

**T<sub>E</sub>X Live 2009 news**

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**Abstract**

Notable changes in the T<sub>E</sub>X Live 2009 release.

**Introduction**

T<sub>E</sub>X Live is a cross-platform T<sub>E</sub>X distribution supported by the T<sub>E</sub>X user groups worldwide. Our native distribution provides its own installer and management tools; it also serves as the basis for the T<sub>E</sub>X packages in most GNU/Linux, BSD-related, and other system distributions. It was first released in 1996 by Sebastian Rahtz, based on Thomas Esser's *teT<sub>E</sub>X*. By the time this note reaches print, we hope the 2009 release will be in final production.

**News for 2009**

In T<sub>E</sub>X Live 2009, the most visible change is that pdf(L<sup>A</sup>)T<sub>E</sub>X now *automatically* converts a requested Encapsulated PostScript (EPS) file to PDF, via the `epstopdf` package, when and if the L<sup>A</sup>T<sub>E</sub>X 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 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. Installations which must disallow all such external commands can deselect this option in the T<sub>E</sub>X Live installer, or override the value in `texmf.cnf` after installation.

The default output format for Lua(L<sup>A</sup>)T<sub>E</sub>X is now PDF, to take advantage of LuaT<sub>E</sub>X's OpenType support, et al. New executables named `dviluatex` and `dvilualatex` run LuaT<sub>E</sub>X with DVI output. The LuaT<sub>E</sub>X home page is <http://luatex.org>.

The original Omega engine and Lambda format have been excised, after discussions with the Omega authors. The updated Aleph and Lamed remain, as do the Omega utilities.

A new release of the `amsfonts` package is included, including updates to the Computer Modern fonts in Type 1: a few shape changes made over the years by Knuth in the Metafont sources have been integrated, and the hinting has been updated. The

Euler math fonts have been thoroughly reshaped by Hermann Zapf (see <http://tug.org/TUGboat/Articles/tb29-2/tb92hagen-euler.pdf>). In all cases, the metrics are unchanged. The AMS fonts home page: <http://ams.org/tex/amsfonts.html>.

The new GUI front end T<sub>E</sub>Xworks is included for Windows, and is also in MacT<sub>E</sub>X. For other platforms, and more information, see its home page, <http://tug.org/texworks>. T<sub>E</sub>Xworks is a cross-platform front end aiming at initial ease-of-use, inspired by the TeXShop editor for Mac OS X.

The graphics program Asymptote is included for most platforms. This implements a text-based graphics description language somewhat akin to MetaPost, but with advanced 3D support and other features. The Asymptote home page, with documentation and more, is <http://asymptote.sourceforge.net>.

The separate `dvipdfm` program (no longer maintained) has been replaced by `dvipdfmx`, which operates in a special compatibility mode under that name. `dvipdfmx` includes CJK support and has accumulated many other fixes over the years since the last `dvipdfm` release. The DVIPDFMx home page is <http://project.ktug.or.kr/dvipdfmx>.

Executables for the `cygwin` and `i386-netbsd` platforms are now included, while the other BSD distributions have been dropped; we were advised that OpenBSD and FreeBSD users get T<sub>E</sub>X through their package systems, plus there were difficulties in making binaries that had a chance of working on more than one version.

Lastly, a miscellany of smaller changes: we now use `xz` compression, the stable replacement for `lzma` format (<http://tukaani.org/xz/>); a literal `$` is allowed in filenames (when it does not introduce a known variable name); the `Kpathsea` library is now multi-threaded (made use of in MetaPost); the entire T<sub>E</sub>X Live build is now based on Automake.

**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 T<sub>E</sub>X Live, along with ancillary material such as CD labels, are available at <ftp://tug.org/historic/systems/texlive>.

T<sub>E</sub>X Live and MiK<sub>T</sub>E<sub>X</sub> 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.

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<http://tug.org/texlive/>