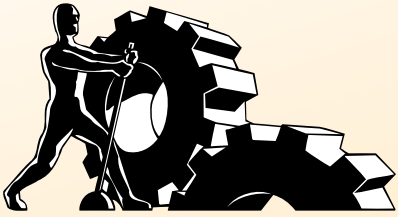


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# Trouble- shooting Your Mac

**Joe Kissell**

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# Read Me First

Welcome to *Take Control of Troubleshooting Your Mac, Second Edition*, published in May 2011 by TidBITS Publishing Inc. This book was written by Joe Kissell and edited by Adam Engst.

Macs are easy to use, but they can experience problems like any other machine. When something goes wrong with your Mac, use this book to discover the solution.

If you have an ebook version of this title, please note that if you want to share it with a friend, we ask that you do so as you would a physical book: “lend” it for a quick look, but ask your friend to buy a new copy to read it more carefully or to keep it for reference. Discounted [classroom and Mac user group copies](#) are also available.

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## Updates and More

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You can access extras related to this book on the Web (use the link in [Ebook Extras](#), near the end of the book; it’s available only to purchasers). On the ebook’s Take Control Extras page, you can:

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## Basics

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Here are a few “rules of the road” that will help you read this book:

- **Lion:** At publication time, Apple had not yet released Mac OS X 10.7 Lion, but developer preview versions were widely available. Although Apple’s non-disclosure agreement prohibits developers with access to the software from publicizing any details about it, the rule doesn’t preclude mentioning information that has already become public (even if that happened without Apple’s permission). As a result, everything I say in this book about Lion simply repeats what has already been posted publicly on numerous Web sites. Be aware, however, that the final version of Lion may be different from what I describe here.
- **Big cats:** I frequently mention features specific to a particular version of Mac OS X, which Apple usually refers to by a “big cat” code name:
  - Lion: Mac OS X 10.7
  - Snow Leopard: Mac OS X 10.6
  - Leopard: Mac OS X 10.5
  - Tiger: Mac OS X 10.4
  - Panther: Mac OS X 10.3

To find out which version of Mac OS X your Mac is running, follow the directions in [Get System Information](#).

- **Menus:** Where I describe choosing a command from a menu in the menu bar, I use a compact description. For example, to create a new folder in the Finder, you choose New Folder from the File menu; I abbreviate this by saying “File > New Folder.”
- **Contextual menus:** In Mac OS X, when you hold down the Control key and click, a pop-up *contextual menu* appears, with commands appropriate to whatever is under the mouse pointer. For example, if you Control-click a file in the Finder, you’ll see commands such as Get Info, Duplicate, and Make Alias. Control-clicking nearly always works to open a contextual menu, but your mouse or trackpad might support a better method. The default

behavior, the alternative methods, and the ways to set them vary depending on the type of input device; the typical alternative (for right-handed users) is to *right-click* with a mouse—click the right-hand mouse button—so that’s the term this book uses by default for the action that opens a contextual menu.

- **Finding System Preferences:** I sometimes refer to settings in System Preferences that you may want to adjust. To open System Preferences, click its icon in the Dock or choose Apple  > System Preferences. When the System Preferences window opens, click the icon of the pane whose settings you want to adjust. I refer to these panes using an abbreviated notation such as “the Network preference pane.”
- **Finding an application’s preferences:** I often refer to preferences in an application that you may want to adjust. Don’t confuse an application’s preferences with the system-wide settings found in System Preferences. For example, in the program Disk Utility, you would choose Disk Utility > Preferences.
- **Path syntax:** This book occasionally uses a *path* to show the location of a file or folder in your file system. For example, Mac OS X stores most utilities, such as Terminal, in the Utilities folder. The path to Terminal is: [/Applications/Utilities/Terminal](#).

The slash at the beginning of the path tells you to start from the root level of the disk. You’ll also see paths that begin with ~ (tilde), which is a shortcut for the user’s home directory. For example, if a person with the user name [joe](#) wants to install fonts that only he can access, he’ll put them in his [~/Library/Fonts](#) folder, which is just another way of writing [/Users/joe/Library/Fonts](#).

