

L^AT_EX3 News

Issue 5, January 2011

Happy new year

Seasons greetings for 2011! As the previous news issue was released late, this season's issue will be shorter than usual.

The LPPL is now OSI-approved

We are happy to report that earlier this year the L^AT_EX Project Public License (LPPL) has been approved by the OSI as an open source licence.¹ Frank Mittelbach has further details on this news in a retrospective of the LPPL [in this *TUGboat*].

Reflections on 2010

We are pleased to see the continued development and discussion in the T_EX world. The L^AT_EX ecosystem continues to see new developments and a selection of notable news from the second half of last year include:

- June The TUG 2010 conference was held very successfully in San Francisco; videos, slides, and papers from L^AT_EX3 Project members are available from our website.²
- Aug. The T_EX Stack Exchange³ question & answer website was created and has since grown quickly. At time of writing, some 2800 people have asked 2600 questions with 5600 answers total, and 2200 users are currently visiting daily.
- Sept. T_EX Live 2010 was released: each year the shipping date is earlier; the production process is becoming more streamlined and we congratulate all involved for their hard work. One of the most notable new components of T_EX Live 2010 includes the 'restricted shell escape' feature to allow, among other things, automatic EPS figure conversion for pdfL^AT_EX documents.
- Oct. TLContrib⁴ was opened by Taco Hoekwater as a way to update a T_EX Live installation with material that is not distributable through `tlmgr` itself. Such material includes executables (e.g., new versions of LuaT_EX), non-free code, or test versions of packages.

¹<http://www.opensource.org/licenses/lppl>

²<http://www.latex-project.org/papers/>

³<http://tex.stackexchange.com>

⁴<http://tlcontrib.metatex.org/>

Nov. Philipp Lehman released the first stable version of `biblatex`. One of the most ambitious L^AT_EX packages in recent memory, `biblatex` is a highly flexible package for managing citation cross-referencing and bibliography typesetting. In 'beta' status for some years now, reaching this point is a great milestone.

Dec. LuaT_EX 0.65. We are happy to see LuaT_EX development steadily continuing. L^AT_EX users may use LuaT_EX with the `lualatex` program. Like `xelatex`, this allows L^AT_EX documents to use multilingual OpenType fonts and Unicode text input.

Current progress

The `expl3` programming modules continue to see revision and expansion; we have added a LuaT_EX module, but `expl3` continues to support all three of pdfL^AT_EX, X_lL^AT_EX, and LuaL^AT_EX equally.

The `l3fp` module for performing floating-point arithmetic has been extended and improved. Floating point maths is important for some of the calculations required for complex box typesetting performed in the new 'coffins' code. The `l3coffin` module has been added based on the original `xcoffins` package introduced at TUG 2010 as reported in the last news issue; this code is now available from CTAN for testing and feedback.

We have consolidated the `l3int` and `l3intexpr` modules (which were separate for historical purposes); all integer/count-related functions are now contained within the 'int' code and have prefix `\int_`. Backwards compatibility is provided for, but eventually we will drop support for the older `\intexpr_` function names.

Plans for 2011

In the following year, we plan to use the current L^AT_EX3 infrastructure to continue work in building high-level code for designing L^AT_EX documents using the `xtemplate` package. Our first priority is to look at section headings and document divisions, as we see this area as one of the most difficult, design-wise, of the areas to address. From there we will broaden our scope to more document elements.

We will also do some low-level work on the 'galley', which is the code that L^AT_EX3 uses to build material for constructing pages, and we will continue to extend `expl3` into a more complete system from which we can, one day, create a pure L^AT_EX3 format.