

Help Is Here!

How this poster can help you

Sometimes computers have problems that can slow you down. This poster helps you deal with one such problem—a “freeze.” When your computer freezes, it doesn’t respond to input from the keyboard or from the mouse. You know a freeze has occurred if you see a pointer on your screen but you can’t move it, or if you type on the keyboard and nothing happens on the screen. By following the instructions in this poster, you can get your computer working again if a freeze occurs.

What to do if your computer freezes

- 1 Don’t turn off your computer or unplug the power cord.
- 2 Write down the following information:
 - which computer you are using
 - what application program (if any) you were using when the freeze occurred
 - what you were doing when the freeze occurredYour notes will help your technology coordinator notice trends and prevent similar problems from occurring in the future.
- 3 Follow one of the troubleshooting steps listed in the table below, depending on what was happening right before the freeze occurred.

Note: Each troubleshooting step is identified by a color; the instructions for how to complete the step are found in the box with the matching color at the top.

- 4 After each troubleshooting step, do what you were doing when the freeze first occurred, and keep notes of what happens. If one step doesn’t prevent the freeze from occurring again, go on to the next.

If the freeze occurs when... Follow these steps...

The “happy Macintosh” icon is displayed, but the Welcome to Macintosh message hasn’t appeared yet

- Check your connections.
- Isolate your hardware.
- Repair your hard disk.
- Get your computer serviced.

System extensions are loading (icons are appearing at the bottom of your screen)

- Check your connections.
- Isolate your hardware.
- Eliminate the extension conflict.
- Perform a clean installation.
- Get your computer serviced.

The Finder is loading (before the menu bar or the hard disk and Trash icons appear) or the computer is idle (you’re not typing or using the mouse)

- Eliminate the extension conflict.
- Perform a clean installation.
- Get your computer serviced.

You’re opening, using, or quitting a particular application program

- Perform a gentle restart.
- Eliminate the extension conflict.
- Adjust the application’s memory settings.
- Turn off Modern Memory Manager and Virtual Memory.
- Contact the application’s developer.

You’re printing from a particular application program

- Perform a gentle restart.
- Turn off background printing.
- Eliminate the extension conflict.
- Perform the SimpleText test.

For more help

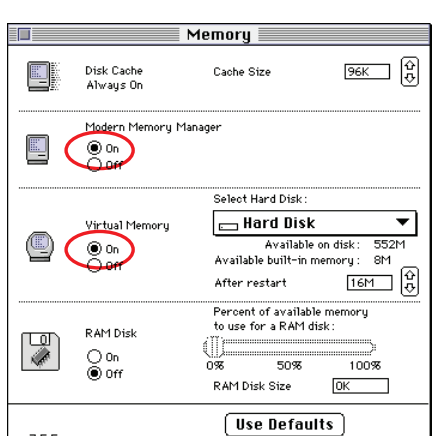
- Check the manual that came with your computer.
- Check the Apple Tech Info Library for articles that answer the most frequently asked questions. You can find this library at the following address: <http://til.info.apple.com/til/til.html>
- Call 800-800-APPLE to have a technical article faxed to you.

Perform a gentle restart

- 1 Press ⌘ (Command)-Option-Esc.
- 2 Click Force Quit in the dialog box that appears.
- 3 If the dialog box goes away, save all documents and quit all open programs.
If the computer freezes again, go back to step 1.
If the dialog box does not go away within five seconds, use the power switch to turn the computer off and on again.
- 4 Choose Restart from the Special menu.

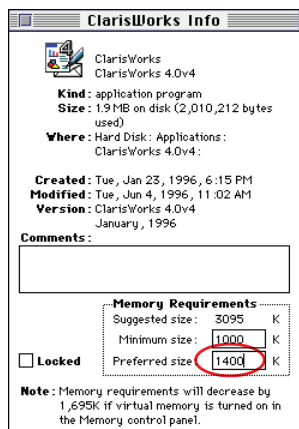
Turn off Modern Memory Manager and Virtual Memory

This procedure works only on Power Macintosh computers with system software version 7.5 and later.

- 1 Choose Control Panels from the Apple () menu, then open the Memory control panel.
- 2 Click these buttons:
- 3 Close the Memory control panel.
- 4 If you made changes in the Memory control panel, choose Restart from the Special menu.

