Intel® Rapid Start Technology User Guide for UEFI Mode

Intel® Rapid Start Technology enables your system to get up and running faster from even the deepest sleep, saving time and power consumption. Feel secure knowing that your system will resume to working condition in the event of unexpected power loss while in sleep mode.

System Requirements:
For a system to support Intel® Smart Response Technology it must have the following:

- Intel® Z77/H77/Q77 Express Chipset-based Intel® Desktop Board
- Intel® Core™ Processor in the LGA1155 package
- Solid State Drive (SSD)
- Hard Disk Drive (optional for Intel Smart Response Technology)
- Operating system : Microsoft Windows* 7 64-bit Edition or Microsoft Windows 8 installed in UEFI mode
- Intel Rapid Start Technology software

Setup Guide

Operating System Installation
Note: If installing the operating system (OS) on the SSD, ensure that there's enough partition space left on the SSD to create an Intel Rapid Start Technology Store Partition. The size of the Store Partition must be equal to or larger than the amount of system memory.

1. Install the operating system in UEFI mode on the SSD. If you plan to implement Intel Smart Response Technology, install the operating system on the HDD instead.
   Note: Instructions for enabling Intel Smart Response Technology are not covered here. Please complete the setup for Intel Smart Response Technology before proceeding with setup for Intel Rapid Start Technology.

2. Install all required device drivers. Do not install the Intel Rapid Start Software yet.

Configure Intel Rapid Start Technology in BIOS Setup (Intel® Visual BIOS)

3. Press the **F2** key during boot up to enter the Intel® Visual BIOS.

4. Click on **Advanced Setup**, and then click on **Power**.

5. Locate the setting for **Intel Rapid Start Technology** and click on the check box to enable it.

6. Set **Hibernation Timer** to **Immediately**.

7. Press the **F10** key to save settings and restart the system.
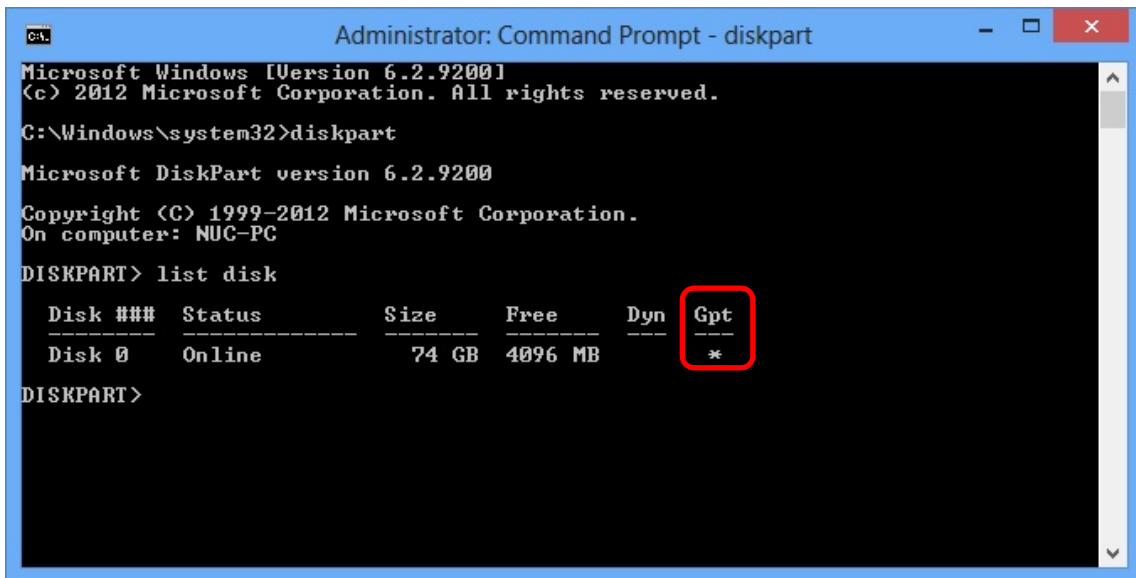
Create a Primary Store Partition on the SSD

Important Note: If the store partition will be created on the SSD where the OS is not installed on, skip this section and go to Alternate Steps: Create a Primary Store Partition on a non-OS Drive SSD.

