

page. The `\tryfig` macro avoids this problem by subtracting an extra two times `\baselineskip` from the remaining space on the page before testing to see if there is room.

An example of the problem can be seen by removing the extra `\advance\dimen0` from Section A or `\tryfig` and running the macros with random sequences 42 and 43.

Improvements to the insertion macros

When a figure won't fit on a page, it is deferred until a paragraph break on the next page. However, it does not always start with the first paragraph on the next page (try sequences 9 and 35). Sequence 55 shows a variation of this same problem. The output routine lags behind the building of the vertical list. Thus, it is possible that when this "first" paragraph break occurred, `TeX` was still processing the earlier page. The improvement to the figure placement would be to get the figure to be output as soon as possible after the page break.

A further refinement would be to get the figure to start at the very top of the next page. This might involve placing the figure in the middle of a paragraph.

Perhaps the definitive improvement to these figure insertion techniques would be to define a new `\insert` (say, `\newinsert\rightins`) and revise the output routine to handle a `\rightins` as it does other inserts. This is where output routines do become nasty beasts.

L^AT_EX

Contents of L^AT_EX Style Collection as of 6th September 1987

Ken Yap
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The L^AT_EX style collection now contains the files listed below. They are available for anonymous ftp from Rochester.Arpa in directory public/latex-style. You should retrieve the file 00index first to obtain a brief description of current directory contents. The file 00directory contains a reverse time sorted list of files; this may be helpful in keeping your collection in sync with L^AT_EX-style.

File	Description
00directory	
00index	
00readme	
a4.sty	Set page size to A4
a4wide.sty	Adjusts width too to suit A4
aaai-instructions.tex	Instructions to authors
aaai-named.bst	BiB _T E _X style to accompany aaai.sty
aaai.sty	Style file for AAAI conference 1987
acm.bst	ACM Bib _T E _X style
agugrl.sty	AGU Geophysical Research
*agugrl.sample	Letters style, sample
agujgr.sty	AGU Journal of Geophysical
*agujgr.sample	Research style, sample
amssymbols.sty	Load AMS symbol fonts
*article.txt	Standard files in text format, with places to make
*art10.txt	language specific
*art11.txt	changes indicated
*art12.txt	
bihead.sty	Underlined heading
cyrillic.sty	Load cyrillic font
dayofweek.tex	Macros to compute day of week and phase of moon
deproc.sty	Examples of how to use <code>TeX</code> arithmetic capabilities
deprocldc.tex	DECUS Proceedings style Paper that describes the above
docsty.c	Program to convert .doc to .sty by stripping comments
docsty.readme	
doublespace.sty	Double spacing in text
*draft.sty	Draft option for documents for "debugging"
drafthead.sty	Prints DRAFT in heading
dvidoc.shar1	Sh archive of DVIDOC, DVI to character device filter
dvidoc.shar2	for Unix BSD systems
dvidoc.sty	Style file to substitute all fonts with doc font
epic.shar1	Sh archive of extended
epic.shar2	picture environment
*espo.sty	Style file for Esperanto
format.sty	Print FP numbers in fixed format
fullpage.doc	Get more out of a page
fullpage.sty	
geophysics.sty	Geophysics journal style
*german.sty	Redefines keywords for German documents

