Abstracts

Editor's note: This issue of *TUGboat* contains abstracts and summaries from recent publications by several other TEX user groups, translated to English where needed. For a complete list of all user group publications, see http://tug.org/pubs.html.

Zpravodaj 13(1)-14(2), 2003-2004

Zpravodaj is the bulletin of CTUG, the TEX user group for the Czech and Slovak languages. Their web site is http://www.cstug.cz, and the Zpravodaj web site is http://bulletin.cstug.cz.

Zpravodaj 13(1), 2003

Petr Olšák, Úvodníček [Introduction]; p. 1–2

JIŘÍ KOSEK, Sazba XML [Typesetting XML]; p. 3–6

This article summarizes methods suitable for processing XML documents by the TEX system—direct typesetting (xmltex, ConTeXt), conversion to TEX (XSLT) and TEX based stylesheet language implementations (XSL, DSSSL). The article acts as an introduction for more detailed articles about processing XML with TeX.

JIŘÍ KOSEK, Použití parseru XML v TeXu [Use of an XML parser in TeX]; p. 6-14

This article shows how to use xmltex — an XML parser written in pure T_EX — to directly typeset XML documents. Special interest is devoted to correct processing of localized Czech/Slovak documents.

JIŘÍ KOSEK, JadeTFX; p. 15–26

JadeTEX is a TEX macro package which is able to process SGML and XML documents according to a DSSSL stylesheet in conjunction with (Open)Jade DSSSL processor. This article briefly describes basic principles of the DSSSL language and its usage for formatting XML documents. Complete working example of a DSSSL stylesheet is shown in the article.

JIŘÍ KOSEK, PassiveTEX; p. 26–38

PassiveTEX is a TEX-based XSL-FO processor which is able to process XML documents according to an XSL stylesheet in conjunction with any XSLT processor. This article briefly describes basic principles of the XSL language and its usage for formatting XML documents. Complete working example of an XSL stylesheet is shown in the article.

ZDENĚK WAGNER, Fraktální obrazce v PostScriptu [Fractal Images in PostScript]; p. 45–53

The picture used on the cover of this issue is an example of a fractal image. The article describes the PostScript macro by means of which the picture was created.

Zpravodaj 14(1), 2004

Petr Olšák, Úvodníček [Introduction]; p. 1–2

Zdeněk Wagner, Anatomie virtuálních fontů [Anatomy of Virtual Fonts]; p. 3–16

The article is a brief introduction to the concept of virtual fonts. It is first explained how TEX works with fonts. Afterwards a simple tool for building a virtual font, namely qdTEXvpl, is presented. Finally usage of virtual fonts is demonstrated by typesetting spaced and underlined text. The macros and Perl scripts described in this article are available from the web page of the Bulletin.

ALEŠ PAVELKA, Wordové plug-iny související s TEXem aneb Možnosti a schopnosti produktů Word2TEX a TEX2Word [Word Plug-Ins for TEX: Possibilities and Abilities of the Word2TEX and TEX2Word Products]; p. 16–28

The article describes two MS Word plug-ins which allow conversion from and to TeX. The documents illustrating the results of conversion are available from the web page of the Bulletin.

Ladislav Bittó, TeX and PostScript in Graphics of Programming Languages; p. 28–38

The article describes possibility of generating PostScript graphics by means of a library of subroutines written in FORTRAN. The speed of the program is compared to that of METAPOST. Examples of pictures created by the mentioned program are available from the web page of the Bulletin.

Zpravodaj 14(2), 2004

Petr Olšák, Úvodníček [Introduction]; p. 45–46 Vít Zýka, Používáme pdfTeX IV: mikrotypografické rozšíření [Using pdfTeX IV: micro-typographic extensions]; p. 47–53

This article describes two micro-typographic extensions being implemented by Hàn Thế Thành in pdfTEX: character protruding and font expansion. Expanded font metric preparation is also addressed.

MIROSLAV BALDA, Výpočty a diagramy v IATEXu [Calculations and diagrams in IATEX]; p. 54–110

The article deals with the title problem from the point of view of a common user of LATEX. It describes a way of using the standard packages fp.sty and curves.sty, along with their new extensions fp-contrib.sty and diagram.sty with an auxiliary package support.sty. The suite allows solving rather complicated tasks in one run of the LATEX compiler. A solution for processing fatigue data into SN-curve, bands of confidence intervals, plots and a table of results is presented as an example. The system is also suitable for presentation purposes.

[Received from Zdeněk Wagner]