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Troubleshooting Checklist

This document covers maintenance and troubleshooting your PC or Laptop. This document covers PC's running Windows XP SP2.

The author of this document cannot be held liable for any problems resulting from PC or operating system maintenance items discussed in this document. It is important to consult your technical support department before performing any PC or operating system maintenance tasks.

Index of Topics

Maintenance

General PC Maintenance Checklist	2
General Operating System Task List	3
Scan Disk	4 - 5
Defragment Hard Drive	6
Norton Anti-Virus	7 - 11
Windows Update	12 - 13
Extras	14
Disk Cleanup	14
Delete Browser Cache and Cookies	15

Troubleshooting

Minor PC Issues	16
Computer Won't Start	16
OS doesn't load properly	16
Minor Browser Issues	17
Connecting to the Internet	17
Security and Cookies	17
Proxy Server	17
Removing Software	17
Hardware Drivers	17
Spyware Issues	18
New Microsoft Spyware needs IE 6.0	18
Freeware	18

Maintenance

The following maintenance section contains check lists, tasks, and pictures to help you with your PC maintenance. It is important to consult your technical support department, before performing any PC or operating system maintenance tasks.

General PC/Laptop Maintenance Checklist

Use this checklist as a maintenance document for maintaining the life of your PC or Laptop. If you have any questions or if you have questions with any of the tasks, contact your technical support department.

___ 1. Make sure your PC is cleaned semi-annually by a member of the technical support staff. Please call your technical support department to schedule this task.

___ 2. Make sure your PC or laptop is elevated off of the floor on to a desktop, tabletop, or at least 3 feet off the ground. So that dust is less likely to be blown into your machine.

___ 3. Make sure your machine is in a cool and dust-free location and away from heavy traffic.

___ 4. Make sure your machine is placed on a flat surface and in the upright position as the manufacturer suggests.

___ 5. Make sure you are not blocking any of the fans in your machine. Do not place the machine directly against any walls. Place your machine in such a way that you give the machine enough room around it to stay cool.

___ 7. Check to see if the cooling fan in the back and/or front of the machine is running. If you hear an unusual noise or if the fan does not seem to be running properly please notify your technical support department.

___ 8. Check to make sure you are plugging your machine into an UPS battery or a power strip that handles a high power of voltage.

General Operating System Task List

Use the following task list to ensure you are performing the proper maintenance task for your Windows XP SP2

Run the Following tasks as noted in each item:

Task	Frequency	Covers	Page
Scan Disk	Every Other Week to Once a Month	Fixing Errors on Hard Drive	4-5
Defragment Hard Drive	Weekly	Optimizes Hard Drive	6
Norton Anti-Virus Update	Weekly	Get Latest Virus Definitions	7-9
Norton Anti-Virus Scan	Every Other Week to Once a Month	Checks for Virus on Machine	10-11
Windows Update	Every Other Week to Once a Month	Get Latest Windows Service Updates	12-13
Extras			
Disk Cleanup	Semi Annually if needed.	Cleans Temporary Files	14
Delete Browser Cache and Cookies	Weekly	Clears Cache or Web site visited items like GIFs and CSS files.	15

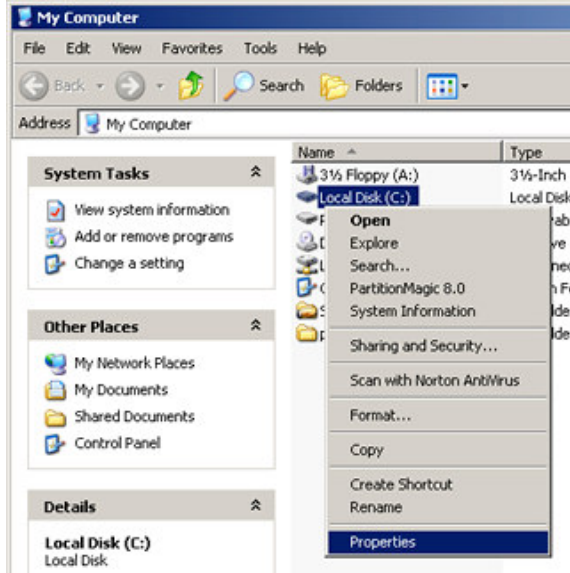
Scan Disk

Use the following steps to perform a scan disk on your machine.