- **Hidden ~/Library folder in Lion:** The [~/Library](#) folder, which I refer to frequently in this book, is hidden by default in Lion. To view it in the Finder, choose Go > Go to Folder, enter [~/Library](#), and click Go. Or, to unhide it permanently, open Terminal (in [/Applications/Utilities](#)) and enter `chflags nohidden ~/Library` (you can reverse the command by using `hidden` instead of `nohidden`).
- **Volumes and partitions:** I follow Apple’s terminology in referring to any disk *or partition on a disk* as a volume. So if a hard disk has not been partitioned, it has just one volume. If a disk has been partitioned, each partition is a volume.

## A Note about My Mac Fitness Books

This book is one of three I've written that involve keeping your Mac healthy and fit. Inevitably, they all overlap slightly, but they have different emphases:

- ◆ This book is about solving problems that prevent your Mac from operating properly. It includes basic troubleshooting procedures, ready-made solutions to common complaints, and techniques that can help you diagnose and treat issues the book doesn't cover specifically.
- ◆ *Take Control of Maintaining Your Mac* focuses on preventive maintenance—avoiding future problems, reducing clutter, making your Mac easier to use, and monitoring its ongoing health.
- ◆ *Take Control of Speeding Up Your Mac* goes into great detail about ways to increase your Mac's performance, returning to (or even surpassing) the speed it had when it was brand new. This includes finding and taming rogue processes, improving disk and CPU responsiveness, installing hardware upgrades, optimizing your wireless network, and many other tasks that contribute to overall speed.

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## What's New in The Second Edition

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In the roughly two years since the previous version of this book was released in 2009, Mac OS X has undergone lots of changes, as have third-party tools. In addition, I've accumulated more troubleshooting advice I wanted to share. As a result, I've made extensive changes in this edition. Some of the most significant changes include:

- Information on Apple's USB Software Reinstall Drive, other flash drives, and Lion's Recovery HD volume in [Acquire a Secondary Startup Volume](#)
- Suggestions for alternative ways to [Start Up from Another Volume](#)
- Updated instructions (for 10.6 Snow Leopard and later) in [Erase and Restore from Backup](#)
- A thoroughly revised list of resources in [Reset PMU, SMU, SMC, NVRAM, or PRAM](#)

- Improved guidelines and updated information in [Check Free Disk Space](#)
- Revised instructions (now supporting Snow Leopard and later, and Microsoft Office 2011) in [Clear Caches](#)
- Expanded information about bad RAM in [Your Computer Keeps Turning Itself Off](#)
- Additional suggestions about what to do if [You Experience Repeated Kernel Panics](#)
- Drawing from *Take Control of Speeding Up Your Mac*, a revised discussion of easy things to try if [Your Mac Is Abnormally Slow](#)
- Ready-to-use solutions to even more common problems:
  - ▶ [Spotlight Searches Fail](#)
  - ▶ [Keychain \(Seemingly\) Forgets Passwords](#)
  - ▶ [Apple Mail Fails to Connect](#)
  - ▶ [Time Machine Misbehaves](#)
  - ▶ [A Volume Won't Unmount](#)
- Updated information about Apple's support offerings in [Ask the Vendor for Help](#)

# Introduction: Don't Panic!

You've always heard that Macs are easy to use and less prone to misadventures than Windows PCs. And that's true. But they're still only machines. And sure enough, one day it happens: you encounter a serious problem with your Mac and have no idea what to do. Perhaps, since you're reading this book, that day is today.

Repeat after me: Everything is going to be all right. Now take a deep breath and try again, this time with feeling! *Everything is going to be all right*. I want you to believe that. Even if you're feeling panicked right now because your Mac is doing something wonky and you're facing a deadline, I want you to set aside your anxiety for a moment.

Almost every Mac problem you may encounter has a solution. True, some solutions are more elusive, more time-consuming, or more expensive, than others, but still: don't worry. I've been solving problems with Macs for more than 20 years, and I'm here to tell you that solutions come more easily when you have a clear head and approach a problem systematically. That's what this book helps you to do.

