Installation / User Guide

WDCKit_Users_Guide.pdf

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Customer Tools Team

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Product Scope

Overview

wdckit is a command line utility to perform various operations on one or more supported devices. Any of the wdckit commands may be executed as a one time command from the terminal or from within the interactive session. From the interactive sessions, enter 'h' for help or 'q' to quit. Windows: Administrative privilege is required to execute the tool. Linux: Root authority is required to execute the tool.

Features

Command	Description
ahci	Gets contents of AHCI Configuration Registers
aop	Adjust OverProvisioning (AOP) of the device
assert	Check, clear or force a device asserts
atasecurity	This command is used to set, disable, freeze or unlock ATA security using User or Master password with High or Maximum security for ATA devices
debug	Send vendor unique command for debugging operations for supported NVMe devices
do-not-operate	Add a device to the list of do not operate devices
erase	This issues a secure erases, a trim of all user data or a sanitize command the device
errors	List some or all application status codes and messages

Command	Description
eula	Show the End User License Agreement (EULA)
format	Performs a format on a SCSI/ATA or NVMe device
fsflush	Performs a file system flush on device
getdui	Retrieves the vendor specific DUI (Device Unit Information) log from supported WDC devices
geteyediagram	Retrieves the vendor specific Eye Diagram (Eye Surf) log from supported NVMe devices
getfeature	Gets the various fields along with their values related to features on the device
getlog	This command retrieves logs from ATA, NVMe and SCSI devices
getpe	Retrieves the vendor specific PE (Program Erase) log from supported NVMe devices
getpersistentevent	Retrieves and parses the Persistent Event Log (dh) from supported NVMe devices
getsmart	Retrieves the SMART data and the SMART status with SMART trip parameter, if any, from the device
getsmr	Retrieves the vendor specific SMR data from supported WDC devices
help	Displays help information about wdckit commands
hmb	Display Host Memory Buffer support for an NVMe device
idd	Retrieves the Identify data of the ATA or NVMe device
logdump	Dump logs from specified devices
ns-attach	Send a namespace attachment command to attach a namepace to a controller identifier(s)
ns-create	Send a namespace management command to create a namespace for an NVMe device
ns-delete	Send a namespace management command to delete a namespace for an NVMe device

Command	Description
ns-detach	Send a namespace attachment command to detach a namepace from a controller identifier(s)
nsze	Send vendor unique command to modify namespace size for NVMe devices
power	Displays or sets power management APST state (PMAS) for NVMe devices
quit	Exit the CLI
rdp	Performs RDP (repurpose depopulation) on a SCSI or ATA device
security	Performs the various security related features on the device
securityprofile	Performs the various security profile related features on the ATA device
selftest	Runs the short or extended test on the device(s) specified by the user
serverconfig	Send vendor unique command to modify the resource server configuration on supported NVMe devices
setfeature	Sets the specified feature value for NVMe devices
sethctmtemps	Configures the settings for the host controlled thermal management feature on the NVMe device
setthrottlingtemp	Sets the Light and Heavy Throttling Temperature on the NVMe device
show	List the details like serial number, capacity, state, geometry information, protection information, progress information, version, statistics, etc
standby	Puts the ATA device in standby mode
update	Updates the device firmware with new firmware on the specified device
version	Displays version information
writelog	This command is used to write a log page to the ATA device
zns	Perform various ZNS operations and show ZNS reports

Command	Description
zone	Perform various Zoned ATA/Block Commands (ZAC/ZBC)

Supported Products

Product Family	Interface
All WDC, HGST, and SanDisk drives from 2017 and newer	SATA/SAS/NVMe/NVMeoF

RAID version Supported Controllers

Vendor	Family
Microsemi	PMC & Adaptec SATA + SAS RAID Controllers
Broadcom	MegaRAID SATA + SAS + NVMe 9xxx Controllers

The RAID version is only available in 64-bit x86 Linux, 64-bit ARM Linux, 32-bit x86 Windows and 64-bit x86 Windows. Use the RAID version for NVMe devices connected to a Broadcom controller.

Supported Operating Systems

wdckit 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 wdckit. Some devices may not be fully supported in older OS's.

Operating System	Version	32-bit x86	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
Ubuntu	16.04, 18.04, 20.04		X	X
CentOS	7, 8		X	X
Windows	Windows 8, 8.1, 10, 11	X	X	
Windows Server	2016, 2019		X	
FreeBSD	11, 12		X	

Supported Drivers

Prerequisite	Description
HBA and RAID controller Drivers	Drivers provided by vendors of Host Bus Adapters and RAID controllers.

Installation

Overview

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

Installation Packages

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

Installation Package	Description
wdckit-<version>.<arch>.rpm	For RHEL-based Linux platforms
wdckit-raid-<version>.<arch>.rpm	For RHEL-based Linux platforms (RAID SAS/SATA)
wdckit_<version>_<arch>.deb	For Debian-based Linux platforms
wdckit-raid_<version>_<arch>.deb	For Debian-based Linux platforms (RAID SAS/SATA)
wdckit-<version>.<arch>.tar.gz	Standalone instance for Linux/FreeBSD platforms
wdckit-raid-<version>.<arch>.tar.gz	Standalone instance for Linux platforms (RAID SAS/SATA)
wdckit-<version>.<arch>.exe	Installer for Windows platforms
wdckit-raid-<version>.<arch>.exe	Installer for Windows platforms (RAID SAS/SATA)
wdckit-<version>.<arch>.zip	Standalone instance for Windows platforms
wdckit-raid-<version>.<arch>.zip	Standalone instance for Windows platforms (RAID SAS/SATA)

User Privileges

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

Linux or FreeBSD TAR Installation

To install the TAR package(s):

1. Create a temporary installation folder or directory.

2. Please review installation packages above to detemine whether to use the non-RAID or RAID version of wdckit.

3. Download the wdckit TAR 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 tar command to install the tarball, e.g.,

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

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

     ```
     ./wdckit
     ```

Upgrade Procedure

To upgrade wdckit:

1. Logon to the system with root privileges.

2. Delete the directory with the old wdckit install

3. Create a directory for installation and download the most recent wdckit release (TAR).

4. Please review installation packages above to detemine whether to use the non-RAID or RAID version of wdckit.

5. Open a terminal in the installation directory.

6. Use the tar command to install the new wdckit tarball, e.g.,

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

Uninstall Procedure

To uninstall wdckit:

1. Logon to the system with root privileges.

2. Delete the temporary installation folder contents.

   ```
   rm -rf <wdckit folder>
   ```

Linux RPM Installation or Upgrade

To install or upgrade the RPM package(s):

1. Create a temporary installation folder or directory.

2. Please review installation packages above to detemine whether to use the non-RAID or RAID version of wdckit.

3. Extract the wdckit 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 <wdckit RPM file name>
```

Uninstall Procedure

To uninstall wdckit:

1. Open a terminal window or console.

2. Non-raid version (note, no .rpm):

```
sudo rpm -e wdckit-<version>.<arch>
```

Raid version (note, no .rpm):

```
sudo rpm -e wdckit-raid-<version>.<arch>
```

Linux DEB Installation or Upgrade

To install or upgrade the DEB package(s):

1. Create a temporary installation folder or directory.

2. Please review installation packages above to detemine whether to use the non-RAID or RAID version of wdckit.

3. Download the wdckit 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 <wdckit DEB file name>
```

Uninstall Procedure

To uninstall wdckit:

1. Logon to the system with root privileges.

2. Open a terminal window or console.

3. Non-raid version, run

   ```
   sudo dpkg -r wdckit
   ```

   Raid version, run:

   ```
   sudo dpkg -r wdckit-raid
   ```

Windows Installation

Please review installation packages above to detemine whether to use the non-RAID or RAID version of wdckit.

Double click on the installation executable file.

1. Click "Yes" on allow User Control Access if prompted.
2. The wdckit 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 wdckit – Open a command prompt terminal with administrator privileges (Run as administrator). Change directory to the wdckit/bin install directory specified on step 4 above. Execute wdckit by typing the following command:

```
.\wdckit
```

Uninstall Procedure

To uninstall wdckit:

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

End User License Agreement Acceptance

The Windows installer will display an End User License Agreement (EULA). For all other packages, when wdckit is run for the first time, it will prompt the user to accept the EULA.

In Windows (when installed via the zip package), the EULA will begin to fill the screen and the bottom will show:

– More (%) –

This table is a summary of several options to scroll through the EULA.

In Linux/FreeBSD, the screen will show

Read the end user license agreement. [enter]:

After pressing ENTER, the EULA will begin to fill the screen and the bottom will show:

–More–[Press space to continue, 'q' to quit.]

Please use the following keys to scroll through the EULA:

Key	Action
SPACEBAR	Press the SPACEBAR to display the next screen.
ENTER	Press ENTER to display the file one line at a time.
q	Press Q to finish reading.
=	Shows the line number.
p	Press P to display the next n lines.
s	Press S to skip the next n lines.
?	Press ? to show the commands that are available at the more prompt.

After reading the EULA, it will confirm acceptance of the EULA. If you do not, wdckit will quit. After the EULA has been accepted, it will be saved until the the application is removed.

Also, an environment variable may be set to accept the EULA.

Linux/FreeBSD: export WDC_LICENSE_ACCEPTED=1

Windows: set WDC_LICENSE_ACCEPTED=1

Once wdckit has run with the environment variable confirmation, wdckit will remember the EULA has been accepted and will continue to run without asking for the EULA acceptance until the application is updated or removed.

Command Line Interface

Overview

To use wdckit 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 **wdckit**. The user should have a practical knowledge of navigating the command line interface for the specific system platform.

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: `wdckit <command> <flags>`

Command	ahci
Description	Gets contents of AHCI Configuration Registers.
Restriction(s)	
	This task is only valid in Linux.
	This task is only valid for SATA targets.
	This task is only valid for WDC targets.
Usage	
wdckit	ahci [<devList> …|--model <model number> …|--serial <serial number> …] [--trace|--trace-with-scan|--no-trace] [-R <filename>] [--no-ad] [--no-mr] [-z] [--log-level <silent|error|info|debug|cmd-debug>] [-h]
OPTIONAL	
	<devList> (accepted multiple times) Device name(s) to execute ahci command.
–OR–	
	--model <model number> (accepted multiple times) Filter devices that only match this model number.
–OR–	
	--serial <serial number> (accepted multiple times) Filter devices that only match this serial number.
	--trace Save trace log for command operation upon success. Note, by default, trace logging enabled upon error. The trace log filename is wdckit-trace.txt.
–OR–	
	--trace-with-scan Save trace log for command operation and include commands issued while scanning for devices.
–OR–	
	--no-trace Disable trace logging.
	-R <filename>, --redirect <filename> Redirects the screen output to the file specified.

Command	ahci
	--no-ad Do not use the AD driver (only useful with the RAID version).
	--no-mr Do not use the MR driver (only useful with the RAID version).
	-z, --nobanner Suppresses the banner from printing, which includes information such as copyright, license, etc.
	--log-level <silent|error|info|debug|cmd-debug> Change log level.
	-h, --help Display help and exit.
Example(s)	
	wdckit ahci -Gets contents of AHCI Configuration Registers.
	wdckit ahci -R ahci.txt -Redirects the contents of AHCI Configuration Registers to ahci.txt.

Command	aop
Description	Adjust OverProvisioning (AOP) of the device. NOTE: Per the ATA specification, a power cycle shall be required between each AOP change.
Restriction(s)	
	This task is only valid for an actual target.
	This task is only valid for WDC targets.
	This task is only valid for SATA targets.
	This task is only valid for ATA devices that support 48-bit LBAs.
Usage	
wdckit	aop <<devList> ...|--model <model number> ...|--serial <serial number> ...> <-g|-s <new max lba>|-r> [--trace|--trace-with-scan|--no-trace] [-f] [-R <filename>] [--no-ad] [--no-mr] [-z] [--log-level <silent|error|info|debug|cmd-debug>] [-h]
REQUIRED	
	<devList> (accepted multiple times) Device name(s) to execute aop command.
–OR–	
	--model <model number> (accepted multiple times) Filter devices that only match this model number.
–OR–	
	--serial <serial number> (accepted multiple times) Filter devices that only match this serial number.
–AND–	
	-g, --get Gets the actual user addressable max LBA.

Command	aop
–OR–	
	-s <new max lba>, --set <new max lba> Sets the user addressable max LBA to a new supported.
–OR–	
	-r, --reset Resets the user addressable max LBA to actual value.
OPTIONAL	
	--trace Save trace log for command operation upon success. Note, by default, trace logging enabled upon error. The trace log filename is wdckit-trace.txt.
–OR–	
	--trace-with-scan Save trace log for command operation and include commands issued while scanning for devices.
–OR–	
	--no-trace Disable trace logging.
	-f, --force Force the overprovisioning without asking for user confirmation. Valid for only the set or reset option.
	-R <filename>, --redirect <filename> Redirects the screen output to the file specified.
	--no-ad Do not use the AD driver (only useful with the RAID version).
	--no-mr Do not use the MR driver (only useful with the RAID version).
	-z, --nobanner Suppresses the banner from printing, which includes information such as copyright, license, etc.
	--log-level <silent|error|info|debug|cmd-debug> Change log level.
	-h, --help Display help and exit.
Example(s)	
	wdckit aop disk0 disk1 disk2 -g -R aop.txt -Gets the actual user addressable max LBA for disk0, disk1 and disk2 and redirects the output to file aop.txt wdckit aop /dev/sda /dev/sdb /dev/sdc -g -R aop.txt -Gets the actual user addressable max LBA for /dev/sda, /dev/sdb and /dev/sdc and redirects the output to file aop.txt

Command	aop
	wdckit aop disk0 -s 117220823 -f -Sets the user addressable max LBA value for disk0 to 117220823 (with force) i.e. without prompting for confirmation. wdckit aop /dev/sda -s 117220823 -f -Sets the user addressable max LBA value for /dev/sda to 117220823 (with force) i.e. without prompting for confirmation.
	wdckit aop all -r -Resets the user addressable max LBA to their actual or original value for all drives.

Command	assert
Description	Check, clear or force a device asserts.
Restriction(s)	
	This task is only valid for an actual target.
	This task is only valid for NVMe targets.
	This task is only valid for WD or HGST targets.
Usage	
wdckit	assert <<devList> …|--model <model number> …|--serial <serial number> …> <-g|-c> [--trace|--trace-with-scan|--no-trace] [-f] [-m] [--nsid <value>] [-R <filename>] [--no-ad] [--no-mr] [-z] [--log-level <silent|error| info|debug|cmd-debug>] [-h]
REQUIRED	
	<devList> (accepted multiple times) Device name(s) to execute assert command.
–OR–	
	--model <model number> (accepted multiple times) Filter devices that only match this model number.
–OR–	
	--serial <serial number> (accepted multiple times) Filter devices that only match this serial number.
–AND–	
	-g, --get Check for device asserts.
–OR–	
	-c, --clear Clear device assert.
OPTIONAL	
	--trace Save trace log for command operation upon success. Note, by default, trace logging enabled upon error. The trace log filename is wdckit-trace.txt.
–OR–	

Command	assert
	--trace-with-scan Save trace log for command operation and include commands issued while scanning for devices.
–OR–	
	--no-trace Disable trace logging.
	-f, --force Send a clear device assert command even if an assert is not present.
	-m, --mirror Uses the NVMe mirror command instead of the NVMe standard command.
	--nsid <value> Specify the NVMe namespace ID value.
	-R <filename>, --redirect <filename> Redirects the screen output to the file specified.
	--no-ad Do not use the AD driver (only useful with the RAID version).
	--no-mr Do not use the MR driver (only useful with the RAID version).
	-z, --nobanner Suppresses the banner from printing, which includes information such as copyright, license, etc.
	--log-level <silent|error|info|debug|cmd-debug> Change log level.
	-h, --help Display help and exit.
Example(s)	
	wdckit assert disk0 -g -This will check for device asserts on 'disk0'. wdckit assert /dev/nvme0 -g -This will check for device asserts on '/dev/nvme0'.
	wdckit assert disk0 -c -This will clear device asserts on 'disk0' if and only if an assert is present. wdckit assert /dev/nvme0 -c -This will clear device asserts on '/dev/nvme0' if and only if an assert is present.

Command	assert
	wdckit assert disk0 -c -f
	-This will clear device asserts on 'disk0' even if an assert is not present.
	wdckit assert /dev/nvme0 -c -f
	-This will clear device asserts on '/dev/nvme0' even if an assert is not present.

Command	atasecurity
Description	This command is used to set, disable, freeze or unlock ATA security using User or Master password with High or Maximum security for ATA devices. NOTE: Many modern BIOSes will issue an ATA security freeze lock which blocks all subsequent ATA security commands until the next power cycle. Use 'idd' to confirm. The security frozen is reported at word 128, bit 3.
Restriction(s)	
	This task is only valid for an actual target.
	This task is only valid for SATA targets.
	This task is only valid for WDC targets.
Usage	
wdckit	atasecurity <<devList> …|--model <model number> …|--serial <serial number> …> <-s|-d|-f|-U> [-u|-m] [-H|-M] [--trace|--trace-with-scan|--no-trace] [-P <password>] [-R <filename>] [--no-ad] [--no-mr] [-z] [--log-level <silent|error|info|debug|cmd-debug>] [-h]
REQUIRED	
	<devList> (accepted multiple times) Device name(s) to execute atasecurity command.
–OR–	
	--model <model number> (accepted multiple times) Filter devices that only match this model number.
–OR–	
	--serial <serial number> (accepted multiple times) Filter devices that only match this serial number.
–AND–	
	-s, --set This option is used to enable ATA security by setting the User password or Master password.
–OR–	
	-d, --disable This option is used to disable ATA security by using the User or Master password.
–OR–	
	-f, --freeze This option is used to freeze all changes to ATA security options on the drive.
–OR–	

Command	atasecurity
	-U, --unlock This option is used to unlock a security locked drive on which ATA security is enabled.
OPTIONAL	
	-u, --userpassword This option is used if User Password is provided in the --password option to set, disable or unlock ATA security.
–OR–	
	-m, --masterpassword This option is used if Master Password is provided in the --password option to set, disable or unlock ATA security.
	-H, --high This option is used to set Security Mode to High when setting the User password.
–OR–	
	-M, --maximum This option is used to set Security Mode to Maximum when setting the User password.
	--trace Save trace log for command operation upon success. Note, by default, trace logging enabled upon error. The trace log filename is wdckit-trace.txt.
–OR–	
	--trace-with-scan Save trace log for command operation and include commands issued while scanning for devices.
–OR–	
	--no-trace Disable trace logging.
	-P <password>, --password <password> This option is used for providing the password string.
	-R <filename>, --redirect <filename> Redirects the screen output to the file specified.
	--no-ad Do not use the AD driver (only useful with the RAID version).
	--no-mr Do not use the MR driver (only useful with the RAID version).
	-z, --nobanner Suppresses the banner from printing, which includes information such as copyright, license, etc.
	--log-level <silent|error|info|debug|cmd-debug> Change log level.
	-h, --help Display help and exit.
Example(s)	

Command	atasecurity
	wdckit atasecurity disk0 -m -s -P password -Set Master password. wdckit atasecurity /dev/sda -m -s -P password -Set Master password.
	wdckit atasecurity disk0 -u -H -s -P password -Set User password with High Security Mode. wdckit atasecurity /dev/sda -u -H -s -P password -Set User password with High Security Mode.
	wdckit atasecurity disk0 -u -d -P password -Disable security using User password. wdckit atasecurity /dev/sda -u -d -P password -Disable security using User password.
	wdckit atasecurity disk0 -m -d -P password -Disable security using Master password. wdckit atasecurity /dev/sda -m -d -P password -Disable security using Master password.

Command	debug
Description	Send vendor unique command for debugging operations for supported NVMe devices.
Restriction(s)	
	This task is only valid for an actual target.
	This task is only valid for NVMe targets.
	This task is only valid for SanDisk targets.
Usage	
wdckit	debug <<devList> …|--model <model number> …|--serial <serial number> …> <-k <value>|-p <file>> [--trace|--trace-with-scan|--no-trace] -f <value> [-R <filename>] [--no-ad] [--no-mr] [-z] [--log-level <silent|error|info|debug|cmd-debug>] [-h]
REQUIRED	
	<devList> (accepted multiple times) Device name(s) to execute debug command.
–OR–	
	--model <model number> (accepted multiple times) Filter devices that only match this model number.

Command	debug
–OR–	
	--serial <serial number> (accepted multiple times) Filter devices that only match this serial number.
–AND–	
	-k <value>, --key <value> Private key code required for FW to accept this command.
–OR–	
	-p <file>, --payload <file> Private file containing 4-byte aligned data (maximum of 512 bytes).
	-f <value>, --flag <value> Value for the general flag.
OPTIONAL	
	--trace Save trace log for command operation upon success. Note, by default, trace logging enabled upon error. The trace log filename is wdckit-trace.txt.
–OR–	
	--trace-with-scan Save trace log for command operation and include commands issued while scanning for devices.
–OR–	
	--no-trace Disable trace logging.
	-R <filename>, --redirect <filename> Redirects the screen output to the file specified.
	--no-ad Do not use the AD driver (only useful with the RAID version).
	--no-mr Do not use the MR driver (only useful with the RAID version).
	-z, --nobanner Suppresses the banner from printing, which includes information such as copyright, license, etc.
	--log-level <silent|error|info|debug|cmd-debug> Change log level.
	-h, --help Display help and exit.
Example(s)	
	wdckit debug disk0 -f 10 -k <code> -Send the VU debug command 10 to the device 'disk0'. wdckit debug /dev/nvme0 -f 10 -k <code> -Send the VU debug command 10 to the device '/dev/nvme0'.

