



The Treasure Chest

This is a selection of the new packages posted to CTAN (ctan.org) from August–October 2017, with descriptions based on the announcements and edited for extreme brevity.

Entries are listed alphabetically within CTAN directories. More information about any package can be found at ctan.org/pkg/pkgname. A few entries which the editors subjectively believe 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 \TeX community. See also ctan.org/topic. Comments are welcome, as always.

◇ Karl Berry
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fonts

- * **coelacanth** in **fonts**
L^AT_EX support for Coelacanth, inspired by the classic Centaur design.
- dejavu-otf** in **fonts**
Support for TrueType DejaVu font family.
- spark-otf** in **fonts**
Support OpenType sparkline fonts.

graphics

- dynkin-diagrams** in **graphics/pgf/contrib**
Draw mathematical Dynkin diagrams with TikZ.
- endofproofwd** in **graphics**
An additional end-of-proof symbol.
- istgame** in **graphics/pgf/contrib**
Draw game trees with TikZ.
- tikzducks** in **graphics/pgf/contrib**
Rubber ducks, with adornments, in TikZ.

info

- * **amscs-doc** in **info**
Comprehensive user documentation for AMS document classes.
- latex-refsheet** in **info**
Cheat sheet for KOMA-Script thesis.

macros/generic

- fixjfm** in **macros/generic**
Work around bugs in p \TeX 's JFM format.
- ifxptex** in **macros/generic**
Detect p \TeX and its derivatives.

- simplekv** in **macros/generic**
Key/value system for L^AT_EX.
- upzhkinsoku** in **macros/generic**
Supplementary Chinese kinsoku (line breaking rules, etc.) for Unicode.

macros/latex/contrib

- abnt** in **macros/latex/contrib**
Brazil's ABNT rules for academic texts.
- algbobox** in **macros/latex/contrib**
Typeset Algbobox programs.
- beilstein** in **macros/latex/contrib**
L^AT_EX and B^IB_TE_X support for the *Beilstein Journal of Nanotechnology*.
- cesenaexam** in **macros/latex/contrib**
Typeset examinations.
- cheatsheet** in **macros/latex/contrib**
Class to typeset cheat sheets.
- dijkstra** in **macros/latex/contrib**
Dijkstra's algorithm for weighted graphs in L^AT_EX.
- ducksay** in **macros/latex/contrib**
Draw ASCII art of animals saying a message.
- eq-save** in **macros/latex/contrib**
Save and return to *exerquiz* quizzes.
- eqnumwarn** in **macros/latex/contrib**
Warn about displaced equation number in *amsmath* environments.
- fetchcls** in **macros/latex/contrib**
Fetch current class name.
- forms16be** in **macros/latex/contrib**
Initialize form strings using BigEndian UTF-16BE.
- hithesis** in **macros/latex/contrib**
Harbin Institute of Technology thesis template.
- komacv-rg** in **macros/latex/contrib**
Help creating CVs based on the *komacv* class.
- ku-template** in **macros/latex/contrib**
Include Copenhagen University logos.
- limecv** in **macros/latex/contrib**
CV class for X_qL^AT_EX and LuaL^AT_EX.
- mensa-tex** in **macros/latex/contrib**
Typeset simple school cafeteria menus.
- multilang** in **macros/latex/contrib**
Maintaining multiple translations of a document.
- musicography** in **macros/latex/contrib**
Accessing symbols for music writing in pdfL^AT_EX.
- notestex** in **macros/latex/contrib**
Note-taking package for students.
- octave** in **macros/latex/contrib**
Typeset musical pitches with octave designations.
- pm-isomath** in **macros/latex/contrib**
Poor man's ISO math for pdfL^AT_EX.
- termcal-de** in **macros/latex/contrib**
German localization for the *termcal* package.
- theatre** in **macros/latex/contrib**
Sophisticated support for typesetting stage plays.
- witharrows** in **macros/latex/contrib**
Typeset arrows on right side of math alignments.

***xltabular** in macros/latex/contrib

Combine `longtable` and `tabularx`: header/footer definitions, X specifier, possible page breaks.

zhlipsum in macros/latex/contrib

Dummy Chinese text, using UTF-8.

macros/latex/contrib/beamer-contrib

`hackthefootline` in m/l/c/beamer-contrib

Arbitrary footline selection for standard themes.

macros/luatex

`fontloader-luaotfload` in macros/luatex/generic

Offer a few alternative font loaders.

macros/xetex/latex

`na-box` in macros/xetex/latex

Arabic-aware version of `pas-cours`.

`na-position` in macros/xetex/latex

Tables of relative positions of curves and asymptotes or tangents in Arabic documents.