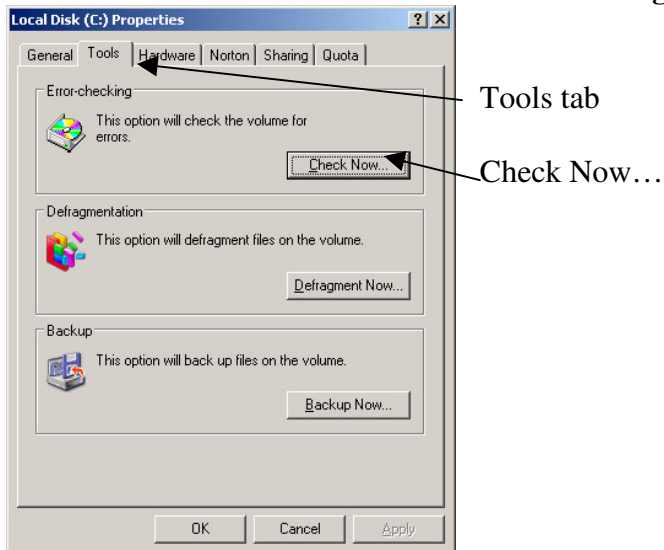
Runtime: This step can take up to an hour or longer to complete depending on the size and use of your hard drive(s).

Scan Disk Steps

1. **Open My Computer, right click on the C Drive and select properties.**

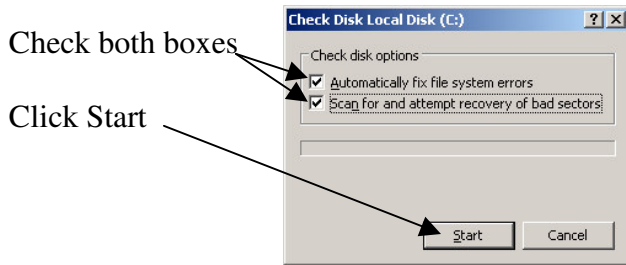


2. **Select the “Tools” tab.**
3. **Select “Check Now...” in the Error-checking section.**



4. A new window will popup, “Check Disk Local Disk”.

5. Select both check boxes for “Automatically fix...” and “Scan for and attempt...”
Click the Start button. You may be prompted to restart the computer.



6. Continue these steps for each hard drive on your machine before restarting the machine.

Defragment Hard Drive

Fragmentation occurs over time as files and applications are added, removed, and modified on your hard drive. When this happens, the system on the hard drive becomes less consolidated and unorganized causing the hard drive to be less efficient in accessing data.

Runtime: This step can take up to a half-hour to an hour to complete depending on the size and fragmentation of your hard drive(s).

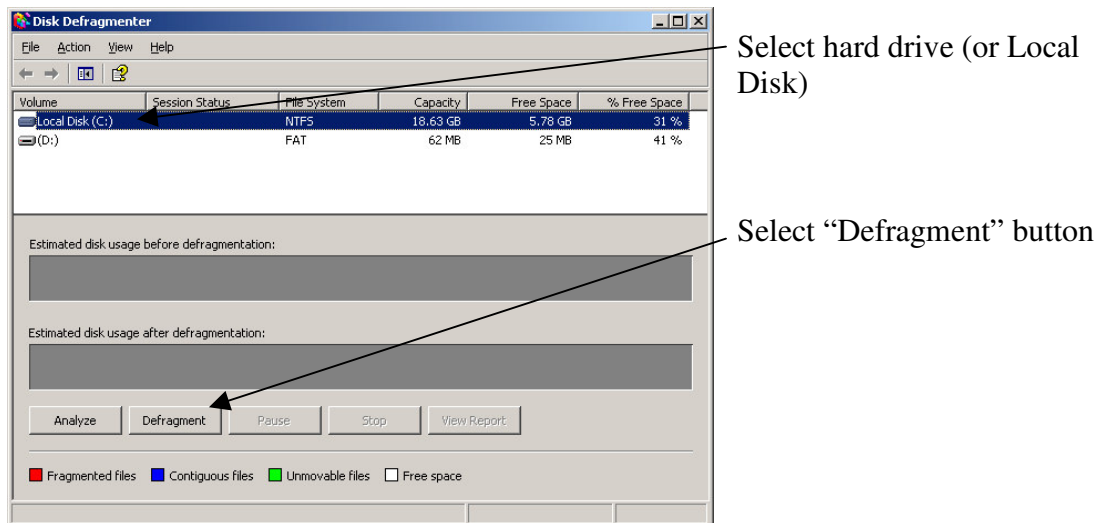
Symptoms Include:

- Reduced performance
- Random program or OS errors
- Lockups
- Crashes
- Loss of data

Use the following steps to perform a defragment of your machine's hard drive.

