

Setting a Caching Partition on a Boot SSD with Intel® Cache Acceleration Software

Setup Guide



Revision History

Revision	Description	Date
001	Initial release of this document	January 2017

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Introduction

This guide provides a quick walkthrough on how to set up a caching partition on a boot Intel® Solid State Drive (Intel® SSD) with Intel CAS for new operating system (OS) installations, as well as for operating systems that are already installed. This guide uses Windows Server 2012 R2* as an example, but this procedure is also applicable to other supported versions of Microsoft Windows* Server and Linux*.

Procedure for a New OS Installations

To install the OS on a drive and leave unallocated space for caching partition, do the following:

1. Set the boot partition space.

During OS installation, dedicate required space for boot partition (for example, 50GB). Leave remaining space on a boot drive unallocated. This space will later be used to create a caching partition.

NOTE: Different workloads may require different cache size to storage size ratio for optimal performance and use of space.

2. Install OS to the chosen boot partition.

After OS installation, the boot drive partitioning scheme will look similar to the following:

Disk 1 Basic 238.35 GB Online	300 MB Healthy (Recovery Partition)	100 MB Healthy (EFI System Partition)	(C) 48.83 GB NTFS Healthy (Boot, Page File, Crash Dump, Primary Partition)	189.13 GB Unallocated

NOTE: A portion of the drive is used for boot partition, and remaining space is unallocated.

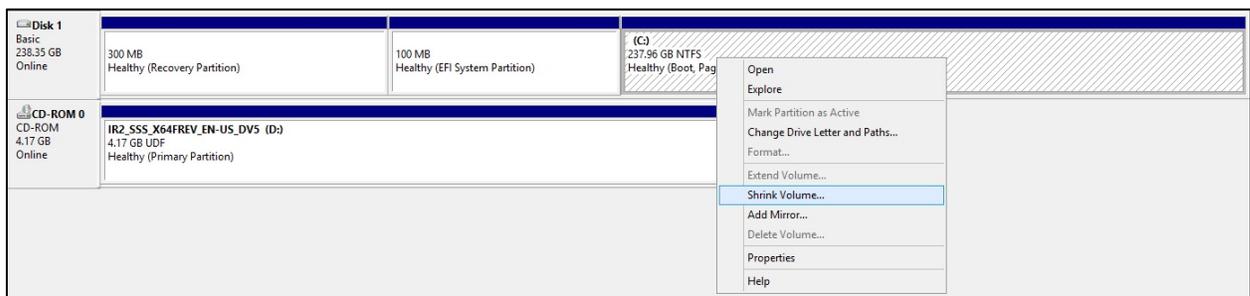
3. Install Intel® CAS and continue to [Setting up the Cache Partition](#) on page 5.

Procedure for an Existing OS

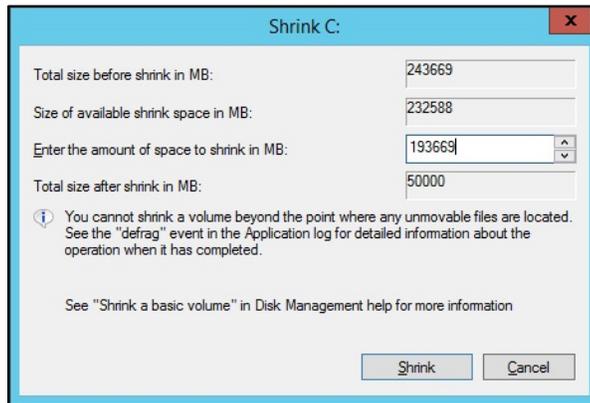
To create a caching partition on a drive with an existing OS, you must first free-up some space on the boot drive, then shrink the boot partition and leave remaining space unallocated.

1. In the Server Manager, go to **Tools – Computer Management**.
2. In the Computer Management console, right-click on the boot partition and choose *Shrink Volume*.

Make sure you have enough free space on a drive for this operation.



3. In the pop-up window, specify a value in the *Enter the amount of space to shrink in MB* field and click Shrink.



Drive partitioning after shrinking should look like the following:

Disk 1 Basic 238.35 GB Online	300 MB Healthy (Recovery Partition)	100 MB Healthy (EFI System Partition)	(C) 48.83 GB NTFS Healthy (Boot, Page File, Crash Dump, Primary Partition)	189.13 GB Unallocated
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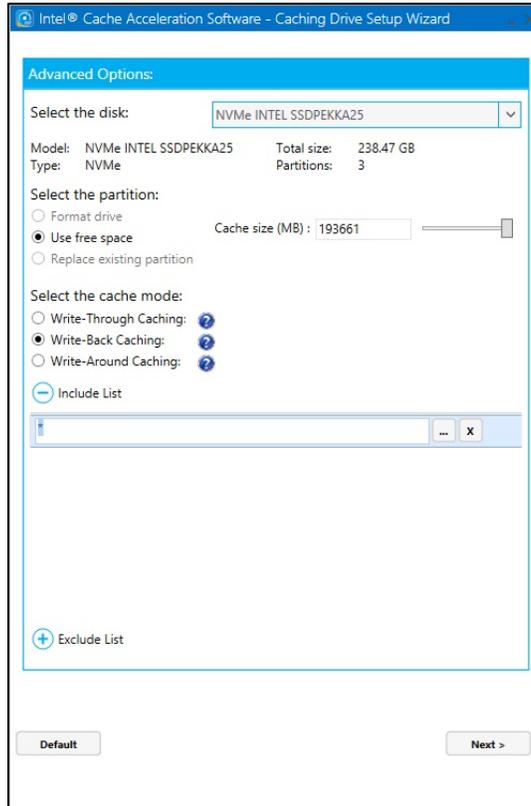
4. Install Intel® CAS and continue to [Setting up the Cache Partition](#) on page 5.



Setting up the Cache Partition

To specify the unallocated space as a caching device in Intel CAS, do the following:

1. From the main window, click **Advanced Options**.



2. Choose *Use free space*.
3. Choose the type of cache in *Select the cache mode* (Write-Back, Write-Through or Write-Around).
4. If needed, select files to be always cached and files to be never cached.
5. Click **Next**.

After cache setup, drive partitioning should look like the following:

Disk 1 Basic 238.35 GB Online	300 MB Healthy (Recovery Partition)	100 MB Healthy (EFI System Partition)	(C:) 48.83 GB NTFS Healthy (Boot, Page File, Crash Dump, Primary Partition)	189.12 GB RAW Healthy (Primary Partition)	8 MB Unallocated