Command	debug
	wdckit debug disk0 -f FFFFh -k <code> -Send the VU debug command FFFFh to the device 'disk0'. wdckit debug /dev/nvme0 -f FFFFh -k <code> -Send the VU debug command FFFFh to the device '/dev/nvme0'.

Command	do-not-operate
Description	Add a device to the list of do not operate devices.
Usage	
wdckit	do-not-operate <-s <serial number> …|-d|-c> [--trace|--trace-with-scan|--no-trace] [-R <filename>] [--no-ad] [--no-mr] [-z] [--log-level <silent|error|info|debug|cmd-debug>] [-h]
REQUIRED	
	-s <serial number>, --serial <serial number> (accepted multiple times) Add this device to the Do Not Operate list.
–OR–	
	-d, --display Print a list of all devices from the Do Not Operate list.
–OR–	
	-c, --clear Clear all devices from the Do Not Operate list.
OPTIONAL	
	--trace Save trace log for command operation upon success. Note, by default, trace logging enabled upon error. The trace log filename is wdckit-trace.txt.
–OR–	
	--trace-with-scan Save trace log for command operation and include commands issued while scanning for devices.
–OR–	
	--no-trace Disable trace logging.
	-R <filename>, --redirect <filename> Redirects the screen output to the file specified.
	--no-ad Do not use the AD driver (only useful with the RAID version).
	--no-mr Do not use the MR driver (only useful with the RAID version).
	-z, --nobanner Suppresses the banner from printing, which includes information such as copyright, license, etc.
	--log-level <silent|error|info|debug|cmd-debug> Change log level.

Command	do-not-operate
	-h, --help Display help and exit.
Example(s)	
	wdckit do-not-operate -s "WDC WD1234" -Add serial number 'WDC WD1234' to the do not operate devices list.
	wdckit do-not-operate -d -Print the list of do not operated devices.
	wdckit do-not-operate -c -Clear the list of do not operated devices.

Command	erase
Description	This issues a secure erases, a trim of all user data or a sanitize command the device. Since this is a destructive operation, by default, this tool prompts for user confirmation before execution of this operation. To force the operation, use -f (–force). Note: For Windows with the NVMe inbox driver, erase via Sanitize must be run from Windows PE.
Restriction(s)	
	This task is only valid for an actual target.
	This task is not allowed on a boot device.
	This task is only valid for non-RAID devices.
	This task is only valid for WDC targets.
	This task is only valid in Windows PE with NVMe devices when connected via the inbox driver.
	This task requires the device to be ready.
Usage	
wdckit	erase <<devList> …|--model <model number> …|--serial <serial number> …> [-n|-e|-t|-B|-o <pattern>|-F <filename>|-c|-x|--table|-p|-s] [--progress-bar|--simple-progress|--no-progress] [--trace|--trace-with-scan|--no-trace] [-b] [-l <1|2|3|4>] [-C <1-31>] [-i] [--nsid <value>] [-f] [-R <filename>] [--no-ad] [--no-mr] [-z] [--log-level <silent|error|info|debug|cmd-debug>] [-h]
REQUIRED	
	<devList> (accepted multiple times) Device name(s) to execute erase command.
–OR–	
	--model <model number> (accepted multiple times) Filter devices that only match this model number.
–OR–	
	--serial <serial number> (accepted multiple times) Filter devices that only match this serial number.
OPTIONAL	
	-n, --normal Performs a normal Security Erase operation on the device list. Supported on only ATA devices.

Command	erase
–OR–	
	-e, --enhanced Performs an enhanced Security Erase operation on the device list. Supported on only ATA devices.
–OR–	
	-t, --trim Performs a trim operation from LBA 0 to the Maximum User Addressable LBA on the device list. Supported on only ATA and SCSI devices.
–OR–	
	-B, --blockerase Performs a Sanitize Block Erase operation on the device list.
–OR–	
	-o <pattern>, --overwrite <pattern> Performs a Sanitize Overwrite operation on the device list. The pattern is this 32-bit value. To specify length of pattern in bytes, use -l|--length.
–OR–	
	-F <filename>, --file <filename> Performs a Sanitize Overwrite operation on the device list. The pattern source is from this file.
–OR–	
	-c, --crypto Performs a Sanitize Crypto Scramble operation on the device list.
–OR–	
	-x, --exit-failure-mode Performs a Sanitize Exit Failure Mode operation on the device list (NVMe & SCSI only) or clear sanitize errors (ATA only).
–OR–	
	--table Erase the device partition table.
–OR–	
	-p, --progress Query the progress of an erase operation.
–OR–	
	-s, --show-support Show the erase methods that are supported on the device. No erase shall be performed.
	--progress-bar Display a full screen progress bar screen.
–OR–	
	--simple-progress Prevent the display of the progress bar screen, useful when running commands from a script.
–OR–	
	--no-progress No progress display.

Command	erase
	--trace Save trace log for command operation upon success. Note, by default, trace logging enabled upon error. The trace log filename is wdckit-trace.txt.
–OR–	
	--trace-with-scan Save trace log for command operation and include commands issued while scanning for devices.
–OR–	
	--no-trace Disable trace logging.
	-b, --blocked For a Sanitize operation, waits for the operation to complete.
	-l <1|2|3|4>, --length <1|2|3|4> Specify the length of the pattern (1-4) in bytes. This argument is only valid for -o|--overwrite. If not specified, default is 4.
	-C <1-31>, --overwrite-count <1-31> Specify the number of Sanitize Overwrite passes to be perform. This argument is only valid with -o|--overwrite or -F|--file.
	-i, --invert Specify that the pattern shall be inverted after every pass. This argument is only valid with -o|--overwrite or -F|--file.
	--nsid <value> Specify the NVMe namespace ID value.
	-f, --force Force the erase operation without asking for user confirmation.
	-R <filename>, --redirect <filename> Redirects the screen output to the file specified.
	--no-ad Do not use the AD driver (only useful with the RAID version).
	--no-mr Do not use the MR driver (only useful with the RAID version).
	-z, --nobanner Suppresses the banner from printing, which includes information such as copyright, license, etc.
	--log-level <silent|error|info|debug|cmd-debug> Change log level.
	-h, --help Display help and exit.
Example(s)	
	wdckit erase disk0 -o 0xAABB -Initiates overwrite sanitize operation with pattern AABB on device 'disk0'. wdckit erase /dev/sda -o 0xAABB -Initiates overwrite sanitize operation with pattern AABB on device '/dev/sda'.

Command	erase
	wdckit erase disk0 -B -f -Forcefully initiates blockerase sanitize operation on device 'disk0'. wdckit erase /dev/sda -B -f -Forcefully initiates blockerase sanitize operation on device '/dev/sda'.
	wdckit erase disk0 disk1 --crypto --blocked -Initiates cryptoscramble sanitize operation on devices 'disk0' and 'disk1'. CLI will be blocked until erase completes. wdckit erase /dev/sda /dev/sdb --crypto --blocked -Initiates cryptoscramble sanitize operation on devices '/dev/sda' and '/dev/sdb'. CLI will be blocked until erase completes.
	wdckit erase all --enhanced --nobanner --force -Forcefully initiates enhanced secure erase operation on all the supported devices and banner will be suppressed.
	wdckit erase disk0 disk1 -p -Shows the progress of erase operation on devices 'disk0' and 'disk1' once, if any. wdckit erase /dev/sda /dev/sdb -p -Shows the progress of erase operation on devices '/dev/sda' and '/dev/sdb' once, if any.

Command	errors
Description	List some or all application status codes and messages.
Usage	
wdckit	errors [<error-code> …] [-n|-s|-c|-r <error,exit> …] [--trace|--trace-with-scan|--no-trace] [-e <exit code>] [-S] [-R <filename>] [--no-ad] [--no-mr] [-z] [--log-level <silent|error|info|debug|cmd-debug>] [-h]
OPTIONAL	
	<error-code> (accepted multiple times) Show message for this error code.
	-n, --nvme Show an NVMe status command type/status command code. This error-code is a 12-bit value, where SCT = bits 11:8 and SC = bits 7:0.
–OR–	
	-s, --status-field Show value as NVMe status field (SF). This error-code is expected to be a 16-bit value.
–OR–	

Command	errors
	-c, --clear Clear all exit codes overrides (IE reset to default).
–OR–	
	-r <error,exit>, --replace <error,exit> (accepted multiple times) Replace the exit code for the given error code.
	--trace Save trace log for command operation upon success. Note, by default, trace logging enabled upon error. The trace log filename is wdckit-trace.txt.
–OR–	
	--trace-with-scan Save trace log for command operation and include commands issued while scanning for devices.
–OR–	
	--no-trace Disable trace logging.
	-e <exit code>, --exit-code <exit code> Filter error codes to only this exit code.
	-S, --sort-exit-code Show all application errors, and sort then by the exit code value.
	-R <filename>, --redirect <filename> Redirects the screen output to the file specified.
	--no-ad Do not use the AD driver (only useful with the RAID version).
	--no-mr Do not use the MR driver (only useful with the RAID version).
	-z, --nobanner Suppresses the banner from printing, which includes information such as copyright, license, etc.
	--log-level <silent|error|info|debug|cmd-debug> Change log level.
	-h, --help Display help and exit.
Example(s)	
	wdckit errors -List all error codes, exit codes and messages.
	wdckit errors -S -List all error codes, exit codes and messages sorted by exit code.
	wdckit errors -List all error codes, exit codes and messages.
	wdckit errors --exit-code 1 -List all error codes that return an exit code of 1.

Command	errors
	wdckit errors -1 -999 -List error codes -1 and -999 and the exit codes and messages.
	wdckit errors -12 -List error code -12 and the exit code and message.
	wdckit errors -n -List all known NVMe error codes.
	wdckit errors 0x00B -n -List NVMe error 00Bh.
	wdckit errors 0xC212 -s -List NVMe status field C212h.
	wdckit errors --redirect status.txt -List all error codes, messages and exit codes and the output is stored in status.txt.

Command	eula
Description	Show the End User License Agreement (EULA).
Usage	
wdckit	eula [-a|-3] [-h]
OPTIONAL	
	-a, --exhibit-a Show EULA Exhibit A
–OR–	
	-3, --third-party Show third party notices.
	-h, --help Display help and exit.
Example(s)	
	wdckit eula -Show the End User License Agreement (EULA).
	wdckit eula -a -Show EULA exhibit A.
	wdckit eula -3 -Show Third party notices.

Command	format
Description	Performs a format on a SCSI/ATA or NVMe device. Notes: NVMe format is supported in only Linux or Windows PE with the inbox driver. ATA format is only supported on L-H products.
Restriction(s)	
	This task is only valid for an actual target.
	This task is not allowed on a boot device.
	This task is only valid for WDC targets.
	This task is only valid in Windows PE with NVMe devices when connected via the inbox or Intel RST driver.
	This task requires the device to be ready.
Usage	
wdckit	format <<devList> …|--model <model number> …|--serial <serial number> …> <-l <lba format>|-b <bytes>> [--progress-bar|--simple-progress] [--trace|--trace-with-scan|--no-trace] [-s <ses value>] [--nsid <value>] [-n <number of blocks>] [--merge] [--fastformat] [-c] [-p <protection type>] [--danger-zone] [--timeout-seconds <seconds>] [-R <filename>] [--no-ad] [--no-mr] [-z] [--log-level <silent|error|info|debug|cmd-debug>] [-h]
REQUIRED	
	<devList> (accepted multiple times) Device name(s) to execute format command.
–OR–	
	--model <model number> (accepted multiple times) Filter devices that only match this model number.
–OR–	
	--serial <serial number> (accepted multiple times) Filter devices that only match this serial number.
–AND–	
	-l <lba format>, --lbaformat <lba format> Specify the LBA format number for an NVMe device. Not applicable for SCSI/ATA devices.
–OR–	
	-b <bytes>, --blocksize <bytes> Specify the block size, in bytes. Valid values for ATA devices: 512, 4096. Valid values for SCSI devices: 512, 520, 528, 4096, 4112, 4160, 4224. Valid values for NVMe devices are reported in identify namespace data.
OPTIONAL	
	--progress-bar Display a full screen progress bar screen.
–OR–	
	--simple-progress Prevent the display of the progress bar screen, useful when running commands from a script.
	--trace Save trace log for command operation upon success. Note, by default, trace logging enabled upon error. The trace log filename is wdckit-trace.txt.

Command	format
–OR–	
	--trace-with-scan Save trace log for command operation and include commands issued while scanning for devices.
–OR–	
	--no-trace Disable trace logging.
	-s <ses value>, --ses <ses value> Specify the Secure Erase Settings (SES) value for an NVMe device. Defaults to 0. Not applicable for SCSI/ATA devices.
	--nsid <value> Specify the NVMe namespace ID value.
	-n <number of blocks>, --numblocks <number of blocks> Specify number of blocks to format for SCSI/ATA devices. Not applicable for NVMe devices. Default: will format to maximum number of blocks supported by the device.
	--merge Merge G-List and P-List for SCSI/ATA devices. Not applicable for NVMe devices.
	--fastformat Set Fast Format for SCSI/ATA devices. Not applicable for NVMe devices.
	-c, --media-compatibility-check Perform media compatibility check for SCSI/ATA devices. Not applicable for NVMe devices.
	-p <protection type>, --protection <protection type> Specify a type of Protection Information (0|1|2|3) for SCSI/ATA devices. Not applicable for NVMe devices.
	--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.
	--timeout-seconds <seconds> Timeout value, in seconds. Allowed range is 30 seconds to 604800 (1 week).
	-R <filename>, --redirect <filename> Redirects the screen output to the file specified.
	--no-ad Do not use the AD driver (only useful with the RAID version).
	--no-mr Do not use the MR driver (only useful with the RAID version).
	-z, --nobanner Suppresses the banner from printing, which includes information such as copyright, license, etc.
	--log-level <silent|error|info|debug|cmd-debug> Change log level.
	-h, --help Display help and exit.
Example(s)	

Command	format
	wdckit format disk0 -Formats the device 'disk0' with default LBA format 0. wdckit format /dev/nvme0 -Formats the device '/dev/nvme0' with default LBA format 0.
	wdckit format disk0 -l 1 -Formats the device 'disk0' with LBA format 1. wdckit format /dev/nvme0 -l 1 -Formats the device '/dev/nvme0' with LBA format 1.
	wdckit format disk0 -l 1 -s 2 -Formats the device 'disk0' with LBA format 1 and SES 2. wdckit format /dev/nvme0 -l 1 -s 2 -Formats the device '/dev/nvme0' with LBA format 1 and SES 2.
	wdckit format disk0 -b 512 -Format the device 'disk0' with a block size of 512 bytes and maximum capacity. wdckit format /dev/sda -b 512 -Format the device '/dev/sda' with a block size of 512 bytes and maximum capacity.

Command	fsflush
Description	Performs a file system flush on device.
Restriction(s)	
	This task is only valid for an actual target.
	This task is only valid for WDC targets.
Usage	
wdckit	fsflush <<devList> …|--model <model number> …|--serial <serial number> …> [--trace|--trace-with-scan|--no-trace] [-R <filename>] [--no-ad] [--no-mr] [-z] [--log-level <silent|error|info|debug|cmd-debug>] [-h]
REQUIRED	
	<devList> (accepted multiple times) Device name(s) to execute fsflush command.
–OR–	
	--model <model number> (accepted multiple times) Filter devices that only match this model number.
–OR–	

Command	fsflush
	--serial <serial number> (accepted multiple times) Filter devices that only match this serial number.
OPTIONAL	
	--trace Save trace log for command operation upon success. Note, by default, trace logging enabled upon error. The trace log filename is wdckit-trace.txt.
–OR–	
	--trace-with-scan Save trace log for command operation and include commands issued while scanning for devices.
–OR–	
	--no-trace Disable trace logging.
	-R <filename>, --redirect <filename> Redirects the screen output to the file specified.
	--no-ad Do not use the AD driver (only useful with the RAID version).
	--no-mr Do not use the MR driver (only useful with the RAID version).
	-z, --nobanner Suppresses the banner from printing, which includes information such as copyright, license, etc.
	--log-level <silent|error|info|debug|cmd-debug> Change log level.
	-h, --help Display help and exit.
Example(s)	
	wdckit fsflush disk0 -File system flush for device 'disk0'. wdckit fsflush /dev/sda -File system flush for device '/dev/sda'.

Command	getdui
Description	Retrieves the vendor specific DUI (Device Unit Information) log from supported WDC devices.
Restriction(s)	
	This task is only valid for an actual NVMe device or file target.
	This task is only valid for SanDisk targets.
Usage	

Command	getdui
wdckit	getdui <<devList|filename> …|--model <model number> …|--serial <serial number> …> [--progress-bar|--simple-progress|--no-progress] [--trace|--trace-with-scan|--no-trace] [-S] [-g <type[,max size]> …] [-e <type[,max size]> …] [-d <1|2|3|4>] [-x <transfer size>] [-s <path>] [-R <filename>] [--no-ad] [--no-mr] [-z] [--log-level <silent|error|info|debug|cmd-debug>] [-h]
REQUIRED	
	<devList|filename> (accepted multiple times) Device or file name(s) to execute getdui command.
–OR–	
	--model <model number> (accepted multiple times) Filter devices that only match this model number.
–OR–	
	--serial <serial number> (accepted multiple times) Filter devices that only match this serial number.
OPTIONAL	
	--progress-bar Display a full screen progress bar screen.
–OR–	
	--simple-progress Prevent the display of the progress bar screen, useful when running commands from a script.
–OR–	
	--no-progress No progress display.
	--trace Save trace log for command operation upon success. Note, by default, trace logging enabled upon error. The trace log filename is wdckit-trace.txt.
–OR–	
	--trace-with-scan Save trace log for command operation and include commands issued while scanning for devices.
–OR–	
	--no-trace Disable trace logging.
	-S, --show-header Show header - will not collect DUI log.
	-g <type[,max size]>, --get-type <type[,max size]> (accepted multiple times) Specify section type to extract, with an optional maximum size limit in bytes.
	-e <type[,max size]>, --exclude-type <type[,max size]> (accepted multiple times) Specify section type to exclude. If an optional maximum size limit, in bytes, is specified, then this section type will be read up to the specified limit.
	-d <1|2|3|4>, --data-area <1|2|3|4> Data area to retrieve up to.

Command	getdui
	-x <transfer size>, --xfer <transfer size> Specify the maximum size, in bytes, to transfer per command. This value must be a multiple of 512.
	-s <path>, --save <path> Saves the device output to the path specified.
	-R <filename>, --redirect <filename> Redirects the screen output to the file specified.
	--no-ad Do not use the AD driver (only useful with the RAID version).
	--no-mr Do not use the MR driver (only useful with the RAID version).
	-z, --nobanner Suppresses the banner from printing, which includes information such as copyright, license, etc.
	--log-level <silent|error|info|debug|cmd-debug> Change log level.
	-h, --help Display help and exit.
Example(s)	
	wdckit getdui all -Retrieves from all the supported devices.
	wdckit getdui disk0 disk1 -s /home -Retrieves from device 'disk0' and 'disk1' and saves the log into /home. wdckit getdui /dev/nvme0 /dev/nvme1 -s /home -Retrieves from device '/dev/nvme0' and '/dev/nvme1' and saves the log into /home.
	wdckit getdui disk0 -g 0 -g 1 -g 2 -s /home -Retrieves only section type 0, 1 and 2 from device 'disk0' and saves the log into /home. wdckit getdui /dev/nvme0 -g 0 -g 1 -g 2 -s /home -Retrieves only section type 0, 1 and 2 from device '/dev/nvme0' and saves the log into /home.
	wdckit getdui disk0 -e 12 -e 6,200h -s /home -Retrieves every section except section type 12, and partially retrieves section type 6 (first 512 bytes) from device 'disk0' and saves the log into /home. wdckit getdui /dev/nvme0 -e 12 -e 6,200h -s /home -Retrieves every section except section type 12, and partially retrieves section type 6 (first 512 bytes) from device '/dev/nvme0' and saves the log into /home.

Command	geteyediagram
Description	Retrieves the vendor specific Eye Diagram (Eye Surf) log from supported NVMe devices.
Restriction (s)	
	This task is only valid for an actual NVMe device, an HGST device or file target.
	This task is only valid for WDC targets.
Usage	
wdckit	geteyediagram <<devList|filename> …|--model <model number> …|--serial <serial number> …> [-r|-s <path>|-f <filename>] [--trace|--trace-with-scan|--no-trace] [-m] [--nsid <value>] [--phy-id <0|1>] [--bit-depth <value>] [--phase-low <phase value>] [--phase-high <phase value>] [--phase-step <positive value>] [--voltage-low <voltage value>] [--voltage-high <voltage value>] [--voltage-step <positive value>] [--snapshot] [-R <filename>] [--no-ad] [--no-mr] [-z] [--log-level <silent|error|info|debug|cmd-debug>] [-h]
REQUIRED	
	<devList|filename> (accepted multiple times) Device or file name(s) to execute geteyediagram command.
–OR–	
	--model <model number> (accepted multiple times) Filter devices that only match this model number.
–OR–	
	--serial <serial number> (accepted multiple times) Filter devices that only match this serial number.
OPTIONAL	
	-r, --raw Dump the raw buffer.
–OR–	
	-s <path>, --save <path> Saves the device output to the path specified.
–OR–	
	-f <filename>, --file <filename> Saves the device output to the file specified. Can only be used with a single device.
	--trace Save trace log for command operation upon success. Note, by default, trace logging enabled upon error. The trace log filename is wdckit-trace.txt.
–OR–	
	--trace-with-scan Save trace log for command operation and include commands issued while scanning for devices.
–OR–	
	--no-trace Disable trace logging.

