

# Mac OS

## Font Management Best Practices Guide

49.2827° N

123.1207° W



portrait, office, meeting,  
contented, people, working,  
glasses, yellow



# Contents

- Why Do You Need to Manage Your Fonts? ..... 3**
  - The Best Practices for Effective Font Management.....3
  
- About This Guide..... 4**
  - Conventions Used in This Guide .....4
  - Back Up Your Files.....5
  - Check for Operating System and Application Updates.....5
  - Clean Font Caches .....5
  - Clean Up Your System Fonts .....6
  
- Clean Up and Organize Your Fonts..... 15**
  - Identifying Damaged and Incompatible Fonts.....15
  - Upgrading Older Fonts to New Formats .....16
  - Identifying Duplicate Fonts .....16
  
- Manage Your Fonts with Suitcase Fusion..... 18**
  - Adding Your Fonts .....18
  - Creating and Deleting Sets .....18
  - Managing Duplicate Fonts .....19
  
- Make a Plan for the Future ..... 20**
  - Organizing Your Fonts with FontDoctor ..... 20
  - Backing Up Your Fonts ..... 20
  - Getting New Fonts ..... 21
  
- Appendix A: The Hidden User Library ..... 23**
  
- Contact Extensis..... 24**

Copyright © 2019 by Celartem, Inc. dba Extensis. All rights reserved.

Disclaimer: Fonts are software and are subject to license restrictions. Any recommendations in this guide regarding moving and using fonts should be considered with respect to the license included with the fonts.

October 11, 2019 1:49 PM

# Why Do You Need to Manage Your Fonts?

Your fonts are your tools; you need to know where they are, and know how and when to use them. If you have a large collection of fonts, effective font management is essential.

- Installing your fonts in Font Book makes the font menus in your applications a pain to navigate
- Different projects might use different versions of the same font
- Installing new applications can make unexpected changes to your fonts
- Replacing damaged or missing fonts and sorting out duplicate fonts wastes production time

The revised Mac OS Font Management Best Practices Guide gives you only the information you need to get your fonts under control. It covers macOS Sierra (10.12), macOS High Sierra (10.13), and macOS Mojave (10.14).

## The Best Practices for Effective Font Management

- Back up your files
- Check for operating system and application updates
- Clean up your operating system font folders
- Identify damaged and incompatible fonts
- Upgrade older fonts
- Sort out duplicate fonts
- Add fonts to a font manager
- Make a plan for maintaining your fonts

# About This Guide

This guide has recommendations and instructions to help you understand how to manage your fonts on Mac OS. It covers:

- Collecting your fonts
- Dealing with old, damaged, and duplicate fonts
- Organizing fonts using Suitcase Fusion
- Planning ahead for new fonts

## Conventions Used in This Guide

### **Bold**

Indicates new terms and titles for sections of this guide.

### *Italic*

Indicates button and checkbox titles, URLs and folder paths, folder and file names, and file extensions.

Menu commands are indicated by a right angle bracket after the menu name (Edit > Select All). Menu commands in submenus will use a bracket after the submenu name (View > Arrange By > Name).

Folder paths starting with a slash (/) are **full paths** from the top level of your startup disk (/System/Library/Fonts/). Folder paths that don't start with a slash are **relative paths** (Go to Optional Fonts/Office Fonts/ on your Desktop).

Relative paths starting with a tilde (~) point to locations in the user's home folder (~/Documents/). Some paths will point to the current user's Library folder, which Mac OS hides by default. For more information, see **Appendix A: The Hidden User Library** on page 23.

A path that ends with a folder will end with a slash (/Users/Shared/); a path that ends with a file name will not (/Library/Fonts/Tahoma.ttf).

# Collect Your Fonts

Managing your fonts means gathering and reviewing them to find damaged, incompatible, and duplicate fonts. These steps are the same whether you start with a brand-new Mac, or work on a production system that has other software and fonts installed.

## Back Up Your Files

Before you start any project that makes changes to your Mac, you should back up your important files in case something goes wrong.

You can use Time Machine, the built-in backup feature of Mac OS, to back up your computer to an external disk. See [How to use Time Machine to back up or restore your Mac](#) for more information. For third-party backup software, consult the documentation.

## Check for Operating System and Application Updates

You should also make sure that your operating system and applications are up to date. Updates can add, update, or remove system fonts.

Open the App Store application by choosing Apple (🍏) menu > App Store.... Check the Updates icon (macOS High Sierra or earlier) or the Updates section (macOS Mojave) to see if any updates are available.

Many third-party applications have their own means of installing updates. Check the documentation for those applications.

## Clean Font Caches

The Mac OS and many font-intensive applications store font information in a **font cache**. If you activate and deactivate large groups of fonts or have damaged fonts, the information in these font caches can get out of sync or corrupted. Symptoms of font cache corruption include being unable to activate and deactivate fonts, incorrect or garbled fonts, and applications quitting unexpectedly.

You can reset the Mac OS font cache by booting into Safe Mode; see [Use safe mode to isolate issues with your Mac](#) for more information. You can also use a third-party program to reset the Mac OS font cache as well as other application font caches.

### What extension, please?

When working with fonts, you need to tell the difference between font files, especially those that have an extension (such as the .ttf in Arial.ttf) and those that don't. To make this easier, you can enable file extensions in the Finder:

1. Choose *Finder > Preferences...* to open the *Finder Preferences* window
2. Click the *Advanced* icon
3. Check *Show all filename extensions*
4. Close the *Finder Preferences* window

*This shows the files extensions for all your files, not just your font files: .doc or .docx for Word files, .app for applications, and so on. If you find this distracting, you can disable filename extensions in the *Finder Preferences* window when you have finished organizing your fonts.*

Suitcase Fusion can reset most font caches on Mac OS. Close your other open applications, then open Suitcase Fusion and choose File > Clean Font Caches...; this will restart your Mac.

## Clean Up Your System Fonts

Next, you should consider removing unneeded fonts from your fonts folder. Create three folders on your Desktop: *Other system fonts*, *Core web fonts*, and *Optional fonts*.

