PC Maintenance Handbook

Improve Your PC's Performance,

Speed, and Reliability

Windows Guides

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About the Author

Rich Robinson is the author and creator of Windows Guides, Windows Forums, and MyWindowsPC. Rich is a [Microsoft MVP](#) in the Desktop Experience category and authored Windows 7 –The Pocket Guide, Windows Vista – The Pocket Guide, Windows Vista – Customization Manual, and the PC Security Handbook. He also co-authored the Windows 7 Media Center Customization Handbook. His hobbies include spending time with family, road biking, web design, programming, running, soccer, skiing, and swimming.

See [more books Rich authored](#).

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Introduction

This handbook is designed to help you find ways to maintain your Windows PC and ensure it remains clean and speedy throughout its life. Computers quickly get bogged down by junk files, invalid registry entries, a fragmented hard drive, spyware, adware, low disk space, and more. A speedy system is just a few clicks away, but sometimes it's hard to know where to start or even what to do.

I set up PCs for companies, friends, and family; the advice I give in this manual is what I use when maintaining any PC. My tips are tried and tested and have left thousands of people satisfied with the way their computer works. I hope you too can follow these instructions and enjoy an error-free, clean, and speedy PC.

The purpose of this book is not to define the ultimate solution; its purpose is to give you simple, unbiased advice on what I've found to be the best options out there. In this handbook, I only give advice and share programs that I've used for at least a year because some programs seem good when you first use them, but quickly annoy you or slow down your PC.

If you have any questions about PC maintenance or PCs in general, you can head to Windows Forums where you'll find friendly, knowledgeable members who are happy to assist in your learning. If you disagree with anything in this handbook, please join us also and share your solutions.

Notational Conventions

In this handbook, I have used these notational conventions:

Italic: Text from the current dialogue you are working with.

Bold: the name of a keyboard key.

Italic bold: something you type as shown, e.g., ***regedit***. Unless otherwise specified, you can use uppercase or lowercase letter.

Click: move the cursor to the referenced item and press the left mouse button.

Press: push on a keyboard key.

Select: choose from a list.

Blue Links: Links to external websites.

Teal Links: Links to Windows Guides and Windows Forums.

Green Links: Links to other sections in this book.

Maintenance 101

Many terms in this handbook may be new to you; I make every effort to explain things in a simple manner that is easy to digest. Before we begin with solutions, I present some key terms and phrases that will assist you as you work your way through the rest of this handbook. These phrases are commonly thrown out in conversation and in online discussion forums, but it's hard to know exactly what they mean.

Defragment - When you constantly add and delete files on your hard drive, they become fragmented.

Think of this as follows: You have a library full of collections of books. Each of these collections represents a file on your hard drive. You take one book from the collection and put some sticky notes in the book and make it too big to fit back on the shelf–so you put it on the end. Every now and then you get a new book for a collection; these too need to go on the end of the shelf. You sell a collection and buy a bigger one to replace it. Unfortunately, the whole collection doesn't fit in the recently made space so you put half in the space and half at the end of the shelf. You do this for years and you have a mess on your hands. Defragmenting "re-orders your book collections" in terms of your data, and makes access to them a lot easier.

Junk Files – Similar to temporary files, but used to describe files left behind by programs—even after the program is uninstalled from your PC.

Malware – The generic term used for all forms of software designed with malicious intent. Viruses, worms, spyware etc. are all forms of malware. The term *virus* is often used when malware should really be used as it describes all forms of malicious software.

Registry – A control center for your computer. Windows settings, individual program settings, and other important configuration information are stored here.

Spyware – Spyware tracks a user's activity by monitoring browsing habits and key board activity and can even take screenshots while you use your PC. This information is sent back to the creator or beneficiary of the spyware. Signs of spyware include: modified browser homepages, slow internet, and suspicious looking sites in place of legitimate sites (usually banking sites.)

System Optimization – The act of cleaning your PC and making changes to gain the most performance.

Temporary Files – Files created by programs on your computer that are temporary. Thus, these files can safely be deleted after the program, which created them, is finished using them.

Uninstall – To remove a program from your computer so that it no longer occupies space on your hard drive and cannot be used anymore. Uninstallation includes deletion of program

files, registry entries, associations, supporting libraries, user data, plugins, extensions, and other features specific to a program.

Now you have your jargon set straight, you can begin cleaning your PC and forming good practices to keep it clean and running smoothly.

Windows Update – A service provided by Microsoft that downloads updates for Windows and other installed components (i.e. Microsoft Office, Internet Explorer etc.) Updates are provided to improve performance and security.

Maintain Your PC

The internet is flooded with tips and advice on PC cleaning. Much of this advice urges you to buy useless programs that cost hundreds of [insert your currency here.] Look no further: you can follow this guide and get your PC clean without spending any money whatsoever. I do recommend programs, which have paid upgrades; however, I am confident these programs, when upgraded, are worth every penny and hundreds of Windows Guides readers (and I'm sure others) agree with me.

Let's get right into things; to clean and maintain your PC:

1. Create a system restore point to protect you from unwanted changes.
2. Backup your data.
3. Keep Windows and installed software up to date.
4. Find and remove malware.
5. Uninstall unnecessary programs.
6. Delete junk/temporary files.

7. Optimize your system.
8. Defragment your hard drive.

By following these steps, you'll ensure your computer is performing at its best and is error free.

Because this book is designed for beginners, instructions on manually tweaking your PC are not included. Such optimization tips are beyond the scope of this book and, in many cases, are unfounded and can compromise the stability of your system. Instead, I will focus on tried and tested tools, which are easy to use and make maintenance an easy task.

Create a System Restore Point to Protect You from Unwanted Changes

If you're making changes to your system and using programs such as CCleaner or Advanced SystemCare, you should always make a restore point before. There is the argument that by creating a restore point you take up almost all the space you are freeing up of these programs. This is true; however, cleaning your system can improve performance significantly and is good practice when using your PC.

In this section you'll learn how to:

1. Create a System Restore Point.
2. Recover your system by using a System Restore Point.
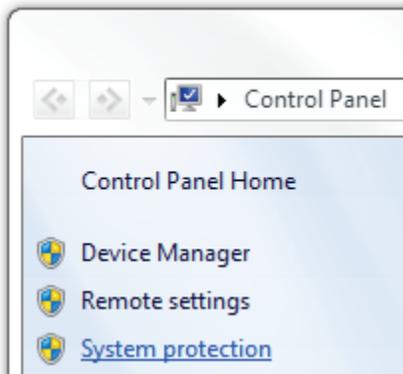3. Change and limit system restore options.

Create a System Restore Point
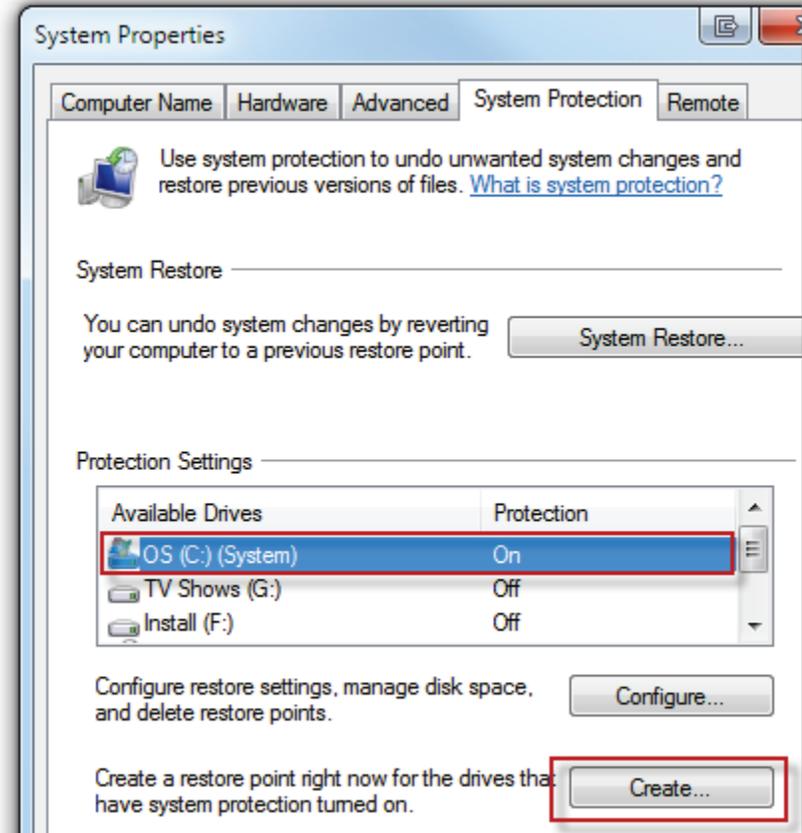
To create a system restore point:

Windows Vista/7

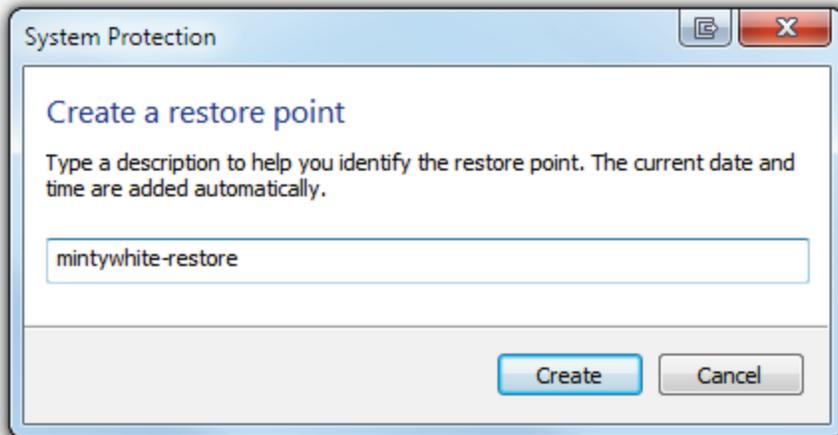To create a system restore point in Windows 7 or Vista:

1. Press the *Start* button, type **system**, and click on *System* in the start menu.
2. When the system properties dialog box appears, click on *System Protection* in the left-hand menu.

3. Select/check the drive on which Windows resides and click *Create*.

4. Give your restore point a *name* and click *Create*.

5. Wait while Windows creates a system restore point for you.
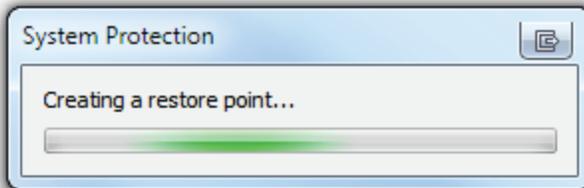
You are now ready to use a cleaning program or make other system modifications.
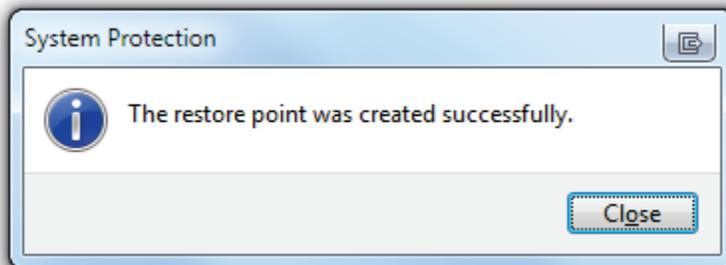
Windows XP

To create a Restore Point in Windows XP:

1. Click the *Start* button, click *All Programs > Accessories > System Tools > System Restore*.

2. Select *Create a restore point* and click *Next*.

3. Type a *name* and click *Next*.

4. Once the restore point is created, click *Close*.
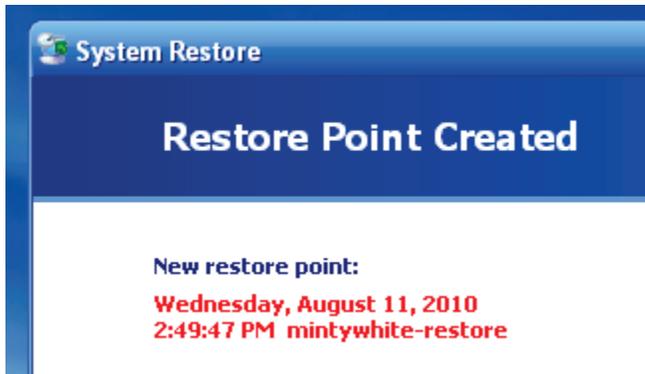
Recover Your System by Using a System Restore Point

Creating a restore point is a good start, but it is useful to know how to use the restore point if you need it. To restore your system from a previously created restore point:

1. Click the *Start* button, type **restore**, and click on *System Restore*.
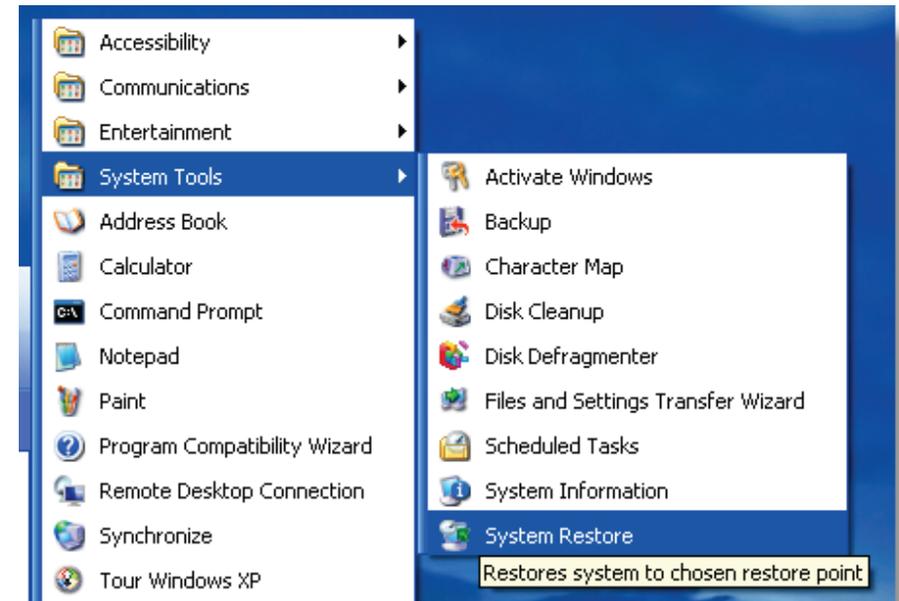2. When the system restore dialog box appears, click *Next*.
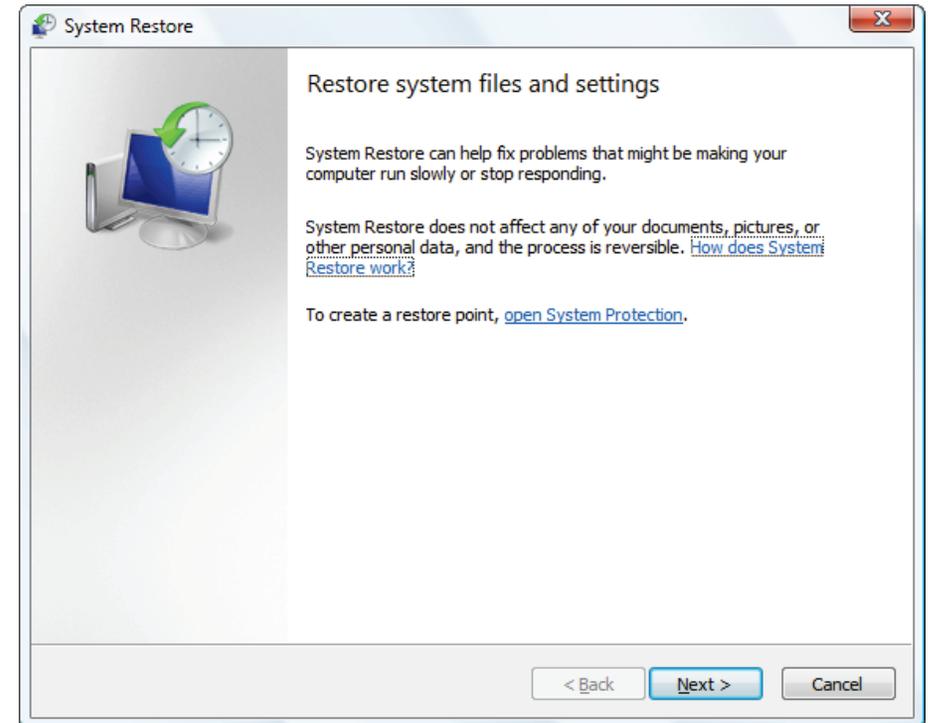
3. Select the restore point and click *Next*.
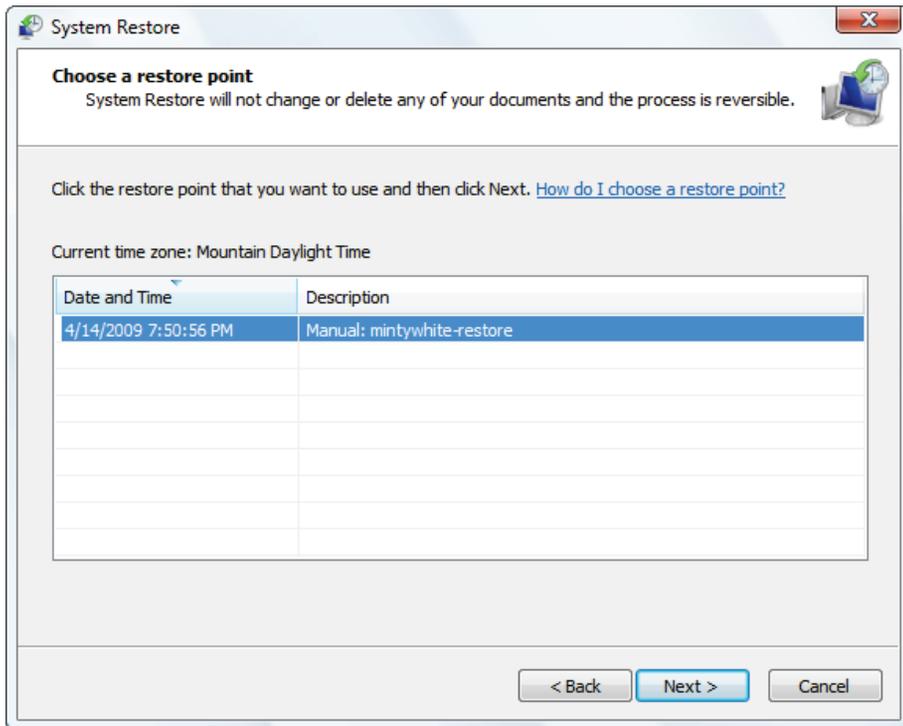
4. Click *Finish*.

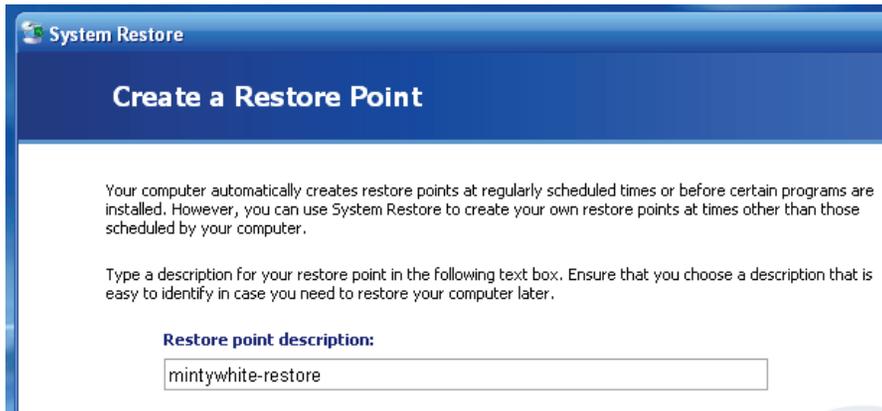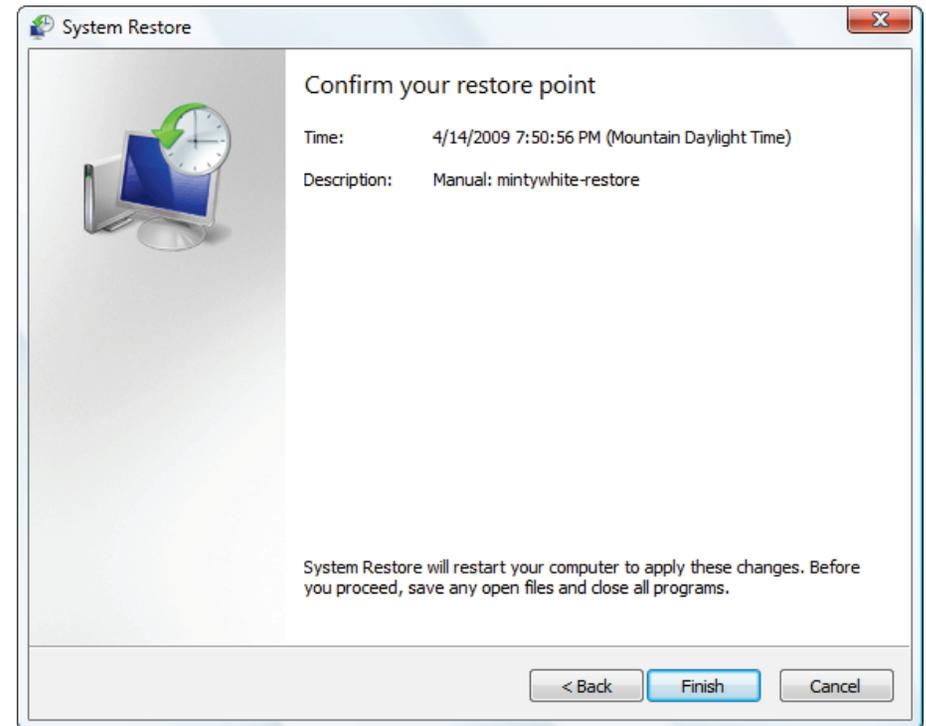Restoring your system may take some time so be patient and ensure you do not disturb the process.

Windows XP

1. Click the *Start* button, click *All Programs > Accessories > System Tools > System Restore*.
2. Select *Restore my computer to an earlier time* and click *Next*.

System Restore

Welcome to System Restore

? Help

You can use System Restore to undo harmful changes to your computer and restore its settings and performance. System Restore returns your computer to an earlier time (called a restore point) without causing you to lose recent work, such as saved documents, e-mail, or history and favorites lists.

Any changes that System Restore makes to your computer are completely reversible.

To begin, select the task that you want to perform:

○ Restore my computer to an earlier time

○ Create a restore point

3. Use the calendar to select a restore point from a time when your computer worked as it should and click *Next*.

System Restore

Select a Restore Point

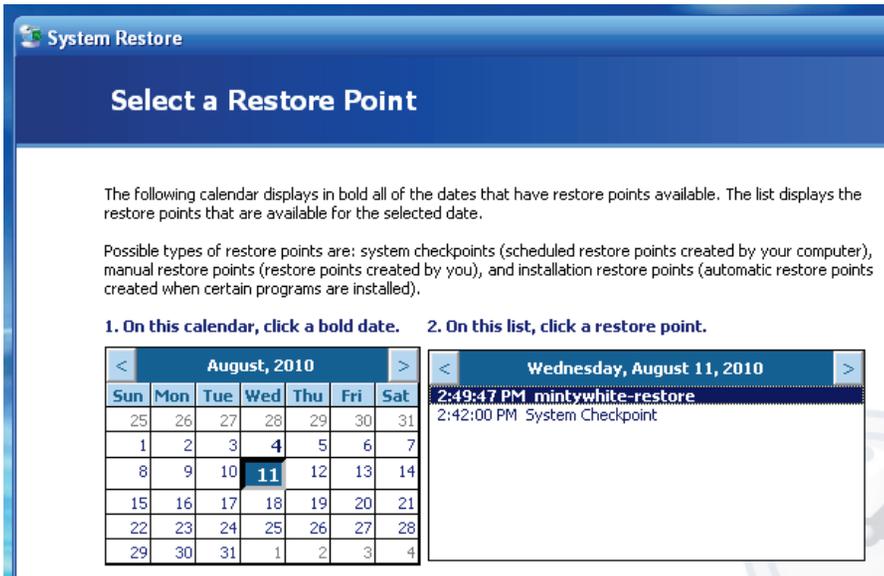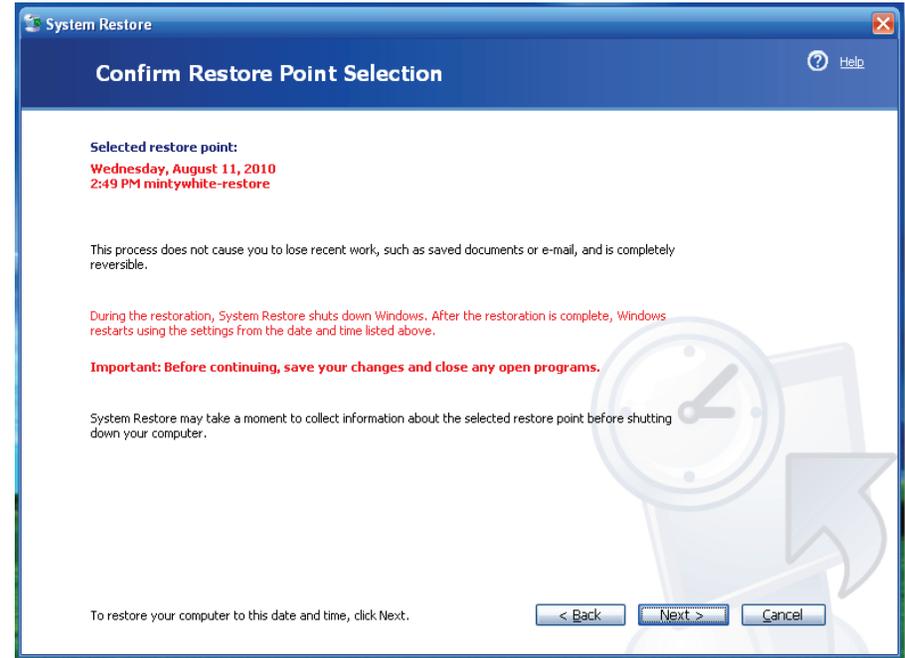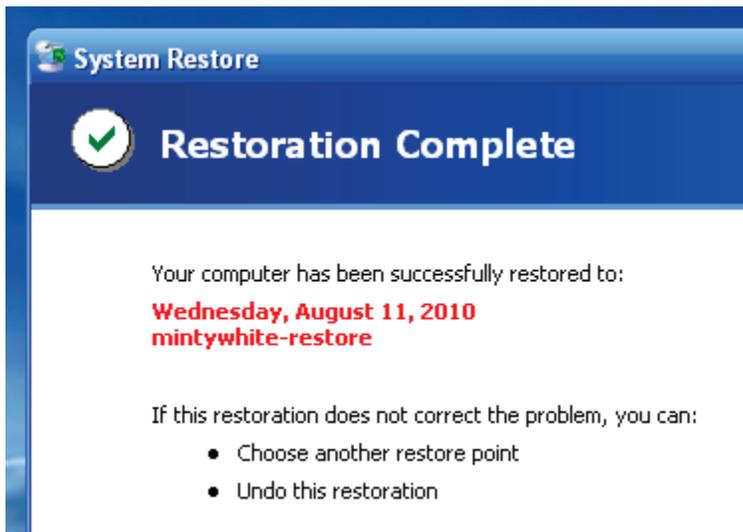The following calendar displays in bold all of the dates that have restore points available. The list displays the restore points that are available for the selected date.

Possible types of restore points are: system checkpoints (scheduled restore points created by your computer), manual restore points (restore points created by you), and installation restore points (automatic restore points created when certain programs are installed).

1. On this calendar, click a bold date.   **2. On this list, click a restore point.**

<	August, 2010	>

Sun	Mon	Tue	Wed	Thu	Fri	Sat
25	26	27	28	29	30	31
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	1	2	3	4

<	Wednesday, August 11, 2010	>

2:49:47 PM mintywhite-restore
2:42:00 PM System Checkpoint

4. Save your work and click *Finish*.

System Restore ✕

Confirm Restore Point Selection

? Help

Selected restore point:
Wednesday, August 11, 2010
2:49 PM mintywhite-restore

This process does not cause you to lose recent work, such as saved documents or e-mail, and is completely reversible.

During the restoration, System Restore shuts down Windows. After the restoration is complete, Windows restarts using the settings from the date and time listed above.

Important: Before continuing, save your changes and close any open programs.

System Restore may take a moment to collect information about the selected restore point before shutting down your computer.

To restore your computer to this date and time, click Next.   < Back   Next >   Cancel

5. Restoring your system may take some time so be patient and ensure you do not disturb the process.

Change and Limit System Restore Options

If you'd like to customize system restore options (i.e. how much space on your hard disk is taken by system restore), follow this guide: Change & Limit System Restore in Windows 7.

Clean Up Old System Restore Points

As this is a maintenance handbook, you may want to clean up old restore points to save space on your hard drive: Clean up old Windows System Restore Points.

Backup Your Data

Data backup is essential. There are three main ways you can back up your data and this section will cover them:

1. Local backup.
2. Backup to optical media.
3. Online backup.

Backup Your Data Locally

Backing up your data locally includes making copies of files on your PC, a different internal drive, and an external drive. Backing up your data to optical media is also another form of local backup, but I hope you will send the backups somewhere safe in preparation of a worst-case scenario.

This section will show you how to back your data up locally using Windows backup. In this specific example, I'll show you how to back your data up to a networked PC. The steps to back up to the same PC are almost identical.

Note: Network backup using Windows Backup is not available in the Home editions of Windows XP, Vista, and 7.

