Installation / User Guide

HUGO

Western Digital Corporation

Customer Tools Team

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Product Scope

Overview

Hugo CLI was created to allow customers to perform drive maintenance functions without having to remove the drive from their environment.

Features

Command	Description
abort	Abort a running self test
do-not-operate	Manage a list of devices that hugo will not run on
erase	Erase all or part of the device
eula	Show the End User License Agreement
help	Show the help output
format	Format a specific device
logdump	Dump logs from specified devices
namespace	Allows the user to perform namespace operations (list, create, delete, etc) on NVMe devices
powerstate	Lists the power state of NVMe devices
psid	Send a PSID string to a device
quit	Exit the Command Line Interface

Command	Description
sanitize	Sanitize a device
show	Show a list of connected devices. Also refreshes device list
test	Run a drive self test
unmap	Unmap all LBAs
update	Update a device’s firmware
version	Show the version information for hugo

Supported Products

Product Family	Interface
Travelstar Z5K500 / Z7K500 / 5K1000 / 7K1000 / 5K1500	SATA
Travelstar Z5K1000	SATA
Ultrastar A7K2000	SATA
Ultrastar 15K600	SAS
Ultrastar 15K73	SAS
Ultrastar C10K300 / C15K147	SAS
Ultrastar C10K600	SAS
Ultrastar C10K900 / C10K1200	SAS
Ultrastar C10K1800 / C15K600	SAS
Ultrastar 7K3000 / 7K4000	SAS / SATA
Ultrastar He6 / He8 / Ha10	SAS / SATA
Ultrastar 7K6000	SAS / SATA
Ultrastar He10 / DC HC510	SAS / SATA
Ultrastar He12 / DC HC520	SAS / SATA
Ultrastar He14 / DC HC530	SAS / SATA
Ultrastar DC HC550 / HC650	SAS / SATA
Ultrastar Hs14 / DC HC620	SAS / SATA
Ultrastar 7K6 / DC HC310	SAS / SATA
Ultrastar 7K8 / DC HC320	SAS / SATA
Ultrastar SSD: 800, 1000MR, 800MH 1600MM, 1600MR	SAS (SSD)
Ultrastar SS300 / SS530 / SS540	SAS (SSD)
Ultrastar DC SN630	NVMe
Ultrastar DC SN640	NVMe
Ultrastar DC SN840	NVMe

Supported Controllers

Vendor	Family
Broadcom (formerly LSI)	SAS/SATA 30xx Host Bus Adapters
Broadcom	SAS/SATA 92xx Host Bus Adapters and RAID Controllers
Broadcom	SAS/SATA 93xx Host Bus Adapters and RAID Controllers
Broadcom	SAS/SATA 94xx Host Bus Adapters and RAID Controllers
ATTO	ExpressSAS SAS/SATA H6xx Host Bus Adapters
ATTO	ExpressSAS SAS/SATA H12xx Host Bus Adapters
Tempo SAS	Pro ExpressCard 34
HighPoint	RocketRAID 23xx
Microsemi Adaptec	8885 RAID
Microsemi Adaptec	HBA 1100 series, SmartHBA 2100 series, and SmartRAID 3100 series

Supported Operating Systems

Hugo only supports the kernels that are supplied with the operating systems distributed by the Operating Systems vendors. If the user should compile any other kernel versions into the operating systems, then the configuration shall not be considered officially supported by Hugo.

Operating System	Version	64-bit x86	64-bit ARM
Red Hat Enterprise Linux (RHEL)	6.7, 6.8, 6.9\7.1, 7.2, 7.3, 7.4, 8.0	X	X
	6.8 7.x	X	X
Ubuntu Server Linux	14.04, 15.04, 16.04, 17.04	X	X
FreeBSD	11.2\12.1	X (No RAID)	
Windows	Windows 7, 8, 8.1, 10	X	
	Windows Server 2012, 2016, 2019	X	X

Supported Drivers

Prerequisite	Description
HBA and RAID controller Drivers	Drivers provided by vendors of Host Bus Adapters and RAID controllers.
ncurses 5.x libraries	Linux systems require ncurses 5.x libraries. On RHEL 8, this means the ‘ncurses-compat-libs’ package is required.

Installation

Overview

This section addresses issues regarding the compatibility, system requirements, installation and configuration of Hugo.

