



Intel® Memory and Storage Tool

Installation Guide

May 2021

Tool Version 1.8

Revision History

Revision	Description	Revision Date
001	Initial Release	January 2020
002	Added Windows Server 2019 as supported operating system in Section 1.1	June 2020
003	Updated Supported Operating Systems in Section 1.1	January 2021
004	Added Support for ESXi 7.0.2	April 2021
005	Added section for Ubuntu installation	May 2021

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1 Introduction

This document provides guidance for installing the *Intel® Memory and Storage Tool (Intel® MAS)* software for the Windows, Linux and ESXi operating systems.

1.1 Requirements

The Intel® MAS Tool requires the following:

- One of these supported operating systems:
 - Windows Server 2019
 - Windows Server 2016
 - Windows Server 2012
 - Windows Server 2012 R2
 - Windows Server 2008 SP2 / R2
 - Windows 8
 - Windows 8.1
 - Windows 10
 - Red Hat Enterprise Linux (RHEL) 7.4,7.5, 7.6, 8.0, 8.1, 8.2
 - SLES 11.3, 11.4, 12, 15
 - ESXi 6.0, 6.5, 6.7, 7.0.1, 7.0.2
 - Ubuntu 14.04, 16.04, 18.04, 20.04
 - CentOS 7.2.1511 (Kernel 3.10.0), 7.9, 8.0, 8.1, 8.2
- Available space of 60MBs

1.2 Known Installer Limitations

Review the following limitations before installing the Intel® MAS Tool:

- Validated Linux environments are only the Red Hat Enterprise Linux (RHEL) and SLES versions listed above.
 - Other Linux environments may work
 - Other Linux environments will be added/validated in future versions

2 Windows Installation and Startup

Download the Windows version of Intel® MAS and save it to the system with the SSDs you will be configuring with the Intel® MAS tool.

2.1 Installing the Intel® Memory and Storage Tool

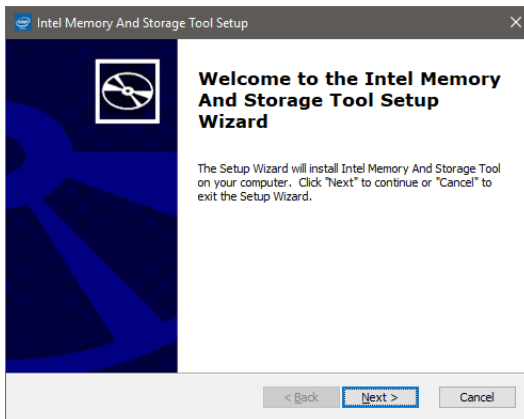
To install the Intel® MAS Tool software:

1. Double-click on the downloaded executable file to open the self-extracting archive.

This extracts the installer .EXE file and the Intel® MAS 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?", press Yes
3. Double-click on the installer .EXE file.

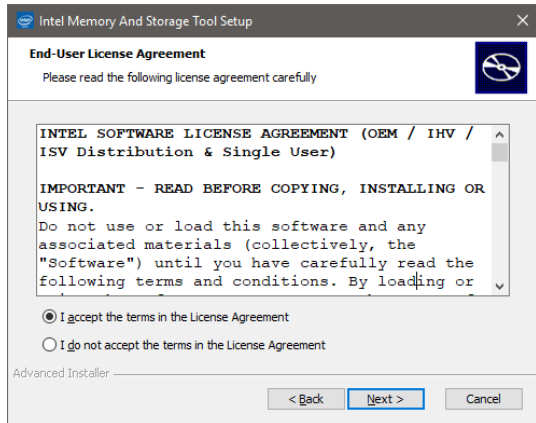
This opens the Welcome Screen.\



4. Click **Next**. Accept the End User License Agreement. Click Next

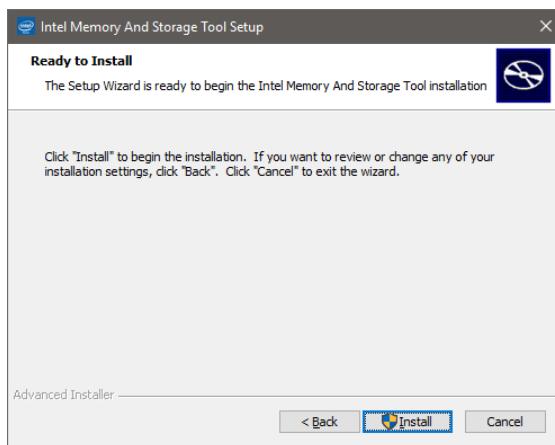
The Installer displays the license agreement

User must accept the license to proceed.



