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There is always a danger of becoming so entranced with speed and efficiency that we may forget that suitability to use is still the most important element of any typographic job.

Oscar Ogg
The 26 Letters, Revised edition (1971)

TUGBOAT

COMMUNICATIONS OF THE TEX USERS GROUP
EDITOR BARBARA BEETON

VOLUME 21, NUMBER 1 • MARCH 2000
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TUGboat

During 2000, the communications of the TEX Users Group will be published in four issues. The September issue (Vol. 21, No. 3) will contain the Proceedings of the 2000 TUG Annual Meeting.

TUGboat is distributed as a benefit of membership to all members.

Submissions to *TUGboat* are reviewed by volunteers and checked by the Editor before publication. However, the authors are still assumed to be the experts. Questions regarding content or accuracy should therefore be directed to the authors, with an information copy to the Editor.

Submitting Items for Publication

The next regular issue will be Vol. 21, No. 2. Production and mailing have been delayed; the second and third issues for 2000 are expected to be sent to the printer in October. Deadlines for future issues are listed in the Calendar, page 92.

Manuscripts should be submitted to a member of the *TUGboat* Editorial Board. Articles of general interest, those not covered by any of the editorial departments listed, and all items submitted on magnetic media or as camera-ready copy should be addressed to the Editor, Barbara Beeton, or to the Production Manager, Mimi Burbank (see addresses on p. 3).

Contributions in electronic form are encouraged, via electronic mail, on diskette, or made available for the Editor to retrieve by anonymous FTP; contributions in the form of camera copy are also accepted. The *TUGboat* "style files", for use with either `plain` TEX or LATEX, are available from CTAN. For authors who have no network FTP access, they will be sent on request; please specify which is preferred. Send e-mail to `TUGboat@tug.org`, or write or call the TUG office.

This is also the preferred address for submitting contributions via electronic mail.

Reviewers

Additional reviewers are needed, to assist in checking new articles for completeness, accuracy, and presentation. Volunteers are invited to submit their names and interests for consideration; write to `TUGboat@tug.org` or to the Editor, Barbara Beeton (see address on p. 3).

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For information about advertising rates, publication schedules or the purchase of TUG mailing lists, write or call the TUG office.

TUGboat Editorial Board

See page 3 for addresses.

Other TUG Publications

TUG publishes the series *TEXniques*, in which have appeared reference materials and user manuals for macro packages and TEX-related software, as well as the Proceedings of the 1987 and 1988 Annual Meetings. Other publications on TEXnical subjects also appear from time to time.

TUG is interested in considering additional manuscripts for publication. These might include manuals, instructional materials, documentation, or works on any other topic that might be useful to the TEX community in general. Provision can be made for including macro packages or software in computer-readable form. If you have any such items or know of any that you would like considered for publication, send the information to the attention of the Publications Committee at `tug-pub@tug.org` or in care of the TUG office.

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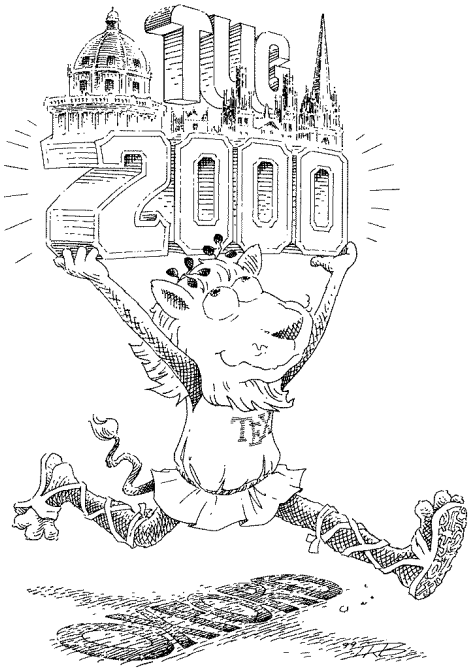
TUG 2000

Wadham College, Oxford, UK
August 13th–16th, 2000

The 21st Annual Conference of the TEX Users Group will take place at Wadham College, Oxford, between Sunday 13th August and Wednesday 16th August 2000. Tutorials will be given on the 17th and 18th August.

The Location

Oxford is a small, pleasant city with an internationally famous university. The city is full of ancient buildings, beautiful gardens, libraries and bookshops. The conference will be held in Wadham College, a traditional college (founded 1613) in the centre of the city. Oxford is easily reached from London, and is a good starting point for visiting much of southern England.



The Conference

The conference will feature talks on all aspects of TEX and its relationship to both traditional and electronic document preparation and processing.
The Annual General Meeting of the TEX Users' Group will be held during the period of the conference.
We expect the cost to a typical delegate to be about £300, including accommodation and meals; cheaper accommodation and bursaries will also be available.
The conference chairman is Sebastian Rahtz (Oxford University Computing Services) and local organisation is led by Kim Roberts (Oxford University Press).

Dates and Contacts

15th January 2000	Proposals for papers
31st January 2000	Acceptance of papers
15th February 2000	Publication of booking form and prices
31st March 2000	Delivery of papers for refereeing
31st May 2000	Delivery of final papers
General enquiries:	`tug2000-enquiries@tug.org`
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General Delivery

From the President

Mimi Jett

Greetings, fellow TUG members!

As this is the first issue of 2000, originally scheduled for March 30, I was going to write an "April Fools" piece to follow Richard Kinch's joke last year that Dr. Knuth had sold the rights to TEX to Microsoft. Amazingly, Richard's article was picked up and reprinted all over the world. Many took it seriously, possibly because of the outstanding journalistic style, or maybe it was the fear of your worst nightmare coming true. In any case, it was a good joke and I applaud Richard Kinch for sharing his humor. My little joke was to be about a brand new LUG called TUNA (TEX Users of North America). Conversations about TUG being an umbrella organization for worldwide LUGs have gone on as long as I can remember. Some people think we need a separate organization for the USA and Canada, so this was a great opportunity to have some fun with it. But seriously, TUG is for everyone, wherever they live. Finding enough volunteers to staff another organization would be difficult, not to mention expensive. More importantly, there is no need. I personally feel that we are doing a good job for all of our members in more than 60 countries.

Now that we are well into the year 2000, I am not going to pretend it is March 30 even though that is the target publication date for this issue. We are extremely late, not due to any shortcomings of our Editor or Production Manager, but simply because we need an ample supply of good articles to publish. For some reason, the flow of new material has slowed down, making it difficult to publish a meaningful journal with scarce new content. Please, if you have been thinking of contributing, or have something interesting to share with the TEX community, make it a priority to write the article (or book review, or hints & tips, or whatever) and forward it to our Editor, Barbara Beeton (`bnb@ams.org`). If only 5% of our members contribute, we will have enough new material to carry us for a year.

In this issue you will find the latest TEX Live CD containing more TEX and related tools than you will find anywhere else. This distribution is a benefit of membership, we hope you find it useful and valuable. There is a one-page introduction, followed by a listing of the CTAN Catalogue, by Graham Williams, indicating which items are present on the CD, and which you will have to look for on CTAN. Please let us know what you think. Send your comments to `board@tug.org`.

Another benefit we are working on providing is training. This is easily the most requested service we can offer. Our goal is to provide regularly scheduled seminars, probably twice each year in America as well as in Europe. Working with the LUGs around the world, we are developing a prospectus of courses which will be taught by seasoned professionals. From basic introduction to advanced programming and even working with MathML, TUG will provide a series that every user can learn from. If you have ideas, enthusiasm, or time to help, please contact our Office Manager, Robin Laakso, (`office@tug.org`) or our Program Chair, Susan DeMeritt, (`sue@ccrwest.org`).

Since I have already admitted that it isn't March any more, I will forgo inviting you to the annual conference in Oxford. It was an impressive meeting, with great presentations and stellar organization. But I am getting ahead of myself here; you will have to wait a little bit for the proceedings issue, which will be coming soon. Also coming soon will be the next issue of *TUGboat* which will contain the 3-CD set of the CTAN archives. This is yet another benefit of membership that you will certainly enjoy.

Finally, a note of thanks to all of our members, past and present. Last year at the meeting in Vancouver, we set a goal of "2000 members by 2000" which was accomplished late in 1999. By joining TUG and contributing to our publications and projects, you are contributing to a worldwide consortium and expanding knowledge base dedicated to mathematics and science and other disciplines that can benefit from capable publishing tools. Thank you, members!

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Editorial Comments

Barbara Beeton

Erratum: Address for CyrTEX mail

In last issue's instance of this column, under "International news", an incorrect address was given for subscribing to CyrTUG's Russian discussion list; the instructions should have been: To join the list, send e-mail to `CyrTeX-ru-subscribe@vsu.ru`. I failed to say that there is also an English-language list for discussing cyrillic problems: subscribe at `CyrTeX-en-subscribe@vsu.ru`. To send mail to either list, remove `-subscribe` from the subscription addresses.

Both lists are archived, and are available at `https:info.vsu.ru/Lists/CyrTeX-**/List.html`, substituting `ru` or `en` for the `**` as appropriate.

Thanks to Vladimir Volovich for the correction and additional information.

History of TEX

Karl Berry reminds us that there's a site for history buffs at `ftp://tug.org/historic`. At this site are posted old releases of TEX, METAFONT, LATEX, and other TEX-related software.

Anyone who might have any copies of source code, change files, or platform-specific distributions is invited to get in touch. I will route the information to someone who can arrange for an upload of archive-worthy antiques.

Computers & Typesetting remains in print

Although the Addison Wesley Longman web site may still not be up to date, I have been advised by the A-W Production Director that it is their intention to keep all five *C & T* volumes in print indefinitely, probably through a print-on-demand facility. All but *The TEXbook* and *The METAFONTbook* accidentally got on A-W's out-of-print list when their warehouse and inventory systems changed.

Anyone who has sought a copy of one of these volumes should keep watching at `http://www.awl.com/`, search on "knuth".

Please be aware that new printings will not incorporate errata found since the last printing; for errata, as always, look on CTAN in `systems/knuth/errata/`.

A new printing museum near Boston

In Boston, the collections of the Museum of Printing have been housed in borrowed warehouse space for a number of years. Their long search for permanent quarters has been rewarded; a building originally constructed to house the heavy looms of a textile museum was vacated about a year ago when that museum moved to Lowell, Massachusetts, to be part of the complex surrounding the Lowell National Historical Park. The new Museum of Printing is located in North Andover, north of Boston. The grand opening will be held on July 29, and there will be a preview associated with TypeCon 2000 on June 18, which I hope to attend.

This museum is of particular interest to me as I have been looking for a home for composition-related items — bits of old hardware and associated papers — used at the Math. Society before (and since) the adoption of TEX. The person in charge of the museum's collections has confirmed their interest in these objects. I now have added to my to-do list the task of cataloguing this material so that its context is not lost.

For more information, visit the museum's web site at `http://www.museumofprinting.org/`.

And visit the TUG web page for a list of printing museums around the world. We're actively updating this, so if you have any additions, please send them to us for posting.

Evolution of alphabets

Here's another web page that provides considerable food for thought. Did you know that most Western alphabets are ultimately derived from Phoenician? And that Phoenecian derived in turn from the pictographs of Proto-Sinaitic? These glyphs found in the Sinai peninsula, and dating from ca. 1500 BC, are assumed to be the source of the sound symbols developed several centuries later by the Phoenicians.

Visit `http://www.wam.umd.edu/~rfradkin/alphapage.html` for material associated with a course on "History of the Alphabets" taught by Professor Robert Fradkin at the University of Maryland.

Alphabets shown on these pages include cuneiform, Phoenician, Greek, Latin, Cyrillic, Arabic, and more. Watch shapes change, new letters appear. If you have any interest at all in where your writing system came from, this should more than satisfy your curiosity.

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Software & Tools

XƎMTEX (Version 2.00) as Implementation of the XƎM Notation and the XƎM Markup Language

Shinsaku Fujita and Nobuya Tanaka

Introduction

The XƎMTEX system [1, 2] has been accepted by TEX/LATEX users as a tool for typesetting chemical structural formulas, since it incorporates several advantages over previous systems [3, 4]. The first version of the system (version 1.00, 1993) with a detailed on-line manual has been deposited to the @Nifty archives (FTEX library No. 11) by one of the authors [5] and to the CTAN by volunteers [6]. Articles on the construction and usage of XƎMTEX have appeared in Ref. [1, 2]. Although the packages (style files) of the XƎMTEX system were originally intended for use under the LATEX2.09 system, they also work effectively under LATEX 2_ε [7, 8, 9] without any changes.

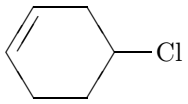
Version 1.01 of the XƎMTEX system was released in 1996. This version is available from the @Nifty archives [10] or from a CD-ROM that is attached to the reference manual published in 1997 [11, 12]. The main purpose of version 1.01 is the updating of XƎMTEX to meet the LATEX 2_ε way of preparing packages (option style files). The following items were revised or added to encourage XƎMTEX users to write articles in chemical fields.

1. Each of the old sty files of XƎMTEX has been rewritten into a dtx file, from which we have prepared a new sty file by using the docstrip utility [8] of LATEX 2_ε. If you want to obtain the documentation for each source file, you may apply LATEX 2_ε to the corresponding drv file, which has also been prepared from the dtx file by using the docstrip utility.
2. Macros for drawing chair-form conformers of cyclohexane and for drawing adamantanes of an alternative type have been added.
3. Macros for drawing polymers have been added.
4. The package chemist.sty, which was originally prepared for [13], has been rewritten into a dtx file and added to XƎMTEX as a new component. This package enables us to use various functions such as
   (a) the numbering and the cross-reference of chemical compounds and derivatives,
   (b) various arrows of fixed and flexible length for chemical equations,
   (c) 'chem' version and chemical environments for describing chemical equations, and
   (d) various box-preparing macros for chemical or general use.

The XƎMTEX command system can be regarded as a linear-notation system, which corresponds to the IUPAC nomenclature [14, 15] or to the CAS nomemclature [16]. For example, the command

```
\cyclohexaneh[a]{4==Cl}/
```

for drawing **1** corresponds to the IUPAC name, 4-chlorocyclohex-1-ene, where the substituent "4-chloro" is generated by the code "`4==Cl`" in the braces (a substitution list: SUBSLIST) and the endocyclic double bond "1-ene" comes from the code "`a`" in the brackets (a bond list: BONDLIST).

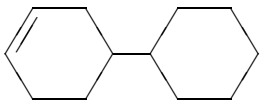


1

The chlorine atom in **1** is replaced by a cyclohexyl group so as to give 4-cyclohexylcyclohex-1-ene (**2**). According to this derivation, such a command as

```
\cyclohexaneh[a]{4==\cyclohexaneh{}}
```

should be capable of drawing the formula **2** in order that the XƎMTEX command system remains a linear-notation system. However, the latter command is incapable of drawing **2** within XƎMTEX version 1.01, since this version has postulated rather small substituents for the SUBSLIST.



2

Within the scope of XƎMTEX version 1.01, such a substituent with a complicated structure requires a direct description of layout data, as shown in Chapters 14 and 15 of the XƎMTEXbook [11]. Thus, we can use the picture environment of LATEX:

```
\begin{picture}(1400,700)(0,0)
\put(0,0){\cyclohexaneh[a]{4==}}
\put(546,0){\cyclohexaneh{}}
\end{picture}
```

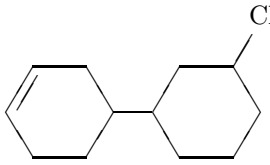
or the `\kern` command for horizontal adjustment and the `\lower` command for vertical adjustment in plain TEX:

```
\cyclohexaneh[a]{4==\kern-25pt%
\lower37pt\hbox{\cyclohexaneh{}}}
```

Although these methods are useful for drawing complicated structures, such layout data should be hidden to realize a coherent system of drawing structural formulas. Moreover, the methods have another essential disadvantage: their codes give no, or at most partial, connectivity data between parts to be combined, though such parts appear to be combined as a picture. For example, the code

```
\cyclohexaneh[a]{4==\kern-25pt%
\lower37pt\hbox{\cyclohexaneh{3==Cl}}}
```

producing 4-(3-cyclohex-1-yl)cyclohex-1-ene (**3**) has no connectivity data at the 1-position to the 3-chlorine atom of the second cyclohexane ring:



3

For the purpose of overcoming the disadvantages, a new system to be developed should allow us to write such a code as `\cyclohexaneh{1==(yl)}` for representing the cyclohexyl substituent. Thus, we find the code for **2**:

```
\cyclohexaneh[a]{%
4==\cyclohexaneh{1==(yl)}}
```

where the code "`1==(yl)`" represents the substitution position. This specification of a substitution position is called a yl-function in the present paper. In order to represent the 3-cyclohex-1-yl substituent for 4-(3-cyclohex-1-yl)cyclohex-1-ene, the new system should enable us to use a code such as

```
\cyclohexaneh{1==(yl);3==Cl}
```

as found in the code for **3**:

```
\cyclohexaneh[a]{%
4==\cyclohexaneh{1==(yl);3==Cl}}
```

According to this approach, the XyMTEX command system has been refined and extended to give a new linear-notation system, which is now called the *XyM Notation* [17, 18]. The abstract nature of the XyM Notation means that XyMTEX is now regarded as a software application for TEX/LATEX printing, where the XyM Notation is parsed by virtue of TEX/LATEX. It follows that a further system can be developed on the basis of the XyM Notation if another parsing sytem is available. Moreover, the XyM Notation can be used as an intermediate language, into which another language for representing structural formulas is translated so as to print out the formulas. This is the approach reported for the XyM Markup Language (XyMML) [19].

Table 1: Package Files of XyMTEX

package name	included functions
aliphat.sty	macros for drawing aliphatic compounds
carom.sty	macros for drawing vertical and horizontal types of carbocyclic compounds
lowcycle.sty	macros for drawing five-or-less-membered carbocyles.
ccycle.sty	macros for drawing bicyclic compounds, etc.
hetarom.sty	macros for drawing vertical types of heterocyclic compounds
hetaromh.sty	macros for drawing horizontal types of heterocyclic compounds
hcycle.sty	macros for drawing pyranose and furanose derivatives
chemstr.sty	basic commands for atom- and bond-typesetting
locant.sty	commands for printing locant numbers
polymers.sty	commands for drawing polymers
fusering.sty	commands for drawing units for ring fusion
methylen.sty	commands for drawing zigzag polymethylene chains
xymtex.sty	a package for calling all package files
chemist.sty	commands for using 'chem' version and chemical environments

As clarified by the discussions described in the preceding paragraphs, the first goal of this article is to show a mechanism for the adjustment of substitution positions (or for concealing layout data), which has been developed in XyMTEX version 2.00 to support the XyM Notation and XyMML. The second goal is to exhibit its scope and limitations by using illustrative exmaples.

XyMTEX Version 2.00

Overview Version 2.00 of XyMTEX (1998 and 1999) supports the yl-function introduced by the XyM Notation [20], where a complicated substituent is treated as a modification of a substitution list (SUBSLIST). As an extension of this methodology, a bond list (BONDLIST) can be modified to treat ring

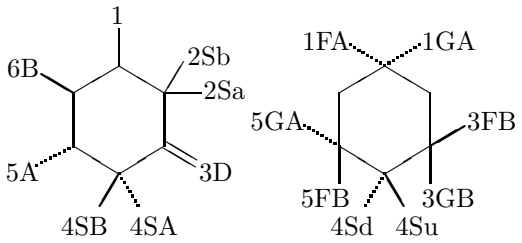


Figure 1: Examples of Locant Numbers and Bond Modifiers

fusion, since each ring fusion is considered to be a kind of substitution on a bond. In addition, an atom list (ATOMLIST) can also be used to treat spiro rings, since each spiro ring is a kind of atom replacement at an appropriate vertex.

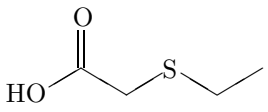
The XyMTEX system (version 2.00) consists of the package files listed in Table 1. The package file chemstr.sty is the basic file that is automatically read within any other package file of XyMTEX. It contains macros for internal use, e.g., common commands for bond-setting and atom-setting. The other package files contain macros for users. The use of xymtex.sty calling all package files may sometimes cause the "TEX capacity exceeded" error. In this case, you should call the necessary packages explicitly by using the `\usepackage` command.

Commands and Functions Added To expand the scope of the XyMTEX system, several new functions have been introduced as follows.

1. Several bond modifiers are added to draw alternative up- and down-bonds as well as to treat ring fusion, as shown in the right formula of Figure 1.

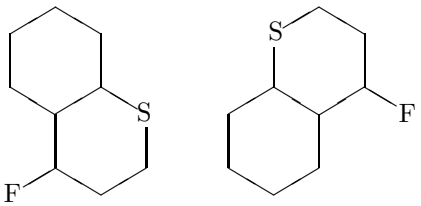
2. Commands for typesetting zigzag polymethylenes are developed (methylen.sty). For example, we obtain

```
\pentamethylenei{3==S}{1D==O;1W==HO}
```



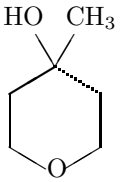
3. Commands for drawing six-six fused carbocycles and heterocycles are added. Thus, the suffixes "vb" and "vt" are used along with "v", "vi", "h" and "hi":

```
\decaheterovb{1==S}{4==F}
\decaheterovt{1==S}{4==F}
```



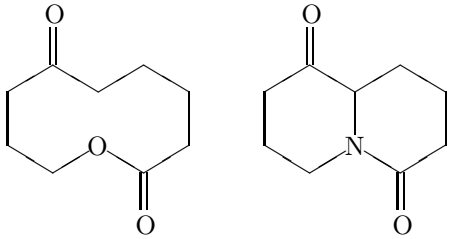
4. An optional argument (SKBONDLIST) for representing stereochemistry, e.g., (`{aA}{fB}`), is added to each command of general use for drawing boldfaced and dotted skeletal bonds.

```
\sixheterov({aA}{fB})%
{4==O}{1Sa==CH$_{3}$;1Sb==HO}
```



5. An optional argument (OMIT) is added to each command for drawing related skeletons by bond deletion. Compare the following structural formulas drawn by the codes with and without an OMIT argument (`[k]`).

