

The PracTeX Journal 2005-1–2005-4

The PracTeX Journal is an online publication of the TeX Users Group. Its web site is <http://tug.org/pracjourn>. All articles are available there.

The PracTeX Journal 2005-1, 2005-01-15

LANCE CARNES, Welcome

STEVE GRATHWOHL, Invitation to PracTeX'05

LANCE CARNES, Highlights of the PracTeX'04 conference

JIM HEFFERON, CTAN for Starters

Newcomers to TeX can have trouble finding their way around. As with many other community-supported projects, beginners can get the sense that only insiders or old-timers can get the tool to do its magic. One of the secrets to TeX success is to know where to find resources on the Internet that you can use. This article guides you through finding and using resources from the TeX community's archive, the Comprehensive TeX Archive Network (CTAN).

DAVID ALLEN, Screen presentations, manuscripts, and posters from the same L^ATeX source

This paper describes how to format the same document in any of three different styles: screen, manuscript and poster. The screen style is used to format output for a computer screen or LCD projector presentation, the manuscript package is used for printed publication, and the poster package will generate a conference poster presentation. These styles are used with the L^ATeX article class. This paper gives the implementation details of the three styles, and also shows examples of their usage.

JENNY LEVINE, Label replacement in graphics

In this paper I show how graphics are manipulated to our (*Duke Mathematical Journal*) style. I give some examples and a step-by-step approach to assessing a figure file, removing its labels, and placing new ones using `graphicx` and `overpic`.

This is done to maintain a consistent style. Our labels should be in a compatible font and should match the look of the journal as well as that of the article (size, placement, emphasis, etc.).

DOUGLAS WAUD AND TIM NULL,
`\begin{here}% getting started`

This is the first in a series of columns designed for the beginner or non-expert TeX or L^ATeX user. This first column is divided into two main parts: the installation of TeX on your computer, and creating a simple L^ATeX document. The installation section gives an overview of installing TeX on a

computer system, and provides a list of detailed resources for installation on different computers and operating systems. The section on creating a sample L^ATeX document shows the basic elements of a L^ATeX source file and guides the reader step-by-step in creating a document.

STEVE PETER, `\starttext % Practical ConTeXt`

This column will introduce the use of ConTeXt, a powerful document creation system. In this first installment the reader will learn how to obtain a working ConTeXt system, how to write a simple “Hello, World” document, and how to adjust to the position of page numbers in a document. Following this is a demonstration of some unique features of ConTeXt, and finally a list of places to find more information.

DAVID WALDEN, Travels in TeX Land: Tweaking L^ATeX

The author uses L^ATeX extensively, but is not an expert by any means. His work requires that L^ATeX do things differently than it does “out of the box”. He may need new capabilities that do not already exist in L^ATeX, to modify slightly existing L^ATeX capabilities, or to give L^ATeX a different look and feel.

This note sketches some of what the author would have liked to have found sketched in one place (rather than having to hunt in books or on the Web) when he was first trying to tweak L^ATeX to do different things: finding an appropriate package or class, creating a new command or environment to do something new, creating a new command or environment to do something differently than L^ATeX already does it, and changing an existing command or environment.

THE EDITORS, Ask Nelly:

- What is ConTeXt?
- What is L^ATeX3?

PETER FLYNN, In my opinion: L^ATeX myths and realities

The PracTeX Journal 2005-2, 2005-04-15

LANCE CARNES, From the Editor

FROM READERS, Feedback

CHRISTINA THIELE, News from Around

This new section is about news from other user groups, news about TeX, and anything else that seems ‘new’.

This first column is modelled on the old “News from Around”, which appeared in *TTN (TeX and*

TUG News), a TUG newsletter (hardcopy) which circulated from 1991 till 1995.

There are two main sections: User Group News and T_EX News. Under User Group News, there is a report on Greek T_EX users and on the TUG 2004 conference in Greece; news from the Islandic T_EX users, who recently launched their local newsletter; a report from the Polish T_EX users on their upcoming annual BachoT_EX conference; and an update from the UK T_EX users. There is a report from the international T_EX Users Group on elections, on the upcoming conferences in North Carolina and China, and on two new projects: the Interview Corner and the TUG Heritage Project.

T_EX News includes items on Y&Y Inc., the L^AT_EX 3 project, and accessing CTAN more easily.

