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Font management issues have been some of the worst stumbling blocks when moving into an OS X workflow. In general, font management issues cause most of the prepress problems we find, no matter what operating system is used.

However, in Mac OS 9 when font problems happened, they were usually caused by issues that pros had faced many times before and had experience in solving. OS X changed many of the rules for font management. Suddenly, designers who switched to Mac OS X were faced with:

- a multi-user environment with four or more separate font folders;
- locked font suitcases that can't easily be edited;
- the fonts that ship with OS X are in a new font format: dFont. These fonts conflict with common fonts used by many designers;
- font management tools from OS 9 that either didn't make the jump to OS X or just didn't work reliably;
- a weird bug that made some fonts appear in gibberish, even after they were reinstalled.

The fallout from these issues caused many people to avoid OS X entirely. Those that did make the switch have been faced with a frustrating transition that is decidedly un-Mac-like.

Fortunately, many of these issues have been solved, or at least can be managed. If you want to make your switch to OS X a little easier, follow these suggestions for organizing your font libraries.

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The Good, The Bad and The Ugly OS X Font Management

The Good

Despite the problems people have encountered, the changes in font handling made to OS X aren't entirely bad. In several ways, OS X offers improvements over OS 9.

- Native support for cross-platform font formats such as Windows TrueType and OpenType.
- Locked suitcases make it harder for end users to mess with fonts.
- No hard limit on the number of fonts that may be open (although programs will still run more efficiently if you limit the number of open fonts to just those that are needed).
- PostScript fonts render without the need for a separate utility like Adobe Type Manager.
- Active fonts may now be loaded in subfolders, which makes organizing a font library easier.
- OS X 10.3 includes Font Book, a font management utility that works well with small font sets.
- Fonts are now cached, which protects the originals from corruption.

The Bad

Multiple Font Folders

Many of the issues that have arisen with OS X relate to its new multi-user environment. Fonts may now be stored in any of the following locations. If multiple versions of any given font are installed in different fonts folders, OS X will load the first version of a font it finds in the order listed below. Later we will cover a strategy for moving these fonts into one place to make organizing them easier.

Application Fonts Folders: Some programs have internal fonts folders, usually stored in the program folder or in Library/Application Support, that are active only for that application or vendor.
 User Fonts Folder: These fonts are active for a single user account.

3) Library Fonts Folder: These fonts are active for all user accounts.

4) Network Fonts Folder: In a networked environment with Mac OS X server, fonts may be shared among all users. Those fonts will show up here if available. This folder is rarely used and can be ignored if not available.

5) OS X System Fonts Folder: These fonts are available for all applications and all users on the computer. Internally, the operating system uses these fonts as well, so certain fonts must be left here for everything to work.

6) Classic System Fonts Folder: These fonts are used by Classic OS 9 applications when they are run under OS X. Certain fonts must be left in here as well for Classic applications to run. If you don't have Classic (Mac OS 9) installed, this folder won't be available.

Locked Suitcases

This is both a good and bad thing. In OS 9 it was possible to open and copy fonts into and out of a font suitcase. Because of limits in OS 9, it was sometimes necessary to combine font families (or multiple families) into one suitcase. This worked but led to chaos because you could never be sure if a suitcase contained all the fonts needed to work on a job.

Font Types

There are six different types of Fonts that are usable under OS X. You can mix and match different versions of fonts throughout your library, as long as you never have different types of a font loaded at the same time.

PostScript Type 1

These are the traditional fonts used for publishing. PostScript fonts require two parts to work correctly: the screen font (usually stored in a suitcase or with FFIL in the icon under OS X) which contains information your computer uses to draw fonts on screen; and the printer font that contains the mathematical outlines that a PostScript printer uses to output the font.



TrueType & Windows TrueType

TrueType fonts are similar to PostScript except that they come as a one piece file. When first introduced there were some issues caused by older printers that didn't support the format. Those issues have been resolved and today, any *high quality* TrueType font should print as well as the PostScript version. Note the emphasis on high quality, a poorly designed font will cause problems, no matter what format you use. New in OS X (but not in Classic) is the ability to use native Windows TrueType fonts with the .ttf extension.





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The Bad (it continues)

In OS X suitcases are locked in the finder, so you can't double click to open them. This is a good thing... if the suitcase hasn't already been messed with, but it drives prepress nuts because we now need special utilities to check and fix client fonts before we work on a job. Apple's ancient Font/DA mover (circa 1994) actually works for this in OS X in Classic.

dFonts

Internally Macs break fonts (and files) into two pieces, a Resource Fork and a Data Fork. Regular Mac fonts store information in the Resource Fork, but UNIX and Windows machines use the Data Fork and don't understand Mac Resource Forks. To get around this with OS X, Apple took regular TrueType fonts and moved the information from the Resource Fork into the Data Fork. dFonts work just like TrueType fonts on Mac OS X, but don't work under Classic OS 9 or on other platforms. However there are several utilities such as Font Doctor and dFontifier that will convert these fonts into regular TrueType fonts that work in OS 9.