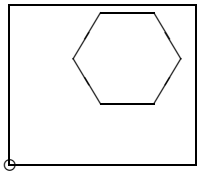
```
\decaheterov{9==O}{4D==O;8D==O}[k]
\decaheterov{9==N}{4D==O;8D==O}
```



Substitution Derivation

This section deals with the yl-function for complex substitution, where this type of derivation is called *substitution derivation* because of the usage of a substitution list (SUBSLIST).

Adjusting Mechanism For a usual drawing mode, each XyMTEX command has its reference point of x and y-coordinates $(0, 0)$, since XyMTEX is based on the LATEX picture environment. For example, the `\cyclohexaneh{}` command has the reference point shown by a circle in the following diagram:



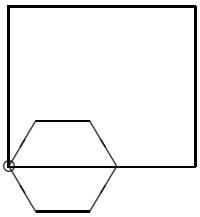
which is drawn by the code:

```
\begin{picture}(700,600)(0,0)
\put(0,0){\circle{40}}
\put(0,0){\cyclohexaneh{}}
\end{picture}
```

The frame is added to show the domain (700,600) of the picture environment, where the bottom-left vertex of the frame corresponds to the origin of (0,0), as shown by a small circle [22]. The reference point can be shifted to a vertex of the cyclohexane ring by means of the code:

```
\begin{picture}(700,600)(240,400)
\put(240,400){\circle{40}}
\put(0,0){\cyclohexaneh{}}
\end{picture}
```

where the second argument (240,400) specifies x- and y-shift values. Thereby, we obtain the following diagram:



Then the resulting structure with the reference point shifted is placed in the SUBSLIST of the outer skeleton.

The `\cyclohexaneh` command is defined on the basis of the `\sixheteroh` command, which involves the mechanism of shifting the reference point. The fundamentals of the mechanism are in turn implemented in its inner command `\@sixheteroh`. The definition of this command is cited from hetaromh.sty as follows:

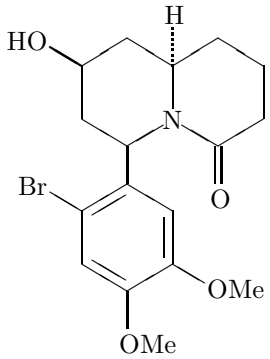
```
\def\@sixheteroh(#1)[#2]#3#4[#5]{%
\iniatom\iniflag%initialize
\test@vrtx@sixh{#3}%
\@reset@ylsw%
\ylpositionh{#4}{0}{0}{7}{0}%
\if@ylsw
 \yl@shiftii=\@ylii
 \yl@shifti=\@yli
 \advance\yl@shiftii\yl@xdiff
 \advance\yl@shifti\yl@ydiff
\begin{picture}(0,0)%
(-\yl@shiftii,-\yl@shifti)
 \reset@yl@xydiff%
\else
\begin{picture}(880,800)(-240,-400)%
%(abbreviated)
\fi
%(abbreviated)
\end{picture}
}
```

The inner testing command `\ylpositionh` tests the SUBSLIST (the argument #4) to return a switch `\@ylswtrue` and shift values for adjustment, if a code `(yl)` is found in the list. Then, the reference point of the inner picture environment is shifted to the point `(-\yl@shiftii,-\yl@shifti)`.

Nested Substitution The yl-function is quite versatile, as indicated by the code

```
\decaheterov[]{4a==N}{4D==O;7B==HO;%
{{10}A}==H;5==\bzdrv{3==OMe;4==OMe;%
6==Br;1==(yl)}}
```

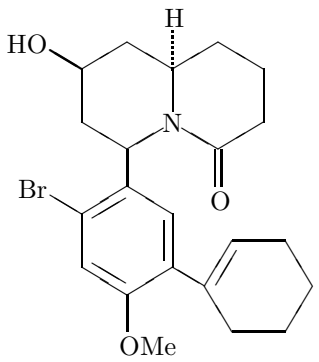
which produces the following structure:



where the substituted phenyl group is regarded as a substituent. In order that the phenyl substituent has a cyclohexenyl substituent in place of the methyl substituent, the code

```
\decaheterov[]{4a==N}{4D==O;7B==HO;%
{{10}A}==H;5==\bzdrv{4==OMe;%
3==\cyclohexaneh[a]{1==(yl)};%
6==Br;1==(yl)}}
```

is written to generate a formula with a nested substituent as follows:

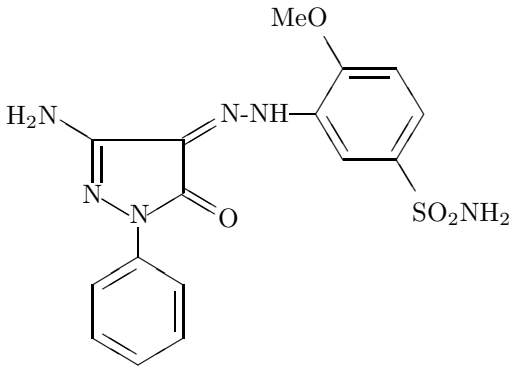


Linking Moieties The commands `\ryl` and `\lyl`, which are contained in the chemstr package (file name: chemstr.sty), are used to typeset linking moieties. For example, the command `\ryl` take a linking unit (N–NH) as the first argument and

a substituent with the yl-function as the second argument, as found in the following code:

```
\fiveheterov[d]{1==N;5==N}{4==H$_{2}$N;%
1==\bzdrv{1==(yl)};2D==O;%
3D==\ryl(5==N-NH){4==\bzdrh{1==(yl);%
2==\lmoiety{MeO};5==SO$_{2}$NH$_{2}$}}}
```

This code typesets the following formula:

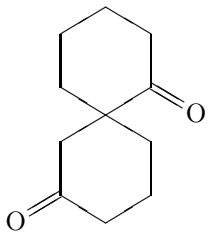


Atom Derivation

A new function for typesetting a spiro ring is introduced in each command for general use, in which a substituent generated by the yl-function is placed in its atom list (ATOMLIST). For example, the code

```
\sixheterov{1s==\sixheterov{}%
{4==(yl);3D==O}}{5D==O}
```

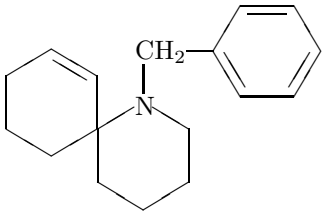
contains a code for a spiro-cyclohexanone ring, i.e., `\sixheterov{}{4==(yl);3D==O}` produced by the yl-function. Note that the atom modifier '`1s`' in the code represents the absence of a hetero-atom at the spiro 1-position. Thus, we can draw a spiro[5.5]undecane represented by the following formula:



The following code:

```
\sixheterov{1==N;%
6s==\cyclohexanev[a]{3==(yl)}}%
{1==\ryl(8==CH$_{2}$){4==\bzdrh{1==(yl)}}}
```

contains yl-functions in an atom list as well as in a substitution list. Using this, we can draw a 1-azaspiro[5.5]undecane,

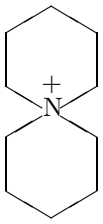


which is the skeleton present in histrionicotoxin.

When a hetero-atom is present at the spiro position, an atom modifier '`h`' is used in place of '`s`'. For example, the code

```
\sixheterov{1h==\sixheterov[{4+}]%
{4==N}{4==(yl)}}{}
```

typesets the following formula:



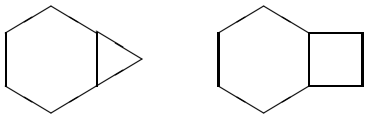
It should be noted that the BONDLIST of the inner `\sixheterov` contains the code `{4+}`, which is used for drawing a plus charge at an inner position of the cyclohexane ring.

Bond Derivation

Fusing Units Several fusing units (three- to six-membered units) have been developed (fusering.sty). For example, the codes

```
\cyclohexanev[{B\threefuseh{}{}{b}}]{}
\cyclohexanev[{B\fourfuse{}{}{D}}]{}
```

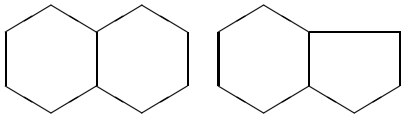
contain such three- and four-membered fusing units, `\threefuseh` and `\fourfuse`. They generate fused cyclic compounds as follows.



In addition, five- and six-membered fusing units (`\fivefusev` and `\sixfusev`) contained in the code,

```
\cyclohexanev[{B\fivefusev{}{}{D}}]{}
\cyclohexanev[{B\sixfusev{}{}{e}}]{}
```

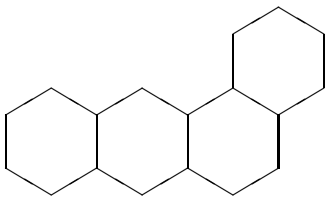
are used to typeset the following bicyclo compounds:



Ring Fusions Ring fusion is treated by adding a fusing unit to the BONDLIST of each command. A unit to be fused is written in the BONDLIST of a command with a bond specifier (a lowercase or uppercase alphabet) in one way. For example, the code

```
\hanthracenev[{A\sixfusev{}{}{d}}]{}
```

generates a perhydroanthracene with a fused six-membered ring at the bond 'a' of the perhydroanthracene nucleus:



The letter 'A' of the code `{A\sixfusev{}{}{d}}` is a bond specifier that represents the older terminal of the bond 'a' of the perhydroanthracene nucleus [21]. On the other hand, the code `\sixfusev{}{}{d}` of `{A\sixfusev{}{}{d}}` in the BONDLIST represents the fused six-membered ring with the bond 'd' omitted. The letter 'd' indicates that the fusing point of the unit is the younger terminal of the omitted bond 'd'. If the the fusing point of the unit is the other (older) terminal, the corresponding uppercase letter 'D' should be used.

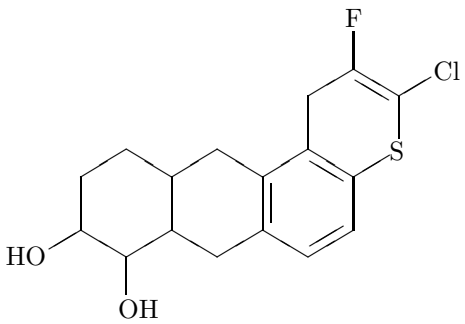
Accordingly, the same formula can be drawn by the code exchanging uppercase and lowercase letters, as found in the following code:

```
\hanthracenev[{a\sixfusev{}{}{D}}]{}
```

We can use SUBSLISTs to specify substituents, BONDLISTs to specify endocyclic double bonds, and ATOMLISTs to specify heterocyclic atoms in such fused derivatives. For example, the code

```
\hanthracenev[aco{A\sixfusev[a]{3==S}%
{1==F;2==Cl}{d}}]{5==OH;6==HO}
```

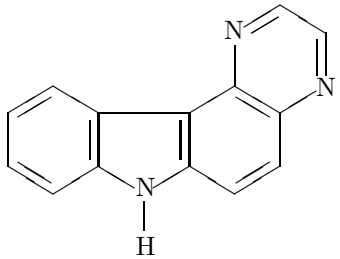
gives a tetracycle having additional substituents:



Nested Ring Fusions The `\sixfusev` command is capable of accomodating another `\sixfusev` command in a nested fashion. By this technique, the carbazole structure can take a further fused ring so as to produce the structural formula of 7*H*-pyrazino[2,3-*c*]carbazole. Thus, the code,

```
\nonaheterov[begj{b\sixfusev[%
ac{a\sixfusev[bf]{6==N;3==N}{}{D}}]%
{}{}{e}}]{1==N}{1==H}
```

gives the structural formula of the fused heterocycle:



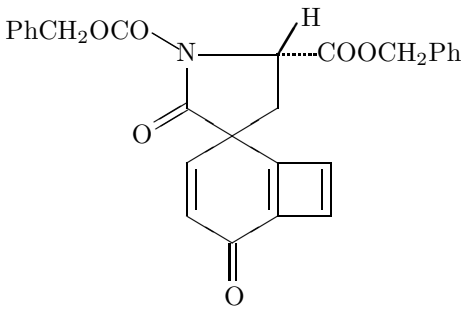
which is depicted by attaching a six-membered ring (`\sixfusev[ac]{}{}{e}`) to the bond 'b' of an indole nucleus.

Combined Derivations

Three types of derivations can be combined to draw complicated structural formulas. For example, the code

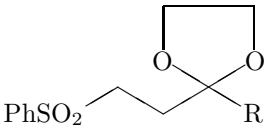
```
\sixheterov[be{B\fourfuse[b]{}{}{D}}]{%
1s==\fiveheterov{4==N}{1==(yl);3SB==H;%
3SA==COOCH$_{2}$Ph;%
4==PhCH$_{2}$OCO;5D==O}}{4D==O}
```

involves a bond derivation (a 4–6 fused ring) and an atom derivation (a 5–6 spiro ring) to give the following formula:



Synonyms

The XYM notation system is so flexible in selecting mother skeletons that there can be several ways to draw structural formulas of the same meaning. For exmaple, a 1,3-dioxolane derivative

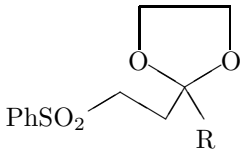


can be drawn by the code,

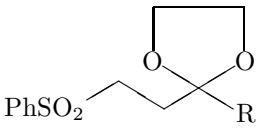
```
\fiveheterov{2==O;5==O;%
1s==\trimethylenei{}{3==(yl);%
1W==PhSO$_{2}$;3W==R}}{}%
```

The same compound is also drawn by usual techniques as follows:

```
\fiveheterov{2==O;5==O}{%
1Sb==\dimethylenei%
{}{2==(yl);1W==PhSO$_{2}$};1Sa==R}
```




```
\fiveheterov{2==O;5==O}{1G==\dimethylenei%
{}{2==(yl);1W==PhSO$_{2}$};1F==R}
```



Conclusion

XyMTEX (version 2.00) is regarded as an implementation of the XyM Notation, which is a linear notation for representing organic structures. The XyM Notation is an extension of the previous XyMTEX command system (versions 1.00 and 1.01) and they are apparently akin to each other. However, they are conceptually different in that the former removes layout data by virtue of the newly introduced concepts of yl-function, substitution derivation, atom derivation, and bond derivation. Moreover, the XyM Markup Language (XyMML) has been developed as a markup language for representing organic structures. XyMML is translated into the XyM Notation, which, in turn, can be used to print out structural formulas by means of the new version of XyMTEX.

References

[1] Fujita S., "Typesetting structural formulas with the text formatter TEX/LATEX", *Comput. Chem.*, **18**, 109 (1994).

[2] Fujita S., "XyMTEX for Drawing Chemical Structural Formulas", *TUGboat* **16** (1), 80 (1995).

[3] For the ChemTEX macros, see Haas R. T. & O'Kane K. C., *Comput. Chem.*, **11**, 251 (1987).

[4] For drawing chemical formulas by TEX, see Ramek M., in Clark M. (ed), *TEX: Applications, Uses, Methods*, Ellis Horwood, London (1990), p. 277.

[5] @Nifty achives, FTEX library No. 11, Item Nos. 201, 202, 204. For @Nifty achives, see `http://www.nifty.ne.jp/fonum/fprint/ftex/`.

[6] For CTAN, see `http://tug.ctan.org/tex-archive/macros/latex209/contrib/xymtex/`.

[7] Lamport L., *LATEX: A Document Preparation System*, 2nd ed. for LATEX 2_ε, Addison-Wesley, Reading (1994). See also Lamport L., *LATEX: A Document Preparation System*, Addison-Wesley, Reading (1986).

[8] Goossens M., Mittelbach F., & Samarin A., *The LATEX Companion*, Addison-Wesley, Reading (1994).

[9] Goossens M., Rahtz S., & Mittelbach F., *The LATEX Graphics Companion*, Addison-Wesley Longman, Reading (1997).

[10] @Nifty achives, FTEX library No. 11, Item Nos. 385, 386.

[11] Fujita S., *XyMTEX—Typesetting Chemical Structural Formulas*, Addison-Wesley, Tokyo (1997). The book title is abbreviated as "XyMTEXbook" in the present article.

[12] The basic items described in the XyMTEXbook are common and applied also in XyMTEX version 2.00. Please refer to the XyMTEXbook, when they are used without explanations in the on-line manual for version 2.00.

[13] Fujita S., *Kagakusha-Seikagakusha no tame no LATEX (LATEX for Chemists and Biochemists)*, Tokyo Kagaku Dozin, Tokyo (1993).

[14] IUPAC Organic Chemistry Division, Commission on Nomenclature of Organic Chemistry, *Nomenclature of Organic Chemistry, Sections A, B, C, D, E, F and H*, 4th ed., Pergamon, Oxford (1979).

[15] IUPAC Organic Chemistry Division, Commission on Nomenclature of Organic Chemistry (III.1), *Guide to IUPAC Nomenclature of Organic Compounds. Recommendations 1993*, Blackwell, London (1993).

[16] Chemical Abstracts, *Index Guide 1992–1996, Appendix IV*, Chemical Abstracts Service, Columbus (1997).

[17] Fujita S. & Tanaka N., "XyM Notation for electronic communication of organic chemical structures", *J. Chem. Inf. Comput. Sci.*, **39**, 903 (1999).

[18] For linear notations of organic structures, see Davis C. H. & Rush J. E., *Information Retrieval and Documentation in Chemistry*, Greenwood, Westport (1974).

[19] Fujita S., "XyM Markup Language (XyMML) for electronic communication of chemical documents containing structural formulas and reaction schemes", *J. Chem. Inf. Comput. Sci.*, **39**, 915 (1999).

[20] The system is now available from Fujita's homepage via the Internet:
`http://www.chem.kit.ac.jp/fujita/fujitas/fujita.html`
A detailed manual is also available from this homepage.

[21] For the designation of the bonds of perhydroanthracene, see Chapter 5 of the XyMTEXbook. Note that the younger terminal of the bond 'a' is designated by the letter 'a'. The word 'older' or 'younger' is concerned with the order of numbering of vertices. For a six-membered ring, the numbering 1—2—3—4—5—6—1 shows that the terminal 1 of the bond 'a' (1—2) is younger, while the terminal 2 of the bond 'a' is older. It should be noted that the terminal 6 of the bond 'f' (6—1) is younger, while the terminal 1 of the bond 'f' is older.

[22] The `\cyclohexaneh` command of the present distribution of XyMTEX (version 2.00) contains a bug. Until the bug is fixed, please include the following code in the preamble of your article:

```
\makeatletter%bug for version 2.00
\def\cyclohexaneh{\@ifnextchar[%
{\@cyclohexaneh[@]{\@cyclohexaneh[@]}}
\makeatother
```

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Resources

The TUG CTAN Site Makes a Move

Jim Hefferon

In the USA, the state of Vermont has a reputation as a place where a person might go for a bit of a change. It is known as beautiful to look at (although by no means a technology backwater with a major chip-making facility); a quirky place where the natives have a little — shall we say? — personality.

All of which sounded like a good fit when the TUG CTAN site looked to relocate. The machine housing `ftp://tug.ctan.org/tex-archive` along with its web interface `http://www.ctan.org` was tired. It was originally DANTE's ftp machine and then was donated to TUG when DANTE upgraded. And the site's maintainer, Karl Berry, needed a new person to try their hand.

Consequently, as of June 2000, the TUG CTAN site is operating out of Vermont. Saint Michael's College, in Colchester, has generously agreed to be its host and support the traffic. We've converted the machine `joshua`, which used to be a mirror of TUG CTAN, into a core participant in the three-site network along with `cam.ctan.org` and `dante.ctan.org`. It will of course continue to be accessed by the address `ftp://tug.ctan.org/tex-archive`.

I'll be watching over the site, and I appreciate your patience as well as your feedback as I learn the ropes.

I must say that the ropes I've learned so far have gone much smoother because of the help of the other CTANers, especially Robin Fairbairns, Rainer Schöepf, and Reinhart Zierke. The professionalism, and the amount of work done by this team, is something to which all of the TEX community is indebted.

And, of course, we all also thank Karl Berry for his years of effort in keeping the TUG site up. He has been a great help to me personally on a number of projects, and especially so in the transition period.