Command	geteyediagram
	-m, --mirror Uses the NVMe mirror command instead of the NVMe standard command.
	--nsid <value> Specify the NVMe namespace ID value.
	--phy-id <0|1> Specify the port number (0 or 1) on SAS drives. Only used with L-H devices.
	--bit-depth <value> Bit depth (default = 100000). Only used with L-H devices.
	--phase-low <phase value> Phase low value (default = 0). Only used with L-H devices.
	--phase-high <phase value> Phase high value (default = 31). Only used with L-H devices.
	--phase-step <positive value> Phase step (default = 1). Only used with L-H devices.
	--voltage-low <voltage value> Low voltage value (default = -31). Only used with L-H devices.
	--voltage-high <voltage value> High voltage value (default = 31). Only used with L-H devices.
	--voltage-step <positive value> Voltage value (default = 1). Only used with L-H devices.
	--snapshot Specify a snap shot eye diagram. This option is only used with L-H NVMe devices.
	-R <filename>, --redirect <filename> Redirects the screen output to the file specified.
	--no-ad Do not use the AD driver (only useful with the RAID version).
	--no-mr Do not use the MR driver (only useful with the RAID version).
	-z, --nobanner Suppresses the banner from printing, which includes information such as copyright, license, etc.
	--log-level <silent|error|info|debug|cmd-debug> Change log level.
	-h, --help Display help and exit.
Example(s)	
	wdckit geteyediagram all -Retrieves from all the supported devices.
	wdckit geteyediagram disk0 disk1 -Retrieves from device 'disk0' and 'disk1'. wdckit geteyediagram /dev/nvme0 /dev/nvme1 -Retrieves from device '/dev/nvme0' and '/dev/nvme1'.

Command	geteyediagram
	wdckit geteyediagram eye.bin -Parses file 'eye.bin'.

Command	getfeature
Description	Gets the various fields along with their values related to features on the device.
Restriction(s)	
	This task is only valid for an actual target.
	This task is only valid for WDC targets.
	This task is only valid for NVMe or SATA targets.
Usage	
wdckit	getfeature <<devList> …|--model <model number> …|--serial <serial number> …> <-f <feature-id>|-l|-p <alias> …> [-S <select-value>|--current|--default|--saved|--supported-capabilities] [-r|--raw-limit <bytes>|-s <path>|--set-feature-xml <filename>] [--trace|--trace-with-scan|--no-trace] [--xml-decoder <filename>] [-m] [--nsid <value>] [-u <uuid index>] [-R <filename>] [--no-ad] [--no-mr] [-z] [--log-level <silent|error|info|debug|cmd-debug>] [-h]
REQUIRED	
	<devList> (accepted multiple times) Device name(s) to execute getfeature command.
–OR–	
	--model <model number> (accepted multiple times) Filter devices that only match this model number.
–OR–	
	--serial <serial number> (accepted multiple times) Filter devices that only match this serial number.
–AND–	
	-f <feature-id>, --feature <feature-id> NVMe devices only. Feature id to be retrieved.
–OR–	
	-l, --list Prints the list of supported features.
–OR–	
	-p <alias>, --parameterlist <alias> (accepted multiple times) ATA devices only. Name of the operational parameters whose values need to be retrieved. Use 'all' to retrieve all operational parameter values.
OPTIONAL	
	-S <select-value>, --select <select-value> NVMe devices only. Option for the select field.
–OR–	
	--current NVMe devices only. Select current feature setting.

Command	getfeature
–OR–	
	--default NVMe devices only. Select default feature setting.
–OR–	
	--saved NVMe devices only. Select saved feature setting.
–OR–	
	--supported-capabilities NVMe devices only. Select supported capabilities feature setting.
	-r, --raw Dump the raw buffer.
–OR–	
	--raw-limit <bytes> Dump the raw buffer, with at most, this many bytes.
–OR–	
	-s <path>, --save <path> Saves the device output to the path specified.
–OR–	
	--set-feature-xml <filename> Save NVMe set feature response buffer in an XML format suitable for setfeatures. Only applies to feature IDs: 3h, Ch, Eh, 13h, 16h, 7Dh, 7Eh, 7Fh and 81h. <filename> will be used if and only if one target device is specified. When multiple targets are specified, the XML filename will be <sn>_<timestamp>_feature-<id>_<version>.xml.
	--trace Save trace log for command operation upon success. Note, by default, trace logging enabled upon error. The trace log filename is wdckit-trace.txt.
–OR–	
	--trace-with-scan Save trace log for command operation and include commands issued while scanning for devices.
–OR–	
	--no-trace Disable trace logging.
	--xml-decoder <filename> Decode additional data as described by this xml file. Please refer to the user guide appendix for the XML schema.
	-m, --mirror Uses the NVMe mirror command instead of the NVMe standard command.
	--nsid <value> Specify the NVMe namespace ID value.
	-u <uuid index>, --uuid-index <uuid index> Specify the NVMe UUID Index (0-7fh). This field is only valid for NVMe devices. It will be ignored for ATA/SCSI devices.
	-R <filename>, --redirect <filename> Redirects the screen output to the file specified.

Command	getfeature
	--no-ad Do not use the AD driver (only useful with the RAID version).
	--no-mr Do not use the MR driver (only useful with the RAID version).
	-z, --nobanner Suppresses the banner from printing, which includes information such as copyright, license, etc.
	--log-level <silent|error|info|debug|cmd-debug> Change log level.
	-h, --help Display help and exit.
Example(s)	
	wdckit getfeature disk0 -f 2 -This will display the feature values related to feature id 2h of 'disk0'. wdckit getfeature /dev/nvme0 -f 2 -This will display the feature values related to feature id 2h of '/dev/nvme0'.
	wdckit getfeature disk0 -f 2 -z -This will display the feature values related to feature id 2h of 'disk0' and suppress the banner. wdckit getfeature /dev/nvme0 -f 2 -z -This will display the feature values related to feature id 2h of '/dev/nvme0' and suppress the banner.
	wdckit getfeature disk0 disk1 -f 2 -This will display the feature values related to feature id 2h of 'disk0' and 'disk1'. wdckit getfeature /dev/nvme0 /dev/nvme1 -f 2 -This will display the feature values related to feature id 2h of '/dev/nvme0' and '/dev/nvme1'.
	wdckit getfeature disk0 -l -This option will list the Names and alias of all the supported operational Parameters of 'disk0'. wdckit getfeature /dev/sda -l -This option will list the Names and alias of all the supported operational Parameters of '/dev/sda'.
	wdckit getfeature all -p all -This option will list the Name-value Pair of all the operational Parameters of all devices.

Command	getfeature
	wdckit getfeature disk0 disk1 -p apm -p dipm -This option will list the Name-value Pair for APM and Device Initiated Power Management parameters of 'disk0' and 'disk1'. wdckit getfeature /dev/sda /dev/sdb -p apm -p dipm -This option will list the Name-value Pair for APM and Device Initiated Power Management parameters of '/dev/sda' and '/dev/sdb'.

Command	getlog
Description	This command retrieves logs from ATA, NVMe and SCSI devices. Log events for various factors, such as error handling, status handling, statistics, accounting, and so forth. This will decode and show the log contents in human readable text.
Restriction(s)	
	This task is only valid for an actual device or file target.
	This task is only valid for WDC targets.
Usage	
wdckit	getlog <<devList|filename> …|--model <model number> …|--serial <serial number> …> [--smartlog|-g|-G] [--ata|--nvme|--scsi] [-r|--raw-limit <bytes>|-s <path>] [--data-area <1|2|3|4>|-t <type[,max size]> …|-e <type[,max size]]> …|--show-dui-header] [--no-progress|--progress-bar|--simple-progress] [--trace|--trace-with-scan|--no-trace] [-l <log number>] [--lsp <log specific number>] [-u <uuid index>] [--rae] [-f <value>] [-p <page list>] [--ignore-directory] [-S <bytes>] [-b <blocks>] [--lsi <value>] [--csi <value>] [--force] [-m] [--nsid <value>] [-x <transfer size>] [--xml-decoder <filename>] [--output <text|json|xml|csv|csv-no-header>] [-R <filename>] [--no-ad] [--no-mr] [-z] [--log-level <silent|error|info|debug|cmd-debug>] [-h]
REQUIRED	
	<devList|filename> (accepted multiple times) Device or file name(s) to execute getlog command.
–OR–	
	--model <model number> (accepted multiple times) Filter devices that only match this model number.
–OR–	
	--serial <serial number> (accepted multiple times) Filter devices that only match this serial number.
OPTIONAL	
	--smartlog Use ATA SMART read log command to access the data.
–OR–	
	-g, --gpl Use ATA GPL read log command to access the data.
–OR–	

Command	getlog
	-G, --gpl-dma Use ATA GPL read log DMA command to access the data.
	--ata Specify that the binary file was retreived from an ATA device.
–OR–	
	--nvme Specify that the binary file was retreived from an NVMe device.
–OR–	
	--scsi Specify that the binary file was retreived from a SCSI device.
	-r, --raw Dump the raw buffer.
–OR–	
	--raw-limit <bytes> Dump the raw buffer, with at most, this many bytes.
–OR–	
	-s <path>, --save <path> Saves the device output to the path specified.
	--data-area <1|2|3|4> Specify the highest NVMe telemetry data area to retrieve. The default value is 3.
–OR–	
	-t <type[,max size]>, --get-type <type[,max size]> (accepted multiple times) Specify NVMe telemetry section type to extract, with an optional maximum size limit in bytes. Note, may not be supported for all WDC NVMe devices.
–OR–	
	-e <type[,max size]]>, --exclude-type <type[,max size]]> (accepted multiple times) Specify NVMe telemetry section type to exclude. If an optional maximum size limit, in bytes, is specified, then this section type will be read up to the specified limit. Note, may not be supported for all WDC NVMe devices.
–OR–	
	--show-dui-header Show NVMe telemetry log (log 7h) header - will not collect telemetry log. Note, may not be supported for all WDC NVMe devices.
	--no-progress No progress display.
–OR–	
	--progress-bar Display a full screen progress bar screen.
–OR–	
	--simple-progress Prevent the display of the progress bar screen, useful when running commands from a script.
	--trace Save trace log for command operation upon success. Note, by default, trace logging enabled upon error. The trace log filename is wdckit-trace.txt.

Command	getlog
–OR–	
	--trace-with-scan Save trace log for command operation and include commands issued while scanning for devices.
–OR–	
	--no-trace Disable trace logging.
	-l <log number>, --log <log number> Specify the NVMe log page id (LID) to be retrieved or the ATA log address to be retreived or the SCSI page code to be retrieved. Refer to the appendix of the user guide for a list of log numbers and names.
	--lsp <log specific number> Specify the NVMe log specific field (LSP) value.
	-u <uuid index>, --uuid-index <uuid index> Specify the NVMe UUID Index (0-7fh). This field is only valid for NVMe devices. It will be ignored for ATA/SCSI devices.
	--rae Specify the NVMe Retain Asyncrhonous Event (rae) flag. It will be ignored for ATA/SCSI devices.
	-f <value>, --features <value> Specify the ATA General Purpose Log address FEATURE value. Used only on some GPL addresses.
	-p <page list>, --pages <page list> Pages from the ATA log address or SCSI subpage code to be retrieved. If not specified, all the pages are displayed. The following notations are supported for pageList: x|x..y|x..+y[,x|x..y|x..+y].
	--ignore-directory Skips the check if the log exists and tries the command.
	-S <bytes>, --size <bytes> Specify the number of bytes to read for NVMe devices.
	-b <blocks>, --block-count <blocks> Specify the maximum number of blocks to transfer per ATA command.
	--lsi <value> Specify the log specific identifier (0-FFFFh) for NVMe devices.
	--csi <value> Specify the command set identifier (0-FFh) for NVMe devices.
	--force Force reading an empty NVMe telemetry-controller intiated log (lid=8h).
	-m, --mirror Uses the NVMe mirror command instead of the NVMe standard command.
	--nsid <value> Specify the NVMe namespace ID value.
	-x <transfer size>, --xfer <transfer size> Specify the maximum size, in 4096 byte (4 KiB) units, to transfer per command. This is only used for NVMe devices. Default is 1.
	--xml-decoder <filename> Decode additional data as described by this xml file. Please refer to the user guide appendix for the XML schema.

Command	getlog
	--output <text|json|xml|csv|csv-no-header> Specify output format.
	-R <filename>, --redirect <filename> Redirects the screen output to the file specified.
	--no-ad Do not use the AD driver (only useful with the RAID version).
	--no-mr Do not use the MR driver (only useful with the RAID version).
	-z, --nobanner Suppresses the banner from printing, which includes information such as copyright, license, etc.
	--log-level <silent|error|info|debug|cmd-debug> Change log level.
	-h, --help Display help and exit.
Example(s)	
	wdckit getlog disk0 -l 2 -Retrieves and parses log identifier 2h from 'disk0'. wdckit getlog /dev/nvme0 -l 2 -Retrieves and parses log identifier 2h from '/dev/nvme0'.
	wdckit getlog disk0 -l 2 -r -Display log identifier 2h raw data for 'disk0'. wdckit getlog /dev/nvme0 -l 2 -r -Display log identifier 2h raw data for '/dev/nvme0'.
	wdckit getlog disk0 -l 2 -s . -Saves log identifier 2h data from 'disk0' into a binary file in the current directory (.). wdckit getlog /dev/nvme0 -l 2 -s . -Saves log identifier 2h data from '/dev/nvme0' into a binary file in the current directory (.).
	wdckit getlog error.bin -l 1 --nvme -Parses error log (lid = 1) content of 'error.bin'.
	wdckit getlog disk0 -l 7 --show-dui-header -Shows telemetry log's DUI header from 'disk0'. wdckit getlog /dev/nvme0 -l 7 --show-dui-header -Shows telemetry log's DUI header from '/dev/nvme0'.

Command	getlog
	wdckit getlog disk0 -l 7 -t 2 -t 15 -s . -Saves partial telemetry log (get section type 2 and 15) as a zip file in the current directory (.).disk0'. wdckit getlog /dev/nvme0 -l 7 -t 2 -t 15 -s . -Saves partial telemetry log (get section type 2 and 15) as a zip file in the current directory (.)./dev/nvme0'.
	wdckit getlog disk0 disk1 -l 4 -p 0..3 -Retrieves Log Data of device 'disk0' and 'disk1' of log address 4 of log pages 0 to 3. wdckit getlog /dev/sda /dev/sdb -l 4 -p 0..3 -Retrieves Log Data of device '/dev/sda' and '/dev/sdb' of log address 4 of log pages 0 to 3.
	wdckit getlog all -l 4 -p 0,3..+5 -Retrieves Log Data of all supported ATA devices of log address 4 log page 0 and log page 3 for 5 consecutive pages.
	wdckit getlog smartctl.txt -l A0h --save . --ata -Convert text file smartctl.txt to a binary file in the current directory (.) (smartctl.txt_{DDMMYYYY_HHMMSS}_file_{VERSION}.bin).

Command	getpe
Description	Retrieves the vendor specific PE (Program Erase) log from supported NVMe devices.
Restriction(s)	
	This task is only valid for an actual NVMe device or file target.
	This task is only valid for devices with a unique customer firmware.
	This task is only valid for WDC targets.
Usage	
wdckit	getpe <<devList|filename> …|--model <model number> …|--serial <serial number> …> [-r|--raw-limit <bytes>|-s <path>] [--trace|--trace-with-scan|--no-trace] [-R <filename>] [--no-ad] [--no-mr] [-z] [--log-level <silent|error|info|debug|cmd-debug>] [-h]
REQUIRED	
	<devList|filename> (accepted multiple times) Device or file name(s) to execute getpe command.
–OR–	
	--model <model number> (accepted multiple times) Filter devices that only match this model number.
–OR–	

Command	getpe
	--serial <serial number> (accepted multiple times) Filter devices that only match this serial number.
OPTIONAL	
	-r, --raw Dump the raw buffer.
–OR–	
	--raw-limit <bytes> Dump the raw buffer, with at most, this many bytes.
–OR–	
	-s <path>, --save <path> Saves the device output to the path specified.
	--trace Save trace log for command operation upon success. Note, by default, trace logging enabled upon error. The trace log filename is wdckit-trace.txt.
–OR–	
	--trace-with-scan Save trace log for command operation and include commands issued while scanning for devices.
–OR–	
	--no-trace Disable trace logging.
	-R <filename>, --redirect <filename> Redirects the screen output to the file specified.
	--no-ad Do not use the AD driver (only useful with the RAID version).
	--no-mr Do not use the MR driver (only useful with the RAID version).
	-z, --nobanner Suppresses the banner from printing, which includes information such as copyright, license, etc.
	--log-level <silent|error|info|debug|cmd-debug> Change log level.
	-h, --help Display help and exit.
Example(s)	
	wdckit getpe all -Retrieves from all the supported devices.
	wdckit getpe disk0 disk1 -Retrieves from device 'disk0' and 'disk1'. wdckit getpe /dev/nvme0 /dev/nvme1 -Retrieves from device '/dev/nvme0' and '/dev/nvme1'.

Command	getpe
	wdckit getpe pe.bin -Retrieves from file 'pe.bin'.

Command	getpersistentevent
Description	Retrieves and parses the Persistent Event Log (dh) from supported NVMe devices.
Restriction(s)	
	This task is only valid for an actual NVMe device or file target.
	This task is only valid for WDC targets.
Usage	
wdckit	getpersistentevent <<devList|filename> …|--model <model number> …|--serial <serial number> …> [-r|--raw-limit <bytes>|-s <path>] [--trace|--trace-with-scan|--no-trace] [-m] [--nsid <value>] [-R <path>] [--no-ad] [--no-mr] [-z] [--log-level <silent|error|info|debug|cmd-debug>] [-h]
REQUIRED	
	<devList|filename> (accepted multiple times) Device or file name(s) to execute getpersistentevent command.
–OR–	
	--model <model number> (accepted multiple times) Filter devices that only match this model number.
–OR–	
	--serial <serial number> (accepted multiple times) Filter devices that only match this serial number.
OPTIONAL	
	-r, --raw Dump the raw buffer.
–OR–	
	--raw-limit <bytes> Dump the raw buffer, with at most, this many bytes.
–OR–	
	-s <path>, --save <path> Saves the device output to the path specified.
	--trace Save trace log for command operation upon success. Note, by default, trace logging enabled upon error. The trace log filename is wdckit-trace.txt.
–OR–	
	--trace-with-scan Save trace log for command operation and include commands issued while scanning for devices.
–OR–	
	--no-trace Disable trace logging.

Command	getpersistentevent
	-m, --mirror Uses the NVMe mirror command instead of the NVMe standard command.
	--nsid <value> Specify the NVMe namespace ID value.
	-R <path>, --redirect <path> Redirects the screen output to the path specified.
	--no-ad Do not use the AD driver (only useful with the RAID version).
	--no-mr Do not use the MR driver (only useful with the RAID version).
	-z, --nobanner Suppresses the banner from printing, which includes information such as copyright, license, etc.
	--log-level <silent|error|info|debug|cmd-debug> Change log level.
	-h, --help Display help and exit.
Example(s)	
	wdckit getpersistentevent all -Displays the Persistent Event Log from all the supported devices.
	wdckit getpersistentevent disk0 disk1 -s c:1 -Retrieves from device 'disk0' and 'disk1' and saves the log into c:1. wdckit getpersistentevent /dev/nvme0 /dev/nvme1 -s /home -Retrieves from device '/dev/nvme0' and '/dev/nvme1' and saves the log into root/home.
	wdckit getpersistentevent data.bin -Displays the Persistent Event Log from 'data.bin'.

Command	getsmart
Description	Retrieves the SMART data and the SMART status with SMART trip parameter, if any, from the device.
Restriction(s)	
	This task is only valid for an actual device or file target.
	This task is only valid for WDC targets.
Usage	
wdckit	getsmart <<devList|filename> …|--model <model number> …|--serial <serial number> …> [-a|-r|--raw-limit <bytes>|-S|-s <path>] [--trace|--trace-with-scan|--no-trace] [--output <text|json|xml|csv|csv-no-header>] [--nsid <value>] [-f] [-n <filename>] [-R <filename>] [--no-ad] [--no-mr] [-z] [--log-level <silent|error|info|debug|cmd-debug>] [-h]
REQUIRED	

Command	getsmart
	<devList|filename> (accepted multiple times) Device or file name(s) to execute getsmart command.
–OR–	
	--model <model number> (accepted multiple times) Filter devices that only match this model number.
–OR–	
	--serial <serial number> (accepted multiple times) Filter devices that only match this serial number.
OPTIONAL	
	-a, --attributes Retrieves the SMART attributes of the device.
–OR–	
	-r, --raw Dump the raw buffer.
–OR–	
	--raw-limit <bytes> Dump the raw buffer, with at most, this many bytes.
–OR–	
	-S, --status Retrieves the SMART status of the device.
–OR–	
	-s <path>, --save <path> Saves the device output to the path specified.
	--trace Save trace log for command operation upon success. Note, by default, trace logging enabled upon error. The trace log filename is wdckit-trace.txt.
–OR–	
	--trace-with-scan Save trace log for command operation and include commands issued while scanning for devices.
–OR–	
	--no-trace Disable trace logging.
	--output <text|json|xml|csv|csv-no-header> Specify output format.
	--nsid <value> Specify the NVMe namespace ID value.
	-f, --fail Retrieves the SMART failed attributes of the device.
	-n <filename>, --namesub <filename> Takes xml filename as input for name substitution of attributes.
	-R <filename>, --redirect <filename> Redirects the screen output to the file specified.
	--no-ad Do not use the AD driver (only useful with the RAID version).

