



TAKE CONTROL OF

# Solving Mac Problems

**MAINTAIN,  
TROUBLESHOOT, AND  
SPEED UP YOUR MAC**

*by* **JOE KISSELL**

**\$14.99**

# Table of Contents

|                                            |           |
|--------------------------------------------|-----------|
| <b>Read Me First .....</b>                 | <b>5</b>  |
| Updates and More .....                     | 5         |
| Basics .....                               | 6         |
| Which Macs Does This Book Cover? .....     | 8         |
| What's New in Version 1.2 .....            | 9         |
| What Was New in Version 1.1 .....          | 10        |
| <b>Introduction .....</b>                  | <b>11</b> |
| <b>Quick Start.....</b>                    | <b>13</b> |
| <b>Author's Note .....</b>                 | <b>14</b> |
| <b>Prevent Problems .....</b>              | <b>16</b> |
| Get Information About Your Mac .....       | 16        |
| Install the Latest Version of macOS .....  | 22        |
| Update Other Software .....                | 24        |
| Turn On Automatic Software Updates .....   | 26        |
| Free Up (Just Enough) Disk Space .....     | 31        |
| Set Up a Backup System .....               | 42        |
| Consider Maintenance Utilities .....       | 44        |
| Set Up Another User Account .....          | 51        |
| Consider Purchasing AppleCare+ .....       | 52        |
| Do You Need an Anti-Malware App? .....     | 53        |
| Perform Periodic Maintenance Tasks .....   | 55        |
| <b>Learn Troubleshooting Basics .....</b>  | <b>63</b> |
| Force-Quit an App.....                     | 63        |
| Restart Your Mac .....                     | 64        |
| Log In to Another User Account .....       | 65        |
| Use Disk Utility's First Aid Feature ..... | 66        |
| Use Recovery Mode.....                     | 68        |
| Use Apple Diagnostics .....                | 75        |
| Start Up in Safe Mode .....                | 76        |
| Use Activity Monitor .....                 | 77        |

|                                                    |            |
|----------------------------------------------------|------------|
| Reset NVRAM or SMC .....                           | 80         |
| Check Preference Files .....                       | 81         |
| Clear Caches .....                                 | 83         |
| Check Log Files .....                              | 87         |
| Test for Reproducibility .....                     | 89         |
| Take a Screenshot or Screen Recording .....        | 91         |
| <b>Solve Common Problems .....</b>                 | <b>93</b>  |
| Your Mac Won't Turn On .....                       | 93         |
| Your Mac Stalls During Startup .....               | 94         |
| You Can't Boot from an External Volume .....       | 97         |
| Your Mac Restarts Spontaneously .....              | 100        |
| Your Mac Keeps Turning Itself Off .....            | 102        |
| Your Fan Runs Excessively .....                    | 103        |
| You Can't Empty the Trash .....                    | 105        |
| An App Grinds to a Halt .....                      | 106        |
| An App Crashes .....                               | 108        |
| The Screen Freezes .....                           | 112        |
| The Keyboard or Pointing Device Doesn't Work ..... | 113        |
| You Lose Your Internet Connection .....            | 115        |
| iCloud Data Doesn't Sync Properly .....            | 118        |
| Files or Folders Are Missing .....                 | 121        |
| Printing Doesn't Work .....                        | 122        |
| Spotlight Searches Fail .....                      | 124        |
| Apple Mail Fails to Connect .....                  | 127        |
| Time Machine Misbehaves .....                      | 134        |
| A Volume Won't Unmount .....                       | 140        |
| Continuity Features Fail .....                     | 141        |
| Your Laptop's Battery Misbehaves .....             | 143        |
| Apple Pay Stops Working .....                      | 143        |
| Another Mac Is Using Your IP Address .....         | 145        |
| A Webpage Won't Load .....                         | 146        |
| You Forget Your Admin Password .....               | 148        |
| <b>Troubleshoot Novel Problems .....</b>           | <b>149</b> |
| Try the Standard Quick Fixes .....                 | 149        |

