# Workshop Summaries

### T<sub>F</sub>X Archives

 ${\bf Moderator} \colon Peter \: Abbott$ 

Although not all the major archives were represented at the meetings, it was felt that the following would be of advantage to the word community.

- A site (not necessarily an archive) will 'own' an item of software. That site will be the definitive source for the current version of that item. Archives will collect/receive items from the 'owner'.
- Every attempt will be made to keep the archives in step and up to date.
- Authors will be requested to use standard header formats in ASCII files, details of which will be circulated later.
- Read.Me files for collections of PK font files will contain header details stating from which MF sources they were generated (e.g., Aston will move towards holding 300 dpi PK files for Canon SX (write black), 180 dpi, and 240 dpi).
- Aston may (probably will) move to a UNIX machine but VMS binaries will be retained and, if possible, a VMS-like interface will be provided.
- Due notice will be taken of directory and filenames to prevent them exceeding 80 characters in total if possible, since many mailers will truncate long lines.
- Case of letters in names should be irrelevant.
   Aston has also undertaken to make available
- WAIS Wide Area Information Server;
- Gopher The Internet Gopher Service;
- ARCHIE—Archie entries (A VMS client has been announced); and
- WWW (W<sup>3</sup>) World Wide Web.

Aston currently has its directory available for search by WAIS (i.e., the ability to locate any file name immediately). UKTEX and TEXhax are also available in indexed form.

Aston is aiming to make available a front end to link the synthetic catalogues such as Jones to the actual files in the archive. The same systems can be

used to access more developed books, such as the TEXbook.

Aston already has a crude model of activity for WAIS and T<sub>E</sub>X files, whereby the \*.dvi\* is indexed word by word. The user is returned a piece of dvi representing a printed page.

# Getting PostScript into TEX and LATEX Documents

Moderator: Anita Z. Hoover

Approximately 65 people came to learn and contribute ideas on how to include PostScript files into TEX and IATEX using the popular DVI—PostScript driver written by Tomas Rokicki of Stanford University.

The basic objectives covered:

1. What is a Bounding Box?

Tells how big the graphic is and where it islocated on the page.

It represents the lower-left and upper-right corners of a box, which would surround the graphic in the PostScript file.

- 2. What if I don't have a Bounding Box?
  - You need to use **bbfig** or some other program or calculate it by hand.
- 3. What is the page orientation for PostScript? Looking at a portrait page, the lower-left corner is the origin (0,0) and the upper-right corner is (612,792) for American letter size paper. The

(612,792) for American letter size paper. The upper-right corner will be different for other paper sizes.

4. How do I include my PostScript pictures?

Two macro packages available

```
epsf
    TEX:
        \input epsf
        IATEX:
        \documentstyle [epsf] {style}
psfig
    TEX:
        \input psfig
        IATEX:
        \documentstyle {style}
        \input{psfig}
```

A document was distributed that explained in detail how to include PostScript in TEX and IATEX documents. This was specifically written for the UNIX environment at the University of Delaware, but can easily be applied to all copmputer environments.

Eight examples were distributed that showed specific PostScript files being included from a variety of applications such as Macintosh Cricket-Graph, Mathematica, Framemaker, WordPerfect, Lotus, SAS Graphics, Macintosh MacDrawII, and Macintosh SuperPaint.

All examples and documentation are available anonymous ftp from

zebra.cns.udel.edu (128.175.8.11) in pub/tex/workshoptug92/PostScript.

# IATEX $2.09 \hookrightarrow IATEX3$ : an update

Moderator: Chris Rowley

The workshop on IATEX3 was basically a report on activities of the project in the first half of 1992. This report is an addendum to the article in *TUG-boat* (13(1):96–101, 1992), which contained a brief sketch of the IATEX3 Project: its history, its present state and its future, as at the end of 1991. See also *TEX and TUG News* (vol. 1, nos. 1 and 2) for additional updates.

#### The Continuing History

Visits and meetings: 1992

March — Workshop in Hamburg

April — Visit to CERN and EP92 conference

April — Alan Hoenig takes on the role of liaison between the project and the TUG Technical Council.

May/June — Meeting of core team in Mainz

June — Special meeting of GUTenberg in Paris.

July — Presentation and mini-workshop at TUG conference in Portland, Oregon.

July — Bowling fund-raiser in Portland.

We are pleased to be able to thank the TUG board for its unreserved support for the project—and the TUG office for making this support a reality. Without such solid backing, many of our aims would be much more difficult to attain. Since his appointment (and also before it) Alan Hoenig has been enthusiastic in his encouragement and publicity for the

project and is now helping us in many ways including the always vital fund-raising which is needed (see below).

The meeting in Mainz was an especially important occasion as it was the first time that the current core team of implementors had all met face-to-face rather than via the megabytes of e-mail correspondence which had been their only previous contact. This potentially traumatic experience was survived by everyone and the outcome was a very useful, intellectually stimulating and enjoyable ten days.

