

LATEX News

Issue 14, June 2001

Future releases

We are currently exploring how to best support the very large community of individuals, organisations and enterprises that depend on the robustness and availability of the current standard LATEX distribution. The results of this may lead to some changes in the regular release schedule and the handling of bug reports during the next year.

New release of Babel (required)

Earlier this year a new release of Babel (3.7) became available. You can read about its new features in <http://www.ctan.org/tex-archive/macros/latex/required/babel/announce.txt>

One of the bugs that got fixed in this release deals with how labels are handled by LATEX. Because this part of the kernel is modified by babel, the relevant changes need to be coordinated. Therefore to use Babel with this release of LATEX you will need to update your version of babel to at least 3.7.

New input encoding latin9

The package `inputenc` has, thanks to Karsten Tinnefeld, been extended to cover the latin9 input encoding. The ISO-Latin 9 encoding is a useful modern replacement for ISO-Latin 1 that contains a few characters needed for French and Finnish. Of wider interest, it also contains the euro currency sign; this could be the killer argument for many 8-bit texts to use Latin-9 in the future.

According to a Linux manpage, ISO Latin-9 supports Albanian, Basque, Breton, Catalan, Danish, Dutch, English, Estonian, Faroese, Finnish, French, Frisian, Galician, German, Greenlandic, Icelandic, Irish Gaelic, Italian, Latin, Luxembourgish, Norwegian, Portuguese, Rhaeto-Romanic, Scottish Gaelic, Spanish and Swedish. The characters added in latin9 are (in LATEX notation):

```
\texteuro \v{S} \v{s} \v{Z} \v{z} \OE \oe \"Y  
They displace the following characters from latin1:  
\textcurrency \textbrokenbar \"{} \'{ } \c{}\br/>\textonequarter \textonehalf \textthreequarters
```

New tools

The new package `trace` provides many commands to control LATEX's tracing and debugging output, including the excellent new information available with ε-TEX such as the extremely useful tracing of local assignments. You will find it in the tools distribution.

It offers the command `\traceon`, which is similar to `\tracingall` but suppresses uninteresting stuff such as font loading by NFSS (which can go on for pages if you are unlucky). It also offers `\traceoff` to ... guess what! Full details are in the documented source file, `trace.dtx`.

In the base `ifthen` package we have added the uppercase synonyms `\NOT` `\AND` and `\OR`.

New experimental code

In *LATEX News 12* we announced some ongoing work towards a 'Designer Interface for LATEX' and we presented some early results thereof. Since then, at Gutenberg 2000 in Toulouse and TUG 2000 in Oxford, we described a new output routine and an improved method of handling vertical mode material between paragraphs. In combination these support higher quality *automated*¹ page-breaking and page make-up for complex pages—the best yet achieved with TEX!

More recently we have added material to handle the complex front matter requirements of journal articles; this was presented at Gutenberg 2001 in Metz.

A paper describing the new output routine is at <http://www.latex-project.org/papers/xo-pffloat.pdf> All code examples and documentation are available at <http://www.latex-project.org/code/experimental>

This directory has been extended to contain the following.

galley Prototype implementation of the interface for manipulating vertical material in galleys.

xinitials Prototype implementation of the interface for paragraph initials (needs the `galley` package).

xtheorem Contributed example using the `template` package to provide a designer interface for theorem environments.

xor A prototype implementation of the new output routine as described in the `xo-pffloat.pdf` paper.

xfrontm A prototype version of the new font matter interface.

¹The stress here is on automated!