------------------------------------------------------------------------
1          4000.49    RAID0     DISABLED     512k    512B    NONE  RAID0_000041A7

FnL CLI >
```

query arrays {arrays_id}

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

Example:

FnL CLI> query arrays 1

```
FnL CLI > query arrays 1
ID:             1                   Name:           RAID_0_0
Type:           RAID0               Status:         NORMAL
Capacity(GB):   4000.49             BlockSize:      512k
SectorSize:     512B                CachePolicy:    NONE
Progress:       --
ID      Capacity    MaxFree     Flag    Status    ModelNumber
-------------------------------------------------------------------------------
1       1000.12     0           NORMAL  RAID
2       1000.12     0           NORMAL  RAID
3       1000.12     0           NORMAL  RAID
4       1000.12     0           NORMAL  RAID
-------------------------------------------------------------------------------
```

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

FnL CLI> events

```
FnL CLI > events
1  Inf  [10/19/2021 10:10:20]          Scheduled task (t1) started.

2  Err  [10/18/2021 08:32:11]          Disk 'Samsung SSD 980 PRO 1TB-S5GXNG0N905360M' at Device4 failed.

3  Err  [10/18/2021 08:32:11]          Disk 'Samsung SSD 980 PRO 1TB-S5GXNG0NA06288P' at Device3 failed.

4  Err  [10/18/2021 08:32:11]          Disk 'Samsung SSD 980 PRO 1TB-S5GXNG0N905355Z' at Device2 failed.

5  Err  [10/18/2021 08:32:11]          Disk 'Samsung SSD 980 PRO 1TB-S5GXNG0N905363B' at Device1 failed.
```

events save {file_name}

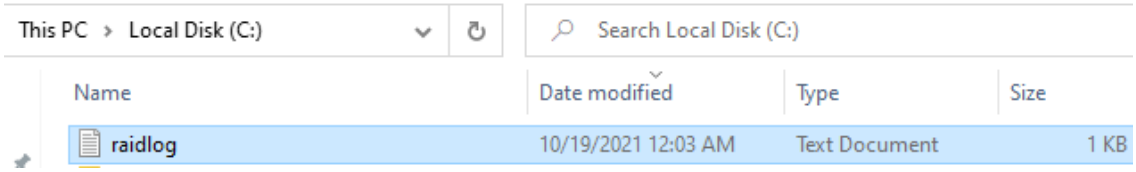
This command will save all the logged events as a plain text file.

Example

HPT CLI> events save C:/raidlog.txt

```
FnL CLI > events save C:/raidlog.txt
The event log has been saved to C:/raidlog.txt.
```

This command will save all the events to C:/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 of the mail recipients

Example

FnL CLI> mail recipient

```
FnL CLI > mail recipient
ID   Name      Mail  Address                          Notify Types
-------------------------------------------------------------------------
1    hpt       luchaonan@highpoint-tech.com           Information Warning Error
```

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

Add a new recipient

Example

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

```
FnL CLI > mail recipient add high yzhang@highpoint-tech.com yzhang@highpoint-tech.com

FnL CLI > mail recipient
ID   Name      Mail  Address                          Notify Types
-------------------------------------------------------------------------
1    hpt       luchaonan@highpoint-tech.com           Information Warning Error
2    high      yzhang@highpoint-tech.com              Information Warning Error
```

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

mail recipient delete {recipient_name}

--- Delete an existing recipient.

Example

FnL CLI> mail recipient delete hpt

```
FnL CLI > mail recipient delete hpt

FnL CLI > mail recipient
ID   Name      Mail  Address                         Notify Types
-------------------------------------------------------------------------
1    high      yzhang@highpoint-tech.com             Information Warning Error
```

mail recipient test {recipient_name}

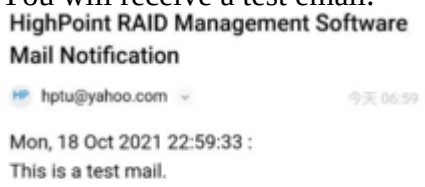
Send a test email to a specified recipient.

Example

FnL CLI> mail recipient test hpt

```
FnL CLI > mail recipient test high
```

You will receive a test email.



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

Set the notification type for a recipient.

Example

FnL CLI> mail recipient set admin Inf War Err