### Why pare down system fonts?

Keeping too many fonts on your system can cause your font menus to become an unwieldy mess. Creative applications have gotten better at letting you navigate long lists of fonts, but it can still be a hassle to find the fonts you need.

Many applications build their own list of fonts instead of letting Mac OS tell them what fonts are available. When you have too many fonts active, these applications take longer to open. If you trim your system font folders down to the essentials and activate the fonts you want to use, you can speed up opening these applications.

### Classifying your system fonts

You can separate the fonts on your computer into different categories:

- Essential fonts required by Mac OS and its applications
- Fonts installed by Mac OS that are not required by the operating system or its applications
- Core Fonts for the Web (see below)
- Third-party fonts, including fonts installed by Adobe and Microsoft

### Selecting and moving non-essential system fonts

Apple has knowledge base articles listing the fonts installed by default in Mac OS, separated by version. You can remove many of these fonts from `/System/Library/Fonts/` without causing problems. Each version of Mac OS installs different fonts, and the list of required fonts for each version is different.

- macOS Sierra (10.12): [Fonts included with macOS Sierra](#)
- macOS High Sierra (10.13): [Fonts included with macOS High Sierra](#)
- macOS Mojave (10.14): [Fonts included with macOS Mojave](#)

Removing any of the fonts on the lists below can cause problems: menus and windows can become unreadable and applications may quit expectedly. In some cases, you will be unable to start your Mac. Copy the other fonts into the *Other System Fonts* folder, then drag them into the Trash from `/System/Library/Fonts/`. If you can't empty your Trash, restart your Mac and try again.

The power of three  
You can find system  
fonts in three main  
locations:

- `/System/Library/Fonts/` holds fonts that are available for all Mac OS user accounts; Mac OS needs many of these fonts to operate normally
- `/Library/Fonts/` holds fonts that are available for all Mac OS user accounts, including fonts installed by applications
- `~/Library/Fonts/` holds fonts that are available only for the current Mac OS user; each user account has its own Fonts folder

For a more detailed explanation of where Mac OS keeps its fonts, see [Mac OS X: Font locations and their purposes](#).

**Note:** If you don't feel comfortable removing fonts from your operating system, you can skip these steps. Some font managers allow you to deactivate fonts in system font folders. If your font manager has this feature, consider deactivating fonts in place instead of moving them.

## About System Integrity Protection

Removing fonts from `/System/Library/Fonts/` can be difficult in recent versions of Mac OS. **System Integrity Protection** prevents Administrator users (even the root account) from moving fonts out of protected system folders. If you want to remove unwanted fonts from protected folders you must turn off System Integrity Protection, remove the fonts, then turn System Integrity Protection back on.

You should not use your machine with System Integrity Protection turned off once you have moved your system fonts. Mac OS relies on System Integrity Protection to keep your machine safe from malicious programs and attacks. For more information, see [About System Integrity Protection on your Mac](#).

# Required fonts in Mac OS Mojave (10.14)

These fonts should be left in the `/System/Library/Fonts/` folder for your machine to operate normally.

<i>Apple Color Emoji.ttc</i>	<i>SFCompactText-SemiboldItalic.otf</i>
<i>AppleSDGothicNeo.ttc</i>	<i>SFNSDisplay-BlackItalic.otf</i>
<i>Avenir.ttc</i>	<i>SFNSDisplay-BoldItalic.otf</i>
<i>Courier.dfont</i>	<i>SFNSDisplay-HeavyItalic.otf</i>
<i>Geneva.dfont</i>	<i>SFNSDisplay-LightItalic.otf</i>
<i>HelveticaNeueDeskInterface.ttc</i>	<i>SFNSDisplay-MediumItalic.otf</i>
<i>Keyboard.ttf</i>	<i>SFNSDisplay-RegularItalic.otf</i>
<i>LastResort.otf</i>	<i>SFNSDisplay-SemiboldItalic.otf</i>
<i>LucidaGrande.ttc</i>	<i>SFNSDisplay-ThinG1.otf</i>
<i>Menlo.ttc</i>	<i>SFNSDisplay-ThinG2.otf</i>
<i>Monaco.dfont</i>	<i>SFNSDisplay-ThinG3.otf</i>
<i>PingFang.ttc</i>	<i>SFNSDisplay-ThinG4.otf</i>
<i>SFCompactDisplay-Black.otf</i>	<i>SFNSDisplay-ThinItalic.otf</i>
<i>SFCompactDisplay-Bold.otf</i>	<i>SFNSDisplay-UltralightItalic.otf</i>
<i>SFCompactDisplay-Heavy.otf</i>	<i>SFNSDisplay.ttf</i>
<i>SFCompactDisplay-Light.otf</i>	<i>SFNSDisplayCondensed-Black.otf</i>
<i>SFCompactDisplay-Medium.otf</i>	<i>SFNSDisplayCondensed-Bold.otf</i>
<i>SFCompactDisplay-Regular.otf</i>	<i>SFNSDisplayCondensed-Heavy.otf</i>
<i>SFCompactDisplay-Semibold.otf</i>	<i>SFNSDisplayCondensed-Light.otf</i>
<i>SFCompactDisplay-Thin.otf</i>	<i>SFNSDisplayCondensed-Medium.otf</i>
<i>SFCompactDisplay-Ultralight.otf</i>	<i>SFNSDisplayCondensed-Regular.otf</i>
<i>SFCompactRounded-Black.otf</i>	<i>SFNSDisplayCondensed-Semibold.otf</i>
<i>SFCompactRounded-Bold.otf</i>	<i>SFNSDisplayCondensed-Thin.otf</i>
<i>SFCompactRounded-Heavy.otf</i>	<i>SFNSDisplayCondensed-Ultralight.otf</i>
<i>SFCompactRounded-Light.otf</i>	<i>SFNSRounded-Black.otf</i>
<i>SFCompactRounded-Medium.otf</i>	<i>SFNSRounded-Bold.otf</i>
<i>SFCompactRounded-Regular.otf</i>	<i>SFNSRounded-Heavy.otf</i>
<i>SFCompactRounded-Semibold.otf</i>	<i>SFNSRounded-Light.otf</i>
<i>SFCompactRounded-Thin.otf</i>	<i>SFNSRounded-Medium.otf</i>
<i>SFCompactRounded-Ultralight.otf</i>	<i>SFNSRounded-Regular.otf</i>
<i>SFCompactText-Bold.otf</i>	<i>SFNSRounded-Semibold.otf</i>
<i>SFCompactText-BoldItalic.otf</i>	<i>SFNSRounded-Thin.otf</i>
<i>SFCompactText-Heavy.otf</i>	<i>SFNSRounded-Ultralight.otf</i>
<i>SFCompactText-HeavyItalic.otf</i>	<i>SFNSSymbols-Black.otf</i>
<i>SFCompactText-Light.otf</i>	<i>SFNSSymbols-Bold.otf</i>
<i>SFCompactText-LightItalic.otf</i>	<i>SFNSSymbols-Heavy.otf</i>
<i>SFCompactText-Medium.otf</i>	<i>SFNSSymbols-Light.otf</i>
<i>SFCompactText-MediumItalic.otf</i>	<i>SFNSSymbols-Medium.otf</i>
<i>SFCompactText-Regular.otf</i>	<i>SFNSSymbols-Regular.otf</i>
<i>SFCompactText-RegularItalic.otf</i>	<i>SFNSSymbols-Semibold.otf</i>
<i>SFCompactText-Semibold.otf</i>	<i>SFNSSymbols-Thin.otf</i>