Apple gave users hundreds of fonts in this format for free with OS X. Unfortunately many of these new fonts have the same name as older PostScript fonts that people have been using for years. This, in conjunction with by multiple font folders, has led to lots of font conflicts and accidentally re-wrapped text. To make matters worse, common fonts like Helvetica and Helvetica Neue are now required by some applications to run.

Missing Font Management Tools

The massive changes in font handling in OS X meant that font management programs had to be rewritten from scratch to deal with the new operating system, as well as OS 9 running in Classic mode. Some popular programs, like Adobe Type Manager Deluxe, never made the switch. Others, like Suitcase and Font Reserve, were rewritten but suffered from bugs and other bad behavior that made users long for the good old days of OS 9.

Lately, the situation has improved. Things still aren't as solid as they were under OS 9, but with a little work, fonts can be managed reliably. With OS X 10.3, Apple introduced Font Book which handles font management for casual users with smaller font libraries. Professional users will want to purchase a program that can better handle large font libraries. The leading programs are Font Reserve, Suitcase, and FontAgent Pro.

Font Reserve: Extensis bought Font Reserve and is in the process of merging its features with Suitcase. It never really ran reliably under OS X and won't be updated further.

Extensis Suitcase: Suitcase has some bugs, but version X1 has become somewhat more stable and now does a passable job of managing OS X fonts. Deleting the preference files regularly goes a long way toward making it run reliably.

FontAgent Pro: This is a relatively new font manager. Although the non-Pro version has been around for a while, it only handled font organization and repair. The initial version of FontAgent Pro was extremely slow, but it has improved lately and is starting to show promise.

Looking for a Font?

Have you ever been reading something and stumbled upon the perfect font for an upcoming project? For an easy way to find the name of a font and how to buy it, check out www.myfonts.com.

Scan in a few characters of the font and save it as a JPG, GIF, or TIF. For best results, try to get the characters around 100 pixels high, make sure no characters are touching and make the baseline of your text horizontal.

Click on the "What the Font" link and upload your sample. Check the resulting list and remove any characters that the recognition engine failed to identify properly before continuing.

In a few seconds the website will come up with several of the closest matches as well as links where you can buy them. Although the recognition engine can't identify every font out there, it is surprisingly good at matching most of them and can save you hours of effort pouring over fonts books.

Still stuck? Try asking someone for help in the "What's this font" forums. www.myfonts.com/whatthefont/forum/

The Ugly

A new bug in OS X sometimes causes fonts to display as gibberish like this when loaded.

HELVETICA

dlfaidfn ;aldfkj a; uit% nd;la nmmc; aeithy nfgbpenf adk

The problem can persist, even after deleting and reloading the font, but the same font can be copied on a different machine and will work perfectly. What's happening is that the font itself isn't becoming corrupt, but the cache file that the system loads is.

Under OS 9 the system would read and write to font files directly. If a crash happened at the wrong moment it was (remotely) possible for the font file to become corrupt, which could lead to all sorts of crashes. In OS X, instead of opening the original font, everything is copied into a cache. This protects the original from damage, but unfortunately, the cache files seem to become corrupt much more often under OS X than the fonts themselves became corrupt under OS 9.

Fortunately there is an easy solution. Quit all active applications, then delete the font caches and restart. The font caches are stored in the following locations:



Deleting these files will force the system to rebuild them with clean, non-corrupted versions and should make your fonts display correctly again.

Some Adobe programs have been affected by a separate font caching issue. Adobe uses its own font caching system and scatters cache files all over your hard drive. To find them, go to File —> Find and do a search for "AdobeFnt" you can delete everything that it finds with a .lst extension (ie. AdobeFnt.lst, AdobeFnt07.lst, etc.). This will clear the caches for Adobe programs and can help solve crashes or slowdowns in the Creative Suite applications.

You can also download utilities that will automatically clear these caches for you. Two good programs are DeepSix and Font Finagler.

Links	Font Doctor dFontifier	www.morrisonsoftdesign.com/fd_mac.html www.homepage.mac.com/mdouma46/dfont/dfont.html
	Font Reserve/Suitcase	www.extensis.com
	Font Agent	www.insidersoftware.com
	Font/DA Mover	www.apple.com
	DeepSix	www.ifthensoft.com
	FontFinagler	www.homepage.mac.com/mdouma46/fontfinagler
	more font resources	www.apple.com/pro/pdf/L303878B_Font_TT_v4.pdf www.ideastraining.com/Reports.html www.creativepro.com/printerfriendly/story/20000.html

Font Types (continued)

Multiple Master

Multiple Master is a special version of PostScript fonts that are always named with an MM. They allow the user to customize the weight and width of the font. This format never really caught on and wasn't even supported in earlier versions of OS X. Multiple/Master fonts should be avoided if possible.



dFont

The dFont format is exclusive to OS X. It is a standard TrueType font that stores its internal data in the Data Fork of the file instead of the Resource Fork that Macs have traditionally used. These fonts work the same as a regular TrueType font on OS X but don't work at all under OS 9 or Windows.