Installation Packages

Hugo installers are available for a variety of platforms. It is the responsibility of the user to be knowledgeable of the specific platform on which Hugo will be installed. An authorized representative will e-mail the desired version of Hugo to the user. The packages must be unpacked in a default directory or a temporary directory.

Installation Package	Description
hugo-x.x.x.x86_64.tar.gz	Standalone instance for Linux 64-bit x86 platforms
hugo-x.x.x.x86_64.rpm	For RHEL-based Linux 64-bit x86 platforms
hugo-x.x.x.x86_64.deb	For Debian-based Linux 64-bit x86 platforms
hugo-x.x.x.freebsd.zip	For FreeBSD 64-bit x86 platforms
HUGO-x.x.x.win64SA.zip	Standalone instance for Windows 64-bit x86 platforms
HUGO-x.x.x.win64.exe	For Windows 64-bit x86 platforms
HUGO-x.x.x.winArm64.exe	For Windows 64-bit ARM platforms

User Privileges

Prerequisite	Description
Linux Distributions	root authority is required
Windows Distributions	Administrator authority is required

Linux/FreeBSD TAR Installation

To install the TAR package(s):

1. Create a temporary installation folder or directory.
2. Download the Hugo TAR file to the temporary installation folder or directory.
3. Open a terminal window and change directories to the temporary installation folder or directory.
4. Use the tar command to install the tarball, e.g.,

```
tar -zxvf <Hugo TAR file name>
```

- Use of Hugo after this installation will be from this directory with

```
./hugo
```

Upgrade Procedure

To upgrade Hugo:

1. Logon to the system with root privileges.
2. Delete the directory with the old Hugo install
3. Create a directory for installation and download the most recent Hugo release (TAR).
4. Open a terminal in the installation directory.
5. Use the tar command to install the new Hugo tarball, e.g.,

```
tar -zxvf <Hugo TAR file name>
```

Uninstall Procedure

To uninstall Hugo:

1. Logon to the system with root privileges.
2. Delete the temporary installation folder contents.

Linux RPM Installation

To install the RPM package(s):

1. Logon to the system with root privileges.
2. Create a temporary installation folder or directory.
3. Download the Hugo installable (RPM) file to the temporary installation folder or directory.
4. Open a terminal window and change directories to the temporary installation folder or directory.
5. Use the rpm command to install the RPM file, e.g.,

```
sudo rpm -Uvh <Hugo RPM file name>
```

Upgrade Procedure

To upgrade Hugo:

1. Logon to the system with root privileges
2. Download the most recent Hugo installable (RPM) file.
3. Open a terminal in the directory where the RPM is located.
4. Use the rpm command to upgrade Hugo, e.g.,

```
sudo rpm -Uvh <Hugo DEB file name>
```

Uninstall Procedure

To uninstall Hugo:

1. Logon to the system with root privileges.
2. Open a terminal window or console.
3. Run:

```
sudo rpm -e hugo-*
```

Linux DEB Installation

To install the DEB package(s):

1. Logon to the system with root privileges.
2. Create a temporary installation folder or directory.
3. Download the Hugo installable (DEB) file to the temporary installation folder or directory.
4. Open a terminal window and change directories to the temporary installation folder or directory.
5. Use the dpkg command to install the DEB file, e.g.,

```
sudo dpkg -i <Hugo DEB file name>
```

Upgrade Procedure

To upgrade Hugo:

1. Logon to the system with root privileges.
2. Download the most recent Hugo installable (DEB).
3. Open a terminal in the directory where the DEB is located.
4. Use the dpkg command to upgrade Hugo, e.g.,

```
sudo dpkg -i <Hugo DEB file name>
```

Uninstall Procedure

To uninstall Hugo:

1. Logon to the system with root privileges.
2. Open a terminal window or console.
3. Run sudo dpkg -r hugo

Windows Standalone Installation

1. Create a new directory to hold the standalone Hugo instance. This can be located on a local drive, network drive, or removable media.
2. Decompress the zip file into the directory from step 1.

To Launch Hugo – Open a command prompt terminal with administrator privileges (Run as administrator). Change directory to the HUGO/bin install directory from step 1 above. Execute Hugo by typing the following command:

```
.\hugo
```

See the Command Line Interface section for Hugo command line argument help.

