What are some troubleshooting techniques?

Introduction

What are Some Troubleshooting Techniques?



Watch the video (2:19). Need help?

The computer goes blank before the Word document was saved. The browser window freezes for no reason. You can't hear anything from the web camera or your speakers.

Most people have at one time or another experienced a **computer problem** like at least one of situations described, and if you haven't, chances are you will at some point.

Computer problems can be upsetting, especially if you are trying to meet a deadline for work or school. **Most problems are minor** and can be easily fixed, so don't panic when computer problems happen to you. Instead, work your way through some**basic troubleshooting techniques** and try to solve the problem.

Basic Troubleshooting Tips

For every problem there is a solution. For computer problems, it can be something as simple as a loose cord, or something more complicated. While it isn't necessary to learn how to locate and fix, or troubleshoot, **every** potential problem, it is a good idea to know some **common pitfalls** and how to handle those issues.

Here are **four general tips** to keep in mind when you are troubleshooting computer issues.



Check All Cables, Wires and Cords

Always check the cables, wires, and cords.

A majority of computer problems are related to an issue in the cables and connections. The easiest first step you can take to troubleshoot most problems is to check all related cables and connections.

Isolate the problem.

If it is possible to isolate the problem, then do so. For example, if you can't get the cursor to move on the screen, try to **determine if the issue** is with the mouse. If you have an extra mouse, you can alternate devices to see if the one plugged in is the issue, or use the arrow keys on the keyboard to help determine if the mouse is the source of the problem. When trying to isolate the problem, only make one change at a time.

Take notes about error messages

If your computer gives you **error messages**, be sure to write down as much information as possible. If the basic troubleshooting steps don't work, you may need the information.



Example Error Message

Remember the steps you've taken, or write it down.

Once you start troubleshooting, you will want to remember what you have done, so you don't repeat yourself. Also, each possible repair that you try that doesn't work is one less possible solution. If you can't remember it, then write it down. You'll be glad you did if it turns out to be a problem that you need additional assistance to solve.

Specific Troubleshooting Problems

There are many devices, parts, cords, and connections on a computer, which means that there are many possible problem areas that could arise. Additionally, your computer uses a variety of software, which can cause additional issues. However, there are some common computer problems that you may experience.

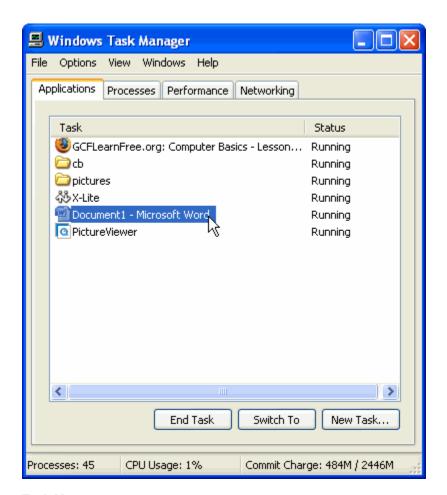
Programs Stall/Freeze While Working

Press the Control, Alt, Delete keys. The Task Manager dialog box appears.



Press the Ctrl, Alt, and Delete Keys

- Select the **Applications** tab.
- Click a process or task to highlight it.

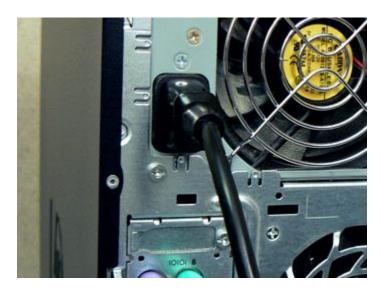


Task Manager

- Click End Task.
- Repeat, as necessary, to end multiple programs or processes.
- If the computer continues to freeze, **restart** it. This will clear many errors.

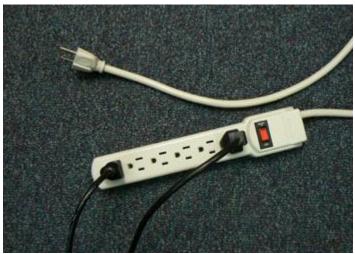
Specific Troubleshooting Problems (cont.)