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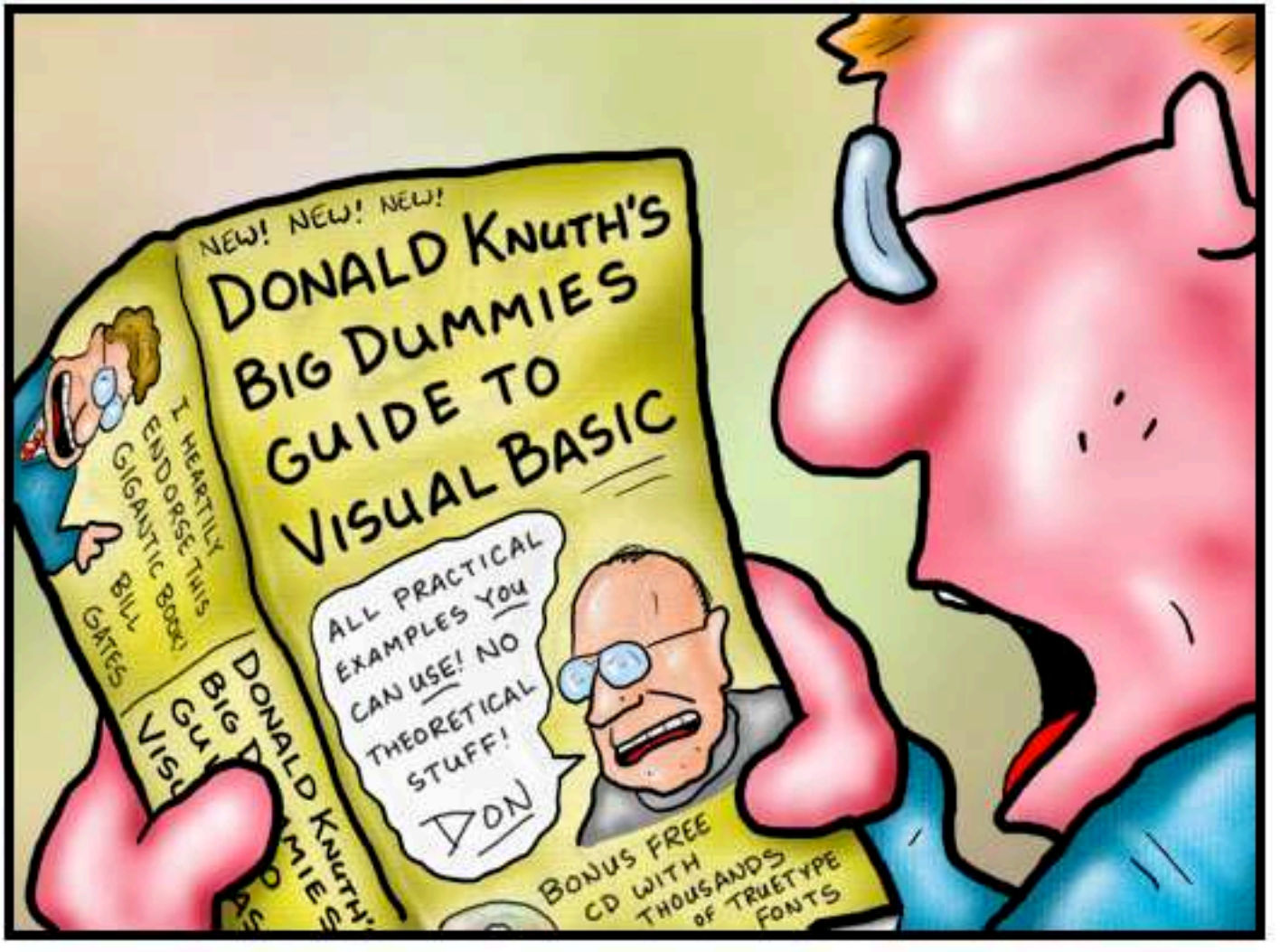
DOCTOR FUN

10 Feb 2000



Don Knuth finally sells out.

TEX Live 5 and the TEX Catalogue

The *TUGboat* Team

With this issue is included the fifth edition of the TEX Live CD-ROM, a collection of TEX software and macros that has proved itself invaluable to TEX users around the globe.

First of all, these people deserve the credit and our sincere thanks for all their contributions of hard work and time and tools:

- Sebastian Rahtz: the leader of the project, without whom TEX would not be Live, at least not in this form!
- Fabrice Popineau: extensive work on the Windows setup, far beyond the call of duty, and evolving the TPM catalogue format.
- Kaja Christiansen: re-compiling all the sources of various Unix platforms, and providing feedback.
- Staszek Wawrykiewicz: great checking feedback, and co-ordination of the Polish contributions.
- The German TEX Users (DANTE e.V.): providing a machine on which the master of the CD-ROM is developed and maintained.
- The Perforce company: providing a free copy of their excellent change management system, which has been used to manage the CD-ROM contents.
- Petr Olšák and Jananka Chlebíková: work on the Czech/Slovak material and documentation.
- All the other people who took the trouble to inform us of problems, checked versions of the CD, and (especially) updated their software to include licensing information.

Thanks to all!

The contents of the CD overlap a substantial subset of the contents of CTAN (the Comprehensive TEX Archive Network, for anyone who is yet not aware of its existence). A strong effort has been made to include the latest version of any CTAN item that was not obsolete and was (at the time of compilation) free of restrictions on use or distribution.

Some items that appeared on earlier editions of the CD are not present on this one. This is mainly because of restrictions on those items (e.g., restrictions against redistribution without express permission, or a requirement for permission or license for non-personal use). Sentiment was strong that this edition should have "no strings attached", that the sponsoring User Groups should be able to sell copies if they wished to non-members or that anyone obtaining a copy should be able to use or share anything on the CD without having to check on licensing requirements. License terms for items on the CD are mainly of the following form:

- public domain or unrestricted
- the LATEX Project Public License (LPPL); see CTAN: `/tex-archive/macros/latex/base/lppl.txt`.
- the GNU Public License (GPL); see `http://www.gnu.org/copyleft/gpl.html`.

Information about these and other licensing terms that apply to items on CTAN can be found (at CTAN) in `/tex-archive/help/Catalogue/licenses.html`.

Graham Williams, with the help of those submitting material to CTAN, maintains a Catalogue of these contents, including (among other things) pointers to the location of items on TEX Live. For this reason, we are including a slightly abridged listing of Graham's Catalogue here to use as an index to the CD. Items removed from the list are on neither the CD nor on CTAN. The Catalogue list was current as of the date the cd was compiled. The Catalogue is maintained as a collection of XML files, and the easiest way to find out whether a package is to use the CTAN search facility, at `http://www.ctan.org/search/`.

If you find any errors or omissions in the Catalogue listing on the following pages, use the CTAN search first to verify that the information wasn't corrupted in translation. If you find an error in the online Catalogue, please inform Graham at `Graham.Williams@cmis.csiro.au`. In particular, the author name is missing from many entries, and licensing information is not complete. Quite a few useful packages are not yet indexed, and package descriptions often do not list important items within the package, so an inquiry to the on-line Catalogue will not get a useful reply. Users of CTAN, and, in particular, authors of packages are urged to help make this resource complete and accurate.

An adjunct to the CD is "The Treasure Chest", a column that appears in "regular" issues of *TUGboat* (i.e., not in proceedings issues, and it's absent from the present issue as well). In this column are listed additions to CTAN since the last instalment, as well as (in some issues) a survey of a particular topic. This makes it possible to keep abreast of what is new or updated since the latest edition of TEX Live, so that you can update your collection as needed.

We hope you find this year's TEX Live edition as useful as the earlier ones.

◇ The *TUGboat* Team
`TUGboat@tug.org`

a0poster Provides fonts in sizes of 12pt up to 107pt. Provides fonts in sizes of 12pt up to 107pt and also makes sure that in math formulas the symbols appear in the right size. Can also create a PostScript header file for dvips which ensures that the poster will be printed in the right size. Supported sizes are DIN A0, DIN A1, DIN A2 and DIN A3.
`latex3` Author: unknown; CTAN location: `macros/latex/contrib/supported/a0poster`

a2ac AFM to AFM plus Composites. Enables the use of PostScript fonts while typesetting texts in languages where accented letters are used. The font doesn't need to contain the complete alphabet of a given language; the presence of mere accents themselves (no whole accented characters) is sufficient. The configuration files of the a2ac program are independent of the PostScript font encoding and of the typesetting system encoding. The program may be used to prepare a font for any typesetting system, especially TEX.
Author: Petr Olšák; CTAN location: `fonts/utilities/a2ac`

a4 Support for A4 paper sizes. Provides support for A4 paper sizes, however it is mostly superseded by the a4paper option of LATEX and by the geometry package. It does, however also define the extra option of widemargins.
Author: Nico Poppelier and Johannes Braams; CTAN location: `macros/latex/contrib/supported/ntgclass`

a4wide Increases width of printed area of an a4 page. This package provides an option to increase the width of the a4 page. Note however that it is superseded by geometry.
Author: unknown; CTAN location: `macros/latex/contrib/other/misc`

a5 Support for a5 paper size. This package provides support for a5 paper sizes. Note however that it is superseded by geometry.
Author: Mario Wolczko; CTAN location: `macros/latex/contrib/other/misc`

a5comb Support for a5 paper sizes. Superseded by geometry.
Author: Mario Wolczko; CTAN location: `macros/latex/contrib/other/misc`

aaai AAAI style.
`latex3` Author: unknown; CTAN location: `macros/latex209/contrib/aaai`

aastex American Astronomical Society format.
`latex3` Author: American Astronomical Society; CTAN location: `macros/latex/contrib/supported/aastex`

abbrevs Text abbreviations in LATEX. A LATEX package defining abbreviation macros, which expand to
`latex3` defined text and insert following space intelligently, based on context. They can also expand to one thing the first time they are used and another thing on subsequent invocations. Thus they can be abbreviations in two senses, in the source and in the document. Also includes a facility for suffixes like 1900BC and 6:00PM which correctly handles following periods.
Author: Matt Swift; CTAN location: `macros/latex/contrib/supported/frankenstein`

abc2mtex Notate tunes stored in abc notation. A package to notate tunes stored in an ASCII format (abc notation). One of the most important aims of abc notation, and perhaps one that distinguishes it from most, if not all, computer-readable musical languages is that it can be easily read by humans. The package produces files that can be processed with MusicTEX.
Author: Chris Walshaw; CTAN location: `support/abc2mtex`

abstbook Books of abstracts. A LATEX 2_ε class file for making "books of abstracts", commonly used for conferences. It is based on report class, however `\chapter` has been redefined and shouldn't be used.
Author: Havlik Denis; CTAN location: `macros/latex/contrib/other/misc`

abstract Control the typesetting of the abstract environment. The abstract package gives you control over
`latex2` the typesetting of the abstract environment, and in particular provides for a one column abstract in a two column paper.
Author: Peter R. Wilson; CTAN location: `macros/latex/contrib/supported/abstract`

abstyles No description available.
`bibtex3` Author: unknown

accents Multiple accents. A package for multiple accents with nice features concerning creation of accents and placement of scripts.
Author: Javier Bezos; CTAN location: `macros/latex/contrib/supported/bezos`

accfonts Includes mkt1font, vpl2vpl, CSX.def, and Norman.def.
`fonts3` Author: John Smith; CTAN location: `fonts/utilities/accfonts`

achemso LATEX and BIBTEX style for American Chemical Society.
`latex3` Author: Mats Dahlgren; CTAN location: `macros/latex/contrib/supported/achemso`

achicago-bst — Chicago Manual BibTeX style. Produces bibliographies based on The Chicago Manual of Style. Requires the achicago LaTeX package.
Author: Matt Swift; CTAN location: `macros/latex/contrib/supported/frankenstein`

achicago — Chicago Manual citations in LaTeX. Produces author-date citations based on The Chicago Manual of Style.
Author: Matt Swift; CTAN location: `macros/latex/contrib/supported/frankenstein`

acmconf
`latex3` — Association for Computing Machinery conference proceedings. This class may be used to typeset articles to be published in the proceedings of ACM (Association for Computing Machinery) conferences and workshops. The layout produced by the 'acmconf' class is based on the description contained in `www.acm.org/sigs/pubs/proceed/pubform.doc`.
Author: Juergen Vollmer; CTAN location: `macros/latex/contrib/supported/acmconf`

acronym
`latex3` — Expand acronyms at least once. This package ensures that all acronyms used in the text are spelled out in full at least once. It also provides an environment to build a list of acronyms.
Author: Tobias Oetiker and Heiko Oberdiek; CTAN location: `macros/latex/contrib/supported/acronym`

adfathesis
`latex3` — Australian Defence Force Academy thesis format.
Author: Stephen Harker; CTAN location: `macros/latex/contrib/supported/adfathesis`

adobe — Font metrics and macro support for many Adobe fonts.
Author: unknown; CTAN location: `fonts/postscript/adobe`

adobeother
`fonts3` — Font metrics for Adobe non-standard fonts.
Author: Sebastian Rahtz

adobestd
`fonts1` — Font metrics for Adobe 'standard' fonts.
Author: Sebastian Rahtz

adrlist
`latex3` — Using address lists in LaTeX.
Author: unknown; CTAN location: `macros/latex/contrib/other/adrlist`

advdate — Provides macros which can add a specified number of days to the current date (as specified in `\today`) and print it. Intended for use, for example, in invoices payable within 14 days from today etc. Has only been tested with Czech dates. A version supporting English dates is expected soon.
Author: Zdenek Wagner; CTAN location: `macros/latex/contrib/other/misc`

ae
`fonts2` — Virtual fonts for PDF-files with T1 encoded CMR-fonts. A set of virtual fonts which emulates T1 coded fonts using the standard CM fonts. The package is called AE fonts (for Almost European). The main use of the package is to produce PDF files using versions of the CM fonts instead of the bitmapped EC fonts.
Author: Lars Engebretsen; CTAN location: `fonts/ae`

aeguill
`latex2` — Add several kinds of guillemets to the ae fonts. A package adding several kinds of guillemets (polish cmr, cyrillic cmr, lasy and ec) to the ae fonts. It is useful if you are using the ae fonts to produce PDF files, since the additional guillemets exist in Type 1 versions (and for free, except in ec's case).
Author: Denis B. Roegel; CTAN location: `macros/latex/contrib/supported/aeguill`

afterpage — Execute command after each page. Implements a command that causes the commands specified in its argument to be expanded after the curent page is output. Useful to flush floats, for example. LaTeX's float positioning mechanism sometimes gets overloaded and all floating figures and table drift to the end of the document. One may flush out all the unprocessed floats by issuing a `\clearpage` command, but this has the effect of making the current page end prematurely. Now you can issue `\afterpage{\clearpage}` and the current page will be filled up with text as usual, but then a `\clearpage` command will flush out all the floats before the next text page begins.
Author: David Carlisle; CTAN location: `macros/latex/required/tools`

afthesis — Air Force Institute of Technology thesis class. LaTeX thesis/dissertation class for US Air Force Institute of Technology.
Author: Joel D. Young; CTAN location: `macros/latex/contrib/supported/afthesis`

aguplus
`latex3` — Styles for American Geophysical Union.
Author: P. W. Daly; CTAN location: `macros/latex/contrib/supported/aguplus`

aiaa
`latex3` — American Institute of Aeronautics and Astronautics. A bundle of LaTeX/BibTeX files and sample documents to aid those producing papers and journal articles according to the guidelines of the American Institute of Aeronautics and Astronautics (AIAA).
Author: Bil Kleb; CTAN location: `macros/latex/contrib/supported/aiaa`

aifont — BSR/YandY/AMS Type 1 Computer Modern fonts. Virtual fonts and other related files for remapping the BSR/YandY/AMS Type 1 Computer Modern fonts. This helps to produce more robust PDF output from pdfTeX, dvips/gs, and dvipdf.
Author: Skip Collins; CTAN location: `fonts/cm/ai`

akletter — Comprehensive letter support. An advanced letter document class which extends LaTeX's usual letter class, providing support for building your own letterhead and marking fold points for window envelopes. Options supported by the package include: letterpaper for US letter; a4offset for a modified A4 layout suitable for plastic binders that cover a part of the left margin. Also includes isodate to set the date as YYYY-MM-DD as described in ISO 8601 and DIN 5008 and akfaxps a new configuration example that uses Times/Courier.
Author: Axel Kielhorn; CTAN location: `macros/latex/contrib/supported/akletter`

alatex — Abstract LaTeX. Provides the user with all the functionality of LaTeX but with one small change: a general, legal way to override standard LaTeX behavior without altering source files. can interpret official LaTeX markup in an abstract way.
Author: Matt Swift; CTAN location: `macros/alatex`

alg — LaTeX environments for typesetting algorithms. Defines two environments for typesetting algorithms in LaTeX 2_ε where lines are automatically numbered and can be referenced, with easy indentation, and algorithms as floats.
Author: Staffan Ulfberg; CTAN location: `macros/latex/contrib/other/alg`

algorithmic — Provides an environment for describing algorithms. Within an algorithmic a number of commands for typesetting popular algorithmic constructs are available.
Author: Peter Williams; CTAN location: `macros/latex/contrib/supported/algorithms`

algorithms — Defines a floating algorithm environment designed to work with the algorithmic package.
Author: Peter Williams; CTAN location: `macros/latex/contrib/supported/algorithms`

alltt — Defines the alltt environment which is like the verbatim environment except that \ and braces have their usual meanings. Thus, other commands and environments can appear within an alltt environment.
Author: Johannes Braams; CTAN location: `macros/latex/base`

alphalph — Convert numbers to letters. Provides commands `\alphalph` and `\AlphAlph`. They are like `\number` but the expansion consists of lowercase and uppercase letters respectively (1 to a, 26 to z, 27 to aa, 52 to zz, 53 to ba, 702 to zz, 703 to aaa, etc.). Can be used as an replacement for LaTeX's `\@alph` and `\@Alph` macros.
Author: Heiko Oberdiek; CTAN location: `macros/latex/contrib/supported/oberdiek`

alphanum — Permits alphanumeric section numbering. For example, A. Introduction; III. International Law.
Author: Felix Braun; CTAN location: `macros/latex/contrib/supported/jura`

altfont — A generalised replacement for some parts of psnfss and mfnfss. Similar to psfont with the PostScript specific code removed.
Author: Sebastian Kirsch; CTAN location: `macros/latex/contrib/supported/altfont`

amiweb2c — An Amiga port of the complete UNIX-TeX system.
Author: Andreas Scherer; CTAN location: `systems/amiga/amiweb2c`

amsbsy — Produce bold math symbols (AMS-LaTeX). Produce bold math symbols (AMS-LaTeX). Part of the AMS-LaTeX distribution, this package provides a command for producing bold math symbols when appropriate fonts exist, and a 'poor man's bold' command that can be applied when no appropriate bold font is available. In paticular, the macro `\boldsymbol` is defined.
Author: American Mathematical Society; CTAN location: `macros/latex/required/amslatex/math`

amscd — AMS-LaTeX – commutative diagrams. Part of the AMS-LaTeX distribution, this package adapts the commutative diagram macros of AMS-TeX for use in LaTeX.
Author: American Mathematical Society; CTAN location: `macros/latex/required/amslatex/math`

amscls — AMS document class for LaTeX.
Author: American Mathematical Society; CTAN location: `macros/latex/required/amslatex`

amsfonts — TeX fonts from the American Mathematical Society. Augments the standard set normally distributed with TeX, including: extra mathematical symbols; blackboard bold letters (uppercase only); fraktur letters; subscript sizes of bold math italic and bold Greek letters; subscript sizes of large symbols such as sum and product; added sizes of the Computer Modern small caps font; cyrillic fonts (from the University of Washington); Euler math fonts.
Author: unknown; CTAN location: `fonts/amsfonts`

amslatex
latex2
Miscellaneous LaTeX enhancements. A collection of loosely related files that are distributed together by the American Mathematical Society. These files are miscellaneous enhancements to LaTeX whose aim is superior information structure of mathematical documents and superior printed output.
Author: American Mathematical Society; CTAN location: `macros/latex/required/amslatex`

amsmath
AMS math facilities for LaTeX. This package is the principal package in the AMS-LaTeX distribution. It adapts for use in LaTeX most of the mathematical features found in AMS-TeX.
Author: American Mathematical Society; CTAN location: `macros/latex/required/amslatex/math`

amsppt
AMS-TeX article preprint document style.
Author: American Mathematical Society; CTAN location: `macros/amstex`

amssym
AMS symbol fonts for Plain TeX. Defines names for all the math symbols in the AMS symbol fonts (msam and msbm). If not used with AMS-TeX, amssym.tex must be used with amssym.def (q.v.).
Author: American Mathematical Society; CTAN location: `fonts/amsfonts/plaintex`

amssymb
AMS symbol fonts for LaTeX. Part of the AMSFonts distribution, this LaTeX option defines symbol names for all the math symbols in the fonts MSAM and MSBM, of the AMSFonts package.
Author: American Mathematical Society; CTAN location: `fonts/amsfonts/latex`

amstex
plain2
American Mathematical Society plain TeX macros.
Author: American Mathematical Society; CTAN location: `macros/amstex`

amstext
latex2
AMS-LaTeX – text fragments in math. Part of the AMS-LaTeX distribution, this package defines a `\text` macro, which makes it easy to incorporate fragments of text inside a displayed equation or a sub or superscript. Font sizes are automatically scaled in sub/superscripts.
Author: American Mathematical Society; CTAN location: `macros/latex/required/amslatex/math`

anonchap
Make `\chapter`s be typeset like sections.
Author: Peter R. Wilson; CTAN location: `macros/latex/contrib/supported/misc`

answers
latex3
Styles for setting questions (or exercises) and answers. Styles for setting questions (or exercises) and answers.
Author: Mike Piff; CTAN location: `macros/latex/contrib/supported/answers`

antp
fonts3
Antykwa Półtawskiego: a Type 1 family of Polish traditional type. A replica of Antykwa Półtawskiego font in PostScript Type 1 format – preliminary version. This font was designed in the 'twenties and the 'thirties of XX century by a Polish graphic artist and a typographer Adam Półtawski. It was widely used by Polish printing houses as long as metal types were in use (until ca the 'sixties). Perhaps the first complete font family programmed and parametrized in METAPOST (?)
Author: J. Nowacki; CTAN location: `fonts/psfonts/polish/antp`

anttvf
Virtual fonts for PostScript Antykwa Torunska font. A collection of virtual fonts generated with fontinst 1.6, that provide a PostScript font 'Antykwa Toruńska' (antyktor) in OT1, T1, TS1 and OT4 encodings, to be used with LaTeX 2_ε.
Author: Tomasz Wierzbicki; CTAN location: `fonts/psfonts/anttvf`

