LaTeX Support For Monotype Imprint Shadow Font

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Abstract

This package provides LaTeX support for the Monotype Imprint Shadow font. It has everything you need to typeset in this font - except the font itself.

Contents

1 Introduction **2**

2 Installation **2**

3 Using LaTeX Style **2**

4 Implementation **3**

4.1 Identification 3

4.2 Fontinst Driver 3

4.3 Fontmap Generation 5

4.4 Style File 5

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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 Monotype Imprint Shadow font. According to the Fontname scheme [1], this corresponds to the family `miih`. We provide the necessary font files—everything but the fonts.

2 Installation

First, you need to purchase the fonts themselves: the `pfb` files are *not* included in the package. We assume that the `pfb` file is called `ImpriMTSha.pfb`. If your TEX system is TDS-compliant, install the this file into `$TEXMFLOCAL/fonts/type1/monotype/imprintmtshadow`. Download http://mirrors.ctan.org/install/fonts/psfonts/imprintmtshadow.tds.zip and unzip this file in `$TEXMFLOCAL`. Add `+miih.map` to the configuration files of dvips, pdftex and your dvi previewer. Run texhash and updmap programs to update the configuration files and file names database.

The style `imprintmtshadow.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*⟩`]{imprintmtshadow}`.

The package option `scaled=...` scales the font to the given scale.

The font can be selected in the usual way, for example

```
\fontfamily{miih}\selectfont
```

`\imprintmtshadowfamily`
`\textimprintmtshadow`

Alternatively you can use a declaration `\imprintmtshadowfamily` and a command `\textimprintmtshadow` 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{imprintmtshadow.dtx}
⟨/gobble⟩
⟨style⟩\ProvidesClass{imprintmtshadow}
⟨miih-drv⟩\ProvidesFile{miih-drv.tex}
⟨miih-map⟩\ProvidesFile{miih-map.tex}
[2012/08/03 v1.0 Using Monotype Imprint Shadow 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{imprintmtshadow.dtx}
\end{document}
⟨/gobble⟩
```

4.2 Fontinst Driver

This follows [2].

First, the preamble

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

Starting recording transforms:

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

We have only one font:

```
\transformfont{miih8r}{\reencodefont{8r}{\fromafm{ImpriMTSha}}}
```

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
     MIIH@scale\string\endcsname\string\relax}
   \out_line{\space\string\let\string\MIIH@@scale\string\@empty}
   \out_line{\string\else}
   \out_line{\space\string\edef\string\MIIH@@scale\left_brace_char
       s*[\string\csname\space MIIH@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}{miih}{}
\installfont{miih8t}{miih8r,newlatin}{t1}{T1}{miih}{m}{n}{
  <->\string\MIIH@@scale}
\endinstallfonts
```

Then TS1

```
\installfonts
\installfamily{TS1}{miih}{}
\installfont{miih8c}{miih8r,textcomp}{ts1}{TS1}{miih}{m}{n}{
  <->\string\MIIH@@scale}
\endinstallfonts
```

And OT1

```
\installfonts
\installfamily{OT1}{miih}{}
\installfont{miih7t}{miih8r,newlatin}{ot1}{OT1}{miih}{m}{n}{
  <->\string\MIIH@@scale}
\endinstallfonts
```

And the end:

```
\endrecordtransforms
\bye
```

⟨/miih-drv⟩

4.3 Fontmap Generation

This is a standard procedure [2]

⟨*miih-map⟩

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

⟨/miih-map⟩

4.4 Style File

The scaling code is from the `helvet` package:

⟨*style⟩

```
\RequirePackage{keyval}
\define@key{MIIH}{scaled}[1.00]{%
  \def\MIIH@scale{#1}}
\def\ProcessOptionsWithKV#1{%
  \let\@tempc\relax
  \let\MIIH@tempa\@empty
  \ifx\@classoptionslist\relax\else
    \@for\CurrentOption:=\@classoptionslist\do{%
```

```
      \@ifundefined{KV@#1@\CurrentOption}%
      {}%
      {%
        \edef\MIIH@tempa{\MIIH@tempa,\CurrentOption,}%
        \@expandtwoargs\@removeelement\CurrentOption
          \@unusedoptionlist\@unusedoptionlist
      }%
    }%
  \fi
  \edef\MIIH@tempa{%
    \noexpand\setkeys{#1}{%
      \MIIH@tempa\@ptionlist{\@currname.\@currext}%
    }%
  }%
  \MIIH@tempa
  \let\CurrentOption\@empty
}
\ProcessOptionsWithKV{MIIH}
\AtEndOfPackage{%
  \let\@unprocessedoptions\relax
}
```

Some new commands:

```
\DeclareRobustCommand\imprintmtshadowfamily{\fontfamily{miih}\selectfont}
\DeclareTextFontCommand{\textimprintmtshadow}{\imprintmtshadowfamily}
```

⟨/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.

Index

Numbers written in italic refer to the page where the corresponding entry is described; numbers underlined refer to the code line of the definition; numbers in roman refer to the code lines where the entry is used.

Symbols

\@classoptionslist 108, 109
\@currext 121
\@currname 121
\@empty . . . 53, 107, 125
\@expandtwoargs . . . 114
\@for 109
\@ifundefined 110
\@ptionlist 121
\@removeelement . . . 114
\@tempc 106
\@unprocessedoptions 129
\@unusedoptionlist . 115

A

\a 30, 60
\adddriver 96
\AtEndOfPackage . . . 128

B

\begin 19
\bye 91, 99

C

\close 72
\CodelineIndex 16
\csname 51, 56, 62, 65, 67
\CurrentOption 109, 110, 113, 114, 125

D

\day 46
\DeclareFontFamily . 60
\DeclareRobustCommand 131
\DeclareTextFontCommand 132
\def 29, 104, 105
\define@key 103
\do 64, 66, 109
\DocInput 20
\documentclass 10
\donedrivers 98

E

\edef 31, 32, 55, 113, 119
\else 54, 108
\EnableCrossrefs . . 18
\end 21
\endcsname 52, 56, 62, 65, 67
\endinput 71
\endinstallfonts 79, 84, 89
\endrecordtransforms 90
\expandafter 51

F

\fd 29
\fi 45, 46, 58, 118
\fontfamily 131
\fontinstcc 28
\fontinstversion 37, 47
\fromafm 27

G

\g 69

I

\ifnum 45, 46
\ifx 51, 108
\imprintmtshadowfamily *2*, 131, 132
\input 24, 94, 97
\installfamily 76, 81, 86
\installfont . 77, 82, 87
\installfonts 75, 80, 85

J

\jobname 36

L

\left 55
\let 53, 64, 66, 106, 107, 125, 129
\lowercase 31, 32, 33, 34, 35, 42

M

\MIIH@@scale 53, 55, 78, 83, 88
\MIIH@scale 104
\MIIH@tempa . . . 107, 113, 119, 121, 124
\month 45

N

\NeedsTeXFormat 1
\noexpand 32, 120
\normalcc 74

O

\open 34
\out 35, 36, 37, 38, 39, 41, 42, 43, 50, 51, 53, 54, 55, 58, 59, 60, 63, 70, 71

P

\PageIndex 15
\percent 35, 36, 37, 39, 57, 58
\ProcessOptionsWithKV 105, 127
\ProvidesClass 5
\ProvidesFile 3, 6, 7, 42

R

\RecordChanges 17
\recordtransforms . 26
\reencodefont 27
\relax . 52, 106, 108, 129
\remove 66
\RequirePackage . . . 102
\resetstr 95
\right 57

S

\selectfont 131

\setkeys 120
\space 46, 47, 51, 53, 55, 56
\string 42, 51, 52, 53, 54, 55, 56, 58, 60, 71, 78, 83, 88
\substitute 64
\substitutesilent . 25

T

\textimprintmtshadow *2*, 132
\the 44, 45, 46, 60
\transformfont 27

U

\usepackage 11, 12, 13, 14

X

\x 69

Y

\year 44