Solidigm™ CLI Storage Tool

Installation Guide

May 2025
Revision 010

SOLIDIGM™

Revision History

Revision	Software Version	Description	Revision Date
001	1.0	• Initial Release	March 2022
002	1.1	• Updated System Requirements	May 2022
003	1.2	• Document Changes	July 2022
004	1.4	• Updated ESXi Version Support	Dec. 2022
005	1.5	• Added ESXi 8.0 Support	Jan. 2023
006	1.9	• Updated ESXi Restart Requirement	July 2023
007	1.10	• Removed ESXi Installation Restart Requirement	Sept. 2023
008	1.12	• ESXi - Change package from VIB to Component	March 2024
009	1.13	• Added Ubuntu 22.04, 24.04 Support • Updated requirements for ESXi	June 2024
010	2.3	• Added ESXi 8.0.u3 Support	May 2025

Contents

1   Introduction

This document provides guidance for installing the Solidigm™ Storage Tool (SST) software for the Windows, Linux, and ESXi operating systems.

1.1   Requirements

The SST is supported on the following:

- Operating systems on x64 Architecture:
    - Windows
        - Windows Server 2012, 2012 R2, 2016, 2019, 2022
        - Windows 10, 11
    - Linux
        - Red Hat Enterprise Linux (RHEL) 8.0, 8.2, 8.3, 8.4
        - CentOS 8.0, 8.2, 8.3, 8.4
        - SLES 12, 15
        - Ubuntu 16.04, 18.04, 20.04, 22.04, 24.04
    - ESXi
        - Unsigned VIB
            - ESXi 7.x
            - ESXi 8.0, 8.0.u1, 8.0.u2, 8.0.u3
        - Signed Component
            - ESXi 8.0.u2, 8.0.u3
- Available space of 400MBs

1.2   Additional Installer Notes

Review the following notes regarding SST Requirements:

- Earlier OS Versions not listed in supported list are generally expected to work but are not actively validated and not officially supported.

2 Windows Installation and Startup

Download the Windows version of Solidigm™ Storage Tool (SST) and save it to the system with the SSDs you will be configuring with the SST.

2.1 Installing the Solidigm™ Storage Tool

To install the Solidigm™ Storage Tool software:

1. Double-click on the downloaded executable file to open the self-extracting archive.
   This extracts the installer .EXE file and the Solidigm™ Storage Tool User's Guide.
2. If Windows User Account Control prompts to confirm with "Do you want to allow this app to make changes to your device?"
   Click Yes
3. Double-click on the installer .EXE file. This opens the Welcome Screen
4. Click Next
   Accept the terms of the End-User License Agreement and click Next.
   The End-User License Agreement displays.
   User must accept the license to proceed.
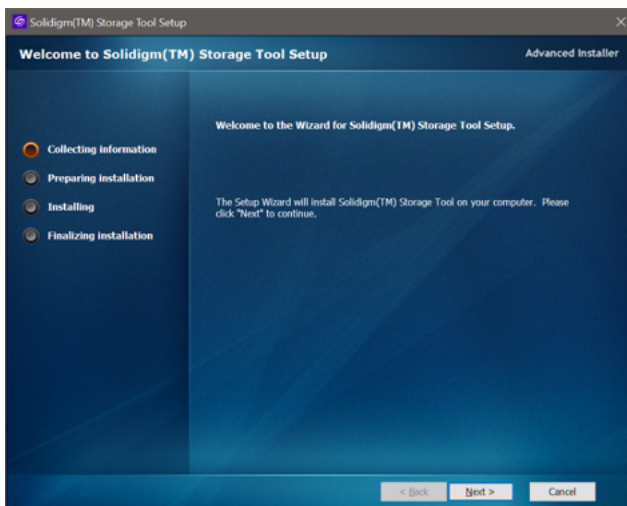
   Click Next
5. Click Install on Ready to Install screen.
6. If Windows User Account Control prompts to confirm with "Do you want to allow this app to make changes to your device?". Click Yes.
7. Tool installs in:
   64 bit:

     • c:\Program Files\Solidigm\Solidigm(TM) Storage Tool

   The installation folder is also added to Environment Variables –PATH.
   It can be run from any directory.
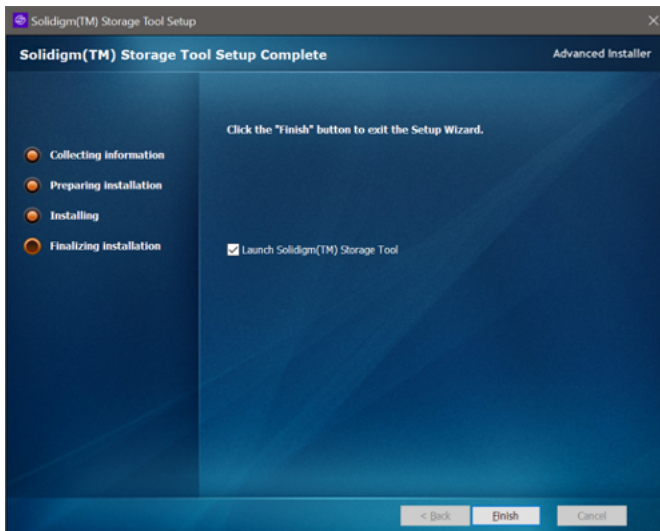
8. Click Finish

