



The Treasure Chest

This is a list of selected new packages posted to CTAN (<http://ctan.org>) from November 2012 through March 2013, with descriptions based on the announcements and edited for brevity.

Entries are listed alphabetically within CTAN directories. A few entries which the editors subjectively believed to be of especially wide interest or otherwise notable are starred; of course, this is not intended to slight the other contributions.

We hope this column and its companions will help to make CTAN a more accessible resource to the T_EX community. Comments are welcome, as always.

- ◇ Karl Berry
tugboat (at) tug dot org
<http://tug.org/ctan.html>

fonts

- aecc** in **fonts**
Almost European Concrete Roman fonts.
- cabin** in **fonts**
A humanist sans with true italics and small capitals.
- garamondx** in **fonts**
Adds small caps, f-ligatures and old style figures to URW GaramondNo8.
- ***librebaskerville** in **fonts**
L^AT_EX support for the Libre Baskerville font family. Article in this *TUGboat*.
- persian-hm-ftx** in **fonts/persian**
228 Persian TrueType fonts derived from FarsiT_EX METAFONTS.
- quattrocentro** in **fonts**
A classical typeface with both serif and sans designs.
- sourcecodepro** in **fonts**
Adobe's open-source monospaced font
Source Code Pro in Type 1 and OpenType.
- sourcesanspro** in **fonts**
Adobe's open-source font family Source Sans Pro in Type 1 and OpenType.
- schulschriften** in **fonts**
Handwriting fonts used in German schools, implemented in METAFONT.

graphics

- flowchart** in **graphics/pgf/contrib**
Traditional programming flowcharts.
- forest** in **graphics/pgf/contrib**
Linguistic and other trees, with many novel features.

fonts/aecc

- logicpuzzle** in **graphics/pgf/contrib**
Battleship and Bokkusu games, with more to come.
- makeshape** in **graphics/pgf/contrib**
Simplifies creation of custom PGF shapes.
- pdftricks2** in **graphics**
Automation of PSTricks for pdfL^AT_EX.
- pst-fit** in **graphics/pstricks/contrib**
PSTricks curve fitting.
- pst-vectorian** in **graphics/pstricks/contrib**
Drawing ornaments.
- sa-tikz** in **graphics/pgf/contrib**
TikZ library for drawing switching architectures.
- tikzinclude** in **graphics/pgf/contrib**
Import one image from a file holding multiple images.
- tikzscale** in **graphics/pgf/contrib**
Scaling of TikZ and pgfplots graphics without changing text size.
- tikzsymbols** in **graphics/pgf/contrib**
Emoticons, cooking symbols, and trees.

info

- luainfo** in **info/examples**
Examples from the German book *Einführung in LuaT_EX und LuaL^AT_EX*.

macros/generic

- commado** in **macros/generic**
Expandable iteration over comma-separated and file name lists.
- schemata** in **macros/generic**
Topical diagrams for, e.g., Scholastic thought.

macros/latex/contrib

- abntex2** in **macros/latex/contrib**
Brazilian academic theses based on ABNT rules.
- apptools** in **macros/latex/contrib**
Customize appendices.
- autopdf** in **macros/latex/contrib**
Facilitates on-the-fly conversion to PDF and other formats supported by pdfL^AT_EX.
- backnaur** in **macros/latex/contrib**
Backus-Naur Form definitions.
- bropd** in **macros/latex/contrib**
Writing differential operators and brackets.
- concepts** in **macros/latex/contrib**
Managing document-specific formal concepts.
- contracard** in **macros/latex/contrib**
Calling cards for contra and square dances.
- copypaste** in **macros/latex/contrib**
Dynamically quoting an external document.
- dvgloss** in **macros/latex/contrib**
Setting interlinear glossed text.

