Intel® Smart Response Technology User Guide

Intel® Smart Response Technology is an Intel® Rapid Storage Technology (Intel® RST) caching feature that improves computer system performance. It allows a user to configure computer systems with a Solid State Drive (SSD) used as cache memory between the hard disk drive and system memory. This provides the advantage of having a hard disk drive (or a RAID volume) for maximum storage capacity while delivering an SSD-like overall system performance experience. Intel® Smart Response Technology caching is implemented as a single drive letter solution; no additional drive letter is required for the SSD device used as cache.

System Requirements:

- Intel® Z87, Q87, H87, Z77, Q77, H77 Express Chipset-based desktop board
- Intel® Core™ Processor in the LGA1155 or LGA1150 package
- System BIOS with SATA mode set to RAID
- Intel Rapid Storage Technology software 10.5 version release or later
- Single Hard Disk Drive (HDD) or multiple HDD's in a single RAID volume
- Solid State Drive (SSD) with a minimum capacity of 18.6GB
- Operating system: Microsoft Windows 8* or Windows 7 (32-bit and 64-bit editions)

Setup Guide for Intel Smart Response Technology

Configuring your computer for Intel Smart Response Technology is a 3-step process:

- 1. Configure SATA mode for RAID in BIOS Setup
- 2. Install the operating system
- 3. Enable Intel Smart Response Technology

Step 1: Configure SATA mode for RAID in BIOS Setup

1.1. Press the **F2** key during boot up to enter BIOS setup.

1.2. Go to **Configuration** > **SATA Drives.**

- 1.3. Set the option for Chipset SATA Mode to RAID.
- 1.4. Press the F10 key to save settings, exit BIOS, and restart the computer.

Step 2: Install the operating system

- **2.1.** Install the operating system on the HDD (or RAID volume).
- 2.2. Install all required device drivers.
- **2.3.** Install the Intel Rapid Storage Technology software version 10.5 or later.

Step 3: Enable Intel Smart Response Technology

Note: The Intel RST software denotes Intel Smart Response Technology as Accelerate

- **3.1.** Run the Intel RST software through the All Programs menu or the task bar icon.
- **3.2.** Click **Enable acceleration**, either under the Accelerate button or the Current Status menu.

∂ Intel® Rapid Storage Technology		×
Status		(intel)
Image Click on any element in the storage system view to manage its properties. Image Image <t< th=""><th>Storage System View Array_0000 932 GB 932 GB 932 GB P32 G</th><th>Volume_0000 Type: RAID 1 932 G8</th></t<>	Storage System View Array_0000 932 GB 932 GB 932 GB P32 G	Volume_0000 Type: RAID 1 932 G8
	і М	ore help on this page

- **3.3.** Select the SSD to be used as a cache device.
- **3.4.** Select the size from the SSD to be allocated for the cache memory.

Note: Any remaining space on the SSD may be used for data storage using the simple data single-disk RAID 0 volume that is automatically created.

3.5. Select the HDD (or RAID volume) to be accelerated. It is highly recommended to accelerate the system volume or system disk for maximum performance.

3.6. Select the acceleration mode, and then click OK. By default, Enhanced mode is selected.

Note:

Enhanced mode (default): Acceleration optimized for data protection. **Maximized mode:** Acceleration optimized for input/output performance.

Enable Acceleration	X
Select the solid-state drive you want to use to accelerate your storage system: SSD on port 1: 75 GB Select the size allocated for the cache memory:	
 18.6 GB Full disk capacity (maximum 64 GB) 	
Select the disk or volume to accelerate:	
Disk on port 0 (932 GB) (system)	•
Select the boot disk or volume for optimal system acceleration.	
Select the acceleration mode:	
 Enhanced mode Maximized mode 	
More help OK Cancel	

3.7. The page refreshes and reports the new acceleration configuration in the Acceleration View.

Your system is now successfully configured with the Intel Smart Response Technology.

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