

Troubleshooting

Do the reading from the Buffalo & Erie County Public Library website (<http://www.buffalolib.org/ComputerTraining/tutorials/pctspublic/>).

You must read the parts on:

Preventive Maintenance, Troubleshooting Hardware, Error Messages, and Common Software Questions.

Preventative Maintenance

Develop a preventative maintenance plan for your PCs

1. Saves money
2. Saves time
3. Safeguards your data
4. Improves performance

Mice

- Mice are very vulnerable to dust and debris. When too much debris has accumulated on the mouse, it will not move as expected.
- Two basic types of mice:
 1. Mechanical – older mice - has a rubber ball. Movement of the ball is detected and the screen pointer moves accordingly.
 2. Optical – new mice – does not have a ball. Movement is detected by a laser.

Cleaning Mice

- To clean a mechanical mouse,
 1. Unplug the mouse from your computer.
 2. Remove the ball and clean it with soapy water.
 3. Blow out the dust inside the mouse.
 4. Clean the rollers with a cotton swab and alcohol.
 5. After everything is dry, reassemble the mouse.
- To clean an optical mouse,
 1. Unplug the mouse from your computer.
 2. Clean the outside of the mouse with a cloth (dampened with alcohol). Do not disassemble an optical mouse.
- You should also keep the mouse pad and/or the mouse area clean of dust and debris

Cleaning Keyboards

- Keyboards accumulate dust and debris in between the keys. Also, public use computers can pick up numerous bacteria.
- To clean keyboards,
 1. Use a can of compressed air to blow out the debris between the keys
 2. Use a cloth dampened with alcohol (or ammonia) to clean the top of the keys.
 3. I would not recommend removing the keycaps from a library's computer. Consult your supervisor before attempting to do so.

Cleaning Monitors

- Monitors have vents to keep them cool. If objects block the vent openings, the monitor may become very hot.
- To clean a monitor's vent openings, you can use a vacuum cleaner to remove any dust on the outside of your computer.
- To clean your monitor's screen, gently rub the screen with a cloth dampened with a cleaning solution.
- Do not open a monitor in order to clean it.
- Do not pour the cleaning solution into any part of the monitor.

Cleaning a Floppy Disk Drive

- The heads of the drive actually make contact with the floppy disk. This contact can leave residue on the heads of the drive.
- To clean a floppy disk drive, purchase and use a cleaning kit.

Cleaning CD and DVD Drives

- Like a floppy disc drive, CD and DVD drives also have heads.
- To clean the drives, purchase and use a cleaning kit.
- You can clean the tray of a CD and DVD drive using a cloth, dampened with water.

The Troubleshooting Process

1. Write down exactly what happened. If you receive any error messages, be sure to write them down. You can pass on this information to your technical support people.
2. Do not attempt to repair hardware unless you have your supervisor's permission. In most cases of hardware problems, you will not have the proper permissions or abilities to fix the problem yourself.

Easy Troubleshooting

However, there are a few things that you can try without risking damage to the computer (or damage to your employment):

1. Check to make sure the computer is receiving power. Check both ends of the power cord. If there is a power strip, make sure it is turned on.
2. Check all of your connections. Make sure both ends of your cables are inserted correctly. You can unplug and replug cables without damaging a computer.

Virus Scans

- Many problems can arise from a computer virus.
- All computers should have a program to check for viruses.
- These programs run by themselves. The program should tell you when a virus is detected.
- If you receive a message about a virus, you should notify your technical support people immediately.

Troubleshooting Sound

If you receive no sound:

1. Check the volume control.
 - a) You can access the volume control by double clicking the volume control icon in the taskbar (lower right hand corner of the screen).
 - b) You can also go to the start menu and select control panel. Then double click on Sounds
2. Check the speakers or headphones.
 - a) Make sure the cords are connected correctly
 - b) Most speakers have a separate power switch. Make sure the speakers are turned on.

Freeing Up Disk Space

- A computer needs empty disk space to run correctly and quickly.
- To free up space:
 1. Empty the recycle bin
 2. Remove programs that you are no longer using.
 - a) From the start menu, select Control Panel.
 - b) Double click on Add or Remove Programs.
 - c) Wait for the list of programs to load up and remove unwanted programs. You may need to consult your supervisor before removing programs from a library computer.
 3. Back up old files and then delete them from your hard drive.

