

# Best Practices for Managing Fonts in Mac OS X

## So what's all the hubbub?

With Mac OS X, professional workflows involving fonts have become seemingly more difficult and confusing, resulting in delays and problems for users. This is especially true for Mac OS 9 users who are just now making the transition.

Fonts in OS X can now be located in a myriad of locations on the system, and fonts are activated by a very specific font hierarchy that can make it very challenging for users to accurately verify that the correct font is in use.

Several fonts are also required for Mac OS X to properly function. Removing these fonts can have unpredictable effects upon the stability of your system and severely hamper your workflow.

## What can I do about it?

This document contains detailed recommendations and instructions that can help you work efficiently with fonts in OS X, configure your system to minimize font problems, enhance your workflow. It covers:

- *How to organize your font library*
- *Which fonts are necessary to Mac OS X*

- *Where Mac OS X stores system fonts*
- *How to cleanup and organize your font library*
- *The font activation hierarchy*
- *Techniques to workaround font issues*

We presume that you have made the decision to use a professional font manager – like Suitcase or Font Reserve – to manage your fonts. These font management tools are an integral part of making sense of your font mess.

If you are unclear on the need for a professional font manager, please take a moment to review the document “Font Management – Why Go Pro?” Please visit the following location to download the PDF: [http://dl.extensis.com/downloads/SC/EN/P/Suitcase\\_why\\_go\\_pro.pdf](http://dl.extensis.com/downloads/SC/EN/P/Suitcase_why_go_pro.pdf)

This document is useful for all professionals in the creative, print and publishing environments. If you manage a workgroup of multiple users, you may significantly benefit from the use of a server-based font management system. To download white papers, documentation and related information about the benefits of server based font management solutions, please visit the Extensis website: <http://www.extensis.com>.

## Step 1: Organize Your Font Files

One of the first things you should do is to organize your physical font files into a neat, systematic and central location.

To do this, you need to create a folder – for example a folder called **My Fonts** – and keep it somewhere locally on your hard drive. A good location to place this folder is in the **/Users/Shared** folder, because that way your font library will be accessible to all the users on the machine.

You should also decide whether you want to manually organize your font files, or use a font manager to do this for you. Suitcase comes with a product called FontDoctor which, among other things, can organize all your font files. Font Reserve can also organize all your font files for you automatically if you choose to have it do this.

### To organize fonts with FontDoctor:

#### 1. Launch **FontDoctor**.

Font Doctor comes with Suitcase, or can be purchased separately from the Extensis website:

<http://www.extensis.com>.

#### 2. In the FontDoctor dialog box, select the **Organize Fonts** tab.

#### 3. In the **Search Disks/Folders for Fonts** box, add specific folders to the list by using the folder button to choose specific locations, or by checking a specific disk to scan.

If you choose to scan an entire disk, you may wish to manually clean up your Adobe Application font folders before scanning the entire disk. See **page 5** of this guide for detailed instructions.

4. If you want to keep an entirely clean font library, it is good to remove the original font files, so that the fonts in your library are the only ones available for use. To do so, check the **Delete Original Files After Copy** option.
5. Click the **Organize Options** button to open the **Organize Options** dialog box. Typically the default settings are appropriate here. To reset the default settings, click the **Reset Settings** button. Note that the **Skip System Folder** option is checked. You will also need to clean these files up, but it is better to do this manually, or with a font manager such as Suitcase or Font Reserve.
6. Click **Save** to save the new settings.
7. Click **Create Library**.
8. FontDoctor prompts you to choose a location for your new font library. Click **New** and choose a convenient location on your hard disk for your library.
9. Click **OK** to confirm the settings. FontDoctor searches the selected locations and groups all of the fonts in the new library.