Defragment Steps

1. **Click on the Start button** usually located in the lower left-hand corner of the screen. The start menu should be displayed. From here **go to Programs>Accessories>System Tools>Disk Defragmenter**.
2. **Click on “Disk Defragmenter”**.
3. A menu should appear, **select the hard drive (or Local Disk) to defrag and click on the “Defragment” button**.



4. Continue to defragment additional Local Disks if present. **When done close the program.**

Norton Anti-Virus Update

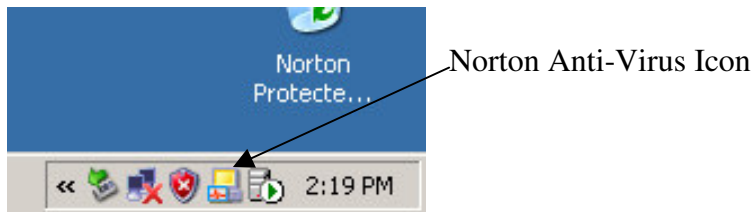
Running the Norton Update will provide your machine with the latest and greatest updates to new viruses. Running this task often is recommended.

Runtime: This process can take about 10 minutes to run depending on your Internet Connection. This process will require an Internet connection.

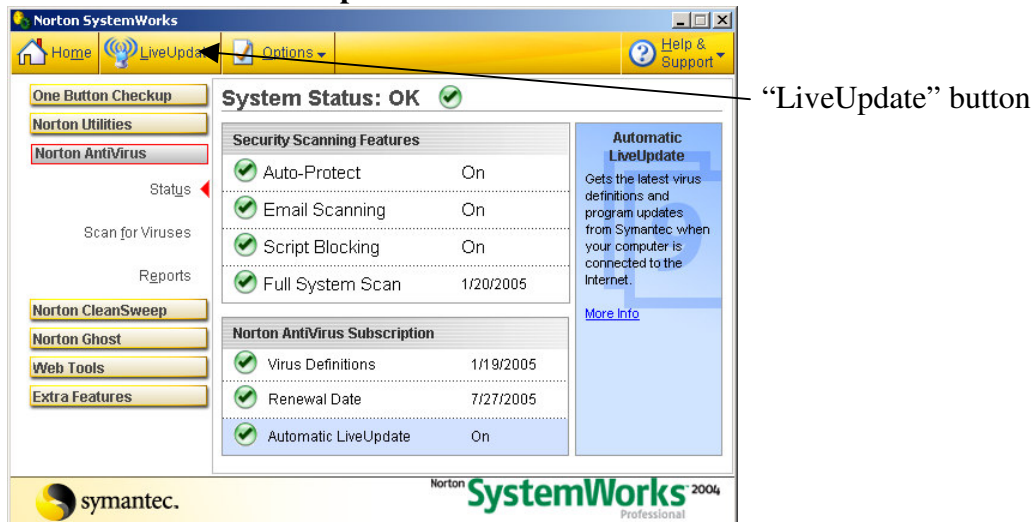
Steps to Run Norton Anti-Virus Update

1. First, **locate where your Norton Anti-Virus icon is running.** Usually it's an icon like the one below or a golden shield (depending on what version you're using). You can also figure out which one it is by hovering the mouse over the icon. Also **make sure you're connected to the Internet.**