Make yourself a nice cup of tea. (Keep the tea away from your Mac, by the way—let's not add to your problems, eh?) Close your eyes and think happy thoughts. Then page through this book to learn the most efficient way to deal with whatever difficulties you may be having.

I've seen more than one Mac troubleshooting book that was upward of 600 pages long, and troubleshooting Web sites with thousands of pages of suggestions. By contrast, this book makes no attempt to be comprehensive, because merely listing vast numbers of problems and their accompanying solutions doesn't help one bit if you have a different problem or don't realize how your problem is like some other one. What I hope to do, instead, is show you some handy troubleshooting techniques, provide instructions for solving several common problems, and then help you figure out what to do when a problem's cause or solution isn't immediately apparent. In other words, I want to teach you how to be your own technical support person—to do what I do when something goes wrong with one of my Macs.

Because my focus here is on getting your Mac back into working order, I intentionally skip over lots of background information and technical details. So don't worry if you're unsure exactly *why* some technique solves your problem. If you're really interested in the deep background, some exploration on the Web will probably turn up oodles of detail.

As confident as I am that most Mac problems have straightforward solutions, I must point out that some problems can't be solved with a few mouse clicks or other clever fiddling. If flames are shooting out of your Mac or the screen is in a thousand pieces, you'll need more help than I can provide here. Even simpler hardware problems, such as a faulty component on your logic board or a busted power cable, may require a trip to the repair shop. And a few—very few—hardware problems are either entirely beyond repair or more costly to repair than is worthwhile. Nevertheless, don't panic. By the time you finish this book, you'll not only know how to solve most problems, you'll have the tools and techniques you need to prevent many problems in the first place, or at least to nip them in the bud. And even if you have a problem that requires professional help, following the steps in this book will help you talk to a repairperson more effectively.

If you don't have any problems right now and are merely reading this to prepare yourself for future mishaps, good for you! You'll especially appreciate the information in the first couple of chapters about preventing problems and preparing for an emergency.

This book is designed to help troubleshoot problems with any version of Mac OS X from 10.4 Tiger onward, though many of the techniques also work with older versions. At press time, Mac OS X 10.7 Lion hadn't yet been released, but based on my preliminary testing with preview versions, I expect that nearly everything in this book will continue to work with it. Use the link in [Ebook Extras](#), near the end of the book, to check for any new information or updated versions of this book.

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**Font of knowledge:** *One large category of Mac trouble I don't cover here is font misbehavior. If you need help troubleshooting a font-related problem, read Sharon Zardetto's [Take Control of Font Problems in Leopard](#). It hasn't been revised in several years, but it remains the only book on the market about font problems and much of its advice is still worthwhile.*

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# Troubleshooting

## Quick Start

When your Macintosh has problems, you undoubtedly want to jump right to the solution. So feel free to skip immediately to [Solve Common Problems](#) and see if your symptom is listed there. If not, and time permitting, I recommend reading this book in order, because earlier sections provide useful background information for later sections. However, you may also try the steps in [Troubleshoot Novel Problems](#), following the cross-references as necessary to earlier parts of the book where certain procedures are described in detail.

### ***Prepare for Trouble***

- Even if your Mac is healthy now, take steps to keep it that way. Read [Prevent Problems](#).
- When your Mac starts acting up, you'll be glad to already have a toolkit with which you can diagnose and fix it. Learn what you need to have on hand in [Prepare for an Emergency](#).
- Most of the steps you'll go through when a problem occurs rely on several common procedures. Learn how to do these tasks before problems arise so that fixing them will be easier. See [Learn Basic Troubleshooting Procedures](#).

### ***Solve Problems***

- If your Mac misbehaves, the problem may be something that many other people have experienced (and that's easily repaired). Start with [Solve Common Problems](#).
- Not all problems are common. If you encounter something not covered in the previous section, learn how to solve it—or find someone who can—in [Troubleshoot Novel Problems](#).

### ***Find More Information***

- For further instruction in troubleshooting, check out the electronic or printed books in [Learn More](#).

# Prevent Problems

Although this book is mainly about solving problems, not preventing them, I'm sure you don't want any issues you've fixed to recur. And a few preventive steps can make solving problems much, much easier if and when they do occur.

