

# L<sup>A</sup>T<sub>E</sub>X<sub>2</sub>HTML Update '95

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## 1 Introduction

A new version of L<sup>A</sup>T<sub>E</sub>X<sub>2</sub>HTML (version 95.1) has been available since January 1995. This article outlines some of the main changes.

## 2 Brief overview of L<sup>A</sup>T<sub>E</sub>X<sub>2</sub>HTML

L<sup>A</sup>T<sub>E</sub>X<sub>2</sub>HTML is a conversion tool that allows documents written in L<sup>A</sup>T<sub>E</sub>X to be converted into the hypertext format (HTML) used by WorldWide Web navigators.

L<sup>A</sup>T<sub>E</sub>X<sub>2</sub>HTML recreates the basic structure of a paper document as a set of interconnected hypertext nodes which can be explored using automatically generated navigation panels. Any cross-references, citations, footnotes, etc are converted into hypertext links. Formatting information (eg for mathematical equations or pictures) is converted into images which are placed automatically in the hypertext document.

L<sup>A</sup>T<sub>E</sub>X<sub>2</sub>HTML is being widely used for the preparation of active electronic books, online documentation, electronic scientific papers, lecture notes, training and coursework material, literate programming tools, active bibliographic references and much more. Several thousands of copies of L<sup>A</sup>T<sub>E</sub>X<sub>2</sub>HTML have been distributed to academic, commercial and government institutions since May 93 when it was first released.

## 3 L<sup>A</sup>T<sub>E</sub>X<sub>2</sub>HTML 95.1 new features summary

- **Much improved inlined equation baseline alignment!**  
(Thanks to Mark Segal, [segal@spud.asd.sgi.com](mailto:segal@spud.asd.sgi.com))  
Inlined equation bitmaps are now aligned correctly depending on whether they contain subscripts, superscripts etc.
- **Support for internationalization**  
(Thanks to Martin Boyer, [gamin@ireq-robot.hydro.qc.ca](mailto:gamin@ireq-robot.hydro.qc.ca)) A global variable LANGUAGE\_TITLES can now be used to change

the language in which some section titles (eg ‘Table of Contents’) are printed. It is also very easy to add support for more languages.

- **More efficient implementation**

There has been a major overhaul of the way the source text is parsed and analysed in order to reduce the memory requirements of this process.

- **‘Off-line’ Image Generation**

Two new options `-no_images` and `-images_only` allow ‘off-line’ image conversion. The advantage of using these options is that the translation can be allowed to finish even when there are problems with image conversion. In addition it may be possible to fix manually any image conversion problems and then run L<sup>A</sup>T<sub>E</sub>X<sub>2</sub>HTML again just to integrate the new images without having to translate the rest of the text.

Also, a new option `map=<image map URL>` in the command `htmlimage` can turn an included postscript image into an active image map.

- **Compatibility with Perl 5**

## 4 Examples of converted documents

### Electronic books

- Spinning the Web,<sup>1</sup> a book for WWW developers by Andrew Ford.
- Designing and Building Parallel Programs (Online)<sup>2</sup> which is an ‘evolving online resource’ incorporating the content of a 500-page textbook published by Addison-Wesley.
- Common Lisp the Language, 2nd Edition<sup>3</sup> — an electronic version of the 1000+ page *LISP bible* by Guy L. Steele, published with permission from Digital Press.
- Computational Science Education Project.<sup>4</sup>

### Scientific papers

- The MIT transit project,<sup>5</sup> and a paper on electronic submissions to an IEEE journal.<sup>6</sup> Also, some sam-

<sup>1</sup><http://power.globalnews.com:80/stw/stw/home.htm>

<sup>2</sup><http://www.mcs.anl.gov/dbpp>

<sup>3</sup><http://www.cs.cmu.edu:8001/Web/Groups/AI/html/cltl/cltd2.html>

<sup>4</sup><http://csep1.phy.ornl.gov/csep.html>

<sup>5</sup><http://www.ai.mit.edu/projects/transit/tn-cat.html>

<sup>6</sup><http://www.research.att.com/submit/submit.html>

ple journal articles in SEPTEMBER (AT&T's Secure Electronic Publishing Trial<sup>7</sup>)

## Training and teaching support material

- ISLE — The Intensely Supportive Learning Environment<sup>8</sup> project at ICBL, Heriot-Watt University, lecture notes at Cardiff,<sup>9</sup> and at Brigham Young<sup>10</sup> Universities.