`xexchangebar` in macros/xetex/latex

Version of `changebar` for $X_{\text{L}}\text{A}_{\text{T}}\text{E}_{\text{X}}$.

support

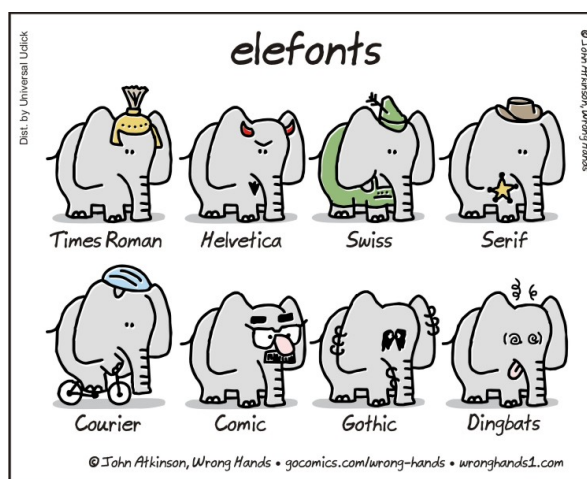
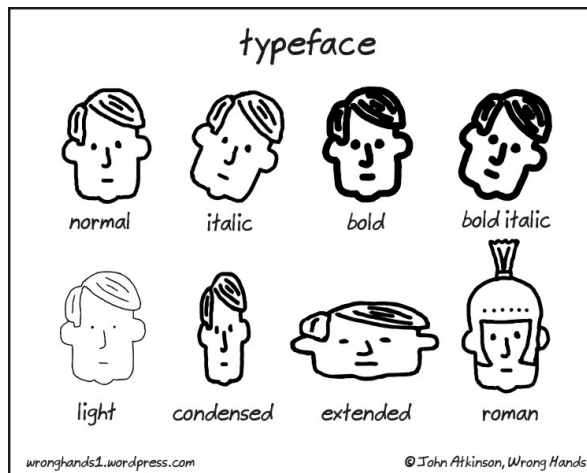
`bib2gls` in support

Java application to extract glossary information from `.bib` files; see article in this issue, pp. 373–399.

web

`web2w` in web

Convert Knuth's `tex.web` to CWEB; see article in this issue, pp. 353–358.



Comics by John Atkinson (<http://wronghands1.com>).

Another seasonal puzzle: XII take II

David Carlisle

```

^^5clet^^5ccatcode~'j0~90 13~'1~'Y2~77 6jdef ZM1~'##113jdef
YZXXM1M2~M2iM1YZRR"ppYZVWV"QuYZWW"aliYZ::"erYZ55M1M2"am2M1Y~'@
11Z++"jdefY+jif@YZ99"j@if"bXg"YY"sXpkYYZ33"luYZ <<M1"jedefjx
"j@if"uR:Y"c5esY"#1YYjxYZ~ ^"iceYZ&&"yeYZ//""SeYZ88"DuyZ;;"s Y
Z--M1M2~M2M1YZ77"e-tneYZ66"inyZzzM1M2"anM2M1YZZQQ"0-tcYZ00"noY
Z44"j@if b&YZ_"j.WYZ22"eYZ00"iYZSS"rY+jj", -St-YZee"!YZ!!"uY
Z=="jparY+jv"s,=Y+j!"-2dXmcYZ' "DY+jw"z2tY"jbf<"!doj! X2d;-a
nt50 1sY9Y+j.M1 "o X2d -2f-tsM1 -ma5otS m0 Xsm0t=YZAAM1"P:dXc
S2m 6 XSpom19YZ??"8oYZ**'2cYZ["E!YZ]"CoYZ$$"B!YZBB"8a;co3-
bm5AjbvYZCC"-ST2;-SFzocg51165BjvYZDD"V5tt-o!S p5ss:-!c15CjvYZE
E"V6q!' 5S!z1!ojvDYZFF"/x z2sS2;paS7jvEYZGG"/pt2m -yccno;nat-
jvYjvFYZHH"Qo -!p2115m;!lg7jvGYZII"0vj,as5t1jwvHYZJJ"*j,-o-x2-
-s1!tjwvIYZKK"Unj! Xbt~n2;6f1jwvJYZLL"~j! -ytmpaXsnt5p;!ls-
jvYjvKY+j.M1"2m d-mo6M1;YPXmSj.W A./c-n!dj.o B.T:Xj.tW C.V5tS_
D.V- t6j.W E./xtj.W F./pt-m0j.o G. -5Qj.-vo H.Onj.W I.*-m0j.o
J.-nUj!j.o K.?j!j.o Le+jk")Y("Xtj@if [-~n $SS ]!-hcj!lzs.Yjk4

```

Seasons greetings to all.

This code should be input to *plain* $\text{T}_{\text{E}}\text{X}$, not $\text{L}^{\text{A}}\text{T}_{\text{E}}\text{X}$. For those without patience to figure out what the output will be, and to save the fingers and sanity of anyone who would like to try it out, the file can be found via <https://ctan.org/pkg/xii>.

Enjoy!

[1] Carlisle, David, "XII". *TUGboat* 19:4 (1993). tug.org/TUGboat/tb19-4/tb61carl.pdf