SFNSSymbols-Ultralight.otf  
SFNSText.ttf  
SFNSTextCondensed-Bold.otf  
SFNSTextCondensed-Heavy.otf  
SFNSTextCondensed-Light.otf  
SFNSTextCondensed-Medium.otf  
SFNSTextCondensed-Regular.otf

SFNSTextCondensed-Semibold.otf  
SFNSTextItalic.ttf  
Symbol.ttf  
Times.ttc  
ZapfDingbats.ttf  
ヒラギノ角ゴシック W3.ttc

## Required fonts in Mac OS High Sierra (10.13)

These fonts should be left in the `/System/Library/Fonts/` folder for your machine to operate normally.

Apple Color Emoji.ttc  
AppleSDGothicNeo.ttc  
Avenir.ttc  
Courier.dfont  
Geneva.dfont  
HelveticaNeueDeskInterface.ttc  
Keyboard.ttf  
LastResort.otf  
LucidaGrande.ttc  
Menlo.ttc  
Monaco.dfont  
PingFang.ttc  
SFCompactDisplay-Black.otf  
SFCompactDisplay-Bold.otf  
SFCompactDisplay-Heavy.otf  
SFCompactDisplay-Light.otf  
SFCompactDisplay-Medium.otf  
SFCompactDisplay-Regular.otf  
SFCompactDisplay-Semibold.otf  
SFCompactDisplay-Thin.otf  
SFCompactDisplay-Ultralight.otf  
SFCompactRounded-Black.otf  
SFCompactRounded-Bold.otf  
SFCompactRounded-Heavy.otf  
SFCompactRounded-Light.otf  
SFCompactRounded-Medium.otf  
SFCompactText-MediumItalic.otf  
SFCompactText-Regular.otf  
SFCompactText-RegularItalic.otf  
SFCompactText-Semibold.otf  
SFCompactText-SemiboldItalic.otf  
SFNSDisplay-BlackItalic.otf

SFNSDisplay-BoldItalic.otf  
SFNSDisplay-HeavyItalic.otf  
SFNSDisplay-LightItalic.otf  
SFNSDisplay-MediumItalic.otf  
SFNSDisplay-RegularItalic.otf  
SFNSDisplay-SemiboldItalic.otf  
SFNSDisplay-ThinItalic.otf  
SFNSDisplay-UltralightItalic.otf  
SFNSDisplay.ttf  
SFNSDisplayCondensed-Black.otf  
SFNSDisplayCondensed-Bold.otf  
SFNSDisplayCondensed-Heavy.otf  
SFNSDisplayCondensed-Light.otf  
SFNSDisplayCondensed-Medium.otf  
SFNSDisplayCondensed-Regular.otf  
SFNSDisplayCondensed-Semibold.otf  
SFNSDisplayCondensed-Thin.otf  
SFNSDisplayCondensed-Ultralight.otf  
SFNSSymbols-Regular.otf  
SFNSText.ttf  
SFNSTextCondensed-Bold.otf  
SFNSTextCondensed-Heavy.otf  
SFNSTextCondensed-Light.otf  
SFNSTextCondensed-Medium.otf  
SFNSTextCondensed-Regular.otf  
SFNSTextCondensed-Semibold.otf  
SFNSTextItalic.ttf  
Symbol.ttf  
Times.ttc  
ZapfDingbats.ttf  
ヒラギノ角ゴシック W3.ttc

## Required fonts in Mac OS High Sierra (10.13)

These fonts should be left in the `/System/Library/Fonts/` folder for your machine to operate normally.