ieeetr.bst	IEEE Transactions BibTeX style	slem.sty	
ist21.sty	IST21 document style option for cover page	spacecites.doc	Modified to give spacing between citations
latex.bug	latest listing of bugs found in L ^A T _E X	spacecites.sty	Stanford U thesis style
layout.readme	Prints nice diagram	suthesis.doc	
layout.tex	showing page parameters	suthesis.sty	
lcustom.tex	Useful macros and definitions for L ^A T _E X	texindex.doc	Style file and processor for index entries.
lfonts_ams.readme	Use AMS symbols in L ^A T _E X	texindex.pas	Works under VMS.
lfonts_ams.tex		texindex.sty	Define a couple more T _E X names
lgraph.shar	Sh archive of data to graph command filter in Pascal	texnames.doc	
local.suppl	Supplement to local guide; describes a4, tgrind, sfwmac, trademark, lcustom, and vdm	texnames.sty	Tgrind macros for L ^A T _E X instead of T _E X
*memo.sty	Memo style option	tgrind.sty	Three part page headers
*mfr.sty	Modifier to memo.sty	threepart.sty	Style file in text format to go with article.txt
*mitthesis.sty	Massachusetts Institute of Technology thesis format	*titlepage.txt	Definitions of common trademarks
*mitthesis.sample		trademark.sty	U of California thesis style
natsci.bst	Natural sciences generic BibTeX style	uct10.doc	
*natsci.sty	Formats citations created with natsci.bst	uct11.doc	
newalpha.bst	Modified alphabetic BibTeX style	uct12.doc	
*nl.sty	Style file customized for Dutch	ucthesis.doc	
nopagenumbers.doc	Remove page numbers	ucthesis.readme	
nopagenumbers.sty		vdm.doc	Vienna Development Method L ^A T _E X style
remark.sty	Like newtheorem but no \it	vdm.sty	
*resume.sty	Format for doing resumes	vdm.tex	
*resume.sample	Sample file	ws87.p	Wordstar 8 bit filter
*rscsencode.shar		wsltex.c	Wordstar to L ^A T _E X filter, C version
sc21.sty	ISO/TC97/SC21 document style	wsltex.p	Wordstar to L ^A T _E X filter
sc21-wg1.sty	option for cover page	xxxcustom.tex	Supplementary macros for xxx-tex, for some xxx
sfwmac.sty	Useful macros for Unix documentation	xxxslides.sty	Supplementary macros for S ^L T _E X, includes slides.sty
*showlabels.sty	Shows labels and references to them		
siam.bib	SIAM BibTeX style		
siam.bst			
siam.doc	SIAM L ^A T _E X style		
siam.sty			
siam.tex			
siam10.doc			
siam10.sty			
siam11.sty			
siam12.sty			
slem.doc	Change \s1 to \em		

New entries since the last TUGboat listing are marked with an *. More submissions are very welcome. Send them to

Ken
 LaTeX-Style@Rochester.Arpa
 LaTeX-Style@cs.rochester.edu
 ..!rochester!latex-style

Editor's note: People sending future submissions should note that some gateways to Bitnet strip off everything beyond 80 columns, and perhaps corrupt some other data as well (ASCII tabs may or may not remain intact). Please structure your file so that it will survive.

For Internet users: how to ftp

An example session is shown below. Disclaimer: ftp syntax varies from host to host. Your syntax may be different. The syntax presented here is that of Unix ftp. Comments in parentheses.

Non-Internet users: how to retrieve by mail

An archive server for L^AT_EX files has been installed. Send a piece of mail to LaTeX-Style (@cs.rochester.edu, via UUCP or your favourite gateway) in the following format.

- Subject line should contain the phrase "@file request".
- The body of the mail should start with a line containing only an @ (at) sign.

Important! The first line following the "at" line should be a mail address **from** Rochester **to** you. (Undeliverable mail will be silently dropped on the floor.)

- Follow your return address by the names of the files you want, either one to each line, or many to each line, separated by spaces.
- End with a line containing only an @ sign.
- Case is not significant.

For example, if you are user at site.bitnet, this is what you should send: (*don't forget your address!*)

```
To: latex-style@cs.rochester.edu
Subject: @file request
```

```
@
user%site.bitnet@wiscvm.wisc.edu
00readme
00index
@
```

A word to the wise: it is best to fully qualify your mail address. Our mailer is pretty ignorant of Bitnet, CSnet or UUCP addresses unless they are in registered domains. It is best that you supply explicit gateway routes. Also use the new domainized form or addresses whenever possible because the old .ARPA addresses are fading away.

Examples:

```
user%site.bitnet@wiscvm.wisc.edu
user%site.csnet@relay.cs.net
site!user@uunet.uu.net
```

Note that csnet-relay.arpa doesn't work any more. Long UUCP paths are discouraged. System administrators get upset and your turnaround is very slow anyway.

