

Computer Maintenance

Computer maintenance is the practice of keeping computers in a good state of repair.

Basic Routine Maintenance for Your Computer

If your computer seems to be running slower than usual, crashes unexpectedly, or is otherwise unstable, you may be in need of some basic computer maintenance such as the following:

- **Maintaining Current Anti-Virus Software**

The most important step in maintaining your computer's performance is **keeping your anti-virus software up-to-date** and frequently scanning your computer for viruses. We recommend updating your anti-virus software at least once a week to help ensure the safety of your computer.

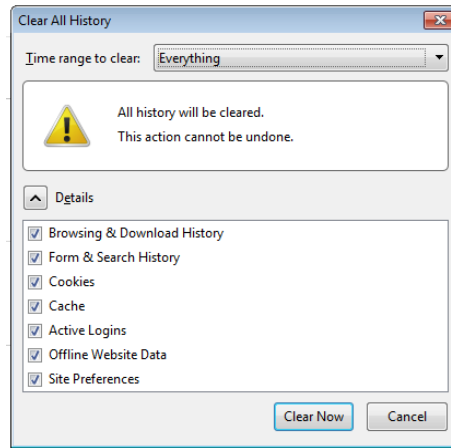
- **Installing Operating System Updates**

It is also important to install the latest **operating system updates**, as recommended by the developer of your operating system.

- **Clearing the Cache in your Internet Browser(s)**

Maintenance we suggest performing approximately once a month is to **clear the cache (memory) in your Internet browser(s)**. We recommend clearing it more often if you are a frequent Internet user. This reduces the amount of hard disk space your cookies and temporary Internet files use. Follow these steps to clear the cache in your browser(s).

1. Open your browser (Internet Explorer, Mozilla Firefox, Google Chrome, etc...).
2. Press **Ctrl+Shift+Delete**. This will open the cache settings window for your browser.
3. Carefully review the options presented and select the settings you wish to clear.
4. After clearing the cache, close all browser windows to ensure that the changes take effect.
5. Repeat these steps for other browsers as needed.



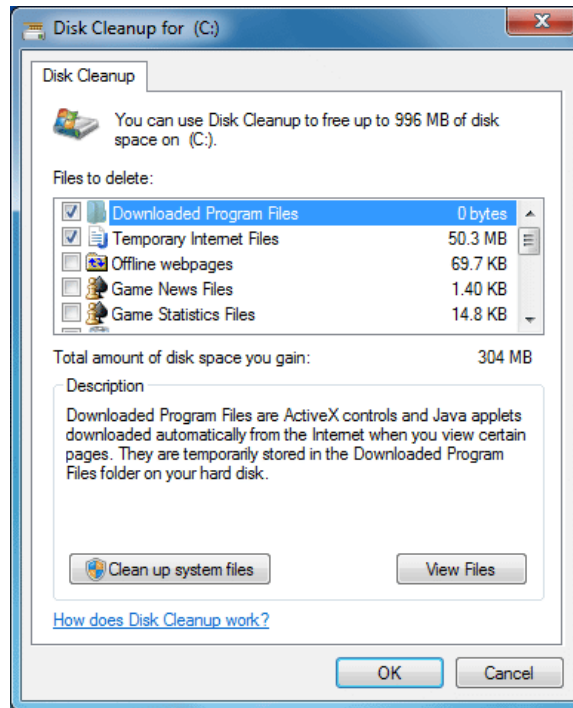
- **Running Disk Cleanup (in Windows systems)**

Windows includes a **Disk Cleanup** program in the Control Panel. It scans your computer for temporary files and other files that can be deleted. You can then delete the files to free up space on your hard drive. **Disk Cleanup** removes selected unnecessary files on your hard drive, freeing up space.

Unwanted files can eventually fill up your **hard drive**, which will make your computer slower and more difficult to use.

If you are unsure of which files to select on the Disk Cleanup list, read the description carefully and then choose whether to have Disk Cleanup delete them from your computer. If you are in doubt after reading the description, do not delete them.

click on **Start** (or the Windows button), and go to **My Computer** (or Computer). Right-click on the **Local Disk (C:)** and choose **Properties**. The **Disk Cleanup** option is displayed (under the **General** tab).