At the risk of sounding overly promotional, I would like to note that some of my other books (chiefly *Take Control of Mac OS X Backups* and *Take Control of Maintaining Your Mac*) offer a great deal of advice that will help you prevent problems, and I certainly recommend those titles if you need additional help. In this chapter, though, I cover three particularly important preventive maintenance tasks.

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## Use a Surge Protector or UPS

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Surge protectors are to a computer what airbags are to a passenger in a car. No matter how carefully you drive, another driver could cause a collision—and that airbag could save your life. Likewise, no matter how clean or reliable the power in your building normally is, a lightning strike or power surge could damage components or even wipe out your computer. It's unlikely, but it can and does happen.

Considering how inexpensively you can buy a surge protector, using one is common sense. If you haven't already done so, spend a few dollars to prevent hundreds or thousands of dollars worth of damage. (Still, don't buy the cheapest surge protector you can find, which may not offer enough protection. Get one that includes a warranty covering damage to your computer in the event of a power surge.)

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***Path of least resistance:*** *A lightning strike can also travel through phone lines, Ethernet cables, USB cables, or any other conductor. If your computer has phone or Ethernet cables attached, I recommend purchasing a surge protector with the necessary jacks to protect your computer from these additional sources of potential damage; I also recommend plugging any attached USB devices into a surge protector or UPS.*

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Much better yet, if you can afford it (and they're not terribly expensive), is an uninterruptible power supply (UPS), which includes not only significantly better protection from power surges but a battery that can keep your Mac running for minutes or hours during a power interruption. Models from APC and Tripp Lite work with Mac OS X's Energy Saver preference pane to shut the Mac down automatically in case of power failure. Bear in mind, however, that UPS batteries must be replaced every 3–5 years—a potentially awkward and expensive undertaking.

For more information and to determine the size of UPS you would need, visit <http://www.apc.com/> or <http://www.tripplite.com/>.

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## Back Up Your Mac Regularly

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Statistically speaking, your odds of having some sort of problem with your computer that results in a loss of data are high. It may not happen for years, but if and when it does, the consequences can be devastating. Crucially for our purposes in this book, some of the troubleshooting and repair techniques I cover here assume that you have a backup from which you can restore your data in the event of a serious problem. So if you've never set up a backup plan, don't delay. Start today!

Backups come in all shapes and sizes. I advocate an approach that includes a couple of different backup types, having redundant backups, and storing your media off-site. But if I had to choose just one sort of backup, it would be a bootable duplicate—an exact copy of your startup volume, stored on another hard disk, and configured in such a way that you can boot from that backup drive in the event of an emergency. Ideally, you should update this bootable duplicate at least once a week so that it reflects the files that have been added or changed since the last run.

Lots of software tools provide easy ways to make bootable duplicates. My favorites are:

- Shirt Pocket's SuperDuper: <http://www.shirt-pocket.com/SuperDuper/> (\$27.95)
- Bombich Software's Carbon Copy Cloner: <http://www.bombich.com/software/cccl.html> (free, donations requested)

# Prepare for an Emergency

You probably carry a spare tire, a jack, and jumper cables in your car (perhaps along with the phone number for roadside service). These sorts of basic problem-solving tools are just common sense. If you don't have comparable tools for your Mac, you'll be in a pickle if and when a problem occurs. Don't get stranded without the means to get back up and running again.

All the items mentioned in this chapter can come in handy when a problem occurs. You might not use them all, but I've used each of them at one time or another, and I've found them all to be sound investments.

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## Acquire a Secondary Startup Volume

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You can't replace your car's oil filter while the engine is running—it would not only be messy but it could potentially ruin the engine. Similarly, some repairs can't be done when your Mac is running from a disk that's experiencing problems. In these cases, you must start your Mac from another volume. You may also need to start from another volume if your internal hard drive dies completely.