If the Subject: line looks like:

```
Subject: @file request uuencode
```

or

```
Subject: @file request rscsencode
```

then the mail will be encoded with the requested scheme before sending. This *might* help sites that get mail through gateways with unfriendly EBCDIC/ASCII mappings. You can find sources for the two types of en/decoders in the collection. You may have to do some porting of sources.

Do not include any messages in the mail. It will not be seen by human eyes. Be patient as the server is actually a batch program run once a day. Files will be sent in batches, each not exceeding 100kbytes in size.

IBM PC and clone users: how to get a distribution

David Hopper of Toronto, Canada, is offering copies of the style collection on diskettes. This is not a commercial enterprise. David is doing this in his own time as a favour to the T_EX community. The entire set of style files, as of September 15th, fits on

Sample FTP session for Internet users

```
% ftp cayuga.cs.rochester.edu (a.k.a. cs.rochester.edu, a.k.a. 192.5.53.209)
... (general blurb)
user: anonymous
password: <any non-null string>
ftp> cd public/latex-style (where the files are)
ftp> ls (to see what is there)
... (lots of output)
ftp> get 00index
... (more blurb)
ftp> quit
```

one 1.2 MB diskette or three 360KB diskettes. No subsetting, please. Send David

1. Formatted diskettes,
2. Indication of the format required,
3. A self-addressed mailer, and
4. A \$5.00 donation per set of files, to cover postage and equipment wear & tear. (If you live outside North America, airmail delivery will probably require more postage. You should probably contact David for details.)

NB: 1. David does not have the C_TE_X files. 2. No phone calls or personal visits.

David's address:

David W. Hopper
446 Main Street
Toronto, Ontario
Canada M4C 4Y2
Thanks, David.

Editor's note: Traffic on the network servers and gateways has been very high recently, and in order to provide improved service, there have been some volunteers to maintain local "slave" repositories of the L^AT_EX style collection. There is usually a geographic or network restriction requested, since the idea is to cut down traffic, not add to it. The following areas will be covered by the volunteers listed.

- Bitnet users: Texas A&M maintains a list-and file-server which is already handling (with TEX-L) much of the Bitnet distribution of T_EXhax. An inquiry via listserv will retrieve a list of all T_EX-related files:
tell listserv at tamvm1 get tex filelist
- United Kingdom, for users of JANET or uucp: Stephen Page, sdpage@uk.ac.ox.prg or ...!ukc!ox-prg!sdpage
- European users of BITnet: Christoph Gatzka, zrgc002@dtuzdv5a.Bitnet

Additional volunteers should contact Ken.

The L^AT_EX User's Column

Jackie Damrau
University of New Mexico

Since there has not been much activity in this column, we have decided to try to take problems and answers from T_EXhax. If anyone who submits material to T_EXhax does not want an item republished, please let me know. The questions section below starts off with a few items from other mail networks.

At the T_EX conference in August, there was some discussion that this column should also be a question and answer column for beginners. So **BEGINNERS**, please submit your questions to

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or

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A L^AT_EX Bug

We did receive a copy of a letter to Leslie Lamport about a possible L^AT_EX bug:

I recently uncovered a bug in L^AT_EX Version 2.09 (as of April 19, 1986). While inside the tabbing environment, every time a \> command appears two words on T_EX's save stack get used. Thus any large tabbing environment can cause a save stack overflow, resulting in this error message

TeX capacity exceeded, sorry.

This is especially true if your system is configured with a small save stack size. The problem stems from your doing both global and local assignments to box register \@curline and is explained in *The T_EXbook* on page 301.

I fixed the problem by changing this declaration
\def\@addfield{\global\setbox\@curline
 \hbox{\unhbox\@curline
 \unhbox\@curfield}}

to

\def\@addfield{\setbox\@curline
 \hbox{\unhbox\@curline
 \unhbox\@curfield}}

Note the absence of the \global in the redefinition. The fix seems to work fine, but I don't know if it will cause any bad repercussions somewhere else.