Backup Your Data with Windows Backup

To back up your data across your home network:

1. Click the *Start* button, type **Backup** and click *Backup and Restore*.
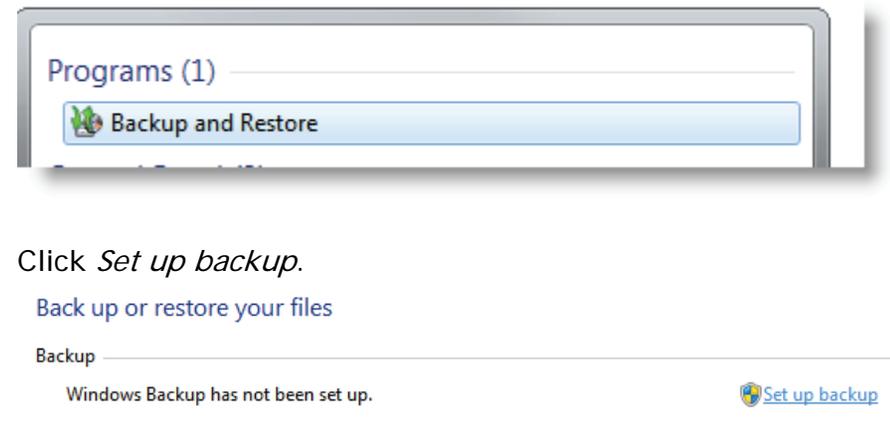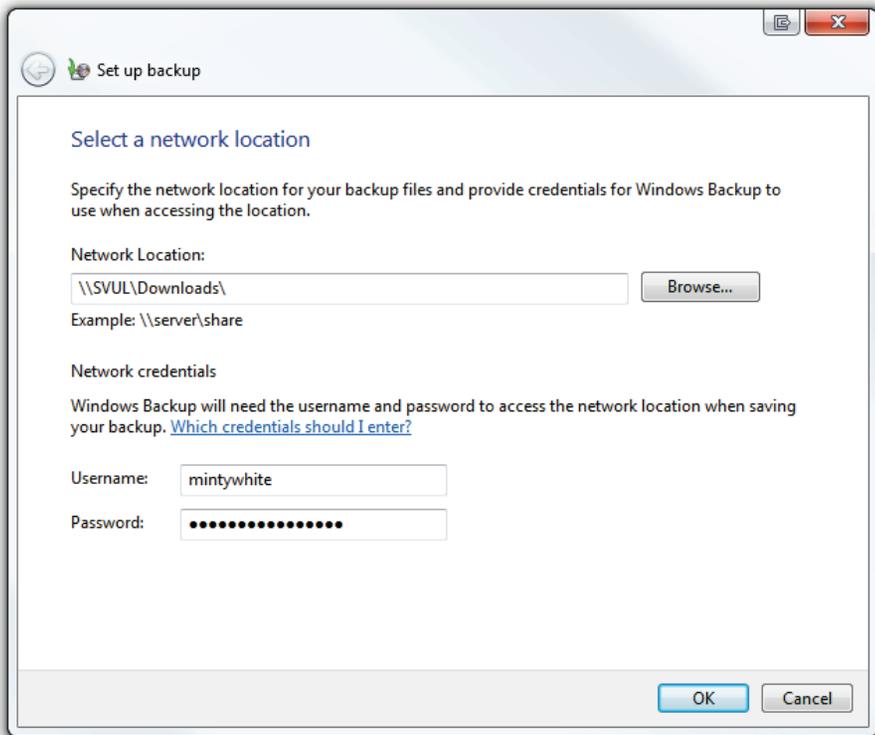

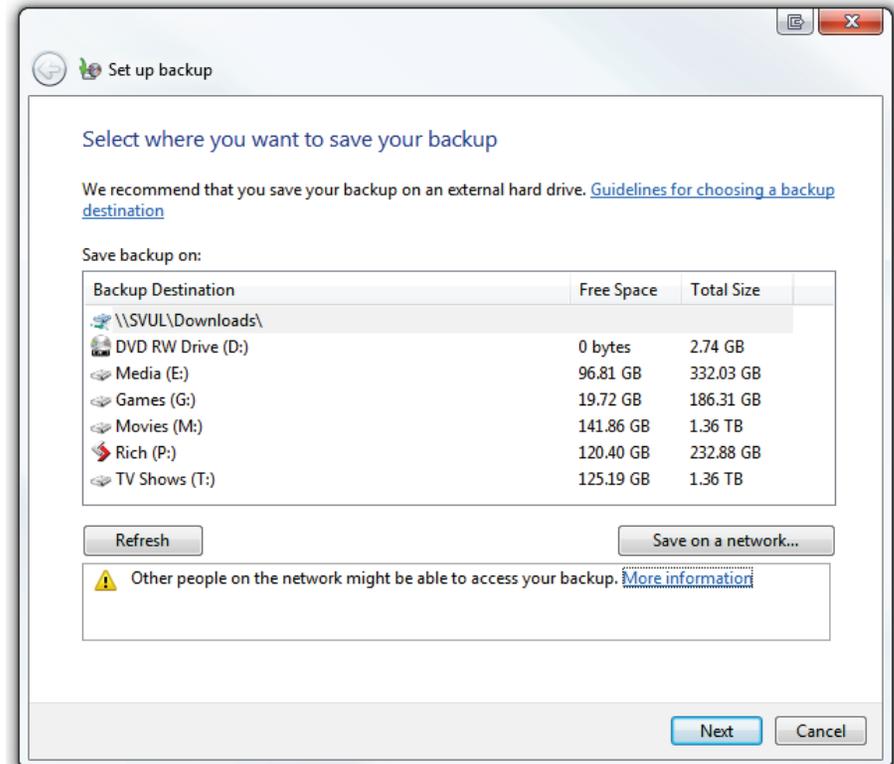2. Click *Set up backup*.

3. Click *Save on a network...*

4. Click *Browse* and Choose your networked PC and pick a shared location ([how to set up networked PCs and shared locations](#).)
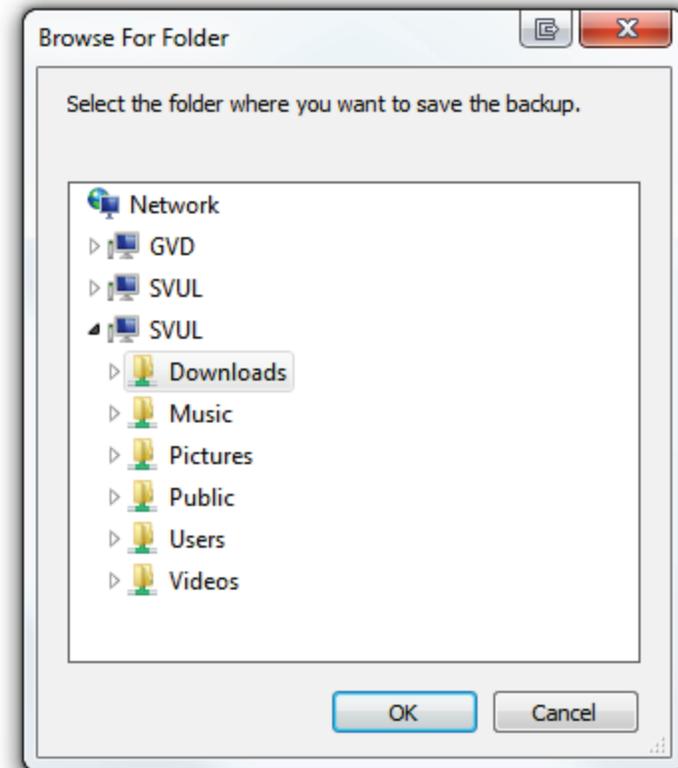
5. Type in the *username* and *password* of the PC that will store the backup. Click *OK*.

6. Click *Next*.

7. I recommend choosing the files you want to back up by selecting *Let me choose* and clicking *Next*.


⊙ Let me choose

You can select libraries and folders and whether to include a system image in the backup. The items you choose will be backed up on a regular schedule.
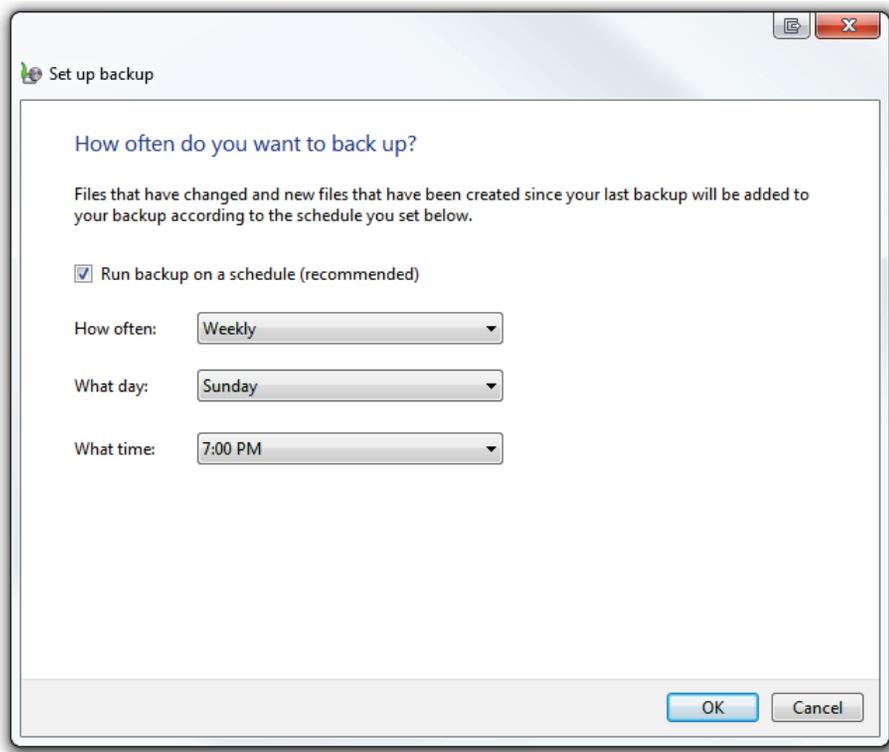
8. Choose the files you'd like to backup (be sure to uncheck Include a system image of drives if you are already making a system image backup or if space is limited on the backup location.)
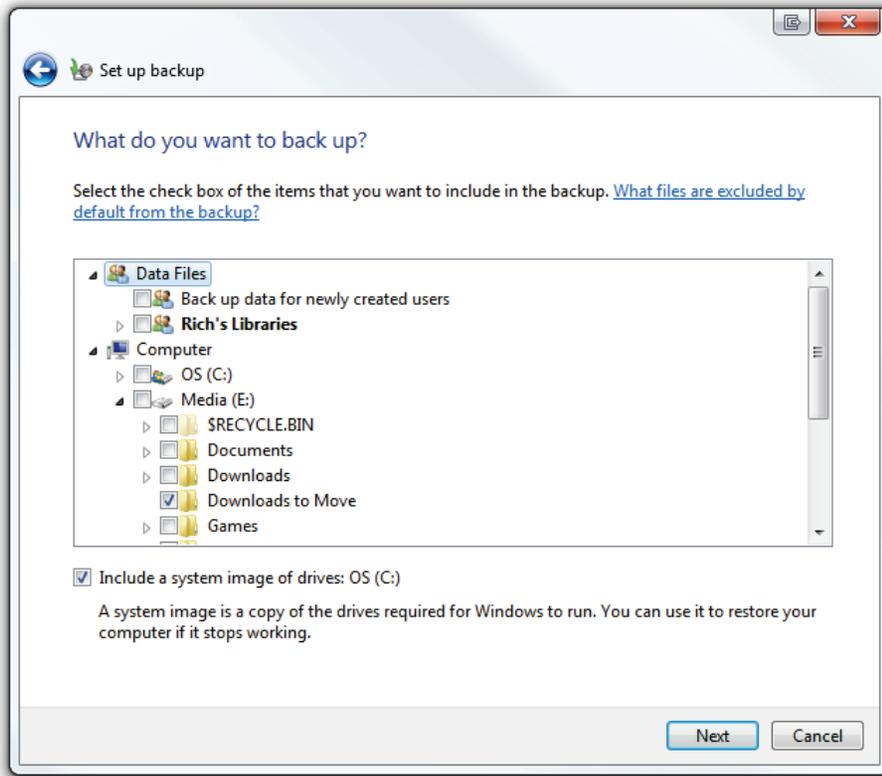
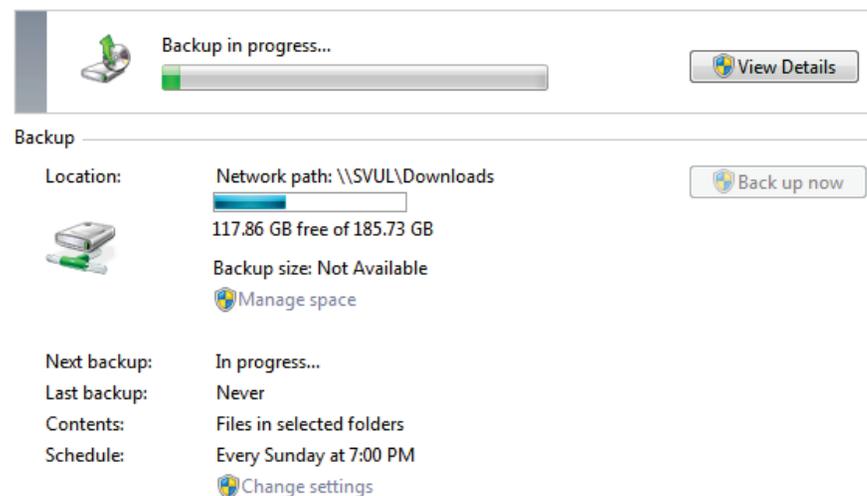9. Verify your settings and click *Save settings and run backup*.
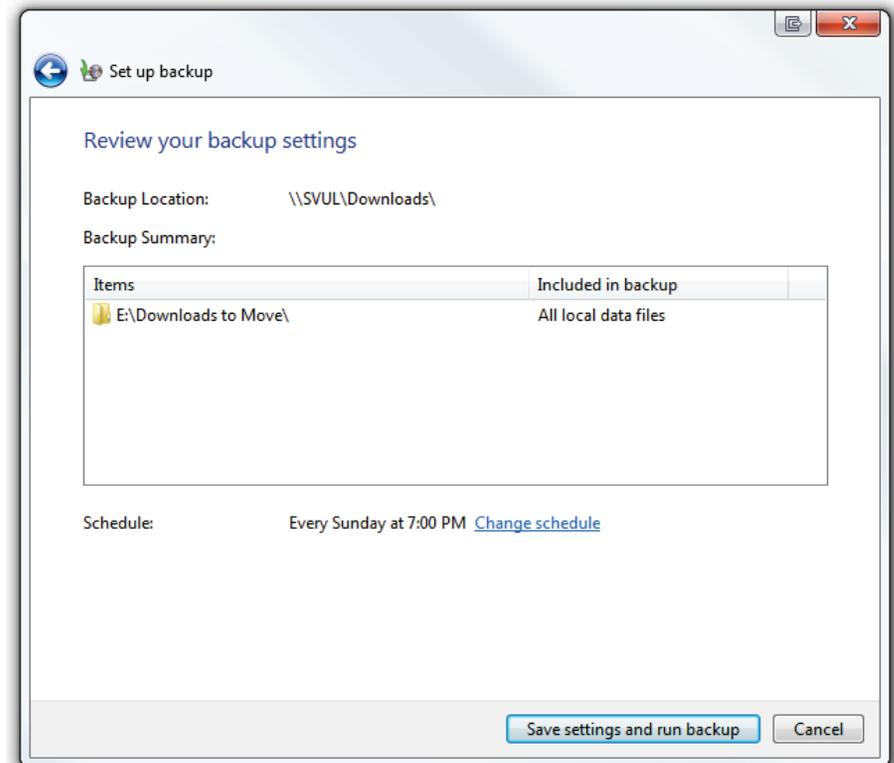
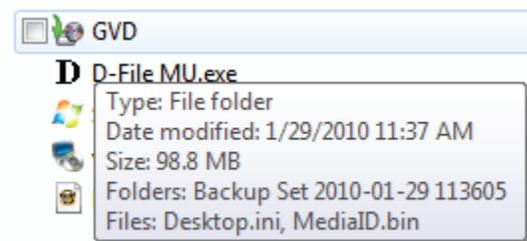10. Set a schedule so backup is automatic. Click *OK*.

