

installfont(-tl)

v1.5

A bash script for installing a \LaTeX font family

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Package authors:

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With this script* 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. **

*This script automates the procedure described in 'Tutorial I The Basics' in [fontinstallatnguide.pdf](#)

**The Nashville, Grenoble and Typewriter font families in this document were installed with installfont

Dependencies

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

- Windows
 - [MiKTeX](#)¹ or [TeXLive](#)²
 - [cygwin](#)³ or any other *nix-like environment with the same functionality
Download setup.exe and follow the instructions on the [cygwin](#) homepage
 - 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)
bunzip2 lcdf-typetools-w32.tar.bz2 followed by
tar -xf lcdf-typetools-w32.tar and add the bin directory to the PATH.
You need to install [Ghstscript](#)⁶ if you are using TeXLive!
- *nix
 - [TeXLive](#)⁷
 - Ghstscript (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.

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)). There's a pre-built package for cygwin!

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), s (semi bold), si (semi bold italic), d (demi), di (demi italic), x (extra bold), xi (extra bold italic), u (ultra bold/heavy), ui (ultra bold/heavy italic)
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`

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.

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

- leading

For some fonts it might be necessary to increase the leading between lines for a better optical impression, where 1.0 means 100%. `\usepackage[leading=1.1]{nashville}` was used in this document.

Example (Nashville)

Family	Series	Shape(s)	Example of Typeface	Supported Encodings
6na	l	n	Nashville Light	OT1, T1, TS1
6na	l	it	<i>Nashville Light</i>	OT1, T1, TS1
6na	l	sl	<i>Nashville Light</i>	OT1, T1, TS1
6na	l	sc	NASHVILLE LIGHT	OT1, T1, TS1
6na	m	n	Nashville	OT1, T1, TS1
6na	m	it	<i>Nashville</i>	OT1, T1, TS1
6na	m	sl	<i>Nashville</i>	OT1, T1, TS1
6na	m	sc	NASHVILLE	OT1, T1, TS1
6na	b	n	Nashville Bold	OT1, T1, TS1
6na	b	it	<i>Nashville Bold</i>	OT1, T1, TS1
6na	b	sl	<i>Nashville Bold</i>	OT1, T1, TS1
6na	b	sc	NASHVILLE BOLD	OT1, T1, TS1
6na	eb	n	Nashville ExtraBold	OT1, T1, TS1
6na	eb	it	<i>Nashville ExtraBold</i>	OT1, T1, TS1
6na	eb	sl	<i>Nashville ExtraBold</i>	OT1, T1, TS1
6na	eb	sc	NASHVILLE EXTRA BOLD	OT1, T1, TS1
6na	ub	n	Nashville Heavy	OT1, T1, TS1
6na	ub	it	<i>Nashville Heavy</i>	OT1, T1, TS1
6na	ub	sl	<i>Nashville Heavy</i>	OT1, T1, TS1
6na	ub	sc	NASHVILLE HEAVY	OT1, T1, TS1

Usage

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 (ps1 (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: \$TEXMFHOME)
-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
-h	--help	will print this help statement

To install a font family simply call the script:

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

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`.

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.bz2>

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/>