mimeTeX announcement

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Introduction

This short note announces the availabilty of mimeTeX, a small GPL'ed program that facilitates the preparation of HTML documents containing math. mimeTeX parses LaTeX-like math expressions, emitting either MIME xbitmaps or GIF images of them, which can be used in HTML documents e.g.,

```
<img src="../cgi-bin/mimetex.cgi?f(x)=x^2"
 border=0 align=absmiddle>
```

This allows you to embed math directly in HTML, reducing the need for external GIF images, and making your HTML documents more readable and easily maintained.

You can see detailed documentation and examples online at `http://www.forkosh.com/mimetex.html`, and the entire package can be downloaded from `/tex-archive/support/mimetex/mimetex.zip` at any CTAN mirror.

mimeTeX isn't primarily meant for latex2html-like tasks where you're maintaining native LaTeX documents that are later redistributed in several formats, including HTML. Rather, mimeTeX is primarily meant to help maintain native HTML documents containing math. In this sense, it's a kind of "lightweight" alternative to MathML, with the advantage that mimeTeX preserves easy-to-use LaTeX syntax. And mimeTeX works with any graphical browser.

mimeTeX's objectives

Widespread use of MathML by HTML/XML authors will eventually begin to dilute the population of LaTeX-aware users, muddying LaTeX's future. LaTeX is more than "TeX The Program"; LaTeX is its syntax. Knuth produced a test suite that validates any program claiming to be TeX, so no one version of the code is crucial. It's the syntax that's crucial. LaTeX will survive so long as a significant user population continues to use this syntax.

MathML poses a threat to the future of LaTeX's syntax in the large and growing HTML/XML market, so it's useful and important to provide some LaTeX-compliant alternative. mimeTeX is meant to be a prototype alternative. It's probably too small and kludgey for a final solution. But it demonstrates feasibility, and is full-featured enough to measure potential interest in LaTeX-compliant alternatives to MathML.

Such alternatives provide a choice to new users, who will hopefully conclude that LaTeX is the easier and more intuitive syntax. And old users can continue using LaTeX syntax when they have to prepare native HTML/XML documents, i.e., when it's not adequate to run latex2html against native LaTeX documents.

Similar tools

Other non-MathML solutions besides mimeTeX that embed LaTeX-like math into HTML are discussed in the TeX FAQ. Two that you might want to look at are textogif at `http://www.fourmilab.ch/webtools/textogif/textogif.html` and gladTeX at `http://www.math.uio.no/~martingu/gladtex`. Both require separate setup procedures that use TeX to help generate external GIF (or PNG) images of your equations, which are later included in your HTML document as it's being rendered.

mimeTeX, as far as I know, is the only such non-MathML package that has its own built-in parser and rendering engine, entirely independent of TeX, and therefore requires no setup procedure or external images whatsoever. It renders realtime, on-the-fly images directly from your LaTeX math embedded in HTML documents. This makes your HTML source documents more readable and easily maintained. textogif, gladTeX, or similar tools may be modifiable to work as easily, or mimeTeX's ease-of-use features may not prove compelling. In any case, mimeTeX becomes one more available tool in your toolbox.

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