LaTeX Support For T-26 Divine Font

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2013/03/07, v1.0

Abstract

This package provides LaTeX support for T-26 Divine Font. It has everything you need to typeset in this font - except the fonts themselves.

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1 Introduction

While such engines as `xetex` and `luatex` can use native system fonts, the installation base of `pdftex` is large enough to justify its continuing support with new fonts.

This package provides support files for the Divine Font Family from T-26. According to the Fontname scheme [1], this corresponds to the family `lsb`. We provide the necessary font files—everything but the fonts.

Divine is a calligraphic font designed by Frank Heine and Marilyn Devedjiev in 1995 (http://www.t26.com/fonts/207-Divine) and distributed by T-26 foundry.

2 Installation

First, you need to purchase the font itself: the `pfb` files are *not* included in the package. You need just one file `divine.pfb` If your TEX system is TDS-compliant, install the file into `$TEXMF/fonts/type1/t26/divine`. Download http://ctan.tug.org/install/fonts/psfonts/divine.tds.zip and unzip this file in `$TEXMF`. Add `+fdv.map` to the configuration files of dvips, pdftex and your dvi previewer. Run updmap and texhash programs to update the configuration files and file names database.

The style `divine.sty` provides a number of commands for using the font family (see Section 3)

3 Using LATEX Style

To use the package, add to the preamble of your document the usual incantation `\usepackage[`⟨*options*⟩`]{divine}`.

The options `scaled=...` scales divine fonts to the given scale.

The font can be selected in the usual way:

```
\fontfamily{fdv}\selectfont
```

`\divinefamily` Alternatively you can use a declaration `\divinefamily` and a command `\textdivine` `\textdivine` to set the family.

4 Implementation

4.1 Identification

We start with the declaration who we are. Most `.dtx` files put driver code in a separate driver file `.drv`. We roll this code into the main file, and use the pseudo-guard `<gobble>` for it.

```
⟨style⟩\NeedsTeXFormat{LaTeX2e}
⟨*gobble⟩
\ProvidesFile{divine.dtx}
⟨/gobble⟩
⟨style⟩\ProvidesClass{divine}
⟨fdv-drv⟩\ProvidesFile{fdv-drv.tex}
⟨fdv-map⟩\ProvidesFile{fdv-map.tex}
[2013/03/07 v1.0 Using T26 Divine Font in LaTeX]
```

And the driver code:

```
⟨*gobble⟩
\documentclass{ltxdoc}
\usepackage{booktabs}
\usepackage{url}
\usepackage[tableposition=top]{caption}
\usepackage{hypdoc}
\PageIndex
\CodelineIndex
\RecordChanges
\EnableCrossrefs
\begin{document}
  \DocInput{divine.dtx}
\end{document}
⟨/gobble⟩
```

4.2 Fontinst Driver

This follows [2].

First, the preamble

```
⟨*fdv-drv⟩
\input fontinst.sty
\substitutesilent{bx}{b}
```

Starting recording transforms:

```
\recordtransforms{fdv-rec.tex}
```

A bunch of fonts:

```
\transformfont{fdvr8r}{\reencodefont{8r}{\fromafm{divine}}}
```

There is no hook in `fontinst.sty` for writing our own preamble to `.fd` file. However, we need to add scaling commands to the preamble. OK, we will patch fontinst:

```
\fontinstcc
```

```
\def\fd_family#1#2#3{
   \a_toks{#3}
   \edef\lowercase_file{\lowercase{
     \edef\noexpand\lowercase_file{#1#2.fd}}}
   \lowercase_file
   \open_out{\lowercase_file}
   \out_line{\percent_char~Filename:~\lowercase_file}
   \out_line{\percent_char~Created~by:~tex~\jobname}
   \out_line{\percent_char~Created~using~fontinst~v\fontinstversion}
   \out_line{}
   \out_line{\percent_char~THIS~FILE~SHOULD~BE~PUT~IN~A~TEX~INPUTS~
      DIRECTORY}
   \out_line{}
   \out_line{\string\ProvidesFile{\lowercase_file}}
   \out_lline{[
      \the\year/
      \ifnum10>\month0\fi\the\month/
      \ifnum10>\day0\fi\the\day\space
      Fontinst~v\fontinstversion\space
      font~definitions~for~#1/#2.
   ]}
   \out_line{}
```