Uninstall Procedure

To uninstall Hugo, remove the directory you created during step 1 of the installation.

Windows Installation

Double click on the installation executable file.

1. Click “Yes” on allow User Control Access if prompted.
2. The Hugo Setup wizard will launch, click “Next”
3. Click on “I agree” to the License Agreement
4. Choose an install location or accept the default path, click “Next”
5. Choose any Start Menu or short cut folder options, click “Install”
6. Click “Finish” when complete

To Launch Hugo – Open a command prompt terminal with administrator privileges (Run as administrator). Change directory to the HUGO/bin install directory specified on step 4 above. Execute Hugo by typing the following command:

```
.\hugo
```

See the Command Line Interface section for Hugo command line argument help.

Uninstall Procedure

To uninstall Hugo:

1. Navigate to the install directory under Program Files
2. Double click on the Uninstall wizard in the Hugo folder
3. Click “Yes” on allow User Control Access if prompted
4. Click “Uninstall” on the Hugo Uninstall wizard

Command Line Interface

Overview

To use Hugo on any PC or server, you can run it using the standalone Command Line Interface. This section explains the usage and capabilities of the CLI and provides basic and advanced device diagnostic functions.

Command Execution

The syntax for command execution is consistent across the various platforms. In this section, the commands are presented in the platform neutral form of **hugo**. The user should have a practical knowledge of navigating the command line interface for the specific system platform.

Windows Standalone Version

When using the Windows standalone version of Hugo, you will need to run the hugo.bat file instead of the executable (hugo-sa.exe) so that compatibility mode can be enabled before running the executable.

Command Syntax

The commands and options use the same syntax across the platforms. The spaces or delimiters are taken literally, while the brackets are ignored:

```
hugo <command> <flags>
```

Command Arguments

The <command> must consist of one command and <flags> may consist of zero or multiple combinations of flags. Flags modify the command behavior and are specific to each command.

Command	**a, abort**
Description	Show a list of connected devices. Also refreshes device list.
Usage	
abort	{-s <serial number> | -m <model string> | -g <device path> | -a}[--no-apti] [--no-spti] [--no-sg] [--no-ad] [--no-mr] [--no-serial] [-h]
REQUIRED	
	-s, --serial <serial number > Abort drive self test on a device specified by serial number.
–OR–	
	-m, --model <model number > Abort drive self test on device(s) specified by model number.
–OR–	
	-g, --target <device path > Operate on targets with device handles specified by this option.
–OR–	
	-a, --all Abort drive self test on all devices.
NOT REQUIRED	
	--no-apti Do not use the APTI driver (Windows Only) (command line only)
	--no-spti Do not use the SPTI driver (Windows Only) (command line only)
	--no-sg Do not use the SG driver. (Linux Only) (command line only)

Command	a, abort
	--no-ad Do not use the AD driver. (command line only)
	--no-mr Do not use the MR driver. (command line only)
	--no-serial Do not use the Serial driver. (command line only)
	-h, --help Displays usage information and exits.

Command	do-not-operate
Description	Manage a list of devices that hugo will not run on
Usage	
do-not-operate	{-d | -s <serial number> | -c} [-h]
REQUIRED	
	-d, --display Print a list of all devices from Do Not Operate list.
–OR–	
	-s, --serial <serial number > Add this device to the Do Not Operate list.
–OR–	
	-c, --clear <model number > Clear all devices from Do Not Operate list.
NOT REQUIRED	
	-h, --help Displays usage information and exits.

Command	e, erase
Description	Erase all or part of the device
Usage	
erase	{-t | -f} {-s <serial number> | -m <model number> | -g <device path>}[--force] [--no-apti] [--no-spti] [--no-sg] [--no-ad] [--no-mr][--no-serial] [-h]
REQUIRED	
	-t, --table Erase the device partition table
–OR–	
	-f, --full Pack write 0’s to the device in its entirety. If the command fails a manual restart of the command will be required.
–AND–	
	-s, --serial <serial number > Abort drive self test on a device specified by serial number.
–OR–	
	-m, --model <model number > Abort drive self test on device(s) specified by model number.