antyktor
fonts3
Antykwa Toruńska: a Type 1 family of a Polish traditional type. Antykwa Toruńska is a serif font designed by the Polish typographer Zygfryd Gardzielewski which have been reconstructed and digitized as Type 1.
Author: J. Nowacki; CTAN location: `fonts/psfonts/polish/antyktor`

apa
latex3
American Psychological Association format. A LaTeX class to format text according to the American Psychological Association Publication Manual (4th ed.) specifications for manuscripts or to the APA journal look found in journals like the Journal of Experimental Psychology etc. In addition, it provides regular LaTeX-like output with a few enhancements and APA-motivated changes.
Author: Athanassios Protopapas; CTAN location: `macros/latex/contrib/other/apa`

apacite
bibtex3
A BibTeX style which closely follows the APA style citation, claiming to provide the closest match.
Author: Erik Meijer; CTAN location: `biblio/bibtex/contrib`

apasoft
A more conforming apa-like style for BibTeX.
Author: Bernd Porr; CTAN location: `biblio/bibtex/contrib`

apl
fonts3
Fonts for typesetting APL programs.
Author: unknown; CTAN location: `fonts/apl`

appendix
latex3
Extra control of appendices. The word 'Appendix' or similar can be prepended to the appendix number for article class documents. The word 'Appendices' or similar can be added to the table of contents before the appendices are listed. The word 'Appendices' or similar can be typeset as a `\part`-like heading (page) in the body. An appendices environment is provided which can be used instead of the `\appendix` command. Includes support for per chapter (or section for non-chaptered documents) appendices.
Author: Peter Wilson; CTAN location: `macros/latex/contrib/supported/appendix`

ar
fonts3
MetaFont files and a LaTeX 2ε package for producing and using the capital A and capital R ligature, used for the symbol of the "aspect ratio" by scientists and engineers in the field of aeronautics.
Author: unknown; CTAN location: `macros/latex/contrib/other/ar`

arabtex
lang3
Macros and fonts for typesetting Arabic.
Author: Klaus Lagally; CTAN location: `language/arabtex`

archaic
fonts3
A collection of archaic fonts. The collection includes cypriot, etruscan, greek4cbc, greek6cbc, linearb, phoenician, and runic.
Author: Peter Wilson; CTAN location: `fonts/archaic`

armenian
lang3
A package which lets one to write in Armenian with TeX. It can be used with a standard Latin keyboard without any special encoding and/or support for Armenian letters. It can also be used with any keyboard which uses encodings having Armenian letters in the second half (characters 128–255) of the extended ASCII table.
Author: Serguei Dachian and V. Hakobian; CTAN location: `fonts/armenian`

armtex
A sytem for writing Armenian with TeX and LaTeX. ArmTeX is an Armenian system for TeX/LaTeX(2_ε)/METAFONT. It can be used with a standard Latin keyboard without any special encoding and/or support for Armenian letters. It can also be used with any keyboard which uses encoding having Armenian letters in the second half (characters 128-255) of the extended ASCII table (for example ArmSCII8 Armenian standard).
Author: Serguei Dachian; CTAN location: `language/armenian`

arosgn
Support for the Bengali language.
Author: Muhammad Masroor Ali; CTAN location: `language/bengali/arosgn`

array
Arrays and tables with formatted columns. An extended implementation of the array and tabular environments which implements options to format columns. The `\!` option, for example, is introduced with this package.
Author: Frank Mittelbach and David Carlisle; CTAN location: `macros/latex/required/tools`

arrayjob
generic3
Array data structures for (LA)TeX. This package provides array data structures in (LA)TeX, in the meaning of the classical procedural programming languages like Fortran, Ada or C, and macros to manipulate them. Arrays can be mono or bi-dimensional. This is useful for applications which require high level programming techniques, like algorithmic graphics programmed in the TeX language.
Author: Zhuhan Jiang; CTAN location: `macros/generic/arrayjob`

arrow
Eplain macros for arrow theoretic diagrams.
Author: Steven T. Smith; CTAN location: `macros/eplain`

arydshln
latex3
Horizontal and vertical dashed lines. Definitions of horizontal and vertical dashed lines for the array and tabular environment. Horizontal lines are drawn by `\hdashline` and `\cdashline` while vertical ones can be specified as a part of preamble using ':'. The shape of dashed lines may be controlled through style parameters or optional arguments.
Author: Hiroshi Nakashima; CTAN location: `macros/latex/contrib/supported/arydshln`

asaetr
latex3
Transactions of the American Society of Agricultural Engineers.
Author: George Pearson; CTAN location: `macros/latex/contrib/other/asaetr`

ascelike
latex3
Bibliography style for the American Society of Civil Engineers. A document class and bibliographic style that prepares documents in the style required by the American Society of Civil Engineers (these are unofficial files, not sanctioned by that organization, and the files specifically give this caveat). Also included is a short documentation/example of how to use the class.
Author: Matthew R. Kuhn; CTAN location: `/macros/latex/contrib/supported/ascelike`

ascii
fonts3
Support for IBM extended ASCII font.
Author: unknown; CTAN location: `fonts/ascii`

astro
fonts3
Astronomical (planetary) symbols. Astronomical (planetary) symbols.
Author: unknown; CTAN location: `fonts/astro`

at — A package to remove a lot of tedious typing that ends up in LaTeX documents by expanding the number of short command names available. The new command names begin with the '@' character, rather than the conventional '\', so you can tell them apart.
Author: Mark Wooding; CTAN location: `macros/latex/contrib/supported/mdwtools`

attrib — Attribution of block quotations in LaTeX. A LaTeX package defining `\attrib`, which attributes block elements, for example when citing a reference after a block quotation.
Author: Matt Swift; CTAN location: `macros/latex/contrib/supported/frankenstein`

auctex — Emacs support files for TeX. Provides one of the best environments for TeX/LaTeX document production.
Author: unknown; CTAN location: `support/auctex`

auncial — Artificial Uncial manuscript book-hand font. The auncial and allauncl packages provide Metafont fonts based on the Artificial Uncial manuscript book-hand used between the 6th and 10th century AD. The font consists of minuscules and digits, with some appropriate period punctuation marks. Both normal and bold versions are provided.
Author: Peter Wilson; CTAN location: `fonts/bookhands/auncial`

aurora, `dvips3` — Header files for dvips to make colour separations.
Author: unknown

authorindex, `latex3` — A package to generate a list of all authors cited in a document along with a list of pages where these citations occur.
Author: Andreas Wettstein; CTAN location: `indexing/authorindex`

autotab, `latex3` — Generating tabular setups.
Author: unknown; CTAN location: `macros/latex209/contrib/autotab`

babel, `generic2` — Multilingual support for LaTeX.
Author: Johannes L. Braams; CTAN location: `macros/latex/required/babel`

backgammon, `fonts3` — Style for typesetting backgammon boards.
Author: unknown; CTAN location: `macros/latex/contrib/other/bg`

backgrnd — Mark text with grey background or change bar Marks text, using TeX's resources only (no PostScript tricks – grey background uses a shade font defined with MetaFont. Works under plain TeX, in simple LaTeX 2.09 documents, but probably not in LaTeX 2_ε.
Author: Peter Schmitt; CTAN location: `macros/generic`

bakoma-fonts — Computer Modern and AMS fonts in PostScript Type1 form.
Author: unknown; CTAN location: `fonts/cm/ps-type1/bakoma`

bakoma-games, `fonts2` — BaKoMa modules for music and games. This module includes popular macro packages described in chapters 7 (Preparing music scores: MusiXTeX) and 8 (Playing games: Chess, Xiangqi - Chinese Chess, Go, Backgammon, Bridge, Crosswords) of the 'LaTeX Graphics Companion' They are precompiled for use, together with fonts and documentation, directly in BaKoMa TeX. Fonts used by some packages are converted into formats suitable both for printing and for PDF generation. For example, for Chess the diagram fonts are converted into vector Type 3 font format. Board black squares are coded as a gray color instead of dashing. This approach gives the best results on printers and displays. Fonts for in-line notation are in Type 1 font format. For Go the special fonts are too hard to convert automatically and have been efficiently coded in Type 3 font format. For Backgammon the fonts were originally dithered as halftone, making them unsuitable for PDF. The halftone was emulated by using gray color in Type 3 fonts.
Author: Basil Malyshev; CTAN location: `systems/win32/bakoma/contrib`

bakoma-malvern, `fonts2` — TeX for MS-Windows for electronic documents. Malvern is a sanserif font intended mainly for non-technical documents. It does not blend particularly well with the Computer Modern fonts. Malvern is a font family designed and implemented in MF by P. Damian Cugley. Conversion to PostScript Type 1 font format has been done by Basil K. Malyshev. It is distributed as a MS-Windows exe file which will install the fonts under already installed BaKoMa TeX 2.11 and later.
Author: Basil Malyshev; CTAN location: `systems/win32/bakoma/dst`

bakoma
fonts2
TEX for MS-Windows for electronic documents. A TEX package intended for preparing Electronic Publications. The system works under MS-Windows 95/98/NT. The system includes a complete extendable GUI (Text editor, DVI Viewer, Help system), an updated version of the BaKoMa Fonts Collection, the TEX processor with friends (BIBTEX, MakeIndex, MetaPost, DVIPS, DVICopy), a standard compliant TDS, and an installation program. The system supports the use of scalable fonts (PostScript Type 1, PostScript Type 3, and TrueType) and the importing of PostScript graphics into documents. In advance, the system supports import of JPEG, PNG, GIF, TIFF, HPGL, DXY, PCX, MSP, BMP, and WMF graphical formats. The system supports generation of PDF and printing on any printer supported by a driver under MS-Windows. The system efficiently supports multiple TEXMF trees.
Author: Basil Malyshev; CTAN location: `systems/win32/bakoma`

barcode2
fonts3
No description available.
Author: unknown

barcodes
fonts3
Fonts for making barcodes.
Author: unknown; CTAN location: `fonts/barcodes`

barr
graphics3
Diagram macros by Michael Barr.
Author: Michael Barr; CTAN location: `macros/generic/diagrams/barr`

base
Definitive source of Plain TEX on CTAN. This archive is mirrored directly from `labrea:/tex/lib/`.
Author: Donald Knuth; CTAN location: `macros/plain/base`

bbding
fonts3
Symbol font including many Zapf dingbats. An NFSS-interface to the symbol font bbding containing many of the Zapf dingbats fonts.
Author: Peter Neergaard; CTAN location: `fonts/bbding`

bbl2html
Convert a LATEX .bbl file to formatted html code.
Author: Rik Blok; CTAN location: `biblio/bibtex/utils`

bbm
fonts3
Blackboard variant fonts for Computer Modern, with LATEX support.
Author: unknown; CTAN location: `fonts/cm/bbm`

bbold
fonts3
Sans serif blackboard bold. A geometric sans serif blackboard bold font, for use in mathematics
Author: Alan Jeffrey

beebe
bibtex2
TEX-related bibliographies and BIBTEX styles. Nelson Beebe's collection of TEX-related bibliographies and BIBTEX style files.
Author: Nelson Beebe

beletter
Typeset Belgian letters. A small class for typesetting Belgium letters.
Author: James Kilfiger and Frank Lenaerts; CTAN location: `macros/latex/other/misc`

belleek
fonts2
Free replacement for basic MathTime fonts. Free replacement for basic MathTime fonts
Author: Richard Kinch

beton
latex3
Typeset a LATEX 2_ε document with the Concrete fonts designed by Don Knuth and used in his book "Concrete Mathematics".
Author: Frank Jensen; CTAN location: `macros/latex/contrib/supported/beton`

bez123
latex3
Support for Bezier curves. A package providing additional facilities for drawing linear, cubic, and rational quadratic Bezier curves. The multiply package provides a command for multiplication of a length without numerical overflow.
Author: Peter Wilson; CTAN location: `macros/latex/contrib/supported/bez123`

bezos
latex3
Packages by Javier Bezos. Tools for math accents; tensorial indexes; tools for easy entry of Spanish index entries.
Author: Javier Bezos; CTAN location: `macros/latex/contrib/supported/bezos`

bibarts
bibtex3
A package to assist in making bibliographical lists common in the arts.
Author: Timo Baumann; CTAN location: `macros/latex/contrib/supported/bibarts`

bibdb
BIBTEX bibliography manager fow MS-Windows and MS-DOS.
Author: Eyal Doron; CTAN location: `support/bibdb`

bibhtml
bibtex3
BIBTEX support for HTML files. Bibhtml consists of a Perl script and a BIBTEX style file, which together allow you to compile a bibliography for a collection of HTML files. The references in the text are linked directly to the corresponding bibliography entry, and if a URL is defined in the entry within the BIBTEX database file, then the generated bibliography entry is linked to this. The BIBTEX style file is plainhtml.bst, and is derived from the standard plain.bst.
Author: Norman Gray; CTAN location: `biblio/bibtex/contrib/bibhtml`

biblio — An extensive collection of BibTeX bibliographies on many topics (linux, java, sas, s-plus, amongst many others) and for many journals (lecture notes in computer science acm, byte, computer, and much, much, more.). Each includes a LaTeX wrapper file to typeset the bibliography.
Author: Nelson H. F. Beebe; CTAN location: `info/biblio`

biblios — A MS-Windows95 tool that uses the CGI (common gateway interface) protocol so that BibTeX files can be managed remotely using an HTTP-server on the server side and a Web-browser such as Netscape on the client side.
Author: Anders Moller; CTAN location: `systems/msdos`

biblist — BibTeX styles by Joachim Schrod.
`latex3` — Author: Joachim Schrod; CTAN location: `macros/latex209/contrib/biblist`

bibtex — Bibliography management for LaTeX.
`bibtex1` — Author: Oren Patashnik; CTAN location: `biblio/bibtex/distribs`

bibtex8bit — A fully 8-bit adaptation of BibTeX 0.99.
`bibtex2` — Author: Niel Kempson; CTAN location: `biblio/bibtex/8-bit`

bibtool — Command line manipulation of BibTeX files. Command line manipulation of BibTeX files: Pretty-printing data bases; Syntactic checks with error recovery; Semantic checks. Sorting and merging of data bases; Generation of uniform reference keys according to predefined rules or according to user specification; Selecting references used in one publication which are found by analyzing an aux file; Controlled rewriting of fields utilising regular expressions to specify the rewriting rules; Macro (String) expansion to eliminate the need of extra string definitions; Collecting statistics about one or more data bases.
Author: Gerd Neugebauer; CTAN location: `biblio/bibtex/utils/bibtool`

bibtopic — Include multiple 'by topic' bibliographies in a document. A LaTeX package to include several bibliographies covering different 'topics' or bibliographic material into a document (e.g., one bibliography for primary literature and one for secondary literature). Provides commands to include either all references from a .bib file, only the references actually cited or those not cited in your document. You'll have to construct a seperate .bib file for each bibliographic 'topic', which will have to be processed separately by BibTeX. If you want to have per-chapter bibliographies in a document, have a look at the packages bibunits or chapterbib instead.
`bibtex2` — Author: Pierre Basso and Stefan Ulrich; CTAN location: `macros/latex/contrib/supported/bibtopic`

bibunits — Multiple bibliographies in one document. A style to generate separate bibliographies for different units (parts) of the text (chapters, sections or bibunit-environments). The style will separate the citations of each unit of text into a separate file to be processed by BibTeX. The global bibliography section produced by LaTeX can also appear in the document and citations can be placed in both at the same time.
`latex3` — Author: Jose Alberto and Thorston Hansen; CTAN location: `macros/latex/contrib/supported/bibunits`

bibweb — Automatically retrieve bibliography from MathSciNet. A utility to automatically retrieve mathematical bibliographical information, in BibTeX format, from the American Mathematical Society's MathSciNet database. More precisely, it acts as a front-end to BibTeX; it converts any citations that BibTeX can't find into queries to the MathSciNet database, it carries out those queries, and returns the answers in BibTeX format. Included in the package are: the perl script bibweb, documentation (in various formats), and a test file.
Author: John H. Palmieri; CTAN location: `biblio/bibtex/utils/bibweb`

bidstobibtex — A tool to take input from a BIDS email message (generated using one of the downloading formats) to BibTeX.
Author: Anthony Stone; CTAN location: `biblio/bibtex/contrib/bids`

bigdelim — Big delimiters.
`latex3` — Author: Piet van Oostrum; CTAN location: `macros/latex/contrib/supported/multirow`

bigstrut — Big struts.
`latex3` — Author: Piet van Oostrum; CTAN location: `macros/latex/contrib/supported/multirow`

bits — Modular environments in LaTeX. A LaTeX package that provides a programmer's interface for a new idea called a bit, which is like an environment but has a title, author, and other attributes usually only associated with the document environment.
`latex3` — Author: Matt Swift; CTAN location: `macros/latex/contrib/supported/frankenstein/unsupported`

bitstrea Font metrics, and macro support in LaTeX 2ε, for the free Bitstream fonts.
Author: unknown; CTAN location: `fonts/psfonts/bitstrea`

bizcard Typeset business cards.
`latex3` Author: Sebastian Marius Kirsch; CTAN location: `macros/latex/contrib/supported/bizcard`

blackboard A demonstration of the various blackboard bold typefaces available for TeX (bbm, bbold, doublestroke, and msbm), including a PostScript file to preview them.
Author: Olaf Kummer; CTAN location: `documentation/blackboard`

blkarray Extended array and tabular. A package in its early stages of development which implements an environment, blockarray, that may be used in the same way as the array or tabular environments of standard LaTeX, or their extended versions defined in array.sty. If used in math-mode, blockarray acts like array, otherwise it acts like tabular. The main feature of this style is that it uses a new method of defining column types.
Author: David Carlisle; CTAN location: `macros/latex/contrib/supported/carlisle`

blkcntrl Block-element hooks in LaTeX. A LaTeX package that inserts hooks into certain block elements and
`latex3` footnotes. Also provides a command to set block quotations one size smaller than the main text.
Author: Matt Swift; CTAN location: `macros/latex/contrib/supported/frankenstein`

block A block letter style for the letter class. A style file for use with the letter class that overwrites the `\opening` and `\closing` macros so that letters can be styled with the block letter style instead of the default style. Thus, the return address, the closing, and the signature appear flushed on the left margin.
Author: Chua Eng Huang; CTAN location: `macros/latex/contrib/other/misc`

blu BLUe's format system. A format used in 'Publishing with TeX'.
Author: Kees van der Laan; CTAN location: `macros/blu`

blue Kees van der Laan's BLUe format, a concise but expressive document preparation system modelled on
`formats3` Knuth's manmac.
Author: Kees van der Laan; CTAN location: `macros/blu`

bluesky Computer Modern family in Type 1 format.
`fonts1` Author: unknown; CTAN location: `fonts/cm/ps-type1/bluesky`

bm This is a package for accessing bold symbols in math mode. (Similar to the AMS `\boldsymbol` command, but taking more care over spacing, delimiters etc.).
Author: David Carlisle; CTAN location: `macros/latex/required/tools`

bookhands A collection of book-hand fonts.
`fonts3` Author: Peter Wilson; CTAN location: `fonts/bookhands`

booktabs Nicer layout of tables.
`latex3` Author: Simon Fear; CTAN location: `macros/latex/contrib/supported/booktabs`

borceux Diagram macros by Francois Borceux.
`graphics3` Author: Francois Borceux; CTAN location: `macros/generic/diagrams/borceux`

bosisio A collection of packages including: dblfont; graphfig; mathcmd; mathenv; quotes; sobolev.
`latex3` Author: Francesco Bosisio; CTAN location: `macros/latex/contrib/supported/bosisio`

boxedminipage A package for producing boxed minipages.
Author: Mario Wolczko; CTAN location: `macros/latex/contrib/other/misc`

braille Support for braille.
Author: William Park; CTAN location: `macros/latex/contrib/supported/braille`

braket Dirac bra-ket and set notation. Provides macros to typeset bra-ket notation, as well as set specifiers. Each macro comes in a fixed-size version and an expanding version.
Author: Donald Arseneau; CTAN location: `macros/latex/contrib/other/misc`

brclc Support 16-bit (double) calculations in LaTeX. The following calculations are implemented: `+`, `-`, `*`, `/`, `^`, `exp`, `log`, `ln`, `sin`, `cos`, `tan`, `asin`, `acos`, `atan`. The output can be formatted and rounded. The program brclc is a preprocessor so it must be run before you run LaTeX! It is recommended using a shellscript like 'testclc' which does this for you. The new command `\clc{arg}` is defined. The program brclc outputs a file called `*.clc` in which LaTeX finds the definitions needed to complete the `\clc{arg}`-command. The LaTeX-commands file inclusion commands are also supported.
Author: Bernd Radgen; CTAN location: `macros/latex/contrib/supported/brclc`

bridge Macros for typesetting bridge diagrams.
`latex3` Author: Kees van der Laan; CTAN location: `macros/latex209/contrib/misc/bridge`

brushscr
fonts3
BrushScript fonts including pbsi, a Type-1 PostScript font containing BrushScript Italic characters.
Author: Maurizio Loreti; CTAN location: fonts/brushscr

btOOL
Perl library for parsing and processing BibTeX files. Includes a C library called btparse and a perl library Text::BibTeX. Features include: robust, efficient lexical scanning and parsing of BibTeX files; excellent error detection, reporting, and recovery in the parser; full processing of BibTeX strings (macros expanded, whitespace collapsed, strings concatenated); handles all common entry types (@comment, @preamble, @string, and everything else) with ease, and gives you full access to the contents of all entry types; support for processing author names identically to BibTeX; preliminary support for imposing/enforcing a particular database structure.
Author: Greg Ward; CTAN location: biblio/bibtex/utils/btOOl