|                                       |            |
|---------------------------------------|------------|
| Ask the Right Questions .....         | 151        |
| Get More Help .....                   | 153        |
| <b>Speed Up a Slow Mac .....</b>      | <b>160</b> |
| Speed Up Your Browser .....           | 160        |
| Check (and Reduce) CPU Usage .....    | 164        |
| Check (and Reduce) RAM Usage .....    | 172        |
| Free Up (Even More) Disk Space .....  | 177        |
| Consider Hardware Upgrades .....      | 182        |
| <b>About This Book .....</b>          | <b>189</b> |
| Ebook Extras .....                    | 189        |
| About the Author and Publisher .....  | 190        |
| Credits .....                         | 190        |
| <b>Also by Joe Kissell .....</b>      | <b>191</b> |
| <b>Copyright and Fine Print .....</b> | <b>193</b> |

# Read Me First

Welcome to *Take Control of Solving Mac Problems*, version 1.2, published in December 2025 by alt concepts. This book was written by Joe Kissell and edited by Caroline Rose.

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 figure out how to get back up and running. It teaches you preventive maintenance, basic troubleshooting steps, how to solve numerous common problems, and what to do if you encounter a novel problem.

If you want to share this ebook with a friend, we ask that you do so as you would with a physical book: “lend” it for a quick look, but ask your friend to buy a copy for careful reading or reference. Discounted [classroom and Mac user group copies](#) are available.

Copyright © 2025, Joe Kissell. All rights reserved.

---

## Updates and More

---

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

- Download any available new version of the ebook for free, or buy any subsequent edition at a discount.
- Access the book in both PDF and EPUB formats. (Learn about reading on mobile devices on our [Device Advice](#) page.)
- Read the ebook’s blog. You may find new tips or information, as well as a link to an author interview.

If you bought this ebook from the Take Control website, it has been added to your account, where you can download it in other formats and access any future updates.

---

## Basics

---

I'd like to briefly acquaint you with a few terms and concepts that I use throughout this book.

### “Apple Account” vs. “Apple ID”

Starting in macOS 15 Sequoia, iOS 18, and iPadOS 18, Apple moved from the term “Apple ID” to “Apple Account.” Thus, instead of entering your Apple ID (which usually takes the form of an email address), you now enter your Apple Account username. In this book, I'm using “Apple Account” except where “Apple ID” still appears in the Mac user interface (in older versions of macOS), but you can treat the terms as interchangeable.

### “M-Series” vs. “Apple Silicon” Mac

This book covers both Intel-based Macs and Macs that use Apple silicon chips such as the M1, M2, M3, M4, and so on. Even though Apple wants everyone to call these devices “Macs with Apple silicon,” that always seemed excessively clunky to us, so in Take Control books we've consistently used the shorthand “M-series Macs.” That has worked fine so far.

However, in mid-2025, [rumors began to circulate](#) that Apple would release a low-priced MacBook using not an M-series chip but rather an A-series chip. Are these rumors true? We have no idea. But if and when that does happen, it will be the first “Mac with Apple silicon” that isn't an M-series Mac—in which case we might have to rethink how we describe such Macs in our books. But, at least for this version of this book, we're sticking with “M-series” with the understanding that anything we say about M-series Macs *should* also apply to hypothetical future A-series Macs.

## Authentication and Credentials

On numerous occasions you'll be asked to prove who you are by entering a username and password or using Touch ID. The process of prov-

ing your identity in one of these ways is known as *authentication*, and I sometimes tell you to *authenticate* rather than spelling out “enter your username and password or use Touch ID.” Your *credentials*, meanwhile, are whatever pieces of information are needed for you to authenticate—usually the combination of a username and password. So, you may also see instructions like “Enter your credentials when prompted.”

## Disk, Drive, and Volume

In this book, when I use the term *disk* by itself, I generally mean your Mac’s primary internal storage device, whether that’s an SSD, a mechanical hard drive, or a Fusion drive. A *drive* is a physical device for storing data; a single drive can comprise one or more *volumes*, or logical storage devices. The volume that contains the copy of macOS currently used to boot your Mac is your *startup volume*. Although a given disk can include more than one startup volume, Apple usually refers to your startup volume as your *startup disk*. (In an odd anachronism, Apple still uses “Macintosh HD” as the default name for your Mac’s startup volume, even when it’s not stored on a hard disk.)

