



Intel® Memory and Storage Tool (Intel® MAS) (GUI)

Installation Guide

May 2022

Software Version 2.0



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Revision History

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009	<ul style="list-style-type: none">• Minor formatting updates	May 2022
008	<ul style="list-style-type: none">• Updated Install Guide rev version	April 2021
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004	<ul style="list-style-type: none">• Added Support for RHEL* 8.0	October 2020
003	<ul style="list-style-type: none">• Removed Windows* 8 as Supported Operating System	August 2020
002	<ul style="list-style-type: none">• Added Windows* Server 2019 support	July 2020
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1 Overview

This guide describes how to install the Intel® Memory and Storage Tool (Intel® MAS Tool).

For information on using Intel® MAS Tool once installed, see the help system included with the application.

For more information on Intel® SSDs, go to: <http://www.intel.com/ssd>.

1.1 Requirements

Intel® MAS Tool requires the following:

- x86/x64 processor-based systems
- Supported operating systems:
 - Microsoft Windows* Server 2022 x64
 - Microsoft Windows* Server 2019 x64
 - Microsoft Windows* Server 2016 x64
 - Microsoft Windows* Server 2012R2 x64
 - Microsoft Windows* 11 x32/x64
 - Microsoft Windows* 10 x32/x64
 - Microsoft Windows* 8.1 x32/x64
- Microsoft* .NET Framework* version 4.0.

.NET Framework* version 4.0 is included with Windows* 10.


If your system is running Windows* 8.1 or does not have version 4.0 of .NET Framework* installed, it can be installed via Windows* Update or downloaded from Microsoft*.

- Visual Studio 2019 C++ redistribution package

The Intel® MAS Tool installer will install this package; however, there are certain dependencies that it requires to install. These dependencies are resolved by Windows* Updates

- At least 400 megabytes (MB) of available space.

To determine whether the drive has enough available space:

1. Double-click **My Computer**. (On Windows* 10 open 'This PC' by clicking the Start Icon  and typing 'This PC'.)
2. Right-click the drive you want to check and click **Properties** to display the amount of free space.



1.2 Known Limitations

Review the following limitations before installing Intel® MAS Tool.

1.2.1 Intel® RAID, Dynamic Disk or Storage Space Configurations

The Intel® MAS Tool works with single Intel® SSD, Intel® SSD in a simple Dynamic Disk configuration, and Intel® SSD that are part of Intel® Matrix Storage Manager or Intel® Rapid Storage Technology (Intel® RST) configurations. It has support for Intel® RAID 0,1,5 and Intel® Virtual RAID on CPU (Intel® VROC).

The Intel® MAS Tool provides limited functionality for Intel® SSD that are part of Intel® RAID, Dynamic Disk,

Windows* 8.1 or Windows* 10 Storage Space configurations with multiple partitions: Intel® SSD Optimizer and Secure Erase are not supported in these configurations.

1.2.2 Systems with Virtualization

The Intel® MAS Tool does not work on systems running in a virtualized environment as it cannot detect the Intel® SSD.

1.2.3 Intel® SSD Formatted with FAT32 File System

The Intel® SSD Optimizer does not work on Intel® SSD formatted with file allocation system FAT32. New Technology File System (NTFS) is required to run Intel® SSD Optimizer.

1.2.4 Windows* 7 NVMe* Native Driver on Intel SSD

By default, the Windows* 7 drivers will not detect Intel® SSD with the PCIe*/NVMe* interface. There is a hotfix available for users to install on Windows* 7 that will enable the Intel® MAS Tool to be able to detect NVMe* drives however, this driver does not support the Intel® MAS Tool features beyond detecting the drive.

Note: Windows* 7 support is as is, this operating system is not validated or guaranteed to work. For firmware updates on Windows* 7 platforms it is required to use the Intel® SSD Firmware Update Tool (FUT).

1.3 Known Issues

1.3.1 Not All Drives in an Intel® RAID Configuration are Recognized by Intel® MAS Tool

Not all drives in an Intel® RAID configuration are recognized by Intel® MAS Tool

Not all drives in an Intel® RAID configuration are recognized by Intel® MAS Tool. Drive details and SMART information may be obtained with another program.

Known systems affected: HP Compaq dc7800 Convertible Minitower PC, HP Compaq dc7800 Small Form Factor PC, HP Compaq dc7800 Ultra Slim Desktop PC

1.3.2 Intel® MAS Tool Does Not Communicate with Drives on Some Systems

On some systems, Intel® MAS Tool does communicate with drives and all functionality is disabled. There is no workaround for this issue.

Known systems affected: Supermicro H8DAi-2, TYAN Thunder N3600M motherboard – NVIDIA nForce Pro 3600

1.3.3 Intel® RAID Volume May Display Extended Serial Number

When an Intel® RAID volume is selected on the home screen, the serial number may contain an extended number of characters. There is no workaround for this issue.

Known system affected: GIGABYTE GA-790FXTA-UD5

1.3.4 Intel® SSD May Report “BAD_CONTEXT” if Secure Erase Operation is Interrupted

During a Secure Erase operation, if the Intel® SSD loses power or if the Intel® SSD is removed from the system once the Secure Erase operation is 40% or more complete, the Intel® SSD may report “BAD_CONTEXT” in the Serial Number field. There is no workaround for this issue.

Known drive affected: Intel® X25-E Solid State Drive

2 *Installation and Start Up*

2.1 Downloading the Intel® MAS Tool

1. Go to the Intel support website by clicking [here](#).
2. Chose Run to begin immediately installing the application, or you can Save the Intel® MAS Tool application (.exe file) to a folder on your computer.

2.2 Installing the Intel® MAS Tool

1. Double-click the downloaded .exe file to start the Intel® MAS Tool setup wizard (skip if you chose **Run** from step 2 above).
2. Click **Next** on the Welcome screen.
3. Click **Install** to begin the installation process.
4. Once the installation is complete, check the box if you want the application to load after completion.
5. Click **Finish**

The Intel® MAS Tool installs at the default location: Program Files (x86)\Intel\Intel(R) Memory and Storage Tool\

2.2.1 Starting the Intel® MAS Tool

- Click Start Menu and navigate to the Intel® MAS Tool.
- Double-click the Intel® MAS Tool icon on your desktop to run as Administrator.