installfont(-tl)

v1.7

A bash script for installing a LATEX font family

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Abstract

With this script* (installfont for MiKTeX; installfont-tl for TeXLive), you can install a LaTeX font family (Postscript Type1, Truetype, Opentype). It supports font series from light to ultra bold + (faked) small caps + faked slanted, but no expert fonts. The script will rename the fonts automatically (optinal) or will otherwise expect *.afm files and the font files (in Postscript Type1 format!) named in the Karl Berry scheme (e.g. 5nar8a.pfb). After running the script, you should have a working font installation in your local TeX tree.

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*This script automates the procedure described in 'Tutorial I The Basics' in fontinstallationguide.pdf

Dependencies

For using this script the following programms have to be installed:

- Windows
    - MiKTeX[1] or TeXLive[2]
    - cygwin[3] or any other *nix-like environment with the same funtionality

      Download setup.exe and follow the instructions on the cygwin home-page
    - for installing fonts in other formats than Postscript Type1
        * Truetype

          Download the ttf2pt1 Installer[4], install ttf2pt1 and add the installation directory to your PATH
        * Opentype

          Download the LCDF Typetools[5] and run (bash/cygwin)
          unxz lcdf-typetools-w32.tar.xz followed by
          tar -xf lcdf-typetools-w32.tar and add the bin directory to the PATH. You need to install Ghostscript[6] if you are using TeXLive!

- *nix
    - TeXLive[7]
    - Ghostscript (pf2afm)
    - for installing fonts in other formats than Postscript Type1
        * Truetype

          Install the ttf2pt1 package with your distribution package manager or download a package from a webpage[8].
        * Opentype

          Install the lcdf-typetools package with your distribution package manager or download a package from a webpage[9]. Should be available in recent versions of TeXLive!

You can also convert the font manually, e.g. with Fontforge[10]. Load the font, reencode the font to 'Adobe Standard' and generate the font (PS Type1 (Binary)).

The font(s)

The core part of the script needs the font(s) in Postscript Type1 format and named in Karl Berry scheme. It can try to convert and to rename the font(s) and afm files for you by analyzing the afm files. If it fails[**] you will have to rename the font(s) and afm files on your own. The Karl Berry scheme expects a file to be named like this:

$$\underbrace{\text{fxx}}_{\text{font family}} \quad \underbrace{\text{y(y)}}_{\text{font cut}} \quad \underbrace{\text{zz}}_{\text{font encoding}} \quad \text{.pfb}$$

with the following meaning:

f	supplier (type foundry)	p (Adobe), l (Linotype), f (small foundries, free), ...
xx	typeface	tm (Times), ch (Charter), hv (Helvetica), ...
y(y)	weights/variants	r (regular/medium), ri (regular/medium italic), rc (regular/medium small caps), b (bold), bi (bold italic), bc (bold small caps), l (light), li (light italic), lc (light small caps), s (semi bold), si (semi bold italic), sc (semi bold small caps), d (demi), di (demi italic), dc (demi small caps), x (extra bold), xi (extra bold italic), xc (extra bold small caps), u (ultra bold/heavy), ui (ultra bold/heavy italic), uc (ultra bold/heavy small caps)
zz	font encoding	8a (AdobeStandardEncoding), 8r (TEX base encoding), ...

The script supports the cuts presented in the table. Don't copy more than these cuts into your working directory, otherwise the automatic renaming will quite likely fail! It will add faked slanted cuts and faked small caps, if there are no real small caps fonts. If you only have one font cut, it will be installed as regular font. If you want more information about Karl Berry scheme read:

`texdoc fontname`

[**]feel free to contact the author, so that another search pattern can be added to `grep` command(s)

Options

The style file created with this script offers the following options:

- scaled

  You can use the option `scaled` for scaling the font to better match with other fonts.

- leading

  For some fonts it might be necessary to increase the leading between lines for a better optical impression, where 1.0 means 100%.

Usage

To install a font family simply call the script:

```
kleberj@home ~/installfont
$ installfont -f 5na -n 'Softmaker Nashville' -c Nashville -P MF@Sna
-v v1.0 -l /cygdrive/d/LocalTeXMF -s MyFonts/Nashville -p nashville
-m nashville -O -d 2010/09/14
```

You can also put a copy of the script in your working directory and change the default values of the script variables. Then you can simply call the script with

```
kleberj@home ~/installfont
$ ./installfont
```

After running the script the font(s) should be properly installed. You can use the font just with \usepackage{PACKAGENAME} or \FONTCOMMAND.

5

installfont(-tl)

The script offers the following command line options:

`-f`	`--fontfamily`	Name of the LaTeX font family, e.g. ptm (Adobe Times)
`-n`	`--fontname`	Font name, e.g. Adobe Times
`-c`	`--fontcommand`	Name of the command that will switch to the font
`-P`	`--fontscaleprefix`	prefix of the scale macro, which should be different for each font (no digits allowed)
`-t`	`--fonttype`	Font type (pst1(default)|ttf|otf)
`-p`	`--packagename`	Name of the LaTeX package
`-d`	`--packagedate`	Date of the LaTeX package
`-v`	`--packageversion`	Version of the LaTeX package
`-l`	`--localtexmf`	root of your local TeX tree, e.g. `/cygdrive/c/LocalTeXMF` (TeXLive version default: `$TEXMFLOCAL`)
`-s`	`--fontsubdir`	location where the fonts and support files should be installed, e.g. `MyFonts/AdobeTimes`
`-e`	`--fontencoding`	encoding of the font (default: 8a (AdobeStandardEncoding))
`-o`	`--otffontfeatures`	choosing Opentype font features (default: -fkern -fliga)
`-m`	`--mapfilename`	file name of the map file (without .map)
`-u`	`--uninstall`	will uninstall the font family. You must specify `--localtexmf` and `--fontsubdir`
`-R`	`--rmdefault`	installs font family as roman (serif) font family (default)
`-S`	`--sfdefault`	installs font family as sans serif font family
`-T`	`--ttdefault`	installs font family as typewriter font family
`-O`	`--origfontname`	use original font names instead of Karl Berry names
`-a`	`--admin`	set administrative mode (MiKTeX v2.8+)
`-V`	`--version`	will print the version number of the script
`-L`	`--log`	will redirect the terminal output of the programms to the LOG file
`-h`	`--help`	will print this help statement

6

Links

[1] http://www.miktex.org/
[2] http://www.tug.org/texlive/
[3] http://www.cygwin.com/
[4] http://gnuwin32.sourceforge.net/packages/ttf2pt1.htm
[5] ftp://akagi.ms.u-tokyo.ac.jp/pub/TeX/win32/lcdf-typetools-w32.tar.xz
[6] http://www.ghostscript.com/
[7] http://www.tug.org/texlive/
[8] http://packages.ubuntu.com/search?lang=en&keywords=ttf2pt1
[9] http://packages.ubuntu.com/search?lang=en&keywords=lcdf-typetools
[10] http://fontforge.sourceforge.net/