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Command Line Online Update Tool (CLOUT) User Guide

CLOUT enables you to manage your SSDs using a command line, including for example, updating firmware and the BIOS, secure erasing data from your SSD, making the data unrecoverable and viewing SMART attributes and other data for your SSD. This guide describes CLOUT for Windows®, Linux® and VMware™ command lines.

CLOUT supports the following operating systems:

- Windows® 10
- Windows® 8.1
- Windows® 7
- Windows Server® 2012 R2
- Windows Server® 2012

- Windows Server® 2008 R2
- Windows Server® PE 3.0 and later
- Linux distributions: CentOS/Oracle/RedHat® 6.0-6.7, 7.0-7.1, SUSE® 11 SP1-SP4, 12, Ubuntu® 10.04, 12.04-15.10
- VMware distributions: ESXi™ 5.5, 6.0 (using the 32-bit Linux executable)

⚠ CAUTION: before you start, make back-up copies of any data on the SSD that you want to keep; some operations result in the complete loss of data on the SSD.

ⓘ Before using CLOUT:
- always download the latest version of CLOUT and you must run CLOUT as an administrator
- set the SATA controller to AHCI mode in the motherboard BIOS; for instructions see the user documentation for your computer
- for firmware or BIOS updates, your computer must be connected to the internet

Install and Start CLOUT

To install CLOUT on your computer, go to http://ocz.com and select the relevant download for your operating system. Open a command line window and set your location to the CLOUT executable.

Syntax Examples

clout **--log**=*log_file_name* **--force --bios** *device_identifier*

clout **--log**=*log_file_name* **--force --fwupd --pkg** *package device_identifier*
- *package* is the full path on your computer to the update package file.
- *device_identifier* in Windows® can be (maximum 10 devices):
  - logical drive names or physical drive numbers separated by spaces, for example:
    clout --log --fwupd e: f:
    clout --log --fwupd 1 2
    clout --log --fwupd \\.\PhysicalDrive1 \\.\PhysicalDrive2
    clout --log --fwupd \\.\Scsi11: \\.\Scsi12
  - a range of logical drive names or physical drive numbers, for example:
    clout --log --fwupd [d-g]
    clout --log --fwupd [1-4]
- *device_identifier* in Linux can be (maximum 10 devices):
  - device paths separated by spaces or a range of device paths, for example:
    ./clout --log --fwupd /dev/sda /dev/sdb /dev/sdc
    ./clout --log --fwupd /dev/sd[a-d]

- device paths with wildcard characters * and ?, for example:
  ./clout --log --fwupd /dev/sd*
  ./clout --log --fwupd /dev/sd?
- *device_identifier* in VMware can be (maximum 10 devices):
  - device paths separated by spaces, for example:
    ./clout --log --fwupd /dev/OCZ-0-0-0 /dev/OCZ-0-0-1

Syntax Notation

bold - command text to enter, after **clout** (Windows®) or **./clout** (Linux and VMware)

italic - text to replace with your chosen values

<item1 | item2> - include only one of the items given

{item} - optional item that you can include if required

About CLOUT and Help

To show details about CLOUT:

--help
Display a list of available commands with descriptions.

--version
Display the version of CLOUT installed on your computer.

Commands

--list
Lists all the supported SSDs on the system, including SSD identifiers.

--fwupd <**--pkg** *package* | **--raw** *file* | **--loc** *location* > <*device_identifier* | **--serial** *serial_number*>
Update firmware of the SSD(s) with the identifier or serial number given, using the package or raw file given or using the file at the given location on the update webserver; only use **--loc** when specifically instructed to. If you do not specify a package, raw file or location, the latest available firmware version on the update webserver is used.
To log the update, include **--log**. To force the update without confirmation, include **--force**.

--bios <**--pkg** *package* | **--raw** *file* | **--loc** *location*> <*device_identifier* | **--serial** *serial_number*>
--install
Update the BIOS of the SSD(s) with the identifier or serial number given, using the package or raw file given or using the file at the given location on the update webserver; only use **--loc** when specifically instructed to. If you do not specify a package, raw file or location, the latest available BIOS version on the update webserver is used.
To log the update, include **--log**. To force the update without confirmation, include **--force**. To install an option ROM on a ZD6000 that does not currently have one, include **--install**.

--cfg <*device_identifier* | **--serial** *serial_number*> **--ns** *namespace_identifier*

Display the configuration details of the device(s) with the identifier or serial number and namespace identifier (NVMe® SSDs only) given.

--force
Force the requested operation without asking for confirmation. Some operations delete the data on the specified device(s).

--log{=*log_file_name*}
Enable logging to file; to specify the log file name, include =*log_file_name*.

--serase <*device_identifier* | **--serial** *serial_number*> [**--crypto**]
Secure erase the device(s) with the identifier or serial number given, making the data unrecoverable. To log the erase, include **--log**. To force the erase without confirmation, include **--force**. To perform a crypto erase if supported by your SSD, add **--crypto**. For an NVMe SSD, secure erase applies to all namespaces.

--smart <*device_identifier* | **--serial** *serial_number*>

Display SMART data for the devices(s) with the identifier or serial number given.

--debug-log

Retrieve the debug log and write the details into the file
debug_log__SSD_Serial_number_**.bin**. This command is only supported on Intrepid and ZD6000 SSDs.

--power-loss-test <*device_identifier* | **--serial** *serial_number*>

Run the power loss protection test on the device(s) with the identifier or serial number given. This command is only supported on Intrepid SSDs.

--set-das-polarity *polarity* <*device_identifier* | **--serial** *serial_number*>

Set the polarity of the activity signal to the polarity given, for the device(s) with the identifier or serial number given. *polarity* can be **normal** or **inverted**. This command is only supported on Intrepid and ZD6000 SSDs.

--set-sata-speed <*SATA_generation*> <*device_identifier* | **--serial** *serial_number*>

Set the SATA speed for the device(s) with the identifier or serial number given. *SATA_generation* can be 1, 2 or 3.

--set-power-state *state*

Set an NVMe drive to the specified power state

NVMe Namespace Management

--nsformat *LBA_format* **--ns** *namespace_id* {**--serase** {**--crypto**}} {**--pi** *n*}
Format a specified namespace to the specified LBA format. To perform a secure erase during the format, add **--serase**. To perform crypto erase, also add **--crypto**. For LBA formats that support metadata, to indicate the type of protection information to use, add **--pi**. Types are 1, 2 or 3, with 0 indicating none (default).

--nscreate *LBA_format* **--blocks** *blocks* {**--pi** *n*} {**--shared**} {**--noattach**}

Create a namespace of a specified block size and LBA format, displaying the created namespace identifier. The namespace is private to this controller unless you add **--shared**, and is attached unless you add **--noattach**. For LBA formats that support metadata, to indicate the type of protection information to use, add **--pi**. Types are 1, 2 or 3, with 0 indicating none (default).

--nsdelete

Delete all namespaces, detaching first if required.

--nsattach *namespace_id* {**--controller** *identifier*}

Attach to the specified namespace. Applies to the local controller unless you include **--controller**.

--nsdetach *namespace_id* {**--controller** *identifier*}

Detach from the specified namespace. Applies to the local controller unless you include **--controller**.

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