Student Guide for Computer Maintenance

Prepared by Information Technology Group
# Table of Contents

Maintaining Your Notebook Computer ........................................... 3

**Norton**
*Configuring Norton AntiVirus for Scheduled Updates* .................. 4
*Manually Updating Norton AntiVirus* ........................................ 5
*Configuring Norton AntiVirus* ..................................................... 6
*Scheduling an Automatic Virus Scan* ......................................... 7
*Manually Scanning Your Computer for Viruses* ............................ 8

**Updating Microsoft Windows**
*Running Windows Updates* ...................................................... 9
*Service Pack Installations* ....................................................... 12

**Microsoft Office Product Updates** ........................................ 14

**Maintaining The Hard Drive**
*Disk Cleanup* ........................................................................ 17
*Disk Defragmenter* .................................................................. 18
*Check Disk* ............................................................................. 19

**Maintaining The Battery** ......................................................... 20
Maintaining Your Notebook Computer

Notebook computers must be maintained regularly. Lack of maintenance will lead to such problems as:

1. overall slowness to the system
2. programs (e.g. Excel) will crash or fail to open
3. the computer will frequently crash and require restarting

These are only a few of the possible problems you will experience if proper maintenance is not routinely performed. There are tools available with Windows designed to optimize the performance of your notebook, as well as prevent problems in the future. In addition, there is software designed to protect your hard drive from viruses. To properly maintain your notebook, the following procedures should be performed with regular frequency:

1. Configure Norton AntiVirus correctly
2. Update virus definitions
3. Microsoft Windows & Microsoft Office Updates
4. Discharge the battery
5. Disk Cleanup
6. Disk Scan
7. Disk Defragmenter
Norton

Configuring Norton AntiVirus for Scheduled Updates

IMPORTANT!!!

You must frequently update your virus signatures in order to have the latest virus definitions. Failure to update will result in virus infections. You can set this up to run automatically or it can be manually run.

1. In Norton AntiVirus click on File, Schedule Updates.

2. Click on Enable scheduled automatic updates to enable this feature.

3. Click on Schedule to specify the date, time, and frequency for the updates.

4. In the Frequency section select Daily.

5. Select a time when your computer will most likely be on and a daily basis (during class or between classes).

6. Click OK.
Manually Updating Norton AntiVirus

1. To update your virus signatures, click on LiveUpdate.

2. Select **Internet** for the method to connect to a LiveUpdate server.

3. You will see a progress screen as the update is performed. After this process you should run a virus scan for any new viruses.
Configuring Norton AntiVirus

1. Open Norton Anti Virus Corporate Edition by double-clicking on the gold shield in the lower-right hand corner of the Windows taskbar.

2. After double-clicking on the gold shield you will see the screen to the right.

3. Navigate to Configure, File System Realtime Protection as seen to the left.

4. Check the box next to All Types in the File Types section of the window. These will configure Norton to scan all files for viruses.

5. You are done configuring Norton AntiVirus Corporate Edition.
Scheduling an Automatic Virus Scan

1. Click on Scheduled Scans.
2. Click on New Scheduled Scans.

3. Name the scan. For example Scan C:.
4. Click **Next** to continue.

5. Click on Enable Scan.
6. Select the frequency with which you would like to scan your computer.
7. Select the exact day and time you want the scan to run.
8. Click Next to continue.

9. Select which drive or partition you want scanned.
10. Click **Save**.

**IMPORTANT!!!**

You must set up a scan for each drive or partition on your system.
Manually Scanning Your Computer for Viruses

1. Double-click on **Scan**.

2. Click on Scan Computer.

3. Click on **C:** so that a check mark appears in the box.

4. Click on the **Scan** button.
Updating Microsoft Windows

Running Windows Updates

1. *Windows 2000* – Click on **Start** and click on the **Windows Update** icon near the top of the list.

2. *Windows XP* – Click on **Start**, then **All Programs**, and finally the **Windows Update** icon at the top of the list.

3. If you have never performed an update, you will get this box. Click on “**Always trust content from Microsoft Corporation**” and press **OK**.

4. Click on **Scan for Updates**.
5. Click on Critical Updates and Service Packs. If for some reason you wish not to install a particular update, click on the Remove button. You should typically install all Critical Updates unless you are advised otherwise by CIS.

6. Click on Review and Install Updates.

**NOTE**

If you have never performed an Update, you may be prompted to install Service Packs. These installations must be done by themselves. Follow the sub-section on **Service Pack Installations** to complete the Service Pack installs. You will have to restart your machine.

7. Click on the Install Now button.

8. Click **Accept** to continue.

9. Windows will automatically download and install the updates.
10. Once the installation is complete, Windows will ask you to restart. If any updates have failed to install, the website in the background will alert you to this. After you have restarted, you should run Windows Update again to capture the failed updates.

To ensure that all service packs and patches are installed...

In order to fully patch your system, you should go back to the Windows Update site until the section for Critical Updates and Service Packs has a “(0)” indicating that there are no more patches to apply. This may require a few restarts.

It is up to you whether you want to install the Recommended Updates, or not. These are specific to programs you may or may not use so install at your discretion.

DO NOT perform Driver Updates. These have been known to cause problems from time to time. Consult your laptop’s manufacturer’s website for any driver updates.

After you have installed all patches, visit the Windows Update site every 2 to 3 weeks to keep you system up to date.
Service Pack Installations

1. If a service pack has to be installed, a window will appear stating that you have selected a item which has to be installed exclusively from the other patches.