12. Now go to the PC where the data was backed up and verify the data is there (it doesn't hurt to look.)

That's it; you're done. Your data is now backed up, automatically according to your schedule.

Backup Your Data to Optical Media

Ashampoo Burning Studio Free pretty much burns any files to any type of optical media. The program is free and simple to use. If you want more information, check out these guides:

11. Your backup will now take place (be sure to not turn off your PC or the PC the data is being backed up to during the backup.)

- How to Install Ashampoo Burning Studio Free.
- Burn Files Using Ashampoo Burning Studio Free.

Backup Your Data Online

I strongly recommend using online (off-site) backups. Backing up your data online prevents data loss if your computer is damaged or stolen—or if your data is wiped by malware.

By far my favorite solution for online backup is Mozy. Mozy offers free online storage (up to 2GB for free with paid options too.) I've had Mozy installed on my laptop for over two years and it has saved me on more than a handful of occasions.

Setup is simple and after downloading Mozy, you can specify what you want to backup and when. Mozy will automate your backups and let you decide when it backs up (specific times), what causes it to backup (low CPU usage), and how often (one, two, three etc. times a day.)
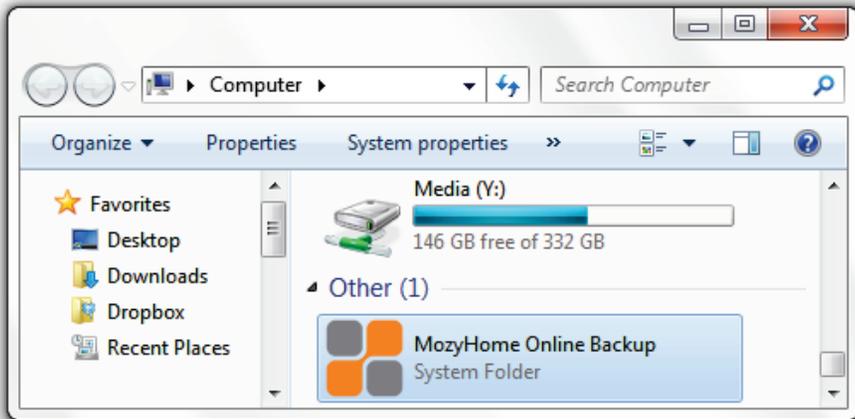
I just let Mozy run and it alerts me after a successful backup:
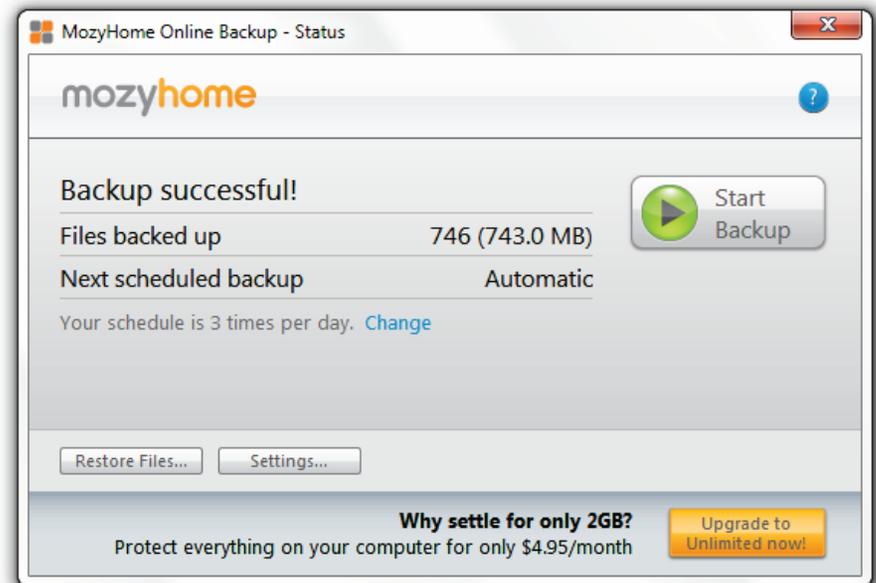
You can specify what types of files to backup or specify folders— it's up to you:
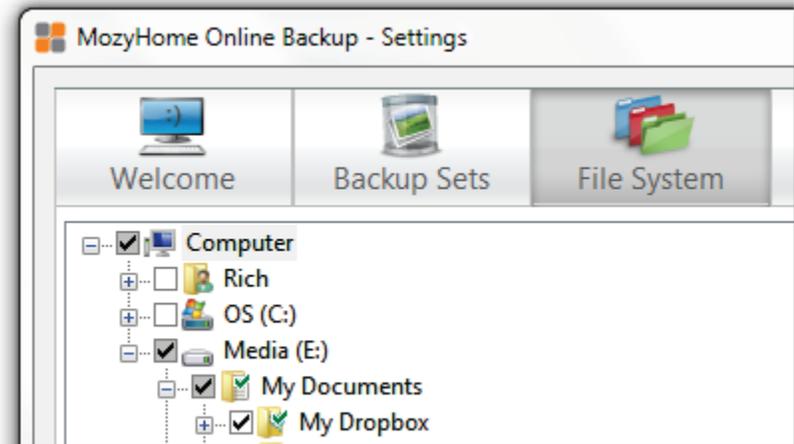
Mozy even integrates into *My Computer* so you can browse and restore your backed up files (even ones you've deleted from your computer):

MozyHome Features

- Open/locked file support: Mozy will back up your documents whether they're open or closed.
- 128-bit SSL encryption: The same technology used by banks secures your data during the backup process.
- 448-bit Blowfish encryption: Secures your files while in storage, providing peace of mind that your private data is safe from hackers.
- Automatic: Schedule the times to back up and MozyHome does the rest.
- New and changed file detection: MozyHome finds and saves the smallest changes.
- Backs up Outlook files: Disaster-proof email protection.
- Block-level incremental backup: After the initial backup, MozyHome only backs up files that have been added or changed, making subsequent backups lightning fast.

Download Mozy for Free

Download [MozyHome free](http://mintywhite.com).

Keep Windows and Installed Software up to Date

To maintain your PC and improve security, you should keep Windows and other installed software up to date. Keeping software up to date is important but can take a lot of work. You should at least keep your browser and Flash up to date and these programs are used frequently and are subject to many attacks. This section covers:

- Keep Windows up to date.
- Keep your security software up to date.
- Keep your browser(s) and Flash up to date.
- Keep other installed software up to date.

Keep Windows up to Date

To keep Windows up to date, Microsoft uses Windows Update. Windows Update should run automatically on your PC. However, you should check if your PC is up to date. To check for Windows updates:

1. Click *Start*, *Run*, and type:
   a. Windows XP: *wupdmgr*
   b. Windows Vista/7: *wuapp*
2. Press **Enter**.
3. Click *Install Updates*.

You may need to download the Windows Genuine Advantage (WGA) tool, which checks to see if your copy of Windows is genuine.

Windows may need to reboot your machine several times as new updates are installed.

Your computer is now up to date.

If you are having problems with Windows Update, you should resolve the issue as soon as possible; many of the updates are security related and will protect you from vulnerabilities. Windows Guides writer, Angel Luis, has written the following guide to help you troubleshoot Windows Update problems: Windows update troubleshooting.

Keep Security Software up to Date

If you don't want to keep every program up to date (maybe you have a slow internet connection and don't want to spend too much time downloading every update), I highly recommend you keep your security software up to date.

Windows Guides writer, Taylor Ling, teaches you how to use a simple program, called SSDownloader, to keep your security software up to date: Automatically download the latest security software with SSDownloader.

If you don't have good security software or you don't know which one to pick, you can find suggestions in the next section.

Keep Your Browser and Flash up to Date

Browsers are a common source of computer vulnerabilities because they use so many plugins and programs that create loop holes that malware can exploit.

You should, above all else, keep Adobe Flash up to date. Flash is notorious for security vulnerabilities and, because it's so

widely used, possibly more so than Windows (because it works on other platforms), is a target for malware creators.

Adobe Flash

To update Adobe Flash:

Keeping Adobe Flash up to date can be tedious, but I highly recommend it. There are several ways you can do this. This guide shows you two ways:

1. Download it from the Adobe Flash Player website.
2. Use a tool like FileHippo to keep it updated.

For option 1, you can get the latest version of flash here.

Note: if you use Internet Explorer and another browser, you will need to go to this site in both browsers to get the Adobe Flash Active X update also.

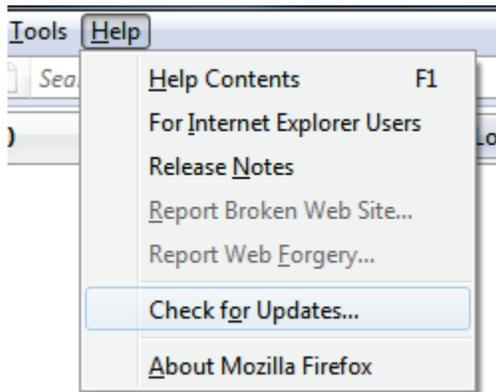For option 2, see the section on Keep Installed Software up to Date.

Internet Explorer

If you are using Internet Explorer (IE) as your browser, use Windows Update—explained above—to keep it up to date.

Mozilla Firefox

To check for updates for Mozilla Firefox:

1. Open Firefox.
2. Click *Help > Check for Updates*.

a. Windows XP: Click *All Programs*, click *Apple Software Update > Apple Software Update*. Windows Vista/7: Type **apple** and click *Apple Software Update*.
2. If an update is available for Safari, you can check the button and click *Install 1 Item*.

3. If updates are available, follow the on-screen instructions.

Google Chrome

To check for updates for Google Chrome:

1. Open Google Chrome.
2. Click the Tools menu.

3. Click *About Google Chrome*.
4. If an update is available, click the *Update* button.

When you restart Google Chrome, you will have the latest version running.

Safari

When you install Safari, you are given the option to "Let

1. Click the *Start* button and:

You can also download the latest version of Safari here.

Opera Web Browser

Opera pushes updates automatically:
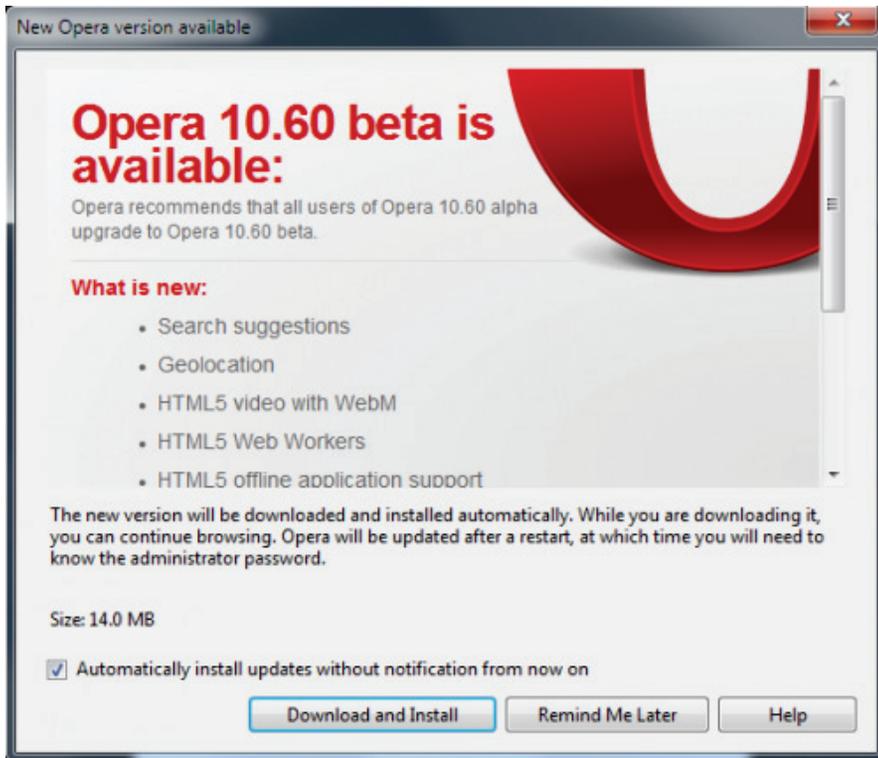

To update Opera manually:

1. Open Opera.
2. Click *Help > Check for Updates*.
3. If a new version is available, you will see an alert and an option to upgrade.

Keep Installed Software up to Date

Now that you're keeping Flash and your browser up to date, you should also consider keeping other software updated. As software ages, more and more security and performance holes are found; these holes leave you vulnerable to all kinds of nastiness like viruses, computer slowdowns, and just looking rather old fashioned. Many programs come with software updaters, but I find these slow your computer down and rear themselves at the most inconvenient times (like at startup) so I tend to disable or opt out of software checking for updates.

FileHippo Update Checker overcomes this problem by checking to ensure you have the latest version of all installed software on your PC. You can even run the program as a standalone app (download the standalone version from the download page):
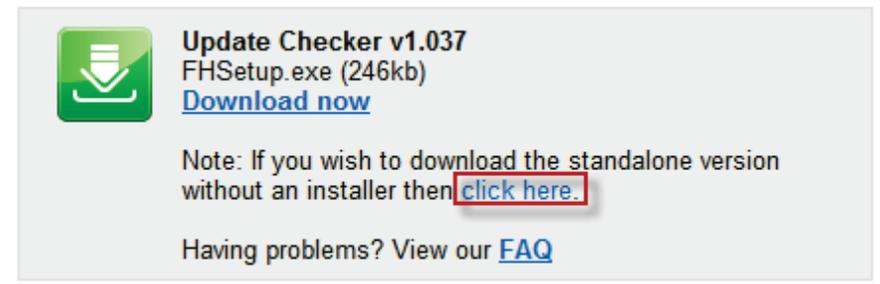
The program scans your installed programs and retrieves version numbers to check against the latest updates in their database:
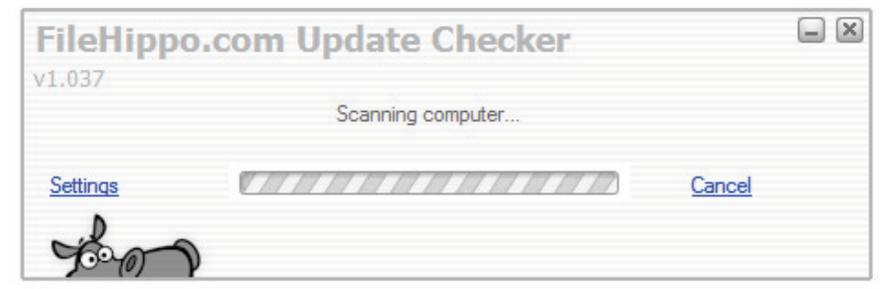
I like to keep my software updated (although I often wait a week or so before upgrading to ensure there are no bugs etc. in the latest version); as you can see, I have five updates available and five beta updates.

5 Updates Detected

Flash Player 10.1.53.64 (IE) Installed Version: 10.0.22.87	2.48MB	⬇
iTunes 9.2.1 (64-bit) Installed Version: 9.1.1.11	93.18MB	⬇
Java Runtime Environment 1.6.0.21 (64-bit) Installed Version: 1.6.0.20	15.37MB	⬇
Notepad++ 5.7 Installed Version: 5.6.8.0	3.89MB	⬇
TrueCrypt 7.0 Installed Version: 6.3.1.0	3.30MB	⬇
	Total size: 118.23MB	

5 Beta Updates Detected

I've been using this program to check for updates for over a year now and have never had problems with any of the software downloads they provide. This is a solid piece of software and I highly recommend you download it.

