LaTeX News

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New math font encodings

A joint working group of the TeX Users Group and the LaTeX3 Project is developing a new 8-bit math font encoding for TeX. It is designed to overcome several limitations and implementation problems of the old math font encodings and to simplify switching between different sets of math fonts, much as the LaTeX font selection interface has simplified switching between text fonts.

Since the work on this project relies entirely on volunteer work, we cannot give a specific release date yet. However, a prototype implementation already exists. This contains several sets of virtual fonts, some LaTeX packages and a kernel module; we hope to integrate it into the main LaTeX distribution for the next release.

Documents using only standard LaTeX commands for math symbols should not be affected by switching to the new math font encodings However, documents, classes or packages making specific assumptions about the encoding of math symbol fonts are likely to break.

Further information about the Math Font Group may be found on the World Wide Web at `http://www.tug.org/twg/mfg/`.

A new math accent

A new math accent, `\mathring`, has been added. This is a math mode version of the ring accent (˚) which is available in text mode with the command `\r`.

Extended `\DeclareMathDelimiter`

The command `\DeclareMathDelimiter` has been extended. Normally this command takes six arguments. Previously, when being used to declare a character (such as `[`) as a delimiter, a variant form was used with only five arguments. The argument specifying the default 'math class' was omitted. Now the full six-argument form may be used in this case. The extra information is used to implicitly declare the character via `\DeclareMathSymbol` for use when the symbol is not used with `\left` or `\right`.

The old five-argument form is detected and will work as before.

Tools distribution

The `multicol` package now supports the production of multiple columns without balancing the last page. To get this effect use the `multicols*` environment.

The `layout` package was partly recoded by Hideo Umeki to display page layout effects in a better way.

As suggested by Donald Arseneau, the `calc` package was extended to support the new commands `\widthof{`*text*`}`, `\heightof{`*text*`}`, and `\depthof{`*text*`}` within a `calc`-expression. At the same time we modified a few kernel commands so that `calc`-expressions can now be used in various useful places such as the dimension arguments to the `tabular` environment and the `\rule` command. For many other standard LaTeX commands this was already possible.

Support for Cyrillic encodings

We are very pleased that, after a lengthy period of development, a set of fonts, encodings and support files for using LaTeX with Cyrillic characters will soon be available.

Test versions of the 'LH' fonts for these Cyrillic encodings, based on the Computer Modern design, are available from CTAN archives in the directory `fonts/cyrillic/lh-test`. The LaTeX support files (by Werner Lemberg and Vladimir Volovich) are also available from CTAN archives in `macros/latex/contrib/supported/t2`

Default docstrip header

Many LaTeX users now distribute packages in documented source form using the docstrip system. Docstrip allows a header to be placed on generated package files, suitable for giving copyright information, or distribution conditions.

We have changed the default version of this header so that it allows stripped files to be distributed in ready-to-run installations such as the TeXLive CD. If you use the default header for distributing your files you should check that the new copyright text is acceptable to you. The file `docstrip.dtx` explains how to produce your own header if you wish to do so.