<i>Apple Color Emoji.ttc</i>	<i>SFCompactText-MediumItalic.otf</i>
<i>AppleSDGothicNeo.ttc</i>	<i>SFCompactText-Regular.otf</i>
<i>Avenir.ttc</i>	<i>SFCompactText-RegularItalic.otf</i>
<i>Courier.dfont</i>	<i>SFCompactText-Semibold.otf</i>
<i>Geneva.dfont</i>	<i>SFCompactText-SemiboldItalic.otf</i>
<i>HelveticaNeueDeskInterface.ttc</i>	<i>SFNSText-BlackItalic.otf</i>
<i>Keyboard.ttf</i>	<i>SFNSText-BoldItalic.otf</i>
<i>LastResort.otf</i>	<i>SFNSText-HeavyItalic.otf</i>
<i>LucidaGrande.ttc</i>	<i>SFNSText-LightItalic.otf</i>
<i>Menlo.ttc</i>	<i>SFNSText-MediumItalic.otf</i>
<i>Monaco.dfont</i>	<i>SFNSText-RegularItalic.otf</i>
<i>PingFang.ttc</i>	<i>SFNSText-SemiboldItalic.otf</i>
<i>SFCompactDisplay-Black.otf</i>	<i>SFNSText-ThinItalic.otf</i>
<i>SFCompactDisplay-Bold.otf</i>	<i>SFNSText-UltralightItalic.otf</i>
<i>SFCompactDisplay-Heavy.otf</i>	<i>SFNSText.ttf</i>
<i>SFCompactDisplay-Light.otf</i>	<i>SFNSTextCondensed-Black.otf</i>
<i>SFCompactDisplay-Medium.otf</i>	<i>SFNSTextCondensed-Bold.otf</i>
<i>SFCompactDisplay-Regular.otf</i>	<i>SFNSTextCondensed-Heavy.otf</i>
<i>SFCompactDisplay-Semibold.otf</i>	<i>SFNSTextCondensed-Light.otf</i>
<i>SFCompactDisplay-Thin.otf</i>	<i>SFNSTextCondensed-Medium.otf</i>
<i>SFCompactDisplay-Ultralight.otf</i>	<i>SFNSTextCondensed-Regular.otf</i>
<i>SFCompactRounded-Black.otf</i>	<i>SFNSTextCondensed-Semibold.otf</i>
<i>SFCompactRounded-Bold.otf</i>	<i>SFNSTextCondensed-Thin.otf</i>
<i>SFCompactRounded-Heavy.otf</i>	<i>SFNSTextCondensed-Ultralight.otf</i>
<i>SFCompactRounded-Light.otf</i>	<i>SFNSText-Regular.otf</i>
<i>SFCompactRounded-Medium.otf</i>	<i>SFNSText.ttf</i>
<i>SFCompactRounded-Regular.otf</i>	<i>SFNSTextCondensed-Bold.otf</i>
<i>SFCompactRounded-Semibold.otf</i>	<i>SFNSTextCondensed-Heavy.otf</i>
<i>SFCompactRounded-Thin.otf</i>	<i>SFNSTextCondensed-Light.otf</i>
<i>SFCompactRounded-Ultralight.otf</i>	<i>SFNSTextCondensed-Medium.otf</i>
<i>SFCompactText-Bold.otf</i>	<i>SFNSTextCondensed-Regular.otf</i>
<i>SFCompactText-BoldItalic.otf</i>	<i>SFNSTextCondensed-Semibold.otf</i>
<i>SFCompactText-Heavy.otf</i>	<i>SFNSTextItalic.ttf</i>
<i>SFCompactText-HeavyItalic.otf</i>	<i>Symbol.ttf</i>
<i>SFCompactText-Light.otf</i>	<i>Times.ttc</i>
<i>SFCompactText-LightItalic.otf</i>	<i>ZapfDingbats.ttf</i>
<i>SFCompactText-Medium.otf</i>	<i>ヒラギノ角ゴシック W3.ttc</i>

## Required fonts in Mac OS Sierra (10.12)

These fonts should be left in the /System/Library/Fonts/ folder for your machine to operate normally.

<i>Apple Color Emoji.ttc</i>	<i>SFCompactText-BoldItalic.otf</i>
<i>Avenir.ttc</i>	<i>SFCompactText-Heavy.otf</i>
<i>Courier.dfont</i>	<i>SFCompactText-HeavyItalic.otf</i>
<i>Geneva.dfont</i>	<i>SFCompactText-Light.otf</i>
<i>Helvetica.dfont</i>	<i>SFCompactText-LightItalic.otf</i>
<i>HelveticaNeue.dfont</i>	<i>SFCompactText-Medium.otf</i>
<i>HelveticaNeueDeskInterface.ttc</i>	<i>SFCompactText-MediumItalic.otf</i>
<i>Keyboard.ttf</i>	<i>SFCompactText-Regular.otf</i>
<i>LastResort.ttf</i>	<i>SFCompactText-RegularItalic.otf</i>
<i>LucidaGrande.ttc</i>	<i>SFCompactText-Semibold.otf</i>
<i>Menlo.ttc</i>	<i>SFCompactText-SemiboldItalic.otf</i>
<i>Monaco.dfont</i>	<i>SFNSText.ttf</i>
<i>PingFang.ttc</i>	<i>SFNSTextCondensed-Bold.otf</i>
<i>SFCompactDisplay-Black.otf</i>	<i>SFNSTextCondensed-Heavy.otf</i>
<i>SFCompactDisplay-Bold.otf</i>	<i>SFNSTextCondensed-Light.otf</i>
<i>SFCompactDisplay-Heavy.otf</i>	<i>SFNSTextCondensed-Medium.otf</i>
<i>SFCompactDisplay-Light.otf</i>	<i>SFNSTextCondensed-Regular.otf</i>
<i>SFCompactDisplay-Medium.otf</i>	<i>SFNSTextCondensed-Semibold.otf</i>
<i>SFCompactDisplay-Regular.otf</i>	<i>SFNSTextCondensed-Thin.otf</i>
<i>SFCompactDisplay-Semibold.otf</i>	<i>SFNSTextCondensed-Ultralight.otf</i>
<i>SFCompactDisplay-Thin.otf</i>	<i>SFNSText.ttf</i>
<i>SFCompactDisplay-Ultralight.otf</i>	<i>SFNSTextCondensed-Bold.otf</i>
<i>SFCompactRounded-Black.otf</i>	<i>SFNSTextCondensed-Heavy.otf</i>
<i>SFCompactRounded-Bold.otf</i>	<i>SFNSTextCondensed-Light.otf</i>
<i>SFCompactRounded-Heavy.otf</i>	<i>SFNSTextCondensed-Medium.otf</i>
<i>SFCompactRounded-Light.otf</i>	<i>SFNSTextCondensed-Regular.otf</i>
<i>SFCompactRounded-Medium.otf</i>	<i>SFNSTextCondensed-Semibold.otf</i>
<i>SFCompactRounded-Regular.otf</i>	<i>SFNSTextItalic.ttf</i>
<i>SFCompactRounded-Semibold.otf</i>	<i>Symbol.ttf</i>
<i>SFCompactRounded-Thin.otf</i>	<i>Times.dfont</i>
<i>SFCompactRounded-Ultralight.otf</i>	<i>ZapfDingbats.ttf</i>
<i>SFCompactText-Bold.otf</i>	

# Collecting fonts from Adobe Creative Suite & Creative Cloud

Adobe Creative Suite 6 isn't supported on recent versions of Mac OS but uninstalling Creative Suite 6 may have left fonts behind in `/Library/Fonts/`. For more information, see [Fonts included with Adobe's Creative Suite 6](#). Move these fonts to the Optional Fonts folder.