Download FileHippo Update Checker.

Find and Remove Malware

In this section, I recommend antimalware software that I've used for over a year. I highly recommend these programs and am confident they will protect your PC and minimize system slowdowns, which are an all-too-common side effect of security software.

The two programs I recommend are Microsoft Security Essentials and ESET Smart Security. The former program is free to all owners of a genuine copy of Windows; the latter is a paid program. I recommend either of the two different programs because they will both provide the level of protection you need, not bog down your computer, and the latter is reasonably priced. You should give both programs a try if you are unsure which one to use. However, don't install both programs because the real-time scanners on both of these programs will conflict.

If you are currently using different antimalware, you may encounter problems uninstalling it. If you want to completely uninstall antimalware from your computer, you can download the uninstall program for it here. The guide lists uninstall programs for:

- Avast!
- AVG
- Bitdefender
- F-Secure
- Kaspesky
- McAffee
- Norton
- Panda Antivirus

Microsoft Security Essentials

Microsoft Security Essentials (MSE) is a free program from Microsoft that is available to all users of a genuine copy of Windows. This software is great and, in this section, I'll cover the following:

- Where to download MSE.
- How to configure MSE correctly.
- How to run a full scan with MSE.
- Advanced tips for MSE.

Where to Download MSE

You can download MSE here. If you'd like to try the latest beta, you can download the Beta here.

How to Configure MSE Correctly

This section covers the basic configuration of MSE and explains what the settings mean and, in some cases, what the optimal settings are.

To get started, open MSE by double clicking on the MSE icon in the system tray.

Under the *Update* tab, click *Update* (if available.) MSE will now get the latest virus definitions so you are up to date with your protection:

Once downloaded, you should see the following message on the *Home* tab:

Virus & spyware definitions status - Up to date

Now click the Settings tab and click *Scheduled scan*. You should run a scheduled scan by *selecting Run a scheduled scan on my computer* and picking a time when your computer is turned on but you are not using it. I have my scan run on my desktop at 2AM every Sunday. I also recommend you run a *Full scan* on this schedule.

Also, be sure to check *Check for the latest spyware definitions before running a scheduled scan* and *check Start the scheduled scan only when my computer is on but not in use*. The first of the two options will make sure you have the latest definitions and the second option will ensure that if you happen to be on your PC during the scheduled time, MSE won't start the scan (as you will probably notice slowdowns during the scan.)
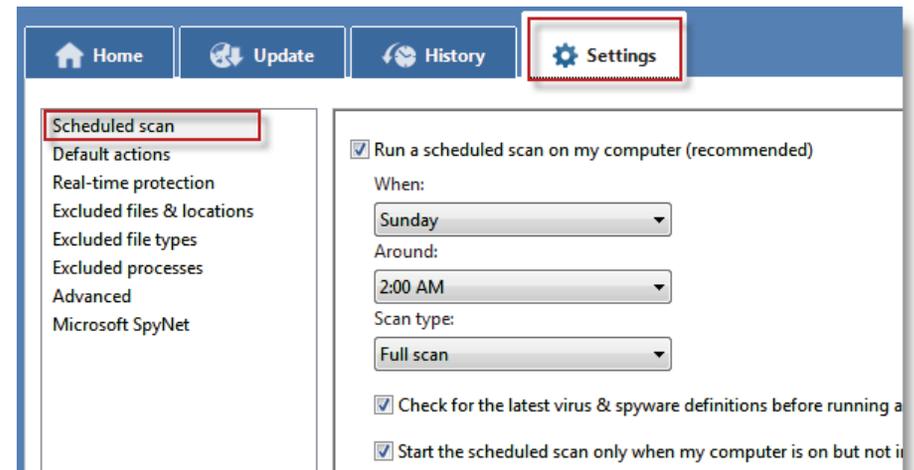
Now click *Default actions*. I choose *Recommended action* for all four alert levels. If you'd like to learn more about actions and alert levels, go here.
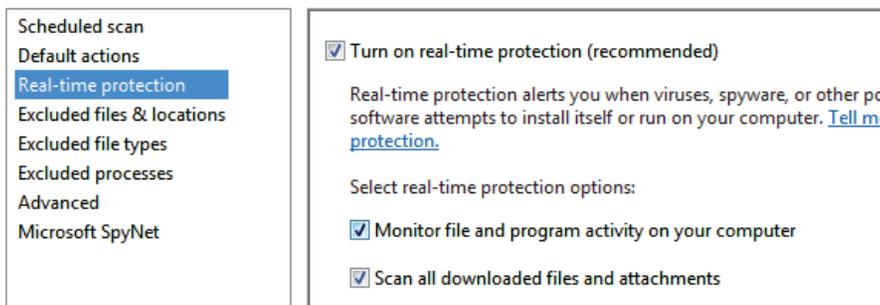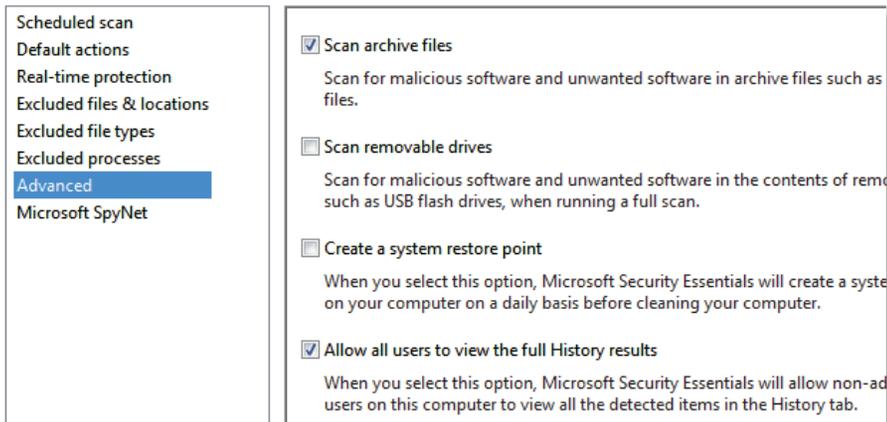

Click *Real-time protection*. I highly recommend you use real-time protection, which monitors files as they appear on your PC (i.e. internet downloads, thumb drives etc.) Learn more about real-time protection here.

Click *Excluded files & locations*. Here you can specify files, folders, or drives where MSE should not scan. Possible exclusions could include:

- Network drives monitored by other PC's virus checking utilities.
- Files, folders, and drives that are read-only (thus, they don't change and should not pose a threat.)
- Folders you are absolutely sure are safe and are not modified.

Personally, I recommend you leave this screen blank unless you have a good reason not to.

The same goes for *Excluded processes*. If you know processes that should be excluded, you probably don't need to read this part of the guide (and you can definitely teach me a thing or two!)

Click the *Advanced* tab. I recommend you check *Scan archive files* i.e. zip files as they are some of the most common files to contain viruses (in the files that are stored in the archive.) The next three options are up to you and you can see my configuration below. I disable reading of USB thumb drives on my computer so I don't need to scan them but you may want to check this one.

Finally, click *Microsoft SpyNet*. Here, I opt for the *Basic membership*, which sends non-identifying information to Microsoft to help them improve MSE's effectiveness in virus detection and removal. The advanced membership sends more detailed information to Microsoft about the virus and how it operates on your machine. It's up to you which membership you use, but I chose Basic.
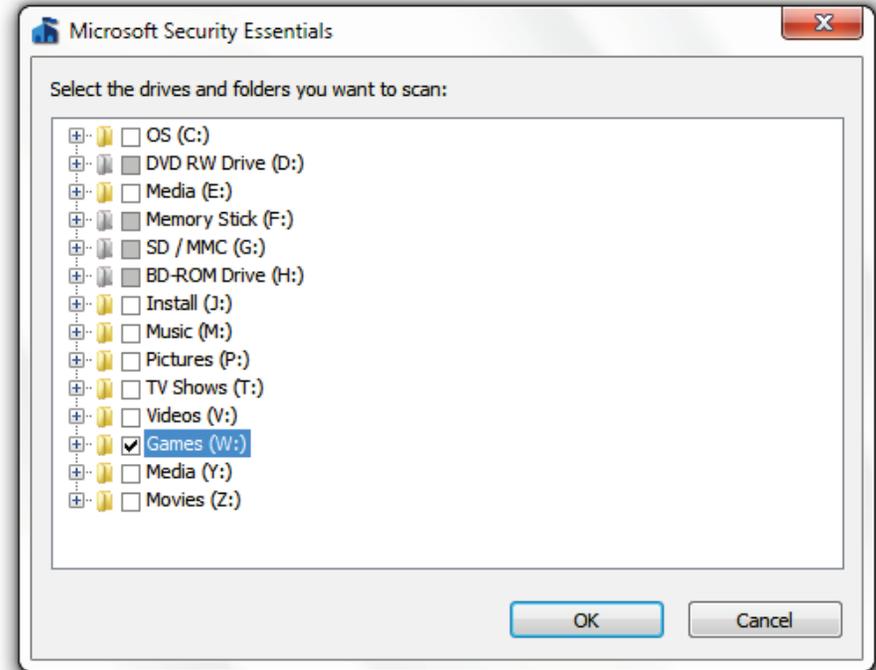
How to Run a Full Scan with MSE

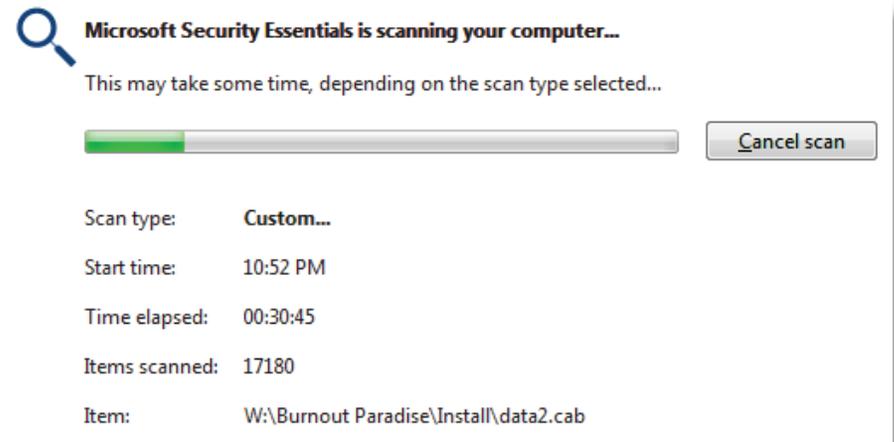Now you've taken time to set up MSE, why not run a scan to make sure there is no malicious software on your PC?

Click the *Home* tab, under *Scan options* select *Custom…* and click *Scan Now*.
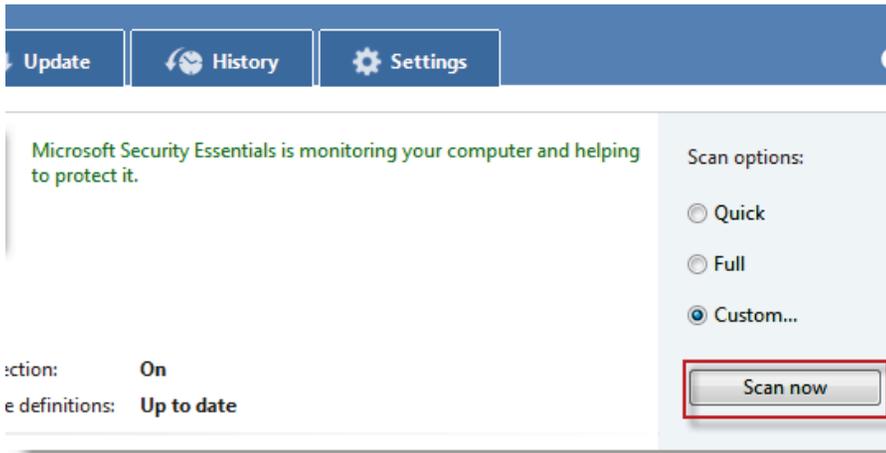
Chose the drives or folders you'd like to scan and click OK.

Take a break (or a nap if you have large hard drives) and let MSE do its job:

Advanced Tips for MSE

If you'd like to learn some advanced tips for MSE, you can view them in the [complete guide to protecting your PC with Microsoft Security Essentials](#).

ESET Smart Security

I love [ESET Smart Security](#) and have been using it for over two years. If you ask anyone who is computer "savvy", they'll know about (and may already use) ESET.

I know some people live by the motto "you get what you pay for" so, if you don't want to put your trust in Microsoft's free software, then you will get great value from ESET Smart Security.

I've reviewed ESET in more detail [here](#). For sake of brevity, I'll explain the best details in this handbook.

When you first start the program, you will be presented with the simple menu. You can enable the advanced menu by clicking at the bottom of the main menu. The interface for this program is simple and intuitive with a clean dashboard that shows you the most recent statistics from the program. From the main menu, you can see the status of the different modules of ESET Smart Security. If you are going to use this program, I highly recommend running all the modules together. This way, you do not need a separate firewall, anti-spam, or anti-spyware program running in the background.

Note: the screenshots I will show you are from the business edition; however, I will only cover features available in the home edition.

System Scanning

The system scanning is both quick and efficient and in, in my opinion, quicker than any other virus program I've ever used. You are shown a simple interface while the system scans your files, which is an improvement over many programs which show an elaborate display when checking your computer.

Scheduled Protection

I always like my computer to run a schedule so that tasks are taken care of without my intervention. Virus scanning is no exception to this rule and ESET comes with a built in scheduler so you don't have to worry about setting up a schedule tasks via Windows control panel.

Harm Prevention

Protection against viruses is great but prevention is even better and ESET constantly update their virus definitions to ensure that the even the newest viruses are well protected against. Virus updates do not consume unnecessary system resources and do not fail–other antivirus programs I have used have issues with updating and sometimes need a manual fix.

You can even submit the file to ESET for further analysis. This will help you identify if the file is malicious and also help ESET protect other users who may have the same file on their machine.

