Java Application: FontRename

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Description

FontRename is a Java 1.4 application to rename OpenType and TrueType font files with their internal "font full name" using only plain text characters (ASCII) plus an extension for the type (*.OTF, *.TTC, *.TTF), or using the full Unicode character set. This gives consistent names to font files, no matter what their source. The contents of the files are not changed, only the names in the system file directory. Don't use this program on system folders with installed fonts.

To display all name tables inside a font, in all languages, see the FontNames utility. For more information on the internal format of font files, start with the following on-line references:

Microsoft TrueType Font Properties Extension
http://www.microsoft.com/typography/TrueTypeProperty21.mspx

The OpenType Font File
http://www.microsoft.com/typography/otspec/otff.htm
http://www.microsoft.com/typography/otspec/name.htm

The TrueType Font File
http://developer.apple.com/textfonts/TTRefMan/RM06/Chap6.html
http://developer.apple.com/textfonts/TTRefMan/RM06/Chap6name.html

The older PostScript font format is not supported. FontRename duplicates some features already found in:

TrueType Renamer 1.00
by Fabrizio Giustina (1998)
http://www.simtel.net/pub/pd/5496.html

RedEar's FontRenamer 2.1.6
by Philip L. Engel (2008)
http://fontorg.us/download.html

RedEar's program is more general, with better features, and fully supports multi-file PostScript fonts; however, it requires the Microsoft .NET framework and runs only on Windows. This FontRename Java application will run on any computer with Java installed: Linux, Macintosh, Solaris, Windows, etc.

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Installation

You must have the Java run-time environment (JRE) installed on your computer. FontRename was developed with Java 1.4 and should run on later versions. It may also run on earlier versions, but this has not been tested. For Macintosh computers, the version of Java is determined by your version of MacOS. For Windows, Linux, and Solaris, you can download the JRE from Sun Microsystems:

    Sun Java
        JRE for end users: http://www.java.com/getjava/
        SDK for programmers: http://developers.sun.com/downloads/
        IDE for programmers: http://www.netbeans.org/

Once Java is installed, you need to put the program files for FontRename into a folder (directory) on your hard drive. The name of the folder and the location are your choice, except it is easier if the name does not include spaces. Assume that files will go into a C:\JAVA folder. Then create the folder and unpack the Java *.class files into this folder (if you received the program as a ZIP file). The files look something like this:

    FontRename4.class (32 KB, executable program)
    FontRename4.doc (37 KB, this documentation in Microsoft Word format)
    FontRename4.gif (16 KB, sample program image)
    FontRename4.ico (7 KB, icon for Windows)
    FontRename4.jar (19 KB, archive file with same class files inside)
    FontRename4.java (107 KB, source code)
    FontRename4.manifest (1 KB, main class manifest for archive file)
    FontRename4.pdf (75 KB, this documentation in Adobe Acrobat format)

```
FontRename4.txt  (14 KB, configuration file in plain text format)
FontRename4Filter.class  (1 KB, helper class for main program)
FontRename4User.class  (1 KB)
GnuPublicLicense3.txt  (35 KB, legal notice)
RunJavaPrograms.pdf  (88 KB, more notes about running Java)
ShowCharSets2.txt  (20 KB, sample file with Java character set names)
```

To run the program on Windows, start a DOS command prompt, which is Start button, Programs, Accessories, Command Prompt on Windows 2000/XP. Change to the folder with the program files and run the program with a "java" command:

```
c:
cd  \java
java  FontRename4
```

The program name "FontRename4" must appear exactly as shown; uppercase and lowercase letters are different in Java names. Some systems (Macintosh) will run a main "class" file by clicking on the class file name while viewing a directory in the file browser (Mac Finder). Many systems will run a "jar" file by clicking (or double clicking) on the jar file name (Windows Explorer). The command line is the only guaranteed way of running a Java program. Should you find this program to be popular, you can create a Start menu item or desktop shortcut on Windows 2000/XP with a target of "java.exe FontRename4" starting in the "c:\java" folder.

One complication may arise when trying to run this program. Java looks for an environment variable called CLASSPATH. If it finds this variable, then that is a list of folders where it looks for *.class files. It won't look anywhere else, not even in the current directory, unless the path contains "." as one of the choices. The symptom is an error message that says:

```
Exception in thread "main" java.lang.NoClassDefFoundError: FontRename4
```

To find out if your system has a CLASSPATH variable defined, type the following command in a DOS window:

```
set  CLASSPATH
```

To temporarily change the CLASSPATH variable to the current directory, use the following command line:

```
java  -cp  .  FontRename4
```

To permanently change the CLASSPATH, you must find where it is being set. This may be in an old AUTOEXEC.* file in the root directory of your system disk (usually the C:\ folder), or it may be in Control Panel, System, Advanced, Environment Variables on Windows 2000/XP.

Removal or Uninstall

To remove this program from your computer, delete the installation files listed above. If the folder that contained the files is now empty, you may also delete the folder ... if you created the folder, of course, not the system. If you created desktop shortcuts or Start menu items, then delete those too. There are no hidden configuration or preference files, and no information is stored in the Windows system registry. You don't need an "uninstall" program.

Graphical Versus Console Application

The Java command line may contain options or file and folder names. If no file or folder names are given on the command line, then this program runs as a graphical or "GUI" application with the usual dialog boxes and windows. See the "-?" option for a help summary:

```
java FontRename4 -?
```

The command line has more options than are visible in the graphical interface. An option such as -u14 or -u16 is recommended because the default Java font is too small. If file or folder names are given on the command line, then this program runs as a console application without a graphical interface. A generated report is written on standard output, and may be redirected with the ">" or "1>" operators. (Standard error may be redirected with the "2>" operator.) An example command line is:

```
java FontRename4 -s d:\fonts >report.txt
```

The console application will return an exit status equal to the number of files whose names have been successfully changed. The graphical interface can be very slow when the output text area gets too big, which will happen if thousands of files are reported.

Restrictions and Limitations

A plain text file called "FontRename4.txt" is expected to be in the current working directory and contains the preferred search order for name table entries in font files. You may edit this file to select other languages, or to convert characters before files are renamed. Please read comments in the file for further instructions.

Not all font files are correctly structured. Before reporting an error in this program, make sure that the error isn't in the font file. Select the highest message level for more detailed information about a particular file (the -m4 option on the command line, or the graphical "show all files, details" option). The MacRoman conversion table may be optional on some JRE; you should install the complete JRE, not the default settings.