

NAME

pdfetex, pdfenitex, pdfevirtex – PDF output from e-TeX

SYNOPSIS

pdfetex [*options*] [**& format**] [*file* | \ *commands*]

DESCRIPTION

Run the pdf_eTeX typesetter on *file*, usually creating *file.pdf*. If the file argument has no extension, ".tex" will be appended to it. Instead of a filename, a set of pdf_eTeX commands can be given, the first of which must start with a backslash. With a **& format** argument pdf_eTeX uses a different set of precompiled commands, contained in *format.fmt*; it is usually better to use the **-fmt format** option instead.

pdf_eTeX is a version of e-TeX that can create *PDF* files as well as *DVI* files.

In *DVI* mode, pdf_eTeX can be used as a complete replacement of the e-TeX engine.

The typical use of pdf_eTeX is with a pregenerated formats for which PDF output has been enabled. The **pdfetex** command uses the equivalent of the plain e-TeX format, and the **pdfelatex** command uses the equivalent of the e-_LTeX format. To generate formats, use the **-ini** switch.

The **pdfenitex** and **pdfevirtex** commands are pdf_eTeX's analogues to the **enitex** and **evirtex** commands. In this installation, they are symbolic links to the **pdfetex** executable. These symbolic links may not exist at all.

In *PDF* mode, pdf_eTeX can natively handle the *PDF*, *JPG*, *JBIG2*, and *PNG* graphics formats. pdf_eTeX cannot include PostScript or Encapsulated PostScript (EPS) graphics files; first convert them to PDF using **epstopdf**(1). pdf_eTeX's handling of its command-line arguments is similar to that of the other TeX programs in the *web2c* implementation.

OPTIONS

This version of pdf_eTeX understands the following command line options.

-draftmode

Sets \pdfdraftmode so pdf_eTeX doesn't write a PDF and doesn't read any included images, thus speeding up execution.

-enc Enable the enc_eTeX extensions. This option is only effective in combination with

-etex Enable the e-TeX extensions. This option is only effective in combination with **-ini**. See **etex**(1).

-ini. For documentation of the enc_eTeX extensions see <http://www.olsak.net/encTex.html>.
-file-line-error Print error messages in the form *file:line:error* which is similar to the way many compilers format them.

-no-file-line-error

Disable printing error messages in the *file:line:error* style.

-file-line-error-style

This is the old name of the **-file-line-error** option.

-fmt format

Use *format* as the name of the format to be used, instead of the name by which pdf_eTeX was called or a %& line.

-halt-on-error

Exit with an error code when an error is encountered during processing.

-help Print help message and exit.**-ini** Start in *INI* mode, which is used to dump formats. The *INI* mode can be used for type-setting, but no format is preloaded, and basic initializations like setting catcodes may be required.**-interaction mode**

Sets the interaction mode. The mode can be either *batchmode*, *nonstopmode*, *scrollmode*, and *errorstopmode*. The meaning of these modes is the same as that of the corresponding `\commands`.

-ipc Send DVI or PDF output to a socket as well as the usual output file. Whether this option is available is the choice of the installer.**-ipc-start**

As **-ipc**, and starts the server at the other end as well. Whether this option is available is the choice of the installer.

-jobname name

Use *name* for the job name, instead of deriving it from the name of the input file.

-kpathsea-debug bitmask

Sets path searching debugging flags according to the bitmask. See the *Kpathsea* manual for details.

-mktex fnt

Enable `mktex fnt`, where *fnt* must be either *tex* or *tfm*.

-mltex Enable ML \TeX extensions. Only effective in combination with **-ini**.**-no-mktex fnt**

Disable `mktex fnt`, where *fnt* must be either *tex* or *tfm*.

-output-comment string

In *DVI* mode, use *string* for the *DVI* file comment instead of the date. This option is ignored in *PDF* mode.

-output-directory directory

directory instead of the current directory. Look up input files in *directory* first, then along the normal search path.

-output-format format

Set the output format mode, where *format* must be either *pdf* or *dvi*. This also influences the set of graphics formats understood by pdf \TeX .

-parse-first-line

If the first line of the main input file begins with `%&` parse it to look for a dump name or a **-translate-file** option.

-no-parse-first-line

Disable parsing of the first line of the main input file.

-progname name

Pretend to be program *name*. This affects both the format used and the search paths.

-recorder

Enable the filename recorder. This leaves a trace of the files opened for input and output in a file with extension *.fls*.

-shell-escape

Enable the `\write18{command}` construct. The *command* can be any shell command. This construct is normally disallowed for security reasons.

-no-shell-escape

Disable the `\write18{command}` construct, even if it is enabled in the *texmf.cnf* file.

