T_EX Live 2010 news

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Abstract

Notable changes in the T_FX Live 2010 release.

1 Automatic EPS conversion for pdf(LA)TFX

In TEX Live 2010, the most visible change is that pdf(LA)TEX now automatically converts a requested Encapsulated PostScript (EPS) file to PDF, via the epstopdf package, when and if the LATEX configuration file graphics.cfg is loaded, and PDF is being output. The default options are intended to eliminate any chance of hand-created PDF files being overwritten, but you can also prevent epstopdf from being loaded at all by putting \newcommand \\DoNotLoadEpstopdf}{} (or \def...) before the \documentclass declaration. For details, see the package documentation for epstopdf (http://ctan.org/pkg/epstopdf-pkg).

A related important change is that execution of a very few external commands, via the \write18 feature, is now enabled by default—for example, epstopdf, makeindex, and bibtex. The exact list of commands is defined in the texmf.cnf file. If you want to disallow all external command execution in your installation, you can deselect this option in the TEX Live installer, or override the value in the root texmf.cnf (.../2010/texmf.cnf) after installation. (Do not change .../2010/texmf/web2c/texmf.cnf, since it can be overwritten on updates.)

The above changes were announced for TL 2009, but disabled before the release was made. This year we sincerely hope and believe the bugs have been worked out.

2 PDF 1.5 output by default

The default version for PDF output is now 1.5, enabling more compression. This applies to all the TeX engines when used to produce PDF and to dvipdfmx.

Loading the pdf14 LATEX package changes back to PDF 1.4, or setting \pdfminorversion=4 (in your document or macros).

3 XATEX and margin kerning

XITEX now supports margin kerning along the same lines as pdfTeX. Font expansion is not yet supported; perhaps next year.

4 New programs

New programs included:

- the pTEX engine for typesetting Japanese;
- BibTeXU, a Unicode-enabled BibTeX;
- chktex, for syntax checking (A)TEX documents (http://baruch.ev-en.org/proj/chktex);
- dvisvgm, a DVI-to-SVG translator (http://dvisvgm.sourceforge.net).

5 No longer live

The TeX Live incarnation on the TeX Collection DVD (http://tug.org/texcollections) can no longer be run live. A single DVD no longer has enough room for all the software we want to include. One benefit is that installation from a physical DVD should be much faster.

6 Backups of updated packages

By default, tlmgr now saves one backup of each package updated, so broken packages updates can be easily reverted with tlmgr restore. If you don't have enough disk space for backups, and want to do post-installation updates, run:

tlmgr option autobackup 0

7 BIBTeX and Makeindex output safer

By default, BIBTEX and Makeindex will now, like TEX itself, refuse to write their output files to an arbitrary directory. This is so they could be enabled for use by the restricted \write18 mentioned above. To change this, the TEXMFOUTPUT environment variable can be set, or the openout_any setting changed.

8 In summary

Thanks to all the many people involved in this and past releases. See the documentation for acknowledgements, as well as installation and usage information—http://tug.org/texlive/doc.html.

All releases of TEX Live, along with ancillary material such as CD labels, are available at ftp://tug.org/historic/systems/texlive.

TEX Live and MiKTEX account for a substantial portion of the total traffic to CTAN. So more mirrors are always welcome; if you can help, please see http://ctan.org/mirroring.html, and thanks.