2.2 Launching the Solidigm™ Storage Tool

To launch the SST software, do the following:

1. Type cmd in the Windows search field to show the cmd.exe program
2. Right click to open the menu and select Run as administrator.
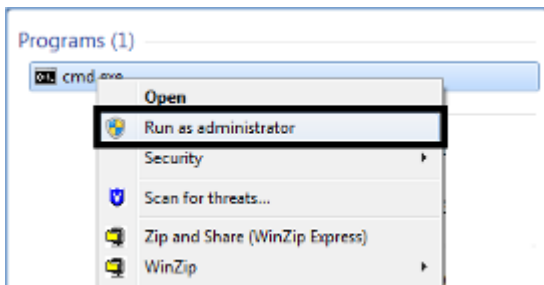
3. In the MS_DOS prompt window, you can either type change to the directory where the files were exacted (for example, C: \Program Files\Solidigm\ Solidigm(TM) Storage Tool\)
4. Run the sst command.
    Launch it as a single command by supplying the command and parameters immediately following the executable name.

```
sst show –ssd
```

For a description of the command options and features, see the Solidigm™ Storage Tool User Guide.

2.3 Uninstalling the Solidigm™ Storage Tool

Use the Windows Control Panel to uninstall the SST software.

Follow these steps to uninstall the SST using Windows Uninstaller:

1. At the Control Panel, click "Program and Features,"

2. Highlight Solidigm™ Storage Tool in the list of programs.
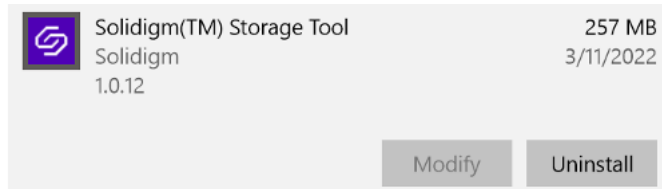
3. Click Uninstall.
   If prompted to, allow Administrator privileges to uninstaller. Follow these steps to uninstall.

Follow these steps to uninstall the SST using Windows Uninstaller:

1. Double-click on the downloaded executable file to open the self-extracting archive.
   This extracts the installer .EXE file and the SST User Guide.
2. If Windows User Account Control prompts you with "Do you want to allow this app to make changes to your device?", select Yes.
3. Double-click on the installer .EXE file; this opens the Welcome Screen.
4. Click Next

5. Click Remove
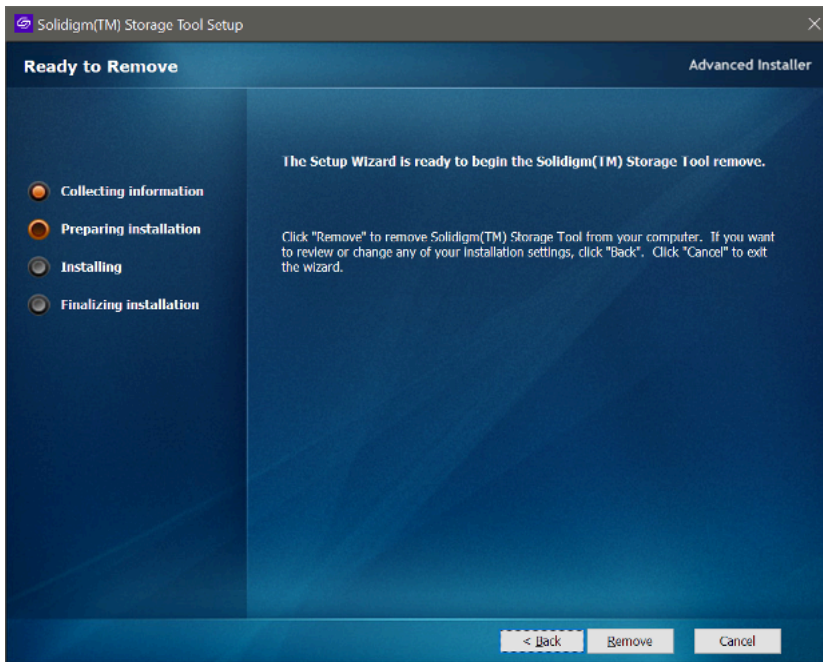
6. Click Remove. If prompted, Allow Admin access for User Access Control. This will show the uninstall progress screen.
7. Click Next.
8. If prompted, Select Yes or No to restart the computer for the changes to take effect, then click Finish.

