### **NAME**

ttf2pk – convert a TrueType font into TeX's PK format

### **SYNOPSIS**

```
ttf2pk [-q] [-n] font-name resolution
ttf2pk -t [-q] font-name
ttf2pk --version | --help
```

#### DESCRIPTION

This program converts a TrueType font into a PK file; the created font can then be used with TeX or LATeX.

CJKV (Chinese/Japanese/Korean/old Vietnamese) subfonts as created by **ttf2tfm** are also supported.

**ttf2pk** always assumes 10pt as the design size for the written T<sub>F</sub>X font.

#### **PARAMETERS**

- -q This optional switch makes **ttf2pk** quiet. It suppresses any informational output except warning and error messages.
- -n Use only '.pk' as the extension instead of '. < resolution > pk'.
- -t Test for the existence of *font-name*. Returns 0 on success and prints out the corresponding line of a map file (default: ttfonts.map), provided the -q switch isn't set.

font-name

The T<sub>E</sub>X name of the font. **ttf2pk** looks this name up in a map file (see below) for further information how to process the font.

resolution

The resolution, given in dots per inch. Currently the horizontal resolution is equal to the vertical resolution. The design size is always assumed to be 10pt.

### --version

Shows the current version of **ttf2pk** and the used file search library (e.g. **kpathsea**).

**--help** Shows usage information.

Environment variables for file searching are described in the manual page of **ttf2tfm**.

### THE CONFIGURATION FILE

**ttf2pk** uses a small configuration file called ttf2pk.cfg; in each line it contains a keyword with its value, separated by whitespace. Comment lines can start with any of the following characters: '\*', '#', ';', and '%'. Leading whitespace is ignored.

Currently, only one keyword, 'map', is recognized in this file; it takes a map file name as a parameter. If no extension is given to the map file name, .map is appended. No whitespace is allowed in the map file name. The 'map' keyword can be given more than once to specify multiple map files; if the map file name is prepended by a plus sign, it is added to the list of map files to be used. Example:

```
map foo
map +bar
```

This makes ttf2pk to first read foo.map, then bar.map.

If the configuration file is not found, **ttf2pk** tries to use ttfonts.map instead.

## **MAP FILES**

Parameters specified to **ttf2tfm** are preserved for **ttf2pk** in map files—**ttf2tfm** writes out to standard output, as the last line, a proper entry for a map file.

As an example, a call to

```
ttf2tfm arial -p T1.enc -s 0.25 -P 1 -E 0 arials
```

will produce the following line:

```
arials arial Slant=0.25 Pid=1 Eid=0 Encoding=T1.enc
```

See ttf2tfm(1) and afm2tfm(1) of the dvips package for a detailed description of encoding files.

Here a table listing the various **ttf2tfm** parameters and the corresponding entries in a map file:

-S	Slant
-е	Extend
-p	Encoding
-f	Fontindex
-P	Pid
-E	Eid
-n	PS=Yes
-N	PS=Only
-R	Replacement
-X	Rotate=Yes
-y	Y-Offset

Single replacement glyph names given to **ttf2tfm** with '-**r** old-glyphname new-glyphname' are directly specified with 'old-glyphname=new-glyphname'. They will be ignored if in subfont mode or if no encoding file is given.

One additional parameter in a map file is unique to **ttf2pk**: 'Hinting', which can take the values 'On' or 'Off'. Some fonts (e.g. the CJK part of cyberbit.ttf) are rendered incorrectly if hinting is activated. Default is 'On' (you can also use 'Yes', 'No', '1', and '0').

For a description of subfonts (i.e., entries of the form '<namestem>@<sfd-filename>@') please refer to ttf2tfm(1).

The format of a map file is simple. Each line defines a font; first comes the T<sub>E</sub>X font name, then its TrueType font file name, followed by the parameters in any order. Case is significant (even for parameter names); the parameters are separated from its values by an equal sign, with whitespace possibly surrounding it. **ttf2pk** reads in all map files line by line in the order given in the configuration file, continuing until the T<sub>E</sub>X font specified on the command line is found, otherwise the programs exits with error code 2. Thus you can use any character invalid in a T<sub>E</sub>X font name to start a comment line.

You can use '\' as the final character of a line to indicate that the input is continued on the next line. The backslash and the following newline character will be removed.

ttf2pk will abort if it can't find or read the TeX font metrics file of the given TeX font name.

### **RETURN VALUE**

If the call was successful, 0 will be returned. In case of error, the return value is 1. Finally, if the font can't be found in the map files, 2 is returned. This simplifies the inclusion of **ttf2pk** into scripts like **mktexpk** for automatic font generation.

# **SEE ALSO**

ttf2tfm(1), afm2tfm(1)

# **AVAILABILITY**

**ttf2pk** is part of the FreeType 1 package, a high quality TrueType rendering library.

## **AUTHORS**

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