```
FnL CLI > mail recipient set admin Inf War Err
ID   Name      Mail  Address                          Notify Types
-------------------------------------------------------------------------------
1    high      yzhang@highpoint-tech.com              Information Warning Error
```

mail server

--- display the SMTP server information

Example

FnL CLI> mail server

```
FnL CLI > mail server
ServerAddress       Port   ssl  Status   Mail From          User Name
-------------------------------------------------------------------------------
smtp.mail.yahoo.com 465    0    Enabled  yzhang@highpoint-tech.comyzhang@highpoint-tech.com
```

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} –mail username
{password} – the user’s password

Examples:

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

```
FnL CLI > mail server set secre.emailsrvr.com 465 1 e yzhang@highpoint.com yzhang@highpoint-tech.com

FnL CLI > mail server
ServerAddress       Port   ssl  Status   Mail From          User Name
-------------------------------------------------------------------------
secre.emailsrvr.com 465    1    Enabled  yzhang@highpoint.comyzhang@highpoint-tech.com
```

FnL CLI> mail server set mail.somecompany.com 25 0 e admin@somecompany.com password

```
FnL CLI > mail server set secre.emailsrvr.com 25 0 e yzhang@highpoint-tech.com yzhang@highpoint-tech.com

FnL CLI > mail server
ServerAddress       Port   ssl  Status   Mail From          User Name
-------------------------------------------------------------------------
secre.emailsrvr.com 25     0    Enabled  yzhang@highpoint-tech.comyzhang@highpoint-tech.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:

FnL CLI> mail server set a smtp.somecompany.com
--- Change the server address

```
FnL CLI > mail server sey a smtp.mail.yahoo.com
ServerAddress       Port   ssl  Status   Mail From          User Name
-------------------------------------------------------------------------
smtp.mail.yahoo.com 465    0    Enabled  yzhang@highpoint-tech.comyzhang@highpoint-tech.com
```

FnL CLI> mail server set p 465
--- Change the port

```
FnL CLI > mail server set p 465

FnL CLI > mail server
ServerAddress       Port   ssl  Status   Mail From          User Name
-------------------------------------------------------------------------
secre.emailsrvr.com 465    0    Enabled  yzhang@highpoint-tech.comyzhang@highpoint-tech.com
```

FnL CLI> mail server set s d

--- Disable mail notification

```
FnL CLI > mail server set s d

FnL CLI > mail server
ServerAddress       Port   ssl  Status   Mail From          User Name
-------------------------------------------------------------------------------
secre.emailsrvr.com 465    0    Disabled yzhang@highpoint-tech.comyzhang@highpoint-tech.com
```

FnL CLI> mail server set s e
--- Enable mail notification

```
FnL CLI > mail server set s e

FnL CLI > mail server
ServerAddress       Port   ssl  Status   Mail From          User Name
-------------------------------------------------------------------------------
secre.emailsrvr.com 465    0    Enabled  yzhang@highpoint-tech.comyzhang@highpoint-tech.com
```

Task Commands

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

Syntax

task

task {smart} {name=} {once|daily|monthly|weekly|biweekly}={day} time=hh:mm:ss
task delete {task_id}

task

This command displays detailed information about all scheduled tasks.

Example

FnL CLI> task
This command displays the current background tasks.

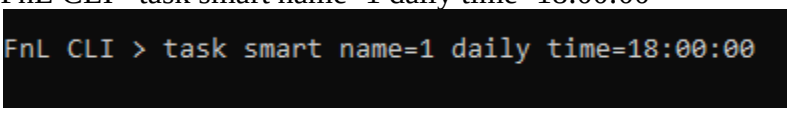
```
FnL CLI > task
ID   Name               S-F    Description
-------------------------------------------------------------------------------
```

task {smart} {name=} {daily|monthly|weekly|biweekly}={day} time=hh:mm:ss

This command set a scheduled task.

Example

FnL CLI> task smart name=1 daily time=18:00:00

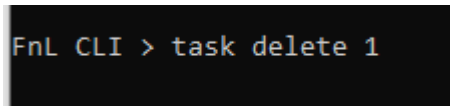


task delete {task_id}

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

Example

FnL CLI> task delete 1



This command will delete the task ”1”.

