

In the following simple solution, I cover the process I use to Tweak an SSD "**Solid State Drive**" for **Optimal Performance** and **Longevity**. There are a few tools out there that can manage a lot of the following settings automatically. However, I feel it's also important to know how to make these changes yourself. Upon completion, you should end up with a slightly faster and longer living better "**Optimized SSD**".

Optimizing an SSD Drive for Performance and Longevity

Disable Defragmenter

There is no reason to defragment an **SSD** drive as the data is not stored on a traditional **rotating platter**. Disabling this feature can help to prolong the life of your SSD Drive by reducing the amount of read/write actions on the drive.

1. Navigate to My Computer (**Computer Shortcut**);
2. Right click your SSD's **Drive Letter**;
3. Select **Properties > Tools > Defragment (Defragment Now)**;
4. Click the **Configure Schedule** Button, uncheck **Run on a schedule**.

Disable Superfetch

Disabling Superfetch can potentially help increase the longevity of your SSD drive by reducing additional probing and data transfer into memory. It also helps to free up RAM for other purposes.

1. Click **Start**, Type **services.msc** and press **Enter**;
2. From the Services list, Double click **Superfetch**, set Startup type to **Disabled** and click **Apply**.

Disable Drive Indexing

Disabling **Drive Indexing** can help increase both the **performance** and **longevity** of your SSD drive as it prevents **Windows** from trying to keep track of every file on the drive for search purposes. Drawback is that SSD searches may be slower.

1. Navigate to **My Computer (Computer Shortcut)**;
2. Right click your SSD's **Drive Letter**;
3. Select **Properties**, uncheck the **Drive Indexing** option (**Allow files on this drive to have contents indexed in addition to file properties**).

Disable Search Indexing

Disabling **Search Indexing** can help increase both the performance and longevity of your SSD drive. Disabling this option prevents windows from trying to keep track of every file for search purposes. Drawback is that **SSD searches may be slower**.

1. Click **Start**, Type **services.msc** and press **Enter**;
2. From the Services list, Double click **Windows Search**, set Startup type to **Disabled** and click **Apply**.

Disable System Restore

Disabling System Restore can help to increase the longevity of your SSD drive as well as free up storage space if existing restore points are deleted. However, if you choose to disable this feature, you should use some other form of backup, like creating a disk image backup.

1. Navigate to and right click **My Computer** (*Computer Shortcut*), select **Properties > System Protection**;
2. Select your SSD **Drive Letter** and click **Configure**;
3. Check the box to **Turn off System Protection** (*you can also delete existing restore points if you wish*).

Enable Write Caching

Enabling **Write Caching** can help to prolong the life of your SSD drive as well as increase it's performance by decreasing the number of times the drive is accessed by delaying writes until the cache has filled to a certain point. Drawback is potential data loss if there is a power outage.

1. Click **Start**, Type **devmgmt.msc** and press **Enter**;
2. Click **Disk drives** to expand;
3. Double click your **SSD drive** and click the **policies tab**;
4. Check the **Enable Write Caching on the device** box, and click **OK**.

Disable Prefetch

Disabling Prefetch can help to increase the longevity of your SSD drive by preventing Windows from storing cached indexed files in one continuous block on your hard drive, and preventing any defragmenting on that storage area. The drawback is that it can potentially slow down your system boot.

1. Click **Start**, type **Regedit** and press **Enter**;
2. Navigate to **Hkey_local_machine/SYSTEM/CurrentControlSet/Control/Session Manager/Memory Management/PrefetchParameters**;
3. Double Click **Enableprefetcher**, and change the hex value to **0** and press **OK**;
4. Close **Regedit**.

Disable Pagefile

Disabling **Pagefile** can help to prolong the life of your SSD drive and increase it's performance by reducing the amount of **read/write** action performed on the drive. This option should be used only if you have a lot of RAM and are running a **64 Bit Operating System**, otherwise it may actually reduce SSD performance.

1. Navigate to and right click **My Computer** (*Computer Shortcut*), select **Properties > Advanced System Settings**;
2. Under the Performance section, Click **Settings** Button;
3. Click **Advanced** Tab, and under Virtual memory section, Click **Change** button;
4. Uncheck **Automatically manage paging file for all drives**, and check **No paging file**, and click **Set**.