### To organize fonts with Font Reserve:

When fonts are added to Font Reserve, you can specify that the fonts be moved or copied to a central location, called the **vault**. To tell Font Reserve to organize your fonts, do the following:

1. Launch the **Font Reserve Browser**.
2. Choose **Font Reserve Browser > Preferences**.
2. Click the **Adding Fonts** icon in the scroll bar at left.
3. To tell Font Reserve to collect your fonts into the vault, choose either of the following options:
  - **Move into Vault:** Moves physical font files from any location, including a remote volume or ZIP

disk, into the vault. (Fonts on CD-ROMs or locked disks are copied into the vault.) Organizations such as design studios, which allow each of their designers to store and manage all their fonts on their local workstations, may prefer this setting.

- **Copy into Vault:** Copies physical font files into the vault, leaving the originals untouched. If you want to load all of your font files into Font Reserve, and then delete the originals after you've begun working with Font Reserve more, this setting works well.

4. Click **OK** to accept the new preferences.
5. Add your fonts to Font Reserve.

### Manually organizing your fonts

If you decide to manually organize your fonts, it is best to have a strategy for the organization of your font library. The following are typical strategies that users implement while organizing a font library:

**Alphabetically by family name:** Often used by designers or creative professionals, this is often the easiest way to find a particular font. With this method, the library is often further divided into a number of subfolders within the My Fonts folder, for example A-D, E-H, etc.

**By classification:** Often used by typographers, or designers who are well versed in typography. Depending on the level sophistication a set of subfolders with names such as Serif, Script, or Ornamental can be used.

**By job name or number:** Often used in production environments like service bureaus or print shops, you would create a set of subfolders for each job name or number in your workflow.

**By client:** Often used in design shops with many clients, where each client uses a specific set of fonts for all their jobs.

Whichever way you decide to organize your font library, you must ensure that you keep all PostScript font components (screen fonts and printer fonts) together in the same folder. Mac OS X requires that the screen font files and corresponding printer font files to be in the same physical folder in order to work correctly.

## Step 2: Manage Your System Font and Application Font Folders

Fonts that are stored in any of the System Font folders or in any of the Application Font folders are typically managed by the operating system and not by your font management tool.

For detailed information about the many locations where Mac OS X can place and store fonts, see the **Mac OS X and Font Locations** chapter of this guide.

The number of locations for fonts in Mac OS X can lead to confusion and cause problems. Within the professional creative, print and publishing environments, it is strongly recommended that you use a font management tool to manage **all** of your available fonts.

Both Suitcase and Font Reserve include features that allow you to manage Mac OS X System Fonts. For details about using Suitcase to do so, see page 19 of the **Suitcase X1 Users Guide**. To use Font Reserve to manage System Fonts, see page 34 of the **Font Reserve 3 User Guide**.

## Manually cleaning up your System Font and Application Font folders

In order to manually clean up your System Font and Application Font folders, it is necessary to remove all fonts that are not absolutely essential for Mac OS X to operate.

If you manually clean out these folders, we recommend that you create a folder named **Moved from System Font Folders** within your **My Fonts** folder (the folder you created in Step 1). Whether you will be using these fonts in the future or not, it is good practice to save these fonts and not discard them just in case you do need them at a later date.

### To manually clean up your system fonts:

1. For **Local Domain Fonts**, create a folder called **Library Fonts** within the **Moved from System Font Folders** folder.
2. Move all fonts that you find in **/Library/Fonts** to your new **Library Fonts** folder.
3. For **User Domain Fonts**, create a folder called **User Fonts** within the **Moved from System Font Folders** folder.
4. Move all fonts that you find in **/Users/[name]/Library/Fonts** to your new **User Fonts** folder.
5. If you have a **Classic System Folder**, a System Folder that has an OS 9 icon at the root of your main hard disk, these fonts must be moved. Create a folder called **Classic Fonts** within the **Moved from System Font Folders** folder.