Adobe Creative Cloud no longer installs fonts in your system folders. Creative Cloud uses Adobe Fonts (formerly known as TypeKit) to distribute its fonts; for more information, see the [Creative Cloud Fonts FAQ](#).

## Collecting the Core Fonts for the Web (optional)

In 1996, Microsoft created **Core Fonts for the Web**: a collection of freely-available fonts intended as standard fonts for websites. Modern websites are moving to **web fonts** but many websites still need these core fonts to display text correctly. You can collect these core web fonts and add them to your font manager.

**Note:** Apple's Safari and Google Chrome have problems using fonts that aren't in operating system font folders. Both applications use **sandboxing** to limit what system resources they can use. If you use either of those browsers, consider leaving the core web fonts in `/Library/Fonts/`.

Open the `/Library/Fonts/` folder (or your Other System Fonts folder, if you've already cleaned up your system fonts) and move the following files into the **Core Web Fonts** folder:

<i>Andale Mono.ttf</i>	<i>Impact.ttf</i>
<i>Arial Black.ttf</i>	<i>Tahoma Bold.ttf</i>
<i>Arial Bold Italic.ttf</i>	<i>Tahoma.ttf</i>
<i>Arial Bold.ttf</i>	<i>Times New Roman Bold Italic.ttf</i>
<i>Arial Italic.ttf</i>	<i>Times New Roman Bold.ttf</i>
<i>Arial.ttf</i>	<i>Times New Roman Italic.ttf</i>
<i>Brush Script.ttf</i>	<i>Times New Roman.ttf</i>
<i>Comic Sans MS Bold.ttf</i>	<i>Trebuchet MS Bold Italic.ttf</i>
<i>Comic Sans MS.ttf</i>	<i>Trebuchet MS Bold.ttf</i>
<i>Courier New Bold Italic.ttf</i>	<i>Trebuchet MS Italic.ttf</i>
<i>Courier New Bold.ttf</i>	<i>Trebuchet MS.ttf</i>
<i>Courier New Italic.ttf</i>	<i>Verdana Bold Italic.ttf</i>
<i>Courier New.ttf</i>	<i>Verdana Bold.ttf</i>
<i>Georgia Bold Italic.ttf</i>	<i>Verdana Italic.ttf</i>
<i>Georgia Bold.ttf</i>	<i>Verdana.ttf</i>
<i>Georgia Italic.ttf</i>	<i>Webdings.ttf</i>
<i>Georgia.ttf</i>	

### Playing in Apple's sandbox

*Sandboxing makes applications more stable and secure by limiting what system resources it can use, and restricting permissions on those resources; for a technical explanation, see [App Sandboxing](#) on the Apple website.*

Installing Microsoft Office 2011 replaces some of these fonts with its own versions. The installer moves the system fonts into `/Library/Fonts Disabled/`. The fonts supplied by Mac OS are more up-to-date; move any fonts on the core web fonts list from Fonts Disabled into your Core Web Fonts folder. If you get a dialog warning you that the fonts already exist in Core Web Fonts, replace them.

## Collecting fonts from Microsoft Office

Fonts activated in a font manager don't always appear in Office font menus. Microsoft Office applications build a list of available fonts when they start. To ensure that your documents and templates use the proper fonts, activate them before opening an Office application.

### Microsoft Office 2011

Microsoft Office 2011 installs fonts in `/Library/Fonts/Microsoft/`. The installer also moves system fonts with conflicting names to `/Library/Fonts Disabled/`. You can move the fonts from Fonts Disabled to your *Other System Fonts* folder.

Two font families are important to Office 2011: Calibri and Cambria are used as default fonts. You can move Calibri and Cambria into your font manager and keep them active, but you'll avoid problems by keeping them in `/Library/Fonts/Microsoft/`. You can move the other fonts to your *Optional Fonts* folder.

### Microsoft Office 2016

Microsoft Office 2016 applications are sandboxed; see **Playing in Apple's sandbox** on page 8 for more information. Office 2016 no longer installs fonts in the operating system. Instead, each application stores copies of its fonts in its application bundle.

Office 2016 applications can use fonts that you activate in a font manager, but it will raise dialogs asking you to enter a username and password to use them. If you have fonts that you must use with Microsoft Word and Excel on a regular basis, you should leave copies inside `/Library/Fonts/`.

If you want to add copies of the Office fonts to your font manager:

1. Select an Office 2016 application in the Finder
2. Control-click on the application and choose Show Package Contents from the dropdown menu; the application bundle will open like a normal folder
3. Go to *Contents/Resources/* in the application folder
4. Hold the Option key down and drag a copy of the Fonts folder to your *Optional Fonts* folder

## Gathering other fonts

You can also find fonts in the following locations:

`~/Library/Fonts/`

`/Library/Fonts/`

`/Library/Fonts Disabled/`

`/Library/Application Support/`

Open `~/Library/Fonts/`; if you can't find it, see **Appendix A: The Hidden User Library** on page 23. Select all of the font files and move them to the Optional Fonts folder.

**Note:** If you are using SkyFonts, do not remove the `skyfonts-google`, `skyfonts-fonts.com`, or `skyfonts-myfonts` folders from `~/Library/Fonts/`. SkyFonts keeps local copies of its fonts in these folders.