## System documentation

- The REDUCE algebra system,<sup>11</sup> the PYTHON tutorials<sup>12</sup> and the user guide to the Compton Observatory Science Support Center.<sup>13</sup>

## 5 Where to get it, how to use it

L<sup>A</sup>T<sub>E</sub>X2HTML runs on Unix systems (SunOS, OSF, Linux, AIX etc) with at least Perl version 4 at patch level 36. Versions of L<sup>A</sup>T<sub>E</sub>X2HTML earlier than 95.1 will *not* work with the newer Perl version 5.

You can get L<sup>A</sup>T<sub>E</sub>X2HTML from the 'Getting L<sup>A</sup>T<sub>E</sub>X2HTML' section of the L<sup>A</sup>T<sub>E</sub>X2HTML manual or via ftp from

```
ftp://ftp.tex.ac.uk/pub/archive/support/
                                latex2html
```

or other CTAN archives.

Fully searchable archives of user comments, bug reports, the L<sup>A</sup>T<sub>E</sub>X2HTML user manual, the L<sup>A</sup>T<sub>E</sub>X2HTML mailing list, links to converted documents, the source code, and much more are available from the L<sup>A</sup>T<sub>E</sub>X2HTML server.<sup>14</sup>

## 6 Appendix (added by MAPS editor)

### 6.1 The L<sup>A</sup>T<sub>E</sub>X2HTML Mailing List

A L<sup>A</sup>T<sub>E</sub>X2HTML mailing list has been set up. To join send a message to:

```
latex2html-request@mcs.anl.gov
with the contents
subscribe
```

To be removed from the list send a message to:

```
latex2html-request@mcs.anl.gov
with the contents
unsubscribe
```

Please send these messages to `latex2html-request` and *not to everybody else on the list*.

The address of the L<sup>A</sup>T<sub>E</sub>X2HTML mailing list is:

```
latex2html@mcs.anl.gov
```

The mailing list archive is available.

## 6.2 Future support and further development

On 3 Apr 1995, the following e-mail was distributed on the `latex2html@mcs.anl.gov` discussion list by the L<sup>A</sup>T<sub>E</sub>X2HTML author Nikos Drakos.

Dear All,

This is to let you know about some changes that will affect the development and support for L<sup>A</sup>T<sub>E</sub>X2HTML in the future.

First of all despite the freedom, encouragement and excellent working environment at the Computer Based Learning Unit of the Univ. of Leeds, I have moved on to another position. During the move a large backlog (several hundred) L<sup>A</sup>T<sub>E</sub>X2HTML-related messages, queries and bug-reports have accumulated. Apologies to all who have not received any replies. . .

### Future Support

Because of the current workload and the change in circumstances it is no longer possible for me to answer all the L<sup>A</sup>T<sub>E</sub>X2HTML queries I receive. I will try to respond as much as possible but in many situations enquirers will receive a standard reply (directing them to the archives and to this mailing list).

### L<sup>A</sup>T<sub>E</sub>X2HTML Archives

The searchable L<sup>A</sup>T<sub>E</sub>X2HTML archives (including messages from this mailing list, comments, bug reports, documentation, etc) will continue to be updated and maintained. They will be kept at the usual address.<sup>15</sup>

### Future Development

The development of L<sup>A</sup>T<sub>E</sub>X2HTML will continue but at a much slower pace. There are already contributions from others which need to be integrated into the main package. Another obvious candidate is the problem of the postscript to GIF conversion. Also, a project between the Computer Based Learning Unit at Leeds and some other institutions concerning an electronic journal is likely to involve contributions in terms of further enhancements to L<sup>A</sup>T<sub>E</sub>X2HTML.

Cheers,

Nikos.

<sup>7</sup><http://www.research.att.com/jsac/>

<sup>8</sup><http://www.icbl.hw.ac.uk/projects/isle/Doc.html>

<sup>9</sup>[http://www.cm.cf.ac.uk/lecture\\_notes.html](http://www.cm.cf.ac.uk/lecture_notes.html)

<sup>10</sup><http://lal.cs.byu.edu/cs501/homepage.html>

<sup>11</sup><http://www.rz.uni-koeln.de/REDUCE/>

<sup>12</sup><http://www.cwi.nl/cwi/people/Guido.van.Rossum/python-tut/tut.html>

<sup>13</sup><http://enemy.gsfc.nasa.gov/cossc/cossc.html>

<sup>14</sup><http://cbl.leeds.ac.uk/nikos/tex2html/doc/latex2html/latex2html.html>

<sup>15</sup><http://cbl.leeds.ac.uk/nikos/tex2html/doc/latex2html/latex2html.html>