Command	getsmart
	--no-mr Do not use the MR driver (only useful with the RAID version).
	-z, --nobanner Suppresses the banner from printing, which includes information such as copyright, license, etc.
	--log-level <silent|error|info|debug|cmd-debug> Change log level.
	-h, --help Display help and exit.
Example(s)	
	wdckit getsmart all -a -Retrieves SMART attributes of all the supported devices.
	wdckit getsmart disk0 -r --redirect smart.txt -Retrieves SMART Read Data of device 'disk0' and output is stored in smart.txt in current directory. wdckit getsmart /dev/sda -r --redirect smart.txt -Retrieves SMART Read Data of device '/dev/sda' and output is stored in smart.txt in current directory.
	wdckit getsmart disk0 disk1 -S --nobanner -Retrieves SMART status of devices 'disk0' and 'disk1' and the banner is suppressed. wdckit getsmart /dev/sda /dev/sdb -S --nobanner -Retrieves SMART status of devices '/dev/sda' and '/dev/sdb' and the banner is suppressed.

Command	getsmr
Description	Retrieves the vendor specific SMR data from supported WDC devices.
Restriction(s)	
	This task is only valid for an actual target.
	This task is only valid for WDC targets.
	This task is only valid for SATA targets.
Usage	
wdckit	getsmr <<devList> …|--model <model number> …|--serial <serial number> …> [--trace|--trace-with-scan|--no-trace] [-s <path>] [-a] [-R <filename>] [--no-ad] [--no-mr] [-z] [--log-level <silent|error|info|debug|cmd-debug>] [-h]
REQUIRED	
	<devList> (accepted multiple times) Device name(s) to execute getsmr command.
–OR–	

Command	getsmr
	--model <model number> (accepted multiple times) Filter devices that only match this model number.
–OR–	
	--serial <serial number> (accepted multiple times) Filter devices that only match this serial number.
OPTIONAL	
	--trace Save trace log for command operation upon success. Note, by default, trace logging enabled upon error. The trace log filename is wdckit-trace.txt.
–OR–	
	--trace-with-scan Save trace log for command operation and include commands issued while scanning for devices.
–OR–	
	--no-trace Disable trace logging.
	-s <path>, --save <path> Saves the device output to the path specified.
	-a, --collect-all Collects all conditional data.
	-R <filename>, --redirect <filename> Redirects the screen output to the file specified.
	--no-ad Do not use the AD driver (only useful with the RAID version).
	--no-mr Do not use the MR driver (only useful with the RAID version).
	-z, --nobanner Suppresses the banner from printing, which includes information such as copyright, license, etc.
	--log-level <silent|error|info|debug|cmd-debug> Change log level.
	-h, --help Display help and exit.
Example(s)	
	wdckit getsmr all -Retrieves from all the supported devices.
	wdckit getsmr disk0 disk1 -s c:1 -Retrieves from device 'disk0' and 'disk1' and saves the log into c:1. wdckit getsmr /dev/sda /dev/sdb -s /home -Retrieves from device '/dev/sda' and '/dev/sdb' and saves the log into /home.

Command	help
Description	Displays help information about wdckit commands.
Usage	
wdckit	help [<command name>] [-n|-d|-e|-s|-r] [--cssd-sata|--cssd-nvme|--chdd|--essd-sata|--essd-nvme|--ehdd|--ssd-sata|--ssd-nvme|--hdd|-a] [--trace|--trace-with-scan|--no-trace] [-o <w|l|f|windows|linux|freebsd>] [-t <label>] [-R <filename>] [--no-ad] [--no-mr] [-z] [--log-level <silent|error|info|debug|cmd-debug>] [-h]
OPTIONAL	
	<command name> Any wdckit command for which help information is required. Always a particular command at once.
	-n, --syntax Displays syntax for command.
–OR–	
	-d, --description Displays description for command.
–OR–	
	-e, --examples Displays examples for command.
–OR–	
	-s, --shortdescription Displays short description for command.
–OR–	
	-r, --restriction Displays restriction(s) for command.
	--cssd-sata Filter help to include functions that support client SSD SATA devices.
–OR–	
	--cssd-nvme Filter help to include functions that support client SSD NVMe devices.
–OR–	
	--chdd Filter help to include functions that support client HDD devices.
–OR–	
	--essd-sata Filter help to include functions that support enterprise SSD SATA devices.
–OR–	
	--essd-nvme Filter help to include functions that support enterprise SSD NVMe devices.
–OR–	
	--ehdd Filter help to include functions that support enterprise HDD devices.
–OR–	

Command	help
	--ssd-sata Filter help to include functions that support SSD SATA devices.
–OR–	
	--ssd-nvme Filter help to include functions that support SSD NVMe devices.
–OR–	
	--hdd Filter help to include functions that support HDD devices.
–OR–	
	-a, --all Show help for every function.
	--trace Save trace log for command operation upon success. Note, by default, trace logging enabled upon error. The trace log filename is wdckit-trace.txt.
–OR–	
	--trace-with-scan Save trace log for command operation and include commands issued while scanning for devices.
–OR–	
	--no-trace Disable trace logging.
	-o <w|l|f|windows|linux|freebsd>, --operatingsystem <w|l|f|windows|linux|freebsd> Displays examples for specified operating system. Use 'w' for Windows and 'l' for Linux.
	-t <label>, --table <label> Save table of command line args to 'label-flag.csv' and 'label-desc.csv'. Best case usage is all commands, eg: 'wdckit help "*" -t label'
	-R <filename>, --redirect <filename> Redirects the screen output to the file specified.
	--no-ad Do not use the AD driver (only useful with the RAID version).
	--no-mr Do not use the MR driver (only useful with the RAID version).
	-z, --nobanner Suppresses the banner from printing, which includes information such as copyright, license, etc.
	--log-level <silent|error|info|debug|cmd-debug> Change log level.
	-h, --help Display help and exit.
Example(s)	
	wdckit help -a -Shows help information for all wdckit commands.

Command	help
	wdckit help show -d -Shows command description only for show command.

Command	hmb
Description	Display Host Memory Buffer support for an NVMe device.
Restriction(s)	
	This task is only valid for an actual target.
	This task is only valid for NVMe targets.
	This task is only valid for WDC targets.
Usage	
wdckit	hmb <<devList> …|--model <model number> …|--serial <serial number> …> [-r|--raw-limit <bytes>|-s <path>] [--trace|--trace-with-scan|--no-trace] [-u <uuid index>] [-R <filename>] [--no-ad] [--no-mr] [-z] [--log-level <silent|error|info|debug|cmd-debug>] [-h]
REQUIRED	
	<devList> (accepted multiple times) Device name(s) to execute hmb command.
–OR–	
	--model <model number> (accepted multiple times) Filter devices that only match this model number.
–OR–	
	--serial <serial number> (accepted multiple times) Filter devices that only match this serial number.
OPTIONAL	
	-r, --raw Dump the raw buffer.
–OR–	
	--raw-limit <bytes> Dump the raw buffer, with at most, this many bytes.
–OR–	
	-s <path>, --save <path> Saves the device output to the path specified.
	--trace Save trace log for command operation upon success. Note, by default, trace logging enabled upon error. The trace log filename is wdckit-trace.txt.
–OR–	
	--trace-with-scan Save trace log for command operation and include commands issued while scanning for devices.
–OR–	
	--no-trace Disable trace logging.

Command	hmb
	-u <uuid index>, --uuid-index <uuid index> Specify the NVMe UUID Index (0-7fh). This field is only valid for NVMe devices. It will be ignored for ATA/SCSI devices.
	-R <filename>, --redirect <filename> Redirects the screen output to the file specified.
	--no-ad Do not use the AD driver (only useful with the RAID version).
	--no-mr Do not use the MR driver (only useful with the RAID version).
	-z, --nobanner Suppresses the banner from printing, which includes information such as copyright, license, etc.
	--log-level <silent|error|info|debug|cmd-debug> Change log level.
	-h, --help Display help and exit.
Example(s)	
	wdckit hmb disk0 -Displays the HMB support from device 'disk0'. wdckit hmb /dev/nvme0 -Displays the HMB support from device '/dev/nvme0'.

Command	idd
Description	Retrieves the Identify data of the ATA or NVMe device. SCSI devices are not supported.
Restriction (s)	
	This task is only valid for an actual device or file target.
Usage	
wdckit	idd [<devList|filename> …|--model <model number> …|--serial <serial number> …] [-r|--raw-limit <bytes>|-s <path>] [-c|-n|-d] [--trace|--trace-with-scan|--no-trace] [-l] [--zns] [--cns <cns value>] [--nsid <value>] [-u <uuid index>] [--csi <csi value>] [--cntid <cntid value>] [--cnssi <cnssi value>] [-v <page code>] [--xml-decoder <filename>] [--output <text|json|xml|csv|csv-no-header>] [-R <filename>] [--no-ad] [--no-mr] [-z] [--log-level <silent|error|info|debug|cmd-debug>] [-h]
OPTIONAL	
	<devList|filename> (accepted multiple times) Device or file name(s) to execute idd command.
–OR–	
	--model <model number> (accepted multiple times) Filter devices that only match this model number.
–OR–	

Command	idd
	--serial <serial number> (accepted multiple times) Filter devices that only match this serial number.
	-r, --raw Dump the raw buffer.
–OR–	
	--raw-limit <bytes> Dump the raw buffer, with at most, this many bytes.
–OR–	
	-s <path>, --save <path> Saves the device output to the path specified.
	-c, --controller Displays the Identify Controller Data for an NVMe device (CNS=01h). Displays the Identify Device Data for an ATA device. SCSI devices are not valid.
–OR–	
	-n, --namespace Displays the Identify Namespace Data of the NVMe device (CNS=00h). ATA and SCSI devices are not valid.
–OR–	
	-d, --desc Displays the Namespace Identification Descriptor list (CNS=03h).
	--trace Save trace log for command operation upon success. Note, by default, trace logging enabled upon error. The trace log filename is wdckit-trace.txt.
–OR–	
	--trace-with-scan Save trace log for command operation and include commands issued while scanning for devices.
–OR–	
	--no-trace Disable trace logging.
	-l, --list Displays the controller list (CNS=13h), when used with -c|--controller or displays the active Namespace ID list (CNS=02h) when used with -n|--namespace of the NVMe device. ATA and SCSI devices are not valid.
	--zns Display the identify controller ZNS specific data (CNS=06h), when used with -c|--controller or display the identify namespace ZNS specific data (CNS=05h), when used with -n|--namespace of the NVMe device. ATA and SCSI devices are not valid.
	--cns <cns value> NVMe controller or namespace structure. Mutually exclusive with -c|--controller, -n|--namespace, -l|--list, --zns.
	--nsid <value> Specify the NVMe namespace ID value.
	-u <uuid index>, --uuid-index <uuid index> Specify the NVMe UUID Index (0-7fh). This field is only valid for NVMe devices. It will be ignored for ATA/SCSI devices.

Command	idd
	--csi <csi value> NVMe Command Set Identifier value. Used for ZNS commands.
	--cntid <cntid value> NVMe Controller Identifier value.
	--cnssi <cnssi value> NVMe CNS Specific Identifier value.
	-v <page code>, --vpd <page code> Display inquiry vital product data for a SCSI device. NVMe and ATA devices are not valid.
	--xml-decoder <filename> Decode additional data as described by this xml file. Please refer to the user guide appendix for the XML schema.
	--output <text|json|xml|csv|csv-no-header> Specify output format.
	-R <filename>, --redirect <filename> Redirects the screen output to the file specified.
	--no-ad Do not use the AD driver (only useful with the RAID version).
	--no-mr Do not use the MR driver (only useful with the RAID version).
	-z, --nobanner Suppresses the banner from printing, which includes information such as copyright, license, etc.
	--log-level <silent|error|info|debug|cmd-debug> Change log level.
	-h, --help Display help and exit.
Example(s)	
	wdckit idd all -Retrieves Identify Data of all the supported devices.
	wdckit idd disk0 --redirect identifyData.txt -Retrieves Identify Data of device 'disk0' and output is stored in identifyData.txt in current directory. wdckit idd /dev/sda --redirect identifyData.txt -Retrieves Identify Data of device '/dev/sda' and output is stored in identifyData.txt in current directory.
	wdckit idd disk0 disk1 --nobanner -Retrieves Identify Data of devices 'disk0' and 'disk1' and the banner is suppressed. wdckit idd /dev/sda /dev/sdb --nobanner -Retrieves Identify Data of devices '/dev/sda' and '/dev/sdb' and the banner is suppressed.

Command	idd
	wdckit idd disk0 --namespace -Retrieves Identify Namespace Data for 'disk0'. wdckit idd /dev/nvme0 --namespace -Retrieves Identify Namespace Data for '/dev/nvme0'.
	wdckit idd disk0 --namespace --list -Retrieves Identify Namespace List Data for 'disk0'. wdckit idd /dev/nvme0 --namespace --list -Retrieves Identify Namespace List Data for '/dev/nvme0'.
	wdckit idd disk0 --controller --list -Retrieves Identify Controller List Data for 'disk0'. wdckit idd /dev/nvme0 --controller --list -Retrieves Identify Controller List Data for '/dev/nvme0'.
	wdckit idd disk0 --zns --nsid 2 --namespace -Retrieves ZNS Identify Namespace Data for namespace ID 2 for 'disk0'. wdckit idd /dev/nvme0 --zns --nsid 2 --namespace -Retrieves ZNS Identify Namespace Data for namespace ID 2 for '/dev/nvme0'.
	wdckit idd disk0 --zns --controller -Retrieves ZNS Identify Controller Data for 'disk0'. wdckit idd /dev/nvme0 --zns --controller -Retrieves ZNS Identify Controller Data for '/dev/nvme0'.
	wdckit idd disk0 --zns --namespace --list --csi 2 -Retrieves ZNS Identify Active Namespace List Data with CSI set to 2 for 'disk0'. wdckit idd /dev/nvme0 --zns --namespace --list --csi 2 -Retrieves ZNS Identify Active Namespace List Data with CSI set to 2 for '/dev/nvme0'.

Command	idd
	wdckit idd disk0 --cns 0
	-Retrieves Identify Namespace Data for 'disk0'.
	wdckit idd /dev/nvme0 --cns 0
	-Retrieves Identify Namespace Data for '/dev/nvme0'.

Command	logdump
Description	Dump logs from specified devices.
Restriction (s)	
	This task is only valid for an actual target.
	This task is only valid for WDC targets.
	This task requires the device to be ready.
Usage	
wdckit	logdump [<devList> …|--model <model number> …|--serial <serial number> …] [--inc-start|--inc-update|--inc-max|--inc-min-io] [--progress-bar|--simple-progress|--no-progress] [--trace|--trace-with-scan|--no-trace] [-s <path>] [--default] [--short] [--south-dump] [--ati] [--p-list] [--fly-height] [--partial-context] [--metadata] [--fly-height2] [--snr-ow] [--servo] [--erp] [--cpu] [--rw-incr] [--partial-context2] [--nand-smart] [--excursion] [--latency] [--workload-tracking] [--all-modes] [--mode <mode byte> …] [-t <bytes>] [-2] [-R <filename>] [--no-ad] [--no-mr] [-z] [--log-level <silent|error|info|debug| cmd-debug>] [-h]
OPTIONAL	
	<devList> (accepted multiple times) Device name(s) to execute logdump command.
–OR–	
	--model <model number> (accepted multiple times) Filter devices that only match this model number.
–OR–	
	--serial <serial number> (accepted multiple times) Filter devices that only match this serial number.
	--inc-start Collects incremental starting log (mode 0x80). This in only used with L-H devices.
–OR–	
	--inc-update Collects incremental update log (mode 0x81). This in only used with L-H devices.
–OR–	
	--inc-max Collects incremental log with maximum log entries (specified in mode page 0x1C, sub-page 0xE5) (mode 0x82). This in only used with L-H devices.
–OR–	

Command	logdump
	--inc-min-io Collects incremental log minimizing host IO (mode 0x83). This in only used with L-H devices.
	--progress-bar Display a full screen progress bar screen.
–OR–	
	--simple-progress Prevent the display of the progress bar screen, useful when running commands from a script.
–OR–	
	--no-progress No progress display.
	--trace Save trace log for command operation upon success. Note, by default, trace logging enabled upon error. The trace log filename is wdckit-trace.txt.
–OR–	
	--trace-with-scan Save trace log for command operation and include commands issued while scanning for devices.
–OR–	
	--no-trace Disable trace logging.
	-s <path>, --save <path> Saves the device output to the path specified.
	--default Collects default modes (normal 0x10, latest snapshot 0x11, older snapshot 0x21 and oldest snapshot 0x31). This in only used with L-H devices. If no mode is specified, this is the default logdump collection method.
	--short A small log for data-collection purposes (mode 0x00). This in only used with L-H devices.
	--south-dump Collects debug information for SSDs only (mode 0x03). This in only used with L-H devices.
	--ati Collects device Adjacent Track Interference (ATI) data (mode 0x12). This in only used with L-H devices.
	--p-list Collects device P-List data (mode 0x13). This in only used with L-H devices.
	--fly-height Collects device Fly-height data (mode 0x14). This in only used with L-H devices.
	--partial-context Collects device partial context data (mode 0x15). This in only used with L-H devices.

Command	logdump
	--metadata Collects the flash stored metadata (mode 0x16). This in only used with L-H devices.
	--fly-height2 Collects device Fly-height 2 data (mode 0x17). This in only used with L-H devices.
	--snr-ow Collects the SNR/OW data (mode 0x18). This in only used with L-H devices.
	--servo Collects the servo error log data (mode 0x19). This in only used with L-H devices.
	--erp Collects the ERP historgram data (mode 0x1A). This in only used with L-H devices.
	--cpu Collects the CPU performance data (mode 0x1B). This in only used with L-H devices.
	--rw-incr Collects the RW incremental log data (mode 0x1C). This in only used with L-H devices.
	--partial-context2 Collects device partial context 2 data (mode 0x1D). This in only used with L-H devices.
	--nand-smart Collects device Nand SMART data (mode 0x1E). This in only used with L-H devices.
	--excursion Collects device excursion log data (mode 0x20). This in only used with L-H devices.
	--latency Collects device latency monitor data (mode 0x22). This in only used with L-H devices.
	--workload-tracking Collects the working tracking data (mode 0xA0). This in only used with L-H devices.
	--all-modes Collects all available logs. This in only used with L-H devices.
	--mode <mode byte> (accepted multiple times) Collect this E6 mode. This in only used with L-H devices.
	-t <bytes>, --transfer-size <bytes> Specify maximum number of bytes to transfer per command. Default values is 64KB.
	-2, --two-ports Collects 2 logs, one for each port of a SAS device.
	-R <filename>, --redirect <filename> Redirects the screen output to the file specified.
	--no-ad Do not use the AD driver (only useful with the RAID version).

Command	logdump
	--no-mr Do not use the MR driver (only useful with the RAID version).
	-z, --nobanner Suppresses the banner from printing, which includes information such as copyright, license, etc.
	--log-level <silent|error|info|debug|cmd-debug> Change log level.
	-h, --help Display help and exit.
Example(s)	
	wdckit logdump all -Dump log from all supported devices.
	wdckit logdump disk0 -Dump log from 'disk0'. wdckit logdump /dev/sda -Dump log from '/dev/sda'.
	wdckit logdump disk0 --all-modes -Dump all modes from 'disk0'. wdckit logdump /dev/sda --all-modes -Dump all modes from '/dev/sda'.

Command	ns-attach
Description	Send a namespace attachment command to attach a namepace to a controller identifier(s). Note: For Windows with the inbox driver, this command must be run from Windows PE.
Restriction(s)	
	This task is only valid for an actual target.
	This task is only valid for NVMe targets.
	This task is only valid for WDC targets.
	This task is only valid in Windows PE with NVMe devices when connected via the inbox driver.
Usage	
wdckit	ns-attach <<device name>|--model <model number> …|--serial <serial number> …> [--trace|--trace-with-scan|--no-trace] -n <value> -c <value> … [-R <filename>] [--no-ad] [--no-mr] [-z] [--log-level <silent|error|info| debug|cmd-debug>] [-h]
REQUIRED	
	<device name> Device name to execute ns-attach command.
–OR–	

Command	ns-attach
	--model <model number> (accepted multiple times) Filter devices that only match this model number.
–OR–	
	--serial <serial number> (accepted multiple times) Filter devices that only match this serial number.
–AND–	
	-n <value>, --nsid <value> Specify the namespace ID value.
	-c <value>, --controller <value> (accepted multiple times) The controller identifier to attach.
OPTIONAL	
	--trace Save trace log for command operation upon success. Note, by default, trace logging enabled upon error. The trace log filename is wdckit-trace.txt.
–OR–	
	--trace-with-scan Save trace log for command operation and include commands issued while scanning for devices.
–OR–	
	--no-trace Disable trace logging.
	-R <filename>, --redirect <filename> Redirects the screen output to the file specified.
	--no-ad Do not use the AD driver (only useful with the RAID version).
	--no-mr Do not use the MR driver (only useful with the RAID version).
	-z, --nobanner Suppresses the banner from printing, which includes information such as copyright, license, etc.
	--log-level <silent|error|info|debug|cmd-debug> Change log level.
	-h, --help Display help and exit.
Example(s)	
	wdckit ns-attach disk0 -n 1 -c 1 -Send the attach namespace command to attach namespace id 1 to controller ID 1 for 'disk0'. wdckit ns-attach /dev/nvme0 -n 1 -c 1 -Send the attach namespace command to attach namespace id 1 to controller ID 1 for '/dev/nvme0'.