OpenType

OpenType fonts are stored as a single file per face. The format basically places a wrapper around a traditional PostScript or TrueType font but can also add extra features.

OpenType fonts can contain up to 65,000 different characters instead of the 256 available in older fonts. This allows OpenType fonts to have multiple ligatures, true small capitals, special characters, and other advanced typographical features. Usually these advanced OpenType files have a "Pro" in the file name.

Adobe has switched its entire library to this format and other vendors are starting to follow suit. If you're going to buy a new font and you have a choice, this is probably the best format to choose because it is cross-platform and the same font file will work on both Mac and Windows platforms.



ACaslonPro-Regular.otf



Monaco

Organizing Your Fonts

Earlier we mentioned that fonts are stored in multiple locations. To effectively manage your fonts, you should move most of them into a single location. Some fonts need to be in a specific place for the system to operate correctly, so we can't move everything. But if we move all the fonts that we can, and then activate them in a single place, we will reduce the risks of conflicts. Fonts are loaded in the sequence listed to the left. So for instance, a font loaded in the User fonts folder will override a font in the Library fonts folder.

When organizing your fonts, don't delete anything, yet. Instead, create a new "moved fonts" folder and move everything out of the fonts folders into it except as indicated below.

1) Application Fonts Folders: There may be many different Application fonts folders. Besides the standard Library listed to the left, fonts can also be stored in:

> Library/Application Support/[Adobe, Macromedia, Microsoft, etc.]/Fonts; Users/[username]/Application Support/[Adobe, Macromedia, Microsoft, etc.]/Fonts; Applications/[Application Name]/Fonts

You can remove everything out of these except for fonts in the Library/Application Support/Adobe/Fonts/Reqrd folder. Removing these fonts will break many of the Adobe Creative Suite programs. (InDesign will crash and give you an error about missing System Fonts or CMap files.) Moving fonts into your standard fonts folders will allow them to be loaded in all your programs, not just Adobe ones, and will avoid conflicts with fonts that are loaded elsewhere in the system.

2) User Fonts Folder: You should take all the fonts out of this folder, for now.

3) Network Fonts Folder: Unless you are running a font server, this folder won't exist. If it does, then follow the advice of your network administrator regarding font management.

4) Library Fonts Folder: You should take all the fonts out of this folder.

5) System Fonts Folder: You can remove everything out of this folder except for these fonts:

Geneva.dfont	LastResort.dfont	Monaco.dfont
Keyboard.dfont	LucidaGrande.dfont	

Be careful, removing any of the above fonts will break your system. Removing other items from here is sometimes difficult, so you may need to change administrative privileges for this folder. Select the folder and get info (command-i), scroll down to "Ownership and Permissions", click on the padlock and enter your password. Now change the owner of the folder from "system" to your username and close the window. You should now be able to make changes to this folder. When done, be sure to switch the owner of the folder back to "system" to stop any further changes.

6) Classic System Fonts: You can remove everything from this folder except for these fonts:

Charcoal	Geneva
Chicago	Monaco

Removing any of these fonts may break your Classic OS 9 System and may make many classic applications crash. Keep track of the fonts that were originally in this folder; often this will show you which fonts were being loaded in for older jobs under OS 9. This can help you make decisions later about which fonts to keep when sorting through your fonts.

7) Sorting Fonts: Now that your fonts folders have been reduced to a minimum, you will want to sort through your library before reinstalling the fonts that you need to use. This would also be a good time to create subfolders for your PostScript fonts. Remember that PostScript fonts require a screen font to be matched up with every printer font; putting a font family in a single folder will make it easier to keep everything together.



You may find that you have several different types of any given font. If this happens you will want to pick a single type and stick with it. To avoid type reflow with older jobs that have been designed under OS 9, you may wish to pick the PostScript or TrueType version (whichever you were using) of some of the common fonts you use instead of the dFonts. Remove the extra versions of duplicate fonts from the "moved fonts" folder before reinstallation.

The first place where a choice needs to be made is with Helvetica and Helvetica Neue. These two fonts are commonly used for publishing but are now required for some programs to work correctly. If you use the dFont version of either of these fonts, you may find the type in your older jobs is reflowing. If you had a PostScript or TrueType version of these fonts installed before going to OS X, you should choose to install that version instead of the dFont. Programs that require these fonts will work correctly no matter what version of these fonts is installed.