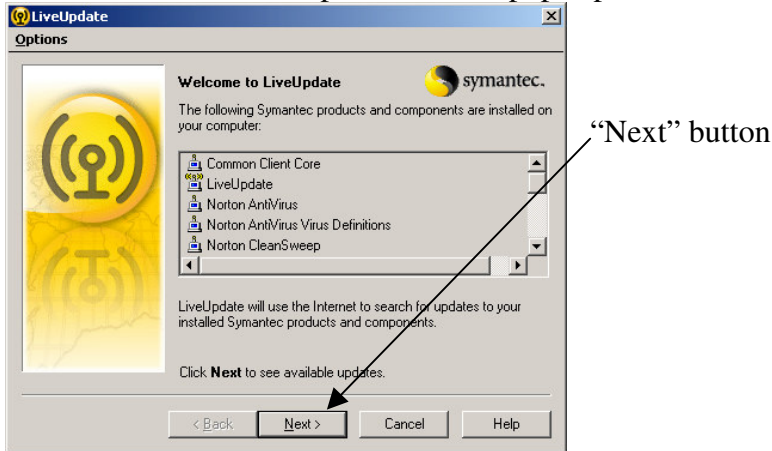
Note: If you do not see the Norton Anti-Virus Icon, call your technical support department. Norton Anti-Virus should be enabled at all times. If you see that the icon is disabled, please enable it so it is actively protecting your machine.



2. Once you have found it, **double click on the icon** and the Norton Anti-Virus window should open.
3. **Select the "LiveUpdate" button.**

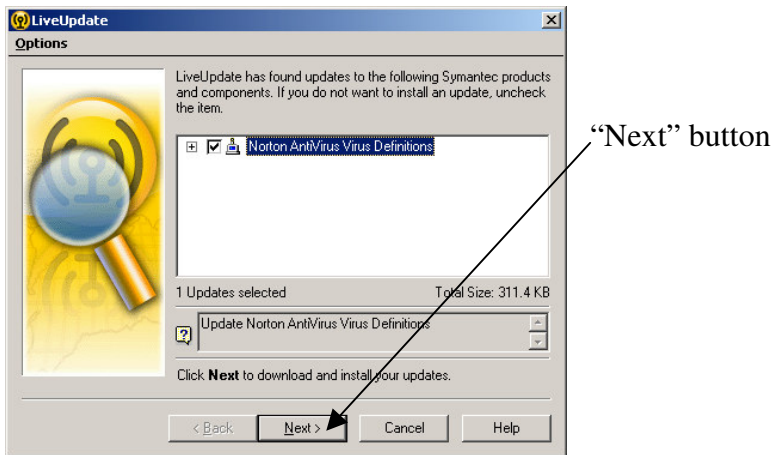


4. When the Live Update window pops up, click the “Next” button.

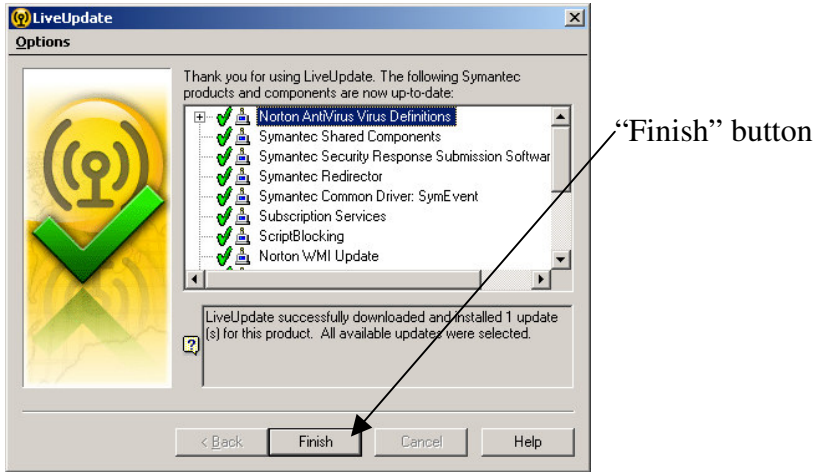


5. The process will use your Internet connection to check for updates. Make sure you are connected to the Internet.

6. If there are updates you will see the following screen below. Click the “Next” button to continue with the download and installation of new products or definitions.



7. After the process runs, you will be presented with the following screen below. Click the **“Finish”** button to exit the LiveUpdate.



8. Now that we are done you can **close the Norton Anti-Virus Menu Window** or continue to perform another task like the Virus Scan.

Norton Anti-Virus Scan

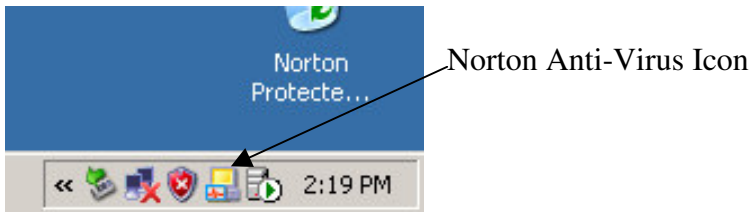
The Norton Ant-Virus scan is used to check your computer for viruses and remove, delete, and/or notify you of a threat. If Norton is unable to remove a virus it finds, call the technical support department.