8. In the OS, click the **Windows Start** button.

9. In the Search box, type in **cmd.exe**.

10. Right-click on the **cmd** tool and select **Run as administrator**.

11. A command line utility will open. Type in **diskpart.exe** and press **Enter**.

12. At the diskpart prompt, type the following commands as shown:

DISKPART> list disk
> *Note: If this is an EFI OS (GPT format disk), then you will see an asterisk under the column GPT*

DISKPART> select disk X
> *(X is the the disk number where you want to create the hibernation partition. Refer to results from "list disk" for exact disk number. Disk must be a SSD)*

DISKPART> create partition primary size=YYYY
> *(YYYY is the hibernation partition size in megabytes larger than the amount of memory installed on the system. As an example, for 4 GB of system memory, the value should be 4096 or higher)*

DISKPART> detail disk

DISKPART> select Volume Z
> *(Z is the newly created RAW partition. Refer to results from "detail disk" for exact volume number)*

DISKPART> set id=D3BFE2DE-3DAF-11DF-BA40-E3A556D89593

DISKPART>exit

Alternate Steps: Create a Primary Store Partition on a non-OS Drive SSD
Note: Follow this section only if you will create the Primary Store Partition on a separate SSD drive where the operating system is not installed.

8. In the OS, click the **Windows Start** button.

9. In the Search box, type in **cmd.exe**.

10. Right-click on the **cmd** tool and select **Run as administrator**.

11. A command line utility will open. Type in **diskpart.exe** and press **Enter**.

12. At the diskpart prompt, type the following commands as shown:

DISKPART> list disk

DISKPART> select disk X
> *(X is the disk number where you want to create the store partition. Refer to results from "list disk" for exact disk number. Disk must be a SSD)*

DISKPART> convert gpt

Note: If you have previously configured for Intel Smart Response Technology, this step will affect the setup. Please re-configure Intel Smart Response Technology using the Intel Rapid Storage Manager tool before continuing on to the next command.

**DISKPART> create partition efi size=YYYY**
(YYYY is the hibernation partition size in megabytes larger than the amount of memory installed on the system. As an example, for 4 GB of system memory, the value should be 4096 or higher)

DISKPART> set id=D3BFE2DE-3DAF-11DF-BA40-E3A556D89593

DISKPART>exit

Verify the Primary Store Partition

13. Go to **Control Panel\System and Security\AdministrativeTools\Computer Management\Disk Management**

14. Confirm in Disk Management that there is now a Primary Partition on the SSD with the correct size that was specified earlier.
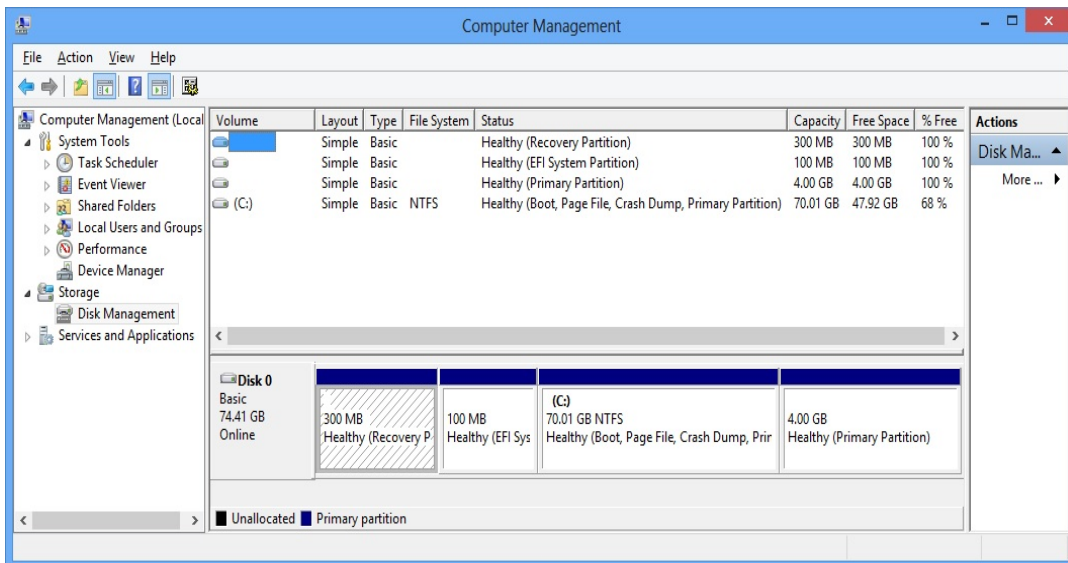