## Settings vs. Preferences

In macOS Ventura, Apple replaced System Preferences with System Settings, and in most apps what was formerly a Preferences window is now a Settings window. In this book, I generally use a shorthand like “go to Safari > Settings/Preferences” or “go to System Settings/System Preferences” to reflect these two possibilities, though I occasionally spell out the applicable operating systems for clarity.

You can open either System Settings or System Preferences in a variety of ways. The simplest is probably to choose System Settings or System Preferences from the Apple  menu.

In spite of this user interface change, the files that hold preferences or settings are both called *preference files*, and I sometime refer to preferences and settings jointly as preferences.

## Visual Changes in Tahoe

macOS 26 Tahoe introduced a visual design called Liquid Glass that includes a number of transparency and translucency effects, plus new icons, rounder window corners, and other changes. Most of the screenshots in this book were taken in earlier versions of macOS, so you may notice minor differences, depending on which version of macOS you're using.

---

## Which Macs Does This Book Cover?

---

This book is for Macs running macOS 11 Big Sur or later, including macOS 12 Monterey, macOS 13 Ventura, macOS 14 Sonoma, macOS 15 Sequoia, and macOS 26 Tahoe. The following Mac models are at least *capable* of running a supported version of macOS:

- iMac (mid 2014 or later)
- iMac Pro
- Mac mini (late 2014 or later)
- Mac Pro (late 2013 or later)
- Mac Studio
- MacBook (2015)
- MacBook Air (2013 or later)
- MacBook Pro (late 2013 or later)

In other words, this list includes any Mac released in 2014 or later, plus the 2013 or later models of the MacBook Air, MacBook Pro, and Mac Pro.

If you have one of those Macs but it's still running an older version of macOS, I strongly recommend updating it, as soon as possible, to run the latest version of macOS it supports; see [Install the Latest Version of macOS](#). Older versions of macOS, besides lacking useful new features and bug fixes, have a significantly different user interface, so although

many of the instructions in this book still apply in a general way, the specifics won't match what you see on your screen.

If you have an older Mac, again, much of the material in this book still applies, at least in a general way, but my candid advice is: give serious consideration to saving up for a new Mac. A ten-year-old computer has long surpassed its typical useful lifespan, and your odds of encountering problems increase with the age of your Mac.

---

## What's New in Version 1.2

---

This minor update adjusts the wording throughout to reflect changes in macOS 26 Tahoe, and makes the following additional changes:

- Added details for where to find automatic App Store update settings in Tahoe; see [Automatic Updates in Ventura or Later](#)
- In [Consider Purchasing AppleCare+](#), added information about the AppleCare One program
- Adjusted [Web Browser, Safari, or Get Help Online](#) to reflect a wording change in Tahoe
- Added information about Recovery Assistant to [Use the Utilities Menu](#)
- Updated [Why Not Ask an AI?](#) to reflect the situation as of publication time
- In [Prune Startup and Background Items](#), added another place to look for background items

---

## What Was New in Version 1.1

---

Version 1.1 of this book was a minor update to address a few small changes in macOS 15 Sequoia between the beta versions that were available when the first version of this book was published and the final release. For example, I did the following:

- Removed all references to Sequoia as a future release
- Updated a few screenshots (such as those in [Automatic Updates in Ventura or Later](#)) to reflect small user interface changes
- Noted, in [Set Up a Backup System](#), that as of macOS 15.2, bootable duplicates are no longer supported
- Updated titles of a couple of Take Control books that have changed

# Introduction

Macs have a well-earned reputation for reliability and ease of use. Even so, they're just machines, and like all machines they're subject to malfunctions. Things can go wrong for many reasons, including software bugs, hardware defects, and user error.

If your Mac is experiencing a problem right now, 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, time-consuming, or expensive than others, but still: don't worry. I've been solving problems with Macs for more than 30 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.

As I explain in an [Author's Note](#) just ahead, this book supersedes and replaces three earlier books of mine, with information on preventive maintenance, troubleshooting, and speeding up your Mac. Of those three areas, however, solving problems is the main focus here.

I've seen more than one Mac troubleshooting book that was upward of 600 pages long, and troubleshooting websites 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 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 useful general techniques, provide instructions for solving numerous 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 tech support person—to do what I do when something goes wrong with one of my Macs.