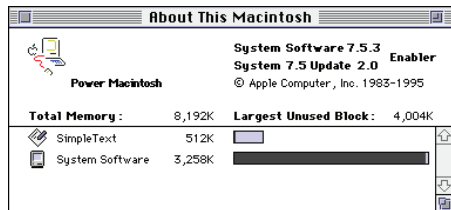
Adjust the application's memory settings

- 1 Click the icon for the application to select it.
- 2 Choose Get Info from the File menu.
- 3 Increase the number in the “Preferred size” box by 100. Keep increasing the preferred size in increments of 100 until the freeze does not occur anymore when you use the application.



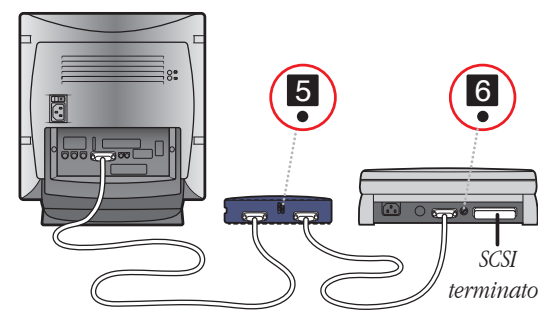
You can increase the preferred size of your application as long as your Macintosh has enough available memory. To see how much memory is available, do the following:

- 1 Choose About This Macintosh from the Apple () menu.
- 2 Look at the number to the right of the words “Largest Unused Block.” Subtract 100 from this number to find the maximum preferred size of your application.



Check your connections

- 1 Turn off the computer using the power switch.
- 2 Make sure everything is connected properly:
 - The SCSI chain ends with a terminator.
 - Each device in the SCSI chain has a different SCSI ID number.
 - Printer, modem, and network connectors are in the right ports and inserted correctly.
 - Cables (keyboard, mouse, monitor) are plugged in.



- 3 Turn on the computer using the power switch.
If the computer still freezes, your connections aren’t causing the freeze.

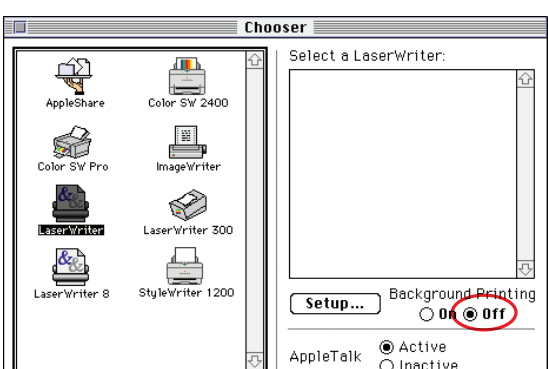
Isolate your hardware

- 1 Turn off your computer using the power switch, and turn off all SCSI devices connected to it.
- 2 Disconnect the SCSI devices.
- 3 Turn the computer on.
- 4 If the computer starts up successfully, one of the SCSI devices caused the original freeze.
If the computer freezes, turn off the computer and disconnect any network cables and any cables connected to the printer port or modem port.
- 5 Turn the computer on.
- 6 If the computer starts up successfully, one of the serial devices caused the original freeze.
If the computer still freezes, none of the hardware connected to your computer is causing the freeze.

Contact the application's developer

If none of these steps work, most likely your application is not compatible with your model of computer and your version of Macintosh system software. Contact the developer of the application to find a version that is compatible.

Turn off background printing

- 1 Choose Chooser from the Apple () menu.
- 2 In the upper-left area, click the type of printer you were using, such as LaserWriter 8.
- 3 Click the Off button under the words “Background Printing.”
- 4 Close the Chooser.

If the words “Background Printing” do not appear, background printing is not an option with this printer.

Perform the SimpleText test

- 1 Print a SimpleText document.
 - 2 If the SimpleText document prints successfully, the problem is in your application. Contact the developer of the application to find a version that works with your computer and your version of Macintosh system software.
- If your computer freezes while printing from SimpleText, the problem is probably with the print driver you’re using. Check your printer manual or contact the printer manufacturer to find out if your print driver is compatible with your computer and your version of Macintosh system software.

Repair your hard disk

This procedure works only on Power Macintosh 5200 and 5300 series computers.

Start up from the Power Macintosh CD

If the computer is on, follow these steps:

- 1 Insert the CD-ROM disc that came with your computer and contains system software.
- 2 Press Control-⌘ (Command)-Power. The Power key is marked by a triangle (<).
- 3 Immediately press the C key, and hold it down until you see the Welcome to Macintosh message.