STEVE GRATHWOHL, Invitation to PracT_EX'05

PETER L. FLOM, A L^AT_EX Fledgling Struggles to Take Flight

I'm writing with two groups in mind: Beginners, and people who write for beginners. I'd like to offer both groups some perspective from someone who is just a little way along the path. I'd like to let the true beginners know that it is possible to learn L^AT_EX; after only a few months of intermittent use, I can do a lot—I have written entire articles in L^AT_EX, some of them with quite complicated organizational structure and with fairly intimidating formulas; I've also started doing some presentations in L^AT_EX, using the `beamer` package. If I can do it, you can. I'd like to give the teachers the perspective of a recent beginner, so that their efforts can have maximum reward; when I consider that so many people contribute to L^AT_EX, often without any monetary reward, I imagine that those people would like to have their efforts help as many people as possible to use L^AT_EX easily and well.

A. SCHREMMER, So, you are running Mac OS X and want to try L^AT_EX

This brief guide explains how to install and use the TeXShop (L^A)T_EX system on Mac OS X. If you follow the step-by-step installation instructions you should have the system running in short order. The second part of the article leads the reader through composing and typesetting a first L^AT_EX document.

WILL ROBERTSON, Square cells: an array cooking lesson

In this article, various features of the array package are described and used to create an environment that typesets tabular material with exactly square-shaped cells (useful in showing, for example, magic squares of numbers in which all rows, col-

umns and diagonals sum to an equal value). Along the way, some intermediate-level concepts in L^AT_EX programming are also shown. This article should be of interest to anyone who would like to read about the process of constructing new macros in L^AT_EX.

THOMAS A. SCHMITZ, Integrating TrueType Fonts into ConT_EXt

T_EX has a reputation for being difficult when it comes to font management. Many people (mainly those who haven't used any flavor of T_EX in a long time) still think that only Computer Modern is available for typesetting in T_EX, and there is a consistent rumor that integrating fonts is terribly difficult. While it involves a lot of steps, most of it is handled by automated tools and can be done even by inexperienced users. This tutorial will give step-by-step instructions on how to integrate TrueType fonts with your ConT_EXt-installation.

ADAM T. LINDSAY, OpenType installation basics for ConT_EXt

This article examines the basic steps necessary for OpenType font installation, with a focus on ConT_EXt-oriented tools. Along the way, I will give overviews of the general font installation workflow and of the T_EX font font installation script. The article assumes a fair amount of confidence at the command line and a properly-configured ConT_EXt installation.

D.P. STORY, Creating Online Tests with eqExam

Have you ever wanted a simple way of creating an online test or quiz for your students? This paper describes one approach I have taken that uses a L^AT_EX-to-PDF workflow. This method may also be used for surveys and other information gathering. For an example of an eqExam online survey see the T_EX/L^AT_EX survey at http://www.math.uakron.edu/~dpstory/eqExam/tex_survey.pdf.

TRISTAN MILLER, Producing beautiful slides with L^AT_EX: An introduction to the HA-prosper package

This paper presents HA-Prosper, a L^AT_EX package for creating overhead slides. The features of the package and some examples of their use are described. The author also discusses advantages to producing slides with L^AT_EX versus the presentation software typically bundled with today's office suites.

PETER FLYNN, What does XML give the L^AT_EX user?

L^AT_EX users are being faced with the suggestion that they learn Yet *Another* Markup Language. Where does it all end? If L^AT_EX is so smart, why bother? This article is intended to provide some guidance for the confused.

D.P. STORY, Producing a \TeX / \LaTeX Online Survey with the eqExam Package

On January 31, 2005, I published a \TeX / \LaTeX online survey at http://www.math.uakron.edu/~dpstory/eqExam/tex_survey.pdf and invited the \TeX community, through the `comp.text.tex` forum, to participate in this unofficial survey of \TeX usage. The survey was created from a \LaTeX source, the final document was in Adobe's Portable Document Format (PDF). The purpose of this article is to describe how the survey was created and to report on some of the results.

TIM NULL, `\begin{here}`% getting started: A \LaTeX Survivor's Guide

This is the second in a series of columns on the preparation of a simple and short \LaTeX article. The main topic of discussion is techniques for avoiding and resolving \LaTeX errors. It is proposed that working to minimize risk is a good strategy for new \LaTeX users. Techniques for reducing risk are offered. The topic for the simple example article will be introduced, and the topic will be related to the philosophy of risk minimization. The information presented in the first `begin-here` column is reviewed in an included appendix. This material is re-presented in a different and, *hopefully*, clearer format.