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 chapter about preventing problems and gathering information that will help you later on.

This book is designed to help solve problems with any version of macOS from macOS 11 Big Sur onward (including macOS 26 Tahoe), though many of the techniques also work with older versions and most should continue to work under future versions of macOS. Use the link in [About This Book](#) to check for any new information or updated versions of this ebook.

# Quick Start

If you need an immediate solution to an urgent problem, feel free to skip to [Solve Common Problems](#) and see if your symptom is listed there. You might also try the steps in [Troubleshoot Novel Problems](#), following the cross-references to earlier parts of the book where certain procedures are described in detail. Otherwise, time permitting, I recommend reading this book in order, because earlier sections provide useful background information for later sections.

## *Prepare for trouble:*

- Even if your Mac is healthy now, take steps to keep it that way. Read [Prevent Problems](#).
- 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; see [Learn Troubleshooting Basics](#).

## *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 preceding section, learn how to solve it—or find someone who can—in [Troubleshoot Novel Problems](#).
- If the specific problem your Mac is experiencing is slow performance (overall, or just in a particular app), read [Speed Up a Slow Mac](#) for advice.

# Author's Note

*Take Control of Solving Mac Problems* was first published in mid-2024, but its roots go way back to 2006, when I wrote the first edition of *Take Control of Maintaining Your Mac* (a book about preventive maintenance). That was followed in 2007 by *Take Control of Troubleshooting Your Mac* and in 2011 by *Take Control of Speeding Up Your Mac*.

All three of those books went through multiple editions, but in 2015 Take Control Books decided the time had come to discontinue them. I thought they were still important and useful, so I took them over, updating them and republishing them myself as Joe On Tech Guides, which also went through multiple updates. Then, in 2017, shortly after I took the reins of Take Control Books, I brought all three titles back into the Take Control catalog, revising them to new editions. They were last updated in early 2019.

**Note:** Those three books plus *Take Control of Backing Up Your Mac* comprised what I once called the Mac Fitness Series. The *Backing Up* book grew out of *Take Control of Mac OS X Backups* (2004) and for a couple of years was titled *Backing Up Your Mac: A Joe On Tech Guide*. Unlike the other books, that one has been kept consistently updated.

For a long list of reasons, I was unable to keep the *Maintaining*, *Troubleshooting*, and *Speeding Up* books updated after 2019, even as Macs changed dramatically with such major developments as recovery mode, the APFS file system, SSDs as standard across all Macs, the introduction of Apple's M-series chips, and a massively revised user interface in macOS. In other words, it wasn't just that the books had gotten long in the tooth; the fundamentals of keeping a Mac healthy had also changed.

The book you're now reading replaces the *Maintaining*, *Troubleshooting*, and *Speeding Up* books. It borrows bits and pieces from them, but the text has been rethought, rearranged, and thoroughly updated. I've

also dropped lots of topics that are no longer relevant while adding a great deal of new information. In the process of doing all that, I realized the following:

- Preventive maintenance for modern Macs does not require all the elaborate daily, weekly, monthly, and annual tasks that once filled a book. A single chapter, [Prevent Problems](#), tells you everything you need to know.
- Macs with SSDs are less likely to have speed problems than those with mechanical hard drives, and M-series Macs are less likely to have speed problems than Intel-based Macs. While any Mac, under the right circumstances, can still become sluggish, the number of potential causes and solutions has shrunk. So, [Speed Up a Slow Mac](#), too, is just one chapter.
- Troubleshooting is still very much a thing, and this book takes more (in both structure and content) from *Take Control of Troubleshooting Your Mac* than from the other two books. But since this book really is a synthesis (and rethinking) of three earlier books, I felt it deserved a new title, albeit one that still emphasizes troubleshooting.
- Whereas the three earlier books covered OS X 10.9 Mavericks through macOS 10.14 Mojave, this one is for Macs that are running (or *can* run) macOS 11 Big Sur or later (see [Which Macs Does This Book Cover?](#)). Restricting the range of Macs covered to those released within roughly the past 10 years enabled me to make the book considerably shorter and less complicated.

