#### **NAME**

afmtodit - create font files for use with groff -Tps and -Tpdf

#### **SYNOPSIS**

```
afmtodit [ -ckmnsvx ] [ -a n ] [ -d desc_file ] [ -e enc_file ] [ -f internal_name ] [ -i n ] [ -o out_file ] afm_file map_file font
```

The whitespace between a command line option and its argument is optional.

# **DESCRIPTION**

**afmtodit** creates a font file for use with groff, **grops**, and **gropdf**. **afmtodit** is written in perl; you must have perl version 5.004 or newer installed in order to run **afmtodit**.

*afm\_file* is the AFM (Adobe Font Metric) file for the font.

map\_file is a file that says which groff character names map onto each PostScript character name; this file should contain a sequence of lines of the form

```
ps_char groff_char
```

where *ps\_char* is the PostScript name of the character and *groff\_char* is the groff name of the character (as used in the groff font file). The same *ps\_char* can occur multiple times in the file; each *groff\_char* must occur at most once. Lines starting with # and blank lines are ignored. If the file isn't found in the current directory, it is searched in the 'devps/generate' subdirectory of the default font directory.

If a PostScript character is not mentioned in *map\_file*, and a generic groff glyph name can't be deduced using the Adobe Glyph List (AGL, built into **afmtodit**), then **afmtodit** puts the PostScript character into the groff font file as an unnamed character which can only be accessed by the \N escape sequence in **troff**. In particular, this is true for glyph variants like 'foo.bar'; all glyph names containing one or more periods are mapped to unnamed entities. If option **-e** is not specified, the encoding defined in the AFM file (i.e., entries with non-negative character codes) is used. Please refer to section 'Using Symbols' in the groff info file which describes how groff glyph names are constructed.

Characters not encoded in the AFM file (i.e., entries which have -1 as the character code) are still available in groff; they get glyph index values greater than 255 (or greater than the biggest character code used in the AFM file in the unlikely case that it is greater than 255) in the groff font file. Glyph indices of unencoded characters don't have a specific order; it is best to access them with glyph names only.

The groff font file will be output to a file called *font*, unless the **-o** option is used.

If there is a downloadable font file for the font, it may be listed in the file /usr/share/groff/1.22.3/font/devps/download; see grops(1).

If the **-i** option is used, **afmtodit** will automatically generate an italic correction, a left italic correction and a subscript correction for each character (the significance of these parameters is explained in groff\_font(5)); these parameters may be specified for individual characters by adding to the *afm\_file* lines of the form:

italicCorrection ps\_char n leftItalicCorrection ps\_char n subscriptCorrection ps\_char n

where  $ps\_char$  is the PostScript name of the character, and n is the desired value of the corresponding parameter in thousandths of an em. These parameters are normally needed only for italic (or oblique) fonts.

## **OPTIONS**

- -an Use *n* as the slant parameter in the font file; this is used by groff in the positioning of accents. By default **afmtodit** uses the negative of the ItalicAngle specified in the afm file; with true italic fonts it is sometimes desirable to use a slant that is less than this. If you find that characters from an italic font have accents placed too far to the right over them, then use the -a option to give the font a smaller slant.
- -c Include comments in the font file in order to identify the PS font.

## -ddesc\_file

The device description file is *desc\_file* rather than the default **DESC**. If not found in the current directory, the 'devps subdirectory of the default font directory is searched (this is true for both the default device description file and a file given with option **-d**).

#### -eenc\_file

The PostScript font should be reencoded to use the encoding described in enc\_file. The format of *enc\_file* is described in grops(1). If not found in the current directory, the 'devps' subdirectory of the default font directory is searched.

**-f**name The internal name of the groff font is set to name.

**-i***n* Generate an italic correction for each character so that the character's width plus the character's italic correction is equal to *n* thousandths of an em plus the amount by which the right edge of the character's bounding box is to the right of the character's origin. If this would result in a negative italic correction, use a zero italic correction instead.

Also generate a subscript correction equal to the product of the tangent of the slant of the font and four fifths of the x-height of the font. If this would result in a subscript correction greater than the italic correction, use a subscript correction equal to the italic correction instead.

Also generate a left italic correction for each character equal to n thousandths of an em plus the amount by which the left edge of the character's bounding box is to the left of the character's origin. The left italic correction may be negative unless option -**m** is given.

This option is normally needed only with italic (or oblique) fonts. The font files distributed with groff were created using an option of **-i50** for italic fonts.

### -oout\_file

The output file is *out\_file* instead of *font*.

- -k Omit any kerning data from the groff font. This should be used only for mono-spaced fonts.
- -m Prevent negative left italic correction values. Roman font files distributed with groff were created with -i0 -m to improve spacing with eqn(1).
- -n Don't output a **ligatures** command for this font. Use this with constant-width fonts.
- -s The font is special. The effect of this option is to add the **special** command to the font file.
- -v Print version.
- -x Don't use the built-in Adobe Glyph List.

#### **FILES**

/usr/share/groff/1.22.3/font/devps/DESC Device description file.

/usr/share/groff/1.22.3/font/devps/F Font description file for font F.

/usr/share/groff/1.22.3/font/devps/download List of downloadable fonts.

/usr/share/groff/1.22.3/font/devps/text.enc Encoding used for text fonts.

/usr/share/groff/1.22.3/font/devps/generate/textmap

Standard mapping.

#### **SEE ALSO**

groff(1), grops(1), groff\_font(5), perl(1)

The groff info file, section 'Using Symbols'.

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