Power Button Will Not Start Computer



Power Cord

- If your desktop computer **does not start**, begin by checking the power cord to confirm that it is plugged securely into the back of the computer case and the power outlet.
- If it is plugged into an outlet, make sure it is a **working outlet**. Often, this will require you to plug a lamp or other electrical device into the outlet to make sure it is receiving power.
- If the computer is plugged into a **surge protector**, verify that it is turned on.
 - o If it is, press the reset switch if it has one.
 - Confirm the outlet on the surge protector is working by plugging a lamp or other electrical device into it.



Power Cord in Surge Protector

- If you can hear the fan or drive from within the computer case, but the monitor remains blank, make sure the **monitor is connected** to a working outlet.
- Plug a lamp or other electrical device into the outlet to make sure it is receiving power.
- Make sure the monitor cable between the monitor and computer case is securely connected. The monitor cable has multiple pins. If one of these is **broken or bent**, the monitor display can be affected.

Windows Shutting Down Message Will Not Disappear

Sometimes Windows will freeze during the shutdown process. If this happens, the **Windows is Shutting Down**message screen will stay active on your screen. To finish shutting down the computer, **press and hold** the power button for about 10 seconds, or until the computer turns off



Windows Shutdown Screen

Specific Troubleshooting Problems (cont.)



Display Properties Dialog Box

Screen Goes Blank Periodically

You may have the screen saver enabled. If the screen saver is enabled, just **move your mouse** back and forth and your original screen will appear. If you would like to disable the screen saver feature:

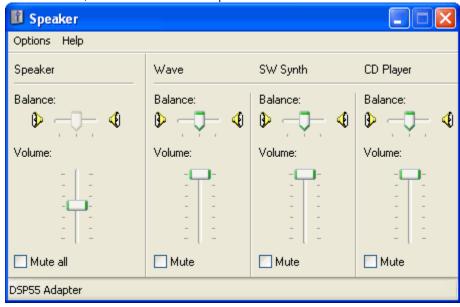
- Go to the **Start** menu.
- Select the Control Panel.
- Click **Display**.
- Choose the Screen Saver tab.
- Disable screen saver or change your screen saver settings.



Move Mouse

No Sound

- Check the **volume control** on your computer.
 - o The **Sound** icon may be in the bottom, right corner of the window.
 - o If not, access the sound options from tControl Panel.



Sound Control Panel

- Verify the mute option is not selected.
- Make sure the speakers are turned on, if using external speakers.
- Make sure external speakers are connected to the correct audio port, which is usually green.
- Connect headphones to the correct audio port and determine if sound is audible from the headphones.

Computer Begins Randomly Rebooting or Crashing

- Check for overheating. Make sure the vents in the case are not blocked.
- Confirm that there is good air flow around the computer.

• Update your virus protection software to check for a virus.

Non-System Disk or Disk Error Message



Non-System Disk Error Message

- If the monitor and computer have power and the Non-System Disk or Disk
 Error message appears on the screen, check the drives.
- Remove any disks that are in drives, such as CD-ROM, DVD-ROM, and USB drives.
- Restart the computer.

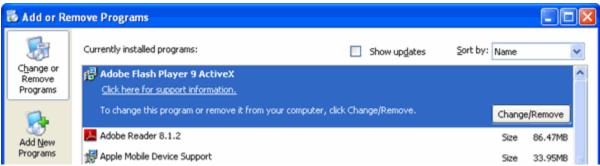
Operating System Won't Start

- If the computer and monitor have power, **restart Windows** using the original disc.
- If it starts from the disc, the problem is probably related to the hard disk drive.
- Read your instruction manual about reformatting a hard drive. You may have to buy a new one.

Existing Software Program Stops Working

- Go to the Start menu.
- Select Control Panel.
- Choose Add/Remove Programs.
- Remove the software program.
- Reinstall the software program.

• If the computer stalls or crashes, check with the company for any known problems or **updates** to the software.



Add/Remove Programs

No Picture on the Monitor

- Confirm the computer is turned on.
- Make sure the monitor cable is connected to both the monitor and the computer case.
- Check the **power cable** from the monitor to the wall outlet or surge protector.
 - Confirm that the wall outlet or surge protector outlet has power to it.
- Check the brightness controls, located on your computer monitor, and make sure it is at the correct position so the screen does not display dark.

If you have a computer problem that you don't know how to solve, use the Internet to search for possibly solutions. There are many other users that may have experienced the same issue as you. This is especially true for error messages with number codes. You can always search to learn more about each message.