NAME

dvipdfmx, xdvipdfmx, dvipdfm − produce PDF files directly from DVI files

SYNOPSIS

dvipdfmx or **dvipdfm** [*options*] *file*[**.dvi**]

DESCRIPTION

The program **dvipdfmx** generates a PDF file from a DVI file. DVI files are the output produced by TeX. **groff** can also generate DVI files using **grodvi**(-Tdvi).

In TeX Live, **dvipdfm** is another incarnation of **dvipdfmx** rather than a separate program. Compatibility is attempted as best as possible.

xdvipdfmx is another incarnation. It is used as the back end for **xetex**(1) and is not intended to be invoked directly.

dvipdfmx recognizes several commonly used **\special** commands, which are extensions to the DVI format. Specifically, it understands color specials, papersize specials, tpic specials (which allow it to be used with **pic**), hypertex specials, and some PostScript specials. These extensions allow documents to contain color, figures, and hyperlinks. The program tries to mimic the behavior of **dvips** where possible, so that many macro packages produced for use with **dvips** will also work with **dvipdfmx**. In addition, **dvipdfmx** understands its own specific **\special** commands to allow access to PDF features such as annotations and bookmarks.

As of December 2018, one such special specific to **dvipdfmx** is *pdf:trailerid*, which specifies the /ID in the PDF trailer. It is used like this (from the TeX level):
\special{pdf:trailerid [(0123456789abcdef) (01234567890abcdef)]}
That is, the special takes an array (the square brackets) of two 16-byte PDF strings (the parentheses). This is the same syntax as LuaTeX's *pdfvariable trailerid*, while different from pdfTeX's *pdftrailerid*. It must appear on the first output page, otherwise it is ignored.

Unrecognized specials will generate warning messages. Packages that may need a **dvipdfm** or **dvipdfmx** driver option include *geometry*, *hyperref*, *bookmark*, *graphicx*, and *xcolor*.

For issues related to bounding boxes (and hence image sizes), see **extractbb**(1).

OPTIONS

Unlike with many other programs, argument values must be separated from option names by a space, not an = sign; option names cannot be abbreviated; and − and −− cannot be used interchangeably.

−c Ignore (or accept) color **\specials**. By default, color **\special**s are interpreted normally (changeable in the configuration file). The **−c** option may be used to produce a black and white document from a document containing color TeX **\special** commands.

−−dvipdfm
Enable **dvipdfm** emulation mode. This is the default if the executable name is 'dvipdfm'.

−d number
Specify the number of decimal digits in the PDF output; must be between 0 and 5, default is 2.

−e Ignored, for (semi-)compatibility with **dvipdfm**.

−f map_file
Read the font map file given by *map_file*. The default map file in TeX Live is *pdftex.map*, as defined in the configuration file.

−−help
Show a help message and exit successfully.

−i cfgfile
Read *cfgfile* as another include file, after reading the default *dvipdfmx.cfg*.

−−kpathsea-debug number
Have Kpathsea output debugging information; '-1' for everything (voluminous).

−l Select landscape mode. In other words, exchange the *x* and *y* dimensions of the paper.

−m mag
Magnify the input document by *mag*.

−o filename
Set the PDF output file name; use '-' for stdout. By default, the name of the output file is derived from the input, that is, *file*.pdf.

−p paper
Select the papersize by name (e.g., **letter**, **legal**, **ledger**, **tabloid**, **a3**, **a4**, or **a5**)

−−pdfm-str-utf8
Assume PDFMark strings in **\special** commands are encoded in UTF-8.

−q Quiet mode.

−r size
Set resolution of bitmapped fonts to **size** dots per inch. Bitmapped fonts are generated by the Kpathsea library, which uses Metafont. Bitmapped fonts are included as Type 3 fonts in the PDF output file. Default is 600.

−s page_specifications
Select the pages of the DVI file to be processed; default is '-', meaning all pages. The *page_specifications* consists of a comma separated list of *page_ranges*:
page_specifications := *page_specification*[,*page_specifications*]
where
page_specification := *single_page*|*page_range*
page_range := [*first_page*]-[*last_page*]
An empty *first_page* is treated as the first page of the DVI file, and an empty *last_page* is treated as the last page of the DVI file.