Move all fonts that you find in **/System Folder/Fonts** to your new folder, except the following fonts:

*Charcoal*  
*Chicago*  
*Geneva*  
*Monaco*

These fonts are essential to normal system operation of Mac OS X v10.3 (Panther), and removing these fonts may cause your system to behave erratically. In no event should these fonts be moved from **/System Folder/Fonts**.

6. To move **System Domain Fonts**, you must be logged in to Mac OS X as a user with Administrator rights. If you aren't sure your login level, check the Accounts page of the System Preferences. For more information, see the Mac OS X documentation.
7. Create a folder named **System Domain Fonts** folder in your **Moved from System Font Folders** folder.
8. Select all of the fonts in the **/System/Library/Fonts** folder except the following essential system fonts:

*Geneva.dfont*  
*Keyboard.dfont*  
*LastResort.dfont*  
*Lucida Grande.dfont*  
*Monaco.dfont*

These fonts are essential to normal system operation of Mac OS X v10.3 (Panther), and removing these fonts may cause your system to behave erratically. In no event should these fonts be moved from **/System Folder/Library/Fonts**.

9. **Copy** the selected fonts from the **/System/Library/Fonts** folder to your new **System Domain Fonts** folder.
10. Press **Command-Delete** to remove the selected files from the System Folder. At the prompt, enter your Mac OS X Administrator password and click **OK**.

## Adobe Application Fonts

It is likely that you have a number of applications from Adobe installed on your system. When installed, these applications place font files in a special location. To locate and move these files:

1. Create a folder named **Adobe Application Fonts** within the **Moved from System Font Folders** folder.
2. Move all of the fonts that you find in `/Library/Application Support/Adobe/Fonts` to your new folder, except the folder named **Reqrd** and the fonts stored within this folder.

## A Note about Helvetica

While Helvetica is not an essential system font, some applications still require an active version of Helvetica in order to operate correctly. If you regularly use any applications that require Helvetica: As soon as you remove Helvetica from your system font folders, be sure to activate a version of Helvetica using your font manager (Suitcase or Font Reserve). It doesn't matter which font format you use (PostScript, OpenType, TrueType, etc), but for professional creative, print and publishing environments, we recommend using a PostScript version of Helvetica.

<b>Required System Fonts for Mac OS X v10.3 (Panther)</b>		
<b>Type</b>	<b>Fonts</b>	<b>Location</b>
<i>Classic Domain Fonts</i>	<i>Charcoal Chicago Geneva Monaco</i>	<code>/System Folder/Fonts</code>
<i>System Domain Fonts</i>	<i>Geneva.dfont Keyboard.dfont LastResort.dfont Lucida Grande.dfont Monaco.dfont</i>	<code>/System/Library/Fonts</code>
<b>Required International Fonts</b>		
<i>Japanese Fonts</i>	<i>Hiragino Kaku Gothic Pro W3 and W6 Hiragino Mincho Pro AquaKana Osaka and Osaka Mono</i>	<code>/System/Library/Fonts</code>
<i>Traditional Chinese fonts</i>	<i>LiHei Pro Apple LiGothic Medium Hei</i>	<code>/System/Library/Fonts</code>
<i>Simplified Chinese Fonts</i>	<i>STXiHei STHeiti</i>	<code>/System/Library/Fonts</code>
<i>Korean Font</i>	<i>AppleGothic Regular</i>	<code>/System/Library/Fonts</code>
<i>Arabic Font</i>	<i>Geeza Pro Regular and Bold</i>	<code>/System/Library/Fonts</code>

## International Fonts

If your preferred language is non-Roman, or if you expect to use a non-Roman language as your preferred language in the future, there are a number of other required fonts .

Mac OS X also comes with a number of international fonts for use when using a non-Roman language as the preferred language. The required fonts for each language are listed in the chart on the previous page.

If you have difficulty reading the font name, select the font and choose **File > Get Info** (Command-I). The full name is listed in the Get Info dialog box.