With just one book to manage rather than three, I expect that I'll be able to keep this title updated far into the future.

# Prevent Problems

Although this book is mainly about solving problems, I'm sure you'll agree that *preventing* problems when possible is even better! So, we begin with some steps you can take now, even if your Mac is behaving perfectly well, that will reduce the likelihood of problems in the future, as well as a handful of procedures you should use routinely (say, every week or every month) to keep your Mac in good working order.

Before getting to preventive measures, however, you should know some key facts about your Mac that will help in troubleshooting later on.

---

## Get Information About Your Mac

---

Those of us who have lived and breathed Apple stuff for decades tend to be as aware of our Mac's vital statistics as our children's birthdays. We know, without having to think about it or look it up, the Mac's exact model and year, amount of RAM and storage, version of macOS, and numerous other facts. If you're not a card-carrying computer geek, on the other hand, such details may be less than obvious. Yet when it comes to solving problems, knowing exactly what you have is essential, as it will affect which directions you follow, what options are available to you, and what advice a professional may give.

I'd like to walk you through a list of important facts you should know about your Mac. Look them up now and make a note of them (on paper, or in the Notes app, or wherever you like) so that you can refer to them as you read this book and may need to seek outside help with Mac problems. Unless you physically upgrade your Mac hardware (which is impossible for most Mac models), the only item on this list that's subject to change is your version of macOS, which you'll likely update from time to time.

## Find Basic Details

Your first step is to choose Apple  > About This Mac (**Figure 1**).



**Figure 1:** The About This Mac window contains many cheerful facts about your Mac. (The layout is different in Monterey and Big Sur.)

This window, whose appearance may vary depending on which version of macOS you're running, tells you the following (all of which should go in your notes):

- **Mac model:** The big bold line at the top plus the small, light gray line below it describe your Mac model. In this example, it's a MacBook Pro, 16-inch, Nov 2023. The most important information here is the model name (MacBook Pro) and the date (Nov 2023), which is

# Learn Troubleshooting Basics

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, roast poultry, and so on. That way, when we got to specific recipes later, I could simply say, "sweat the aromatics in butter and purée the tomatoes" without having to explain the meanings of words like "sweat," "aromatics," and "purée."

I want to do the same thing in this chapter: make sure you have a grasp of certain 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.

**Note:** To be clear, I'm *not* saying you should try every procedure in this chapter right now, even if your Mac is misbehaving! This is a *reference* chapter to teach you various procedures you may use as part of the troubleshooting steps I cover later.

If you've been using Macs for a while, 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 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).

---

## Force-Quit an App

---

When an app gets stuck and its regular Quit command won't work, you can usually quit it using the macOS Force Quit feature. To do this, choose Apple  > Force Quit (or press ⌘-Option-Esc), select the app

you want to quit, and click Force Quit. You can then close the Force Quit Applications window.

**Tip:** Sometimes you can't bring up the Force Quit Applications window; however, you can often force-quit a stuck app without using that window. One way is to Option-right-click (or Option-Control-click) the offending app's Dock icon and choose Force Quit from the contextual menu. Or, to force-quit the foreground app immediately, press ⌘-Option-Shift-Esc.

Sometimes an app keeps running even after you try to force-quit it. When this happens, a second attempt at force-quitting nearly always does the trick. If even that doesn't work, your best bet is to [Restart Your Mac](#).

**Note:** The Finder appears in the Force Quit Applications window along with your other currently running apps, but when you select it the button changes from Force Quit to Relaunch. That's because macOS is designed so that the Finder is always running. If you quit it—which you may need to do if it gets stuck—it automatically attempts to open again.

---

## Restart Your Mac

---

Restarting, as I mentioned earlier in [Restart](#), 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 sometimes 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. macOS then instructs all running apps and background processes to quit gracefully—meaning your work is either saved automatically or you're prompted to save it. After a few seconds (or as long as a few minutes

# 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 25 of the most common Mac problems for which there's a clear path to a solution.

---

## Your Mac Won't Turn On

---

One day you sit down at your Mac and press the power button, but nothing happens. No power light, no sounds, a blank screen—no sign of life. This is an especially good time to remember not to panic. Take a deep breath and try these steps in order until the problem goes away:

1. Check the entire electrical path. (If you're using a Mac laptop, connect it to AC power first; the battery could be dead.) 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 uninterruptible power supply (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.

