E-books and Graphics with LaTexml

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Abstract. Marked by the highlights of native generation of EPUB E-books and Tikz support for creating SVG images, we present an annual report of LATEXML development in 2013. LATEXML provides a reimplementation of the TeX parser, geared towards preserving macro semantics; it supports an array of output formats, notably HTML5, EPUB, XHTML and its own TeX-near XML.

Other highlights include enhancing performance when used inside high-throughput build systems, via incorporating a native ZIP archive workflow, as well as a simplified installation procedure that now allows to deploy LaTeXML as a cloud service. To this end, we also introduce an official plugin-based scheme for publishing new features that go beyond the core scope of LaTeXML, such as web services or unconventional post-processors.

The software suite has now migrated to GitHub and we welcome forks and patches from the wider FLOSS community.

1 Introduction

IATEXML [Mil] is a TeX to XML converter, bringing the well-known authoring syntax of TeX and IATEX to the world of XML. Not a new face in the MKM crowd, IATEXML has been adopted in a wide range of MKM applications. Originally designed to support the development of NIST's Digital Library of Mathematical Functions (DLMF), it is now employed in publishing frameworks, authoring suites and for the preparation of a number of large-scale TeX corpora.

2 Outlook

Although development was never stagnated, an official release is long overdue; a LATEXML 0.8 release is planned for early 2014. It will incorporate the enhancements presented here: support for several LATEX graphics packages, such as Tikz and Xypic; an overhauled XSLT and CSS styling framework; and a merge of daemonized processing to the master branch.

References

[Mil] Bruce Miller. LaTeXML: A LATEX to XML converter.