## Step 3: Add your fonts to your font manager (Suitcase or Font Reserve)

Once you have all your font files organized, and have removed all unnecessary fonts from the various System Font and Application Font folders, the next step is to add all these fonts to your font manager. If you have organized all your font files into a single folder hierarchy, then it is a fairly simple process to add these fonts to your font manager. You can simply drag the entire My Fonts folder into the Fonts pane in Suitcase or Font Reserve to have all the fonts added to the font manager.

The only decision you need to make is whether you want to follow your physical organization of files by creating corresponding Sets in Suitcase or Font Reserve, or simply add the fonts and organize them into Sets at a later time. For example, if you have organized your font files by client or by job name, you may want to create a separate Set for each client or job. To do this, simply drag each client or job folder into the Sets pane in Suitcase or Font Reserve.

For detailed instructions about adding fonts, see [page 17 of the Suitcase X1 User Guide](#) or [page 27 of the Font Reserve 3 User Guide](#).

Before you add your font library to your font manager, you may want to consider first validating your font library using a tool like Font Doctor. For more information about this, refer to the “Corrupt Fonts” section in Step 4.

## Step 4: Cleanup your Font Library

Cleaning up your font library is probably the most diverse and certainly the most difficult task of font management. Many font problems encountered in Mac OS X occur because of problem fonts. Any number of errors can occur because a font is actually corrupt, missing a printer font file, or is a duplicate of another font you already have in your library. Having a clean, healthy font library is your best bet to a seamless, problem free workflow.

### Corrupt Fonts

Suitcase comes with a full copy of Font Doctor. Font Doctor's main function is to validate fonts, to fix any corrupt fonts that it is able to fix, and warn you about corrupt fonts it is unable to fix.

If you are using Suitcase as your font manager, it is recommended that before you add your font library to Suitcase, you first run it through Font Doctor to validate your fonts and create a healthy library.

If you are using Font Reserve, it's also a good idea to first run your font library through Font Doctor before adding your fonts to Font Reserve. Font Reserve contains font validation and corruption fixing features built into the product, so this acts as an additional verification process if you have used Font Doctor.

Any fonts that are found to be corrupt by either Font Doctor or Font Reserve should be discarded and you should find and reload a healthy version of the font from the original media wherever possible.

### Orphan Fonts

PostScript fonts are comprised of a screen (bitmap or suitcase font file) and a corresponding printer (outline font file). If either of these components is missing, it is referred to as an orphan font. Different applications deal with these orphan fonts in different ways, but to ensure a trouble free workflow, both components are required. So one of the steps you should take in cleaning up your font library, is to either discard any orphan fonts you have in your library, or replace the orphans with a clean version of the font from the original media.

Once again, Font Doctor can help in this regard by locating and matching screen and printer fonts together. Font Reserve can also do this. But the final check should be done once you have added your font library to Suitcase or Font Reserve. Use the features of these products to locate and remove any orphan fonts that you find.

### Duplicate Fonts

Two fonts that have the same name are considered duplicate fonts because it is often difficult to determine what – if anything – is different between the fonts. Many font libraries often contain many duplicate fonts, sometimes out of necessity (different versions of these fonts may be needed), sometimes simply because they have accumulated over time. To avoid confusion and errors, it is best to keep only the fonts – and the versions of fonts – that you need.

Once all your fonts have been added to your font manager, you should decide which of these fonts – especially duplicates – you want or need to keep, and which you should discard. For example, most people have multiple versions of Helvetica — likely PostScript, TrueType and Dfont versions, and even possibly multiple PostScript versions of Helvetica from a single foundry, such as Adobe. This is not uncommon. There are, in fact, many, many versions of Helvetica available. If you work on client jobs using client provided fonts, then you will need to make sure you have the versions of these fonts provided by the client. So if Client A requires Helvetica “A”, and Client B requires Helvetica “B”, it is necessary to keep copies of both Helvetica “A” and Helvetica “B” in your library.