If the computer is off, follow these steps:

- 1 Find the CD-ROM disc that came with your computer and contains system software.
- 2 Press the Power key to turn on the computer.
- 3 Immediately press the Open/Close button on your CD-ROM drive, and quickly insert the CD into the drive.
- 4 Immediately press the C key, and hold it down until you see the Welcome to Macintosh message.

If your computer freezes, you did not perform steps 3 and 4 quickly enough. Press Control-⌘-Power and immediately press and hold down the C key.

Use Disk First Aid

- 1 Open the Disk First Aid icon, which is inside the Utilities folder.
- 2 In the Disk First Aid dialog box, click the icon for your hard disk.
If an icon for your hard disk does not appear, go to the next section, “Use Drive Setup.”
- 3 Click Repair. Read the status messages to see if Disk First Aid finds any problems it can’t repair.
- 4 If Disk First Aid found problems it couldn’t repair, use Drive Setup.
- 5 Choose Quit from the File menu.

Use Drive Setup

- 1 Open the Drive Setup icon, which is inside the Utilities folder.

Note: If you don’t have Drive Setup, get it from one of the Apple software sites, such as www.support.apple.com.

- 2 In the list of drives, click your hard disk.
- 3 Choose Update Driver from the Functions menu.
If you see a message that Drive Setup could not update the driver, reinitialize your hard disk.
- 4 Choose Quit from the File menu.

Reinitialize your hard disk and reinstall system software

Warning: This procedure completely erases your hard disk. Perform this procedure only if Disk First Aid could not fix some problems *and* Drive Setup could not update the driver.

- 1 Back up as much data from your hard disk as possible.
- 2 Open Drive Setup if it’s not already open.
- 3 In the list of drives, click your hard disk.
- 4 Click Initialize to initialize your hard disk.
- 5 Click Quit when initialization is successful.
- 6 Open the System Software Installer icon on the CD.
- 7 Click Continue in the Welcome screen.
- 8 Click Install in the Easy Install dialog box that appears.
- 9 Follow the onscreen instructions to complete the installation.

Get your computer serviced

If none of these steps solve your problem, your computer probably needs repair by an Apple-authorized service provider.

- To find an Apple-authorized service provider near you, call 800-538-9696.
- To request on-site service, call 800-800-APPLE.

Eliminate the extension conflict

This procedure works only on computers with system software version 7.5 and later.

- 1 Turn on the computer by pressing Control-⌘ (Command)-Power. The Power key is marked by a triangle (<).
- 2 Hold down the Space bar until the Extensions Manager window appears.
- 3 Choose System 7.5.x from the pop-up menu.
- 4 Close Extensions Manager.
- 5 Choose Restart from the Special menu to make the changes take effect.

Perform a clean installation

This procedure works only on Power Macintosh 5200 and 5300 series computers.

Start up from the Power Macintosh CD

If the computer is on, follow these steps:

- 1 Insert the CD-ROM disc that came with your computer and contains system software.
- 2 Press Control-⌘ (Command)-Power. The Power key is marked by a triangle (<).
- 3 Immediately press the C key, and hold it down until you see the Welcome to Macintosh message.

If the computer is off, follow these steps:

- 1 Find the CD-ROM disc that came with your computer and contains system software.
- 2 Press the Power key to turn on the computer.
- 3 Immediately press the Open/Close button on your CD-ROM drive, and quickly insert the CD into the drive.
- 4 Immediately press the C key, and hold it down until you see the Welcome to Macintosh message.

If your computer freezes, you did not perform steps 3 and 4 quickly enough. Press Control-⌘-Power and immediately press and hold down the C key.

Use Disk First Aid

- 1 Open the Disk First Aid icon, which is inside the Utilities folder.
- 2 In the Disk First Aid dialog box, click the icon for your hard disk.
- 3 Click Repair.
- 4 After Disk First Aid is done scanning your hard disk, choose Quit from the File menu.

Use Drive Setup

- 1 Open the Drive Setup icon, which is inside the Utilities folder.

Note: If you don’t have Drive Setup, get it from one of the Apple software sites, such as www.support.apple.com.

- 2 In the list of drives, click your hard disk.
- 3 Choose Update Driver from the Functions menu.
If the test reveals a problem, reinitialize your hard disk.
- 4 Choose Quit from the File menu.

Perform an easy installation of system software

- 1 Open the System Software Installer icon.
- 2 In the Welcome screen, click Continue.
- 3 When the Easy Install dialog box appears, hold down Shift-⌘-K.
- 4 Click Install New System Folder, then click OK.
- 5 Click Clean Install.
- 6 Follow the onscreen instructions to complete the installation.