Name

tfmtodit – adapt TeX Font Metrics files for use with *groff* and *grodvi*

Synopsis

tfmtodit [**−s**] [**−g** *gf-file*] [**−k** *skew-char*] *tfm-file map-file font-description*

tfmtodit −−help

tfmtodit −v
tfmtodit −−version

Description

tfmtodit creates a font description file for use with *groff* (1)'s **dvi** output device. *tfm-file* is the name of the TEX font metric file for the font. *map-file* assigns *groff* ordinary or special character identifiers to glyph indices in the font; it should consist of a sequence of lines of the form

    i c1 … cn

where *i* is a position of the glyph in the font in decimal, and *c1* through *cn* are glyph identifiers in the form used by *groff* font descriptions. If a glyph has no *groff* names but exists in *tfm-file,* it is put in the *groff* font description file as an unnamed glyph. Output is written in *groff_font*(5) format to *font-description,* a file named for the intended *groff* font name.

If the font is "special", meaning that *groff* should search it whenever a glyph is not found in the current font, use the **−s** option and name *font-description* in the **fonts** directive in the output device's *DESC* file.

To do a good job of math typesetting, *groff* requires font metric information not present in *tfm-file.* This is because TEX has separate math italic fonts, whereas *groff* uses normal italic fonts for math. The additional information required by *groff* is given by the two arguments to the **math_fit** macro in the Metafont programs for the Computer Modern fonts. In a text font (a font for which **math_fit** is false), Metafont normally ignores these two arguments. Metafont can be made to put this information into the GF ("generic font") files it produces by loading the following definition after **cmbase** when creating *cm.base*.

```
def ignore_math_fit(expr left_adjustment,right_adjustment) =
special "adjustment";
numspecial left_adjustment*16/designsize;
numspecial right_adjustment*16/designsize;
enddef;
```

For the EC font family, load the following definition after **exbase**; consider patching *exbase.mf* locally.

```
def ignore_math_fit(expr left_adjustment,right_adjustment) =
ori_special "adjustment";
ori_numspecial left_adjustment*16/designsize;
ori_numspecial right_adjustment*16/designsize;
enddef;
```

The only difference from the previous example is the "ori_" prefix to "special" and "numspecial". The GF file created using this modified *cm.base* or *exbase.mf* should be specified with the **−g** option, which should *not* be given for a font for which **math_fit** is true.

Options

−−help displays a usage message, while **−v** and **−−version** show version information; all exit afterward.

−g *gf-file*

Use the *gf-file* produced by Metafont containing "**special**" and "**numspecial**" commands to obtain additional font metric information.

−k *skew-char*

The skew character of this font is at position *skew-char*. *skew-char* should be an integer; it may be given in decimal, with a leading 0 in octal, or with a leading 0x in hexadecimal. Any kerns whose second component is *skew-char* are ignored.

−s Add the **special** directive to the font description file.

Files

/usr/share/groff/1.23.0/font/devdvi/DESC
        describes the **dvi** output device.

*/usr/share/groff/1.23.0/font/devdvi/*F
        describes the font known as *F* on device **dvi**.

/usr/share/groff/1.23.0/font/devdvi/generate/ec.map
/usr/share/groff/1.23.0/font/devdvi/generate/msam.map
/usr/share/groff/1.23.0/font/devdvi/generate/msbm.map
/usr/share/groff/1.23.0/font/devdvi/generate/tc.map
/usr/share/groff/1.23.0/font/devdvi/generate/texb.map
/usr/share/groff/1.23.0/font/devdvi/generate/texex.map
/usr/share/groff/1.23.0/font/devdvi/generate/texi.map
/usr/share/groff/1.23.0/font/devdvi/generate/texitt.map
/usr/share/groff/1.23.0/font/devdvi/generate/texmi.map
/usr/share/groff/1.23.0/font/devdvi/generate/texr.map
/usr/share/groff/1.23.0/font/devdvi/generate/texsy.map
/usr/share/groff/1.23.0/font/devdvi/generate/textex.map
/usr/share/groff/1.23.0/font/devdvi/generate/textt.map
        map glyph indices in TeX fonts to *groff* ordinary and special character identifiers. *ec.map* is used
        for **TREC**, **TIEC**, **TBEC**, **TBIEC**, **HREC**, **HIEC**, **HBEC**, **HBIEC**, **CWEC**, and **CWIEC**;
        msam.map for **SA**; *msbm.map* for **SB**; *tc.map* for **TRTC**, **TITC**, **TBTC**, **TBITC**, **HRTC**, **HITC**,
        HBTC, **HBITC**, **CWTC**, and **CWITC**; *texb.map* for **TB**, **HR**, **HI**, **HB**, and **HBI**; *texex.map* for
        EX; *texi.map* for **TI** and **TBI**; *texitt.map* for **CWI**; *texmi.map* for **MI**; *texr.map* for **TR**; *texsy.map*
        for **S**; *textex.map* for **SC**; and *textt.map* for **CW**.

See also

        groff(1), *grodvi*(1), *groff_font*(5)