- `etoc` in `macros/latex/contrib`
Easily-customizable tables of contents.
- `listofanswers` in `macros/latex/contrib`
Similar to list of tables, etc. With Spanish support.
- *`minifp` in `macros/latex/contrib`
Arithmetic to 7–8 decimal places, and a stack-based programming environment.
- `mkstmpdad` in `macros/latex/contrib`
Create custom stamps and use them for drag and drop matching.
- `multiexpand` in `macros/latex/contrib`
Macros meant to avoid too many `\expandafte`s.
- `ocg-p` in `macros/latex/contrib`
Use PDF’s Optional Content Groups (layers) with `pdfLaTeX` and `XYLaTeX`.
- `scalereel` in `macros/latex/contrib`
Constrained scaling of objects, relative to a reference or absolutely.
- `tableof` in `macros/latex/contrib`
Tables of tagged contents.
- `threadcol` in `macros/latex/contrib`
Organize document columns into PDF article threads.
- `uestcthesis` in `macros/latex/contrib`
Thesis template for the University of Electronic Science and Technology of China.
- `underoverlap` in `macros/latex/contrib`
Partly-overlapping math decorations.
- *`xpicture` in `macros/latex/contrib`
Extending `pict2e` and `curve2e` with support for arbitrary reference systems, function graphs, and more. Article in this *TUGboat*.

macros/latex/contrib/biblatex-contrib

- `uni-wtal-lin` in `m/1/c/biblatex-contrib`
BIBLaTeX citation style for linguistic studies at the Bergische Universität Wuppertal.

macros/luatex

- `spelling` in `macros/luatex/latex`
Aid spell-checking of LuaTeX documents, with nearly any checker.

macros/xetex

- `ptext` in `macros/xetex/latex`
Similar to `lipsum` for Persian: 100 paragraphs of the Shahnameh.
- `xetex-tibetan` in `macros/xetex/generic`
TECKit mappings for Unicode Tibetan.

support

- `arara` in `support`
TeX build tool based on metadata in the sources.
- `dtxgen` in `support`
Create template for self-extracting `.dtx` file.

Production notes

Karl Berry

It’s been about ten years since the last production notes (written by Mimi Burbank; we miss you, Mimi), so it seemed time for an update.

For years now, *TUGboat* production has been via PDF files. We create separate PDFs for each of the four cover pages (front cover, inside front cover, inside back cover, back cover), and all the interior pages. We upload the PDFs to Cadmus, our production printer, via ftp. (*TUGboat* has used Cadmus (cadmus.com) for some 25 years, and they are still a pleasure to work with.) Cadmus quickly returns proofs (“bluelines”) to us on paper. Although they do have an electronic proof process, paper has been more reliable for us so far.

As always with paper printing, everything costs something, and some things cost more. Naturally, color costs more to print than regular black and white; so we often grayscale images (or have Cadmus grayscale them) when the color is not semantically important.

Another factor, especially for color, is the arrangement of the issue into signatures. Most readers here are likely familiar with this, but just in case: the general idea is that the issue is printed on giant sheets of paper — the size of 32 8.5x11 pages — and then other machines do the necessary cutting, folding and binding. Therefore, it’s ideal to have an issue which is a multiple of 32 pages. 16 is next best, then 8, then 4 (the process requires at least 4 pages in the last signature, and the powers of 2). We expend quite a bit of effort on the final pagination and combination of items to get the best page count possible.

As far as color goes, it’s critical to keep all color within one signature, since the color vs. b&w print costs are incurred on a per-signature basis. So sometimes we end up sacrificing the ideal article ordering to keep color articles together.

In another installment I’ll write some technical details about the production and tools we use. For now, let me switch gears . . .

Introduction to Colophon

The last piece in this issue is the first fiction ever published in *TUGboat*: a (very) short story by Daniel Quinn. Its subject was apropos for us. Quinn is better-known as the author of *Ishmael*, *The Story of B*, *Beyond Civilization*, and other books that share common themes of a search for truth and living in our world.

His books were transformative for me personally in understanding how and why we live as we do, so when I came across this short-short, I was very glad to bring it to *TUGboat* and perhaps a few new readers of Quinn’s work. Thanks to our editor and colleague Barbara Beeton for happily acquiescing in printing it, and of course to Daniel Quinn for graciously allowing us to reprint it.

(Colophon to “Colophon”: Lacking Saracen, I chose `cmfib8` for the main font, the only time it’s seemed suitable for an article body. Thanks to Don Knuth, too, as always.)