



# Seagate<sup>®</sup> NVMe Nytro CLI

## User Guide

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## Revision History

Version and Date	Description of Changes
Rev B, January 2017	■ Updated Format commands in <a href="#">Section 2.3.6, Format SSD</a> and <a href="#">Section 2.3.7, Format SSD Using Block Size</a> .
Rev A, June 2016	First release.

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## Seagate Technology Support Services

For Nytro Support, visit: <http://www.seagate.com/support/by-product/ssd-and-pcie-flash/>

For information regarding online support and services, visit: <http://www.seagate.com/contacts/>

Available services include:

- Presales & Technical support
- Global Support Services telephone numbers & business hours
- Authorized Service Centers

For information regarding Warranty Support, visit: <http://www.seagate.com/support/warranty-and-replacements/>

For information regarding data recovery services, visit:

<http://www.seagate.com/services-software/seagate-recovery-services/recover/>

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# 1. Introduction

You can use the Nytro CLI tool to get information on SSD health and activity and manage it.

## 1.1 Installing the Nytro CLI Tool

### 1.1.1 Installing Nytro CLI on the Linux Operating System

1. Extract the Nytro CLI package.
2. Unzip the `Linux.zip` file.
3. Install or upgrade as required.
  - a. To install the Nytro CLI RPM, run the command:

```
rpm -ivh -<x.xx-x.noarch.rpm>
```

- b. To upgrade an existing Nytro CLI RPM, run the command:

```
rpm -Uvh -<x.xx-x.noarch.rpm>
```

Nytro CLI is installed in the folder: `/opt/seagate/nytrocli`.

### 1.1.2 Installing Nytro CLI on the Windows Operating System

1. Extract the Nytro CLI package.
2. Unzip the `Windows.zip` file.
3. Copy the `.exe` file to the required location in the system and the binary is ready to use.

## 2. Nytro CLI Commands

This section describes the Nytro CLI command syntax and the commands.

**CAUTION** Before using the Nytro CLI commands provided in this document, make sure you understand the following:

- Your Nytro CLI software might have other commands and syntaxes that do not apply to this version of Nytro CLI software. Ignore these commands.

### 2.1 Executables and Binaries

Following are the executables/binary names that are prefixed to the commands for the supported operating systems:

- Windows 32-bit and 64-bit versions: `nytrocli.exe`
- Linux 32-bit versions: `nytrocli`
- Linux 64-bit version: `nytrocli64`.

**NOTE** The examples provided here use `nytrocli64`.

### 2.2 Syntax and Format

When running the Nytro CLI binary or executable, do not double click the binary or executable to invoke the Nytro CLI application. To invoke the Nytro CLI application:

1. Open the Command Prompt or Shell.
2. Navigate to the location where the executable or binary is present.
3. Execute according to the command syntax. See, [Section 2.3.2, List All Available SSDs](#).

Nytro CLI syntax uses the following general format:

- Nytro CLI commands are not case sensitive.
- The order in which you specify the command options must be the same as provided in the user guide, otherwise, the command fails.
- Nytro CLI must be run with administrator or root privileges.

### 2.3 Commands List

The following table shows all the supported commands, categorized and sorted according to the command usage. To get a list of all the applicable commands, execute the following command. See [Section 2.3.9, Help Command Output](#) for a sample output.

```
nytrocli64 -c x -help -ddcli
```

`x` in the commands provided in the following table indicates the SSD or controller index number. The index number starts from 1. Use `nytrocli64 -listall` to figure out `x` if you have more than one SSD or controller in the server.

**Table 1 Nytro CLI Commands**

Command	Description
<b>Monitoring SSDs</b>	
<code>nytrocli64 -listall</code>	List all available SSDs with board name, package version and PCI address.
<code>nytrocli64 -c x -list</code>	List details for the SSD.
<code>nytrocli64 -c x -health [-fua] [-all]</code>	List SSD health.
<b>Managing SSDs</b>	
<code>nytrocli64 -c x -updatepkg &lt;flash package file&gt;</code>	Update Flash Package.
<code>nytrocli64 -c x -format [-eraseflash] [-s] [-blksize 512   4096]</code>	Format SSD.
<code>nytrocli64 -c x -getsmartlog -path &lt;path name&gt;</code>	Extract SMART Logs.

### 2.3.1 Nytro CLI Command Descriptions

Following are the executables/binary names for the supported operating systems:

- Windows 32-bit and 64-bit versions: `nytrocli.exe`
- Linux 64-bit version: `nytrocli64`

**NOTE** The examples provided here use `nytrocli64`.

### 2.3.2 List All Available SSDs

Lists all the available SSD controllers along with the board name, package version and PCI address.

```
nytrocli64 -listall
```

### 2.3.3 List Specific SSD Information

Provides details about the SSD that is selected.

```
nytrocli64 -c x -list
```

Example command:

```
nytrocli64 -c 1 -list
```

### 2.3.4 Update Flash Package

Upgrades the SSD Controller firmware along with its components like BIOS and SSD.

```
nytrocli64 -c x -updatepkg <flash package file>
```

Example command:

```
nytrocli64 -c 1 -updatepkg C:\nytrocli_files\sample_updatepkg.fwp
```

### 2.3.5 List SSD Health

Lists the health of the SSD.

```
nytrocli64 -c x -health [-fua] [-all]
```

Where,

fua: Force unit access.

all: All available health parameters.

**Example command:**

```
nytrocli64 -c 1 -health -all
```

### 2.3.6 Format SSD

Formats the selected SSD.

```
nytrocli64 -c x -format [-eraseflash] [-s]
```

Where,

eraseflash: format erases just data from the mapped tables. Including eraseflash erases all data present in the NVMe subsystem.

s: Silent Mode.

**CAUTION** Using the -s option erases the data on the drive without any prompting or warning.

**Example command:**

```
nytrocli64 -c 1 -format
```

### 2.3.7 Format SSD Using Block Size

Formats in block size of 512 or 4096.

```
nytrocli64 -c x -format [-eraseflash] [-s] [-blksize 512 | 4096]
```

Where,

eraseflash: format erases just data from the mapped tables. Including eraseflash erases all data present in the NVMe subsystem.

s: Silent Mode.

**Example command:**

```
nytrocli64 -c 1 -format -blksize 512 -s
```

**CAUTION** Changing the block size during Input/Output (IO) operations (or if the file-system is mounted) is not supported. After changing the block size, you must reboot the device.



### 2.3.8 Extract SMART Logs

Extracts SSD firmware logs and Event logs as in binary format.

```
nytrocli64 -c x -getsmartlog -path <path name>
```

Where,

path: Path where SSD firmware logs and event logs are stored.

Example command:

```
nytrocli64 -c 1 -getsmartlog -path C:\
```

### 2.3.9 Help Command Output

**Command:**

```
nytrocli64 -c x -help -ddcli
```

**Output:**

nytrocli64 -listall: Display information about Controller(s) in the system (does not need controller number)

nytrocli64 -c x -list: Lists information about the selected Controller

nytrocli64 -c x -updatepkg <flash package file>: Updates Controller flash package

nytrocli64 -c x -health [-fua] [-all]: Display the health of selected Controller

nytrocli64 -c x -format [-eraseflash] [-s] [-blksize 512 | 4096]: Format selected Controller

nytrocli64 -c x -getsmartlog -path <path name>: Extract SMART Logs



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