A secondary startup volume can take numerous forms. I prefer an external hard drive with FireWire and USB interfaces, because it's fast, flexible, and can be used for things other than starting up in an emergency. But that is just one of several options. Be sure you have at least one of these handy:

- A bootable CD or DVD, such as a Mac OS X Install DVD or an emergency repair disc from a third party. Examples include:
  - ▶ DiskTools Pro: <http://www.macwareinc.com/products/DiskToolsPro/overview.html> (\$79.99)
  - ▶ DiskWarrior: <http://www.alsoft.com/DiskWarrior/> (\$99.95)
  - ▶ Drive Genius: [http://www.prosofteng.com/products/drive\\_genius.php](http://www.prosofteng.com/products/drive_genius.php) (\$99)
  - ▶ TechTool Pro: <http://www.micromat.com/> (\$99.99)

- The USB Software Reinstall Drive included with certain Macs (such as the MacBook Air and the Mac mini server) that lack an optical drive
- A USB flash drive, or even an SD card (for Macs with built-in SD card readers), on which you've installed a bootable copy of Mac OS X.
- A suitably partitioned external Thunderbolt, FireWire, or USB hard drive or flash drive—see the sidebar [Partitioning Schemes](#), just ahead, for details. (Note that only Intel-based Macs can boot from USB drives.)

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***Pod people:*** *Some iPods can also be used as startup disks, as long as they have enough free space and an interface appropriate for your computer. Note that iPod hard disks weren't designed to run continuously for any amount of time, so it's fine to use one as an emergency repair disk, but don't work from it regularly. You can learn more about starting up from an iPod in this article from Apple: <http://support.apple.com/kb/HT1478>.*

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## Partitioning Schemes

A drive's partitioning scheme describes things like how many volumes the drive has, how large they are, and where they're located. Even if a disk has only one partition, it must use the correct partitioning scheme to be bootable. The choices are GUID Partition Map (the default for Intel-based Macs), Apple Partition Map (APM) (the only scheme supported for PowerPC-based Macs), or Master Boot Record (which is never bootable on a Mac). An APM-partitioned drive can boot either a PowerPC- or Intel-based Mac, but a GUID-partitioned drive can boot only an Intel-based Mac. To select a scheme when partitioning a drive in Disk Utility, click the Partition button, click Options, and select the appropriate radio button.

- Another Mac that can boot into FireWire target disk mode—assuming both Macs have FireWire ports. (To make this work, connect the Macs with a FireWire cable, restart the one whose disk you want to boot from, and hold down the T key until you see the FireWire icon; see <http://support.apple.com/kb/HT1661>.)

# Learn Basic Troubleshooting Procedures

If I were teaching you how to cook, I'd start by making sure you knew the basic techniques you'd be repeating many times: how to julienne vegetables, deglaze a pan, cream butter, roast poultry, and so on. That way, when we got to specific recipes later, I could simply say, "sweat the aromatics in butter and puree the tomatoes" without having to explain the meanings of words like "sweat," "aromatics," and "puree."

I want to do the same thing in this chapter: make sure you have a grasp of all the procedures that come up in many different Mac troubleshooting tasks. Then, when I describe the specific steps you'll follow to solve various problems, I can say, "start up in Safe Mode" without having to spell out that process every time. And of course, you can always follow links back here if you need a reminder of what I'm talking about.

If you've been using Macs for any length of time, you may raise your eyebrows at some of the procedures just ahead. "Restart Your Mac? Is he kidding? Who doesn't know how to restart a Mac?" But please read through those sections anyway, because they include details that may not be obvious (such as what to do if the usual means of restarting doesn't work).

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## Restart Your Mac

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Restarting is the most powerful Mac troubleshooting technique I know. This simple procedure can resolve a huge variety of crashes, hangs, and other problems. It may not be the first thing you should try (because it takes a few minutes), but it should certainly be high on your list.

When the need to restart arises, try each of these methods in turn until you succeed:


1. **The menu command:** Choose Apple  > Restart. When the confirmation alert appears, click the Restart button.

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**Quicker restarting:** *Another way to restart is to press your computer's power button, which will cause your Mac to display a dialog with four buttons (Restart, Sleep, Cancel, and Shut Down). When this dialog appears, you can either click the Restart button or simply press the R key to restart immediately, without the confirmation alert.*

---

Mac OS X then instructs all running applications and background processes to quit. After a few seconds (or, in some cases, as long as a few minutes—if whatever's running takes a while to respond), the screen goes blank, the startup chime plays, and the Mac restarts.

