# Your System Freezes



your system locks up, your work is at risk, but freezing doesn't always have to end in catastrophe. We'll help you understand how to work through and recover from these issues.

### General Tips

What at first looks like a freeze may just be slow processing. When in the middle of

resource-intensive activities, such as editing video, burning a DVD, or copying large files, many applications and machines may appear to hang. Don't start forcing anything to close or shut anything down until you're certain it's not just taking a long time to complete the task.

As always, protect yourself against inevitable freezes and crashes by

saving early and often. Schedule and confirm regular backups of important data. Don't let hardware or software problems linger-troubleshoot and repair/replace as soon as feasible. Use antivirus and antispyware tools to protect your system from malware.

## Program Freezes

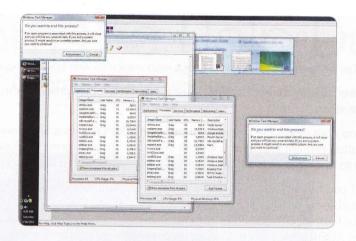
Many applications feature some sort of moving progress indicators to

let you know they're still working, but not all applications have these, and they don't always work correctly. When you think your program is frozen, use your mouse to try switching applications. Sometimes working on something else gives the boggeddown application time to recover.

If switching to other applications doesn't work, or if the mouse isn't responding, press ALT-TAB to display all of the currently open windows. Press TAB repeatedly while holding ALT to rotate through them. Simply release both keys when you reach the application you want. Switching out to another open program, either for just a moment or for a longer period, can help determine whether the application in question is responding.

If nothing else is open or if your system isn't responding to ALT-TAB, press WINDOWS-M to minimize all open applications, returning your screen to the Windows Desktop. Sometimes, this reveals a dialog box or warning message hidden beneath other open windows.

The next step is to try relaunching the offending application or opening another instance of it. It won't always work, but sometimes this nudges the system into reactivating



Pressing ALT-TAB may let you switch among open applications in an attempt to avoid the one that's not responding.

the first open window in that program or, at the very least, lets you complete your activity within a different session.

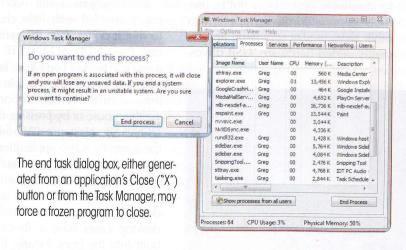
If nothing you do induces the application to respond, click the "X" button at the top right corner. The program may take a minute or two to close, or generate a "Not Responding" message. If you've exhausted all other options, force the application to close by clicking End Task (or similar).

If ending a program this way doesn't work, you'll have to go to the Task Manager by right-clicking

the Taskbar and selecting Start Task Manager from the context menu or by pressing CTRL-ALT-DELETE and clicking Start Task Manager from the on-screen menu. Start with the Applications tab. Locate the program in question and click End Task. If that doesn't do anything after a few minutes, navigate to the Processes tab. When you find the culprit, select it and click End Process at the bottom right. Confirm any warning messages with another End Process selection. This should bring a quick end to any application that's stopped responding, but it doesn't mean your system is back to normal. At this point, it's a good idea to reboot before trying to run the application again.

#### System Freezes

Full system-wide freezes can be a little more difficult to figure out. For one thing, it's hard to identify a single application or process at fault if you're multitasking when things go awry. It's also harder (by definition) to navigate and investigate when nothing is responding, including Windows itself. Start by looking for signs of life that might indicate the system is processing and not frozen. Good indicators include flashing activity lights, the whir of a churning hard drive, or indicator icons and bars that move only infrequently. If it looks like things might actually be moving, wait a little longer.



The Windows Task Manager provides detailed access to all open applications and processes, providing access to a forced End Process or Log Off option.

# After The Thaw: Recover From A Freeze

System frozen? Try these steps to quickly get your system back up and running again.

Reboot. Even after closing an application, your memory or other processes may have become corrupted. Be safe and restart the system.

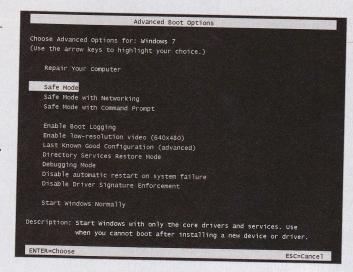
Safe Mode. If you shut down the system without using the Windows Shutdown option, boot up in Safe Mode. Windows will often prompt you after a system crash, or you can press F8 during the boot process for a menu with the option to boot into Safe Mode. Then just restart the system before proceeding.

Recover data. If you had to close out in the midst of working on something, your in-progress data may be lost.

But you may be able to recover at least part of your files. Microsoft Office will often AutoRecover documents after a crash, and temporary or archived files may provide some assistance.

Watch out. Keep a close eye on the system's performance and your usage for a while, so that if a freeze recurs, you can detect a pattern and, hopefully, identify the cause.

Save early, save often. Freezes can happen at any time, without warning. Make a habit of saving your work regularly. Don't forget to schedule and verify regular system backups, as well.



After a freeze, boot back up into Safe Mode before restarting normally.

When signs of life cease, or when you run out of patience, try a few simple navigational tricks. Use the ALT-TAB shortcut as previously described to see if anything happens. Try other keyboard shortcuts such as WINDOWS-M (minimize all) or

WINDOWS-D (show the Desktop). Disconnect and reconnect your mouse and keyboard. You can also try removing peripherals not in use, such as portable drives, printers, or other devices. Try removing any recently added hardware. USB drives,

especially older ones, are notorious for creating resource conflicts that can bring a system to its knees.

If the system is still not responding, you're left with little choice but to shut it down. Take the gentle route first. Press CTRL-ALT-DELETE and see if you can get to a Log Off or Task Manager window. Or try to get to the Start menu with its shutdown options, either via the mouse or by pressing the WIN-DOWS key. Next, press ALT-F4 to close the currently active application or shut down the system. If your machine has Shutdown, Standby, or Restart keyboard buttons (as many notebooks do), try using them. Additionally, many desktop cases have a Restart button built into the front. Finally, if nothing else works, press and hold the Power button to shut the machine down. Avoid pulling the plug or removing the battery if at all possible.

The CTRL-ALT-DELETE keyboard shortcut may not work when the system freezes, but it's worth a try before shutting everything down.