bytefield
latex3
Create illustrations for network protocol specifications. The bytefield package helps the user create illustrations for network protocol specifications and anything else that utilizes fields of data. These illustrations show how the bits and bytes are laid out in a packet or in memory.
Author: Scott Pakin; CTAN location: macros/latex/contrib/supported/bytefield

bzip2
texlive2
Compression program.
Author: unknown; CTAN location: tools/bzip2

c-pascal
generic3
Typeset C and Pascal programs. A TeX macro package for easy typesetting of programs in C and Pascal. Program sources in C and Pascal can also be input.
Author: Michal Gulczynski; CTAN location: macros/generic/c_pascal

c2cweb
A utility to prettyprint C and C++ source files using cweb.
Author: Werner Lemberg; CTAN location: web/c_cpp/c2cweb

calc
Adds infix expressions to perform arithmetic in the LaTeX commands \setcounter, \addtocounter, \setlength, and \addtolength.
Author: Kresten Krab Thorup and Frank Jensen; CTAN location: macros/latex/required/tools

calendar
latex3
A package for calendars and timetables. Includes, for example, a package which organizes date items in a format suitable for conference schedules, itineraries, academic teaching timetables and the like.
Author: Frank Bennett; CTAN location: macros/latex/contrib/supported/calendar

calligra
fonts3
Calligraphic font. Calligraphic font in the handwriting style of the author, Peter Vanroose. A LaTeX package for using this font is available in fundus.
Author: Peter Vanroose and Serguei Dachian; CTAN location: fonts/calligra

calrsfs
latex3
Nicer calligraphic letters.
Author: Vadim Zhytnikov; CTAN location: macros/latex/contrib/other/calrsfs

calxxxx
latex3
Prints a card-size calendar for any year. Prints a card-size calendar for any year, AD or BC, with Gregorian or Julian leap rules (useful for year before adoption of Gregorian rules). Cal2000.tex prints a calendar for years 1990–2020.
Author: Slobodan Jankovic; CTAN location: macros/latex/contrib/other/calxxxx

camel
latex3
Comprehensive bibliography manager (prototype citation engine for LaTeX3). Will become BibTeX 1.0 on release. Under development.
Author: Frank Bennett; CTAN location: macros/latex/contrib/supported/camel

cancel
Place lines through maths formulae. A package to draw diagonal lines and arrows with limits through math formulas.
Author: Donald Arseneau; CTAN location: macros/latex/contrib/other/misc

capt-of
Captions on more than floats. Defines a command \captionof for putting a caption to something that's not a float.
Author: Robin Fairbairns; CTAN location: macros/latex/contrib/other/misc

caption
latex2
Extends caption capabilities for figures and tables, such as the caption width, style, font. Many aspects are tunable as options.
Author: Harald Axel Sommerfeldt; CTAN location: macros/latex/contrib/supported/caption

caption2
Newer version of the caption package. Extends caption capabilities for figures and tables, such as the caption width, style, and font. Many aspects are tunable as options.
Author: Harald Axel Sommerfeldt; CTAN location: macros/latex/contrib/supported/caption

carlisle
latex2
Miscellaneous small packages by David Carlisle.
Author: David Carlisle; CTAN location: macros/latex/contrib/supported/carlisle

cases — Numbered cases environment. Define numcases: math cases with equation numbers. Also define subequation numbering.
Author: Donald Arseneau; CTAN location: `macros/latex/contrib/other/misc`

casyl, `lang3` — Typeset Cree/Inuktitut in Canadian Aboriginal Syllabics.
Author: Ivan A Derzhanski; CTAN location: `language/casyl`

catalogue, `doc2` — A catalogue of what's available on CTAN. The catalogue is an extensive database of many, most, and one day, maybe, all, packages available for TEX/LATEX. It started out as an example of using BIBTEX, but is now fully XML and XSL based. The Catalogue is best browsed online, but refer to xml-catalogue for a nice exmaple of using xmltex. Oh, by the way, you are currently looking at the TEX Catalogue, if you hadn't noticed.
Author: Graham Williams; CTAN location: `help/Catalogue`

catdoc — A filter which converts binary MS-Word files into ASCII text, optionally with some TEX control sequences (for those characters, which have special meaning for TEX).
Author: Victor Wagner; CTAN location: `support/catdoc`

catdvi — A DVI to plain text translator. A DVI to plain text translator capable of generating ASCII, Latin-1 and UTF-8 (Unicode) output. It aims to become a superior replacement for the dvi2tty utility; this version outperforms it in some areas and is inferior to it in other areas.
Author: Antti-Juhani Kaijanaho; CTAN location: `dviware/catdvi`

cbgreek, `fonts3` — MetaFont source files for a complete set of Greek fonts.
Author: Claudio Beccari; CTAN location: `language/greek/cb/mf`

cc-pl, `fonts2` — Polish extension of Computer Concrete fonts (MetaFont sources).
Author: Boguslaw Jackowski and M. Ryćko; CTAN location: `language/polish`

ccaption, `latex3` — Continuation headings and legends for floats. A package providing commands for 'continuation' headings, unnumbered captions, and also a non-specific legend heading for any environment. Methods are also provided to define captions for use outside float (e.g., figure and table) environments, and to define new float environments and List of Floats.
Author: Peter Wilson; CTAN location: `macros/latex/contrib/supported/ccaption`

ccfonts, `latex3` — Support for Concrete text and math fonts in LATEX. LATEX font definition files for the Concrete fonts and a LATEX package for typesetting documents using Concrete as the default font family. The files support OT1, T1, TS1, and Concrete math including AMS fonts (Ulrik Vieth's concmath).
Author: Walter Schmid; CTAN location: `macros/latex/contrib/supported/ccfonts`

cchess, `fonts3` — Macros and fonts for typesetting Chinese Chess board diagrams.
Author: unknown

cdcover, `latex3` — Typeset CD covers.
Author: Christian Holm; CTAN location: `macros/latex/contrib/other/cd-cover`

cdlabeler — Take user text and typeset it to fit a CD label.
Author: Victor Eijkhout; CTAN location: `macros/generic/eijkhout`

cellular, `plain3` — Cellular table construction.
Author: J. E. Pittman; CTAN location: `macros/plain/contrib/cellular`

cep — Compression tools for PostScript. Compression utilities for PostScript files, written in AWK and PostScript (gawk and GhostScript) to compress bitmap EPS files up to 10 percent of the original size. Well documented.
Author: BOP; CTAN location: `support/pstools/cep`

changebar, `latex2` — Generate changebars in LATEX documents. Identify areas of text to be marked with changebars with the `\cbstart` and `\cbend` commands.
Author: Johannes Braams; CTAN location: `macros/latex/contrib/supported/changebar`

chappg — Package for page numbering by chapter. Provides for chapterno-pageno or chaptername-pageno page numbering. Provision made for front- and backmatter in book class.
Author: Robin Fairbairns; CTAN location: `macros/latex/contrib/other/misc`

chapterbib — Separate bibliography for each `\include` file.
Author: Donald Arseneau; CTAN location: `macros/latex/contrib/supported/cite`

chemcono
latex3
Support for compound numbers in chemistry documents. A LaTeX style file for using compound numbers in chemistry documents. It works like \cite and the \thebibliography, using \fcite and \theffbibliography instead. It allows compound names in documents to be numbered and does not affect the normal citation routines.
Author: Stefan Schulz; CTAN location: macros/latex/contrib/supported/chemcono

chemsym
latex3
Macros for typing chemical symbols.
Author: Mats Dahlgren; CTAN location: macros/latex/contrib/supported/chemsym

cheq
fonts3
Adobe chess font.
Author: Adrian Clark; CTAN location: fonts/cheq

cherokee
fonts3
Fonts for Cherokee scripts.
Author: Alan M. Stanier; CTAN location: fonts/cherokee

chess
fonts3
Fonts for typesetting chess boards.
Author: Piet Tutelaaers; CTAN location: fonts/chess

chicago
A bibliography style.
Author: Glenn Paulley; CTAN location: biblio/bibtex/contrib

china2e
latex3
A LaTeX package to produce Chinese calendar symbols of the old Chinese lunisolar calendar.
Author: Udo Heyl; CTAN location: macros/latex/contrib/supported/china2e

chktex
texlive2
This program catches some typographic errors LaTeX overlooks, and can be viewed as Lint for LaTeX. Filters are also provided for checking the LaTeX parts of CWEB documents.
Author: Jens T. Berger Thielemann; CTAN location: support/chktex

chngpage
Change the page layout in the middle of a document. Provides commands to change the page layout in the middle of a document (e.g., make the textblock wider or narrower, and/or longer or shorter, and/or shift it vertically or horizontally).
Author: Peter R Wilson; CTAN location: macros/latex/contrib/supported/misc

circ
graphics3
Macros for typesetting circuit diagrams. Several electrical symbols like resistor, capacitor, transistors etc., are defined. The symbols can be connected with wires.
Author: Sebastian Tannert; CTAN location: macros/generic/diagrams/circ

circle
Provides circles in math mode that can be used for the nextstep operator of temporal logic, in conjunction with \Box and \Diamond (latexsym) or \square and \lozenge (amssymb). LaTeX circles \circ and \bigcirc are not of the right size. The circles are taken from the font lcircle10. The package contains some hacks to approximate the right size and this solution is definitely not sufficient to give a high quality output.
Author: Klaus Georg Barthelmann; CTAN location: macros/latex/contrib/other/misc

circuit-macros
graphics3
M4 Macros for Electric circuit diagrams. A set of macros for drawing high-quality electric circuits containing fundamental elements, amplifiers, transistors, and basic logic gates to include in TeX, LaTeX, or similar documents. Some tools and examples for other types of diagrams are also included. The macros evaluate to drawing commands in the pic language, which is very easy to understand and which has a good power/complexity ratio. Pic contains elements of a simple programming language, and is well-suited to line drawings requiring parametric or conditional components, fine tuning, significant geometric calculations or repetition, or that are naturally block structured or tree structured. The m4 and pic processors are readily available for Unix and PC machines.
Author: Dwight Aplevich; CTAN location: graphics/circuit_macros

cirth
fonts3
Fonts for Cirth.
Author: Jo Grant; CTAN location: fonts/cirth

cite
latex2
Supports compressed, sorted lists of numerical citations.
Author: Donald Arseneau; CTAN location: macros/latex/contrib/supported/cite

citeref
latex3
Support backward references in the bibliography.
Author: Olaf Maibaum; CTAN location: macros/latex/contrib/other/citeref

cjk-fonts
Fonts to go with the cjk macro package for Chinese/Japanese/Korean with LaTeX 2_ε.
Author: Werner Lemberg; CTAN location: fonts/CJK

cjk
lang3
A macro package which enables the use of Chinese/Japanese/Korean with LaTeX 2_ε.
Author: Werner Lemberg; CTAN location: language/chinese/CJK

cm
fonts1
Computer Modern fonts.
Author: Donald Knuth; CTAN location: fonts/cm

cmactex — TEX for the Macintosh. This port of TEX for the Macintosh includes Omega and pdftex.
Author: Tom Kiffe; CTAN location: `systems/mac/cmactex`

cmbright, `fonts2` — Support for CM Bright fonts in LATEX. A family of sans serif fonts for TEX and LATEX, based on Donald Knuth's CM fonts. It comprises OT1, T1 and TS1 encoded text fonts of various shapes as well as all the fonts necessary for mathematical typesetting, incl. AMS symbols. This collection provides all the necessary files for using the fonts with LATEX.
Author: Walter Schmidt; CTAN location: `fonts/cmbright`

cmcyr, `fonts3` — Computer Modern fonts extended with Russian letters, in MetaFont sources and ATM Compatible.
Author: N. Glonty, A. Samarin; B. K. Malyshev; CTAN location: `fonts/cyrillic/cmcyr`

cmcyralt, `latex3` — Alternative Russian encoding support.
Author: Alexander Harin; CTAN location: `fonts/cyrillic/cmcyralt`

cmdtrack, `latex3` — Check used commands. Aids in the task of checking whether a command defined in a document preamble is actually used somewhere in the document. If you add a statement to use the package cmdtrack to the preamble of your document, all 'newcommand' and similar statements between that point and the beginning of the document will be marked for logging. At the end of the document a report of the command usage will be printed in the TEX log, for example: mdash was used on line 25; ndash was never used.
Author: Michael Downes; CTAN location: `macros/latex/contrib/supported/cmdtrack`

cmextra, `fonts2` — Extra Computer Modern fonts, from the American Mathematical Society.
Author: American Mathematical Society; CTAN location: `macros/latex/base`

cmolddig — Virtual fount setup for using old style digits. This package is a virtual fount setup for using old style digits by default with the OT1 encoded Computer Modern Roman upright founts. The eco package does the same job for the T1 encoded EC founts and is generally much better because the EC founts are like that; but then again, OT1 encoded cmr is available for free in TrueType and PS Type 1 formats and has its uses in pdf files as a result.
Author: Rowland McDonnell; CTAN location: `fonts/cmolddig`

cmpica, `fonts3` — A Computer Modern Pica variant.
Author: Don Hosek; CTAN location: `fonts/cmpica`

cmps — Versions of PostScript fonts, from Blue Sky and Y&Y.
Author: unknown; CTAN location: `fonts/cm/ps-type1/bluesky`

cmsd, `latex3` — A package including additional fd files. Its purpose is to provide an alternative interface to the CM Sans Serif boldface fonts. The EC (T1, Cork) encoded versions of the 'CM Sans Serif boldface extended' fonts differ considerably from the traditionally (OT1) encoded ones: At large sizes, >10pt, they have thinner strokes and are much wider. At 25pt they are hardly to be recognized as being 'boldface'. This package attempts to make these T1 fonts look like the traditional ones did. You do not need any new fonts; the package just changes the way LATEX makes use of the current ones.
Author: Walter Schmidt; CTAN location: `macros/latex/contrib/supported/cmsd`

cmtt — A package for handling the 'cmtt' font better. It introduces a special encoding for the font, and provides a command which allows you to use all the characters without the disadvantages of verbatim text.
Author: Mark Wooding; CTAN location: `macros/latex/contrib/supported/mdwtools`

cmyk-hax, `generic2` — A TEX macro package for colour manipulation (using PostScript). A set of TEX macros supporting color separation and substitution using the TEX/PostScript environment. Requires dvips and colordvi.tex/sty from the standard dvips distribution. The current version enables processing of CMYK bitmaps.
Author: BOP; CTAN location: `macros/generic/TeX-PS/cmyk-hax`

code128 — A set of barcode macros for the Code 128 standard.
Author: Petr Olšák; CTAN location: `macros/generic/code128`

codepage, `latex3` — Support for variant code pages.
Author: Alain Aubord; CTAN location: `macros/latex/contrib/supported/codepage`

color — Allows text and page background colors to be set. For documentation see grfguide.
Author: David Carlisle; CTAN location: `macros/latex/required/graphics`

colorsep, `dvips3` — Color separation. Support for colour separation when using dvips.
Author: Sebastian Rahtz

colortab
plain3
Shade cells of tables and halign. Lets you shade or color the cells in the alignment environments such as \halign and LaTeX's tabular and array environments.
Author: Timothy Van Zandt; CTAN location: macros/generic/colortab

colortbl
Add colour to LaTeX tables. Allows rows and columns to be coloured, and even individual cells.
Author: David Carlisle; CTAN location: macros/latex/contrib/supported/carlisle

combine
latex3
Bundle individual documents into a single document. The combine class lets you bundle individual documents into a single document, such as when preparing a conference proceedings. The auxiliary combinet package puts the titles and authors from \maketitle commands into the main document's Table of Contents. The package cooperates with the abstract and titling packages.
Author: Peter R. Wilson; CTAN location: macros/latex/contrib/supported/combine

comma
Formats a number by inserting a comma. A flexible package that allows commas (or anything else) to be inserted every three digits in a number, as in 1,234.
Author: David Carlisle; CTAN location: macros/latex/contrib/supported/carlisle

comment
latex2
Selectively include/exclude portions of text. Selectively include/exclude pieces of text, allowing the user to define new, separately controlled, comment versions.
Author: Victor Eijkhout; CTAN location: macros/latex/contrib/other/comment

compsci
latex3
Document (LaTeX) programming with LaTeX. Document (LaTeX) programming with LaTeX. A LaTeX package useful whenever writing about programming, but especially when writing about TeX and especially when used as a supplement to the ltxdoc class to document LaTeX macros in a literate programming style with dtx files.
Author: Matt Swift; CTAN location: macros/latex/contrib/supported/frankenstein

concmath
fonts3
Concrete Math fonts. LaTeX package and font definition files to access the Concrete math fonts, which were derived from Computer Modern math fonts using parameters from Concrete Roman text fonts. (CTAN:fonts/concmath)
Author: Ulrik Vieth; CTAN location: macros/latex/contrib/other/concmath

concprog
A class which provides the necessary macros to prepare a (classical) concert programme.
Author: unknown; CTAN location: macros/latex/contrib/supported/concprog

concrete-wrap
fonts3
A wrapper to load up the appropriate packages to use the concrete fonts.
Author: Jim Hefferon; CTAN location: macros/latex/contrib/other/misc

concrete
fonts3
Concrete Roman fonts. Concrete Roman fonts, designed by Donald E. Knuth, originally for use with Euler math fonts.
Author: Donald Knuth; CTAN location: fonts/concrete

consdiag
A utility for OO programming documentation. Written in python it generates LaTeX code (texdraw) to draw Rumbaugh OO boxes.
Author: Manuel Gutierrez Algaba; CTAN location: support/consdiag

context
formats2
The ConTeXt macro package. A full featured, parameter driven macro package, which fully supports advanced interactive documents. ppchtex is a module that can be used to typeset chemical formulas.
Author: Hans Hagen; CTAN location: macros/context

contour
latex3
Print a coloured contour around text. This package generates a colored contour around a given text in order to enable printing text over a background without the need of a color box around the text.
Author: Harald Harders; CTAN location: macros/latex/contrib/supported/contour

cooking
latex3
Typeset recipes.
Author: Axel Reichert; CTAN location: macros/latex/contrib/supported/cooking

corelpak
A small perl script to install the pfb and afm files that Corel sells with their products but had to be inserted and renamed by hand.
Author: unknown; CTAN location: fonts/psfonts/corelpak/contrib

count1to
Set count1 to count9. A LaTeX package which sets count1 to count9, which can be used to select certain pages with a driver. Also provides access to the number of pages of the document. Uses the everyshi package.
Author: Martin Schroeder; CTAN location: macros/latex/contrib/supported/ms

covington
latex3
Linguistic support. Numerous minor LaTeX enhancements for linguistics, including multiple accents on the same letter, interline glosses (word-by-word translations), Discourse Representation Structures, and example numbering.
Author: Michael Covington; CTAN location: macros/latex/contrib/supported/covington

croatian — Fonts for typesetting Croatian scripts.
lang3 — Author: Darko Zubrinic; CTAN location: `language/croatian`

crop — Support for cropmarks. A package providing corner marks for camera alignment as well as for trimming paper stacks, and additional page information on every page if required. Most macros are easily adaptable to personal preferences.
latex3 — Author: Melchior Franz; CTAN location: `macros/latex/contrib/supported/crop`

crosswrd — Macros for typesetting crossword puzzles. Brian Hamilton Kelly's crosswrd package updated to run with LaTeX 2ε.
latex3 — Author: Brian Hamilton Kelly and Frank Mittelbach; CTAN location: `macros/latex/contrib/other/crosswrd`

cryst — Font for symmetry elements in crystallography.
latex3 — Author: Ulrich Mueller; CTAN location: `fonts/cryst`

csfonts — Czech/Slovak-tuned MetaFont Computer Modern fonts.
fonts2 — Author: unknown

cslatex — LaTeX support for Czech/Slovak typesetting.
lang2 — Author: unknown

csplain — Plain TeX support for Czech/Slovak typesetting.
lang2 — Author: unknown

cspsfonts — Czech and Slovakian PostScript fonts.
fonts2 — Author: unknown

cstug — No description available.
doc3 — Author: unknown

csx — Documentation for the CS/CSX documents on MS-DOS. Documentation for the CS/CSX 8-bit transliteration scheme, LaTeX 2ε input encoding definition file, and screen drivers for viewing CS/CSX documentation on DOS boxes.
Author: Anshuman Pandey; CTAN location: `fonts/csx`

ctib4tex — Tibetan for TeX and LaTeX 2ε. A package using a modified version of Sirlin's Tibetan font. An advantage of this Tibetan implementation is that all consonant clusters are formed by TeX and Metafont. No external preprocessor is needed.
Author: Oliver Corff; CTAN location: `language/tibetan/ctib`

currvita — Package for typesetting a curriculum vitae.
latex3 — Author: Axel Reichert; CTAN location: `macros/latex/contrib/supported/currvita`

cursor — Creates a simple L-shaped 'cursor' in a math environment to mimic what one might see on a computer screen.
latex3 — Author: Piet van Oostrum; CTAN location: `macros/latex/contrib/supported/cursor`

curves — Curves for LaTeX picture environment Draws curves in the standard LaTeX picture environment using parabolas between data points with continuous slope at joins. For circles and arcs uses up to 16 parabolas. Also draws symbols or dash patterns along curves. Equivalent to technical pens with compasses and French curves. Curves consist of short secants drawn by overlapping disks or line drawing `\specials` selected by package options.
graphics3 — Author: Ian Maclaine-cross; CTAN location: `macros/latex/contrib/supported/curves`

custom-bib — Customised BibTeX styles. Package generating customized BibTeX bibliography styles from a generic file using docstrip. Includes support for the Harvard style.
bibtex2 — Author: Patrick W. Daly; CTAN location: `macros/latex/contrib/supported/custom-bib`