Harm Protection

Most viruses should not find their way on to your system, because of real-time protection, and should be caught immediately. However, if a virus is detected during a scan, it will also be quarantined where you can review it and delete it if necessary.
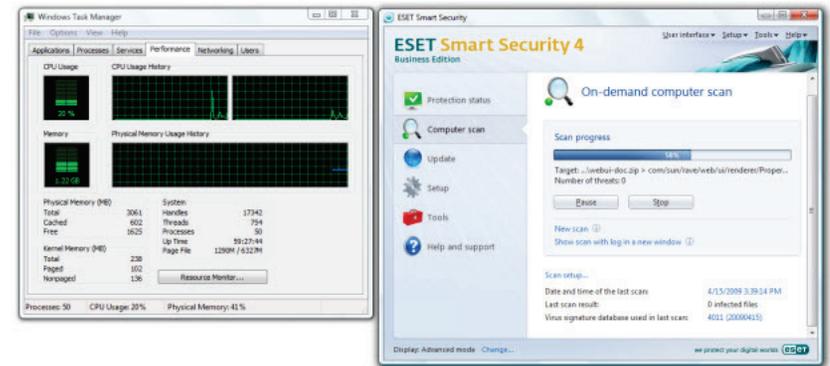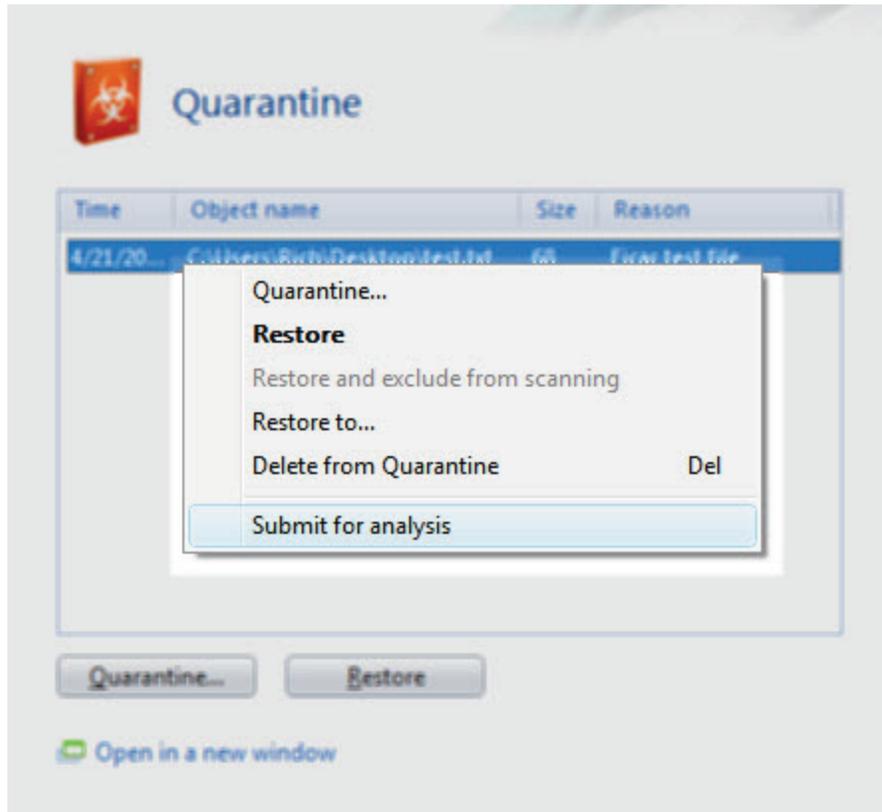
As you can see from the enlarged screenshot, even with a full system scan running, system resources are at 22% on a 2 GHz dual core processor (T7250.) RAM usage is also very low but this is not usually a problem with most virus scanners.

Real-time Status

The final aspect of ESET I want to cover is the virus radar. While this may not be useful to you, it's nice to see that ESET are monitoring current threats and sharing them with you so you can keep an eye out for any suspicious activity on your PC.

Resource Usage

Virus checkers are a notoriously bloated and slow your system down to a halt when I running a scan. Many people who use ESET hold it high because it uses such low system resources. I've never completely tested this rely on the fact my computer still runs just fine when the scans are running. For this review, I decided to run a deep system scan and monitor system resources. The results of this experiment are shown below (click to enlarge):
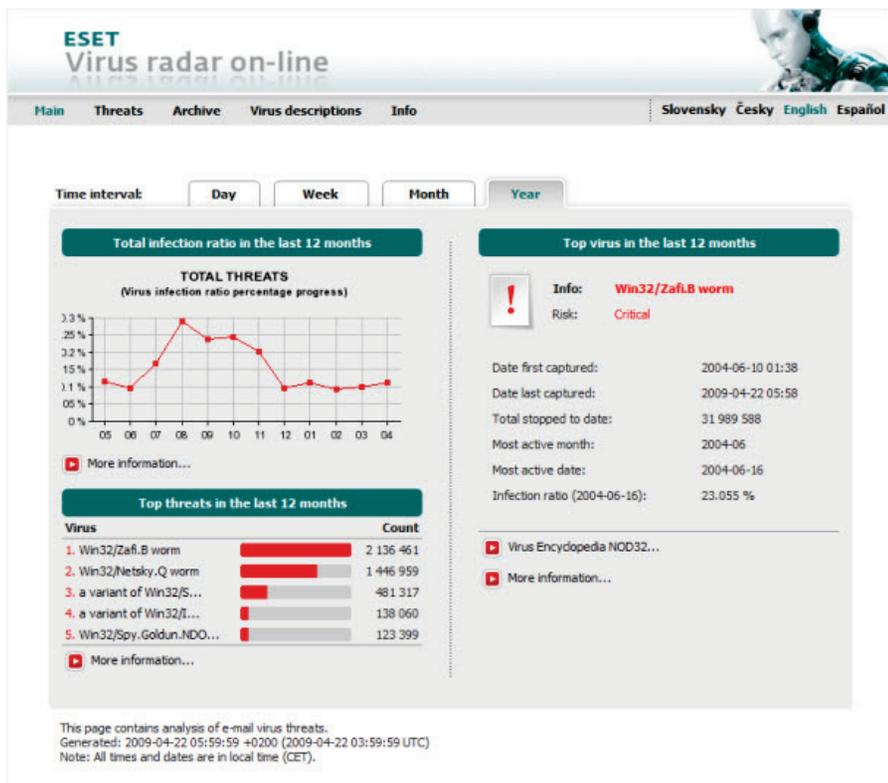
ESET Smart Security 4.0 is an excellent program and I recommend it to everyone. You can download a 30 day trial from ESET's website here. You can also buy it with a 25% discount here.

Read a full review here.

Uninstall Unnecessary Programs

Many of us have programs on our PC that we'll never use i.e. a free trial of QuickBooks, Microsoft Money, or Microsoft Works etc. These programs can be safely uninstalled; thus, freeing up disk space and removing clutter from your PC's file system. If you are unsure about a whether you need a program, I recommend you do not remove it from your PC. You should ask about such programs at Windows Forums.

Three Ways to Remove Programs

I present three solutions to uninstall programs from your computer. You may use any of these methods to remove unwanted programs:

- Use Windows' add/remove programs (easiest.)
- Use the PC Decrapifier (quickest.)
- Use Revo Uninstaller (best.)

Using only one of these methods is sufficient.

Use Windows' Add/Remove Programs

The easiest way to remove programs is to use Windows' Add/Remove programs. While this method is the easiest, it is not the best because programs, even after removal, leave junk on your hard drive. I recommend Revo Uninstaller if you want to completely remove a program. To remove a program:

1. Click *Start > Run* (or use Winkey+R.)
2. Type *appwiz.cpl* and press **Enter.**
3. Click the program you want to remove.
4. Click Uninstall and follow the on-screen prompts.

Use the PC Decrapifier

If you have a newer PC, there may be a lot of trial software, coined "bloatware". The PC Decrapifier is designed to remove a specific list of unwanted software in an unattended fashion.
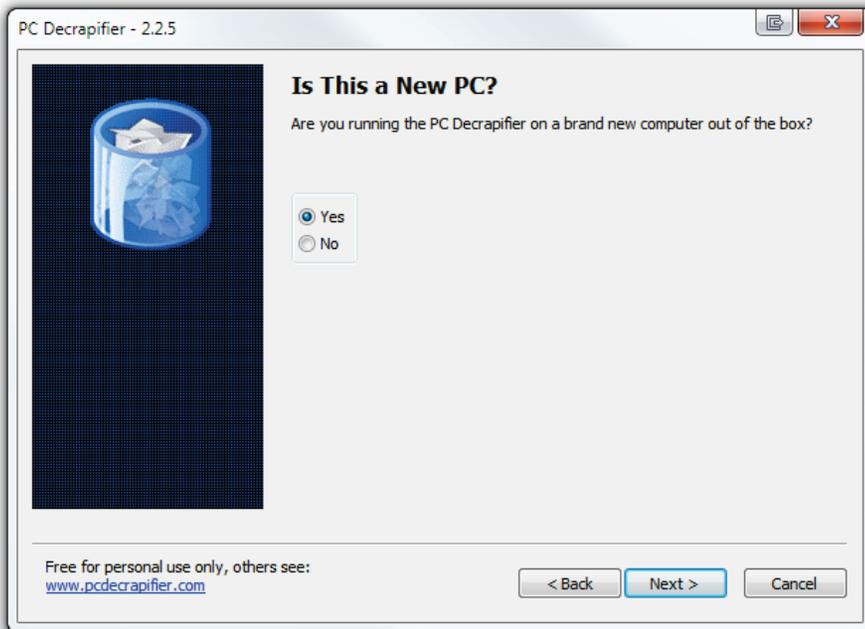
The PC does not need to be new; however, the older the PC is, the less likely it will have any of the software it can detect.

Simply download PC Decrapifier, and run the EXE. There is no installation necessary. Your anti-virus software may complain about this program; however, these warnings can be safely ignored.
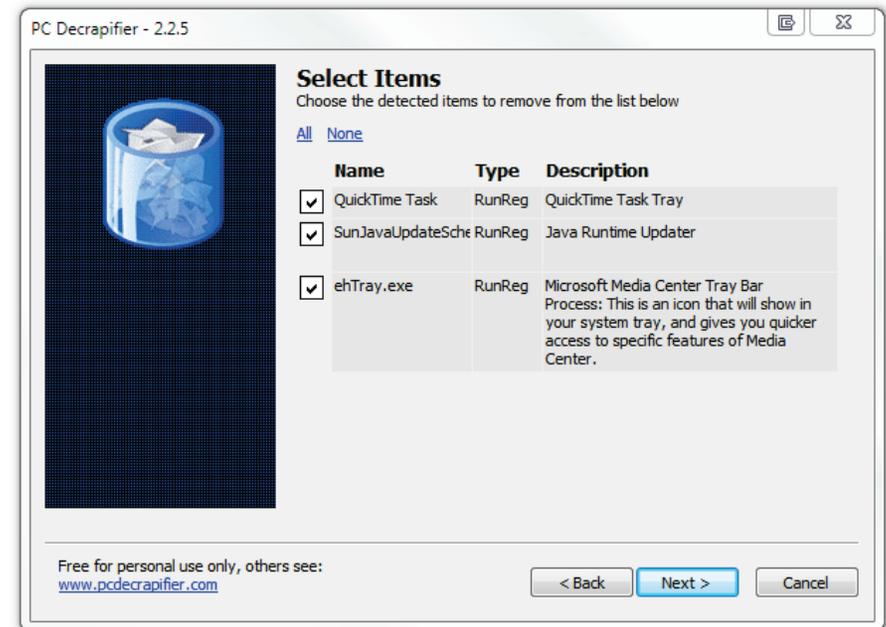
When it runs, you will be presented with a wizard-style dialog box that steps you through the entire process. If you're using a new PC, be sure to select *Yes* when asked:
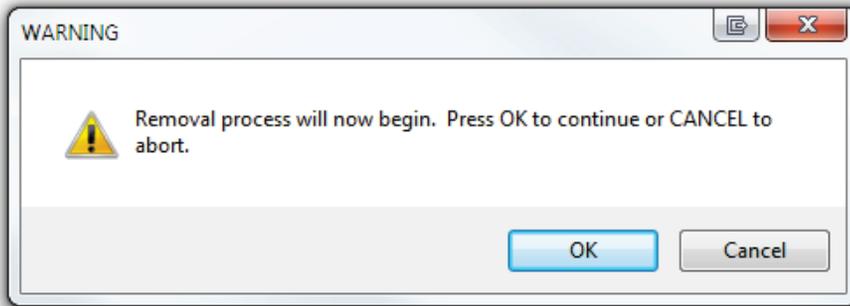

I strongly recommend you create a restore point:
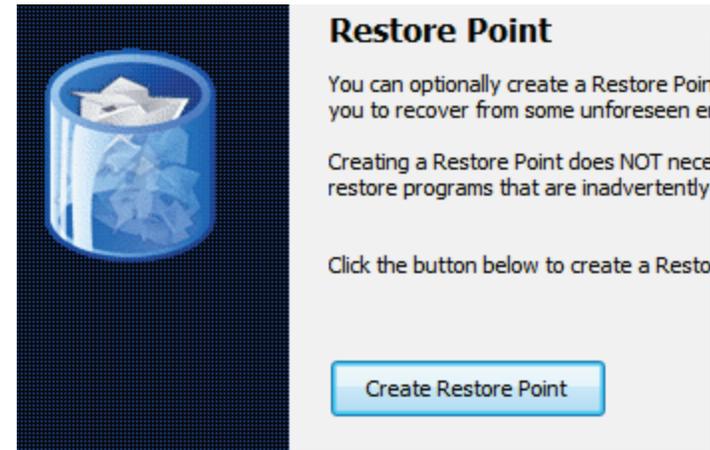
You will be able to pick and choose what programs you want to remove:

The program will not remove anything, without prompting you first:

Click the *Next* button and it will begin cleaning your PC:
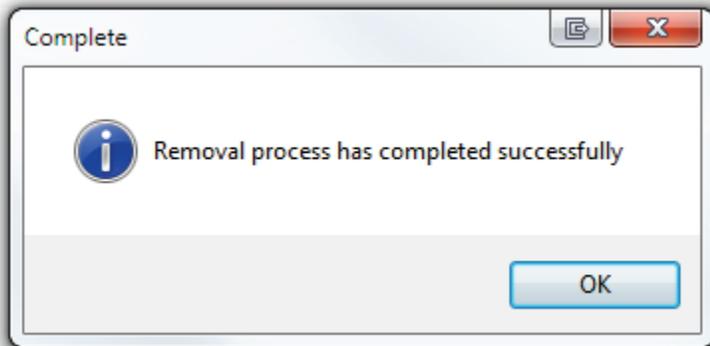
If it does not find anything, a pop-up box will notify you of this and the program will exit and not modify your PC.

Use Revo Uninstaller

The final and most thorough method, of software removal is to use Revo Uninstaller. Revo Uninstaller is primarily designed to ensure programs are properly removed from your computer.
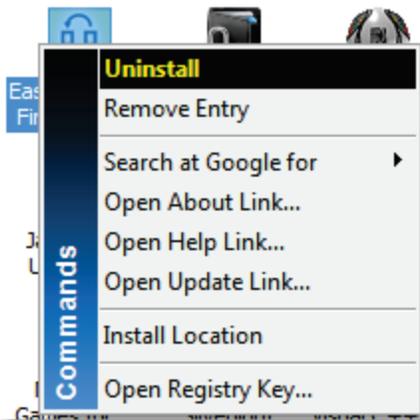
Revo is freeware and is available to all those who want to ensure their computer is clean and working at its best.

Download Revo Uninstaller.

Installing Revo is a simple as any other program. Once you've installed and started Revo, you are presented with a list of currently installed programs:
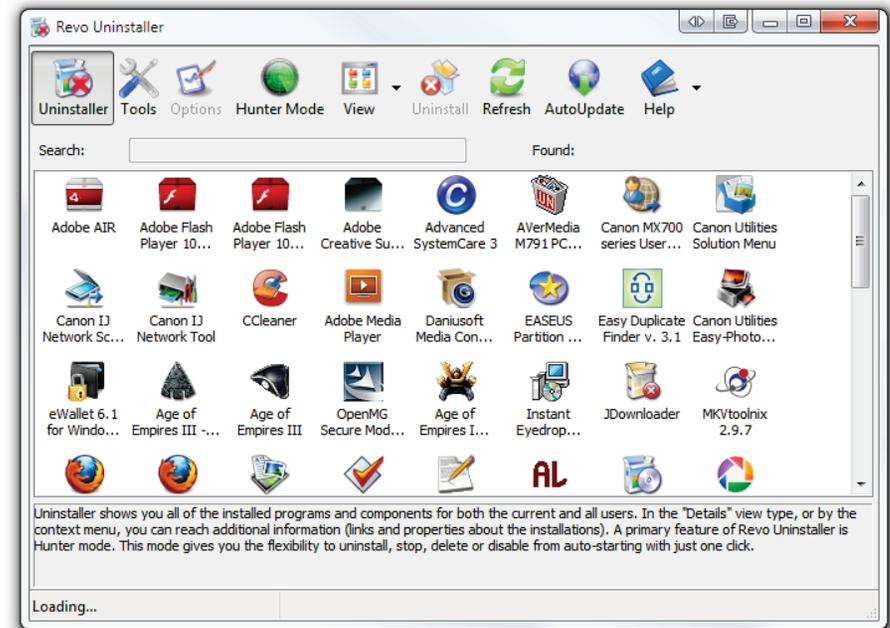
From there, you can right click on a program and select uninstall:

You can also look the program up on Google if you are not sure where it came from or if you just need more information before making the decision to uninstall it.