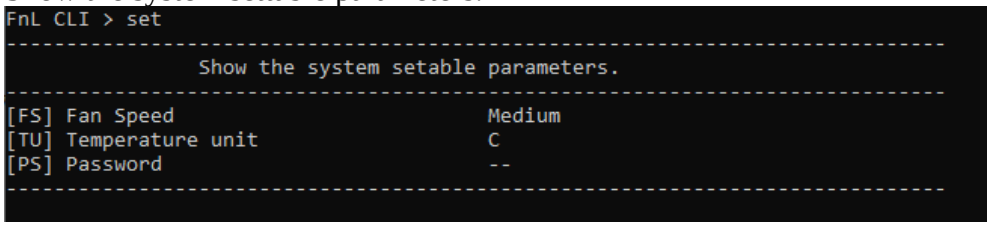
Set Commands

Syntax

set | set [name]={value}

set

Show the system settable parameters.

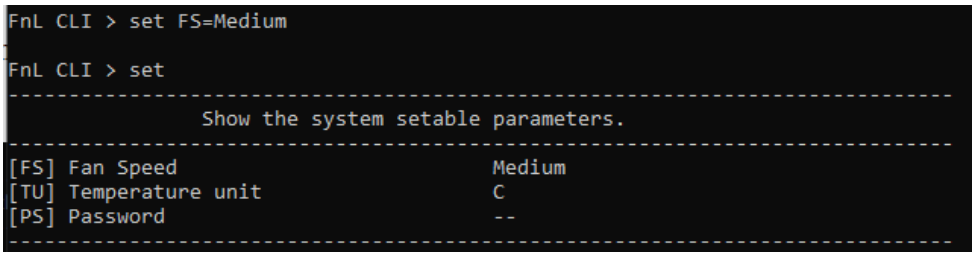


- **set FS={Auto|Off|Low|Medium|High}**

Change Enclosure Fan Speed.
Note：Fan speed function support products：SRD7101A / 7202 / 7505 / 7140 / 7540 / 7502/ CRD7104F / CRD7505，This function is only supported by Windows and mac, not Linux.

Example

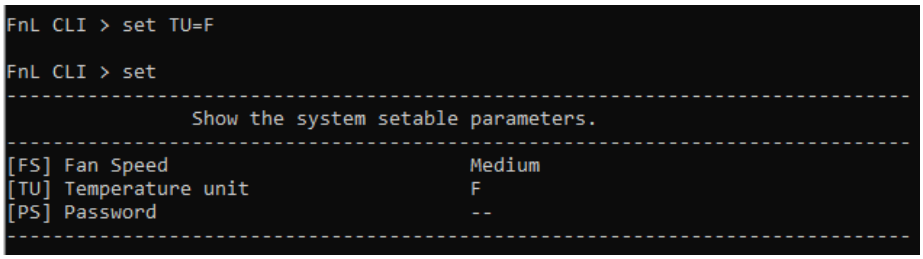
FnL CLI> set FS=Medium



- **set TU={C|F}**

  Set temperature unit to Celsius equals or Fahenheit equals.
  Example

  FnL CLI> set TU=F

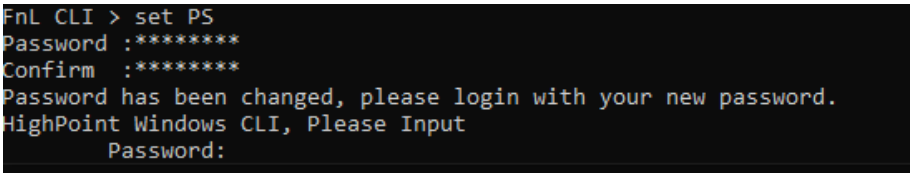


- **set PS**

  Set or change your password and confirm it.

  Example

  FnL CLI> set PS



Diag Commands

Note: This function is only supported by Linux.

This command allows you to collect the diagnostic information.

Example

FnL CLI> diag

```
FnL CLI>diag

The diagnostic information has been saved in /usr/share/hpt/HighPoint_hptnvme_v1.3.2_2021.11.01.tar.gz
FnL CLI>
```

The saving path will be displayed after entering this command.

Help Commands

If you input an unknown or error command, you will be told that the command is unknown, you can use help commands to find correct commands.

```
FnL CLI > raid
ERROR: Unknown command raid .
You can input 'help' for more commands

FnL CLI >
```

Syntax

help | help {command}

help

Show generic help about this utility.