Command	ns-attach
	wdckit ns-attach disk0 -n 1 -c 1 -c 2
	-Send the attach namespace command to attach namespace id 1 to controller ID 1 and 2 for 'disk0'.
	wdckit ns-attach /dev/nvme0 -n 1 -c 1 -c 2
	-Send the attach namespace command to attach namespace id 1 to controller ID 1 and 2 for '/dev/nvme0'.

Command	ns-create
Description	Send a namespace management command to create a namespace for an NVMe device. Note: For Windows with the inbox driver, this command must be run from Windows PE.
Restriction(s)	
	This task is only valid for an actual target.
	This task is only valid for NVMe targets.
	This task is only valid for WDC targets.
	This task is only valid in Windows PE with NVMe devices when connected via the inbox driver.
Usage	
wdckit	ns-create <<device name>|--model <model number> …|--serial <serial number> …> <-f <0-15>|-b <1|2|4|8|16|32|64|128|256|512|1024|2048|4096|8192|16384|32768>> [--trace|--trace-with-scan|--no-trace] [--csi <0-255>] [-s <blocks>] [-c <blocks>] [-d <value>] [-m <value>] [-a <value>] [-i <value>] [-t <seconds>] [-R <filename>] [--no-ad] [--no-mr] [-z] [--log-level <silent|error|info|debug|cmd-debug>] [-h]
REQUIRED	
	<device name> Device name to execute ns-create command.
–OR–	
	--model <model number> (accepted multiple times) Filter devices that only match this model number.
–OR–	
	--serial <serial number> (accepted multiple times) Filter devices that only match this serial number.
–AND–	
	-f <0-15>, --flbas <0-15> LBA format (0-15, 2^value).
–OR–	
	-b <1|2|4|8|16|32|64|128|256|512|1024|2048|4096|8192|16384|32768>, --block-size <1|2|4|8|16|32|64|128|256|512|1024|2048|4096|8192|16384|32768> LBA format in bytes (1-32768, in power of 2 increments).
OPTIONAL	

Command	ns-create
	--trace Save trace log for command operation upon success. Note, by default, trace logging enabled upon error. The trace log filename is wdckit-trace.txt.
–OR–	
	--trace-with-scan Save trace log for command operation and include commands issued while scanning for devices.
–OR–	
	--no-trace Disable trace logging.
	--csi <0-255> The command set identifier. Default is 0. Use 2 for ZNS.
	-s <blocks>, --nsze <blocks> The namespace size, in logical blocks.
	-c <blocks>, --ncap <blocks> The namespace capacity, in logical blocks.
	-d <value>, --dps <value> End-to-end data protection type setting.
	-m <value>, --nmic <value> Namespace Multi-path I/O and Namespace Sharing Capabilities.
	-a <value>, --anagrpid <value> ANA Group Identifier.
	-i <value>, --nvmsetid <value> NVM Set Identifier.
	-t <seconds>, --timeout <seconds> Timeout value, in seconds.
	-R <filename>, --redirect <filename> Redirects the screen output to the file specified.
	--no-ad Do not use the AD driver (only useful with the RAID version).
	--no-mr Do not use the MR driver (only useful with the RAID version).
	-z, --nobanner Suppresses the banner from printing, which includes information such as copyright, license, etc.
	--log-level <silent|error|info|debug|cmd-debug> Change log level.
	-h, --help Display help and exit.
Example(s)	

Command	ns-create
	wdckit ns-create disk0 -s 1953525168 -Send the create namespace command to change to namespace size to 1953525168 blocks for 'disk0'. wdckit ns-create /dev/nvme0 -s 1953525168 -Send the create namespace command to change to namespace size to 1953525168 blocks for '/dev/nvme0'.
	wdckit ns-create disk0 -s 1953525168 -f 9 -Send the create namespace command to change to namespace size to 1953525168 blocks and set LBA format to 9 (2^9, or 512 bytes) for 'disk0'. wdckit ns-create /dev/nvme0 -s 1953525168 -f 9 -Send the create namespace command to change to namespace size to 1953525168 blocks and set LBA format to 9 (2^9, or 512 bytes) for '/dev/nvme0'.
	wdckit ns-create disk0 -s 1953525168 -b 4096 -Send the create namespace command to change to namespace size to 1953525168 blocks and set LBA format to 4096 bytes for 'disk0'. wdckit ns-create /dev/nvme0 -s 1953525168 -b 4096 -Send the create namespace command to change to namespace size to 1953525168 blocks and set LBA format to 4096 bytes for '/dev/nvme0'.
	wdckit ns-create disk0 --csi 2 -s 1953525168 -Send the create namespace command to change to namespace size to 1953525168 blocks using command set identify 2 (ZNS) for 'disk0'. wdckit ns-create /dev/nvme0 --csi 2 -s 1953525168 -Send the create namespace command to change to namespace size to 1953525168 blocks using command set identify 2 (ZNS) for '/dev/nvme0'.

Command	ns-delete
Description	Send a namespace management command to delete a namespace for an NVMe device. Note: For Windows with the inbox driver, this command must be run from Windows PE.
Restriction(s)	
	This task is only valid for an actual target.
	This task is only valid for NVMe targets.
	This task is only valid for WDC targets.
	This task is only valid in Windows PE with NVMe devices when connected via the inbox driver.
Usage	

Command	ns-delete
wdckit	ns-delete <<device name>|--model <model number> …|--serial <serial number> …> [--trace|--trace-with-scan|--no-trace] -n <value> [-R <filename>] [--no-ad] [--no-mr] [-z] [--log-level <silent|error|info|debug| cmd-debug>] [-h]
REQUIRED	
	<device name> Device name to execute ns-delete command.
–OR–	
	--model <model number> (accepted multiple times) Filter devices that only match this model number.
–OR–	
	--serial <serial number> (accepted multiple times) Filter devices that only match this serial number.
–AND–	
	-n <value>, --nsid <value> Specify the namespace ID value to delete. Use FFFFFFFFh to delete all namespaces in the NVM subsystem. If the value of FFFFFFFFh is specified and there are zero valid namespaces, the command completes successfully.
OPTIONAL	
	--trace Save trace log for command operation upon success. Note, by default, trace logging enabled upon error. The trace log filename is wdckit-trace.txt.
–OR–	
	--trace-with-scan Save trace log for command operation and include commands issued while scanning for devices.
–OR–	
	--no-trace Disable trace logging.
	-R <filename>, --redirect <filename> Redirects the screen output to the file specified.
	--no-ad Do not use the AD driver (only useful with the RAID version).
	--no-mr Do not use the MR driver (only useful with the RAID version).
	-z, --nobanner Suppresses the banner from printing, which includes information such as copyright, license, etc.
	--log-level <silent|error|info|debug|cmd-debug> Change log level.
	-h, --help Display help and exit.
Example(s)	

Command	ns-delete
	wdckit ns-delete disk0 -n 1 -Send the delete namespace command to delete namespace ID 1 for 'disk0'. wdckit ns-delete /dev/nvme0 -n 1 -Send the delete namespace command to delete namespace ID 1 for '/dev/nvme0'.
	wdckit ns-delete disk0 -n FFFFFFFFh -Send the delete namespace command to delete all namespace IDs for 'disk0'. wdckit ns-delete /dev/nvme0 -n FFFFFFFFh -Send the delete namespace command to delete all namespace IDs for '/dev/nvme0'.

Command	ns-detach
Description	Send a namespace attachment command to detach a namepace from a controller identifier(s). Note: For Windows with the inbox driver, this command must be run from Windows PE.
Restriction(s)	
	This task is only valid for an actual target.
	This task is only valid for NVMe targets.
	This task is only valid for WDC targets.
	This task is only valid in Windows PE with NVMe devices when connected via the inbox driver.
Usage	
wdckit	ns-detach <<device name>|--model <model number> …|--serial <serial number> …> [--trace|--trace-with-scan|--no-trace] -n <value> -c <value> … [-R <filename>] [--no-ad] [--no-mr] [-z] [--log-level <silent|error|info|debug|cmd-debug>] [-h]
REQUIRED	
	<device name> Device name to execute ns-detach command.
–OR–	
	--model <model number> (accepted multiple times) Filter devices that only match this model number.
–OR–	
	--serial <serial number> (accepted multiple times) Filter devices that only match this serial number.
–AND–	
	-n <value>, --nsid <value> Specify the namespace ID value.

Command	ns-detach
	-c <value>, --controller <value> (accepted multiple times) The controller identifier to detach.
OPTIONAL	
	--trace Save trace log for command operation upon success. Note, by default, trace logging enabled upon error. The trace log filename is wdckit-trace.txt.
–OR–	
	--trace-with-scan Save trace log for command operation and include commands issued while scanning for devices.
–OR–	
	--no-trace Disable trace logging.
	-R <filename>, --redirect <filename> Redirects the screen output to the file specified.
	--no-ad Do not use the AD driver (only useful with the RAID version).
	--no-mr Do not use the MR driver (only useful with the RAID version).
	-z, --nobanner Suppresses the banner from printing, which includes information such as copyright, license, etc.
	--log-level <silent|error|info|debug|cmd-debug> Change log level.
	-h, --help Display help and exit.
Example(s)	
	wdckit ns-detach disk0 -n 1 -c 1 -Send the detach namespace command to detach namespace id 1 from controller ID 1 for 'disk0'. wdckit ns-detach /dev/nvme0 -n 1 -c 1 -Send the detach namespace command to detach namespace id 1 from controller ID 1 for '/dev/nvme0'.
	wdckit ns-detach disk0 -n 1 -c 1 -c 2 -Send the detach namespace command to detach namespace id 1 from controller ID 1 and 2 for 'disk0'. wdckit ns-detach /dev/nvme0 -n 1 -c 1 -c 2 -Send the detach namespace command to detach namespace id 1 from controller ID 1 and 2 for '/dev/nvme0'.

Command	nsze
Description	Send vendor unique command to modify namespace size for NVMe devices.
Restriction(s)	
	This task is only valid for an actual target.
	This task is only valid for NVMe targets.
	This task is only valid for SanDisk targets.
	This task is only valid for devices with a unique customer firmware.
Usage	
wdckit	nsze <<devList> …|--model <model number> …|--serial <serial number> …> [--trace|--trace-with-scan|--no-trace] -o <value> [-R <filename>] [--no-ad] [--no-mr] [-z] [--log-level <silent|error|info|debug|cmd-debug>] [-h]
REQUIRED	
	<devList> (accepted multiple times) Device name(s) to execute nsze command.
–OR–	
	--model <model number> (accepted multiple times) Filter devices that only match this model number.
–OR–	
	--serial <serial number> (accepted multiple times) Filter devices that only match this serial number.
–AND–	
	-o <value>, --option <value> Value for the required option.
OPTIONAL	
	--trace Save trace log for command operation upon success. Note, by default, trace logging enabled upon error. The trace log filename is wdckit-trace.txt.
–OR–	
	--trace-with-scan Save trace log for command operation and include commands issued while scanning for devices.
–OR–	
	--no-trace Disable trace logging.
	-R <filename>, --redirect <filename> Redirects the screen output to the file specified.
	--no-ad Do not use the AD driver (only useful with the RAID version).
	--no-mr Do not use the MR driver (only useful with the RAID version).
	-z, --nobanner Suppresses the banner from printing, which includes information such as copyright, license, etc.

Command	nsze
	--log-level <silent|error|info|debug|cmd-debug> Change log level.
	-h, --help Display help and exit.
Example(s)	
	wdckit nsze disk0 -o 1 -Send the VU command to change to namespace size option 1 for 'disk0'. wdckit nsze /dev/nvme0 -o 1 -Send the VU command to change to namespace size option 1 for '/dev/nvme0'.

Command	power
Description	Displays or sets power management APST state (PMAS) for NVMe devices.
Restriction(s)	
	This task is only valid for an actual target.
	This task is only valid for NVMe targets.
	This task is only valid for devices with a unique customer firmware.
	This task is only valid for WDC targets.
Usage	
wdckit	power <<devList> …|--model <model number> …|--serial <serial number> …> [-s <value>|-c] [--trace|--trace-with-scan|--no-trace] [-R <filename>] [--no-ad] [--no-mr] [-z] [--log-level <silent|error|info|debug|cmd-debug>] [-h]
REQUIRED	
	<devList> (accepted multiple times) Device name(s) to execute power command.
–OR–	
	--model <model number> (accepted multiple times) Filter devices that only match this model number.
–OR–	
	--serial <serial number> (accepted multiple times) Filter devices that only match this serial number.
OPTIONAL	
	-s <value>, --set <value> Enable Power Management APST State.
–OR–	
	-c, --clear Disable Power Management APST State.

Command	power
	--trace Save trace log for command operation upon success. Note, by default, trace logging enabled upon error. The trace log filename is wdckit-trace.txt.
–OR–	
	--trace-with-scan Save trace log for command operation and include commands issued while scanning for devices.
–OR–	
	--no-trace Disable trace logging.
	-R <filename>, --redirect <filename> Redirects the screen output to the file specified.
	--no-ad Do not use the AD driver (only useful with the RAID version).
	--no-mr Do not use the MR driver (only useful with the RAID version).
	-z, --nobanner Suppresses the banner from printing, which includes information such as copyright, license, etc.
	--log-level <silent|error|info|debug|cmd-debug> Change log level.
	-h, --help Display help and exit.
Example(s)	
	wdckit power disk0 -Displays the PMAS state for the device 'disk0'. wdckit power /dev/nvme0 -Displays the PMAS state for the device '/dev/nvme0'.
	wdckit power disk0 -s 1 -Enables the PMAS state for the device 'disk0'. wdckit power /dev/nvme0 -s 1 -Enables the PMAS state for the device '/dev/nvme0'.
	wdckit power disk0 -c -Disables the PMAS state for the device 'disk0'. wdckit power /dev/nvme0 -c -Disables the PMAS state for the device '/dev/nvme0'.

Command	quit
Description	Exit the CLI.
Usage	
wdckit	quit
Example(s)	

Command	rdp
Description	Performs RDP (repurpose depopulation) on a SCSI or ATA device. RDP is also known as the storage element feature set.
Restriction(s)	
	This task is only valid for an actual ATA/SCSI device or file target.
	This task is not allowed on a boot device.
	This task is only valid for WDC targets.
	RDP support was not detected.
Usage	
wdckit	rdp <<device name|filename>|--model <model number> …|--serial <serial number> …> <-g|-r <head>> [--raw|--raw-limit <bytes>|-s <path>] [--no-progress|--progress-bar|--simple-progress] [--trace|--trace-with-scan|--no-trace] [-H <head>] [-t <type>] [-f <filter>] [-m <LBA>] [-b <bytes>] [--danger-zone] [-R <filename>] [--no-ad] [--no-mr] [-z] [--log-level <silent|error|info|debug|cmd-debug>] [-h]
REQUIRED	
	<device name|filename> Device or file name toexecute rdp command.
–OR–	
	--model <model number> (accepted multiple times) Filter devices that only match this model number.
–OR–	
	--serial <serial number> (accepted multiple times) Filter devices that only match this serial number.
–AND–	
	-g, --gpes Get physical element status.
–OR–	
	-r <head>, --ret <head> Remove element and truncate. Specified the element to remove.
OPTIONAL	
	--raw Dump the raw buffer.
–OR–	
	--raw-limit <bytes> Dump the raw buffer, with at most, this many bytes.
–OR–	

Command	rdp
	-s <path>, --save <path> Saves the device output to the path specified.
	--no-progress No progress display.
–OR–	
	--progress-bar Display a full screen progress bar screen.
–OR–	
	--simple-progress Prevent the display of the progress bar screen, useful when running commands from a script.
	--trace Save trace log for command operation upon success. Note, by default, trace logging enabled upon error. The trace log filename is wdckit-trace.txt.
–OR–	
	--trace-with-scan Save trace log for command operation and include commands issued while scanning for devices.
–OR–	
	--no-trace Disable trace logging.
	-H <head>, --head <head> Specify the starting element field for the get physical element status operation.
	-t <type>, --report-type <type> Specify the report type field for the get physical element status operation. Value must be from 0 to 15, inclusive.
	-f <filter>, --filter <filter> Specify the filter field for the get physical element status operation. Value must be from 0 to 3, inclusive.
	-m <LBA>, --max-lba <LBA> Specify the requested maximum LBA for the remove element and truncate operation. Defaults to 0 which allows the device to specify the maximum LBA after successful command completion.
	-b <bytes>, --blocksize <bytes> Specify the block size, in bytes when decoding a filename. Valid values for ATA sourced binary files: 512, 4096. Valid values for SCSI sourced binary files: 512, 520, 528, 4096, 4112, 4160, 4224.
	--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.
	-R <filename>, --redirect <filename> Redirects the screen output to the file specified.
	--no-ad Do not use the AD driver (only useful with the RAID version).
	--no-mr Do not use the MR driver (only useful with the RAID version).

Command	rdp
	-z, --nobanner Suppresses the banner from printing, which includes information such as copyright, license, etc.
	--log-level <silent|error|info|debug|cmd-debug> Change log level.
	-h, --help Display help and exit.
Example(s)	
	wdckit rdp disk0 -g -Show the get physical element status (gpes) log for device 'disk0'. wdckit rdp /dev/sda -g -Show the get physical element status (gpes) log for device '/dev/sda'.
	wdckit rdp disk0 -g -f 1 -Show a filtered get physical element status (gpes) log for device 'disk0'. The output will show only elements that are outside the spec limit or has been depopulated. wdckit rdp /dev/sda -g -f 1 -Show a filtered get physical element status (gpes) log for device '/dev/sda'. The output will show only elements that are outside the spec limit or has been depopulated.
	wdckit rdp disk0 -g -t 1 -Show a get physical element status (gpes) log for device 'disk0' with only storage elements. wdckit rdp /dev/sda -g -t 1 -Show a get physical element status (gpes) log for device '/dev/sda' with only storage elements.
	wdckit rdp disk0 -g -s . -Saves the get physical element status (gpes) log for device 'disk0' to the current folder. wdckit rdp /dev/sda -g -s . -Saves the get physical element status (gpes) log for device '/dev/sda' to the current folder.
	wdckit rdp disk0 -r 6 -Depopulates head 6 from 'disk0'. wdckit rdp /dev/sda -r 6 -Depopulates head 6 from '/dev/sda'.

Command	security
Description	Performs the various security related features on the device.
Restriction (s)	
	This task is only valid for an actual target.
	This task is only valid for WDC targets.
	This task is only valid in Linux when /sys/module/libata/parameters/ allow_tpm=1.
Usage	
wdckit	security <<device name>|--model <model number> …|--serial <serial number> …> <-g|-s|-e|-d|-l|-c|-v|--msid-activate|--msid-revert|-p <psid>> [--raw|--raw-limit <bytes>] [--trace|--trace-with-scan|--no-trace] [--skip-status] [-A <Admin password>] [-U <user password>] [-o <old password>] [-n <new password>] [-u <1|2>] [-r <true|false>] [-w <true|false>] [-t <seconds>] [-R <filename>] [--no-ad] [--no-mr] [-z] [--log-level <silent|error|info|debug|cmd-debug>] [-h]
REQUIRED	
	<device name> Device name to execute security command.
–OR–	
	--model <model number> (accepted multiple times) Filter devices that only match this model number.
–OR–	
	--serial <serial number> (accepted multiple times) Filter devices that only match this serial number.
–AND–	
	-g, --get This option gets the security Information from the device.
–OR–	
	-s, --setadminpassword This option sets a new admin password on device. It must be executed with -A|--Adminpassword option.
–OR–	
	-e, --enable This option enables the new user along with its password. It must be executed with -u|--user, -U|--Userpassword and -A|--Adminpassword options.
–OR–	
	-d, --disable This option disables the given user. It must be executed with -u|--user and -A|--Adminpassword options.
–OR–	

Command	security
	-l, --lock This option locks/unlocks read/write operations on the device. It must be executed with -r|--readlock, -w|--writelock, (-A|--Adminpassword or (-u|--user and -U|--Userpassword)) options. Bracketed option selection depends on who is issuing lock operation. If Admin, -A|--Adminpassword option should be used. Otherwise, if issued by User1 or User2, -u|--user and -U|--Userpassword options should be used.
–OR–	
	-c, --changepassword This option changes Admin/User passworrds on the device. It must be executed with -o|--oldpassword, -n|--newpassword and if issued by User1 or User2, -u|--user option.
–OR–	
	-v, --revert This option reverts the entire security configuration to defaults.
–OR–	
	--msid-activate This option activates security configuration using MSID.
–OR–	
	--msid-revert This option reverts the entire security configuration to defaults using MSID.
–OR–	
	-p <psid>, --psidrevert <psid> This option reverts the entire security configuration to defaults using PSID. Use optional -t|--timewait to specify the maximum time to wait. The default wait time is 30 seconds. The PSID argument is a 32 character value printed on the label.
OPTIONAL	
	--raw Dump the raw buffer.
–OR–	
	--raw-limit <bytes> Dump the raw buffer, with at most, this many bytes.
	--trace Save trace log for command operation upon success. Note, by default, trace logging enabled upon error. The trace log filename is wdckit-trace.txt.
–OR–	
	--trace-with-scan Save trace log for command operation and include commands issued while scanning for devices.
–OR–	
	--no-trace Disable trace logging.
	--skip-status Pass the PSID regardless of the state of the device.