cwebbin — CWEB for ANSI-C/C++ compilers on UNIX/Linux, MS-Windows, and Amiga. A highly portable and slightly extended version of cweb for Unix, MS-Windows32, and Amiga (and possibly other operating systems). TeX macros and CWEB macros are provided for German, French, and Italian program documentation on any machine. Comes with binaries. Note that the file cwebbin-p14.tar.gz contains Amiga binaries that are not found in later versions.
Author: Andreas Scherer; CTAN location: `web/c_cpp/cwebbin`

cweb-hy — Insert hyperlinks for included files.
Author: Enrique Melendez; CTAN location: `macros/latex/contrib/supported/cweb/contrib/cweb-hy`

cwebx — A system for Structured Software Documentation in C. The CWEBx system is a system for Structured Software Documentation (also known as Literate Programming) in the programming language C. It is a derivative of the CWEB system by Sylvio Levy and Donald E. Knuth, who originally conceived the idea of Literate Programming; CWEBx is a compatible extension of CWEB.
Author: Marc van Leeuwen; CTAN location: `web/c_cpp/cwebx`

cwpuzzle — Typeset crossword puzzles.
Author: Gerd Neugebauer; CTAN location: `macros/latex/contrib/other/gene/crossword`

cypriot `fonts3` — A script which was used on Cyprus for writing Greek. The cypriot package provides a Metafont version of a syllabic script which was used on Cyprus for writing Greek. The script was in use between approximately the tenth and third centuries BC. It is one in a series of archaic fonts.
Author: Peter Wilson; CTAN location: `fonts/archaic/cypriot`

cyrillic `lang2` — Cyrillic support.
Author: unknown

cyrtug — The CyrTUG distribution for emTeX.
Author: Michel Goossens; CTAN location: `systems/msdos/emtex-contrib/cyrtug`

czech — Typeset Czech documents.
Author: unknown; CTAN location: `macros/latex/required/babel`

dancers `fonts3` — Font for the Sherlock Holmes 'Dancing Men'.
Author: Alan M. Stanier; CTAN location: `fonts/dancers`

dante-src — Contains the source code for a TEX installation under UNIX (TEX, current release of `\LateXe`, MetaFont, BIBTEX, MakeIndex, drivers for X11, HP LaserJet and PostScript).
Author: unknown; CTAN location: `systems/unix/dante-src`

dates — Macros for parsing date strings.
Author: Frank Bennett; CTAN location: `macros/latex/contrib/supported/dates`

dblfont — A package intended for generating commands that print letters in the blackboard-bold font (which is often used for the numerical sets, for example).
Author: Francesco Bosisio; CTAN location: `macros/latex/contrib/supported/bosisio`

dbprocess — Parse the output from a database, delimited by either a tab or comma, and apply a user-defined macro to each line.
Author: Victor Eijkhout; CTAN location: `macros/generic/eijkhout`

dcolumn — Align on the decimal point of numbers in tabulars.
Author: David Carlisle; CTAN location: `macros/latex/required/tools`

dcounter — Supports dynamic counters. Counters declared as dynamic are created at the time of their first use and they receive at that moment the count style which was established by the `\countstyle` command. The special use of the `\countstyle` command with an optional parameter allows the modification of the subordination of existing counters.
Author: A. I. Rozhenko; CTAN location: `macros/latex/contrib/supported/ncctools`

default — A style to help provide default parameters for TEX macros.
Author: Zhuhan Jiang; CTAN location: `macros/generic`

delarray — Delimiters for arrays. Add delimiters (parentheses etc.) around arrays (nesting brackets are automatically inserted).
Author: David Carlisle; CTAN location: `macros/latex/required/tools`

deleq `latex3` — Flexible numbering of equations. Provides a more flexible numbering of equations, subequations, and 'recycled' equations, including 'partial' equation numbers ('3a', '3b', etc.).
Author: Mats Dahlgren; CTAN location: `macros/latex/contrib/supported/deleq`

delimtxt — Read and parse text tables. This experimental package can read and parse text tables delimited by user-defined tokens (e.g., tab). It can be used for serial letters and the like, making it easier to export the data file from MS-Excel/MS-Word
Author: Bjoern Pedersen; CTAN location: `macros/latex/exptl/delimtxt`

devanagari `lang3` — Typesetting Devanagari. Frans Velthuis' preprocessor for Devanagari text, and fonts and macros to use when typesetting the processed text.
Author: Anshuman Pandey, Frans Velthuis, John Smith, Dominik Wujastyk and François Patte; CTAN location: `language/devanagari`

dialogl `latex3` — Macros for constructing interactive LATEX scripts.
Author: unknown; CTAN location: `macros/latex/contrib/supported/dialogl`

dialogue
latex3
Quote short scripted dialogue in LaTeX. A LaTeX package defining the dialogue environment for citing short passages of scripted dialogue.
Author: Matt Swift; CTAN location: macros/latex/contrib/supported/frankenstein

dichokey
Construct dichotomous identification keys. The package can be used to construct dichotomous identification keys (used especially in biology for species identification), taking care of numbering and indentation of successive key steps automatically. Run the example file!
Author: Nico Dam; CTAN location: macros/latex/contrib/supported/dichokey

dinat
bibtex3
Bibliography style for German texts. Bibliography style files intended for texts in german. They draw up bibliographies in accordance with the german DIN 1505, parts 2 and 3. For more information see the included documentation.
Author: Helge Baumann; CTAN location: biblio/bibtex/contrib/german/dinat

dinbrief
latex3
German letter DIN style. Implements a document layout for writing letters according to the rules of DIN (Deutsches Institut für Normung, German standardization institute). A style file for LaTeX 209 (with limited support of the features) is part of the package. Since the letter layout is based on a German standard, the user guide is written in German, but most macros have English names from which the user can recognize what they are used for. In addition there are example files showing how letters may be created with the package.
Author: Klaus Dieter Braune and Richard Gussmann; CTAN location: macros/latex/contrib/supported/dinbrief

directory
bibtex3
Address book. A package for LaTeX and BibTeX that facilitates the construction, maintenance and exploitation of an address book-like database.
Author: Christophe Geuzaine; CTAN location: biblio/bibtex/contrib/directory

dn2
Fixes for devanagari. A pre-processor to fix problems with using devanagari font with German language extensions.
Author: Klaus-J. Wolf; CTAN location: language/devanagari/contrib/dn2

doc
Format LaTeX documentation. Contains the definitions that are necessary to format the documentation of package files (Literate LaTeX) which incorporate both the documentation and the code.
Author: Frank Mittelbach; CTAN location: macros/latex/base

docmfp
latex3
Document non-LaTeX code. Extends the doc package to cater for documenting non-LaTeX code, such as MetaFont or MetaPost, or other programming languages.
Author: Peter Wilson; CTAN location: macros/latex/contrib/supported/docmfp

docstrip
Remove comments from file. Makes a package documentation file smaller by removing comments and other sections of the document conditionally.
Author: LaTeX Project Team; CTAN location: macros/latex/base

dotlessi
Provides dotless i's and j's for use in any math font.
Author: Javier Bezos; CTAN location: macros/latex/contrib/supported/bezos

dotlessj
Generates a dot-less j.
Author: David Carlisle; CTAN location: macros/latex/contrib/supported/carlisle

dotseqn
latex3
Flush left equations with dotted letters to the numbers.
Author: Donald Arseneau; CTAN location: macros/latex/contrib/other/dotseqn

doublestroke
A font based on Computer Modern Roman useful for typesetting the mathematical symbols for the natural numbers (N), whole numbers (Z), rational numbers (Q), real numbers (R) and complex numbers (C).
Author: Olaf Kummer; CTAN location: fonts/doublestroke

draftcopy
latex3
Identify draft copies. Places the word DRAFT (or other words) in light grey diagonally across the background (or at the bottom) of each (or selected) pages of the document.
Author: Juergen Vollmer; CTAN location: macros/latex/contrib/supported/draftcopy

drafthead
Prints a header on each page including date and time and the string DRAFT.
Author: Stephen Page; CTAN location: macros/latex209/contrib/misc

drama
latex3
Production-style stage script in LaTeX. A LaTeX package that defines macros for typesetting a basic production-style stage script. This package is useful but may have problems and is unsupported.
Author: Matt Swift; CTAN location: macros/latex/contrib/supported/frankenstein/unsupported

dratex
graphics3
General drawing macros entirely in TeX.
Author: Eitan Gurari; CTAN location: macros/generic/dratex

drftcite Print the tags instead of the numbers for `\cite` and `\bibitem`.
Author: unknown; CTAN location: `macros/latex/contrib/supported/cite`

dropcaps Use dropped capitals to start a paragraph.
Author: Fred Lauwers; CTAN location: `macros/latex209/contrib/dropcaps`

dropping
`latex3` Drop first letter of paragraphs. A LaTeX 2ε macro for dropping the first character(s) (or word(s)) of a paragraph, extending the LaTeX 2.09 package dropcaps and automatically taking care of finding the font name.
Author: Mats Dahlgren; CTAN location: `macros/latex/contrib/other/dropping`

dstroke
`fonts3` Doublestroke font for typesetting the mathematical symbols for the natural numbers (N), whole numbers (Z), rational numbers (Q), real numbers (R) and complex numbers (C)
Author: Olaf Kummer

duerer
`fonts3` Computer Duerer fonts.
Author: Alan Hoenig; CTAN location: `fonts/duerer`

dvgtk A DVI file previewer for Tektronix 4010 terminal emulators like Kermit, CONEX, or NCSA Telnet, using the Kpathsea library.
Author: Tomasz J. Cholewo; CTAN location: `dviware/dvgtk`

dvi2bitmap Utility to convert TeX DVI files directly to bitmaps. A utility to convert TeX DVI files directly to bitmaps, without going through the complicated (and slow!) route of conversion via PostScript and PNM. The prime motivation for this is to prepare mathematical equations for inclusion in HTML files but there are many other uses beyond that. It can generate XBM and GIF bitmaps, plus PNG, if you have the libpng library installed. It uses the same kpathsea font-searching library as other TeX programs, again as long as you have the appropriate library installed. The program is written in C++, and incidentally provides a good object interface for DVI and PK files.
Author: Norman Gray; CTAN location: `dviware/dvi2bitmap`

dvi2tty Produce ASCII from DVI. A DVI driver to produce an ASCII representation of the document. The patch file `dvi2tty.patch` fixes a string termination bug which affects some systems (most notably Linux) and cleans up the Makefile.
Author: Svante Lindahl; CTAN location: `dviware/dvi2tty`

dvichk List the page numbers in a DVI file.
Author: Thomas Esken; CTAN location: `dviware/dvichk`

dviconcat Concatenates dvi files.
Author: unknown; CTAN location: `dviware/dvibook/Dviconcat`

dvicopy Copy and concatenate DVI files.
Author: unknown; CTAN location: `dviware/dvicopy`

dvii Extract information from a DVI file. A utility written in C that extracts information from a TeX dvi file. Information displayed can include a summary of File comment (usually the date file was compiled), file size, number of (physical) pages, and number of fonts. More detailed information can also be displayed, including font names for all fonts used, list of physical page number/TeX page number pairs, and a list of all `\specials` and the page on which they appear. To compile, you need to have a C compiler along with the standard C libraries (e.g., gcc on DOS or Unix).
Author: Adam Lewenberg; CTAN location: `dviware/dvii`

dviincl A tiny package for including a DVI page into the EPS files generated by METAPOST. One of the auxiliary programs belonging to every METAPOST package is DVItoMP, converting a DVI into a METAPOST file. Hence the idea (due to Piotr Bolek and Marcin Woliński) of including a DVI page into the EPS files generated by METAPOST. MPX file produced by DVItoMP is then processed by METAPOST with an auxiliary file.
Author: BOP; CTAN location: `graphics/metapost/macros/dviincl`

dviljk A dvi driver for the LaserJet printers with recursive file searching.
Author: unknown; CTAN location: `dviware/dviljk`

dviout TeX previewer and printer driver for MS-Windows.
Author: Oshima Toshio; CTAN location: `dviware/dviout`

dvipaste DVI manipulation. A program designed to produce files that conform to the TeX specifications for dvi files, even though they may actually be too big to be produced with normal implementations of TeX (because of limitations on memory size). More particularly, it allows the material appearing on individual pages of a 'secondary' file to be inserted into a 'main' file.
Author: unknown; CTAN location: `macros/lamstex/dvipaste`

dvipdfm — A dvi driver to produce PDF directly.
doc2 — Author: Mark A. Wicks; CTAN location: `dviware/dvipdfm`

dvips-os2 — OS2 (and hence MS-DOS, MS-Windows3.1, MS-Windows32) executable for dvips.
Author: Wonkoo Kim; CTAN location: `systems/os2/dviware/dvips`

dvips-shell — A dvips Shell for MS-Windows32.
Author: unknown; CTAN location: `systems/win32/util`

dvips — A dvi to PostScript driver.
dvips1 — Author: Tom Rokicki; CTAN location: `dviware/dvips`

dvipsconfig — Collection of dvips PostScript headers. This is a collection of dvips PostScript header and dvips config files. They control certain features of the printer, including: A4, A3, usletter, simplex, duplex / long edge, duplex / short edge, screen frequencies of images, black/white invers, select transparency / paper for tektronix 550/560, manual feeder, envelope feeder, and tray 1, 2 and 3, and printing a PostScript grid underneath the page material - very useful for measuring and eliminating paper feed errors!
Author: Volker Kuhlmann; CTAN location: `dviware/dvipsconfig`

dvipsdoc — No description available.
dvips2 — Author: unknown

dvipsk — A (now standard) version of dvips with support for recursive directory searching.
Author: unknown; CTAN location: `dviware/dvipsk`

dviwin — MS-Windows DVI screen and printer driver. A screen and printer driver for TEX DVI files under Windows 3.1 and Windows NT. Its main features are: Fast previewing (uses 386-specific code if it finds a 386/486); Painless support for graphics in TEX documents; Uses any standard PK font files or FLI font libraries; Works with all displays and printers supported by Windows; Automatic generation of missing fonts; Support for color printers; Native 32-bit versions for Windows NT; Selectable measurement units; User-definable strings for easy adaptation to various languages (the distribution contains strings for four different languages apart from English); graphics filters for GIF and XPM files, etc. The required memory depends on the resolution that you use. It needs about 1.5M free RAM to print on a 300dpi printer without swapping.
Author: Hippocrates Sendoukas; CTAN location: `dviware/dviwin`

ean — Font for making EAN barcodes.
generic3 — Author: unknown; CTAN location: `macros/generic/ean`

easy — A collection of "easy" to use macros.
latex3 — Author: Enrico Bertolazzi; CTAN location: `macros/latex/contrib/supported/easy`

easybib — Simple syntax for custom bibliographies. A macro package for writing custom bibliographies with a simple AMS-TEX-like syntax.
Author: Enrico Bertolazzi; CTAN location: `macros/latex/contrib/supported/easy`

easybmat — Block matrices. A simple package for writing block matrices with equal column widths or equal rows heights or both, with various kinds of rules between rows and columns.
Author: Enrico Bertolazzi; CTAN location: `macros/latex/contrib/supported/easy`

easyeqn — A simple package for writing equations. Introduces some equation environments that simplify writing of equations. It uses a syntax similar to the array environment to define the column alignment. A package option causes only those equations that were labeled and referenced to be numbered. A set of macros for typesetting is also added.
Author: Enrico Bertolazzi; CTAN location: `macros/latex/contrib/supported/easy`

easymat — A simple package for writing matrices. Treats a matrix as an array enviroment with more kinds of lines and reentrant.
Author: Enrico Bertolazzi; CTAN location: `macros/latex/contrib/supported/easy`

easytable — A simple package for writing tables. Supports tables with equal column widths or equal rows heights or both, with various kinds of rules (lines) between rows and columns using an array/tabular-like syntax.
Author: Enrico Bertolazzi; CTAN location: `macros/latex/contrib/supported/easy`

easyvector — Write vectors in a C-like fashion.
Author: Enrico Bertolazzi; CTAN location: `macros/latex/contrib/supported/easy`

ec-plain — A plain-like format using the ec fonts including an extended math italic font (exmi) providing upright greek letters.
Author: Joerg Knappen; CTAN location: `macros/ec-plain`

ec, `fonts2` — The European Computer Modern Fonts supporting the complete LaTeX T1 encoding defined at the 1990 TUG conference held at Cork/Ireland. These fonts are intended to be stable with no changes being made to the tfm files. Also contains a Text Companion Symbol font, called tc, featuring many useful characters needed in typesetting, for example oldstyle digits, currency symbols (including the newly created Euro symbol), the permille sign, copyright, trade mark and servicemark as well as a copyleft sign, and many others. Recent releases of LaTeX 2ε support the ec fonts. The ec fonts supersede the preliminary version released as the dc fonts.
Author: Joerg Knappen, Mainz; CTAN location: `fonts/jknappen/ec`

ecc, `fonts3` — Sources for the European Concrete fonts. The MetaFont sources and tfm files of the European Concrete Fonts. This is the EC implementation of Knuth's Concrete fonts, including also the corresponding text companion fonts.
Author: Walter Schmidt; CTAN location: `fonts/ecc`

ecltree, `latex3` — No description available.
Author: Hideki Isozaki

eco, `fonts3` — Font metric files and virtual fonts for ec fonts. A set of font metric files and virtual fonts for using the ec fonts with oldstyle numerals. These files can only be used together with the standard ec fonts. The style file eco.sty is sufficient to use the eco fonts but if you intend to use other font families as well, e.g., PostScript fonts, try altfont.
Author: Sebastian Marius Kirsch; CTAN location: `fonts/eco`

ecpk, `fonts3` — No description available.
Author: unknown

edmac, `plain3` — A macro package for typesetting scholarly critical editions.
Author: unknown; CTAN location: `macros/plain/contrib/edmac`

eepic, `graphics2` — Extensions to epic and the LaTeX drawing tools. Extensions to epic and the LaTeX picture drawing environment, including the drawing of lines at any slope, the drawing of circles in any radii, and the drawing of dotted and dashed lines much faster with much less TeX memory, and providing several new commands for drawing ellipses, arcs, splines, and filled circles and ellipses.
Author: Conrad Kwok; CTAN location: `macros/latex/contrib/other/eepic`

egplot, `latex3` — A package to encapsulate gnuplot commands in a LaTeX source file and thus include figures generated with gnuplot.
Author: Axel Probst; CTAN location: `macros/latex/contrib/supported/egplot`

eiad, `fonts3` — Macros and EIAD fonts.
Author: unknown; CTAN location: `fonts/eiad`

eijkhout, `generic3` — Several unrelated packages: DBprocess, to parse and process database output; CDlabeler, to typeset user text to fit on a CD label; repeat.tex, a nestable, generic loop macro.
Author: Victor Eijkhout; CTAN location: `macros/generic/eijkhout`

elsevier, `latex3` — Preprint style for Elsevier Science journals.
Author: unknown; CTAN location: `macros/latex/contrib/supported/elsevier`

elvish, `fonts3` — Font for typesetting Tolkien Elvish script.
Author: Julian Bradfield; CTAN location: `fonts/elvish`

emp, `latex3` — A package for encapsulated MetaPost pictures in LaTeX. Useful for keeping illustrations in sync with the text. It also frees the user from inventing descriptive names for PostScript files that fit into the confines of file system conventions.
Author: unknown; CTAN location: `macros/latex/contrib/supported/emp`

emtex-os2 — A TeX system for OS/2.
Author: unknown; CTAN location: `systems/os2/emtex`

emtex — A TeX system for MS-DOS.
Author: unknown; CTAN location: `systems/msdos/emtex`

emtexgi — A MS-Windows interface to emTeX.
Author: Allin Cottrell; CTAN location: `systems/msdos/emtex-contrib/emtexgi`

emtextds — TEX for OS2. An emtex-based TEX system for OS2 with a TDS-compliant directory structure. The distribution contains a full texmf directory tree. It comes with an installation script that sets up a comprehensive, ready-to-run (LA)TEX system, including full PostScript support.
Author: Walter Schmidt; CTAN location: `systems/os2/emtex-contrib/emtexTDS`

emulateapj — LATEX style files to produce preprints with the page layout similar to that of the Astrophysical Journal.
`latex3` Author: Maxim Markevitch; CTAN location: `macros/latex/contrib/supported/emulateapj`

encodings — No description available.
`omega2` Author: unknown

endfloat — Move floats to the end with markers where they belong. Place all figures on pages by themselves at the end of the document with markers like "[Figure 3 about here]" appearing in the text (by default) near to where the figure (or table) would normally have occurred.
`latex3` Author: Jeffrey Goldberg; CTAN location: `macros/latex/contrib/supported/endfloat`

endnotes — Accumulates footnotes and places them at the end of the document.
Author: Bernard Gaulle; CTAN location: `macros/latex/contrib/other/misc`

engwar — Font for typesetting Tolkien Engwar script, by Michael Urban.
`fonts3` Author: unknown; CTAN location: `fonts/engwar`

enumerate — Adds an optional argument to the enumerate environment which determines the style in which the counter is printed.
Author: David Carlisle; CTAN location: `macros/latex/required/tools`

envbig — Printing addresses on envelopes.
`latex3` Author: unknown; CTAN location: `macros/latex/contrib/other/envbig`

envlab — Facilates addressing envelopes or mailing labels. A LATEX 2_ε package for producing mailing envelopes and labels, including barcodes and address formatting according to the US Postal Service rules. Redefines the standard `\makelabels` command of the LATEX 2_ε letter documentclass.
`latex3` Author: Boris Veytsman; CTAN location: `macros/latex/contrib/supported/envlab`

epic — A package enhancing LATEX's picture mode.
Author: Sunil Podar; CTAN location: `macros/latex/contrib/other/epic`