Here is our patch:

```
   \out_line{\string\expandafter\string\ifx\string\csname\space
     FDV@scale\string\endcsname\string\relax}
   \out_line{\space\string\let\string\FDV@@scale\string\@empty}
   \out_line{\string\else}
   \out_line{\space\string\edef\string\FDV@@scale\left_brace_char
       s*[\string\csname\space FDV@scale\string\endcsname]
       \right_brace_char\percent_char}
   \out_line{\string\fi\percent_char}
   \out_line{}
```

End of the patch.

```
   \out_line{\string\DeclareFontFamily{#1}{#2}{\the\a_toks}}
   {
      \csname #1-#2\endcsname
      \out_line{}
      \let\do_shape=\substitute_shape
      \csname #1-#2\endcsname
      \let\do_shape=\remove_shape
      \csname #1-#2\endcsname
   }
   \x_cs\g_let{#1-#2}\x_relax
   \out_line{}
   \out_line{\string\endinput}
   \close_out{Font~definitions}
}
\normalcc
```

Now we install the fonts. First T1

```
\installfonts
\installfamily{T1}{fdv}{}
\installfont{fdvr8t}{fdvr8r,newlatin}{t1}{T1}{fdv}{m}{n}{
  <->\string\FDV@@scale}
\endinstallfonts
```

Then TS1

```
\installfonts
\installfamily{TS1}{fdv}{}
\installfont{fdvr8c}{fdvr8r,textcomp}{ts1}{TS1}{fdv}{m}{n}{
  <->\string\FDV@@scale}
\endinstallfonts
```

And OT1

```
\installfonts
\installfamily{OT1}{fdv}{}
\installfont{fdvr7t}{fdvr8r,newlatin}{ot1}{OT1}{fdv}{m}{n}{
  <->\string\FDV@@scale}
\endinstallfonts
```

And the end:

```
\endrecordtransforms
\bye
```

⟨/fdv-drv⟩

4.3 Fontmap Generation

This is a standard procedure [2]

⟨*fdv-map⟩

```
\input finstmsc.sty
\resetstr{PSfontsuffix}{.pfb}
\adddriver{dvips}{fdv.map}
\input fdv-rec.tex
\donedrivers
\bye
```

⟨/fdv-map⟩

4.4 Style File

The scaling code is from the `helvet` package:

⟨*style⟩

```
\newif\ifFDV@default
\FDV@defaultfalse
\RequirePackage{keyval}
\define@key{FDV}{scaled}[1.00]{%
  \def\FDV@scale{#1}}
\def\ProcessOptionsWithKV#1{%
  \let\@tempc\relax
  \let\FDV@tempa\@empty
```

```
  \ifx\@classoptionslist\relax\else
    \@for\CurrentOption:=\@classoptionslist\do{%
      \@ifundefined{KV@#1@\CurrentOption}%
      {}%
      {%
        \edef\FDV@tempa{\FDV@tempa,\CurrentOption,}%
        \@expandtwoargs\@removeelement\CurrentOption
          \@unusedoptionlist\@unusedoptionlist
      }%
    }%
  \fi
  \edef\FDV@tempa{%
    \noexpand\setkeys{#1}{%
      \FDV@tempa\@ptionlist{\@currname.\@currext}%
    }%
  }%
  \FDV@tempa
  \let\CurrentOption\@empty
}
\ProcessOptionsWithKV{FDV}
\AtEndOfPackage{%
  \let\@unprocessedoptions\relax
}
```

Some new commands:

```
\DeclareRobustCommand\divinefamily{\fontfamily{fdv}\selectfont}
\DeclareTextFontCommand{\textdivine}{\divinefamily}
```

⟨/style⟩

References

[1] Karl Berry. *Fontname. Filenames For TEX Fonts*, September 2005. http://mirrors.ctan.org/info/fontname.

[2] Philipp Lehman. *The Font Installation Guide*, December 2004. http://mirrors.ctan.org/info/Type1fonts/fontinstallationguide.

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