Command	security
	-A <Admin password>, --Adminpassword <Admin password> This option is used for taking Admin Password as input. It should be used with either -s (--setadminpassword), -l (--lock), -v (--revert), -e (--enable) or -d (--disable) options.
	-U <user password>, --Userpassword <user password> This option is used for taking User Password as input. It should be used with either -l (--lock) or -e (--enable) options.
	-o <old password>, --oldpassword <old password> This option is used for taking the old password as input while changing the password of Admin/User.
	-n <new password>, --newpassword <new password> This option is used for taking new old password as input while changing the password of Admin/User.
	-u <1|2>, --user <1|2> This option is used for taking User number as input. It should be used with either of -c (--changepassword), -l (--lock), -e (--enable) or -d (--disable)
	-r <true|false>, --readlock <true|false> This option is used for taking Lock/Unlock value for read operation as input. It should be used with -l (--lock) option.
	-w <true|false>, --writelock <true|false> This option is used for taking Lock/Unlock value for write operation as input. It should be used with -l (--lock) option.
	-t <seconds>, --timewait <seconds> Specify timeout in seconds (15 to 3600). The default value is 30 seconds.
	-R <filename>, --redirect <filename> Redirects the screen output to the file specified.
	--no-ad Do not use the AD driver (only useful with the RAID version).
	--no-mr Do not use the MR driver (only useful with the RAID version).
	-z, --nobanner Suppresses the banner from printing, which includes information such as copyright, license, etc.
	--log-level <silent|error|info|debug|cmd-debug> Change log level.
	-h, --help Display help and exit.
Example(s)	
	wdckit security disk0 -s -A TestPassword -Sets the Admin Password as TestPassword on device 'disk0'. wdckit security /dev/nvme0 -s -A TestPassword -Sets the Admin Password as TestPassword on device '/dev/nvme0'.

Command	security
	wdckit security disk0 -e -A TestPassword -u 1 -U UserPassword1 -Makes Admin enable User1 on the device with User Password as UserPassword1 on device 'disk0'. wdckit security /dev/nvme0 -e -A TestPassword -u 1 -U UserPassword1 -Makes Admin enable User1 on the device with User Password as UserPassword1 on device '/dev/nvme0'.
	wdckit security disk0 -d -A TestPassword -u 1 -Makes Admin disable User1 on the device 'disk0'. wdckit security /dev/nvme0 -d -A TestPassword -u 1 -Makes Admin disable User1 on the device '/dev/nvme0'.
	wdckit security disk0 -l -r true -w true -A TestPassword -Makes Admin lock Read and Write Operations on the device 'disk0'. wdckit security /dev/nvme0 -l -r true -w true -A TestPassword -Makes Admin lock Read and Write Operations on the device '/dev/nvme0'.
	wdckit security disk0 -l -r false -w true -A TestPassword -Makes Admin unlock Read and lock Write Operations on the device 'disk0'. wdckit security /dev/nvme0 -l -r false -w true -A TestPassword -Makes Admin unlock Read and lock Write Operations on the device '/dev/nvme0'.
	wdckit security disk0 -c -o TestPassword -n TestPassword2 -Changes Admin Password from TestPassword to TestPassword2 on the device 'disk0'. wdckit security /dev/nvme0 -c -o TestPassword -n TestPassword2 -Changes Admin Password from TestPassword to TestPassword2 on the device '/dev/nvme0'.

Command	security
	wdckit security disk0 -p 00000000000000000000000000000000 -This will perform the PSID revert operation on the device 'disk0'. Note: Depending upon the current security state on the device, user data may be erased. The PSID string should be printed on the label. wdckit security /dev/nvme0 -p 00000000000000000000000000000000 -This will perform the PSID revert operation on the device '/dev/nvme0'. Note: Depending upon the current security state on the device, user data may be erased. The PSID string should be printed on the label.

Command	securityprofile
Description	Performs the various security profile related features on the ATA device.
Restriction(s)	
	This task is only valid for an actual target.
	This task is only valid for SATA targets.
	This task is only valid for WDC targets.
	This task is only valid in Linux when /sys/module/libata/parameters/ allow_tpm=1.
Usage	
wdckit	securityprofile <<devList> …|--model <model number> …|--serial <serial number> …> <-g|-c|-s <security-profile>> [--trace|--trace-with-scan|--no-trace] [-R <filename>] [--no-ad] [--no-mr] [-z] [--log-level <silent|error|info| debug|cmd-debug>] [-h]
REQUIRED	
	<devList> (accepted multiple times) Device name(s) to execute securityprofile command.
–OR–	
	--model <model number> (accepted multiple times) Filter devices that only match this model number.
–OR–	
	--serial <serial number> (accepted multiple times) Filter devices that only match this serial number.
–AND–	
	-g, --get This option is used to get all the supported Security Profiles of the Device.
–OR–	
	-c, --current This option is used to get the current Security Profile of the Device.
–OR–	
	-s <security-profile>, --set <security-profile> This option is used to set the new Security profile on the device.

Command	securityprofile
OPTIONAL	
	--trace Save trace log for command operation upon success. Note, by default, trace logging enabled upon error. The trace log filename is wdckit-trace.txt.
–OR–	
	--trace-with-scan Save trace log for command operation and include commands issued while scanning for devices.
–OR–	
	--no-trace Disable trace logging.
	-R <filename>, --redirect <filename> Redirects the screen output to the file specified.
	--no-ad Do not use the AD driver (only useful with the RAID version).
	--no-mr Do not use the MR driver (only useful with the RAID version).
	-z, --nobanner Suppresses the banner from printing, which includes information such as copyright, license, etc.
	--log-level <silent|error|info|debug|cmd-debug> Change log level.
	-h, --help Display help and exit.
Example(s)	
	wdckit securityprofile disk0 -g -This will get all the supported security profiles on the device. wdckit securityprofile /dev/sda -g -This will get all the supported security profiles on the device.
	wdckit securityprofile disk0 -c -This will get the current security profile on the device. wdckit securityprofile /dev/sda -c -This will get the current security profile on the device.
	wdckit securityprofile disk0 -s 2 -This will set the security profile of the device to profile S2. wdckit securityprofile /dev/sda -s 2 -This will set the security profile of the device to profile S2.

Command	selftest
Description	Runs the short or extended test on the device(s) specified by the user. Note, Windows 20H1 and later may impose a self test time restriction of 10 minutes between self tests to the same NVMe device.
Restriction(s)	
	This task is only valid for an actual target.
	This task is only valid for WDC targets.
	This task requires the device to be ready.
Usage	
wdckit	selftest <<devList> …|--model <model number> …|--serial <serial number> …> <-s|-e|-a|-p> [--progress-bar|--simple-progress|--no-progress] [--trace|--trace-with-scan|--no-trace] [--nsid <value>] [-b] [-r] [-m] [--no-ad] [--no-mr] [-z] [--log-level <silent|error|info|debug|cmd-debug>] [-h]
REQUIRED	
	<devList> (accepted multiple times) Device name(s) to execute selftest command.
–OR–	
	--model <model number> (accepted multiple times) Filter devices that only match this model number.
–OR–	
	--serial <serial number> (accepted multiple times) Filter devices that only match this serial number.
–AND–	
	-s, --short This option initiates the short Self Test on the device.
–OR–	
	-e, --extended This option initiates the extended Self Test on the device.
–OR–	
	-a, --abort This option aborts the running Self Test on the device.
–OR–	
	-p, --progress Query the self test progress.
OPTIONAL	
	--progress-bar Display a full screen progress bar screen.
–OR–	
	--simple-progress Prevent the display of the progress bar screen, useful when running commands from a script.
–OR–	
	--no-progress No progress display.

Command	selftest
	--trace Save trace log for command operation upon success. Note, by default, trace logging enabled upon error. The trace log filename is wdckit-trace.txt.
–OR–	
	--trace-with-scan Save trace log for command operation and include commands issued while scanning for devices.
–OR–	
	--no-trace Disable trace logging.
	--nsid <value> Specify the NVMe namespace ID value.
	-b, --blocked Perform the self test operation as a blocking operation.
	-r, --result Shows result of the last Extended test execution from ATA log. Valid only with -e option. No result is available for non-ATA devices.
	-m, --mirror Uses the NVMe mirror command instead of the NVMe standard command.
	--no-ad Do not use the AD driver (only useful with the RAID version).
	--no-mr Do not use the MR driver (only useful with the RAID version).
	-z, --nobanner Suppresses the banner from printing, which includes information such as copyright, license, etc.
	--log-level <silent|error|info|debug|cmd-debug> Change log level.
	-h, --help Display help and exit.
Example(s)	
	wdckit selftest all --short -Initiates short test operation on all the supported devices.
	wdckit selftest disk0 --extended --blocked -Initiates extended test operation on 'disk0' and CLI will be blocked until selftest completes or fails. wdckit selftest /dev/sda --extended --blocked -Initiates extended test operation on '/dev/sda' and CLI will be blocked until selftest completes or fails.

Command	selftest
	wdckit selftest disk0 disk1 -p
	-Shows the progress of self test operation on 'disk0' and 'disk1' once, if any.
	wdckit selftest /dev/sda /dev/sdb -p
	-Shows the progress of self test operation on '/dev/sda' and '/dev/sdb' once, if any.

Command	serverconfig
Description	Send vendor unique command to modify the resource server configuration on supported NVMe devices.
Restriction(s)	
	This task is only valid for an actual target.
	This task is only valid for NVMe targets.
	This task is only valid for SanDisk targets.
	This task is only valid for devices with a unique customer firmware.
Usage	
wdckit	serverconfig <<devList> …|--model <model number> …|--serial <serial number> …> [--trace|--trace-with-scan|--no-trace] -p <1|2> [-s <value>] [-R <filename>] [--no-ad] [--no-mr] [-z] [--log-level <silent|error|info|debug|cmd-debug>] [-h]
REQUIRED	
	<devList> (accepted multiple times) Device name(s) to execute serverconfig command.
–OR–	
	--model <model number> (accepted multiple times) Filter devices that only match this model number.
–OR–	
	--serial <serial number> (accepted multiple times) Filter devices that only match this serial number.
–AND–	
	-p <1|2>, --power <1|2> Power type configuration.
OPTIONAL	
	--trace Save trace log for command operation upon success. Note, by default, trace logging enabled upon error. The trace log filename is wdckit-trace.txt.
–OR–	
	--trace-with-scan Save trace log for command operation and include commands issued while scanning for devices.
–OR–	

Command	serverconfig
	--no-trace Disable trace logging.
	-s <value>, --set <value> Set to a new configuration value (0-100).
	-R <filename>, --redirect <filename> Redirects the screen output to the file specified.
	--no-ad Do not use the AD driver (only useful with the RAID version).
	--no-mr Do not use the MR driver (only useful with the RAID version).
	-z, --nobanner Suppresses the banner from printing, which includes information such as copyright, license, etc.
	--log-level <silent|error|info|debug|cmd-debug> Change log level.
	-h, --help Display help and exit.
Example(s)	
	wdckit serverconfig disk0 -p 1 -Send the VU command to read the current power configuration for type 1 for 'disk0'. wdckit serverconfig /dev/nvme0 -p 1 -Send the VU command to read the current power configuration for type 1 for '/dev/nvme0'.
	wdckit serverconfig disk0 -p 1 -s 50 -Send the VU command to set the power configuration of type 2 to value 50 for 'disk0'. wdckit serverconfig /dev/nvme0 -p 1 -s 50 -Send the VU command to set the power configuration of type 2 to value 50 for '/dev/nvme0'.

Command	setfeature
Description	Sets the specified feature value for NVMe devices. Sets the given input operational Parameters with input Values for ATA devices.
Restriction (s)	
	This task is only valid for an actual target.
	This task is only valid for WDC targets.
	This task is only valid for NVMe or SATA targets.
Usage	

Command	setfeature
wdckit	setfeature <<devList> …|--model <model number> …|--serial <serial number> …> [-f <feature-id>|-l] [-b <buffer-file>|--xml-encoder <filename>] [--trace|--trace-with-scan|--no-trace] [-v <value>] [-d <data-length>] [-s] [--nsid <value>] [-u <uuid index>] [-m] [--dipm <enable|disable>] [--apm <value|disable>] [--hwc <enable|disable>] [--aptst <enable|disable>] [--stimeout <value|default>] [--apst <value|default>] [--sscshift <value|default>] [--esspectrum <enable|disable|default>] [--ssrange <0|1|2|3|default>] [--gen1pemphasis <value|default>] [--gen2pemphasis <value|default>] [--gen3pemphasis <value|default>] [--gen1amplitude <value|default>] [--gen2amplitude <value|default>] [--gen3amplitude <value|default>] [--spspeed <0|1|2|default>] [--devslp <enable|disable>] [-R <filename>] [--no-ad] [--no-mr] [-z] [--log-level <silent|error|info|debug|cmd-debug>] [-h]
REQUIRED	
	<devList> (accepted multiple times) Device name(s) to execute setfeature command.
–OR–	
	--model <model number> (accepted multiple times) Filter devices that only match this model number.
–OR–	
	--serial <serial number> (accepted multiple times) Filter devices that only match this serial number.
OPTIONAL	
	-f <feature-id>, --feature <feature-id> Feature id to be modified. This is for NVMe devices only.
–OR–	
	-l, --list Prints the list of supported features.
	-b <buffer-file>, --bufferfile <buffer-file> File name of file containing the data that will be transferred. This is for NVMe devices only.
–OR–	
	--xml-encoder <filename> Encode payload data as described by this xml file. Please refer to the user guide appendix for the XML schema.
	--trace Save trace log for command operation upon success. Note, by default, trace logging enabled upon error. The trace log filename is wdckit-trace.txt.
–OR–	
	--trace-with-scan Save trace log for command operation and include commands issued while scanning for devices.
–OR–	
	--no-trace Disable trace logging.
	-v <value>, --value <value> Value to be set. This is for NVMe devices only.

Command	setfeature
	-d <data-length>, --data-len <data-length> Data transfer length, amount of data in the buffer file. This is for NVMe devices only.
	-s, --save Save settings permanently. This is for NVMe devices only.
	--nsid <value> Specify the NVMe namespace ID value.
	-u <uuid index>, --uuid-index <uuid index> Specify the NVMe UUID Index (0-7fh). This field is only valid for NVMe devices. It will be ignored for ATA/SCSI devices.
	-m, --mirror Uses the NVMe mirror command instead of the NVMe standard command.
	--dipm <enable|disable> Device Initiated Power Management. This is for ATA devices only.
	--apm <value|disable> Advanced Power Management. This is for ATA devices only.
	--hwc <enable|disable> Host Write Cache. This is for ATA devices only.
	--aptst <enable|disable> Auto Partial To Slumber Transition. This is for ATA devices only.
	--stimeout <value|default> Slumber Timeout. This is for ATA devices only.
	--apst <value|default> Auto Partial Slumber Timeout. This is for ATA devices only.
	--sscshift <value|default> Spread Spectrum Clock Shift. This is for ATA devices only.
	--esspectrum <enable|disable|default> Enable Spread Spectrum. This is for ATA devices only.
	--ssrange <0|1|2|3|default> Spread Spectrum Range. This is for ATA devices only.
	--gen1pemphasis <value|default> Gen1 Pre Emphasis. This is for ATA devices only.
	--gen2pemphasis <value|default> Gen2 Pre Emphasis. This is for ATA devices only.
	--gen3pemphasis <value|default> Gen3 Pre Emphasis. This is for ATA devices only.
	--gen1amplitude <value|default> Gen1 Amplitude. This is for ATA devices only.
	--gen2amplitude <value|default> Gen3 Amplitude. This is for ATA devices only.
	--gen3amplitude <value|default> Gen3 Amplitude. This is for ATA devices only.
	--spspeed <0|1|2|default> SATA PHY Speed. This is for ATA devices only.
	--devslp <enable|disable> Device Sleep. This is for ATA devices only.

Command	setfeature
	-R <filename>, --redirect <filename> Redirects the screen output to the file specified.
	--no-ad Do not use the AD driver (only useful with the RAID version).
	--no-mr Do not use the MR driver (only useful with the RAID version).
	-z, --nobanner Suppresses the banner from printing, which includes information such as copyright, license, etc.
	--log-level <silent|error|info|debug|cmd-debug> Change log level.
	-h, --help Display help and exit.
Example(s)	
	wdckit setfeature disk0 -f 6 -v 1 -Sets the feature with id 6 to 1 on 'disk0'. wdckit setfeature /dev/nvme0 -f 6 -v 1 -Sets the feature with id 6 to 1 on '/dev/nvme0'.
	wdckit setfeature disk0 -f 6 -v 1 -z -Sets the feature with id 6 to 1 on 'disk0' and suppresses the banner. wdckit setfeature /dev/nvme0 -f 6 -v 1 -z -Sets the feature with id 6 to 1 on '/dev/nvme0' and suppresses the banner.
	wdckit setfeature disk0 disk1 -f 6 -v 1 -Sets the feature with id 6 to 1 on 'disk0' and 'disk1'. wdckit setfeature /dev/nvme0 /dev/nvme1 -f 6 -v 1 -Sets the feature with id 6 to 1 on '/dev/nvme0' and '/dev/nvme1'.
	wdckit setfeature disk0 -f Ch -v 1 -b data.bin -d 256 -Sets the feature with id 0Ch to 1 and passes 256 bytes of data from the file data.bin on device 'disk0'. wdckit setfeature /dev/nvme0 -f Ch -v 1 -b data.bin -d 256 -Sets the feature with id 0Ch to 1 and passes 256 bytes of data from the file data.bin on device '/dev/nvme0'.

Command	setfeature
	wdckit setfeature disk0 --dipm enable -This option will enable Device Initiated Power Management parameter of 'disk0'. wdckit setfeature /dev/sda --dipm enable -This option will enable Device Initiated Power Management parameter of '/dev/sda'.
	wdckit setfeature all --hwc disable -Disables the Write Cache Parameter of all devices.
	wdckit setfeature disk0 disk1 --apm 32 --hwc enable -Enables the Advanced Power Management and sets the current APM level as 32 and enables the Write Cache of 'disk0' and 'disk1'. wdckit setfeature /dev/sda /dev/sdb --apm 32 --hwc enable -Enables the Advanced Power Management and sets the current APM level as 32 and enables the Write Cache of '/dev/sda' and '/dev/sdb'.

Command	sethctmtemps
Description	Configures the settings for the host controlled thermal management feature on the NVMe device.
Restriction(s)	
	This task is only valid for an actual target.
	This task is only valid for WDC targets.
	This task is only valid for NVMe targets.
Usage	
wdckit	sethctmtemps <<devList> …|--model <model number> …|--serial <serial number> …> [--trace|--trace-with-scan|--no-trace] [-1 <temperature>] [-2 <temperature>] [-d] [-s] [--nsid <value>] [-m] [-R <filename>] [--no-ad] [--no-mr] [-z] [--log-level <silent|error|info|debug|cmd-debug>] [-h]
REQUIRED	
	<devList> (accepted multiple times) Device name(s) to execute sethctmtemps command.
–OR–	
	--model <model number> (accepted multiple times) Filter devices that only match this model number.
–OR–	
	--serial <serial number> (accepted multiple times) Filter devices that only match this serial number.
OPTIONAL	

Command	sethctmtemps
	--trace Save trace log for command operation upon success. Note, by default, trace logging enabled upon error. The trace log filename is wdckit-trace.txt.
–OR–	
	--trace-with-scan Save trace log for command operation and include commands issued while scanning for devices.
–OR–	
	--no-trace Disable trace logging.
	-1 <temperature>, --tmt1 <temperature> Specify the thermal management temperature 1 (Celcuis or Kelvin acceptable). Use 0 to disable TMT1.
	-2 <temperature>, --tmt2 <temperature> Specify the thermal management temperature 2 (Celcuis or Kelvin acceptable). Use 0 to disable TMT2.
	-d, --disable Disable both thermal management temperatures.
	-s, --save Save settings permanently.
	--nsid <value> Specify the NVMe namespace ID value.
	-m, --mirror Uses the NVMe mirror command instead of the NVMe standard command.
	-R <filename>, --redirect <filename> Redirects the screen output to the file specified.
	--no-ad Do not use the AD driver (only useful with the RAID version).
	--no-mr Do not use the MR driver (only useful with the RAID version).
	-z, --nobanner Suppresses the banner from printing, which includes information such as copyright, license, etc.
	--log-level <silent|error|info|debug|cmd-debug> Change log level.
	-h, --help Display help and exit.
Example(s)	

Command	sethctmtemps
	wdckit sethctmtemps disk0 -1 310 -2 315 -Sets Thermal Management Temperature 1 to 310 degrees Kelvin and Thermal Management Temperature 2 to 315 degrees Kelvin on the drive 'disk0'. wdckit sethctmtemps /dev/nvme0 -1 310 -2 315 -Sets Thermal Management Temperature 1 to 310 degrees Kelvin and Thermal Management Temperature 2 to 315 degrees Kelvin on the drive '/dev/nvme0'.
	wdckit sethctmtemps disk0 -1 310 -2 315 -s -Sets Thermal Management Temperature 1 to 310 degrees Kelvin and Thermal Management Temperature 2 to 315 degrees Kelvin on the drive 'disk0' and saves the setting. wdckit sethctmtemps /dev/nvme0 -1 310 -2 315 -s -Sets Thermal Management Temperature 1 to 310 degrees Kelvin and Thermal Management Temperature 2 to 315 degrees Kelvin on the drive '/dev/nvme0' and saves the setting.
	wdckit sethctmtemps disk0 -d -s -Disables HCTM on device 'disk0' and saves the setting. wdckit sethctmtemps /dev/nvme0 -d -s -Disables HCTM on device '/dev/nvme0' and saves the setting.

