Intel® Solid-State Drive Toolbox
Questions and Answers

Q1: What capabilities does Intel® Solid-State Drive Toolbox (Intel® SSD Toolbox) provide?

A1: Intel SSD Toolbox monitors and manages the health of an Intel SSD, allowing you to:

- View current drive information, including:
    - Model number, capacity, and firmware version
    - Drive Health
    - Estimated drive life remaining
    - SMART attributes (also available for hard disk drives and non-Intel SSDs)
    - IDENTIFY DEVICE information (also available for hard disk drives and non-Intel SSDs)
- Optimize the performance of an Intel SSD using Trim functionality with the Intel® SSD Optimizer
- Update the firmware under Microsoft Windows* on a supported Intel SSD
- Run quick and full diagnostic scans to test the read and write functionality of an Intel SSD
- Check and tune your system settings for optimal Intel SSD performance, power efficiency, and endurance
- View your system information and hardware configuration, such as central processing unit (CPU), chipset, controller name, and driver versions
- Run Secure Erase on a secondary Intel SSD

Q2: Can I use Intel SSD Toolbox to run Intel SSD Optimizer (Trim) on my 50nm Intel SSD or a non-Intel SSD?

A2: No, Intel SSD Optimizer works on 34nm and later Intel SSDs only. To identify your Intel SSD, view the model number on the Intel SSD Toolbox home screen. To identify if the Intel SSD is 50nm:

a. Select the Intel SSD on the Intel SSD Toolbox home screen.

b. Click Drive Details.

c. View the Model Number (Word 27-46). If the number contains G1, the Intel SSD is 50nm.

Note: Intel SSD Toolbox can be used to report SMART information for any SATA hard disk drive (HDD) or non-Intel SSD. However, SMART attributes that are manufacturer-specific are displayed with attribute numbers and values only. For complete descriptions of these SMART attributes, see the manufacturer's documentation.

Q3: Can Intel SSD Toolbox be used on my SSD when it is connected externally through a USB-to-SATA adapter?

A3: No.

Q4: Can Intel SSD Toolbox be used on my SSD when it is connected externally through an eSATA adapter ?

A4: Yes.

Q5: Does Intel SSD Toolbox support multiple Intel SSDs in my system?

A5: Yes, Intel SSD Toolbox supports as many SSDs as your host Intel-based chipset system can directly connect to SATA sockets on your motherboard.

Q6: Can I use Intel SSD Optimizer if I have multiple Intel SSDs installed as part of a RAID configuration?

A6: No. The current implementation of Intel SSD Toolbox does not support SSDs installed as part of a RAID configuration. Intel is investigating RAID support for future versions of the tool.

Q7: What are the system requirements for running Intel SSD Toolbox?

A7: Your system must have the following to run Intel SSD Toolbox:

- Microsoft Windows* operating system: Windows 7* (32/64 bit versions), Windows XP*, or Windows Vista*
- Microsoft .NET Framework 3.0
  Note: Microsoft .NET Framework version 3.0 is included with Windows 7 and Windows Vista. If your system is running Windows XP or does not have version 3.0 of .NET Framework installed, Intel SSD Toolbox directs you to the appropriate place to obtain it during the installation.
- At least 20 megabytes (MB) of available space if Java* version 1.4 or later is installed. If Java 1.3 or earlier is installed, at least 110 MB of available space is required.

Q8: How often should Intel SSD Optimizer run on an Intel SSD? How long does it take to complete? Can overuse cause problems?

A8: Intel recommends running Intel SSD Optimizer once per week. The total execution time for running Intel SSD Optimizer is approximately a few seconds. There is no known risk of harm to the SSD due to continuous repeated use; however, running Intel SSD Optimizer more than recommended may waste system resources.

Q9: Does Intel SSD Optimizer work on an Intel SSD that uses encryption software?

A9: Yes, Intel SSD Toolbox works with encryption software.

On a system running Windows 7 or Windows Vista that uses encryption software, a message may appear stating that Intel SSD Optimizer cannot run on an Intel SSD that is part of a RAID configuration. If you can verify that the Intel SSD is not part of a RAID configuration, click Accept to run the Intel SSD Optimizer. (The prompt appears because Intel SSD Toolbox cannot distinguish between an SSD in a RAID configuration and an SSD using encryption). On Microsoft Windows XP systems, Intel SSD Optimizer runs on encrypted drives without this message.

Q10: Will Intel SSD Optimizer run automatically?

A10: Intel SSD Optimizer has an automatic scheduling feature to enable users to optimize an Intel SSD on a regular basis. Intel recommends running Intel SSD Optimizer once per week.

Q11: Does Intel SSD Optimizer (Trim support) work with Intel® Rapid Storage Technology?

A11: The Intel® Rapid Storage Technology (Intel® RST) driver version 9.6 or later supports Trim commands. If the Intel RST driver is on a system that is *not* in a RAID configuration, both the Intel RST driver and the Intel SSD Toolbox will work together, and the Intel SSD Optimizer will run on the Intel SSD. Intel is working with customers and evaluating options for a future release of Intel RST that supports Trim commands under RAID 0.

The following table lists the requirements to run Trim under different operating systems and storage drivers.

Operating System	Storage Driver	Trim Support
Microsoft Windows* 7	Microsoft* AHCI	Trim supported as part of the native operating system (Intel SSD Toolbox with Intel SSD Optimizer not required to run Trim, but nice to have to confirm that Trim has run on the SSD)
	Intel Rapid Storage Technology 9.6 or later	Trim supported as part of Intel RST 9.6 or later (Intel SSD Toolbox with Intel SSD Optimizer not required to run Trim, but nice to have to confirm that Trim has run on the SSD)
	Intel® Matrix Storage Manager	Intel SSD Toolbox with Intel SSD Optimizer required to run Trim
Microsoft Windows Vista* or Windows XP	Microsoft AHCI, Intel® Matrix Storage Manager, or Intel® RST	Intel SSD Toolbox with Intel SSD Optimizer required to run Trim