Command	e, erase
–OR–	
	-g, --target <device path > Operate on targets with device handles specified by this option.
NOT REQUIRED	
	--force Don’t prompt the user before erasing the device(s). ***WARNING: THIS MAY ERASE YOUR BOOT DRIVE***
	--no-apti Do not use the APTI driver (Windows Only) (command line only)
	--no-spti Do not use the SPTI driver (Windows Only) (command line only)
	--no-sg Do not use the SG driver. (Linux Only) (command line only)
	--no-ad Do not use the AD driver. (command line only)
	--no-mr Do not use the MR driver. (command line only)
	--no-serial Do not use the Serial driver. (command line only)
	-h, --help Displays usage information and exits.

Command	eula
Description	Show the End User License Agreement
Usage	eula

Command	f, format
Description	Format a specific device
Usage	
format	{-s <serial number> | -m <model number> |-g <device path>} [--danger-zone] [--simple-progress] [--hide-progress] [-p <protection type>] [--fastformat] [--media-compatibility-check] [--merge] [-n <number of blocks>] [-b <block size>] [--no-apti] [--no-spti] [--no-sg] [--no-ad] [--no-mr] [--no-serial] [-h]
REQUIRED	
	-s, --serial <serial number > Abort drive self test on a device specified by serial number.
–OR–	
	-m, --model <model number > Abort drive self test on device(s) specified by model number.
–OR–	
	-g, --target <device path > Operate on targets with device handles specified by this option.
NOT REQUIRED	

Command	f, format
	--danger-zone Tells Hugo that the user knows they are going to destroy your data with this command and will not prompt the user.
	--simple-progress Prevent the display of the progress bar screen, useful when running commands from a script. (Same as hide-progress flag)
	--hide-progress Prevent the display of the progress bar screen, useful when running commands from a script.
	-p <protection type>, --protection <protection type> Specify a type of Protection Information (0,1,2,3).
	--fastformat Set Fast Format.
	-c, --media-compatibility-check Set media compatibility check flag
	--merge Merge G-List and P-List.
	-n <number of blocks>, --numblocks <number of blocks> Specify number of blocks to format. Default: current size. Specifying ‘max’ will format to maximum number of blocks supported by the device.
	-b <block size>, --blocksize <block size> Format the device to a specified block size (512, 4096). Additional special case sizes for SAS drives only include: 520, 528, 4112, 4160, and 4224. Special cases may not be supported by your specific firmware
	--no-apti Do not use the APTI driver (Windows Only) (command line only)
	--no-spti Do not use the SPTI driver (Windows Only) (command line only)
	--no-sg Do not use the SG driver. (Linux Only) (command line only)
	--no-ad Do not use the AD driver. (command line only)
	--no-mr Do not use the MR driver. (command line only)
	--no-serial Do not use the Serial driver. (command line only)
	-h, --help Displays usage information and exits.

Command	h, help
Description	Show the help output
Usage	Help

Command	l, logdump
Description	Dump logs from specified devices

Command	l, logdump
Usage	logdump {-s <serial number> | -m <model number> | -a | -g <device path>} [-p <output file path>] [--threadPoolSize] [--inc-max][--inc-update] [--inc-start] [--archive] [--all-modes][--partial-context] [--fly-height] [--p-list] [--ati] [--south-dump][--short] [--no-apti] [--no-spti] [--no-sg] [--no-ad] [--no-mr][--no-serial] [-h]
REQUIRED	
	-s <serial number>, --serial <serial number>(accepted multiple times) Dump logs of a single device specified by serial number.
–OR–	
	-m <model number>, --model <model number> Dump logs from all HGST devices of specified model.
–OR–	
	-a, --all Dump logs from all devices.
–OR–	
	-g, --target Filter out devices target(s) NOT specified by this option. Addingdevice handles via this option will prevent other drives from beingshown. For an example in Linux, \“hugo s --target /dev/sg6 --target/dev/sg7\” would only show up to two drives which matched thosedevices. Device handles can be acquired by running a standard showwith the --device option and then using the first value given inthe \“Device handles\” list for a drive. This option is notavailable in the interactive mode.
	-p <output file path>, --path <output file path> Logfile output path
NOT REQUIRED	
	--threadPoolSize <num threads> Set the thread pool size for logdump.
	--inc-max Collects incremental log with maximum log entries (specified in mode page 0x1C, sub-page 0xE5).
	--inc-update Collects incremental update log.
	--inc-start Collects incremental starting log.
	--archive Legacy Logs Only. Collects all legacy logs and puts them in an archive.
	--all-modes Collects all available logs
	--partial-context Collects device partial context data
	--fly-height Collects device Fly-height data
	--p-list Collects device P-List data
	--ati Collects device Adjacent Track Interference (ATI) data