In some situations, restarting in this way isn't possible. Perhaps the Apple  menu won't drop down, or your Mac is completely frozen and won't respond at all. Or maybe the Restart command appears to take, but 10 minutes later the machine is still chugging away. When this happens, move on to...

2. **The keyboard shortcut:**

- ▶ If your keyboard has a power button, hold down Command and Control and press the power button.
- ▶ If your keyboard doesn't have a power button, hold down Command and Control and press the eject key (typically found in the upper right corner of the keyboard, and if it's not labeled, try either F12 or F15). Usually this method causes your Mac to restart immediately.
- ▶ If that doesn't work, try...

3. **The brute-force method:** Press and hold the Mac's power button (sometimes the power button on older Apple monitors works too) for approximately 10 seconds, or until the power light goes out completely. (If you don't hold it long enough, you may just put your computer to sleep, as indicated by a pulsating power light.) Then press the power button again to turn your Mac back on.

# Solve Common Problems

Now that you have a collection of basic problem-solving techniques under your belt, it's time to move on to specific problems. I realize that many problems you may encounter aren't mentioned here (in which case, move on to [Troubleshoot Novel Problems](#)), but these are 15 of the most common Mac problems for which there's a straightforward path to a solution.

---

## Your Computer Won't Turn On

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One day you sit down at your Mac and press the power button, but instead of the reassuring startup chime you hear nothing. No power light, a blank screen—no sign of life. This is an especially good time to remember not to panic. Take a deep breath and follow these steps:

1. Check the entire electrical path. Start with the power cord where it connects to your Mac and make sure it's firmly seated. Then make sure the other end is plugged in tightly. If you have anything else between the plug and the wall outlet—such as an outlet strip, surge protector, or UPS—check each of the plugs along the chain. Also, check for crimps or sharp angles in the cords, which could mean broken wires inside. If you find or suspect a broken wire, replace the cord. (If you were using a surge protector and there was a lightning strike or power surge, it may have sacrificed itself to protect your Mac. Be sure to check its failure indicator.)

If all the connections look good, try plugging a lamp or other device into the same outlet as your Mac to verify that the juice is flowing. If not, check your building's circuit breakers. If it still won't turn on...

2. Unplug everything from the computer except the keyboard, mouse, and display. Press the power key again. If it turns on, suspect a faulty peripheral. If not...
3. Reset the PMU, SMU, or SMC (if appropriate). (See [Reset PMU, SMU, SMC, NVRAM, or PRAM](#).) Obviously, you can't perform a procedure that requires holding down keys while starting up if you can't start up, but most of these resets can be done without power.

If none of these procedures brings your Mac back to life, it's time to call a repairperson. See [Go to the Source](#).

---

## Your Computer Keeps Turning Itself Off

---

Perhaps the problem isn't that your Mac won't turn on, but that it keeps turning itself off when you don't want it to. This could signal a problem with your computer's power supply, logic board, or RAM.

However, before taking your computer in to the shop for a potentially expensive repair, try the following:

- Check to see that the power cord is firmly seated (on both ends), and if your computer is plugged into an outlet strip, make sure that's also plugged in securely.
- If your computer is plugged into a UPS, make sure the UPS itself is working and that it can run the computer from battery. If not, a small power fluctuation could result in the computer losing power when you thought it was being protected by the UPS.
- Carefully check the settings in the Energy Saver pane of System Preferences. In particular, click the Schedule button and verify that your computer is not set to shut down automatically.
- [Start Up in Safe Mode](#) and run your computer for a while to see if the problem recurs.
- Reset all the nonvolatile memory (read [Reset PMU, SMU, SMC, NVRAM, or PRAM](#)).
- Check the RAM (see [Check Your RAM](#)). But note that sometimes even RAM that passes all tests with flying colors can lead to random shutdowns because of subtle variations from Apple's specifications. For example, the late-2010 iMacs often exhibit this problem when outfitted with 16 GB of third-party RAM (lower amounts of RAM, and Apple's factory-installed RAM, appear to be fine). I encountered this problem myself, and in my case, the solution was to replace the RAM with the same brand (Samsung) Apple uses.