Runtime: This process can take up to an hour or longer to run, depending on how large your hard drive is and how much space you are using. Also, if you continue to use your computer while it is running the scan may take longer.

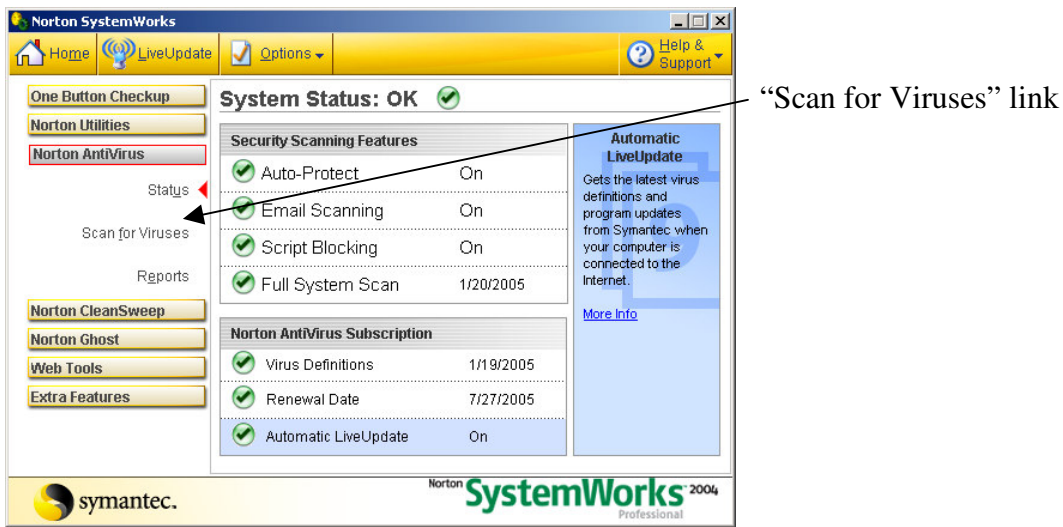
Steps to Run Norton Anti-Virus Update

1. First, **locate where your Norton Anti-Virus icon is running**. Usually it's an icon like the one below or a golden shield (depending on what version you're using). You can also figure out which one it is by hovering the mouse over the icon. Also **make sure you're connected to the Internet**.

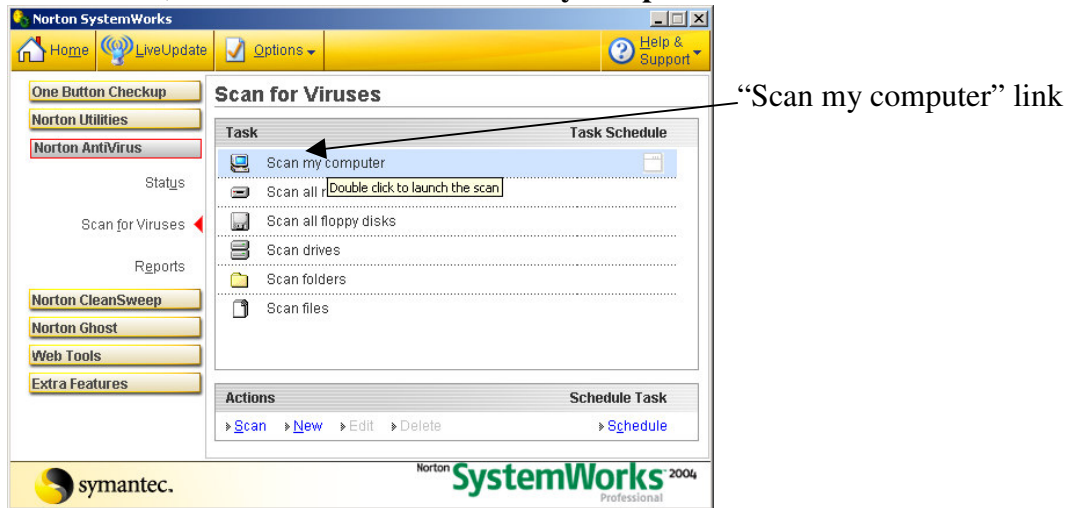
Note: If you do not see the Norton Anti-Virus Icon, call your technical support department. Norton Anti-Virus should be enabled at all times. If you see that the icon is disabled, please enable it so it is actively protecting your machine.