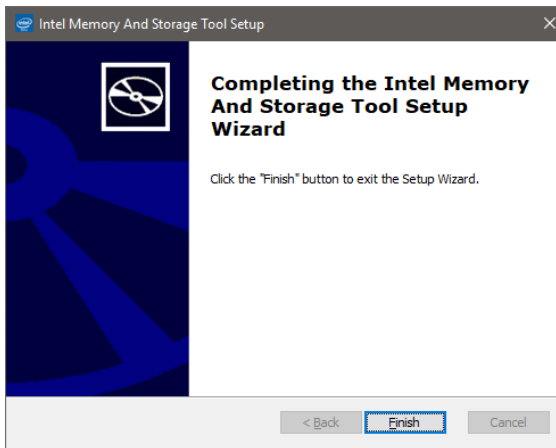
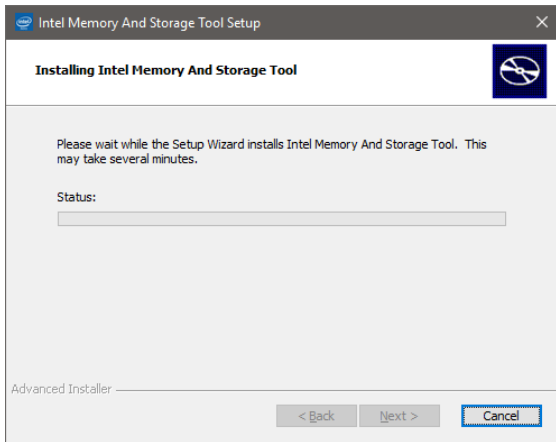
Press Next

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?" , press Yes
7. Tool installs in:
64 bit:
 c:\Program Files\Intel\Intel(R) Memory and Storage Tool
OR 32-bit
 c:\Program Files (x86)\Intel\Intel(R) Memory and Storage Tool

The installation folder is also added to Environment Variables –PATH. So it can be run from any directory.

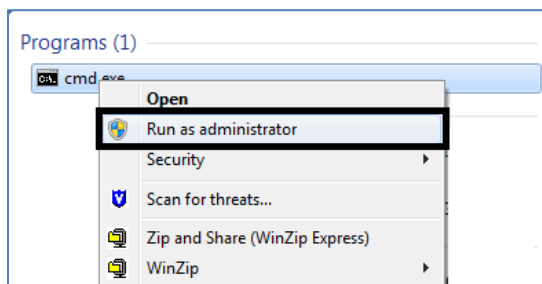


8. Click **Finish**.

2.2 Launching the Intel® Memory and Storage Tool

To launch the Intel® MAS tool 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\Intel\Intel Memory and Storage Tool\)
4. Run the intelmas command.

Launch it as a single command by supplying the command and parameters immediately following the executable name.

```
intelmas show -intelssd
```

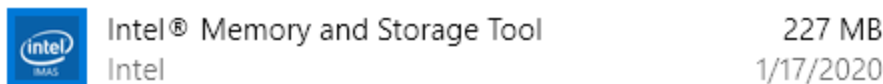
For a description of the command options and features, see the *Intel® Memory and Storage Tool User Guide*.

2.3 Uninstalling the Intel® Memory and Storage Tool

Use the Windows Control Panel to uninstall the Intel® MAS Tool software.

Follow these steps to uninstall the Intel® MAS tool thru Windows Uninstaller:

1. At the Control Panel, click “Program and Features,”
2. Highlight Intel® Memory and Storage Tool in the list of programs.



3. Click **Uninstall**.

If prompted to, allow Administrator privileges to uninstaller. Follow these steps to uninstall.

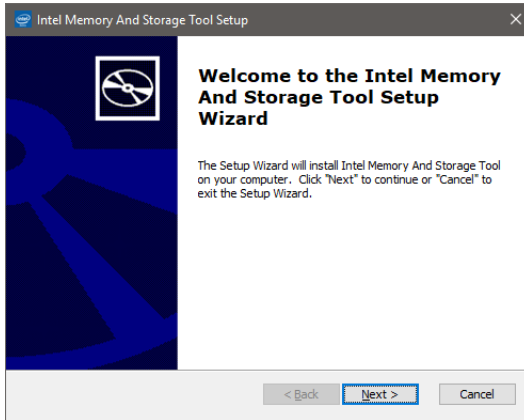
Follow these steps to uninstall the tool using Intel® MAS installer:

1. Double-click on the downloaded executable file to open up the self-extracting archive.

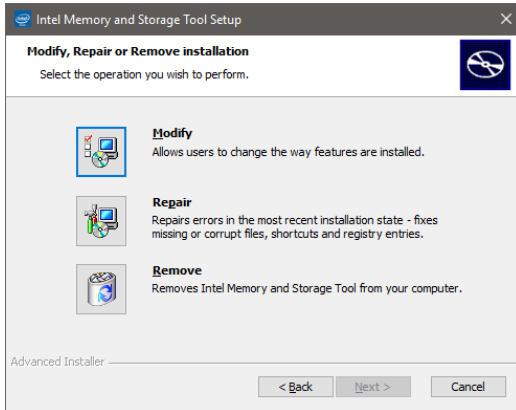
This extracts the installer .EXE file and the Intel® MAS Tool User's Guide.