If your Mac continues to shut itself off or restart randomly, after trying all these suggestions, it's time to take it in for repair.

# Troubleshoot Novel Problems

Sooner or later, you're bound to encounter some problem you haven't experienced before, and which the previous chapter doesn't cover. Although I've seen hundreds of different things go wrong with Macs over the years, I still run across novel problems all the time. If the solution to some problem isn't immediately obvious, I go through a series of steps to narrow down the possible causes and test remedies until I find one that works. That's what I want to teach you to do here.

First, I ask you to try some easy all-purpose solutions. But at a certain point, you may need to look further for help. I describe how to get more information and troubleshooting advice from a number of different sources.

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## Try the Standard Quick Fixes

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If I get a headache, I generally take a couple of over-the-counter pain relievers. If the headache goes away, I don't worry about the cause; I just get on with my day. Only if it doesn't go away, or recurs, or accompanies other symptoms, will I call my doctor. Lots of Mac problems fall into the same category. You can try any or all of several all-purpose procedures that tend to zap lots of common irritations. If the problem goes away, there's no need to waste time tracking down its exact cause, but if the quick fixes don't work or the problem comes back, you can move on to more detailed troubleshooting (see [Ask the Right Questions](#), a few pages ahead).

### Quick Fixes for Application Misbehavior

One of the most frequent Mac problems is an application that fails to launch, refuses to open a certain document, has display problems, or otherwise starts behaving erratically.

If this happens to you, try each of these procedures in turn until the problem disappears:

1. **Quit and try again:** If a program isn't cooperating in any way, quit it, reopen it, and then test to see if the problem is still there.
2. **Force-quit the application:** If the problem remains, or if the application won't quit normally, force-quit it and open it again (see [Force-Quit an Application](#)). If it doesn't work the first time, it's worth trying this procedure a few times in a row.
3. **Restart:** As always, restarting is a good way to zap numerous odd problems. Flip back to [Restart Your Mac](#).
4. **Remove the preference file:** If the application still misbehaves after restarting, follow the procedure for checking or disabling its preference file (read [Check Preference Files](#)) and launch it again.
5. **Repair disk permissions:** Although rare, it can happen that incorrect file permissions prevent an application—particularly one from Apple—from working correctly. See [Repair Permissions](#).
6. **Clear your caches:** Focus on the cache for the application that's misbehaving. Try [Clear Caches](#).

If none of these ideas leads to a solution, skip ahead to [Ask the Right Questions](#), next page.

## Quick Fixes for System-Wide Problems

Sometimes it's not just a single application that's misbehaving. If your whole system appears to be slow or unresponsive, or otherwise behaves in an unexpected way, try these fixes:

1. **Close extra windows, tabs, or applications:** Sometimes applications can chew up RAM and CPU cycles even if they're running in the background and seemingly doing nothing. Having many open tabs or windows (even in the Finder) can also increase your RAM usage. Try quitting applications or closing tabs or windows you're not actively using.
2. **Restart:** You know the drill—if not, read [Restart Your Mac](#).
3. **Check for free space:** Be sure your disk isn't close to being full. Free up at least a few gigabytes. See [Check Free Disk Space](#).

# Learn More

Besides the Web sites listed in [Check Mac Troubleshooting Sites](#), a few other resources may be of interest.