2. Once you have found it, **double click on the icon** and the Norton Anti-Virus window should open.
3. **Select the "Scan for Viruses" link.**



4. Next, double click on the “Scan my computer” link.



5. Norton will begin to scan your machine for viruses and other harmful files.

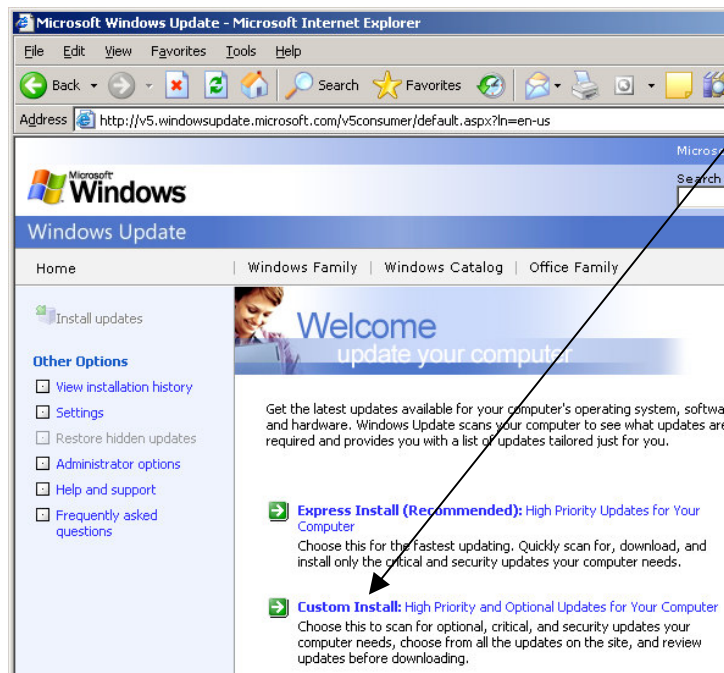
Windows Update

Windows Update is used to connect to the Microsoft Web site and check, download, and install new security patches, service packs, and/or products available for your operating system and other supported software. In some cases it is only recommended to install the critical security patches available for download. You will be offered Optional Updates that may not be necessary for the department's computer. **Contact the technical support department before installing any new Microsoft Update.**

Runtime: This process can take up to a half-hour or longer to run depending on your Internet connection. This process will require an Internet connection. This process can take longer if you're installing multiple updates.

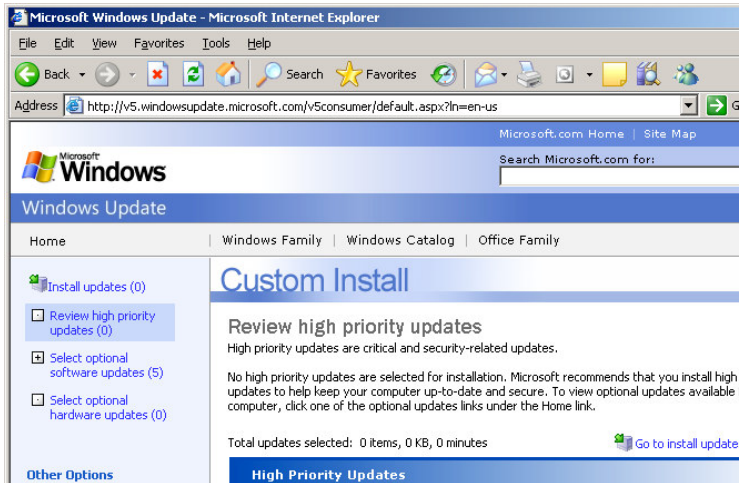
Steps for Windows Update

1. **This process requires a connection to the Internet.** After connecting to the Internet, **click on the Start button** usually located in the lower left-hand corner of the screen. The start menu should be displayed. From here **click on the "Control Panel" option.**
2. When the control panel opens, **double click on "Automatic Updates".**
3. A browser window will open and you should see the screen below. **Select "Custom Install"** so that you may pick the updates you'd like to install.