Command	setthrottlingtemp
Description	Sets the Light and Heavy Throttling Temperature on the NVMe device.
Restriction(s)	
	This task is only valid for an actual target.
	This task is only valid for SanDisk targets.
	This task is only valid for NVMe targets.
Usage	
wdckit	setthrottlingtemp <<devList> …|--model <model number> …|--serial <serial number> …> [--trace|--trace-with-scan|--no-trace] [-l <temperature>] [-H <temperature>] [-R <filename>] [--no-ad] [--no-mr] [-z] [--log-level <silent|error|info|debug|cmd-debug>] [-h]
REQUIRED	
	<devList> (accepted multiple times) Device name(s) to execute setthrottlingtemp command.
–OR–	
	--model <model number> (accepted multiple times) Filter devices that only match this model number.
–OR–	

Command	setthrottlingtemp
	--serial <serial number> (accepted multiple times) Filter devices that only match this serial number.
OPTIONAL	
	--trace Save trace log for command operation upon success. Note, by default, trace logging enabled upon error. The trace log filename is wdckit-trace.txt.
–OR–	
	--trace-with-scan Save trace log for command operation and include commands issued while scanning for devices.
–OR–	
	--no-trace Disable trace logging.
	-l <temperature>, --light <temperature> Specify the light throttling temperature value.
	-H <temperature>, --heavy <temperature> Specify the heavy throttling temperature value.
	-R <filename>, --redirect <filename> Redirects the screen output to the file specified.
	--no-ad Do not use the AD driver (only useful with the RAID version).
	--no-mr Do not use the MR driver (only useful with the RAID version).
	-z, --nobanner Suppresses the banner from printing, which includes information such as copyright, license, etc.
	--log-level <silent|error|info|debug|cmd-debug> Change log level.
	-h, --help Display help and exit.
Example(s)	
	wdckit setthrottlingtemp disk0 -l 80 -H 84 -Sets the light throttling temperature to 80 degrees and the heavy throttling temperature to 84 degrees on the drive 'disk0'. wdckit setthrottlingtemp /dev/nvme0 -l 80 -H 84 -Sets the light throttling temperature to 80 degrees and the heavy throttling temperature to 84 degrees on the drive '/dev/nvme0'.
	wdckit setthrottlingtemp disk0 -l 80 -Sets the light throttling temperature to 80 degrees on the drive 'disk0'. wdckit setthrottlingtemp /dev/nvme0 -l 80 -Sets the light throttling temperature to 80 degrees on the drive '/dev/nvme0'.

Command	show
Description	List the details like serial number, capacity, state, geometry information, protection information, progress information, version, statistics, etc. of the devices.
Restriction(s)	
	This task is only valid for an actual target.
Usage	
wdckit	show [<devList> …|--model <model number> …|--serial <serial number> …] [-a|-g|-s|-d|-f|-t] [-p|-l] [--trace|--trace-with-scan|--no-trace] [--output <text|json|xml|csv|csv-no-header>] [--show-duplicates] [--block-device] [--customer-id] [-L] [--capacity-no-decimal] [--no-usb] [-R <filename>] [--no-ad] [--no-mr] [-z] [--log-level <silent|error|info|debug|cmd-debug>] [-h]
OPTIONAL	
	<devList> (accepted multiple times) Device name(s) to execute show command.
–OR–	
	--model <model number> (accepted multiple times) Filter devices that only match this model number.
–OR–	
	--serial <serial number> (accepted multiple times) Filter devices that only match this serial number.
	-a, --asset Show only asset information, such as drive name, serial number, revision level, etc.
–OR–	
	-g, --geometry Show only device geometry information, such as capacity, etc.
–OR–	
	-s, --state Show device state information with an appropriate description of reason(s) why the device is in that state.
–OR–	
	-d, --dco Shows DCO Identify Data details.
–OR–	
	-f, --features Shows the list of features supported by device.
–OR–	
	-t, --standards Shows the details of standards followed by device.
	-p, --physical Show only physical devices (no logical devices).
–OR–	
	-l, --logical Show only logical devices (no physical devices).

Command	show
	--trace Save trace log for command operation upon success. Note, by default, trace logging enabled upon error. The trace log filename is wdckit-trace.txt.
–OR–	
	--trace-with-scan Save trace log for command operation and include commands issued while scanning for devices.
–OR–	
	--no-trace Disable trace logging.
	--output <text|json|xml|csv|csv-no-header> Specify output format.
	--show-duplicates Show duplicate device paths.
	--block-device Show only block devices (no SES devices).
	--customer-id Show the customer ID and HGST internal firmware.
	-L, --locked Show reason devices are locked.
	--capacity-no-decimal Show capacity without decimal point.
	--no-usb Do not show USB devices.
	-R <filename>, --redirect <filename> Redirects the screen output to the file specified.
	--no-ad Do not use the AD driver (only useful with the RAID version).
	--no-mr Do not use the MR driver (only useful with the RAID version).
	-z, --nobanner Suppresses the banner from printing, which includes information such as copyright, license, etc.
	--log-level <silent|error|info|debug|cmd-debug> Change log level.
	-h, --help Display help and exit.
Example(s)	
	wdckit show all -Shows device details of all the supported devices in tabular form.

Command	show
	wdckit show disk0 disk1 -Shows device details of devices 'disk0' and 'disk1' in tabular form. wdckit show /dev/sda /dev/sdb -Shows device details of devices '/dev/sda' and '/dev/sdb' in tabular form.
	wdckit show all -a -R my.txt -Redirects asset information of all the supported devices to file my.txt.
	wdckit show disk0 --geometry --redirect show.txt -Redirects geometry information of device 'disk0' to file show.txt. wdckit show /dev/sda --geometry --redirect show.txt -Redirects geometry information of device '/dev/sda' to file show.txt.
	wdckit show disk0 disk1 -a -z -Shows asset information of devices 'disk0' and 'disk1' without banner. wdckit show /dev/sda /dev/sdb -a -z -Shows asset information of devices '/dev/sda' and '/dev/sdb' without banner.
	wdckit show disk0 --nobanner --geometry -Shows Geometry information of device 'disk0' without banner. wdckit show /dev/sda --nobanner --geometry -Shows Geometry information of device '/dev/sda' without banner.

Command	standby
Description	Puts the ATA device in standby mode.
Restriction(s)	
	This task is only valid for an actual target.
	This task is only valid for SATA targets.
	This task is only valid for WDC targets.
Usage	
wdckit	standby <<devList> …|--model <model number> …|--serial <serial number> …> [--trace|--trace-with-scan|--no-trace] [-R <filename>] [--no-ad] [--no-mr] [-z] [--log-level <silent|error|info|debug|cmd-debug>] [-h]
REQUIRED	
	<devList> (accepted multiple times) Device name(s) to execute standby command.
–OR–	

Command	standby
	--model <model number> (accepted multiple times) Filter devices that only match this model number.
–OR–	
	--serial <serial number> (accepted multiple times) Filter devices that only match this serial number.
OPTIONAL	
	--trace Save trace log for command operation upon success. Note, by default, trace logging enabled upon error. The trace log filename is wdckit-trace.txt.
–OR–	
	--trace-with-scan Save trace log for command operation and include commands issued while scanning for devices.
–OR–	
	--no-trace Disable trace logging.
	-R <filename>, --redirect <filename> Redirects the screen output to the file specified.
	--no-ad Do not use the AD driver (only useful with the RAID version).
	--no-mr Do not use the MR driver (only useful with the RAID version).
	-z, --nobanner Suppresses the banner from printing, which includes information such as copyright, license, etc.
	--log-level <silent|error|info|debug|cmd-debug> Change log level.
	-h, --help Display help and exit.
Example(s)	
	wdckit standby disk0 -Puts 'disk0' in standby mode. wdckit standby /dev/sda -Puts '/dev/sda' in standby mode.
	wdckit standby disk0 -R standby.txt -Puts 'disk0' in standby mode and redirects the output to standby.txt. wdckit standby /dev/sda -R standby.txt -Puts '/dev/sda' in standby mode and redirects the output to standby.txt.

Command	update
Description	Updates the device firmware with new firmware on the specified device.
Restriction(s)	
	This task is only valid for an actual target.
	This task is only valid for WDC targets.
Usage	
wdckit	update [<devList> …|--model <model number> …|--serial <serial number> …] <-f <firmware>|-a|-g|--xml <xml filename>|--reset> [--progress-bar|--simple-progress|--no-progress] [--trace|--trace-with-scan|--no-trace] [-x <transfer size>] [-d] [-s <slot value>] [-c <ca value>] [-b <0|1>] [-v] [-r <seconds>] [--pause-apst] [--fast] [-R <filename>] [--no-ad] [--no-mr] [-z] [--log-level <silent|error|info|debug|cmd-debug>] [-h]
REQUIRED	
	-f <firmware>, --firmware <firmware> The filename of the firmware binary.
–OR–	
	-a, --activate Perform a firmware commit (aka activate) action. For an NVMe device, this option requires --slot. Activation is usually preceeded by a --firmware command.
–OR–	
	-g, --getfwinfo Get FW slot information from log id 3h.
–OR–	
	--xml <xml filename> The filename of an XML file with firmware update directives. Please refer to the end of the user guide for the XML schema.
–OR–	
	--reset Perform a controller reset (NVMe only). This may not be supported with all Windows NVMe drivers. Not supported in FreeBSD.
OPTIONAL	
	<devList> (accepted multiple times) Device name(s) to execute update command.
–OR–	
	--model <model number> (accepted multiple times) Filter devices that only match this model number.
–OR–	
	--serial <serial number> (accepted multiple times) Filter devices that only match this serial number.
	--progress-bar Display a full screen progress bar screen.
–OR–	
	--simple-progress Prevent the display of the progress bar screen, useful when running commands from a script.

Command	update
–OR–	
	--no-progress No progress display.
	--trace Save trace log for command operation upon success. Note, by default, trace logging enabled upon error. The trace log filename is wdckit-trace.txt.
–OR–	
	--trace-with-scan Save trace log for command operation and include commands issued while scanning for devices.
–OR–	
	--no-trace Disable trace logging.
	-x <transfer size>, --xfer <transfer size> Specify the maximum size, in bytes, to transfer the firmware image. The firmware image will be sent to the device via multilple commands when the image is larger than this value. Use -1 to specify a large transfer size determined programatically. This can only be used with -f|--firmware or --xml.
	-d, --defer Download and save the firmware image to the device and update it only after a system power cycle (non NVMe devices) or activate action.
	-s <slot value>, --slot <slot value> Specify the firmware slot that shall be used for the activate action for an NVMe device. This can only be used with -a|--activate.
	-c <ca value>, --commit-action <ca value> NVMe activate commit action value (0-7). This can only be used with -a|--activate. Note: this option is not accepted by the Windows inbox driver.
	-b <0|1>, --bpid <0|1> Specify the boot partition ID. This can only be used with -a|--activate. Note: this option is not accepted by the Windows inbox driver.
	-v, --validate Validate the firmware image with the specified device(s). If used with --xml it will check if any device(s) needs an update.
	-r <seconds>, --rescan-control <seconds> Set the delay in seconds between firmware update and the device re-scan. Zero is no delay and negative numbers skip the re-scan.
	--pause-apst Save and disable Autonomous Power State Transition (APST) before update and restore afterwards.
	--fast Skip non-essential commands to speed up performance.
	-R <filename>, --redirect <filename> Redirects the screen output to the file specified.
	--no-ad Do not use the AD driver (only useful with the RAID version).
	--no-mr Do not use the MR driver (only useful with the RAID version).

Command	update
	-z, --nobanner Suppresses the banner from printing, which includes information such as copyright, license, etc.
	--log-level <silent|error|info|debug|cmd-debug> Change log level.
	-h, --help Display help and exit.
Example(s)	
	wdckit update disk0 -f X210400.FLUF -Updates the firmware of device 'disk0' with the given firmware image. wdckit update /dev/sda -f X210400.FLUF -Updates the firmware of device '/dev/sda' with the given firmware image.
	wdckit update all -f X210400.FLUF -v -R update.txt -Validates the firmware of all supported devices with given firmware image and output is stored to file update.txt in current directory.
	wdckit update disk0 disk1 -f X210400.FLUF --validate -Validates the given firmware image with devices 'disk0' and 'disk1. wdckit update /dev/sda /dev/sdb -f X210400.FLUF --validate -Validates the given firmware image with devices'/dev/sda' and '/dev/sdb.
	wdckit update all -f X210400.FLUF -Update the firmware of all supported devices with given firmware image.
	wdckit update --model "WDC WD1234" -f X210400.FLUF -Update the firmware of all devices with a model string 'WDC WD1234' with the given firmware image.
	wdckit update --model "WDC WD1234" -a -s 1 -c 1 -Commits the firmware in slot 1 on all devices with a model string 'WDC WD1234'.
	wdckit update --model "WDC WD1234" --reset -Performs a controller reset all devices with a model string 'WDC WD1234'. If a prior commit was ready to activate, this should perform the activation. Not supported on all controllers. Not supported in FreeBSD.

Command	update
	wdckit update disk0 -f X210400.FLUF --log-level silent --no-progress -r -1 -x -1 --fast
	-Updates the firmware of device 'disk0' in the shortest amount of time.
	wdckit update /dev/sda -f X210400.FLUF --log-level silent --no-progress -r -1 -x -1 --fast
	-Updates the firmware of device '/dev/sda' in the shortest amount of time.

Command	version
Description	Displays version information.
Usage	
wdckit	version
Example(s)	

Command	writelog
Description	This command is used to write a log page to the ATA device.
Restriction(s)	
	This task is only valid for an actual target.
	This task is only valid for SATA targets.
	This task is only valid for WDC targets.
Usage	
wdckit	writelog <<devList> …|--model <model number> …|--serial <serial number> …> [-s|-g|-G] <-d <dataFile>|--xml-encoder <filename>> [--trace|--trace-with-scan|--no-trace] -l <value> [-f <value>] [-b <blocks>] [-R <filename>] [--no-ad] [--no-mr] [-z] [--log-level <silent|error|info|debug|cmd-debug>] [-h]
REQUIRED	
	<devList> (accepted multiple times) Device name(s) to execute writelog command.
–OR–	
	--model <model number> (accepted multiple times) Filter devices that only match this model number.
–OR–	
	--serial <serial number> (accepted multiple times) Filter devices that only match this serial number.
–AND–	
	-d <dataFile>, --data <dataFile> The binary filename to send to the device.
–OR–	
	--xml-encoder <filename> Encode payload data as described by this xml file. Please refer to the user guide appendix for the XML schema.

Command	writelog
	-l <value>, --logaddress <value> The log address to access.
OPTIONAL	
	-s, --smart Use SMART write log command to access the data.
–OR–	
	-g, --gpl Use GPL write log command to access the data.
–OR–	
	-G, --gpl-dma Use GPL write log DMA command to access the data.
	--trace Save trace log for command operation upon success. Note, by default, trace logging enabled upon error. The trace log filename is wdckit-trace.txt.
–OR–	
	--trace-with-scan Save trace log for command operation and include commands issued while scanning for devices.
–OR–	
	--no-trace Disable trace logging.
	-f <value>, --features <value> Value for the FEATURES field.
	-b <blocks>, --block-count <blocks> Specify the maximum number of blocks to transfer per command.
	-R <filename>, --redirect <filename> Redirects the screen output to the file specified.
	--no-ad Do not use the AD driver (only useful with the RAID version).
	--no-mr Do not use the MR driver (only useful with the RAID version).
	-z, --nobanner Suppresses the banner from printing, which includes information such as copyright, license, etc.
	--log-level <silent|error|info|debug|cmd-debug> Change log level.
	-h, --help Display help and exit.
Example(s)	

Command	writelog
	wdckit writelog disk0 -l 81h -d hostlog81h.bin --gpl-dma -Write log address 81h (129 decimal) with data from the file hostlog81h.bin using the GPL DMA interface. wdckit writelog /dev/sda -l 81h -d hostlog81h.bin --gpl-dma -Write log address 81h (129 decimal) with data from the file hostlog81h.bin using the GPL DMA interface.
	wdckit writelog disk0 -l 82h -d hostlog82h.bin --gpl -Write log address 82h (130 decimal) with data from the file hostlog82h.bin using the GPL PIO interface. wdckit writelog /dev/sda -l 82h -d hostlog82h.bin --gpl -Write log address 82h (130 decimal) with data from the file hostlog82h.bin using the GPL PIO interface.
	wdckit writelog disk0 -l 83h -d hostlog83h.bin --smart -Write log address 83h (131 decimal) with data from the file hostlog83h.bin using the SMART interface. wdckit writelog /dev/sda -l 83h -d hostlog83h.bin --smart -Write log address 83h (131 decimal) with data from the file hostlog83h.bin using the SMART interface.
	wdckit writelog disk0 -l 84h --xml-encoder log84h.xml --gpl -Write log address 84h (132 decimal) with data from the file log84h.xml using the GPL PIO interface. wdckit writelog /dev/sda -l 84h --xml-encoder log84h.xml --gpl -Write log address 84h (132 decimal) with data from the file log84h.xml using the GPL PIO interface.

Command	zns
Description	Perform various ZNS operations and show ZNS reports.
Restriction (s)	
	This task is only valid for an actual target.
	This task is only valid for NVMe targets.
	This task is only valid for WDC targets.
Usage	

Command	zns
wdckit	zns [<devList> …|--model <model number> …|--serial <serial number> …] <--open|--close|--finish|--reset|--offline|--set-zone-desc <filename>|--report <max-value>|--extended-report <max-value>> [-r|--raw-limit <bytes>|--save <path>] [--start-lba <lba>|--all-zones] [--trace|--trace-with-scan|--no-trace] [--data-lifetime <lifetime>] [-s <all|empty|implicitly-opened|explicitly-opened| closed|full|read-only|offline>] [-p] [--nsid <value>] [-u <uuid index>] [-R <filename>] [--no-ad] [--no-mr] [-z] [--log-level <silent|error|info|debug|cmd-debug>] [-h]
REQUIRED	
	--open Open one or more zones. NOTE: In Linux, the device name MUST be a namespace name (eg /dev/nvme0n1).
–OR–	
	--close Close one or more zones. NOTE: In Linux, the device name MUST be a namespace name (eg /dev/nvme0n1).
–OR–	
	--finish Finish one or more zones. NOTE: In Linux, the device name MUST be a namespace name (eg /dev/nvme0n1).
–OR–	
	--reset Reset one or more zones. NOTE: In Linux, the device name MUST be a namespace name (eg /dev/nvme0n1).
–OR–	
	--offline Offline one or more zones. NOTE: In Linux, the device name MUST be a namespace name (eg /dev/nvme0n1).
–OR–	
	--set-zone-desc <filename> Attach Zone Descriptor Extension data to a zone. NOTE: In Linux, the device name MUST be a namespace name (eg /dev/nvme0n1).
–OR–	
	--report <max-value> Reports zone descriptor entries through the Report Zones data structure. Use -1 to report all entries. NOTE: In Linux, the device name MUST be a namespace name (eg /dev/nvme0n1).
–OR–	
	--extended-report <max-value> Reports zone descriptor entries through the Extended Report Zones data structure. Use -1 to report all entries. NOTE: In Linux, the device name MUST be a namespace name (eg /dev/nvme0n1).
OPTIONAL	
	<devList> (accepted multiple times) Device name(s) to execute zns command.
–OR–	
	--model <model number> (accepted multiple times) Filter devices that only match this model number.

Command	zns
–OR–	
	--serial <serial number> (accepted multiple times) Filter devices that only match this serial number.
	-r, --raw Dump the raw buffer.
–OR–	
	--raw-limit <bytes> Dump the raw buffer, with at most, this many bytes.
–OR–	
	--save <path> Saves the device output to the path specified.
	--start-lba <lba> Specify the zone starting LBA. Used with open, close, finish, reset, offline, report, extended-report or set zone desc options.
–OR–	
	--all-zones Select all zones. Used with open, close, finish, reset, offline or set zone desc options.
	--trace Save trace log for command operation upon success. Note, by default, trace logging enabled upon error. The trace log filename is wdckit-trace.txt.
–OR–	
	--trace-with-scan Save trace log for command operation and include commands issued while scanning for devices.
–OR–	
	--no-trace Disable trace logging.
	--data-lifetime <lifetime> Specify the zone data lifetime. Used with open zone. Valid values range from 0 to 3Fh.
	-s <all|empty|implicitly-opened|explicitly-opened|closed|full|read-only|offline>, --state <all|empty|implicitly-opened|explicitly-opened|closed|full|read-only|offline> Filter report/extended report to only this state.
	-p, --partial Show a parital report/extended report.
	--nsid <value> Specify the NVMe namespace ID value.
	-u <uuid index>, --uuid-index <uuid index> Specify the NVMe UUID Index (0-7fh). This field is only valid for NVMe devices. It will be ignored for ATA/SCSI devices.
	-R <filename>, --redirect <filename> Redirects the screen output to the file specified.
	--no-ad Do not use the AD driver (only useful with the RAID version).