While this can be a time consuming process, it is definitely worth your while to examine your duplicates and decide which you need and which you do not need. Both Suitcase and Font Reserve have features built-in to the product to help you in this process.

For detailed instructions about examining duplicate fonts with Suitcase, see **page 37** of the **Suitcase X1 User Guide**. If you are using Font Reserve, see **page 38** of the **Font Reserve 3 User Guide**.

If you do need to keep multiple versions of fonts in your library, you should probably use the keyword features of your font manager – either Suitcase or Font Reserve – to tag your duplicate fonts with information to help identify the fonts required for each client and job.

For detailed instructions about using keywords with your fonts in Suitcase, see **page 30** of the **Suitcase User Guide**. To add specific information to fonts with Font Reserve, use the **Owners** feature described on **page 89** of the **Font Reserve 3 User Guide**.

If you are completely in charge of the fonts you use, you should only keep one version of each font and remove the duplicate font from your font manager as well as removing the duplicate font files from your system. Within a professional creative, print and publishing environment, PostScript versions are probably the best choice today.

# Mac OS X and Font Locations

With Mac OS X, Apple introduced a number of new locations where fonts may be stored and used by the system.

## **System Domain** **/System/Library/Fonts**

Fonts in this folder are used by the OS, available to all users of the system, and in general should be left alone. Some of the fonts in this folder are absolutely required by the OS and removing them will cause the OS or certain applications to crash or behave erratically. Other fonts may be safely removed from this folder. See [page 7](#) of this guide for a list of required fonts that cannot be removed.

Fonts stored in this location are always active and available to the OS and all running applications – with the exception of applications running in the Classic environment.

## **Local Domain** **/Library/Fonts**

This folder houses any non-essential system fonts available to any user who logs-on to the system.

Fonts stored in this location are always active and available to the OS and all running applications – with the exception of applications running in the Classic environment.

## **User Domain** **/Users/[name]/Library/Fonts**

Fonts in this folder are non-essential system fonts available only to the specific user who logs-on to the system. Each individual user who has an account on the system has his/her own User Fonts folder.

Fonts stored in this location are always active and available to the OS and all running applications – with the exception of applications running in the Classic environment.

## **Classic Domain** **/System Folder/Fonts**

This folder houses fonts available to all users of the system and are specifically for use with the Classic environment. These include both the essential fonts required for running the Classic environment, as well as non-essential fonts for use within the Classic environment. See [page 7](#) of this guide for a list of required Classic fonts that cannot be removed.

Fonts in this folder are always active and available to all applications running within the Classic environment of OS X. Fonts in this folder are also always available to all applications running in the OS X environment – even if the Classic environment is not running.

### Network Domain

#### /Network/Library/Fonts

This folder houses non-essential system fonts that you would like to have available to anyone on your local area network. In order to use this folder, you must setup your network and sharing appropriately. For specific information about setting up this folder, refer to the Mac OS X **Server File Services Administration** Guide. Please visit the Apple website to download this file:

<http://www.apple.com/server/documentation/>

When correctly configured, fonts in this folder on your server are automatically active and available to all running applications on each of the connected client machines – with the exception of applications running within the Classic environment.

These fonts are available to all users on all computers that have been correctly configured to use these fonts.

### Application Fonts

#### /Library/Application Support

In addition to these system font folders, individual applications sometimes also store fonts in certain locations for their own use. With Mac OS X, applications can keep a private store of fonts for their own use. Of particular importance to the professional creative, print and publishing community, are the Adobe applications, which store fonts in:

`/Library/Application Support/Adobe/Fonts`

These fonts are active and available to any Adobe application running in Mac OS X – but not available to non-Adobe applications.

## Font Hierarchy

Can duplicate fonts be retained in the various system and application font folders? Yes, but it's not a good idea.