Select "Custom Install"

4. Windows update will check your computer for updates. **After the process runs you will be presented with a list of updates.** If you'd like, you can review the updates and select which ones you'd like to download and install. Again, **contact the technical support department before installing any new Microsoft Updates.** Also, it may not be necessary to install optional software and hardware updates.



5. **After you have downloaded and installed your updates you may close any windows left open.** You may be prompted to restart the machine. Make sure you save all documents before allowing the machine to restart.

Extras

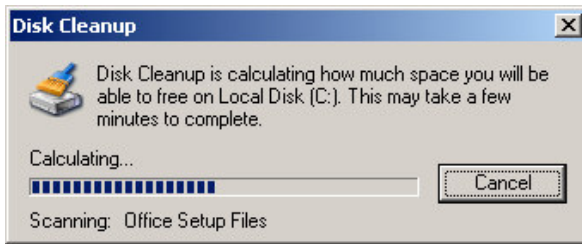
This section is for those “as needed” items. You are welcome to run any of the processes below when they are needed.

Disk Cleanup

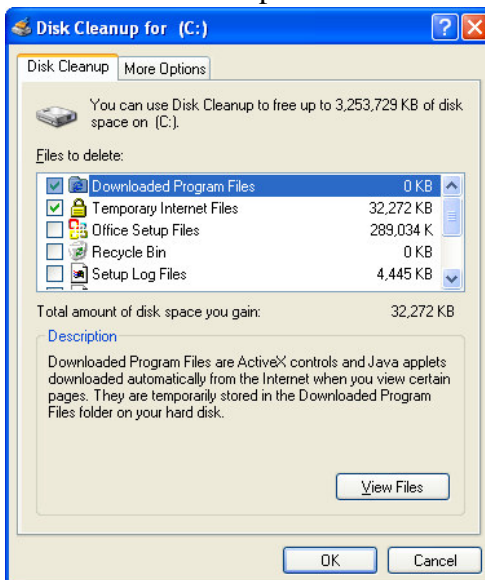
Cleaning the hard drive is a process that can help free up more space. If you’re in need of some hard drive space, Windows has an option you can use.

Runtime: This process can take up to a half-hour to run, depending on your hard drive size and space used.

1. To run the Disk Cleanup select **Start > All Programs > Accessories > System Tools > and select “Disk Cleanup”**.
2. Disk Cleanup will begin checking your hard drive for areas to clean up.



3. You will be presented with the screen below.



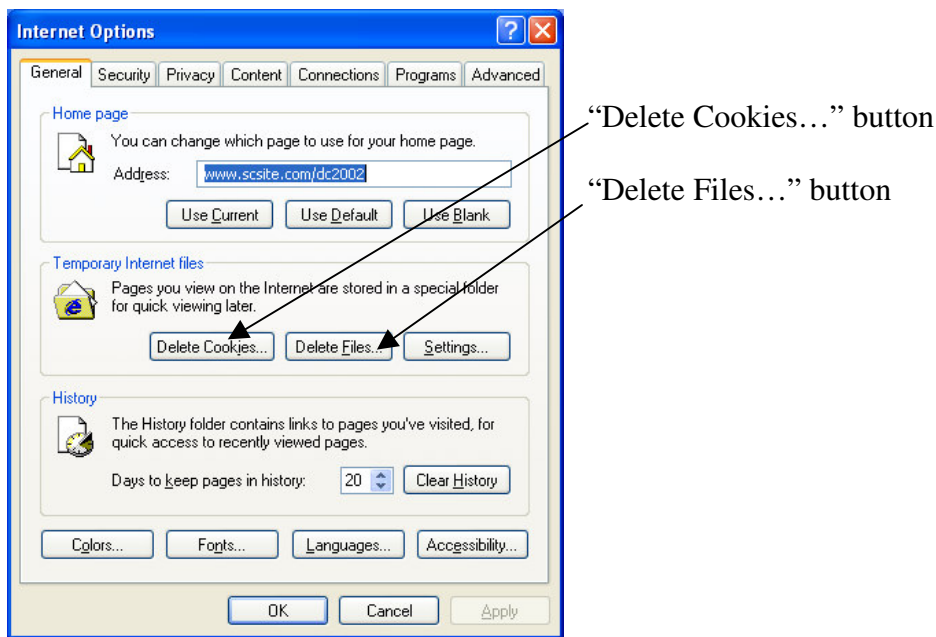
4. Select what you’d like to “cleanup” and click OK. If you are finished click the Cancel button.