Command	zns
	--no-mr Do not use the MR driver (only useful with the RAID version).
	-z, --nobanner Suppresses the banner from printing, which includes information such as copyright, license, etc.
	--log-level <silent|error|info|debug|cmd-debug> Change log level.
	-h, --help Display help and exit.
Example(s)	
	wdckit zns disk0 --report 1000 --state all -Report first 1000 ZNS zone info for all zones for device 'disk0'. wdckit zns /dev/nvme0n1 --report 1000 --state all -Report first 1000 ZNS zone info for all zones for device '/dev/nvme0n1'.
	wdckit zns disk1 --report 1000 --state read-only -Report first 1000 ZNS zone infos for read-only zones for device 'disk1'. wdckit zns /dev/nvme1n1 --report 1000 --state read-only -Report first 1000 ZNS zone infos for read-only zones for device '/dev/nvme1n1'.
	wdckit zns disk0 --report 4 --partial --state all -Report first 4 partial ZNS zone info for all zones for device 'disk0'. wdckit zns /dev/nvme0n1 --report 4 --partial --state all -Report first 4 partial ZNS zone info for all zones for device '/dev/nvme0n1'.
	wdckit zns disk0 --extended-report 8 --state all -Report first 8 extended ZNS zone info for all zones for device 'disk0'. wdckit zns /dev/nvme0n1 --extended-report 8 --state all -Report first 8 extended ZNS zone info for all zones for device '/dev/nvme0n1'.

Command	zone
Description	Perform various Zoned ATA/Block Commands (ZAC/ZBC).
Restriction (s)	
	This task is only valid for an actual target.
	This task is only valid for ZAC/ZBC device.
	This task is only valid for WDC targets.

Command	zone
	This task requires the device to be ready.
Usage	
wdckit	zone <<devList> …|--model <model number> …|--serial <serial number> …> <--report-zones|--close|--finish|--open|--reset> [-r|--raw-limit <bytes>|-s <path>] [--trace|--trace-with-scan|--no-trace] [-a] [--start-lba <lba>] [-p <count>] [-o <all|empty|implicitly-opened|explicitly-opened|closed|full|read-only|offline|inactive|rwp-recommeded|non-seq-wr-res-active|zone-cond-not-write-ptr>] [-R <filename>] [--no-ad] [--no-mr] [-z] [--log-level <silent|error|info|debug|cmd-debug>] [-h]
REQUIRED	
	<devList> (accepted multiple times) Device name(s) to execute zone command.
–OR–	
	--model <model number> (accepted multiple times) Filter devices that only match this model number.
–OR–	
	--serial <serial number> (accepted multiple times) Filter devices that only match this serial number.
–AND–	
	--report-zones Report zones.
–OR–	
	--close Close zone.
–OR–	
	--finish Finish zone.
–OR–	
	--open Open zone.
–OR–	
	--reset Reset write pointer.
OPTIONAL	
	-r, --raw Dump the raw buffer.
–OR–	
	--raw-limit <bytes> Dump the raw buffer, with at most, this many bytes.
–OR–	
	-s <path>, --save <path> Saves the device output to the path specified.
	--trace Save trace log for command operation upon success. Note, by default, trace logging enabled upon error. The trace log filename is wdckit-trace.txt.
–OR–	

Command	zone
	--trace-with-scan Save trace log for command operation and include commands issued while scanning for devices.
–OR–	
	--no-trace Disable trace logging.
	-a, --all-zones Perform zone operation (open/close/finish/reset) on all zones.
	--start-lba <lba> Specify the zone starting LBA.
	-p <count>, --partial <count> Show a partial zone report, with at least this many entries. Note: The OS may prevent large values from succeeding.
	-o <all|empty|implicitly-opened|explicitly-opened|closed|full|read-only|offline|inactive|rwp-recommeded|non-seq-wr-res-active|zone-cond-not-write-ptr>, --reporting-option <all|empty|implicitly-opened|explicitly-opened|closed|full|read-only|offline|inactive|rwp-recommeded|non-seq-wr-res-active|zone-cond-not-write-ptr> Filter report with this reporting option.
	-R <filename>, --redirect <filename> Redirects the screen output to the file specified.
	--no-ad Do not use the AD driver (only useful with the RAID version).
	--no-mr Do not use the MR driver (only useful with the RAID version).
	-z, --nobanner Suppresses the banner from printing, which includes information such as copyright, license, etc.
	--log-level <silent|error|info|debug|cmd-debug> Change log level.
	-h, --help Display help and exit.
Example(s)	
	wdckit zone disk0 --report-zones -Report zone info for all zones for device 'disk0'. wdckit zone /dev/sda --report-zones -Report zone info for all zones for device '/dev/sda'.
	wdckit zone disk0 --report-zones --partial 15 --start-lba 10000000h -Report partial zone info (at least 15 zone descriptors) starting at LBA 10000000h for device 'disk0'. wdckit zone /dev/sda --report-zones --partial 15 --start-lba 10000000h -Report partial zone info (at least 15 zone descriptors) starting at LBA 10000000h for device '/dev/sda'.

Command	zone
	wdckit zone disk0 --report-zones --reporting-option closed -Report zone info for closed zones for device 'disk0'. wdckit zone /dev/sda --report-zones --reporting-option closed -Report zone info for closed zones for device '/dev/sda'.
	wdckit zone disk0 --open --start-lba 10600000h -Open zone starting at LBA 10600000h for device 'disk0'. wdckit zone /dev/sda --open --start-lba 10600000h -Open zone starting at LBA 10600000h for device '/dev/sda'.
	wdckit zone disk0 --finish --start-lba 10600000h -Finish zone starting at LBA 10600000h for device 'disk0'. wdckit zone /dev/sda --finish --start-lba 10600000h -Finish zone starting at LBA 10600000h for device '/dev/sda'.
	wdckit zone disk0 --close --start-lba 10600000h -Close zone starting at LBA 10600000h for device 'disk0'. wdckit zone /dev/sda --close --start-lba 10600000h -Close zone starting at LBA 10600000h for device '/dev/sda'.
	wdckit zone disk0 --reset --start-lba 10600000h -Reset write pointer starting at LBA 10600000h for device 'disk0'. wdckit zone /dev/sda --reset --start-lba 10600000h -Reset write pointer starting at LBA 10600000h for device '/dev/sda'.

Appendix

Reference for --xml-decoder <filename>

XML decoder Field reference

This XML <Field> is used with all XML schemas in this section. It is unbounded, so it can be repeated as many times as needed.

```
<!-- unbounded, may be repeated as many times as needed -->
<Field>
  <Offset>integer</Offset>
  <Length>integer</Length>
  <Name>string</Name>
  <!-- BitStart and BitEnd are optional-->
  <BitStart>integer</BitStart>
  <BitEnd>integer</BitEnd>
  <!--Use either DataType (once) or Data (unbounded)-->
  <DataType>Decimal|Hex|String|ByteSwapString</DataType>
  <Data>
    <Value>integer</Value>
    <Description>string</Description>
  </Data>
</Field>
```

<BitStart> and <BitEnd> are optional, but used as pairs.

The <Data> and <DataType> are mutually exclusive - use one type, but not both.

NVMe Identify Namespace

```
<?xml version="1.0" encoding="utf-8"?>
<FileFormatMajor>1</FileFormatMajor>
<FileFormatMinor>0</FileFormatMinor>
<CSSD>
  <NVME>
    <IdentifyNamespace>
      <Field>
      </Field>
    </IdentifyNamespace>
  </NVME>
</CSSD>
```

NVMe Identify Controller

```
<?xml version="1.0" encoding="utf-8"?>
<FileFormatMajor>1</FileFormatMajor>
<FileFormatMinor>0</FileFormatMinor>
<CSSD>
  <NVME>
    <IdentifyController>
      <Field>
      </Field>
    </IdentifyController>
  </NVME>
</CSSD>
```

SATA Identify Device

```xml
<?xml version="1.0" encoding="utf-8"?>
<FileFormatMajor>1</FileFormatMajor>
<FileFormatMinor>0</FileFormatMinor>
<CSSD>
  <SATA>
    <IdentifyDevice>
      <Field>
      </Field>
    </IdentifyDevice>
  </SATA>
</CSSD>
```

SCSI Inquiry

```xml
<?xml version="1.0" encoding="utf-8"?>
<FileFormatMajor>1</FileFormatMajor>
<FileFormatMinor>0</FileFormatMinor>
<CSSD>
  <SCSI>
    <Inquiry>
      <Field>
      </Field>
    </Inquiry>
  </SCSI>
</CSSD>
```

NVMe Get Feature

```xml
<?xml version="1.0" encoding="utf-8"?>
<FileFormatMajor>1</FileFormatMajor>
<FileFormatMinor>0</FileFormatMinor>
<CSSD>
  <NVME>
    <!-- id attribute (decimal) is optional
    - allows for multiple sections in one file-->
    <GetFeature id="integer">
      <Field>
      </Field>
    </GetFeature>
  </NVME>
</CSSD>
```

GetFeature has an optional XML attribute "id" which allows multiple GetFeature XML nodes in the the same <CSSD><NVME> XML file.

NVMe Get Log

```xml
<?xml version="1.0" encoding="utf-8"?>
<FileFormatMajor>1</FileFormatMajor>
<FileFormatMinor>0</FileFormatMinor>
<CSSD>
  <NVME>
    <!-- id attribute (decimal) is optional
    - allows for multiple sections in one file-->
    <GeLogPage id="integer">
      <Field>
      </Field>
    </GetLogPage>
  </NVME>
</CSSD>
```

GetLogPage has an optional XML attribute "id" which allows multiple GetLogPage XML nodes in the the same <CSSD><NVME> XML file.

SATA Get Log

```xml
<?xml version="1.0" encoding="utf-8"?>
<FileFormatMajor>1</FileFormatMajor>
<FileFormatMinor>0</FileFormatMinor>
<CSSD>
  <SATA>
    <!-- id attribute (decimal) is optional
    - allows for multiple sections in one file-->
    <!-- Use either ReadGPL or ReadSmartLog -->
    <ReadGPL id="integer">
      <Field>
      </Field>
    </ReadGPL>
    <ReadSmartLog id="integer">
      <Field>
      </Field>
    </ReadSmartLog>
  </SATA>
</CSSD>
```

ReadGPL/ReadSmartLog has an optional XML attribute "id" which allows multiple ReadGPL/ReadSmartLog XML nodes in the the same <CSSD><SATA> XML file.

SCSI Get Log

```xml
<?xml version="1.0" encoding="utf-8"?>
<FileFormatMajor>1</FileFormatMajor>
<FileFormatMinor>0</FileFormatMinor>
<CSSD>
  <SCSI>
    <!-- id attribute (decimal) is optional
    - allows for multiple sections in one file-->
    <LogSense id="integer">
      <Field>
      </Field>
    </LogSense>
  </SCSI>
</CSSD>
```

LogSense has an optional XML attribute "id" which allows multiple LogSense XML nodes in the the same <CSSD><SCSI> XML file.

Reference for --xml-encoder <filename>

XML encoder Field reference

This XML <Field> is used with all XML schemas in this section. It is unbounded, so it can be repeated as many times as needed.

```xml
<!-- unbounded, may be repeated as many times as needed -->
<Field>
  <Offset>integer</Offset>
  <Length>integer</Length>
  <!-- BitStart and BitEnd are optional -->
  <BitStart>integer</BitStart>
  <BitEnd>integer</BitEnd>
  <Name>string</Name>
  <DataType>Decimal|Hex|String</DataType>
  <!-- For Hex, do not use 0x prefix or h suffix -->
  <Value>integer|string</Value>
</Field>
```

<BitStart> and <BitEnd> are optional, but used as pairs.

NVMe Set Features

```xml
<?xml version="1.0" encoding="utf-8"?>
<FileFormatMajor>1</FileFormatMajor>
<FileFormatMinor>0</FileFormatMinor>
<CSSD>
  <NVME>
    <!-- id attribute (decimal) is optional
    - allows for multiple sections in one file-->
    <SetFeature id="integer">
      <!-- Size, in bytes, that this feature id expects -->
      <Size>integer</Size>
      <!-- little endian is default -->
      <Endian>little|big</Endian>
      <Field>
      </Field>
    </SetFeature>
  </NVME>
</CSSD>
```

SetFeature has an optional XML attribute "id" which allows multiple SetFeature XML nodes in the the same <CSSD><NVME> XML file.

SATA Write Log

```xml
<?xml version="1.0" encoding="utf-8"?>
<FileFormatMajor>1</FileFormatMajor>
<FileFormatMinor>0</FileFormatMinor>
<CSSD>
  <SATA>
    <!-- id attribute (decimal) is optional
    - allows for multiple sections in one file-->
    <!-- use either WriteSmartLog or WriteGPL -->
    <WriteSmartLog id="integer">
      <!-- Size, in bytes, should be a multiple of 512 -->
      <Size>integer</Size>
      <!-- little endian is default -->
      <Endian>little|big</Endian>
      <Field>
      </Field>
    </WriteSmartLog>
    <WriteGPL id="integer">
      <Size>integer</Size>
      <!-- little endian is default -->
      <Endian>little|big</Endian>
      <Field>
      </Field>
    </WriteGPL>
  </SATA>
</CSSD>
```

WriteSmartLog/WriteGPL has an optional XML attribute "id" which allows multiple WriteSmartLog/WriteGPL XML nodes in the the same <CSSD><SATA> XML file.

Reference for getsmart --namesub <filename>

Getsmart xml schema

```
<smart>
  <!-- create aname array for all attributes -->
  <aname id="integer">attribute name</aname>
</smart>
```

Reference for update --xml <filename>

Update top-level xml schema

```
<lista_devices>
  <!-- lista_device is unbounded, may be repeated as
  many times as needed -->
  <lista_device model="model number">
    <url>filename</url>
  </lista_device>
</lista_devices>
```

Update low-level xml schema

```
<!-- this filename as noted from the url tag in the
top-level xml schema -->
<ffu>
  <!-- fwfile specifies the filename of the firmware binary file --
>
  <fwfile>bin file</fwfile>

  <!-- dependency is unbounded, may be repeated as
  many times as needed -->
  <dependency>version</dependency>

  <!-- fwversion is the new firmware version after update -->
  <fwversion>version</fwversion>
</ffu>
```

Log Address

ATA Log pages

```
wdckit getlog <dev> -l <Log Address>
```

```
wdckit getlog <dev> -l <Log Address> --smartlog
```

Log Address	Description	Access
0h	Log Directory	GPL, SL
1h	Summary SMART error log	SL
2h	Comprehensive SMART error log	SL
3h	Extended Comprehensive SMART error log	GPL
4h	Device Statistics log	GPL, SL
5h	Reserved for CFA	
6h	SMART self-test log	SL
7h	Extended self-test log	GPL
8h	Power Conditions log	GPL
9h	Selective self-test log	SL
Ah	Device Statistics Notification	GPL
Bh	Reserved for CFA	
Ch	Pending Defects log	GPL
Dh	LPS Mis-alignment log	GPL, SL
Eh	Reserved for ZAC-2	
Fh	Sense Data for Successful NCQ Cmds log	GPL
10h	NCQ Command Error log	GPL
11h	SATA Phy Event Counters log	GPL
12h	SATA NCQ Non-Data log	GPL
13h	SATA NCQ Send and Receive log	GPL
14h	Hybrid Information log	GPL
15h	Rebuild Assist log	GPL
16h	Reserved for Serial ATA	
17h	Reserved for Serial ATA	
19h	LBA Status log	GPL
20h	Streaming performance log [OBS-8]	
21h	Write stream error log	GPL
22h	Read stream error log	GPL
23h	Delayed sector log [OBS-8]	
24h	Current Device Internal Status Data log	GPL
25h	Saved Device Internal Status Data log	GPL
2Fh	Set Sector Configuration	GPL
30h	IDENTIFY DEVICE data log	GPL, SL
80h…9Fh	Host Specific	GPL, SL

Log Address	Description	Access
A0h…DFh	Device Vendor Specific	GPL, SL
E0h	SCT Command/Status	GPL, SL
E1h	SCT Data Transfer	GPL, SL

GPL = General Purpose Logging; SL = SMART logging. By default, wdckit will use access the log via GPL. Use –smartlog to access a SMART log address.

NVMe log identifiers

```
wdckit getlog <dev> –l <Log Id>
```

Log Id	Description
0h	Supported Log Pages
1h	Error Infomation
2h	SMART / Health Information
3h	Firmware Slot Information
4h	Changed Namespace List
5h	Commands Supported and Effects
6h	Device Self-test
7h	Telemetry Host-Initiated
8h	Telemetry Controller-Initiated
9h	Endurance Group Information
Ah	Predictable Latency Per NVM Set
Bh	Predictable Latency Event Aggregate Log
Ch	Asymmetric Namespace Access
Dh	Persistent Event Log
Eh	LBA Status Information
Fh	Endurance Group Event Aggregate
10h	Media Unit Status
11h	Supported Capacity Configuration List
12h	Feature Identifiers Supported and Effects
13h	NVMe-MI Commands Supported and Effects
14h	Command and Feature Lockdown
15h	Boot Partition
16h	Rotational Media Information Log
70h	Discovery
80h	Reservation Notification
81h	Sanitize Status
BFh	Changed Zone List

SCSI log identifiers

```
wdckit getlog <dev> –l <Page Code> [–p <Page List>]
```

Page Code	Page List	Description
0h		Supported Log Pages
0h	FFh	Supported Log Pages and Subpages
1h		Buffer Over-Run/Under-Run
2h		Write Error Counters
3h		Read Error Counters
5h		Verify Error Counters
6h		Non-Medium Error
7h		Last n Error Events
8h		Format Status
Bh		Last n Deferred Errors Or Asynchronous Events
Ch		Logical Block Provisioning
Dh		Temperature
Dh	1h	Environmental Reporting
Dh	2h	Environmental Limits
Eh		Start-Stop Cycle Counter
Eh	1h	Utilization
Fh		Application Client
10h		Self-Test Results
11h		Solid State Media
15h		Background Scan Results
15h	1h	Pending Defects
15h	2h	Background Operation
15h	3h	LPS Misalignment
16h		ATA PASS-THROUGH Results
17h		Non-volatile Cache
19h		General Statistics and Performance
19h	20h	Cache Memory Statistics
1Ah		Power Condition Transitions
2Fh		Informational Exceptions

NVMe Identify CNS/CSI Values

```
wdckit idd <dev> --cns <CNS> [--csi <CSI>]
```

CNS	CSI	Description
0h		Identify Namespace Data
1h		Identify Controller Data
2h		Active Namespace ID List
3h		Namespace Identification Descriptor List
4h		IOCS NVM Set List
5h	0h	IOCS Identify Namespace Data
5h	1h	KV Identify Namespace Data

CNS	CSI	Description
5h	2h	ZNS Identify Namespace Data
6h	0h	IOCS Identify Controller Data
6h	1h	KV Identify Controller Data
6h	2h	ZNS Identify Controller Data
7h	0h	IOCS Identify Active Namespace List
7h	1h	KV Identify Active Namespace List
7h	2h	ZNS Identify Active Namespace List
8h	0h	IOCS Independent Identify Namespace Data
8h	1h	KV Independent Identify Namespace Data
8h	2h	ZNS Independent Identify Namespace Data
10h		Allocated Namespace ID List
11h	0h	IOCS Identify Namespace Data
11h	1h	KV Identify Namespace Data
11h	2h	ZNS Identify Namespace Data
12h		Identify Controller List Data
13h		Identify Subsystem Controller List
14h		Identify Primary Controller Capabilities Data
15h		Identify Secondary Controller Capabilities Data
16h		Identify Namespace Granularity List
17h		Identify UUID List
18h		Identify Domain List
19h		Identify Endurance Group List
1Ah	0h	IOCS Allocated Namespace ID List
1Ah	1h	KV Allocated Namespace ID List
1Ah	2h	ZNS Allocated Namespace ID List
1Bh	0h	IOCS Identify Namespace Data
1Bh	1h	KV Identify Namespace Data
1Bh	2h	ZNS Identify Namespace Data
1Ch	0h	IOCS Identify Data
1Ch	1h	KV Identify Data
1Ch	2h	ZNS Identify Data

SCSI Inquiry EVPD pages

```
wdckit idd <dev> -v <VPD>
```

VPD	Description
0h	Supported VPD Pages
80h	Unit Serial Number
83h	Device Identification
84h	Software Interface Identification
85h	Management Network Addresses
86h	Extended INQUIRY Data

VPD	Description
87h	Mode Page Policy
88h	SCSI Ports
89h	ATA Information
8Ah	Power Condition
8Bh	Device Constituents
8Ch	CFA Profile Information
8Dh	Power Consumption
8Fh	Third-party Copy
90h	Protocol Specific Logical Unit Information
91h	Protocol Specific Port Information
92h	SCSI Feature Sets
B0h	Block Limits
B1h	Block Device Characteristics
B2h	Logical Block Provisioning
B3h	Referrals
B4h	Supported Block Lengths And Protection Types
B5h	Block Device Characteristics Extension
B6h	Zoned Block Device Characteristics
B7h	Block Limits Extension