



## The Treasure Chest

These are the new packages posted to CTAN ([ctan.org](http://ctan.org)) from April–August 2022. Descriptions are 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](http://ctan.org/pkg/pkgname).

A few entries which the editors subjectively believe to be especially notable are starred (\*); of course, this is not intended to slight the other contributions.

We hope this column helps people access the vast amount of material available through CTAN and the distributions. See also [ctan.org/topic](http://ctan.org/topic). Comments are welcome, as always.

◇ Karl Berry  
<https://tug.org/TUGboat/Chest>

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### biblio

\***biber-ms** in **biblio**  
 Multi-script Biber.

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### fonts

**simpleicons** in **fonts**  
 Simple Icons font support.

**srbtikz** in **fonts**  
 Stix2 support for Serbian and Macedonian italics.

**symbats3** in **fonts**  
 Support for the Symbats3 OpenType font.

**yfonts-otf** in **fonts**  
 OpenType versions of Yannis Haralambous's Old German fonts.

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### graphics

**customdice** in **graphics/pgf/contrib**  
 Draw customizable dice.

**fancyqr** in **graphics/pgf/contrib**  
 Create fancy QR codes with TikZ.

**figput** in **fonts**  
 Create interactive or static figures in L<sup>A</sup>T<sub>E</sub>X.

**tikz-ext** in **graphics/pgf/contrib**  
 A collection of libraries for PGF/TikZ.

**tikzfill** in **graphics/pgf/contrib**  
 TikZ libraries for filling with images and patterns.

**tikzpingus** in **graphics/pgf/contrib**  
 Penguins.

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### macros/generic

**expex-acro** in **macros/generic**  
 Wrapper for **expex** with support for glossing abbreviations.

**lt3luabridge** in **macros/generic**  
 Execute Lua code in any T<sub>E</sub>X engine that exposes the shell.

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### macros/latex/contrib

**asternote** in **macros/latex/contrib**  
 Annotation symbols enclosed in square brackets and marked with an asterisk.

\***biblatex-ms** in **macros/latex/contrib**  
 Multi-script BIBL<sup>A</sup>T<sub>E</sub>X; requires **biber-ms**.

**chinesechess** in **macros/latex/contrib**  
 Typeset Chinese chess with l3draw.

**circledtext** in **macros/latex/contrib**  
 Create circled text.

**cprotectinside** in **macros/latex/contrib**  
 Use **cprotect**, arbitrarily nested.

**csassignments** in **macros/latex/contrib**  
 Support for computer science assignments.

**dvisirule** in **macros/latex/contrib**  
 Superimpose the covered hline and vline in a L<sup>A</sup>T<sub>E</sub>X **tabular** or **colortbl** environment.

**familytree** in **macros/latex/contrib**  
 Draw family trees.

**fixdif** in **macros/latex/contrib**  
 Typesetting differential operators.

**flexipage** in **macros/latex/contrib**  
 Flexible page geometry with marginalia.

**hereapplies** in **macros/latex/contrib**  
 Cross-linking applications of concepts.

**hideanswer** in **macros/latex/contrib**  
 Toggle printing of answers.

**hvextern** in **macros/latex/contrib**  
 Writing and reading of external source code, and inserting the output.

**inlinelabel** in **macros/latex/contrib**  
 Assign equation numbers to inline equations.

**jpneduenumerate** in **macros/latex/contrib**  
 Enumerative expressions in Japanese education.

**jpnedumathsymbols** in **macros/latex/contrib**  
 Mathematical equation representation in Japanese education.

**kfupm-math-exam** in **macros/latex/contrib**  
 Produce homework, quiz and exam papers.

**langnames** in **macros/latex/contrib**  
 Name languages and their genetic affiliations consistently.

**macros/latex/contrib/langnames**

`lt3rawobjects` in `macros/latex/contrib`  
 Declare and allocate L<sup>A</sup>T<sub>E</sub>X3 objects like C structures.