STEVE PETER, `\starttext % Practical ConTeXt: ConTeXt Text Editors`

This column looks at some text editors and \TeX editing environments that can make life easier for \ConTeXt users. Many text editors have some sort of \TeX support built in, and with a bit of coaxing they can be made to play nicely with \ConTeXt . This column is a (partial) answer to frequent questions on the \ConTeXt mailing list on how to make various \LaTeX -oriented text editors usable for \ConTeXt .

DAVID WALDEN, Travels in \TeX Land: Choosing a \TeX Environment for Windows

This column recounts my experiences looking at and thinking about different ways \TeX is set up for users to go through the document-composition to typesetting cycle (input and edit, compile, and view and print). First I'll describe my own experience randomly trying various \TeX environments. I suspect that some other users have had a similar introduction to \TeX ; and perhaps other users have just used the environment that was available at their workplace or school. Then I'll consider some categories for thinking about options in \TeX setups. Last, I'll suggest some follow-on steps.

Since I use Microsoft Windows as my computer operating system, this note focuses on environments that are available for Windows.

THE EDITORS, Ask Nelly:

- What do I do with the 2 CDs and 1 DVD from TUG?
- How can I condense math matrices?
- Please explain the different \TeX font formats?
- How can I make PowerPoint slides with \LaTeX ?

ARTHUR OGAWA, In my opinion: \TeX 's Interface Challenges

Despite its well-known advantages for producing fine documents, \TeX has five areas with significant usability challenges: document creation, formatting specification, document preview, software installation, and integration with the host system resources. Through improved performance at these interfaces, \TeX can become more useful to the average computer user and, ultimately, more popular. After discussing these challenges and needed improvements, I mention certain activities we may undertake right away to prepare for the development of a more user-friendly \TeX , and I encourage and welcome further dialog on these issues.

The PracTeX Journal 2005-3, 2005-07-15

LANCE CARNES, From the Editor

FROM READERS, Feedback

CHRISTINA THIELE, News from Around

This section is about news from other user groups, news about \TeX , and anything else that seems 'new'.

Under User Group News, there is a report on the Italian \TeX users and their upcoming conference in Pisa this October. There is a photo report on the Polish User Group's recent \BachTeX conference.

From the international \TeX Users Group there are several items: the results of the recent election for TUG president, a summary of the members meeting that took place at the Practical \TeX 2005 conference in North Carolina in June, the upcoming TUG 2005 conference in Wuhan, China, and updates on TUGboat publishing policies and the \TeX Live software release.

COMPILED BY PETER FLOM AND TRISTAN MILLER, Impressions from PracTeX05

The recent PracTeX 2005 conference in Chapel Hill, North Carolina was a great success thanks to the presenters, the attendees, and the local organizer, Steve Grathwohl of Duke University Press. See the post-conference web page at <http://www.>

tug.org/practicaltex2005/ information for more photos and the conference preprints. Several papers from the conference are included in this issue of *The PracTeX Journal*.

JOE HOGG, Making a Booklet

This paper describes how a 36-page booklet, *A Botanical Tour of the Los Angeles Zoo and Botanical Gardens* was produced by the Zoo's Docent Botany Committee. The emphasis is on project and typesetting goals and using L^AT_EX to achieve them. This was our first typesetting project and, as such, it should be of interest to other T_EX novices.

KLAUS HOEPPNER, Strategies for including graphics in L^AT_EX documents

This article presents strategies for including graphics into L^AT_EX documents. It shows the usage of the standard `graphics` packages of L^AT_EX as well as an introduction to different graphics formats. Some external tools for converting graphics formats are discussed.

PETER FLYNN, A categorized search of CTAN

The search functionality accessible through the search page of the Comprehensive T_EX Archive Network (CTAN) allow you to search in three places: *a)* the CTAN directory structure and its filenames; *b)* Google; or *c)* the Graham Williams catalogue. While each has its advantages, they have a tendency to provide too much information. An new interface to *(a)* is being tested, which shows only direct matches, and categorises the output into different types of files.

JON BREITENBUCHER, L^AT_EX at a liberal arts college

Does L^AT_EX have a place in a liberal arts education? Yes, and in this article I present my reasons for introducing L^AT_EX in an undergraduate liberal arts setting. I also present how I introduced L^AT_EX, issues that were encountered, and what students and faculty think the impact has been.