Troubleshooting Floppy Disk Drives

- Because of the flimsiness of floppy disks, the drives can become damaged.
- If a floppy disk loses its metal shield (or flap) inside the drive, the drive can be damaged.
- If you have a foreign object stuck in the drive, you should notify your technical support staff. If you attempt to remove the object yourself, you may make the problem worse.
- Luckily floppy disk drives are becoming obsolete. On most new computers, a floppy disk drive is not standard.

Troubleshooting Floppy Disk Drives (page 2)

- Floppy disk drives have a small green light on them.
- When the green light is on, the drive is running.
- If the light never comes on or stays on constantly, you may have a bad drive.
- Try not to remove a floppy disk while the light is on, you may damage your disk.

Troubleshooting Floppy Disks

- Floppy disks can go bad at any time.
- When a floppy disk is used too many times, it becomes unreadable.
- By rotating the floppy disks that you use, you can increase the lifespan of a floppy.
- Keep floppy disks out of extreme temperatures.
- Protect your floppy by placing it in a hard plastic case.
- However, it is just a matter of time before a floppy disk becomes unusable.

Troubleshooting Floppy Disks (page 2)

If you receive error messages when using a floppy disk:

1. Make sure the disk is not locked. There is a small tab on the back of a floppy that allows you to lock and unlock it.
2. Make sure that the disk is not full. Delete files to free up space on the disk.
3. Make sure that the disk is formatted correctly for your computer. PCs and Apples use different formats.

Troubleshooting Printers

Try these fixes for printer problems:

1. Make sure the print job was sent to the correct printer.
2. Make sure the printer is on.
3. Make sure the printer is "ready." Most printers have a small display that should say ready, online or something similar.
4. Check for paper jams. The printer's display should inform you of a jam.
5. Check all cables.
6. If all else fails, turn the printer off, wait 10 seconds, then restart the printer.

System Lockup

- The computer totally locks-up and does not respond to mouse movement or input from the keyboard.
- The only solution is to shut down the computer by cutting off the power source.
- If the system repeatedly locks-up, write down exactly what you were doing when the system locked-up. Report this to your technical services people.

Program Lockup

When a particular program locks-up:

1. Use the following key combination: Ctrl Alt Delete.
2. Select Task Manager. A list of applications (or programs) will appear.
3. Select the program that is having problems.
4. Click on End Task.
5. If you receive a pop-up window that says the program is not responding or waiting for a response, click on End Task.
6. This should stop the program (You may have to wait a moment for the program to stop). If it does not stop, you may have to shut off the computer and restart.

The Blue Screen of Death

- The computer displays a error message on a blue background. This means that you probably have a serious problem with your hard drive.
- You can try shutting of the computer, waiting for a full minute, then turning the computer back on.
- However, in most cases, if you receive the blue screen, you should call your technical support people.

Internet Error Messages

Common Error Messages while on the web:

1. 404 File Not Found– the web address is incorrect, changed or deleted. Make sure that you typed the address in correctly.
2. 401 Unauthorized – the web address is correct, but you do not have permission to view it. May be password protected.
3. 403 Forbidden – (similar to 401) the web address is correct, but you do not have permission to view it. May be password protected.
4. 500 Internal/Server Error – there is a problem with the web server itself. You can report the problem to the website’s administrator.

Pop-Ups

- Pop-up windows – a window that suddenly appears. In many cases, you must choose a response before you can continue.
- Pop-up ads – While using your web browser, a new window will appear to advertise a product.
- Pop-up filters – software that attempts to block pop-up windows and ads. In some cases, you may want to see these pop-ups. For example, iCollege uses pop-ups. You can override and change the settings of pop-up filters in your web browser.

Cookies

- Stores information about you so that you do not have to re-enter information at certain websites.
- In your web browser, you can change the settings for cookies. You can also delete cookies.

Plug-ins

- Websites use small programs – or plug-ins – to deliver a certain feature or service.
- For example, to show a movie, play music or play a game.
- As you know, iCollege uses many plug-ins.
- When new plug-ins or new versions of plug-ins are released, computers must be updated. Usually, this is done by your technical support people. However, it may be up to you to inform them of new plug-ins that you want installed.