Command	l, logdump
	--south-dump Collects debug information for SSDs only
	--short A small log for data-collection purposes
	--fast Skip non-essential commands to speed up performance.
	--no-apti Do not use the APTI driver (Windows Only) (command line only)
	--no-spti Do not use the SPTI driver (Windows Only) (command line only)
	--no-sg Do not use the SG driver. (Linux Only) (command line only)
	--no-ad Do not use the AD driver. (command line only)
	--no-mr Do not use the MR driver. (command line only)
	--no-serial Do not use the Serial driver. (command line only)
	-h, --help Displays usage information and exits.

Command	n,namespace
Description	Allows the user to perform namespace operations (list,create, delete, etc) on NVMe devices
Usage	
namespace	{-s <serial number> | -m <model number> | -a} {-l|-d|-r|-c|--attach|--detach|-f} [--metadata <0 or 8>][--dif <0, 1, 2, or 3>] [--protection <1 or 8>] [--sector <512, 520, 528, 4096, 4160, or 4224>][--size <gigabytes>] [-i <id number>] [--no-apti] [--no-spti][--no-ad] [--no-mr] [--no-serial] [-h]
REQUIRED:	
	-s <serial number>, --serial <serial number> (accepted multiple times) Operate on a single device specified by serial number.
–OR–	
	-m <model number>, --model <model number> Operate on all HGST devices of specified model.
–OR–	
	-a, --all Operate on all devices.
SubCommands	
	-l, --list List drive namespaces.
–OR–	

Command	n,namespace
	-d, --delete Delete a namespace.
–OR–	
	-r, --resize Resize a namespace.
–OR–	
	-c, --create Create a new namespace (and attach it, if namespace sharing is not enabled).
–OR–	
	--attach Attach the given namespace id.
–OR–	
	--detach Detach the given namespace id.
–OR–	
	-f, --format Format a namespace.
NOT REQUIRED	
	--metadata <0 or 8> Specify the metadata size for a format.
	--dif <0, 1, 2, or 3> Specify the diff level for format.
	--protection <1 or 8> Specify the protection interval for format.
	--sector <512, 520, 528, 4096,4160, or 4224> Specify the sector size for format.
	--size <gigabytes> Specify the target size for create and resize options.
	-i <id number>, --id <id number> Namespace id required for all namespaces function except list and create.
	--no-apti Do not use the APTI driver (Windows Only) (command line only)
	--no-spti Do not use the SPTI driver (Windows Only) (command line only)
	--no-sg Do not use the SG driver. (Linux Only) (command line only)
	--no-ad Do not use the AD driver. (command line only)
	--no-mr Do not use the MR driver. (command line only)
	--no-serial Do not use the Serial driver. (command line only)
	-h, --help Displays usage information and exits.

Command	**powerstate**
Description	Lists the power state of NVMe devices
Usage	
powerstate	{-s <serial number> | -m <model number> | -a} [--no-apti][--no-spti][--no-ad] [--no-mr] [--no-serial] [-h]
REQUIRED:	
	-s <serial number>, --serial <serial number> (accepted multiple times) Operate on a single device specified by serial number.
–OR–	
	-m <model number>,--model <model number> Operate on all HGST devices of specified model.
–OR–	
	-a, --all Operate on all devices.
NOT REQUIRED	
	--no-apti Do not use the APTI driver (Windows Only) (command line only)
	--no-spti Do not use the SPTI driver (Windows Only) (command line only)
	--no-sg Do not use the SG driver. (Linux Only) (command line only)
	--no-ad Do not use the AD driver. (command line only)
	--no-mr Do not use the MR driver. (command line only)
	--no-serial Do not use the Serial driver. (command line only)
	-h, --help Displays usage information and exits.