2. Press OK to continue with the Service Pack installation.

3. Click on Accept to proceed.

4. Select I Agree at the License Agreement window.

5. Click Next.

6. Click on Next to proceed.

**NOTE**

The screen to the left is for a Windows XP service pack. If you are running updates for Windows 2000, your screen will look different.
7. Ensure that **Archive Files** is selected.

8. Click on **Next** to proceed.

9. The computer will first inspect your current Windows installation and download the appropriate updates based on what it finds on your machine.

10. When the installation ends, Windows will prompt you to restart your machine. Save any document you may be working on and press **OK**.
Microsoft Office Product Updates

1. *Windows 2000* – Click on **Start** and click on the **Windows Update** icon near the top of the list.

2. *Windows XP* – Click on **Start**, then **All Programs**, and finally the **Windows Update** icon at the top of the list.

**NOTE**

If you have not run a Windows Update before, you will most likely be greeted by a Microsoft Certificates screen asking you to grant the site access to your machine. Check the box for **Always Trust**... and then **OK**.

3. Once in the Windows Update screen, as shown in the previous screenshot, click on the **Office Updates** link near the top of the screen.

4. When the page on the left appears on your screen, click on the blue **Go** button near the center.

5. A progress meter will appear.

6. Choose the first **Service Pack** update that appears on the Product Updates screen. **You can only perform one Service Pack update at a time.**

7. Once you have selected the update, click on **Start Installation**.
8. Click on **Install Now** to proceed

9. Click on **Review and Install Updates.**

**NOTE**

You will not be able to perform the Office Updates without your Office CD.

10. If you have your **Microsoft Office CD**, place it into the drive. If an Office installation screen appears, simply **ignore it, or close the screen** when you are able to.

11. Press Continue.

12. Click **Accept** to continue.
13. Your computer will begin to download the update and will automatically install them for you.

14. Once the installation begins, you will be presented with this screen.

15. At this point in the installation, the computer may ask you to insert your Office CD if you have not already done so.

16. Once the updates are finished, close the window that appears to the left and answer **Yes** to restarting your computer when they dialogue box appears.

17. If a second Service Pack or other Office Updates remain to be installed, simply repeat this process when the computer restarts.

**Keep In Mind...**

Service Packs for Microsoft Office are released every few (4 to 6) months. Smaller security patches, primarily targeted to fix Outlook, are released more frequently. As a result, we recommend that you check for Updates every 2 to 3 weeks to ensure the highest level of stability and security for the Office suite, especially Outlook.
Maintaining The Hard Drive

Disk Cleanup

To keep a PC running smoothly, regular maintenance is critical. The Disk Cleanup Utility can easily determine which files on your hard drive may no longer be needed and delete those files. In addition to freeing up potentially significant amounts of hard drive space, using Disk Cleanup on a regular basis can significantly improve system performance.

The utility can be accessed in any of the methods listed below.

- Click **Start | Programs | Accessories | System Tools | Disk Cleanup**
- Click **Start | Run** and in the **Open** box type **cleanmgr** and click **OK**
- In Windows Explorer or My Computer, right-click the disk in which you want to free up space, click **Properties**, click the **General** tab, and then click **Disk Cleanup**.

Use the drop down menu to choose the drive you want to clean.

**NOTE:**
The process of scanning your hard drives may take a few minutes

When the scan is complete you will be presented with a list of temporary folder and the amount of space used by the each folder.

Select:
- **Temporary Internet Files**
- **Recycle Bin**
- **Temporary files**

Click **OK**.

**NOTE**
The process of deleting your cached files can take a few minutes
Disk Defragmenter

Disk Defragmenter is used to organize files on the hard drive and optimize free space, improving the speed and performance of the computer. Some applications may fail outright if the disk becomes too fragmented.

1. To run Disk Defragmenter, click on Start, Programs, Accessories, System Tools, Disk Defragmenter.

**NOTE**

You **MUST** have administrative rights in order to perform this process.

2. If your hard drive is partitioned (you have more than one drive), choose which drive you wish to defragment. In most cases, you will select C.
3. Click on the **Defragment** button to begin the operation.

4. When defragmenting begins it will always analyze the hard drive first and then start the defragmentation process.

**IMPORTANT!!!**

You should run this process at least once per month.
Check Disk

1. Click on **Start, Run**.
2. Enter **cmd**, in **Open: text field**.
3. Click **OK**.

4. A command prompt will open as shown to the left.
5. Enter **chkdsk C: /R** at the prompt.

6. The CHKDSK program will give you and error stating that it cannot lock the current drive to be scanned.
7. You will be asked if you want the drive to be scanned on the next boot process.
8. Type **Y** for yes, and then press the enter key.

9. Your system will now be checked and any errors encountered will be fixed.
Maintaining The Battery

NOTE

The battery will last for up to four hours when fully charged. If not maintained, however, the battery will require charging more frequently. Following are tips for properly maintaining your battery for maximum performance.

Use the battery as your power source until the low battery warning emerges

Using your notebook with the AC adapter constantly plugged into an electrical outlet will overcharge the battery. Overcharging decreases the life of the battery. Eventually the battery will be unable to hold a charge and will require a replacement.

Condition the battery for maximum performance

1. Discharge the battery – use the battery until the low battery warning emerges.
2. Charge the battery – use the AC adapter until the battery is fully charged. Then immediately disconnect the AC adapter from the notebook.

The procedure above insures both maximum performance and long life for the battery.