Delete Browser Cache and Cookies

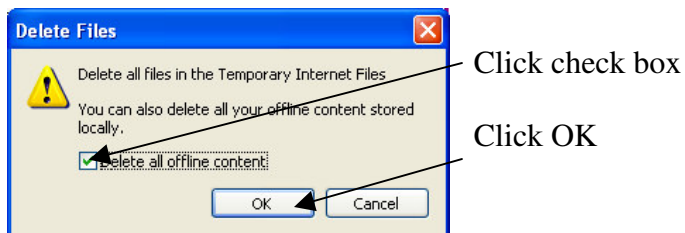
The following instructions will show you how to clear the Internet Browser cache on your machine. This example will be with Internet Explorer.

Runtime: Process can take up to 15 minutes depending on the number of files to be deleted.

1. **Open an IE Browser Window.**
2. **Select Tools > Internet Options** and you should see the screen below pop up.
3. Now **click the “Delete Cookies...” button. A window will pop up asking to confirm, click OK.**



4. After that, **click the “Delete Files...” button**, as shown in the screen above.
5. **Another window will pop up similar to the one below. Check the check box labeled “Delete all offline content” and then click OK.**



6. Once this is done you can **click the OK button in the Internet Options window** and close your browser window if you are done.

Troubleshooting

The following troubleshooting section includes simple solutions to common problems. The following issues and solutions are suggested to help you narrow down your problem or solve the situation. If you continue to have problems contact the technical support department.

Computer Won't Start

Issue:

Trying to start up the computer using the power on button or switch and there is no response.

Solutions:

1. Make sure your computer is plugged in at both ends (this does happen).
2. Make sure the computer was not “zapped” by a power spike or power outage. If this is the case or if you are unsure, contact the technical support department.
3. Try plugging the computer into a different outlet or test the outlet with another electronic device like a desk light.
4. If all else fails contact the technical support department.

OS doesn't load properly

Issue:

If your computer starts booting up but the Operating System never fully loads or does not load properly.

Solution:

This issue could be do to a hardware failure. **DO NOT CONTINUE TO RESTART THE MACHINE.** Contact the technical support department. Continuing to restart the machine will increase the risk of losing data.

Please note: If you are shutting your machine down, make sure to shut it down properly using Windows. Do NOT hold the button down in the front of the machine to shut it down.

Minor Browser Issues

Connecting to the Internet

If you are having trouble connecting to the Internet with a Laptop from home, please contact the technical support department during business hours. If you are having problems connecting from the school's LAN, please check your proxy settings (see Proxy Server section below).

Security and Cookies

Tools > Internet Options > then select the Security Tab. From here you can customize the setting for the browser. All browsers are preset to the default values. To update the cookie settings select the "Custom Level..." button.

Proxy Server

Please note, the school uses a proxy server for access to the Internet. If you are having issues accessing the Internet please use the directions below.

Tools > Internet Options > select the "LAN Settings..." button. A window will pop-up with a section called "Proxy server". Make sure you have the correct proxy server name and port number (8080), with the "Use proxy server" option selected. If you do not have a proxy name, please contact the technical support department.

Removing Software

If you need to remove unneeded software from your computer, please follow the directions below.

Select Start > Settings > Control Panel > and double click on "Add/Remove Software. From here a window will pop-up with a list of software to choose from. Make sure you are not removing any software that is necessary for your computer to run.

Hardware Drivers

If you have purchased a new printer or other internal/external device and would like to install it on your computer, please call the technical support department. The technical support department offers installation on department approved hardware for your needs. Please have all CD's or drives ready when technicians arrives.

Many manufacturers offer free downloads of drivers on-line. Please contact the manufacturer of the hardware if needed.

Spyware Issues

Spyware is software installed on your machine with or without your knowledge. Many spyware applications come from free software downloads like “free weather tool bars”, “free screen savers” or “free music download software”. Please do not download any “free software” without contacting the technical support department first. Spyware is not safe to have on your machine and can slow down your machine, the school’s LAN, and Internet service.

New Microsoft Spyware Software

Microsoft’s new Spyware software requires IE 6.0, and can be found at www.microsoft.com.

Freeware Spyware Software

The school recommends using “Ad-Aware SE Personal” software. To get a free copy of the software contact the technical support department.