Fund-raising Many thanks must go to Malcolm Clark and Doug Henderson for organising the bowling fund-raiser in Portland: a very enjoyable event at which one of us discovered that the bowls do not seem to go in the right direction as easily as they did 25 years ago. Over \$700 was raised by this event — many thanks to all who contributed so generously.

We also wish to thank the European TEX organizations DANTE (Germany) and GUTenberg (France) for their generous contributions and all the many other contributors through whose efforts we have been able to finance important aspects of the work, such as the meeting in Mainz. These include individuals, companies and the national user groups: a list of organisations giving support of various kinds appears regularly in TEX and TUG News.

In addition to the bowling fund-raiser, at the Portland conference we started to look at the possibilities for larger-scale fund-raising from medium-sized and large companies and from trusts and foundations: ETP Services have offered substantial support for this important work. One aspect of this campaign with which *anyone* reading this may be able to help is the supply of information—please contact us if you have any ideas or knowledge about:

- organisations which would be worth canvassing for funds:
- any individuals in medium-to-large companies who would be a good initial contact point for such canvassing.

#### Milestones: 1992

- Clarification of the internal mechanisms needed for parameter handling and their consequences for the processing of environment begin- and end-tags.
- Establishment of the necessity of distinguishing between 'author-defined' environments (and commands) and those environments specified and modified via the style-designer interface.

- Prototype of an enhanced mechanism for passing information from one run of IATEX to the next.
- Start of a discussion on the design and implementation of the float-handling mechanism. This discussion must involve as wide a range as possible of people involved in typograhic design and typesetting: please contact us if you have experience in this area which could be useful to the project.
- Setting up a network-accessible distribution, maintenance and code-management system for the project at the ZDV, Mainz (this will probably also take over as the source for LATEX 2.09 system files).
- Release of a new version of IATEX 2.09 which, in addition to bug fixes, is fully international (incorporating the functionality of IIATEX) and is fully compatible with the NFSS.
- Setting up a validation system for testing new versions of IATEX 2.09.

## Volunteers needed

There are many tasks needing to be done in support of the IATEX3 project which can be worked on concurrently with the development of the IATEX3 kernel. Furthermore, some tasks require special expertise not found among the core programming team. Initial research, analysis, and work on these tasks by volunteers can greatly speed up the process of integrating a number of desirable features into IATEX3. Many of these features can be extensively developed and tested under IATEX 2.09 even before the IATEX3 kernel is available.

Therefore a list of volunteer tasks has been drawn up, in the form of a IATEX article, which will shortly (probably by the time you read this) be circulated as widely as possible to the IATEXuser community through various channels: mail lists such as TeXhax, Info-TeX, Euro-TeX; newsgroups such as comp.text.tex; anonymous FTP and mail servers from major TEX archives; and publication in print via The TEXbook and any other journals and newsletters that are interested to print it.

### thebibliography

Frank Mittelbach and Chris Rowley IATEX2.09  $\hookrightarrow$  IATEX3. TUGboat, 13(1):96-101, 1992.

### LATEX: How to Use Style Options

Moderator: Anita Z. Hoover

Approximately 45 people came to learn and contribute ideas on how to use specific style options available with LATEX. Many of the names of style files needed to be reduced to 8-character file names with 3-character extensions. As a result the original name taken off the archive is listed in parenthesis.

- 1. How to rotate a table (based on using DVIPS written by Tomas Rokicki).
  - rotate.sty/rotate.tex
  - nrotate.sty (newrotate.sty)
- 2. How to create two-up pages without using PostScript.
  - 2up.sty
- 3. How to create a draft overlay for every page using PostScript (based on using dvips written by Tomas Rokicki).
  - drpshead.sty \draftcp
  - draftps.sty \draft
- 4. How to produce tables/figures side by side.
  - Use the minipage environment.
- 5. How to modify your headings and footers.
  - fandyhd.sty (fancyheadings.sty)
- 6. How to number your equations, 1, 2a, 2b, 2c, 3, 4a, 4b, 5, etc.
  - subeqn.sty
  - subeqnar.sty (subeqnarray.sty)
- 7. How to continue a table across mulitple pages without having to do so by hand.
  - bigtab.sty (bigtabular.sty)
  - supertab.sty (supertabular.sty)

All examples and documentation are available anonymous ftp from

zebra.cns.udel.edu (128.175.8.11) in pub/tex/workshoptug92/LaTeXstyles.

# Modifying manmac to Suit the Publisher

Moderator: Dan Olson

This was the second year for this workshop to be presented in conjunction with the TUG Annual Meeting. It is not intended as an introduction to macro writing. Instead, it is an introductory look at the inner workings of macro packages. We looked at modifications made to the manmac macros (used in producing *The TeXbook*) to implement common publisher requests. Topics explained included modifying the fonts used in a document, changing the page size, and reformatting the running heads, footnotes, and exercises. Examples included the use of such TeX commands as \char921lap, \char92rlap, and \char92hangindent. The attendees had Macintoshes running Textures available for hands-on work.