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## Ebooks

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- *Macworld Mac Troubleshooting Superguide*
- *Take Control of Font Problems in Leopard*, by Sharon Zardetto
- *Take Control of Maintaining Your Mac*, by Joe Kissell
- *Take Control of Speeding Up Your Mac*, by Joe Kissell
- *Troubleshooting Mac OS X* by “Dr. Smoke” (Gregory E. Swain) is a 600-page ebook that goes into great detail about solving a wide variety of Mac problems. <http://www.thexlab.com/book/troubleshootingmacosx.html> (\$19.95)

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## Printed Books

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- *Apple Training Series: Mac OS X Support Essentials v10.6* by Kevin M. White. Heavy-duty support information targeted at Mac consultants and technicians. <http://www.amazon.com/gp/product/0321635345/> (\$64.99 retail; current Amazon.com price, \$46.42)
- *Macs Portable Genius* by Paul McFedries. Includes details about using, configuring, maintaining, and troubleshooting your Mac. <http://www.amazon.com/gp/product/0470874023/> (\$25 retail; current Amazon.com price, \$16.50)
- *Mac Secrets* by Mark Hattersley. Another general-purpose book of Mac tips and tricks, including troubleshooting help. <http://www.amazon.com/gp/product/0470637889/> (\$49.99 retail; current Amazon.com price, \$31.49)

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## About the Author

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Joe Kissell is Senior Editor of *TidBITS* and the author of numerous books about Macintosh software, including [Take Control of Mac OS X Backups](#) and [Take Control of Maintaining Your Mac](#). He is also a Senior Contributor to *Macworld*, was the winner of a 2009 Neal award for Best How-to Article, and has appeared on the MacTech 25 list since 2007. Joe has worked in the software industry since the early 1990s, and he previously managed software development for Nisus Software and Kensington Technology Group. He lives in Paris with his wife, Morgen Jahnke, their son, Soren, and their cat, Zora.

To contact Joe about this book, send him email at [jwk@me.com](mailto:jwk@me.com) and include [Take Control of Troubleshooting Your Mac](#) in the subject so

his spam filters won't intercept it. Better yet, if appropriate, post your question at <http://www.getsatisfaction.com/takecontrolbooks/>.



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## Shameless Plug

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Although I write about computers as my day job, I have a great many other interests, which I write about on several Web sites, including [Interesting Thing of the Day](#) and my personal blog. You can find links to all my sites, a complete list of my publications, and more about me at [JoeKissell.com](http://JoeKissell.com). You can also follow me on Twitter ([@joekissell](#)).

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## About the Publisher

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Publishers Adam and Tonya Engst have been creating Apple-related content since they started the online newsletter *TidBITS*, in 1990. In *TidBITS*, you can find the latest Apple news, plus read reviews, opinions, and more (<http://www.tidbits.com/>). Adam and Tonya are known in the Apple world as writers, editors, and speakers. They are also parents to Tristan, who thinks ebooks about clipper ships and castles would be cool.

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*[Take Control of Apple Mail in Snow Leopard](#)* (Joe Kissell): Go under the hood with the new (and old) features in Apple Mail 4. Joe gets you going and helps you get the most out of Mail.

*[Take Control of Font Problems in Leopard](#)* (Sharon Zardetto): If you're suffering from mysterious font problems in Leopard, help is at hand!

*[Take Control of Fonts in Snow Leopard](#)* (Sharon Zardetto): Install, organize, and use fonts with ease in Mac OS X 10.6 Snow Leopard (and 10.5 Leopard)!

*[Take Control of the Mac Command Line with Terminal](#)* (Joe Kissell): Learn the basics of the Unix command line that underlies Mac OS X, and get comfortable and confident when working in Terminal.

*[Take Control of Mac OS X Backups](#)* (Joe Kissell): Set up a rock-solid backup strategy so that you can restore quickly and completely, no matter what catastrophe arises.

*[Take Control of Maintaining Your Mac](#)* (Joe Kissell): Discover a commonsense approach to avoiding problems and ensuring that your Mac runs at peak performance.

*[Take Control of Permissions in Snow Leopard](#)* (Brian Tanaka): Solve quirky problems, increase privacy, and share files better.

*[Take Control of Speeding Up Your Mac](#)* (Joe Kissell): Put the zip back into your Mac with advice based on Joe's extensive research and experimentation in the area of Mac performance.

*[Take Control of Upgrading to Lion](#)* (Joe Kissell): Find friendly advice that prepares you for a successful installation, plus learn how to best run the installer while avoiding problems.

*[Take Control of Users & Accounts in Snow Leopard](#)* (Kirk McElhearn): Find straightforward explanations of how to create, manage, and work with—and among—user accounts.