epigraph — A package for typesetting epigraphs. Epigraphs are the pithy quotations often found at the start (or end) of a chapter. Both single epigraphs and lists of epigraphs are catered for. Various aspects are easily configurable.
`latex3` Author: Peter Wilson; CTAN location: `macros/latex/contrib/supported/epigraph`

eplain — Simple but powerful extended version of the plain format, adding support for bibliographies, tables of contents, enumerated lists, verbatim input of files, numbered equations, tables, two-column output, footnotes and commutative diagrams.
`formats2` Author: Karl Berry; CTAN location: `macros/eplain`

epmtfe — TEX environment for OS2. The EPM TEX Front End is an additional module for the OS2 'Enhanced Editor' (EPM), v6.03, turning the editor into a powerful integrated TEX environment that can be used in conjunction with emTeX or another OS2 TEX system.
Author: Walter Schmidt; CTAN location: `systems/os2/epmtfe`

epsfig — Include Encapsulated PostScript in LATEX documents. Superseded by the LATEX 2_ε graphics package.
Author: Sebastian Rahtz; CTAN location: `macros/latex/required/graphics`

epsfview — AppleScript tool (for Mac) for viewing figures generated with MetaPost.
Author: Javier Bezos; CTAN location: `systems/mac`

epsfx — A TEX macro package for including EPS graphics (a replacement of epsf.tex/sty). An alternative
`generic2` for epsf.tex/sty dvips macros; enables, e.g., draft printing of bounding boxes, safe inputting of EPS files generated by dvips; moreover, the limit on an EPS size is no longer ten times smaller than the TEX one.
Author: BOP; CTAN location: `macros/generic/TeX-PS`

epsincl — The package facilitates including EPS files in METAPOST documents; it makes use of (G)AWK.
Author: BOP; CTAN location: `graphics/metapost/macros/epsincl`

epslatex — guide to using Encapsulated PostScript in LATEX. An extensive document which explains how to use Encapsulated PostScript (EPS) files in LATEX 2_ε documents. Includes explanations of Bounding Boxes, and more.
Author: Keith Reckdahl; CTAN location: `info`

epstopdf — Convert eps to encapsulated pdf using gs. Converts EPS files to encapsulated PDF files and is written based on the perl script 'epstopdf' by Sebastian Rahtz. It is written in C and does not require perl. However, it does require ghostscript. A compiled version for Windows 95/98/NT is included in the package. Since the sources are included, it can be ported to any system having a C-complier.
Author: Juergen Bausa; CTAN location: `support/epstopdf`

eqname — Style for different equation numbering.
`latex3` Author: unknown; CTAN location: `macros/latex/contrib/other/gene/eqname`

eqnarray — More generalised equation arrays with numbering.
`latex3` Author: unknown; CTAN location: `macros/latex/contrib/supported/eqnarray`

esieecv — Curriculum vitae for French.
`latex3` Author: unknown; CTAN location: `macros/latex/contrib/supported/ESIEEcv`

esindex — Typset index entries in Spanish documents.
Author: Javier Bezos; CTAN location: `macros/latex/contrib/supported/bezos`

eso-pic — A package to add picture commands (or backgrounds) to every page.
Author: Rolf Niepraschk; CTAN location: `macros/latex/contrib/supported/ms/contrib`

et — A program to edit TEX files in a semi-WYSIWYG fashion on IBM-type PC's.
Author: John Collins; CTAN location: `support/et`

etexbase — No description available.
`etex2` Author: unknown

ethiop — Ethiopian language support for the babel package, including a collection of fonts and TEX macros for typesetting the characters of the languages of Ethiopia, with fonts based on EthTEX originally distributed by Abass B. Alamnehe.
Author: Olaf Kummer; CTAN location: `language/ethiopia/ethiop`

etruscan — Fonts for the Etruscan script. The Etruscan script was in use between approximately 1000 BC to 100 AD. The font comes in mirrored forms suitable for writing either left-to-right or right-to-left (as the Etruscans did).
`fonts3` Author: Peter Wilson; CTAN location: `fonts/archaic/etruscan`

euler — Provides a setup for using the AMS Euler family of fonts for math in LATEX documents. "The underlying philosophy of Zapf's Euler design was to capture the flavor of mathematics as it might be written by a mathematician with excellent handwriting." [concrete-tug] The euler package is based on Knuth's macros for the book "Concrete Mathematics". The text fonts for the Concrete book are provided by the beton package.
`latex3` Author: Frank Jensen; CTAN location: `macros/latex/contrib/supported/euler`

eulervm — Euler virtual math fonts. The well-known Euler math fonts are suitable for typsetting math in conjunction with a variety of text fonts which do not provide math character sets of their own. Euler-VM is a set of virtual math fonts based on Euler and CM. This approach has several advantages over immediately using the real Euler fonts: Most noticeably, less TEX resources are consumed, the quality of various math symbols is improved and a usable `\hslash` symbol can be provided. The virtual fonts are accompanied by a LATEX package which makes them easy to use, particularly in conjunction with Type1 PostScript text fonts.
`fonts3` Author: Walter Schmidt; CTAN location: `fonts/eulervm`

euro — Arbitrary national currency amounts using the Euro as base unit. Converts arbitrary national currency amounts using the Euro as base unit, and typesets monetary amounts in almost any desired way. Write, e.g., `\ATS{17.6}` to get something like '17,60 öS (1,28 Euro)' automatically. Conversion rates for the so-called Euro-zone countries are already built-in. Further rates can be added easily.
`latex3` Author: Melchior Franz; CTAN location: `macros/latex/contrib/supported/euro`

eurofont
fonts2
Provides a command that prints a euro symbol. The particular symbol printed by \euro will in general change depending on the font family, weight, and shape in use at the time. This symbol can come from any source, and the package user has complete control over which euro symbol is used in any given situation. The package is pre-configured to behave sensibly with many common text fonts and available euro symbols. The \euro command can print 'faked' euro symbols from a C with two lines across it when no suitable real euro symbol is available; the package also includes code for printing fake bold euro symbols for use when no real bold symbol exists, as well as pre-configured support for a faked italic version of the marvosym font. Eurofont comes set up to use euro symbols from Adobe's Eurofonts, the marvosym font, the Eurosym font, and any available Text Companion fonts. The selection between these can be done using options passed to the package. The eurofont package knows about the China2e font's euro symbol, and can be configured to use it.
Author: Rowland McDonnell; CTAN location: macros/latex/contrib/supported/eurofont

europs
fonts2
Access to Adobe's Euro currency symbol fonts. Provides access to Adobe's Euro currency symbol fonts from LaTeX. The fonts are named using Karl Berry's naming scheme, providing fd files and a style file to use the fonts directly, and providing four macros: \EURtm, \EURhv, \EURcr and \EUR (from marvosym). The actual symbol they produce depends on the currently active font, i.e., they follow font changes caused by \text.. and other NFSS commands. The actual fonts are not included as they have to be fetched from Adobe's web or ftp server.
Author: Joern Clausen; CTAN location: fonts/euro/latex/europs

eurosans
latex3
Interface to Adobe's free Euro fonts. Provides a convenient interface for using the free Adobe Type 1 PostScript Euro fonts. Loading the package defines a new command \euro which typesets a Euro symbol. The symbol is always taken from the 'EuroSans' family, with the weight (medium or boldface) and shape (normal or oblique) varying according to the font currently selected. This Euro symbol meets the official design and matches almost any font family very well, except for typewriter fonts. The fonts comply with the 'Karl Berry' scheme and do the same job as the europs fonts, although the TFM files differ slightly, probably because of different translation programs.
Author: Walter Schmidt; CTAN location: fonts/eurosans

eurosym
fonts2
The new European currency symbol for the "Euro" implemented in Metafont, using the official European Commission dimensions, and providing several shapes (normal, slanted, bold, outline). The package also includes a LaTeX style file which defines the macro, pre-compiled tfm files, and documentation.
Author: Henrik Theiling; CTAN location: fonts/eurosym

euxm
fonts3
Like EUSM but with two more characters needed for Concrete Math
Author: Donald Knuth

everysel
A LaTeX package which provides hooks into selectfont.
Author: Martin Schroeder; CTAN location: macros/latex/contrib/supported/ms

everyshi
Introduces a new hook for taking action at every \shipout. Introduces a new hook for taking action at every \shipout.
Author: Martin Schroeder; CTAN location: macros/latex/contrib/supported/ms

exam
latex3
Package for typesetting exam scripts.
Author: unknown; CTAN location: macros/latex/contrib/supported/exam

examdesign
latex3
Package for typesetting exams.
Author: Jason Alexander; CTAN location: macros/latex/contrib/supported/examdesign

exams
Exam questions can be multiple choice or free form long/short answer questions. Options include the typesetting of the exam itself, an exam showing all the answers and a collection of questions and answers. Questions can be parameterized. Use of a random number generator provides for automatic shuffling of multiple choice items.
Author: unknown; CTAN location: macros/latex/contrib/supported/exams

excalibur
A spelling checker for the Macintosh that is also LaTeX aware.
Author: Rick Zaccone; CTAN location: systems/mac/support/excalibur

exerquiz
Environments for defining exercises and quizzes. This package defines three new environments for defining exercises and quizzes. The solutions to the exercises are hyperlinked to the questions. The quizzes are graded and optionally corrected by JavaScript.
Author: D. P. Story; CTAN location: macros/latex/contrib/supported/webeq

expdlist
latex3
Expanded description environments. The expanded description environment provides additional features to the LaTeX description environment. It supports changing the left margin. With \listpart there is a new command available which makes it possible to break a list for a comment without touching any counters.
Author: Wolfgang Kaspar; CTAN location: macros/latex/contrib/supported/expdlist

expl3
latex3
Experimental packages to allow experienced TeX programmers to experiment with, and comment on, a proposed set of syntax conventions and basic data-types that might form the basis for programming large scale projects in TeX.
Author: unknown; CTAN location: macros/latex/exptl/project/expl3

export
latex3
Import and export values of LaTeX registers. This package allows the user to export/import the values of LaTeX registers (counters, rigid and rubber lengths only). It is definitely NOT for faint-hearted users.
Author: Jean-Pierre Drucbert; CTAN location: macros/latex/contrib/supported/export

expressg
metapost2
Diagrams consisting of boxes, lines, and annotations. A MetaPost package providing facilities to assist in drawing diagrams that consist of boxes, lines, and annotations. Particular support is provided for creating EXPRESS-G diagrams. Examples include IDEF1X, OMT, Shlaer-Mellor, and NIAM diagrams.
Author: Peter Wilson; CTAN location: graphics/metapost/contrib/macros/expressg

exscale
Implements scaling of the 'cmex' fonts.
Author: Frank Mittelbach and Rainer Schöpf; CTAN location: macros/latex/base

extdash
Implements the commands \Hyphdash, \Endash, \Emdash, and their *-forms, to control hyphenation of compound words and ordinary words dashed by em-dash. You can also use the shortcuts \-/, \=/, \--, \==, \---, and \=== instead.
Author: A. I. Rozhenko; CTAN location: macros/latex/contrib/supported/ncctools

extsizes
latex3
Extends article and report with extra sized fonts. Provides classes extarticle and extreport, extletter, extbook, extproc which allow for documents with a base font of size 8–20pt.
Author: Wolfgang May and James Kilfiger; CTAN location: macros/latex/contrib/other/extsizes

fancybox
latex2
Provides variants of \fbox: \shadowbox, \doublebox, \ovalbox, \Ovalbox, with helpful tools for using box macros and flexible verbatim macros. You can box mathematics, floats, center, flushleft, and flushright, lists, and pages.
Author: unknown; CTAN location: macros/latex/contrib/supported/fancybox

fancyhdrBoxed
Page headers for the documentation of Software Engineering Projects. Easy and fast creation of page headers for the documentation of Software Engineering Projects, using a mini language implemented in python that generates PSTricks code that is embedded in fancyhdr headers.
Author: Manuel Gutierrez Algaba; CTAN location: support/fancyhdrBoxed

fancyhdr
latex2
Extensive control of page headers and footers in LaTeX 2_ε.
Author: Piet van Oostrum; CTAN location: macros/latex/contrib/supported/fancyhdr

fancynum
latex3
Typeset numbers. A LaTeX package for typesetting numbers, in particular those numbers written by computers.
Author: J. J. Green; CTAN location: macros/latex/contrib/supported/fancynum

fancyref
latex2
A LaTeX package for fancy cross-referencing.
Author: Axel Reichert; CTAN location: macros/latex/contrib/supported/fancyref

fancyvrb
latex2
Sophisticated verbatim text. Sophisticated handling of verbatim text including: verbatim commands in footnotes; a variety of verbatim environments with many parameters; ability to define new customized verbatim environments; save and restore verbatim text and environments; write and read files in verbatim mode; build "example" environments (showing both result and verbatim text).
Author: Timothy Van Zandt, Denis Girou and Sebastian Rahtz; CTAN location: macros/latex/contrib/supported/fancyvrb

faq
The UK TeX Users Group Frequently Asked Questions.
Author: Robin Fairbairns; CTAN location: usergrps/uktug/faq

fax
latex3
Document class for preparing faxes.
Author: J. B. Rhebergen and J. H. M. de Jonge; CTAN location: macros/latex/contrib/supported/fax

fc
fonts3
Fonts for African languages, complementary to Computer Modern.
Author: Joerg Knappen, Mainz; CTAN location: fonts/jknappen/fc

fepslatex — French version of esplatex.
Author: Jean-Pierre Drucbert; CTAN location: `info`

feynmf, `graphics3` — Macros and fonts for creating Feynman (and other) diagrams. Macros and fonts for creating Feynman (and other) diagrams.
Author: Thorsten Ohl; CTAN location: `macros/latex/contrib/supported/feynmf`

fihyph — Hyphenation patterns for Finnish language. This is modified from fihyph.tex to make the Finnish accented letters to work with LaTeX 2ε, adding some `\catcode`, `\uccode`, and `\lccode` commands after the model used in the hyphenation files for the other European languages.
Author: Timo Hellgren; CTAN location: `language/hyphenation`

filehdr — A collection of tools to support BibTeX style format for file/package descriptions.
Author: unknown; CTAN location: `tools/filehdr`

finbib, `bibtex3` — No description available.
Author: unknown

finplain — A Finnish version of 'plain.bst'.
Author: Antti-Juhani Kaijanaho; CTAN location: `biblio/bibtex/contrib`

fix2col — Fix miscellaneous two column mode features. Fix mark handling so that `\firstmark` is taken from the first column if that column has any marks at all; keep two column floats like figure* in sequence with single column floats like figure.
Author: David Carlisle; CTAN location: `macros/latex/contrib/supported/carlisle`

fixbbl — Patch bibliographies inappropriately broken by BibTeX. This script deals with the well-known BibTeX bug whereby BibTeXP inserts a '%' in a url to cause the bibliography line to fit into its minuscule vision of what is an acceptable input line for TeX.
Author: unknown; CTAN location: `biblio/bibtex/utils/fixbbl`

fixfoot, `latex3` — Multiple use of the same footnote text Provides a `\DeclareFixedFootnote` command to provide a single command for a frequently-used footnote. The package ensures that only one instance of the footnote text appears on each page. (LaTeX needs to be run several times to achieve this.)
Author: Robin Fairbairns; CTAN location: `macros/latex/contrib/supported/fixfoot`

flabels, `latex3` — Labels for files and folders. Macros for typesetting pretty labels (optionally colored) for the back of files or binders (currently only the special a4 "Leitz-Ordner" ring binder is supported).
Author: Volker Boerchers; CTAN location: `macros/latex/contrib/supported/flabels`

flashcard — Typeset flash cards. Flash cards are often used for revision being cards with a question on one side and the answer on the other (though the mechanism could be adapted for other purposes.)
Author: James Kilfiger; CTAN location: `macros/latex/contrib/other/misc`

flatex — A C program to flatten a LaTeX file into a single file, by explicitly including the files included by `\include` and `\input` commands. Also, if BibTeX is being used, then includes the bbl file into the resulting file. Thus, creating a stand alone LaTeX file that can be emailed to someone else.
Author: Sariel Har-Peled; CTAN location: `support/flatex`

flatten — A program to flatten a LaTeX root file by copying `\input` and `\include` files into the root file.
Author: Peter Wilson; CTAN location: `support/flatten`

float, `latex2` — Improved interface for floating objects. Improves the interface for defining floating objects such as figures and tables. Introduces the boxed float and the ruled float. You can define your own floats and improve the behaviour of the old ones. Also incorporates the H option of the superseded here package. You can select this as automatic default with `\floatplacement{figure}{H}`.
Author: Anselm Lingnau; CTAN location: `macros/latex/contrib/supported/float`

floatfig, `latex3` — Allows text to be wrapped around figures.
Author: unknown; CTAN location: `macros/latex/contrib/other/floatfig`

floatflt, `latex3` — Wrap text around floats. Float text around figures and tables which do not span the full width of a page, improving upon floatfig, allowing tables/figures to be set left/right or alternating on even/odd pages.
Author: Mats Dahlgren; CTAN location: `macros/latex/contrib/other/floatflt`

fltpage, `latex3` — Defines new environments for placing captions of tables and figures on the facing/following page.
Author: Sebastian Gross; CTAN location: `macros/latex/contrib/supported/fltpage`

fncychap
latex3
: This package provides six predefined chapter headings. Each can be modified using a set of simple commands. Optionally one can modify the formatting routines in order to create additional chapter headings. This package was previously known as FancyChapter.
Author: Ulf Lindgren; CTAN location: `macros/latex/contrib/supported/fncychap`

fnpara
: Typeset footnotes in run-on paragraphs, instead of one above another.
Author: Chris Rowley and Dominik Wujastyk; CTAN location: `macros/latex/contrib/other/misc`

foilhtml
latex3
: Provides integration between FoilTEX and LATEX2HTML, adding sectioning commands and elements of logical formatting to FoilTEX and providing support for FoilTEX commands in LATEX2HTML.
Author: Boris Veytsman; CTAN location: `macros/latex/contrib/supported/foilhtml`

foiltex
latex3
: A LATEX 2_ε class for overhead transparencies. Can be used with fancybox to place a variety of borders around the slides.
Author: James Hafner; CTAN location: `macros/latex/contrib/supported/foiltex`

font-selection
: Font selection for plain TEX. Font selection for plain TEX, featuring: 21 sizes in the range 7 to 154 points; 16 typefaces, including Italic Bold, Calligraphic Bold, Sans Serif, Sans Serif Italic, and Sans Serif Bold; Boldmath, inclusive of subscripts, superscripts, and symbols; and a few other useful macros.
Author: Harold de Wijn; CTAN location: `macros/plain/contrib/font_selection`

fontinst
generic2
: TEX macros for converting Adobe Font Metric files to TEX metric and virtual font format.
Author: unknown; CTAN location: `fonts/utilities/fontinst`

fontname
doc2
: Karl Berry's scheme for naming fonts in TEX.
Author: unknown

fontsmpl
: Print a sample of a font.
Author: Alan Jeffrey; CTAN location: `macros/latex/required/tools`

footbib
latex3
: A package to put bibliographic references as footnotes.
Author: Eric Domenjoud; CTAN location: `macros/latex/contrib/supported/footbib`

footmisc
latex2
: Footnotes with all the options. Captures as package options much (if not all) of the functionality of the various other footnote packages.
Author: Robin Fairbairns; CTAN location: `macros/latex/contrib/supported/footmisc`

footnpag
latex3
: Allows footnotes on individual pages to be numbered from 1, rather than being numbered sequentially through the document.
Author: Joachim Schrod; CTAN location: `macros/latex/contrib/supported/footnpag`

formats
texlive2
: Prebuilt TEX format and MetaFont base files.
Author: unknown

formlett
: Letters to multiple recipients.
Author: unknown; CTAN location: `macros/generic`

formula
latex3
: Support for physical symbols, ensuring the same shape in text and math mode, including some predefined physical units.
Author: Andreas Tille; CTAN location: `macros/latex/contrib/other/formula`

fourproject
: Analyse and display the structure of a TEX document. A Windows32 program that analyses and displays the structure of a TEX document, its chapters, sections, labels, references, captions, graphics, etc.
Author: Erik Frambach; CTAN location: `support/4project`

fourspell
: Windows32 spell checker for TEX, RTF, HTML, and BIBTEX. A Windows32 spell-checker for (LA)TEX, RTF, HTML, BIBTEX documents, or any other ASCII format, with or without tags. Highly configurable. Supports multiple codepages (can spell-check e.g. Russian), uses colors to display document and tag structures. Dictionaries are compatible with WinEdt.
Author: Erik Frambach; CTAN location: `support/4spell`

fourtex
: A TEX environment for MS-Windows32. Includes spell checker, etc, all controlled from a toolbar that can sit on top of your favourite editor.
Author: Erik Frambach; CTAN location: `systems/win32/4tex`

fp
latex3
: Provides an extensive collection of arithmetic operations for fixed point real numbers of high precision.
Author: Michael Mehlich; CTAN location: `macros/latex/contrib/other/fp`

fptex
: A teTeX-1.0 based distribution for MS-Windows. A distribution of TEX for MS-Windows based on web2c and teTeX using InstallShield for installation.
Author: Fabrice Popineau; CTAN location: `systems/win32/fptex`

frankenbundle
support
Develop and distribute groups of LaTeX packages and classes and BibTeX bibstyles. Frankenbundle allows an author to maintain and distribute a bundle of one or more LaTeX packages and classes and BibTeX bibliography styles, their documentation, and any support files with a high degree of sophistication, consistency, and convenience both for the author and their end users, who will receive the bundle in a form easy to understand and use. The author using Frankenbundle needs a Unix-like environment, GNU Make and a rudimentary understanding of Makefiles. The end user does not need Make.
Author: Matt Swift; CTAN location: support/frankenbundle