Open `/Library/Fonts/` and move any font files found into the Optional Fonts folder on the Desktop. Do the same with `/Library/Fonts Disabled/`.

Open `/Library/Application Support/Apple/Fonts/`. You may see folders named iLife and iWork. The iWork folder contains fonts that are also included with the iLife and iWork suites of programs; Apple installs fonts here even if you don't have iLife or iWork installed. Move the iLife and iWork folders to the Optional Fonts folder on the Desktop.

Open `/Library/Application Support/Adobe/`. Adobe Creative Cloud doesn't store any fonts here, but older versions of Adobe Creative Suite would put default fonts in a `Fonts` folder. Move the `Fonts` folder to the Optional Fonts folder on the Desktop.

Look in the `/Library/Applications/` folder for other vendors who may have included a `Fonts` folder and move those fonts to the `Optional Fonts` folder as well.

# Clean Up and Organize Your Fonts

## Identifying Damaged and Incompatible Fonts

As time goes on, you may develop problems with your fonts.

- Fonts can get damaged as you move them from computer to computer
- Older font formats aren't supported on recent versions of Mac OS
- Older fonts can have inconsistent internal font metadata or other bugs—fonts are software, too!

There are several ways you can test your fonts to see if they are damaged or incompatible.

**Note:** Suitcase Fusion scans fonts for problems when you add them to the font library.

## Scanning your fonts with FontDoctor

FontDoctor scans fonts for common issues such as incompatible font formats, damaged or incomplete fonts, and duplicate fonts.

1. Open FontDoctor
2. Drag the folder of fonts you want to scan from the Finder and drop it on the FontDoctor window

FontDoctor will generate a report of problems it finds and can quarantine problem fonts. For more information on the options FontDoctor offers, choose Help > FontDoctor Help.

## Scanning your fonts with Font Book

Mac OS includes Font Book, a basic font manager utility. Font Book installs fonts in the operating system and activates and deactivates fonts. It lacks features for grouping fonts into sets, adding custom information to your fonts, and auto-activating fonts.

Font Book can check for some common font problems. It will also report if a font is a duplicate of an installed system front.

1. Open Font Book
2. Choose File > Validate File
3. Select one or more font files to scan and click Open

Font Book scans each font and reports any problems it finds.

# Upgrading Older Fonts to New Formats

It isn't always easy to replace the fonts you use, especially when working with documents you didn't create. There are good reasons to switch to using OpenType fonts (or TrueType, if OpenType versions aren't available):

- You can use OpenType and Windows TrueType fonts on both Mac OS and Windows
- PostScript Type 1 fonts were OS-specific; glyphs might be mapped to different characters, causing display errors when you switch platforms
- OpenType is the most modern format for fonts, offering features that Type 1 and TrueType fonts lack
- Most type foundries produce only OpenType versions of their fonts now

You can keep older legacy fonts in your font manager and activate them as needed for older projects. Most foundries charge for new versions of fonts, but you can check to see if they offer free upgrades.

## Identifying Duplicate Fonts

One of the biggest challenges of font management is having **duplicate fonts**.

You might have more than one copy of the exact same font. Perhaps you downloaded it more than once, or added it to the operating system but didn't delete the original. That's easy to sort out: choose which copy you want to keep and delete the others.

The main problem involves fonts that are the same typeface, such as Helvetica or Garamond, but are not exact copies. You might have TrueType and OpenType versions of your fonts. You might have two different versions of the same font; the newer version could have more glyphs, adjust kerning and line spacing, or add new OpenType features such as custom ligatures.

If you have duplicate fonts, it's likely that you've used different versions in different projects. If you get rid of the version shown in the example to the right, you may end up with a project that looks like the example to the right: the text wraps differently, causing reflow and pagination differences.

Using Suitcase Fusion to manage duplicate fonts is discussed in **Manage Your Fonts with Suitcase Fusion** on page 18.

## HELVETICA

Itam, volorep ratibus. As explanime voluptibus moluptae comniamet, aut quis aut ea volestiandis evelecab ilicipsam vit liae same veniitii stotatquati natet occum rem dolori cum diae non re rature, omnim serum harchil lentibus et harchiis eaque id ut optae eliate pa velendam nus quiature ne explanimus as sae earitatem qui omnitam, simporp orporeit laccabor restibus sum et provit et aut veroribus et autam quam volumet, quos et que nonem quam quo od mo officipid quibus atet quos eum resciiis corem quatur molor magnimo velluptas sunt et, in ped ellupta volut abo. Nam quam debita arciur? Genistet est poresequi tem et ullabor auditium qui deniatem ius des molendis doluptate et la volecto occat autem que de pratur, optat.

## HELVETICA

Itam, volorep ratibus. As explanime voluptibus moluptae comniamet, aut quis aut ea volestiandis evelecab ilicipsam vit liae same veniitii stotatquati natet occum rem dolori cum diae non re rature, omnim serum harchil lentibus et harchiis eaque id ut optae eliate pa velendam nus quiature ne explanimus as sae earitatem qui omnitam, simporp orporeit laccabor restibus sum et provit et aut veroribus et autam quam volumet, quos et que nonem quam quo od mo officipid quibus atet quos eum resciiis corem quatur molor magnimo velluptas sunt et, in ped ellupta volut abo. Nam quam debita arciur? Genistet est poresequi tem et ullabor auditium qui deniatem ius des molendis doluptate et la volecto occat autem que

What's in a name?

A font's PostScript name is an internal piece of metadata that Mac OS and applications use to identify fonts. It can be different than the font's filename and the font's display name. You see a font's display name in an application's font menu or dialog box.

## Identifying duplicate fonts with FontDoctor

FontDoctor can identify and quarantine duplicate fonts.

1. Open FontDoctor
2. To have FontDoctor scan a folder of fonts, drag the folder icon from the Finder and drop it on the FontDoctor window

If FontDoctor finds more than one font with the same PostScript name and font format, it quarantines the older version and keeps the newer version. If you want FontDoctor to keep all versions of a font:

1. Click on Settings
2. For Find Duplicate Fonts, click on *Advanced Diagnosis Options*
3. Make sure *Allow Multiple Versions of the Same Font* is checked

## Identifying fonts that conflict with system fonts

Some of the fonts that come with Mac OS have PostScript names that conflict with other popular fonts. You can remove many of them from the operating system without causing problems. See **Clean Up Your System Fonts** on page 6 to see which fonts you should leave in place.