Revo also comes with other features, such as Hunter, which allows you to simply click on a running program and uninstall it. This is really useful if you find a program running, but have no idea how to get rid of it. Revo integrates many Windows tools and helps you maintain your system for error-free computing.

Uninstalling Programs with Revo

Uninstalling a program with Revo is a little more complicated than through the standard Add/Remove Programs interface; this is only because Revo gives you more options. When you choose to uninstall a program, you are given four options for uninstalling your program:

1. Built-in
2. Safe
3. Moderate
4. Advanced

Moderate is generally the safe mode to go with. This mode uses the program's standard uninstaller and then scans your system for left over files.
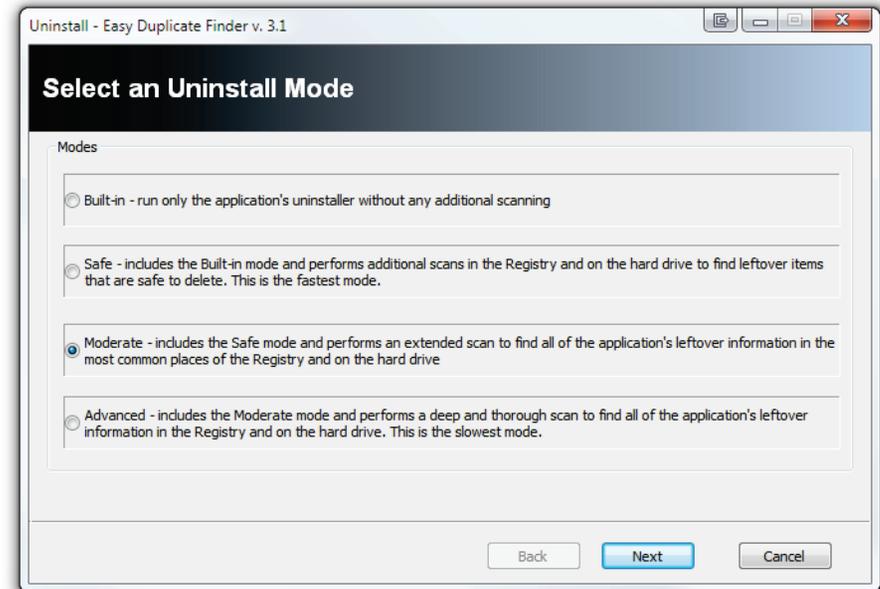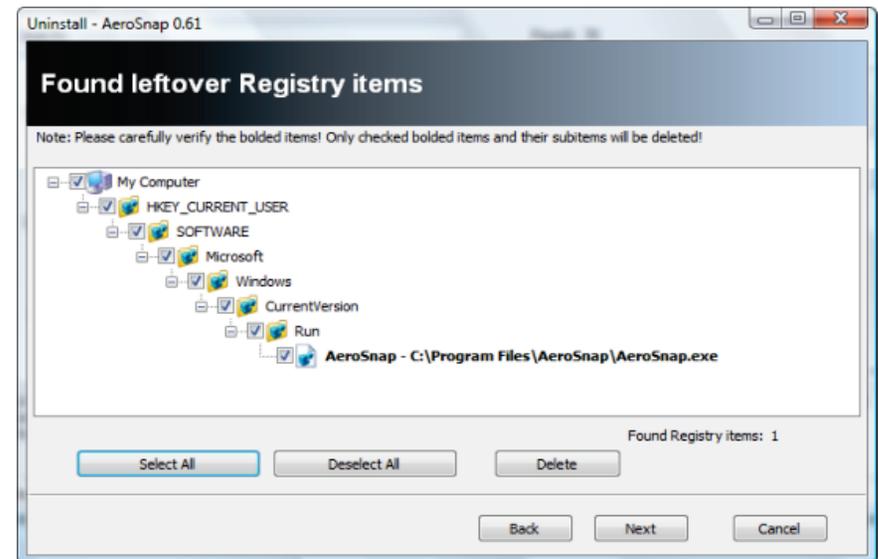

Revo then takes the first steps to uninstall your program by using the program's built in uninstaller:
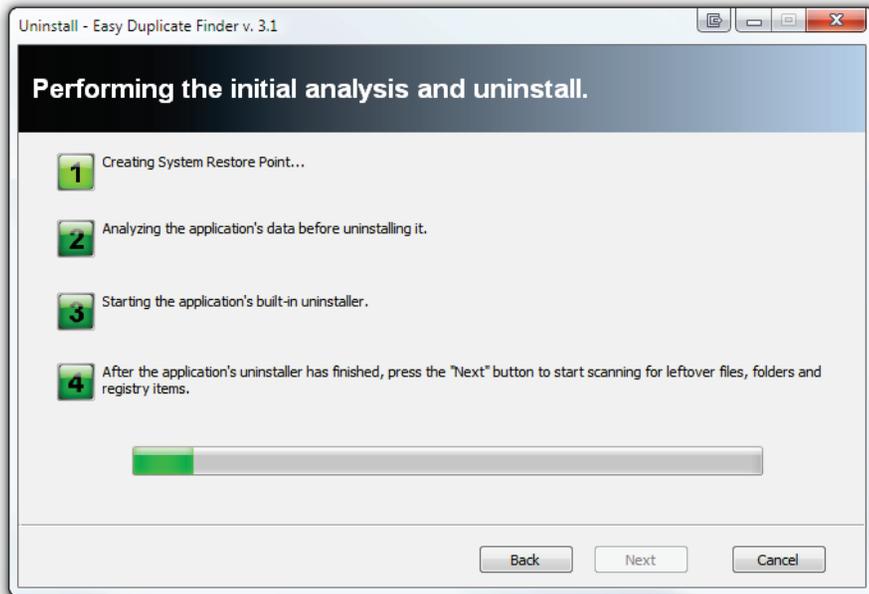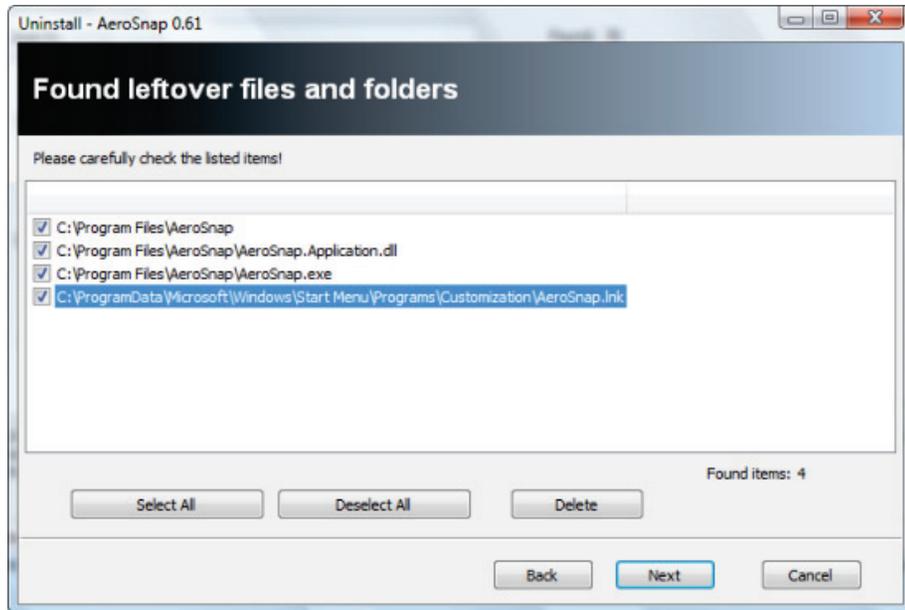
After running the program's built in uninstaller, Revo will then scan your drive for other left over traces:
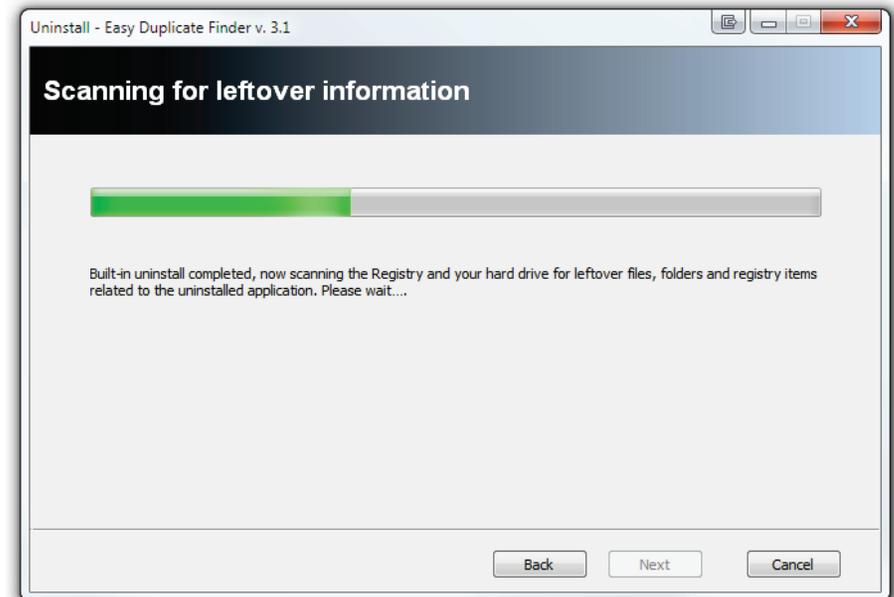
Revo will then show you everything it finds and give you the option to remove the left-over registry keys:

Finally, Revo will show you any files that are left over and give you the option to remove them from your hard drive:

Overall, Revo works really well and it's a great program, which helps you keep your computer clean from left-over clutter.

Download Revo Uninstaller.

Delete Junk/Temporary Files & Optimize Your System

Your system can quickly become filled with junk, temporary, and duplicate files. In this section, you'll learn how:

- Find and delete duplicate files.
- Delete junk and temporary files.

Find and delete duplicate files

Duplicate files can take up a lot of space on your PC. I've always used Easy Duplicate Finder to find duplicate files for me.

Just download and install the program, run it, and select the folders that you'd like to search for duplicates:
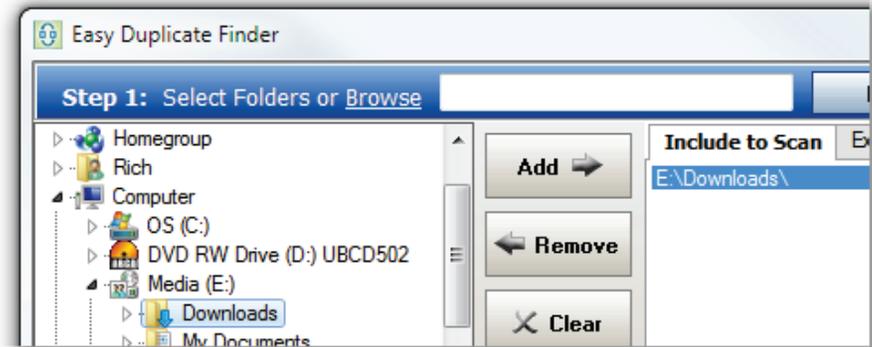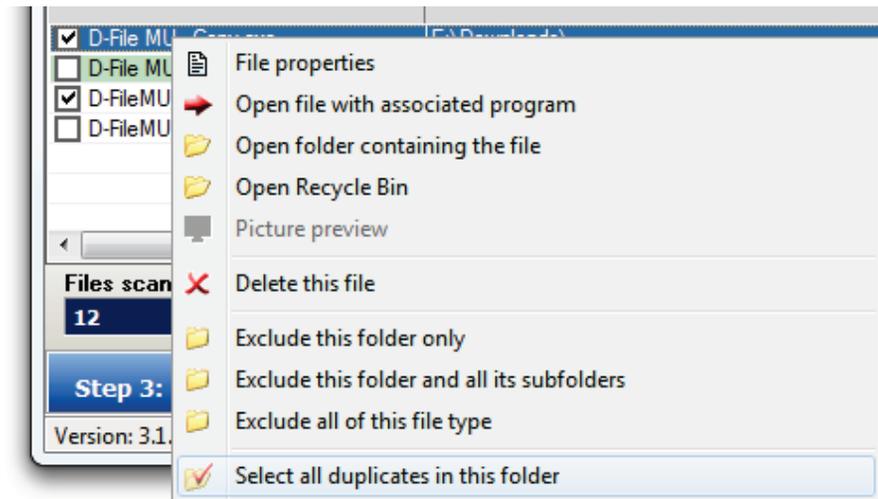

Once you've added the directories you'd like to search, click *Start*.
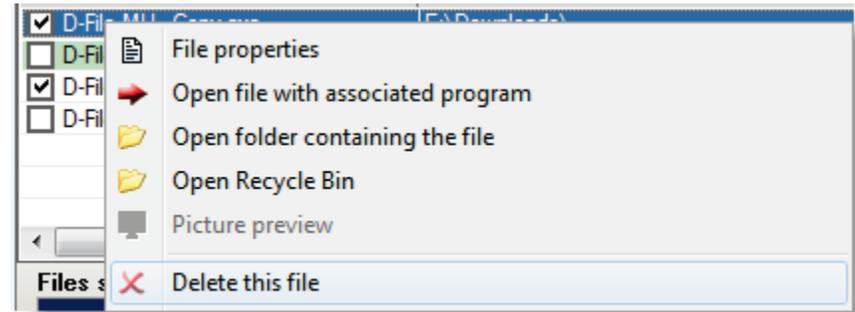

You'll be prompted to register (I just clicked the x):

Now, in the results pane, right click and click *Select all duplicates in this folder* or *Select all duplicates in the selected branch of subdirectories*.
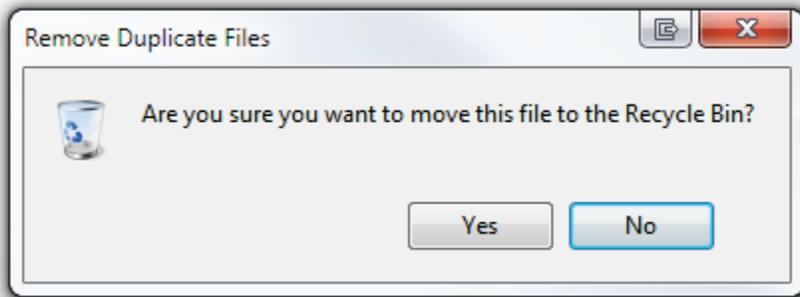

Right click again and click *Delete this file* for each duplicate (or register the product to delete all duplicates at once.)

