LaTeX3 News

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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 LaTeX Project Public License (LPPL) has been approved by the OSI as an open source licence.[1] Frank Mittelbach will be publishing further details on this news in a retrospective on the LPPL in an upcoming TUGboat article.

Reflections on 2010

We are pleased to see the continued development and discussion in the TeX world. The LaTeX 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 LaTeX3 Project members are available from our website.[2]

Aug. The TeX Stack Exchange[3] 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. TeX 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 TeX Live 2010 includes the 'restricted shell escape' feature to allow, among other things, automatic EPS figure conversion for pdfLaTeX documents.

Oct. TLContrib[4] was opened by Taco Hoekwater as a way to update a TeX Live installation with material that is not distributable through `tlmgr` itself. Such material includes executables (e.g., new versions of LuaTeX), non-free code, or test versions of packages.

Nov. Philipp Lehman released the first stable version of biblatex. One of the most ambitious LaTeX 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. LuaTeX 0.65. We are happy to see LuaTeX development steadily continuing. LaTeX users may use LuaTeX with the `lualatex` program. Like `xelatex`, this allows LaTeX 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 LuaTeX module, but expl3 continues to support all three of pdfLaTeX, XeLaTeX, and LuaLaTeX 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 LaTeX3 infrastructure to continue work in building high-level code for designing LaTeX 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 LaTeX3 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 LaTeX3 format.

[1] `http://www.opensource.org/licenses/lppl`
[2] `http://www.latex-project.org/papers/`
[3] `http://tex.stackexchange.com`
[4] `http://tlcontrib.metatex.org/`

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