Example

FnL CLI> help

```
FnL CLI > help
help [query|switch|events|mail|task|set|clear|help|exit]

FnL CLI >
```

help {command}

Show help about a specific command.

Example

FnL CLI> help query

```
FnL CLI > help query
Query Command
        This command allows you to query devices or arrays' informations.
Syntax:
        query drives
        query devices
        query devices {device_id}
        query arrays
        query arrays {array_id}
Note:
        The query devices {device_id} has add S.M.A.R.T information in version 2.1.

FnL CLI >
```

Exit Commands

Syntax

exit
Exit from the interactive mode and close the window.

Example

FnL CLI> exit

```
FnL CLI > exit
```

Clear Commands

Syntax

clear
This command is used to clear screen.

Example

FnL CLI> clear

```
FnL CLI > clear
```

Troubleshooting

Debugging an Abnormal RAID status

Please submit a support ticket using our online service at
https://www.highpoint-tech.com/websupport/

Table 1. WebGUI Icon Guide

	Disabled The icon represents a disabled array, meaning more than one disk failed and the array is no longer accessible
	Legacy An existing file system has been detected on the disk. These disks are classified as legacy drives.
	Normal The array status is normal
	Critical – rebuild required The array has all disks, but one disk requires rebuilding.

Table 2. RAID Level Reference Guide

Type	Description	Min. disks	Usable space	Advantage	Disadvantage	Application
RAID 0	Disk Striping	4	100%	Offers the highest performance	No fault tolerance - failure of one drive results in complete data loss	Temporary file, performance driven application.
RAID 1	Disk Mirroring	2	50%	Provides convenient low-cost data redundancy for smaller systems and servers	Useable storage space is 50% of total available capacity. Can handle 1 disk failure.	Operating system, backup, and transaction database.
RAID10	Striping with Mirroring	4	50%	High read performance and medium write performance with data protection for up to 2-drive failures	Useable storage capacity equals total capacity of all drives in the array minus two	Fast database and application servers which need performance and data protection

HighPoint Recommended List of Motherboards

HighPoint provides a list of motherboards suitable for use with the SRD7101P&PB /7202P /7204P /7104P&PB /7140P&PB /7502P /7505P /7540P&PA. This document is routinely updated, and is available from the SRD7101P&PB /7202P /7204P /7104P&PB /7140P&PB /7502P /7505P /7540P&PA Resources webpage:

SRD7101P&PB:
https://highpoint-tech.com/PDF/Compatibility_List/FnL/SRD/PRO/FnL_SRD7101P&PB_Compatibility_List_v1.02_21_9_26.pdf

SRD7202P:
https://highpoint-tech.com/PDF/Compatibility_List/FnL/SRD/PRO/FnL_SRD7202P_Compatibility_List_v1.02_21_9_26.pdf

SRD7204P:
https://highpoint-tech.com/PDF/Compatibility_List/FnL/SRD/PRO/FnL_SRD7204P_Compatibility_List_v1.02_21_9_26.pdf

SRD7104P&PB:
https://highpoint-tech.com/PDF/Compatibility_List/FnL/SRD/PRO/FnL_SRD7104P&PB_Compatibility_List_v1.02_21_9_26.pdf

SRD7140P&PB:
https://highpoint-tech.com/PDF/Compatibility_List/FnL/SRD/PRO/FnL_SRD7140P&PB_Compatibility_List_v1.02_21_9_26.pdf

SRD7502P:
https://highpoint-tech.com/PDF/Compatibility_List/FnL/SRD/PRO/FnL_SRD7502P_Compatibility_List_v1.02_21_9_26.pdf

SRD7505P:
https://highpoint-tech.com/PDF/Compatibility_List/FnL/SRD/PRO/FnL_SRD7505P_Compatibility_List_v1.02_21_9_26.pdf

SRD7540P&PA:
https://highpoint-tech.com/PDF/Compatibility_List/FnL/SRD/PRO/FnL_SRD7540P&PA_Compatibility_List_v1.02_21_9_26.pdf

Contacting Technical Support

FAQ’s, technical articles, and trouble-shooting tips are available from our Support web page and Blog web page:

https://www.fnlnvme.com/faq

https://www.fnlnvme.com/blog

If you require technical Support, please go to the page footer our offical website and Click Contact Us for futher support.

https://www.fnlnvme.com