Command	**psid**
Description	Send a PSID string to a device
Usage	
psid	{-s <serial number> | -m <model number> | -a} [--no-apti][--no-spti][--no-ad] [--no-mr] [--no-serial] [-h]
REQUIRED:	
	-s <serial number>, --serial <serial number> Operate on a single device specified by serial number.
NOT REQUIRED	
	--skip-status Pass the PSID regardless of the stat of the device
	--no-apti Do not use the APTI driver (Windows Only) (command line only)

Command	psid
	--no-spti Do not use the SPTI driver (Windows Only) (command line only)
	--no-sg Do not use the SG driver. (Linux Only) (command line only)
	--no-ad Do not use the AD driver. (command line only)
	--no-mr Do not use the MR driver. (command line only)
	--no-serial Do not use the Serial driver. (command line only)
	-h, --help Displays usage information and exits.

Command	q, quit, exit
Description	Exit the Command Line Interface
Usage	quit

Command	sanitize
Description	Sanitize a device
Usage	
sanitize	{-c | -o <overwrite count> | -b | --show-sanitize-support | --show-progress} {-s <serial number> | -m <model number> | -g <device path>} [-a] [--danger-zone] [--simple-progress] [--hide-progress] [--no-apti] [--no-spti][--no-ad] [--no-mr] [--no-serial] [-h]
REQUIRED:	
	-c --crypto Perform Sanitize cryptographic erase operation.
–OR–	
	-o <overwrite count>, --overwrite <overwrite count> Perform Sanitize overwrite operation.
–OR–	
	-b, --block Perform Sanitize block erase operation
–OR–	
	--show-sanitize-support Print the sanitize operations(s) supported by the target drive(s)
–OR–	
	--show-progress Show the progress of an in-progress sanitize operation if one exists
–AND–	
	-s <serial number>, --serial <serial number> (accepted multiple times) Operate on a single device specified by serial number.
–OR–	

Command	sanitize
	-m <model number>,--model <model number> Operate on all HGST devices of specified model.
–OR–	
	-g <device path> Operate on targets with device handles specified by this option.
NOT REQUIRED	
	-p <pattern>, --pattern <pattern> Specifies the pattern that will be used for the overwrite sanitize operation. Not valid if --file option is also specified. To specify length of pattern in bytes, use –length option. Valid lengths are 1-4 and default is 4 bytes.
–OR–	
	-f <file name>, --file <file name> Specifies the path to a file containing a binary pattern that will be written to all user data blocks during an overwrite operation. Not valid if --pattern is also specified
	-l <length>, --length <length> Specifies the length of the pattern (1-4) in bytes. This argument is only valid for overwrite sanitize. If not specified, default is 4.
	--invert Flag only valid for overwrite sanitize command. Invert flag indicates that the --pattern option or the value within the filename specified by the --file option should be inverted each time it is written. The --file or --pattern options must also be specified.
	--danger-zone Tells the application that the user knows they are going to destroy their data with this command and will not prompt the user.
	--simple-progress Prevent the display of the progress bar screen, useful when running commands from a script. (Same as hide-progress flag)
	--hide-progress Prevent the display of the progress bar screen, useful when running commands from a script.
	--no-progress Prevent all output of sanitize progress.
	--no-apti Do not use the APTI driver (Windows Only) (command line only)
	--no-spti Do not use the SPTI driver (Windows Only) (command line only)
	--no-sg Do not use the SG driver. (Linux Only) (command line only)
	--no-ad Do not use the AD driver. (command line only)
	--no-mr Do not use the MR driver. (command line only)
	--no-serial Do not use the Serial driver. (command line only)

Command	sanitize
	-h, --help Displays usage information and exits.

Command	show
Description	Show a list of connected devices. Also refreshes device list.
Usage	
show	[--device] [--hgst-firmware] [-l] [-m] [-b] [-w] [-g <device path>] [--no-apti] [--no-spti][--no-ad] [--no-mr] [--no-serial] [-h]
NOT REQUIRED	
	--device Show the drive device paths if available.
	--customer-id Show the customer ID and hgst internal firmware.
	--hgst-firmware how the hgst internal firmware. (Deprecated)
	-l, --locked Show reason devices are locked.
	-b, --block-size Show the block size of each device.
	-g, --target Filter out devices target(s) NOT specified by this option. Adding device handles via this option will prevent other drives from being shown. For an example in Linux, "hugo s --target /dev/sg6 --target /dev/sg7" would only show up to two drives which matched those devices. Device handles can be acquired by running a standard show with the --device option and then using the first value given in the "Device handles" list for a drive. This option is not available in the interactive mode.
	--no-apti Do not use the APTI driver (Windows Only) (command line only)
	--no-spti Do not use the SPTI driver (Windows Only) (command line only)
	--no-sg Do not use the SG driver. (Linux Only) (command line only)
	--no-ad Do not use the AD driver. (command line only)
	--no-mr Do not use the MR driver. (command line only)
	--no-serial Do not use the Serial driver. (command line only)
	-h, --help Displays usage information and exits.