2. If your Mac uses an external display, confirm that it's not just the display that isn't working. As in step 1, check the connections (both to AC power and to your Mac), and make sure the display is turned

on. (Apple's external displays have no power switch.) If possible, connect the display to another computer to confirm that it works.

3. Unplug everything from the Mac except the keyboard, mouse or other pointing device, and display (on a Mac laptop, disconnect everything but the power adapter), and press the power button again. If it turns on, suspect a faulty peripheral; you can figure out which one by reconnecting your peripherals one at a time, restarting after each.
4. Reset the SMC. (See [Reset NVRAM or SMC](#).) On Intel-based Macs, this reset 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 Mac Stalls During Startup

---

You press your Mac's power button or restart it, you hear the startup chime, your display powers on, and you see a black or gray screen. But then...nothing. Maybe the Apple logo or another mysterious icon appears, maybe not, but no matter how long you wait, the startup process remains stuck.

This problem may have any number of causes, so the best thing to do is address the possible difficulties systematically. You'll notice that the remedies for most of these problems are nearly the same; they generally involve using recovery mode to first check your disk with Disk Utility and, if that doesn't work, reinstall macOS. However, each set of instructions does have some unique details.

### Question Mark Icon

If an icon of a folder with a flashing question mark  appears, it means your Mac can't find a valid startup volume. That in turn could mean any of the following:

- Your Mac has “forgotten” which volume you want to start up from.

# Troubleshoot Novel Problems

Sooner or later, you're bound to encounter a problem that you haven't experienced before—and that 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, so I also describe how to get more information and troubleshooting advice from a number of different sources.

---

## Try the Standard Quick Fixes

---

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 do I call my doctor. Similarly, for lots of Mac problems you can try any or all of several all-purpose procedures that tend to zap common irritations, and if the problem goes away there's no need to waste time tracking down its exact cause. If the quick fixes you try don't work or the problem comes back, you can move on to more detailed troubleshooting (see [Ask the Right Questions](#)).

## Quick Fixes for App Misbehavior

One of the most frequent Mac problems is an app 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 an app 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 app.** If the app won't quit normally, force-quit it and open it again (see [Force-Quit an App](#)). If this procedure doesn't work the first time, try it a few times in a row.
3. **Restart your Mac.** 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 app still misbehaves after you restart your Mac, follow the procedure for disabling its preference file (read [Check Preference Files](#)) and launch it again.
5. **Clear your caches.** Focus on the cache for the app that's misbehaving. See [Clear Caches](#).

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

## Quick Fixes for Systemwide Problems

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

1. **Close extra windows, tabs, or apps.** Sometimes apps 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 apps or closing tabs or windows you're not actively using. (See [Reduce the Number of Open Apps, Windows, and Tabs](#) for more information.)
2. **Restart your Mac.** You know the drill; if not, read [Restart Your Mac](#).

# Speed Up a Slow Mac

If the problem you’re trying to troubleshoot is that your Mac (or even just a certain app) is too slow, this chapter is for you. It offers tips for speeding up browsing as well as numerous other aspects of your Mac’s performance. And, if fiddling with settings and software isn’t enough, you can also read about ways you may be able to upgrade your hardware.

---

## Speed Up Your Browser

---

Because most of us spend so much time in our web browsers, having a slow browsing experience can be a huge drain on productivity and happiness—even if everything else on your Mac is zippy. If you aren’t experiencing any browser speed problems, feel free to skip ahead to [Check \(and Reduce\) CPU Usage](#).

**Note:** If your problem isn’t browsing speed but rather a particular webpage not loading, see [A Webpage Won’t Load](#).

## Have Fewer Tabs and Windows Open

The more browser windows or tabs you have open, the more RAM (and perhaps CPU resources) you’re using. If you don’t want to quit the browser altogether, at least close the tabs and windows that you aren’t currently using and don’t expect to return to soon. But if you are willing to quit the browser, you can usually enable a browser setting or preference to automatically restore windows and tabs when you reopen it. (For example, in Safari, choose Safari > Settings/Preferences > General and choose “All windows from last session” from the “Safari opens with” pop-up menu.)