**Note:** You can remove some of those fonts if you are running in a prepress environment and must use other versions. You can remove *Courier.dfont*, *Geneva.dfont*, *Monaco.dfont*, *Symbol.ttf*, and *Times.dfont* from */System/Library/Fonts/* but you should replace them the version you wish to use. Keeping a different version active in your font manager will work.

*Helvetica.dfont* and *HelveticaNeue.dfont* are protected fonts in macOS Sierra: If you remove them, the Mac OS restores them automatically. If you must remove them, see **About System Integrity Protection** on page 7. If your font manager can override system fonts, you should use that feature instead.

# Manage Your Fonts with Suitcase Fusion

Once you have collected and cleaned up your fonts, you're ready to add them to Suitcase Fusion. This section covers the basics of adding and managing fonts; for more information on using Suitcase Fusion, choose Help > Suitcase Fusion Help.

## Adding Your Fonts

To add your fonts to Suitcase Fusion:

1. Choose File > Add Fonts to Library
2. Find your *Other System Fonts* folder on your Desktop and click Add

Suitcase Fusion will create a set called "Other System Fonts" and add the fonts to the set. Repeat these steps for your *Core Web Fonts* and *Optional Fonts* folders.

**Note:** You can also drag the folders onto the Font Library in the sidebar of the main Suitcase Fusion window. Suitcase Fusion will create a set for each folder and add the fonts to the sets.

## Adding fonts to Temporary Fonts

For some projects, you might not want to add fonts permanently to your font library. You can drag them to the Temporary Fonts folder in the Suitcase Fusion sidebar or drag them onto the Suitcase Fusion Icon in the Dock. Fonts in Temporary Fonts are removed from Suitcase Fusion when you log out of Mac OS or restart your Mac.

Note: Fonts that are added temporarily are not copied into the vault; they are added in place. If you move a folder of fonts after adding them to Temporary Fonts, Suitcase Fusion won't be able to use them.

## Creating and Deleting Sets

Once your fonts have been added you can delete the sets, if you want to organize them differently. Select a set and choose Edit > Delete Set... to remove a set.

To make a new set, choose File > New Set and give your set a name. To add fonts to a set, select them from the Font Library and drag them onto the set name.

*The (Font)Doctor is in Extensis includes a free copy of FontDoctor when you buy Suitcase Fusion. FontDoctor can also be purchased separately.*

### The fork in the road

Legacy Macintosh fonts—specifically, PostScript Type 1 fonts and older TrueType fonts—use files that include font data in a separate resource fork. Apple has been moving away from using resource forks, but Mac OS still recognizes files with resource forks attached. Resource forks are not recognized by Windows or any other operating system. If you need to store your fonts on a Windows server, you must archive them into a .zip file first. To archive the fonts into a .zip from the Finder:

1. Select the folder of fonts
2. Control-click and select Compress (name of folder) from the dropdown menu

# Managing Duplicate Fonts

If you've added fonts to Suitcase Fusion over time, you may find that you have duplicates of some of your fonts. Suitcase Fusion doesn't allow you to add the same font to the font vault more than once; it will add fonts with the same PostScript name but different version numbers or font formats.

Most of the time, this is what you want—if you work with legacy documents or projects created by other people, you want to use the same fonts. If that's not the case, you might want to remove older versions and old font formats to ensure that you are using the newest copy of your fonts.

1. Open Suitcase Fusion
2. In the Smart Searches section of the sidebar, click on *Duplicate Fonts*

The display shows fonts that have the same PostScript name. If the fonts are grouped by family, you can make it show each font individually by unchecking View > Group Fonts by Family.

You can select fonts and choose Edit > Delete (or press the Delete key) to remove them from your Font Library. This deletes them from the font vault, so make sure you have backup copies!

# Make a Plan for the Future

You've cleaned up your operating system font folders; you've gotten rid of bad fonts; and you've added them to Suitcase Fusion or other font manager. Now it's time to come up with a plan for going forward.

## Organizing Your Fonts with FontDoctor

You can keep your fonts in the Other System Fonts, Core Web Fonts, and Optional Fonts folders that you created. You might want to organize them into font families to make finding individual fonts easier.

FontDoctor can organize a folder of fonts into a new folder structure:

1. Open FontDoctor
2. Under Scan & Organize, click *Show Options*
3. Select the folder you want to organize
4. Select the folder you want to place the organized fonts in
5. Choose how you want to sort and group your fonts, then click *Start Scan*

FontDoctor will scan your fonts then sort them into groups of folders. You can use the same destination folder more than once to combine all your fonts into one collection.

## Backing Up Your Fonts

The easiest way to back up your fonts is to back them up along with the rest of your files. If you are using Time Machine or third-party backup software, you're all set! Make sure your fonts are in a folder that's being backed up.

You can also make a backup of your Suitcase Fusion font vault. Choose *File > Font Vault Archive > Archive...* and select a location for the backup file. Suitcase Fusion creates a file with a *.macbackup* extension and backs up your entire font vault: fonts, sets, and custom metadata. Once it's done, make sure you store the backup file in a safe location.

Suitcase Fusion has TypeSync, a syncing feature that copies your font vault into the cloud. If you log in to a new copy of Suitcase Fusion, your fonts and sets will be automatically added to your font vault. For more information on TypeSync, choose *Help > Suitcase Fusion Help*.

If you are using a different font manager, check the documentation to see if there are any features for making a backup of your font collection.

# Getting New Fonts

Let's not kid ourselves: there is no such thing as enough fonts. You are going to get more fonts at some point, so you should know what you're going to do with them when you do.