Command	test
Description	Run a drive self test
Usage	

Command	test
t, test	{-q | -l | --status} {-s <serial number> | -m <model number> | -g <device path> | -a} [-f] [--noprompt] [--no-apti] [--no-spti] [--no-sg] [--no-ad] [--no-mr] [--no-serial] [-h]
REQUIRED	
	-q, --quick Run a short drive self test.
–OR–	
	-l, --long Run a long drive self test.
–OR–	
	--status Check self test results.
–AND–	
	-s, --serial <serial number > Run drive self test on a device specified by serial number.
–OR–	
	-m, --model <model number > Run drive self test on all devices of a specified model.
–OR–	
	-g, --target <device path > Operate on targets with device handles specified by this option.
–OR–	
	-a, --all Run drive self test on all devices.
NOT REQUIRED	
	-f, --foreground Runs self test in the foreground and shows real time status
	--no-apti Do not use the APTI driver (Windows Only) (command line only)
	--no-spti Do not use the SPTI driver (Windows Only) (command line only)
	--no-sg Do not use the SG driver. (Linux Only) (command line only)
	--no-ad Do not use the AD driver. (command line only)
	--no-mr Do not use the MR driver. (command line only)
	--no-serial Do not use the Serial driver. (command line only)
	-h, --help Displays usage information and exits.

Command	Unmap
Description	Unmap all LBAs
Usage	

Command	Unmap
unmap	{-m <model number>|-s <serial number>} [--no-sg] [--no-ad][--no-mr] [--no-serial] [--danger-zone] [-h]
REQUIRED	
	-s, --serial <serial number > unmap all LBAs from all devices of specified serial number
	-m, --model <model number > unmap all LBAs from all devices of specified model number
NOT REQUIRED	
	--danger-zone Flag tells the application that you know you are going to destroy your data with this command and will not prompt the user.
	--no-apti Do not use the APTI driver (Windows Only) (command line only)
	--no-spti Do not use the SPTI driver (Windows Only) (command line only)
	--no-sg Do not use the SG driver. (Linux Only) (command line only)
	--no-ad Do not use the AD driver. (command line only)
	--no-mr Do not use the MR driver. (command line only)
	--no-serial Do not use the Serial driver. (command line only)
	-h, --help Displays usage information and exits.

Command	update
Description	Update a device's firmware
Usage	
u, update	{-s <serial number> | -m <model number> | -g <device path>}[--no-apti] [--no-spti] [--no-sg] [--no-ad] [--no-mr] [--no-serial][-a] [-d] [--skip-status] [--slot <nvme firmware slot number>][--rescanControl <seconds>] [-f <firmware file path>] [-h]
REQUIRED	
	-s, --serial <serial number > Update device specified by serial number.
–OR–	
	-m, --model <model number > Update device specified by model number.
–OR–	
	-g, --target <device path > Operate on targets with device handles specified by this option.
NOT REQUIRED	
	-a, --activate Activate a deferred firmware.

Command	update
	-d, --defer Perform a deferred update.
	--show-slots Lists the NVME slots and firmware (if present).
	--slot <nvme firmware slot number> Target an NVME slot number. Required for NVME targets.
	--rescanControl <seconds> Set the delay in seconds between firmware update and the drive Re-scan. Zero is no delay and negative numbers skip the re-scan.
	-f, --firmware <firmware file path> Firmware file name.
	--fast Skip non-essential commands to speed up performance.
	--no-apti Do not use the APTI driver (Windows Only) (command line only)
	--no-spti Do not use the SPTI driver (Windows Only) (command line only)
	--no-sg Do not use the SG driver. (Linux Only) (command line only)
	--no-ad Do not use the AD driver. (command line only)
	--no-mr Do not use the MR driver. (command line only)
	--no-serial Do not use the Serial driver. (command line only)
	-h, --help Displays usage information and exits.

Command	v, version
Description	Show the version information for hugo
Usage	version