3   Linux Installation and Startup

Download the Linux version of the Solidigm™ Storage Tool and copy it to a directory

When the installer finishes:

- The sst executable file will be placed in /usr/bin directory.
- The libraries used by SST will be placed in /usr/lib/sst directory.

3.1   Viewing RPM Metadata

View the RPM metadata with the command:

```
sudo rpm -q -i -p <package_name>.rpm
```

The following shows an example of the output:

Name : intelmas

Version : 1.0.5.400

Release : 0

Architecture: x86_64

Install Date: (not installed)

Group : default

Size : 266816072

License : "Intel(R) NSG End User Software License Agreement"

Signature : RSA/SHA1, Mon 23 Dec 2019 08:42:21 PM EST, Key ID 4994c89d5d1bc6fe

Source RPM : intelmas-1.0.5.400-0.src.rpm

Build Date : Mon 23 Dec 2019 08:41:43 PM EST

Build Host : linuxDevhdu16

Relocations : /

Packager : "Intel(R) Corporation"

Vendor : "Intel(R) Corporation"

URL : https://downloadcenter.intel.com/product/35125/Memory-and-Storage

Summary : "Intel(R) Memory And Storage Tool

Description :

"Intel(R) Memory And Storage Tool

The

Intel(R) Memory And Storage Tool provides firmware update capability as well as reading and setting many configuration settings on Intel's SSD Family of products."

3.2   RHEL Command Line Installation and Removal

To install SST using the command line, use the RPM utility to run the following command:

```
sudo rpm –ivh <package_name>.rpm
```

The following shows a sample output:

sudo rpm -ivh sst-1.0.12-0.i386.rpm
warning: sst-1.0.12-0.i386.rpm: Header V4 RSA/SHA1 Signature, key ID 35c760e5: NOKEY
Verifying... ############################### [100%]
Preparing... ############################### [100%]
Updating / installing...
1:sst-1.0.12-0 ############################### [100%]

After the tool is installed, run the following command to get information:

```
sudo rpm –q –i sst
```

To remove an RPM package, run the following command:

```
sudo rpm –e sst
```

3.3   Ubuntu Command Line Installation and Removal

To install the SST using the command line, use the DPKG utility to run the following command:

```
sudo dpkg –i <package_name>.deb
```

The following shows a sample output:

remlab@ctool_Ubuntu_16:~/Validation$ sudo dpkg -i sst_1.0.12-0_amd64.deb
sudo: unable to resolve host ctool_Ubuntu_16.04
Selecting previously unselected package sst.
(Reading database ... 251800 files and directories currently installed.)

Preparing to unpack sst_1.0.12-0_amd64.deb ...
Unpacking sst (1.0.12-0) ...
Setting up sst (1.0.12-0) ...
After the tool is installed, run the following command to get information:
sudo dpkg –l sst

To remove an RPM package, run the following command:

```
sudo dpkg -r sst
```

4   ESXi Installation and Startup

Download the ESXi version of SST and copy it to a directory on an ESXi host (i.e. /tmp).

When the installer finishes the executable file and associated libraries will be placed in /opt/solidigm/intelmas directory.

4.1   Installing the Solidigm™ Storage Tool

Starting in 2024 VMWare requires Components to be signed instead of VIBs. So the signed package is component.

To install component:

- esxcli software component apply -d /tmp/package_name.zip

To install VIB only:

- Unzip the components zip
- Copy the VIB from vib folder
- Install vib: esxcli software vib install -v <package name>.vib

Helpful Hints:

1.   To change acceptance level
      Login to your ESXi Host. You will need to set your Host's acceptance level to "CommunitySupported". Run the following command
      to see what your host's acceptance level is set to:

```
> esxcli software acceptance get
PartnerSupported
```
Run the following command to set your Host's acceptance level to "CommunitySupported":

```
> esxcli software acceptance set --level=CommunitySupported
Host acceptance level changed to 'CommunitySupported'.
```
2.   Copy component or VIB to /tmp folder and install using the command below from root directory to avoid VIB download error.

```
esxcli software vib install -v /tmp/<package name>.vib
```
3.   To install unsigned VIB

```
Install vib: esxcli software vib install -v <package name>.vib --no-sig-check
```

4.2   Launching the Solidigm™ Storage Tool

To launch the SST software, take these steps:

1.   Login to the ESXi host.
2.   Change directory to /opt/solidigm/sst
3.   Run the sst command
      Launch with a single command by supplying the command and parameters immediately following the executable name.
      Due to VMWare requirements for signing, sst may be targeted with sh extension.

```
./sst show –ssd
OR
./sst.sh show –ssd
```
4.   For a description of the command options and features, see the SST User Guide.

4.3   Uninstalling the Solidigm™ Storage Tool

To uninstall the SST software, take the steps:

1.   Login to the ESXi host.
2.   Run the following esxcli command:

```
esxcli software component remove -n solidigm-storage-tool


esxcli software vib remove -n solidigm_storage_tool
```