You'll be prompted to move the file to the recycle bin or to delete it permanently:
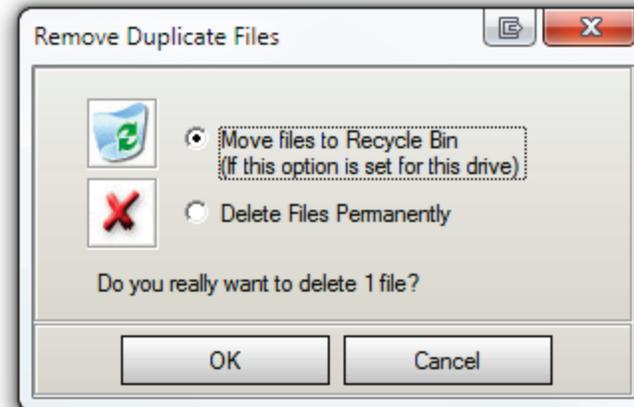
I'd choose use of the Recycle Bin to be safer:

Continue for the rest of the duplicate files:

File Name	Path
☐ ~~D-File MU - Copy.exe~~	~~E:\Downloads\~~
☐ D-File MU.exe	E:\Downloads\
☑ D-FileMU_Process - Copy.txt	E:\Downloads\
☐ D-FileMU_Process.txt	E:\Downloads\

Download Easy Duplicate Finder

Delete Junk and Temporary Files

As computers become more complex and programs rely on more and more data, your PC can fill up quickly with junk and temporary files. Knowing where to look for them (and what you can delete) can be a headache. Fortunately, there are two great tools available to help you clean your PC automatically:

- Advanced SystemCare
- CCleaner

In this section, we'll take a look at each of these programs.

Advanced SystemCare

A great program you can use to remove junk files and optimize your system is Advanced SystemCare. I use this program on every system I work with. If you want quick results and a more responsive system, this is the program for you. The interface is simple and the effects are powerful.

I use this program to help my computer and run it regularly. I love the free version so much that I had to try the Pro version. I must say "I'm not disappointed at all—this program is amazing!" Advanced SystemCare PRO is a one click program, which helps you optimize and clean your PC.

Advanced SystemCare Features

- Clean and optimize your PC with one click
- Defrag and optimize your hard drives
- Automate system clean up
- Protect your PC from spyware
- Free up RAM with one click
- Lots more!
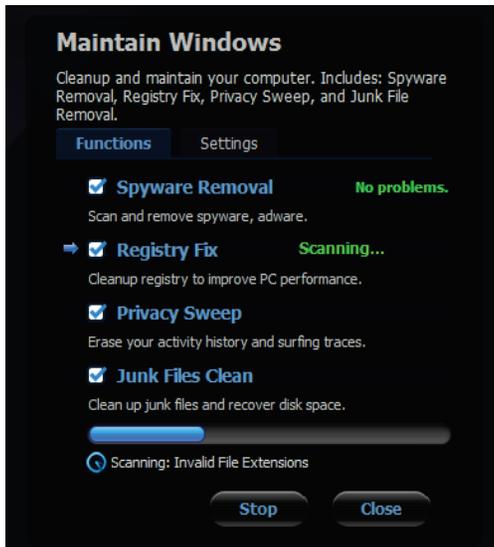
Advanced SystemCare Screenshots

From the main screen, just click *Care* and let the program take care of your computer:

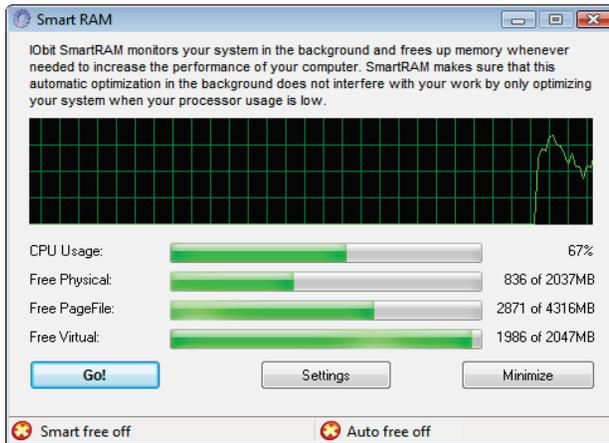Advanced SystemCare runs through your computer and protects it for you:

Problems are automatically fixed:

There are many manual tune up and security tools you can use:
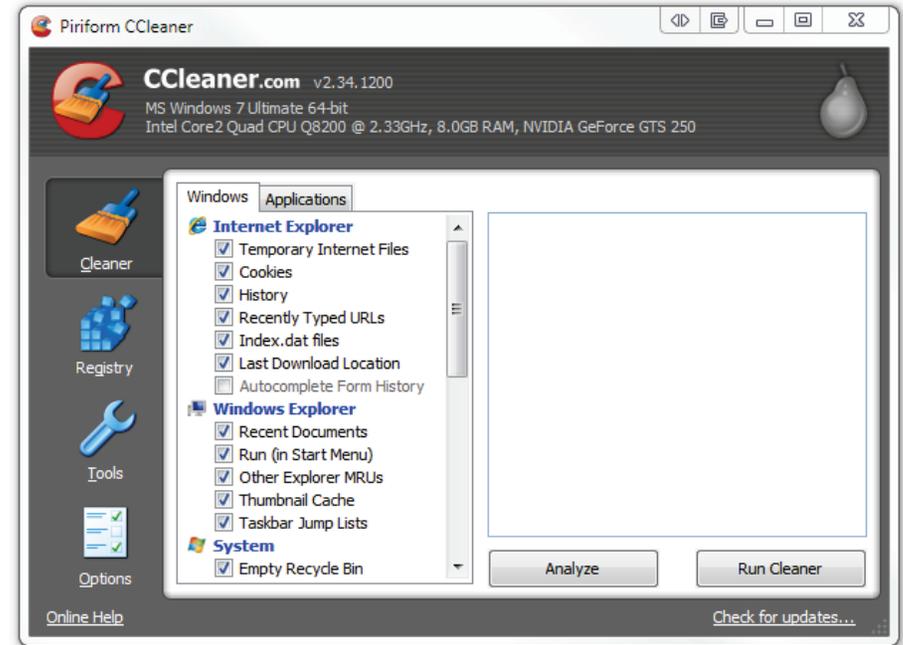

Free up RAM with one click:

I highly recommend this program; this should be installed on every system.

[Download Advanced SystemCare Free](#) (Upgrade to the [Pro version](#).)

CCleaner

Another popular program used to clean junk files is [CCleaner](#). Much like Advanced SystemCare, this program removes junk files and is designed for a slightly more advanced user.

When you open the program, click *Analyze* to see what data can be deleted (you should close open internet browsers and other programs to enable a full clean.) After the analysis is complete, click *Run Cleaner*.
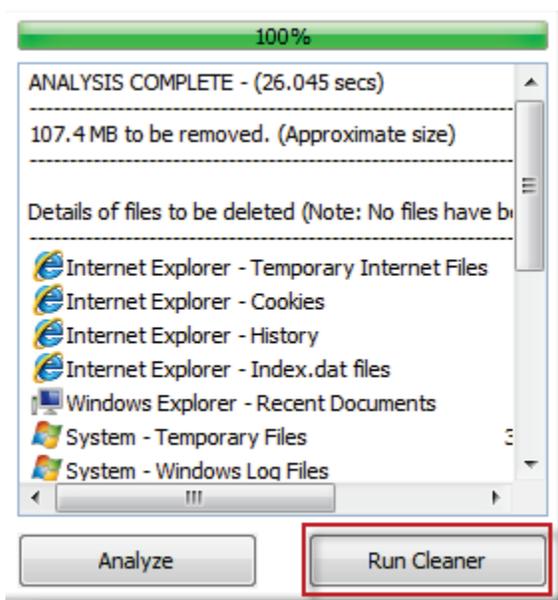
You can customize what CCleaner removes by checking the options in the *Windows* and *Applications* tab but I recommend the defaults if you are not comfortable with this.

Download CCleaner

Defragment Your Hard Drive

Defragmentation helps speed up access to data on your drive. In this section, you'll learn how to schedule defragmentation so you don't have to worry about ensuring your drive is defragmented.

Windows XP, Vista, and 7 all come with a built-in disk defragmenting tool. I'll show you how to use this and set up a schedule; however, I recommend a free program called Smart Defrag, which is explained below, because it keeps your files

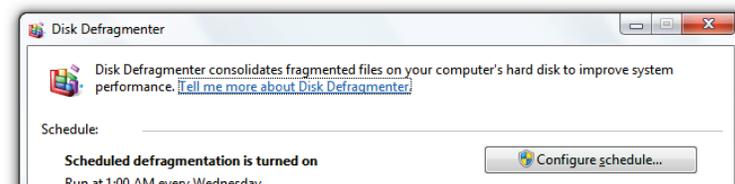defragmented more frequently and optimizes the file storage on your drive.

Use Windows' Built in Defragmentation Tool
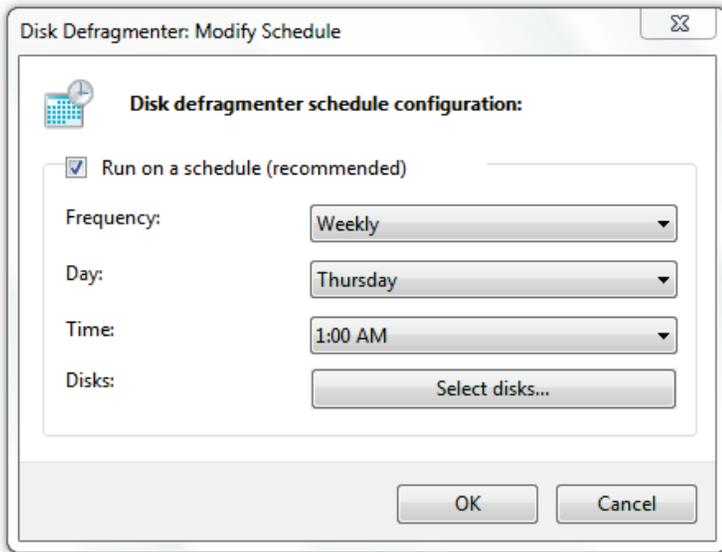
Setting up scheduled defrags is easy:

1. Click the Start button, type ***defrag***, and click *Disk Defragmenter*.

2. Click *Configure schedule*.

3. Choose a time when your computer is turned on, but you are not using it.

4. Click *OK* and *Close* to save your settings

Your disk will now be defragmented regularly.

Use Defraggler

Defraggler is one of the best free solutions to defragment your hard drive. If you'd like to use something other than Windows Disk Defragmenter, I'd recommend you use Defraggler.
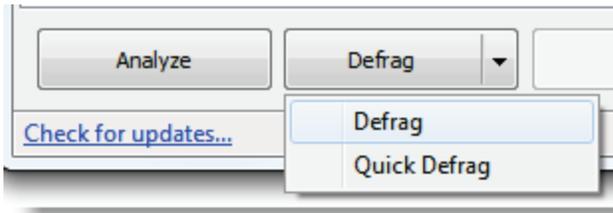
After installing Defraggler, open it, select a drive and click Analyze to determine whether or not there is a need for defragmentation:
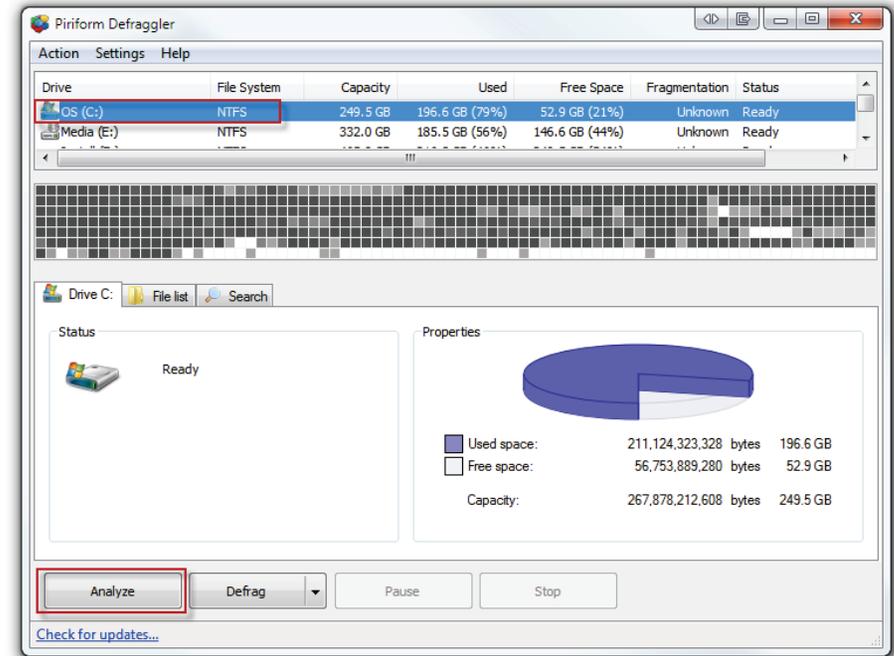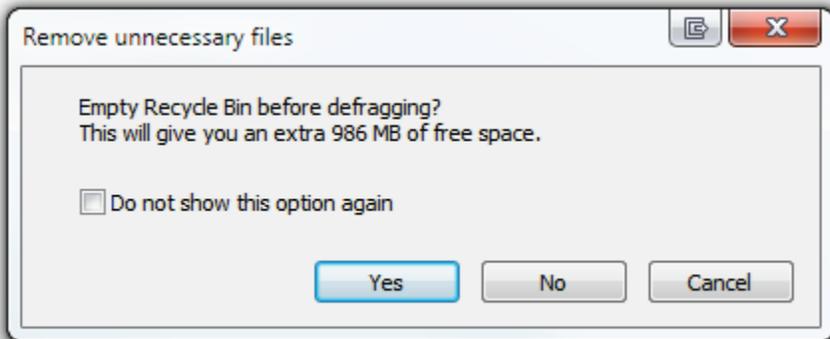
After the analysis is complete:
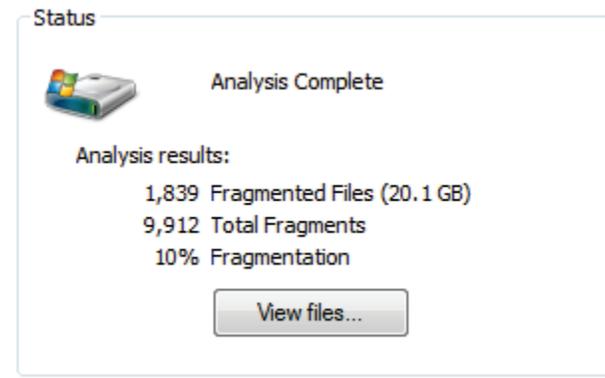
I recommend a normal defrag on a drive instead of a *Quick Defrag*:

To speed up defragmentation and avoid spending time on unnecessary files, you should empty the recycle bin (the program asks you if you want to):

What Next?

Now you've read this book, I recommend you ensure you've made changes to ensure your system is optimized. Refer to this book frequently for reminders of what to do when cleaning your PC; you will soon find PC optimization is a habit and you are familiar enough with it to help friends and family with their PCs. After you've done this, I encourage you to visit Windows Guides and learn other ways to improve your PC.

About this Handbook

This handbook is delivered free by Windows Guides.

The author, Rich Robinson, is a Microsoft MVP in the Desktop Experience category; this book is not affiliated with Microsoft. Get more books.

Download Defraggler.