### **Intel® SSD Toolbox Questions and Answers**

#### Q1: What capabilities does the Intel® Solid-State Drive Toolbox provide?

A1: The Intel SSD Toolbox monitors and manages the health of the Intel SSD. The Intel® SSD Optimizer is the tool that implements Trim functionality. The Intel SSD Toolbox includes:

- <u>Management tools</u>—that provide tools and information to get the most out of the SSD.
- <u>Information tools</u>—which check standard drive information about the Intel SSD; compares Self-Monitoring and Reporting Technology (S.M.A.R.T.) attributes to that of manufacturer threshold and recommends actions.
- <u>Diagnostic tools</u>—that run basic or full diagnostic tests on the SSD and suggests recommended actions.

## Q2: Can I use the Intel® Solid-State Drive Toolbox to run the Intel SSD Optimizer (Trim) on my Intel 50nm SSD or a non-Intel SSD?

A2: No, the Intel® Solid-State Drive Toolbox Optimizer tool will only work on an Intel 34nm SSD. However, the Intel SSD Toolbox can be used to report the health (S.M.A.R.T) of any SATA HDD or SSD. That said, those S.M.A.R.T. attributes that are manufacturer specific will only display the attribute number and values. Further explanations for other manufacturers drive attributes will need to be obtained from their respective websites.

## Q3: Can the Intel® Solid-State Drive Toolbox be used on my SSD when it is connected externally through a USB-to-SATA adapter

A3: No.

# Q4: Can the Intel® Solid-State Drive Toolbox be used on my SSD when it is connected externally through an eSATA adapter ?

A4: Yes

#### **Q5:** Will the Intel® Solid-State Drive Toolbox support multiple Intel® SSD's in my system?

A5: Yes, the Intel® Solid-State Drive Toolbox supports as many SSDs as your host Intel based chipset (ICH) system can directly connect to SATA sockets on your motherboard.

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

A6: No. The current implementation of the 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 the Intel® Solid-State Drive Toolbox?

- A7: 1) Microsoft Windows\* operating system:
  - Windows XP\*, Windows Vista\* or Windows 7\* (32/64 bit versions).
  - 2) The Microsoft .NET Framework 2.0
  - 3) At least 10 mega bytes (MB) of available space on the installation drive

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

A8: Intel recommends running the Intel Optimizer once a day. Since the total execution time for running the Intel SSD Optimizer runs in a matter of seconds and there is no known risk of harm to the SSD due to continuous repeated use, Intel recommends scheduling the Intel SSD Optimizer to run on a daily basis. Overuse does not cause problems with the SSD but wastes system resources to run the optimizer more than is recommended.

#### Q9: Does the Intel SSD Optimizer work on a drive that uses encryption software?

A9: Yes, the Intel® SSD Toolbox will work with encryption software. On Windows Vista\* or Windows 7, a prompt will appear within the Intel® SSD Toolbox allowing the user to force the Intel® SSD Optimizer to run -- if the user can verify that their Intel SSD is not part of a RAID array (*NOTE:* The prompt is done because the Intel SSD Toolbox cannot distinguish between an SSD in a RAID configuration and an SSD using encryption). Clicking "accept" will optimize the drive successfully and records a successful optimize session in the status box. On Microsoft Windows\* XP, the Intel SSD Optimizer will work directly on encrypted drives with no additional user input required.

#### Q10: Will the Intel SSD Optimizer run automatically?

A10: The Intel SSD Optimizer has an automatic scheduling feature to enable users to optimize the SSD on a regular basis. Intel recommends this be done once per day.

### Q11: Does the Intel SSD Toolbox with the Intel SSD Optimizer work with the Intel® Matrix Storage Manager?

A11: WRT RAID configurations, see question 6 above. Currently the Intel Matrix Storage Manger does not support Trim commands. If the Intel Matrix Storage Manager is loaded on a system that is not in a RAID configuration, both it and the Intel SSD Toolbox will work together and the Intel SSD Optimizer tool will also work directly on the Intel SSD. Intel is working with customers and evaluating options for a future release the Intel Matrix Storage Manager which supports Trim commands. See the Intel SSD Optimizer Requirements chart below to see what is required to support the "Trim" function for a particular OS.

Operating System	Storage Driver	Execution Environment
Microsoft Windows* 7	Microsoft* AHCI	Native OS support (Intel <sup>,</sup> SSD Toolbox not required)
Microsoft Windows 7	Intel•Matrix Storage Manager**	Intel SSD Toolbox required
Microsoft Windows Vista* or XP	Microsoft AHCI or Intel Matrix Storage Manager	Intel <sup>®</sup> SSD Toolbox required

#### Intel SSD Optimizer OS Requirements Matrix

\* Other names and brands may be claimed as the property of others

\*\* The Intel® Matrix Storage Manager driver currently does not support native execution of the Intel® SSD Optimizer under Windows 7 OS. The Intel® SSD Toolbox must be used until support is included in a future release of the Intel® Matrix Storage Manager driver.