The method you use to reinstall fonts will depend on the tools you are using for font management. There are three main methods: Use a third-party font manager like Suitcase; use Font Book under 10.3 or higher; or manually copy the fonts yourself into a fonts folder.

Loading Fonts Using a Font Manager

For a font manager like Suitcase or FontBook, you should create a specific set for fonts, like Helvetica and Helvetica Neue, that always need to be on. This way, the font will be active for the applications that require it, but if you open a job that requires a different version of Helvetica, you can turn off your usual version and temporarily load the version required for the job. If you have a set of fonts you regularly use for your projects, you may want to create a standard set that you can always keep open.

We suggest that you create specific client or job sets of fonts that you can load as needed for specific projects. Never allow duplicate fonts to be loaded, and if a font you turn on conflicts with one already loaded, turn one off.

Suitcase



A version of these fonts should always be loaded. Removing them from your system fonts folders and loading them here allows you to turn them on or off when you need to switch to a different version for a job to avoid type reflow.

Create Client or sets that can be turned on or off.

You may want to create a set of commonly used fonts that are always loaded

Font Book

Font Book

	Q	
Collection	Font	
All Fonts User Computer	► Courier ► Helvetica ► Helvetica Neue	
Classic Mac OS	 ▶ Times ▶ ITC Zapf Dingbats 	
+	Disable 5 Fonts	

System Fonts

User Fonts

standard set of fonts you always

want open here.

Install the

This set should only contain fonts loaded in your System Library.



Classic Fonts

Install fonts here to make them active for Classic OS 9 programs.



Client Fonts

Create new collections for specific clients or jobs. Turn them on or off as needed.

Fon	t Book
	Q
Collection ▼ A All Fonts	Font Formata
L User Computer Classic Mac OS	▶ GaramondThree ▶ ITC Galliard
÷	+ Disable 5 Fonts

Font Book Preferences

Set your Font Book Prefs like this. Install fonts in Classic Mac OS if you use Classic, otherwise pick "for me only."

Unloaded Fonts folder Store non-active fonts here.	Classic Fonts Classic Fonts Library Fonts System Fonts User Fonts	Font Management A A B C C C C C C C C C C C C C C C C	
Classic Fonts alias Copy fonts for Classic OS 9 programs here.	Unloaded Fonts Classic Fonts Library Fonts System Fonts User Fonts	Font Management Charcoal Chicago Chicago Geneva Monaco	
Library Fonts alias Keep this folder empty.	 Onloaded Fonts Classic Fonts Classic Fonts System Fonts User Fonts 	Font Management	
System Fonts alias This folder should only contain the fonts shown here.	Unloaded Fonts Classic Fonts Library Fonts User Fonts	Font Management Ceneva.dfont Keyboard.dfont LucidaGrande.dfont Monaco.dfont	
User Fonts alias Copy fonts into and out of this folder to install or uninstall them.	Unloaded Fonts Classic Fonts Library Fonts System Fonts User Fonts	Font Management F Courier Helvetica HelveticaNeue.dfont Times Zapf Dingbats	

Loading Fonts Using Fonts Folders

If you don't have FontBook and don't want to buy a font management program, you can still choose to load and unload fonts using the fonts folders. Simply drag fonts into folders to load them and drag them out to unload them. Here is a tip for using aliases to make this easier.

Create a new folder in an easily accessible location and call it "Font Management." Open it and from the View menu choose to view by columns. In a separate window, go to each of your individual fonts folders and copy an alias of each folder into your new Font Management folder. (Hint: dragging an item while holding down the command and option keys will make an alias of it instead of moving the original.) Rename the aliases as indicated on the left to make it clear where each font folder alias leads. Now move your sorted font library folder into the Font Management folder and name it "Unloaded Fonts."

You should now have a series of folders and aliases similar to those shown on the right. Now start by copying your standard fonts into the User Fonts alias, be sure to include a version of Helvetica and Helvetica Neue.

To install a font or set of fonts for a job, copy them from the Unloaded Fonts folder into the appropriate alias in the Font Management Folder. If you're working in Classic, then the fonts should go into the Classic Fonts folder alias, otherwise put them in User Fonts, since the User Fonts folder is loaded before the Library Fonts folder.

Before installing a font, check the contents of your other libraries to make sure that none of the fonts you are installing will conflict. To see what fonts are already loaded, select each alias and the fonts installed in that folder will appear in the right-hand pane. The System library is included here so you can quickly see what fonts are loaded. You shouldn't install any new fonts there, instead use the User Fonts folder.

To deactivate fonts, move them out of all the active fonts folders. If you originally copied them from your sorted fonts, you can delete them; otherwise, move them back to their original location in the Unloaded fonts folder.