Examples:

−s 1,3,5
includes pages 1, 3, and 5;

−s − includes all pages;

−s −,−
includes two copies of all pages in the DVI file; and

−s 1−10
includes the first ten pages of the DVI file.

−t Search for thumbnail images of each page in the directory named by the **TMPDIR** environment variable. The thumbnail images must be named in a specific format: the same base name as the DVI file and the page number as the extension to the file name. **dvipdfmx** does not generate such thumbnails itself, but it is distributed with a wrapper program named **dvipdft** that does so.

−−version
Show a help message and exit successfully.

−v Increase verbosity. Results of the **−v** option are cumulative (e.g., **−vv** increases the verbosity by two increments). Maximum verbosity is four.

−x x_offset
Set the left margin to *x_offset*. The default left margin is **1.0in**. The dimension may be specified in any units understood by TeX (e.g., **bp**, **pt**, **in**, **cm**).

−y y_offset
Set the top margin to *y_offset*. The default top margin is **1.0in**. The dimension may be specified in any units understood by TeX (e.g., **bpt**, **pt**, **in**, **cm**).

−z number
Set the compression level to *compression_level*. Compression levels range from 0 (no compression) to 9 (maximum compression) and correspond to the values understood by zlib; default is 9.

−C number
Miscellaneous option flags; see the --help output for details.

−D template
PostScript to PDF conversion command line template; the default is taken from the configuration file, which also gives all the details and mentions several possibilities.

−E Always try to embed fonts, ignoring licensing flags, etc.

−I number
Image cache life in hours; default is -2, meaning to not cache images at all. A value of -1 means to erase all old images and also new images; 0 means to erase all old images but leave new images.

−K number
Encryption key length; default 40.

−M Process MetaPost PostScript output.

−O number
Set maximum depth of open bookmark items; default 0.

−P number
Set permission flags for PDF encryption; default 0x003C.

−S Enable PDF encryption.

−V number
Set PDF minor version; default 5 (from the configuration file).

IMAGE BOUNDING BOXES

When including images with **dvipdfmx**, their bounding boxes should be generated by running **extractbb**. The result will be in an **.xbb** file; the xbb information is the same as for the PDF format.

ENVIRONMENT

dvipdfmx uses the **kpathsea** library for locating the files that it opens. Hence, the environment variables documented in the *Kpathsea library* documentation influence **dvipdfmx**. It also uses the value of the environment variable TMPDIR as the directory to search for thumbnail images of each page.

FILES

The precise location of the following files is determined by the *Kpathsea library* configuration. The location may be determined by using kpsewhich, e.g.,
kpsewhich –progname=dvipdfmx –format='other text files' dvipdfmx.cfg

dvipdfmx.cfg
: Default configuration file

dvipdfmx-unsafe.cfg
: Configuration file that runs Ghostscript without safety checks; use only for trusted source files. It is currently required to use PSTricks with XeTeX: **xetex –output-driver="xdvipdfmx –i dvipdfmx-unsafe.cfg -q -E" ...**

pdftex.map
: The default font map file (this may be changed in the config file).

**.tfm* TeX font metrics

**.vf* TeX virtual font files

**.pfb* PostScript Type 1 font files

texmf.cnf
: The Kpathsea library configuration file. The location of this file may be found by typing **kpsewhich texmf.cnf**

SEE ALSO

dvipdft(1), extractbb(1),
tex(1), luatex(1), xetex(1), dvips(1),
groff(1), grodvi(1), pic(1), the Kpathsea library Info documentation (https://tug.org/kpathsea), and the Dvipdfmx User's Manual (in the distribution, and linked from https://tug.org/dvipdfmx).

AUTHOR

Primarily Mark A. Wicks; dvipdfmx extensions primarily by Jin-Hwan Cho, Shunsaku Hirata, and Matthias Franz. For the version in TeX Live, please send bugs and other reports to the maintainers at dvipdfmx (at) tug.org (https://lists.tug.org/dvipdfmx).

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