JOHN BURT, Using `poemscol` for Critical Editions of Poetry

Critical editions are special versions of literary, legal, or historical texts in which the editors have attempted to reconstruct the text as the author wrote it. Editors of critical editions examine such things as the author's manuscripts, the publisher's galleys, or other published editions of the same work to gather evidence to make arguments for the readings they propose, sometimes engaging in painstaking literary detective work. Critical editions have special typographical features which make them especially suited for T_EX. `poemscol` is a critical edition package

for L^AT_EX designed around the special requirements of critical editions of poetic texts.

D. W. IGNAT, Word to L^AT_EX for a Large, Multi-Author Scientific Paper

The scientific journal *Nuclear Fusion* received a manuscript for a large review article in many sections, each formatted in MS Word. The journal's policy for reviews required a translation to L^AT_EX, including the transformation of section-based references to a non-repetitive article-based list. Saving Word files in RTF format and using `rtf2latex2e` accomplished the basic translation, and then a `perl` program was used to get the references into acceptable condition. This approach to conversion succeeded and may be useful to others.

PETER FLOM, HANS HAGEN, JOE HOGG, NICOLA TALBOT, PHILIP TAYLOR, CHRISTINA THIELE AND DAVID WALDEN, What is T_EX?

TIM NULL, `\begin{here}`% getting started:

Topic #1: Creating my first L^AT_EX article, Part 3

This a continuation of a series on the preparation of a simple and short L^AT_EX article. It is the third installment in the series. This column will introduce two sections of a L^AT_EX document: the *Preamble* and *Title Page*. Part II of this column offers several contests/exercises to hone your L^AT_EX skills.

DAVID WALDEN, Travels in T_EX Land: A Macro, Three Software Packages, and the Trouble with T_EX

In this column in each issue I muse on my wanderings around the T_EX world. In this issue, I deal with three *unrelated* topics: I describe how a small macro works that I decided to try to understand, I briefly describe my experiments with three T_EX-related software packages, and I give my perspective on why lots of people find T_EX difficult.

THE EDITORS, Ask Nelly:

- What is Lyx?
- What are class and style files?

THE EDITORS, Distractions: A Pitfalls Contest and a Web Treasure Hunt — prizes awarded!

The PracTeX Journal 2005-4, 2005-11-07

LANCE CARNES, From the Editor: In this issue; Next issue: Fonts

FROM READERS, Feedback

PETER FLOM, \LaTeX for academics and researchers who (think they) don't need it

This paper is written for academics and researchers who don't use \LaTeX and wonder why anyone does. People who *do* use \LaTeX (probably all of the readers of the article in this journal) may wish to share the article with their colleagues.

JIM HEFFERON, Minutes in Less Than Hours: Using \LaTeX Resources

In this article, building a new \LaTeX document class is illustrated by developing a class for minutes of meetings.

ANDREW MERTZ AND WILLIAM SLOUGH, Beamer by Example

There are a variety of \LaTeX classes which can be used to produce "overhead slides" for presentations. One of these, beamer, provides flexible and powerful environments which can be used to create slides and PDF-based documents suitable for presentations. Although the class is extensively documented, first-time users may prefer learning about this class using a collection of graduated examples. The examples presented here cover a wide spectrum of use, from the simplest static slides to those with dynamic effects.

M.A. GURAVAGE, A Brochure

This paper shows how typesetting a commercial brochure can be done easily with \ConTeXt .

STEVE PETER, \starttext % Swelled rules and MetaPost

This column looks at how to make a typographic character called a "swelled rule" using MetaPost and \ConTeXt .

DAVID WALDEN, Travels in \TeX Land: Word2 \TeX redux, \TeX 2Word, plain \TeX and Eplain, and playing with "thought breaks"

In this column in each issue I muse on my wanderings around the \TeX world. In the last issue, I described my trial of Word2 \TeX . In this issue, I first describe a little more of my experience with Word2 \TeX , second describe a trial of \TeX 2Word, third describe my efforts to try \TeX itself (not \LaTeX) for the first time, and fourth look at several ways to typographically show a change of subject.

THE EDITORS, Ask Nelly:

- How can I use hyperlinks in documents?
- How do I use the apa style?

THE EDITORS, Distractions: Sudoku; contest winners and answers