## Buying new fonts

When you buy new fonts, you should keep a few things in mind:

- Buy your fonts from well-known, reliable font foundries or websites
- Make sure the fonts you buy includes the styles, languages, and symbols that you need
- Try to get fonts in OpenType format, or TrueType if they don't offer OpenType fonts
- Avoid collections of thousands of fonts for a low price: most of the fonts will be "fun" display typefaces that you will rarely use and are likely of low typographic quality

## Downloading free fonts

Be careful when downloading fonts from "free font" websites. There are a few reputable sites but many of them offer only low-quality fonts. Sometimes the fonts they offer are knockoffs of popular typefaces that don't have the full range of glyphs and features of the professionally-designed fonts. They might also offer pirated copies of commercial fonts—when in doubt, avoid using them!

## Dealing with fonts installed with applications

Some applications include high-quality fonts for your use. The software may install its fonts in your system font folders or in other locations where your font manager can't manage them.

The following process is optional. It can help you identify fonts that get installed along with other software. If you don't follow these steps, fonts installed by applications are usually placed in your `/Library/Fonts/` folder.

## Make a list of your current fonts

1. Open the `/Library/Fonts/` folder in the Finder
2. Choose View > As List
3. Choose View > Arrange By > None
4. Click the heading of the Name column to sort the files by name
5. Choose Edit > Select All
6. Hold down the Option key and choose File > Show Inspector
7. In the Multiple Item Info window, note how many files are present under Kind at the top of the window

8. Close the Multiple Item Info window and choose Edit > Copy
9. Open TextEdit and create a new document
10. Type “Library Fonts Files:” and the number of files from step 7
11. Choose Edit > Paste and Match Style to paste the list of filenames from step 8
12. Save the file in your Documents folder

**Note:** If you select Paste instead of Paste and Match Style, TextEdit will paste links to the font files instead of the names. Choose Edit > Undo and try again.

Name your file “Library Fonts as of” and the current date. Repeat the process for the `/System/Library/Fonts/` folder; name the resulting file “System Library Fonts as of” with the current date.

## Collecting fonts installed by an application

Once you have installed your application, check your list against the `/Library/Fonts/` folder to see if new fonts have been added. For more tips on finding fonts installed by applications, see **Gathering other fonts** on page 14. If you think your application has installed new fonts but you can’t find them, check the application’s documentation or the developer’s website for support.

## Working with Your New Fonts

If you get your fonts from a trustworthy vendor, they probably won’t have any problems. You can still use FontDoctor or Font Book to scan them for issues. You can also use FontDoctor to add them to your organized collection of folders.

When you add the fonts to your font manager you may want to add them as a set, so you can identify them later. If your font manager allows you to add notes or tags to a font, you may want to add order information, font vendor, and client information.

## Now What?

That’s it! If you’ve gotten this far then you should have a lean set of system folders, your fonts added to your font manager and organized as you want them, backup copies of your fonts in case something goes wrong, and a plan for what to do with your new fonts. Now go forth and be creative!

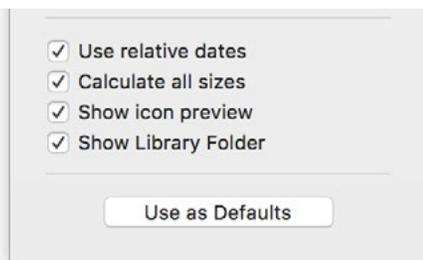
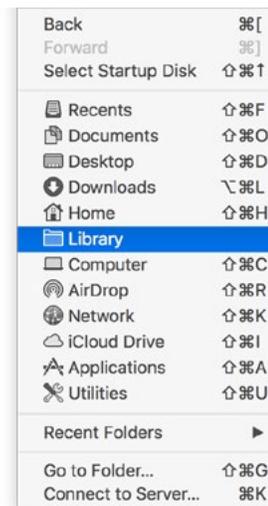
# Appendix A: The Hidden User Library

Every Mac OS user account has a *Library* folder in its home folder. Mac OS hides this Library folder from casual browsing, but it's easy to gain access to it.

To open the folder in the Finder, click on the Go menu and hold the Option key down. You will see a Library entry just below the Home entry. Choose Library to open the folder.

You can reach folders in the user Library folder by switching to the Finder and choosing Go > Go to Folder.... You can type the full path to the folder (“/Users/username/Library/Application Support/”) or a relative path starting with a tilde (“~/Library/Fonts/”), and click Go.

You can also make the user *Library* folder visible in the Finder. Open your home folder in the Finder, then choose View > Show View Options. In the View Options pane that opens, you will see a *Show Library Folder* checkbox near the bottom. Check the checkbox and the Library folder will appear in the Finder window.



# Contact Extensis

## Extensis

1800 SW First Avenue  
Suite 500  
Portland, OR 97201

Toll Free: (800) 796-9798  
Phone: (503) 274-2020  
Fax: (503) 274-0530  
Web: <http://www.extensis.com/>

## Celartem, Inc.

Email: [salesap@celartem.com](mailto:salesap@celartem.com)  
Web: <http://www.celartem.com/en/>

## US Press Contact

Email: [press@extensis.com](mailto:press@extensis.com)

## Social Media

### Twitter:

<https://twitter.com/extensis>

### LinkedIn:

<https://www.linkedin.com/company/extensis>

### Extensis Blog:

<https://www.extensis.com/blog>

## Customer Service

Web: <https://www.extensis.com/contact/>  
Phone: (800) 796-9798

## Technical Support

Web: <https://www.extensis.com/support/>

## Extensis Europe

Suites 17 & 18, Newton House  
Northampton Science Park  
Kings Park Road, Moulton Park  
Northampton  
NN3 6LG  
United Kingdom

Phone: +44 (0) 1604 654 270  
Fax: +44 (0) 1604 654 268  
Email: [info@extensis.co.uk](mailto:info@extensis.co.uk)

## Customer Service

Web: <https://www.extensis.com/contact/>  
Phone: (800) 796-9798

## Technical Support

Web: <https://www.extensis.com/support/>



North America 1.800.796.9798 // Europe +44 (0) 1604 654 270 // [extensis.com](http://www.extensis.com)