

**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 T<sub>E</sub>X or L<sup>A</sup>T<sub>E</sub>X.

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>E</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
-e	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  $\TeX$  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  $\TeX$  font specified on the command line is found, otherwise the program exits with error code 2. Thus you can use any character invalid in a  $\TeX$  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.

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