2. If Windows User Account Control prompts you with “Do you want to allow this app to make changes to your device?”, select **Yes**.

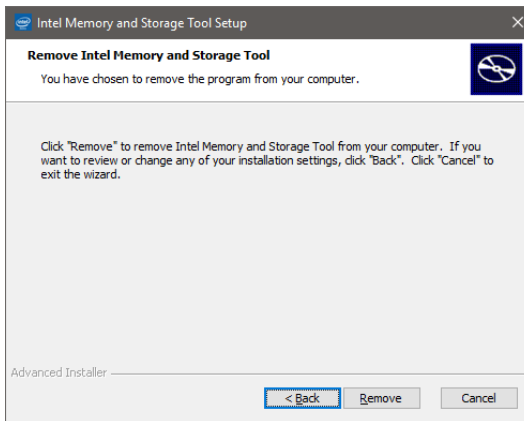
3. Double-click on the installer .EXE file; this opens the Welcome Screen.



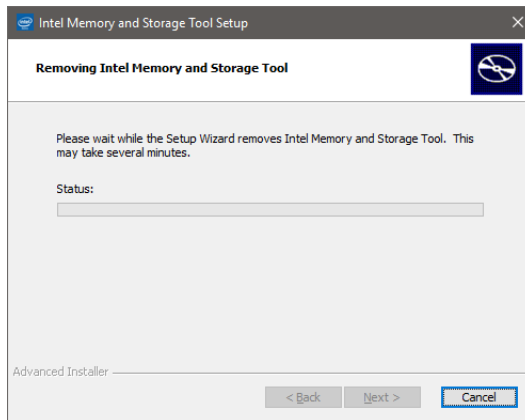
4. Click **Next**.



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, and then click **Finish**.

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3 Linux Installation and Startup

Download the Linux version of the Intel® SSD Intel Memory and Storage Tool and copy it to a directory

When the installer finishes:

- The intelmas executable file will be placed in /usr/bin directory.
- The libraries used by Intel® MAS will be placed in /usr/lib/intelmas 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 the Intel[®] MAS Tool 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 intelmas-1.0.5.400-0.x86_64.rpm
warning: intelmas-1.0.5.400-0.x86_64.rpm: Header V4 RSA/SHA1 Signature, key ID 5d1bc6fe:
NOKEY
Preparing...                               ##### [100%]
Updating / installing...
1:intelmas-1.0.5.400-0                       ##### [100%]
```

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

```
sudo rpm -q -i intelmas
```

To remove an RPM package, run the following command:

```
sudo rpm -e intelmas
```

3.3 Ubuntu Command Line Installation and Removal

To install the Intel[®] MAS Tool 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:

```
sudo dpkg -i intelmas_1.7.130-0_amd64.deb
Selecting previously unselected package intelmas.
(Reading database ... 123753 files and directories currently installed.)
Preparing to unpack intelmas_1.7.130-0_amd64.deb ...
Unpacking intelmas (1.7.130-0) ...
Setting up intelmas (1.7.130-0) ...
```

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

```
sudo dpkg -list intelmas
```

To remove an RPM package, run the following command:

```
sudo dpkg -r intelmas
```

4 ESXi Installation and Startup

Download the ESXi version of the Intel® MAS Tool 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/intel/intelmas directory.

4.1 Installing the Intel® Memory and Storage Tool

Follow the steps below to install the Intel® MAS Tool.

1. 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
```

2. 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'.
```

3. Login to your ESXi host and run the following esxcli command:

```
esxcli software vib install -v <package name>.vib
```

4. Once successfully installed you will see the following:

```
Installation Result
  Message: Operation finished successfully.
  Reboot Required: false
  VIBs Installed: Intel_bootbank_intel_memory_and_storage_tool_1.0.5-400
  VIBs Removed:
  VIBs Skipped:
```

4.2 Launching the Intel® Memory and Storage Tool

To launch the Intel® MAS Tool software, take these steps:

1. Login to the ESXi host.
2. Change directory to /opt/intel/intelmas
3. Run the intelmas command

Launch with a single command by supplying the command and parameters immediately following the executable name.

```
./intelmas show -intelssd
```

4. For a description of the command options and features, see the *Intel® MAS Tool User Guide*.

4.3 Uninstalling the Intel® Memory and Storage Tool

To uninstall the Intel® MAS Tool software, take the steps:

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

```
esxcli software vib remove -n intel_memory_and_storage_tool
```

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