## Use a Faster DNS Provider

Virtually any time an app on your Mac does *anything* on the internet—checking your email, loading a webpage, updating software, using Apple Music, and so on—it must look up the IP address of the server it wants to communicate with. To do this, it uses DNS: it queries a device called a *domain name server*, or *DNS server*, which keeps records of which domain names (for example, takecontrolbooks.com) correspond to which numeric addresses (for example, 162.248.179.4). If the first DNS server your Mac asks doesn't know the address, that server queries another, and so on up a hierarchical chain leading to a small number of authoritative servers for an entire top-level domain (such as .net or .com).

**Note:** I say more about DNS issues in [Clear Your DNS Cache](#).

The way DNS works is fairly well known, but many people don't realize that:

- A seemingly simple activity such as loading a webpage could involve a handful, or even dozens, of DNS lookups.
- DNS lookups take time, and must happen before any data can be transferred between your Mac and the server. So, the more DNS lookups that must take place, and the longer each one takes, the longer you must wait for the connection to become active.
- Some DNS servers are *much* faster than others.
- You're not stuck with the DNS servers your ISP tells you to use; you have complete freedom to choose!

Every ISP provides DNS servers. Your ISP may give you addresses to enter manually when setting up your Mac and other devices, or it may use a dynamic method, such as DHCP, to automatically tell your Mac which DNS servers to use. Either way, you can override this choice if your ISP's DNS servers don't perform as well as you'd like.

# About This Book

Thank you for purchasing this Take Control book. We hope you find it both useful and enjoyable to read. We welcome your [comments](#).

---

## Ebook Extras

---

You can [access extras related to this ebook](#) on the web. Once you're on the ebook's Take Control Extras page, you can:

- Download any available new version of the ebook for free, or buy a subsequent edition at a discount.
- Access the book in both PDF and EPUB formats. (Learn about reading on mobile devices on our [Device Advice](#) page.)
- Read the ebook's blog. You may find new tips or information, as well as a link to an author interview.
- Find out if we have any update plans for the ebook.

If you bought this ebook from the Take Control website, it has been automatically added to your account, where you can download it in other formats and access any future updates.

### More Take Control Books

This is but one of many Take Control titles! We have books that cover a wide range of technology topics, with extra emphasis on Macs and other Apple products.

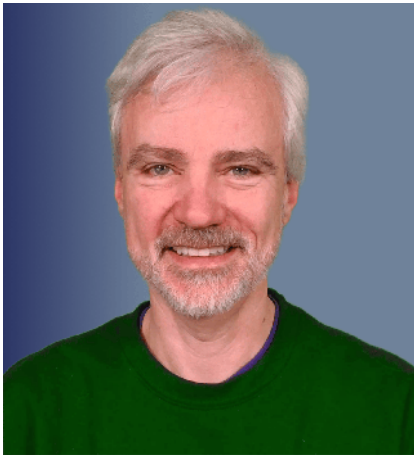
You can buy Take Control books from the [Take Control online catalog](#) as well as from venues such as Amazon and the Apple Book Store. But it's a better user experience and our authors earn more when you buy directly from us. Just saying...

Our ebooks are available in two formats, PDF and EPUB, which are viewable on any computer, smartphone, tablet, or e-reader. All are DRM-free.

---

## About the Author and Publisher

---



Joe Kissell is the author of more than 75 books about technology. In 2017, he also became the publisher of Take Control Books, when alt concepts—the company he runs along with his wife, Morgen Jahnke—acquired the Take Control imprint from TidBITS Publishing Inc.’s owners, Adam and Tonya Engst. Before he began writing full-time in 2003, Joe managed software development, a *totally normal* profession for someone with degrees in philosophy and linguistics.

In his hypothetical spare time, Joe likes to walk, cook, eat, and practice tai chi. He lives in Saskatoon, Saskatchewan, Canada, with Morgen and their sons. To contact Joe about this book, [send him email](#) and *please* include [Take Control of Solving Mac Problems](#) in the subject. You can also sign up for [joeMail](#), his low-volume mailing list, follow him on Mastodon ([@joekissell](#)) or Bluesky ([@joekissell.com](#)), or visit his blog at [JoeKissell.com](#).