15. Close Disk Management and restart the system for the BIOS to identify the existence of the newly created hibernation partition for Intel Rapid Start Technology.
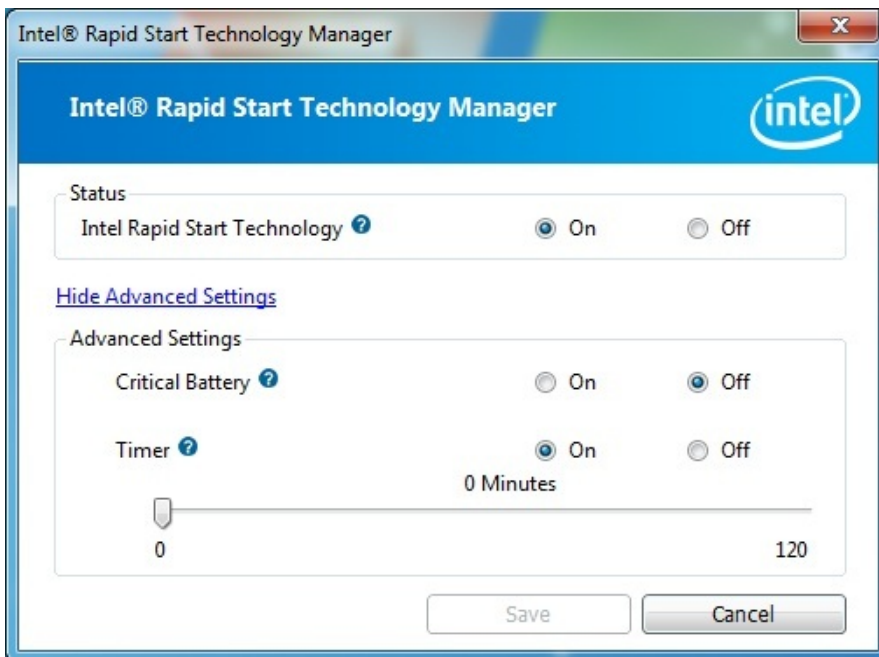
Installing the Intel Rapid Start Technology software

16. Run the **setup.exe** file for the Intel Rapid Start Technology software package.

17. Complete the installation process.

18. Once installation is complete, click the Task Bar on the bottom right of the desktop and look for the icon for Intel Rapid Start Technology Manager. Click to launch the tool.
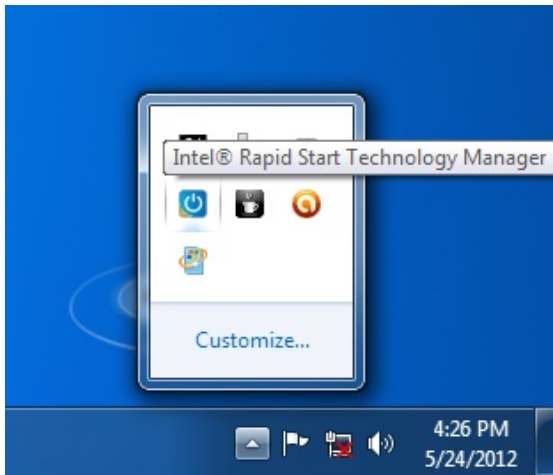
19. Check that the status for Intel Rapid Start Technology is On.

20. Ensure that the Timer is set to On and the slider bar is at position 0. This is to ensure the system will immediately begin utilizing Intel Rapid Start Technology once the system is put into sleep (S3) mode.

Testing the Intel Rapid Start Technology

21. Click on the Windows Start button, and then click on **Sleep**. This will put the system into S3 state.

22. Observe that the system will go into sleep mode, and then quickly wake up again before going into sleep state again. This is normal behavior as the system first transitions into the S3 state (per the OS), and then Intel Rapid Start Technology will wake the system up and move it into the S4 state.

23. The system is now in the S4 state and will not wake up using USB devices such as USB keyboard or mouse.

24. Press the Power Button to resume the system.

25. Observe that the system resume time is as fast as a wake from S3.