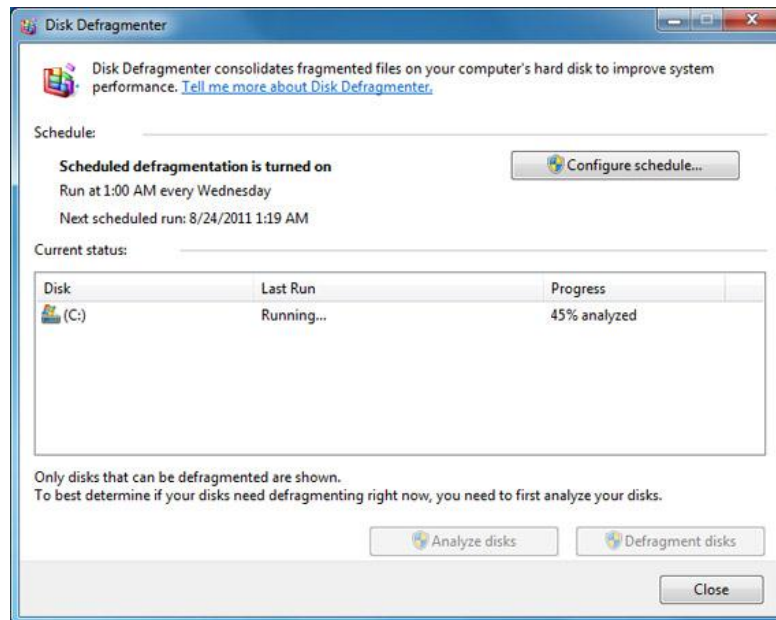


- **Running Disk Defragmenter (Windows systems)**

Windows includes a **Disk Defragmenter** *program in the Control Panel. It scans the files on your hard drive and rearranges them so it can read them faster. Disk Defragmenter reorganizes the files on your hard drive and helps it run more efficiently. If your computer is running slowly, running Disk Defragmenter can help to speed it up.*

Please be aware that this process can take several hours, and you should not interrupt it while it is running.

click on **Start** (or the Windows button), and go to **My Computer** (or Computer). Right-click on the **Local Disk (C:)** and choose **Properties**. Click on the **Tools** tab to locate the **Defragmenter**.



To keep your computer running smoothly, it's important to keep files and folders **uncluttered**. Cluttered or unorganized folders make it more difficult to find the files you need.

- **Backup**

Important data stored on computers may be copied and archived securely so that, in the event of failure, the data and systems may be reconstructed. In Information Technology, a **backup**, is the process of copying and archiving of computer data so it may be used to *restore* the original after a data loss event, or the event of failure, so that the data and systems can be reconstructed.

Backups have two distinct purposes:

- The **primary purpose** is to recover data after its loss, be it by data deletion or corruption.
- The **secondary purpose** of backups is to recover data from an earlier time.

Not all backup systems or backup applications are able to reconstitute a computer system or other complex configurations such as a *computer cluster*, *active directory servers*, or a *database server*, by restoring only data from a backup.

Since a backup system contains at least one copy of all data, the data storage requirements can be significant of organizing this storage space and managing the backup process. Nowadays, there are many different types of data storage devices that are useful for making backups.

Before data are sent to their storage locations, they are selected, extracted, and manipulated. Many different techniques have been developed to optimize the backup procedure. These include optimizations for dealing with open files and live compression, encryption, and de-duplication, among others.

- **Registry**

Operating systems files such as the Windows registry may require maintenance. The Windows Registry is an essential *system file that houses a massive collection of details about your computer, which helper programs (known as DLLs) are shared among your various applications, listings of all your Start-menu shortcuts, and pointers to the programs that fire up when you click on an icon*. Practically *everything you do in Windows is recorded somewhere in the Registry*.

- **Security**

Software packages and operating systems may require regular updates to correct software bugs and address security weaknesses. An automated program such as Windows update may be used for this.

System Maintenance troubleshooter

Troubleshooting in Control Panel contains several troubleshooting programs that can automatically fix some common problems with your computer, such as problems with networking, hardware and devices, using the web, and program compatibility.

Although troubleshooters aren't designed to fix every problem, they are a useful thing to try first, as they can often save you time and effort.

To perform common maintenance tasks in Windows, such as cleaning up unused files and shortcuts, try using the System Maintenance troubleshooter to automatically find and fix problems. For example, the System Maintenance troubleshooter looks for unused files and shortcuts you can clean up or remove so that your computer can run faster.

Windows Error Reporting

You can use Windows Error Reporting *to help solve computer problems* by report computer problems to Microsoft. Microsoft uses the problem reports to try to match descriptions of each problem to a solution. When a solution is available for a problem reported by your computer, it will appear in Action Center. In addition, you'll see a message in the notification area, or if you hover over the Action Center icon. If a solution is not available yet, the information that you send in a problem report can help Microsoft find or create a new solution.