---

## Credits

---

- Publisher: Joe Kissell
- Editor: Caroline Rose
- Cover design: Sam Schick of [Neversink](#)
- Logo design: Geoff Allen of [FUN is OK](#)

# Also by Joe Kissell

Click any book title below or [visit our web catalog](#) to add more ebooks to your Take Control collection!

[\*Mac Basics\*](#): Get to know your Mac inside and out with this detailed guide.

[\*Take Control of 1Password\*](#): Slowed down by entering passwords repeatedly? Learn how to let 1Password do the heavy lifting.

[\*Take Control of Apple Mail\*](#): Learn the ins and outs of Apple's email app in macOS, iOS, and iPadOS.

[\*Take Control of Automating Your Mac\*](#): Work more efficiently on your Mac with time-saving shortcuts of all kinds.

[\*Take Control of Backing Up Your Mac\*](#): Protect your valuable data with a complete, bulletproof backup strategy.

[\*Take Control of DEVONthink 4\*](#): Master this powerful information management tool.

[\*Take Control of iCloud\*](#): Make the most of Apple's online service for storing, syncing, and sharing data.

[\*Take Control of MailMaven\*](#): Discover how to use this powerful Mac email app from SmallCubed.

[\*Take Control of the Mac Command Line with Terminal\*](#): Master your Mac's command-line interface and learn basic Unix skills.

[\*Take Control of Tahoe\*](#): Discover what's new in macOS 26, and get all the information you need to upgrade safely.

[\*Take Control of Your Digital Legacy\*](#): Make sure your important digital information is preserved for future generations.

[\*Take Control of Your Online Privacy\*](#): Learn what's private online (not much) and what to do about it.

*Take Control of Your Paperless Office*: With your Mac and scanner, you'll clear the chaos of an office overflowing with paper.

*Take Control of Your Passwords*: Overcome password overload without losing your cool.

# Copyright and Fine Print

*Take Control of Solving Mac Problems*

ISBN: 978-1-990783-51-7

Copyright © 2025, Joe Kissell. All rights reserved.

[alt concepts](#), 419 8B-3110 8th St. East, Saskatoon, SK S7H 0W2 Canada

**Why Take Control?** We designed Take Control electronic books to help readers regain a measure of control in an oftentimes out-of-control universe. With Take Control, we also work to streamline the publication process so that information about quickly changing technical topics can be published while it's still relevant and accurate.

**Our books are DRM-free:** This ebook doesn't use digital rights management in any way because DRM makes life harder for everyone. So we ask a favor of our readers. If you want to share your copy of this ebook with a friend, please do so as you would a physical book, meaning that if your friend uses it regularly, they should buy a copy. Your support makes it possible for future Take Control ebooks to hit the internet long before you'd find the same information in a printed book. Plus, if you buy the ebook, you're entitled to any free updates that become available.

**Remember the trees!** You have our permission to make a single print copy of this ebook for personal use, if you must. Please reference this page if a print service refuses to print the ebook for copyright reasons.

**Caveat lector:** Although the author and alt concepts have made a reasonable effort to ensure the accuracy of the information herein, they assume no responsibility for errors or omissions. The information in this book is distributed "As Is," without warranty of any kind. Neither alt concepts nor the author shall be liable to any person or entity for any special, indirect, incidental, or consequential damages, including without limitation lost revenues or lost profits, that may result (or that are alleged to result) from the use of these materials. In other words, use this information at your own risk.

**It's just a name:** Many of the designations in this ebook used to distinguish products and services are claimed as trademarks or service marks. Any trademarks, service marks, product names, or named features that appear in this title are assumed to be the property of their respective owners. All product names and services are used in an editorial fashion only, with no intention of infringement. No such use, or the use of any trade name, is meant to convey endorsement or other affiliation with this title.

**We aren't Apple:** This title is an independent publication and has not been authorized, sponsored, or otherwise approved by Apple Inc. Because of the nature of this title, it uses terms that are registered trademarks or service marks of Apple Inc. If you're into that sort of thing, you can view a [complete list](#) of Apple Inc.'s registered trademarks and service marks.