-src-specials

In *DVI* mode, insert source specials into the *DVI* file. This option is ignored in *PDF* mode.

-src-specials where

In *DVI* mode, insert source specials in certain places of the *DVI* file. *where* is a comma-separated value list: *cr*, *display*, *hbox*, *math*, *par*, *parent*, or *vbox*. This option is ignored in *PDF* mode.

-translate-file tcxname

Use the *tcxname* translation table to set the mapping of input characters and re-mapping of output characters.

-default-translate-file tcxname

Like **-translate-file** except that a `%&` line can overrule this setting.

-version

Print version information and exit.

ENVIRONMENT

See the Kpathsearch library documentation (the ‘Path specifications’ node) for precise details of how the environment variables are used. The **kpsewhich** utility can be used to query the values of the variables.

One caveat: In most pdf_εTeX formats, you cannot use `~` in a filename you give directly to pdf_εTeX, because `~` is an active character, and hence is expanded, not taken as part of the filename. Other programs, such as METAFONT, do not have this problem.

TEXMFOUTPUT

Normally, pdf_εTeX puts its output files in the current directory. If any output file cannot be opened there, it tries to open it in the directory specified in the environment variable **TEXMFOUTPUT**. There is no default value for that variable. For example, if you say *pdfetex paper* and the current directory is not writable, if **TEXMFOUTPUT** has the value */tmp*, pdf_εTeX attempts to create */tmp/paper.log* (and */tmp/paper.pdf*, if any output is produced.)

TEXINPUTS

Search path for `\input` and `\openin` files. This should probably start with `“.”`, so that user files are found before system files. An empty path component will be replaced with the paths defined in the *texmf.cnf* file. For example, set **TEXINPUTS** to `“./home/usr/tex:”` to prepend the current directory and `“/home/user/tex”` to the standard search path.

TEXFORMATS

Search path for format files.

TEXPOOL

search path for **pdfetex** internal strings.

TEXEDIT

Command template for switching to editor. The default, usually **vi**, is set when pdf_ET_EX is compiled.

TFMFORMATS

Search path for font metric (*.tfm*) files.

FILES

The location of the files mentioned below varies from system to system. Use the **kpsewhich** utility to find their locations.

pdfetex.pool

Text file containing pdf_ET_EX's internal strings.

pdf_Etex.map

Filename mapping definitions.

**.tfm* Metric files for pdf_ET_EX's fonts.

**.fmt* Predigested pdf_ET_EX format (*.fmt*) files.

NOTES

Starting with version 1.40, pdf_ET_EX incorporates the e-_ET_EX extensions, and pdf_ET_EX is just a copy of pdf_ET_EX. See **pdf_Etex**(1). This manual page is not meant to be exhaustive. The complete documentation for this version of pdf_ET_EX can be found in the *pdf_ET_EX manual* and the info manual *Web2C: A TeX implementation*.

BUGS

This version of pdf_ET_EX implements a number of optional extensions. In fact, many of these extensions conflict to a greater or lesser extent with the definition of pdf_ET_EX. When such extensions are enabled, the banner printed when pdf_ET_EX starts is changed to print **pdf_ETeXk** instead of **pdf_ETeX**.

This version of pdf_ET_EX fails to trap arithmetic overflow when dimensions are added or subtracted. Cases where this occurs are rare, but when it does the generated *DVI* file will be invalid. Whether a generated *PDF* file would be usable is unknown.

AVAILABILITY

pdf_ET_EX is available for a large variety of machine architectures and operation systems. pdf_ET_EX is part of all major _ET_EX distributions.

Information on how to get pdf_ET_EX and related information is available at the **<http://www.pdf-tex.org>** pdf_ET_EX website.

The following pdf_ET_EX related mailing list is available: **pdf_Etex@tug.org**. This is a mailman list; to subscribe send a message containing *subscribe* to **pdf_Etex-request@tug.org**. More about the list can be found at the **<http://tug.org/mailman/listinfo/pdf_Etex>** mailing list website.

SEE ALSO

et_Etex(1), **mf**(1), **pdf_Etex**(1), **tex**(1).

AUTHORS

The primary authors of pdf \TeX are Han The Thanh, Petr Sojka, Jiri Zlatuska, and Peter Breitenlohner (e \TeX).

\TeX was designed by Donald E. Knuth, who implemented it using his system for Pascal programs. It was ported to Unix at Stanford by Howard Trickey, and at Cornell by Pavel Curtis. The version now offered with the Unix \TeX distribution is that generated by the to C system (**web2c**), originally written by Tomas Rokicki and Tim Morgan.

The enc \TeX extensions were written by Petr Olsak.