If duplicate fonts are stored in multiple font locations, Mac OS X will use the version of the font based on the location of the font in the following hierarchy:

1. A specific Application's font folder:  
`/Library/Application Support`
2. The User font folder:  
`/Users/[name]/Library/Fonts`
3. The Local font folder:  
`/Library/Fonts`
4. The Network font folder:  
`/Network/Library/Fonts`
5. The System font folder:  
`/System/Library/Fonts`
6. The Classic font folder:  
`/System Folder/Fonts`

The Application Support font folder is the “highest” font location, and the classic font folder is the “lowest” font location. This means, for example, that if you have a font of the same name (a duplicate font) in both the `/Users/[name]/Library/Fonts` folder, and the `/System/Library/Fonts` folder, Mac OS X (and all running applications) uses the version of the font in the `/Users/[name]/Library/Fonts` folder, since that is the “higher” font location.

# Mac OS X and Font Formats

Can you use the same fonts that you used with Mac OS 9? In general, the answer is yes. Mac OS X supports the same PostScript and TrueType fonts used with Mac OS 9. The fonts may look a little different – for example, suitcases don't look or even seemingly behave like suitcases in Mac OS X – but they still work the same way.

Following is a brief synopsis of all font formats supported by Mac OS X:

## PostScript Type 1

These are still the de-facto standard for professionals in the creative, print and publishing environments. You still require both the suitcase (screen font) file and the corresponding outline (printer font) file in order for PostScript fonts to work correctly in Mac OS X. Both the screen and corresponding printer font files must be in the same physical folder in order to work correctly.

## TrueType

These continue to be supported by Mac OS X. TrueType fonts contain the bitmap and outline information, as well as all the required font metrics, in a single font suitcase, making it somewhat easier to utilize than traditional PostScript Type 1 fonts. However, TrueType fonts are still not as widely accepted in professional creative, print and publishing environments.

## OpenType

OpenType is the up and coming standard in font formats. There are several significant advantages to the OpenType format. First, as with TrueType, the entire font – including the bitmap and outline data and all font metrics – are housed in a single file. Second, this file is cross platform – the same file can be used on a Mac or Windows platform with consistent results. Third, an OpenType font can contain either PostScript or TrueType outline data, so professional creative, print and publishing environments can continue to use PostScript fonts. Fourth, OpenType can support Unicode information which can contain thousands of characters including high quality ligatures, swash glyphs, and other advanced typographical features. This is a significant benefit over PostScript Type 1, which is limited to 256 ASCII characters.

Mac OS X natively supports OpenType fonts and Unicode information, making OpenType an excellent choice of font format. However, moving to OpenType fonts does require a financial investment since you cannot simply convert your existing PostScript Type 1 or TrueType fonts to OpenType. Adobe is now selling an OpenType version of their Adobe Font Folio library.

### Dfont

With Mac OS X, Apple introduced yet another font format. The Dfont (Data Fork TrueType Font) is essentially a TrueType font repackaged in a data fork file rather than the resource fork in Mac OS 9. While these Dfont format fonts are high-quality fonts, this format is essentially only used by Apple and, in effect, these fonts are just used as system fonts. We do not recommend using Dfont format fonts within professional creative, print and publishing environments.

### PostScript Multiple Master

This special PostScript font allows modifications of one or more font parameters to create variations of the original font. While Multiple Master fonts are supported by Mac OS X, they have been falling “out of favor” and are no longer being actively developed by Adobe (the original creators of Multiple Master fonts). They have been known to cause various issues and problems in professional workflows, and we recommend not using Multiple Master fonts if possible.

### Windows TrueType

Mac OS X also supports Windows TrueType fonts (often called .ttf fonts). These fonts are the same as Mac TrueType fonts, but with a different internal organization. These fonts were not supported by Mac OS 9.

Windows TrueType fonts should not be used for true cross platform compatibility. To attain true compatibility, it is recommended that you choose an appropriate OpenType font.