`magicwatermark` in `macros/latex/contrib`  
 Watermarks, based on `everypage` and `TikZ`.

`mathsemantics` in `macros/latex/contrib`  
 Semantic math commands in L<sup>A</sup>T<sub>E</sub>X.

`multifootnote` in `macros/latex/contrib`  
 Multiple numbers for the same footnote.

`multiple-choice` in `macros/latex/contrib`  
 Multiple-choice questions.

`ndsu-thesis-2022` in `macros/latex/contrib`  
 North Dakota State University support, update for 2022.

`postnotes` in `macros/latex/contrib`  
 Endnotes for L<sup>A</sup>T<sub>E</sub>X.

`precattl` in `macros/latex/contrib`  
 Write code containing tokens with unusual catcodes.

`prettytok` in `macros/latex/contrib`  
 Pretty-print token list.

`proflabo` in `macros/latex/contrib`  
 Draw laboratory equipment.

`rescansync` in `macros/latex/contrib`  
 Execute saved code to typeset text while preserving SyncT<sub>E</sub>X information.

`saveenv` in `macros/latex/contrib`  
 Save environment content verbatim.

`scripture` in `macros/latex/contrib`  
 Typesetting Bible quotations.

`sidenotesplus` in `macros/latex/contrib`  
 Place material in margins.

`simples-matrices` in `macros/latex/contrib`  
 Define matrices by given list of values.

`thermodynamics` in `macros/latex/contrib`  
 Macros for multicomponent thermodynamics documents.

`tkzexample` in `macros/latex/contrib`  
 Package for documentation of `tkz-*` packages.

`wrapstuff` in `macros/latex/contrib`  
 Wrapping text around stuff, using new L<sup>A</sup>T<sub>E</sub>X hooks.

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#### **m/l/c/beamer-contrib/themes**

`beamerthemeamurmaple` in `m/l/c/b-c/themes`  
 A new modern beamer theme.

`beamertheme-tcolorbox` in `m/l/c/b-c/themes`  
 Inner beamer theme that reproduces standard beamer blocks.

`m/l/c/b-c/themes/beamertheme-tcolorbox`

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#### **macros/latex/required**

`latex-lab` in `macros/latex/required`  
 Development pre-release. See L<sup>A</sup>T<sub>E</sub>X news installment in this issue.

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#### **macros/luatex/latex**

`ligtype` in `macros/luatex/latex`  
 Suppress inappropriate ligatures, for German by default.

`luamathalign` in `macros/luatex/latex`  
 Flexible alignments in `amsmath` environments.

`luaquotes` in `macros/luatex/latex`  
 Smart setting of quotation marks.

`showhyphenation` in `macros/luatex/latex`  
 Show hyphenation points.

`showkerning` in `macros/luatex/latex`  
 Show kerns.

`spacekern` in `macros/luatex/latex`  
 Kerning between words and against whitespace.

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#### **macros/plain**

`transparent-io` in `macros/plain/contrib`  
 Show for approval the filenames used in `\input`, `\openin`, or `\openout`. See article in *TUGboat* 43:1.

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#### **macros/unicodetex/latex**

`swungdash` in `macros/unicodetex/latex`  
 Swung dash (U+2053), made by transforming the tilde.

`unisc` in `macros/unicodetex/latex`  
 Unicode small caps with Lua/X<sub>q</sub>L<sup>A</sup>T<sub>E</sub>X.

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#### **macros/xetex/latex**

`exam-zh` in `macros/xetex/latex`  
 L<sup>A</sup>T<sub>E</sub>X template for Chinese exams.

`hfutthesis` in `macros/xetex/latex`  
 L<sup>A</sup>T<sub>E</sub>X thesis template for Hefei University of Technology.

`xduts` in `macros/xetex/latex`  
 Xidian University T<sub>E</sub>X suite.

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#### **support**

`texlive-dummy-fedora` in `support`  
 Dummy T<sub>E</sub>X Live RPM for use with Fedora and similar distributions.