### Unicode

You’ve probably heard the term “Unicode” used in one way or the other, but may not know exactly to what it refers. For Fonts, Unicode defines unique character mappings for up to 65,000 characters and glyphs per font. Therefore, the character “A” is in the same character mapping across all Unicode fonts.

In previous versions of the Mac OS, the predominant character encoding for fonts was MacRoman, not Unicode. MacRoman does not specify exact character mappings, so unique characters could be mapped to other character locations. For example, in MacRoman, Dingbat characters could be mapped to keyboard keys. The Unicode format specifies exact character mappings for all letters, including Dingbats, that provides much more predictability.

For an application to be able to use Unicode fonts, it must be “Unicode Compliant.” If an application is not compliant, then it will likely display an entirely wrong character from a different location in the font.

Mac OS X applications developed for Cocoa are Unicode compliant, while applications written with the earlier Carbon standard are not likely to be compliant.

### ATM Light

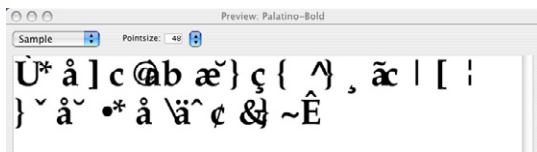
With Mac OS 9, PostScript fonts required Adobe’s ATM Light system extension to be installed in order to work, because they were not natively supported by the Mac OS. With Mac OS X, PostScript is natively supported and the rendering of Type 1 fonts is supported directly by the OS, so ATM Light is no longer required, or even available, for Mac OS X.

# Troubleshooting

This section describes some of the known font issues and workarounds that you can employ to circumvent the problem.

## Font Cache Issues

If your fonts occasionally appear garbled – it appears the correct font is being used but the characters are randomized – you have most likely run into the Mac OS X font cache problem. This problem was fixed in Mac OS X version 10.3.6, but existed in version 10.3.5 and earlier.



To workaround this issue:

1. Remove the font cache files **com.apple.ATS.System.cache**, **com.apple.ATSServer.FODB\_System** and **fontTablesAnnex** that are found in **/System/Library/Caches**. You will need to enter an Administrator password in order to do this.
2. Remove the folder **com.apple.ATS** from **/Library/Caches**.
3. Remove the file **com.apple.ATS.plist** from **/Users/[name]/Library/Preferences**.
4. Restart your Mac.

This should alleviate the problem. If the problem recurs, it is necessary to remove the font cache files again. There are also shareware products available that allow you to purge these font cache files easily, such as **Font Finagler**, available from: <http://homepage.mac.com/mdouma46/fontfinagler/>

## Symbol/Dingbats Fonts

In Mac OS X version 10.3.5, occasionally certain symbol/dingbats fonts do not display in certain applications. This problem was fixed with Mac OS X 10.3.6. A similar situation occurs when you are using a Unicode symbol/dingbat font within a Unicode-savvy application. An example of this is the Mac OS X font ZapfDingbats.dfont – which is a Unicode font – when used with TextEdit – which is a Unicode-savvy application – will result in the font Lucida Grande being substituted for ZapfDingbats.dfont when you enter text with the keyboard.

Unicode does not map symbol/dingbat characters to keyboard alphabet keys. Therefore, text entry from the keyboard using a Unicode font with a Unicode-savvy application will result in “invisible” text, blank boxes, or font substitution.

To display and use dingbat characters in a Unicode-savvy application using a Unicode font, use the Character Palette - a built-in feature of Mac OS X – to input the dingbat characters, instead of the keyboard.

For more information on this issue and the workaround, please refer to the Extensis Knowledge Base Article #1302204: [http://www.extensis.com/en/support/kb\\_article.jsp?articleNumber=1302204](http://www.extensis.com/en/support/kb_article.jsp?articleNumber=1302204)

## Expert Fonts

Some expert fonts, for example Adobe Minion Expert, do not preview on screen correctly in most applications. This was only an issue in Mac OS X version 10.3.5 and was fixed with the version 10.3.6 release.