frankenstein
latex3
A collection of LaTeX packages. Formerly known as monster (an obsolete, 8+3-compliant name), Frankenstein is a bundle of LaTeX packages serving various purposes and a BibTeX bibliography style. Descriptions are given under the individual packages: abbrevs, achicago package, achicago bibstyle, attrib, bits, blkcntrl, compsci, dialogue, drama, includex, lips, moredefs, newclude, slemph, titles.
Author: Matt Swift; CTAN location: macros/latex/contrib/supported/frankenstein

freetype
A free, full-featured TrueType rasterizer library.
Author: Werner Lemberg; CTAN location: fonts/utilities/freetype

french
lang2
Style for French typography: light version.
Author: Bernard Gaulle; CTAN location: language/french

frhyph
French hyphenation patterns.
Author: Daniel Flipo; CTAN location: language/hyphenation

fribrief
latex3
A LaTeX class for writing letters.
Author: Alexander Fries; CTAN location: macros/latex/contrib/supported/fribrief

ftcap
Allows \caption at the beginning of a table-environment. For several reasons a \caption may be desirable at the top of a table-environment. This package changes the table-environment such that \abovecaptionskip and \belowcaptionskip are swapped. ftcap should also work with your own non-standard table-environment.
Author: Hans Friedrich Steffani; CTAN location: macros/latex/contrib/other/misc

ftetx
A TeX package for FTE (FTE = Folding Text Editor by Marko Macek). Adds a TeX menu system for FTE. Changes syntax highlighting for FTE's TeX-Mode. Runs TeX, dvi-drivers, ispell, etc., from FTE. Calls LaTeX help files from FTE. It is preconfigured for emTeX.
Author: Oliver John von Zydowitz; CTAN location: systems/os2/ftetx

ftn
LaTeX document-style option to make footnotes available in any environment, except inside floats.
Author: Kresten Krab Thorup; CTAN location: macros/latex209/contrib/misc

ftnright
Footnotes in two column documents.
Author: Frank Mittelbach; CTAN location: macros/latex/required/tools

fullblck
latex3
Used with the letter documentclass to set the letter in a fullblock style (everything at the left margin).
Author: James H. Cloos Jr.; CTAN location: macros/latex/contrib/supported/fullblck

fullpict
latex3
Full page pictures.
Author: Bruce Shawyer; CTAN location: macros/latex/contrib/supported/fullpict

fundus
latex3
Providing LaTeX access to various font families.
Author: unknown; CTAN location: macros/latex/contrib/other/gene/fundus

funnelweb
A 'Literate Programming' tool, which produces documentation for programs in TeX or LaTeX.
Author: Tony Coates; CTAN location: web/funnelAC

futhark
fonts3
Fonts for the Older Futhark script.
Author: unknown; CTAN location: fonts/futhark

g-brief
latex3
A document class for LaTeX 2_ε. Serves for formatting formless letters in german or english language.
Author: Michael Lenzen; CTAN location: macros/latex/contrib/supported/g-brief

galois
latex3
Write Galois connections in two-ddimensional style.
Author: Patrick Cousot; CTAN location: macros/latex/contrib/supported/galois

gb4e
latex3
Government Binding styles.
Author: unknown; CTAN location: macros/latex/contrib/supported/gb4e

genealogy
fonts3
A simple compilation of the genealogical symbols found in the 'wasy' and 'gen' font, essentially adding the male and female symbols to Knuth's 'gen' font, and so avoiding loading two fonts when you need only genealogical symbols.
Author: Denis Roegel; CTAN location: fonts/genealogy

genmisc
generic3
Miscellaneous small files for all formats, specific to the TEXLive CDROM.
Author: unknown

gentl-gr
Modern Greek translation of the Gentle Introduction to TEX.
Author: Dimitrios Filippou; CTAN location: help/greek/gentl-gr

gentle
A Gentle Intorduction to TEX.
Author: Michael Doob; CTAN location: info/gentle

geometry
latex2
Flexible and complete interface to document dimensions. Provides an easy and flexible user interface to customize page layout, implementing auto-centering and auto-balancing mechanisms so that the users have only to give the least description for the page layout. For example, if you want to set each margin 2cm without header space, what you need is just \usepackage[margin=2cm,nohead]{geometry}. Options include columnsep and footnotesep, vtex, mag.
Author: Hideo Umeki; CTAN location: macros/latex/contrib/supported/geometry

geomsty
latex3
Provides: inclusion of PostScript figures, and of TEX text within figures; automatic creation of index entries and cross-references where appropriate; no need to worry about fragile commands in almost all situations; greater versatility in defining theorem-like environments; proofing aids such as version numbers and a running index.
Author: unknown; CTAN location: macros/latex209/contrib/geomsty

german
lang2
Support for German typography. Supports the new German orthography (neue deutsche Rechtschreibung).
Author: Bernd Raichle; CTAN location: language/german

germbib
bibtex2
German variants of standard BIBTEX styles.
Author: Harald Harders; CTAN location: biblio/bibtex/contrib/germbib

germdoc
doc2
No description available.
Author: unknown

getrefs
A BIBTEX style file and a LATEX document template to facilitate the retrieval of references from a library.
Author: Stefan A. Deutscher; CTAN location: biblio/bibtex/contrib/getrefs

ghostscript
Freely available PostScript interpreter. Freely available Aladdin and GNU PostScript interpreters available for many platforms and also useful for conversion from PostScript to other formats, and particularly for printing to non-PostScript printers.
Author: L. Peter Deutsch; CTAN location: support/ghostscript/aladdin

ghostview-mac
Ghostview for CMacTEX to preview PostScript documents.
Author: Tom Kiffe; CTAN location: systems/mac

ghyphen
Describes the different versions of German hyphenation support.
Author: Walter Schmidt; CTAN location: language/hyphenation

gleitobjekte
Tutorial from a DANTE meeting in November 1997. The script of a tutorial held at the November 1997 DANTE meeting. Topics covered include floats and their placement, captions, inclusion of graphics, lettering of graphics, layout of tables and large amounts of numerical data.
Author: Axel Reichert; CTAN location: info/german/gleitobjekte

gloss
latex3
Create glossaries using BIBTEX. A glossary package using BIBTEX with \cite replaced by \gloss.
Author: Jose Luis Diaz de Arriba and Javier Bezos; CTAN location: macros/latex/contrib/supported/gloss

glosstex
Prepare glossaries in LATEX. GlossTeX is a tool for the automatic preparation of glossaries, lists of acronyms and sorted lists in general for use with LATEX and MakeIndex. GlossTeX combines the functionality of acronym and nomencl and provides some new features. Various binaries are available in the bin subdirectory.
Author: Volkan Yavuz; CTAN location: support/glosstex

gn-logic
latex3
No description available.
Author: unknown

gnhyph
An experimental set of hyphenation patterns for the new German orthography ("neue deutsche Rechtschreibung") currently being introduced.
Author: Walter Schmidt; CTAN location: language/hyphenation

gnuplot
General purpose plotting program. Generate almost any type of chart you wish and save it in LATEX format or as EPS (or in any of a dozen other formats).
Author: unknown; CTAN location: graphics/gnuplot

go
fonts3
Fonts and macros for typesetting go games.
Author: Hanna Kołodziejska; CTAN location: fonts/go

gothic
fonts3
Gothic and ornamental initial fonts by Yannis Haralambous.
Author: Walter Schmidt; CTAN location: fonts/gothic

graphfig
Simpler graphic, subfigure and float. This package combines the tools of the graphic, subfigure and float packages in a way that makes their use simpler and more robust. The Figure environment (capitalized!) differs from the standard LaTeX figure environment with the addition of a mandatory argument to specify the caption and an optional argument used as a label. These ensure that the \label command appears after the \caption command to avoid possible errors. The commands \graphfig and \graphfig* have the additional advantage that the picture will be automatically centered along the horizontal direction.
Author: Francesco Bosisio; CTAN location: macros/latex/contrib/supported/bosisio

graphics
latex1
The primary LaTeX package for the support of the inclusion of graphics generally produced with other tools. This package aims to give a consistent interface to including the file types that are understood by your printer driver. For documentation see grfguide.
Author: David Carlisle and Sebastian Rahtz; CTAN location: macros/latex/required/graphics

graphicx
Better support for graphics. Builds upon the graphics package. For documentation see grfguide.
Author: David Carlisle and Sebastian Rahtz; CTAN location: macros/latex/required/graphics

graphpap
For producing graph paper.
Author: David Carlisle and Sebastian Rahtz; CTAN location: macros/latex/base

gray
Fonts for gray scales.
Author: unknown; CTAN location: fonts/cm/utilityfonts/gray

greek4cbc
A Greek font from 394BC. Provides a Greek monumental font as used on a stele in Athens in 394BC. The font consists of majuscules only and is one of a series of archaic fonts.
Author: Peter Wilson; CTAN location: fonts/archaic/greek4cbc

greek6cbc
fonts3
A Greek font from the sixth century BC. This Greek font is typical of those used in the 6th century BC.
Author: Peter Wilson; CTAN location: fonts/archaic/greek6cbc

grfguide
Guide to using graphics in LaTeX, including documentation on various packages including color and graphicx.
Author: David Carlisle; CTAN location: macros/latex/required/graphics

grfpaste
latex3
Include fragments of a dvi file. Provides an mechanism to include fragments of dvi files with the graphicx package: you can use \includegraphics to include dvi files. It requires the dvipaste program.
Author: David Carlisle; CTAN location: macros/latex/contrib/supported/grfpaste

grnumalt
latex3
A package which implements a numbering system used in ancient Athens, producing the 'Athenian' numeral for any positive arabic numeral. The package can be used as a means to provide alternative counters.
Author: Apostolos Syropoulos; CTAN location: macros/latex/contrib/other/grnumalt

grtimes
lang3
Typeset Greek text with the Times New Roman Greek. Enables users who use the Greek option of the Babel package to typeset monotonic Greek text with the Times New Roman Greek, Arial Greek and Courier Greek fonts. Does not include the fonts.
Author: Apostolos Syropoulos; CTAN location: language/greek/grtimes

gsftopk
Primarily intended for use with xdvi and dvips this utility allows the use of PostScript fonts with xdvi.
Author: Paul Vojta; CTAN location: fonts/utilities/gsftopk

gsview
View PostScript under MS-Windows or OS2. GSView is a graphical interface for Ghostscript under MS-Windows or OS2. Ghostscript is an interpreter for the PostScript page description language used by laser printers. For documents following the Adobe PostScript Document Structuring Conventions, GSview allows selected pages to be viewed or printed. Various conversions can also be performed, including ps to pdf, pdf to ps, eps to pdf, and eps to jpg. GSview 2.7 requires Ghostscript 4.03 - 5.99. GSview was inspired by Tim Theisen's X11 Ghostview program. It is designed to work with Aladdin Ghostscript, not GNU Ghostscript.
Author: Russell Lang; CTAN location: support/ghostscript/rjl

gustlib
plain2
Polish oriented macros. Various small utility packages for typesetting in plain TeX, with a Polish perspective.
Author: unknown

hands
fonts3
Pointing hand fonts.
Author: unknown; CTAN location: fonts/hands

hangcaption
Defines a variant of the caption command to produce captions with hanging indentation.
Author: unknown; CTAN location: macros/latex209/contrib/misc

hanging
latex3
Hanging paragraphs. The hanging package facilitates the typesetting of hanging paragraphs. It also enables typesetting with hanging punctuation (this is probably best regarded as a curiosity).
Author: Peter Wilson; CTAN location: macros/latex/contrib/supported/hanging

harpoon
latex3
Extra harpoons, using the graphics package.
Author: unknown; CTAN location: macros/latex/contrib/supported/harpoon

harvard
bibtex2
The Harvard bibliography style family.
Author: unknown; CTAN location: biblio/bibtex/contrib

harvmac
plain3
Paul Ginsparg's Harvard macros for scientific articles.
Author: unknown; CTAN location: macros/plain/contrib/harvmac

hcbundle
Replacement for the LaTeX classes. Provides replacements for the default LaTeX classes, based upon the Koma-Script bundle and the seminar class. Includes hcart, hcreport, hcletter, and hcslides.
Author: Christian Siefkes; CTAN location: macros/latex/contrib/supported/hc

hellas
Typeset bibliographies which include Greek. A BibTeX style for typesetting databases that containing both Greek and non-Greek bibliographic records.
Author: Apostolos Syropoulos; CTAN location: language/greek/cb/BibTeX

hexdump
Read and format ASCII hexdump files. The main macro reads an ASCII hexdump file and puts it formatted into the document. Additional macros included, e.g., for a Directory of Dumps.
Author: Thomas Hillebrand; CTAN location: macros/generic/hexdump

hh
latex3
Fancy boxing effects.
Author: unknown; CTAN location: macros/latex/contrib/supported/hh

hhline
Better horizontal lines in tabulars and arrays.
Author: David Carlisle; CTAN location: macros/latex/required/tools

hieroglf
About 60 Egyptian Hieroglyphs.
Author: Peter R Wilson; CTAN location: fonts/archaic/hieroglf

hilowres
latex3
A package to simplify the inclusion of low resolution versions of high resolution images, if each pair of files have the same basename (e.g., bird.low.eps and bird.eps). The package is a simple wrapper around the \includegraphics command of the graphicx package.
Author: Johann Gerell; CTAN location: macros/latex/contrib/supported/hilowres

histogr
latex3
Drawing histograms with the LaTeX picture environment.
Author: unknown; CTAN location: macros/latex/contrib/supported/histogr

hlatex
Support for the Korean language. Support for Korean documents written in Korean standard KSC codes for LaTeX 2_ε.
Author: Koaunghi Un; CTAN location: language/korean/HLaTeX

hoekwater
fonts2
Converted mflogo font. Fonts originally created in MetaFont, transformed to PostScript by Taco Hoekwater; includes logo, manfnt, rsfs, stmaryrd, wasy, wasy2, xipa.
Author: Taco Hoekwater; CTAN location: fonts/mflogo/ps-type1/hoekwater

html
doc1
Various TeX documentation converted to HTML.
Author: unknown; CTAN location: support/html

html2latex
The html2latex package compiled from the Unix sources version 0.9c with emx 0.9c fix 2 to run on MS-DOS, MS-Windows (3.x, 9x, NT), OS2 Warp
Author: Roland Reimers; CTAN location: support/html2latex

html2text
Convert HTML into text. This is a HTML-to-text converter for UNIX.
Author: Rolf Niepraschk; CTAN location: support/html2text

huhyph
Hyphenation patterns for the Hungarian language.
Author: Gyula Mayer; CTAN location: language/hyphenation

huncial
Fonts based on the half Uncial manuscript book-hand. The huncial and allhuncl packages provide Metafont fonts based on the Half Uncial manuscript book-hand used between the 3rd and 9th centuries. The font consists of minuscules and digits, with some appropriate period punctuation marks and ligatures. Both normal and bold versions are provided. This is one in a series of manuscript fonts.
Author: Peter Wilson; CTAN location: fonts/bookhands/huncial

hvdashln — Definitions of horizontal and vertical dashed lines for the array and tabular environment. Instead of building partial horizontal dashed lines using Isozaki's `\cline{2-3}`, `\hdashline` fills the full width. The proportion of the dashed line is defined by the two parameters: `\hdashlinewidth=2pt` and `\hdashlinegap=2pt`, where the former defines the width of the dash and the latter sets their gap.
Author: unknown; CTAN location: `macros/latex209/contrib/misc`

hvmath
`latex3` — Support for using the Micropress HV-Math fonts (Helvetica Maths). Typeset math in a style that suits the Adobe Helvetica text fonts. Math fonts for use with Helvetica are generally otherwise not available, and a free, bitmapped version of HV-Math can be downloaded from Micropress. Commercial versions of the HT-Math fonts are available from Micropress.
Author: Walter Schmid; CTAN location: `macros/latex/contrib/supported/hvmath`

hypbmsec — Hypertext bookmarks in sectioning commands. Bookmark entries can be given as another argument to the LaTeX sectioning commands. The hyperref package is required to get the bookmarks, but the syntax works without it.
Author: Heiko Oberdiek; CTAN location: `macros/latex/contrib/supported/oberdiek`

hyper
`latex3` — Hypertext cross referencing. Redefines LaTeX cross-referencing commands to insert `\special` commands for HyperTeX dvi viewers, such as recent versions of xdvi.
Author: Michael Mehlich; CTAN location: `macros/latex/contrib/supported/hyper`

hyperlatex — A package that allows you to prepare documents in HTML and to produce a neatly printed document from your input using LaTeX. It is not a LaTeX to HTML converter (see ltoh or latex2html for that).
Author: Otfried Schwarzkopf; CTAN location: `support/hyperlatex`

hyperref
`latex2` — Extensive support for hypertext in LaTeX. The hyperref package is used to handle cross-referencing commands in LaTeX to produce some sort of hypertext command; there are backends for the `\special` set defined for HyperTeX dvi processors, for embedded pdfmark commands for processing by Acrobat Distiller (dvips and dvipsone), for dviwindo, for pdf]TeX, for TeX4ht, and for VTEX's pdf and HTML backends.
Author: Sebastian Rahtz; CTAN location: `macros/latex/contrib/supported/hyperref`

hyphenat
`latex3` — Disable/enable hypenation. This package can disable all hyphenation or enable hyphenation of non-alphabetics or monospaced fonts. Enables hyphenation within 'words' that contain non-alphabetic characters (e.g., that include underscores), and hyphenation of text typeset in monospaced (e.g., cmtt) fonts.
Author: Peter Wilson; CTAN location: `macros/latex/contrib/supported/hyphenat`

hyphenation-greek — Hyphenation patterns for ancient and modern Greek. Contains the hyphenation patterns for ancient Greek and modern Greek in polytonic (multi-accent) and monotonic (uni-accent) systems. The hyphenation patterns will work perfectly with the "greek" option of "babel" or Dryllerakis' GreeKTeX. For any other Greek package, the patterns will have to be re-coded. A brief description of the files is given in the file "readme.txt".
Author: Dimitrios Filippou; CTAN location: `language/greek/package-babel/hyphenation/filippou`

hypht1 — Additional hyphenation patterns. Additional hyphenation patterns which have to be loaded in conjunction with each "normal" set of patterns. It contains patterns to allow hyphenation after an explicit hyphen, which are needed if you want to use e.g. the second hyphen character (`\char127`) of the EC fonts or any other T1 encoded font as `\hyphenchar\font`.
Author: Bernd Raichle; CTAN location: `language/hyphenation`

ibm
`fonts3` — No description available.
Author: unknown

idealfonts — Consists of 2 files that might help Textures users: one to ease the use of the basic 35 Adobe fonts with the T1 font encoding with LaTeX; the other for people willing to automatically install that last LaTeX version under Textures.
Author: Bernard Gaulle; CTAN location: `systems/mac/textures/contrib/IdealFonts`

ieeepes
`latex3` — IEEE Power Engineering Society Transactions. Supports typesetting of transactions, as well as discussions and closures, for the IEEE Power Engineering Society Transactions journals.
Author: Volker Kuhlmann; CTAN location: `macros/latex/contrib/supported/ieeepes`

ifacmtg
`latex3` — Elsevier Science preprint style for IFAC meetings.
Author: Simon Pepping; CTAN location: `macros/latex/contrib/supported/ifacmtg`

ifmslide — Presentation slides (from computer screen) and printouts. This package is used to produce printed slides with LaTeX and online presentations with pdflatex. It is provided by the "institute of mechanics" (ifm) Univ. of Technology Darmstadt, Germany. It is based on ideas of pdfslide, but completely rewritten for compatibility with texpower and seminar. The manual (ifmman.pdf) describes all functions and provides a sample.
Author: Thomas Emmel; CTAN location: `macros/latex/contrib/supported/ifmslide`

ifmtarg — If-then-else command for processing potentially empty arguments.
Author: Peter Wilson; CTAN location: `macros/latex/contrib/supported/misc`

ifsym — Symbols for alpinistic, electronic, meteorological, geometric etc. usage.
`fonts3` Author: Ingo Kloeckl; CTAN location: `fonts/ifsym`

ifthen — Conditionals in LaTeX 2ε documents.
Author: LaTeX Project Team; CTAN location: `macros/latex/base`

imac — International Modal Analysis Conference format. A set of files for producing correctly formatted
`latex3` documents for the International Modal Analysis Conference.
Author: Joseph Slater; CTAN location: `macros/latex/contrib/other/imac`

impose — PostScript utilities. Impose is used for two-up printing of DSC-compliant PostScript (including that from Netscape, dvips, and FrameMaker). It makes an effort to remove white space from the printout by probing the original PostScript for the bounding box of the printed area. This makes the output much more esthetic than does a simplistic layout of non-cropped original pages.
Author: Dov Grobgeld; CTAN location: `support/impose`

includex — Extended `\include`. A LaTeX package that allows you to include just the contents of one source
`latex3` file into another, ignoring text outside the `\begin{document}` and `\end{document}` in the included file. This package is useful but may have problems and is unsupported. See also the newclude package.
Author: Matt Swift and Robin Fairbairns; CTAN location: `macros/latex/contrib/supported/frankenstein/unsupported`

indentfirst — Indent first paragraph after section header.
Author: David Carlisle; CTAN location: `macros/latex/required/tools`

index — Extended index for LaTeX including multiple indexes. This is a reimplementation of LaTeX's indexing macros to provide better support for indexing. For example, it supports multiple indexes in a single document and provides a more robust `\index` command. It supplies short hand notation for the `\index` command (`^{word}`) and a * variation of `\index` (abbreviated `_{word}`) that prints the word being indexed, as well as creating an index entry for it.
Author: David M. Jones; CTAN location: `macros/latex/contrib/supported/camel`

indxcite — A package to automatically generate an Author Index based on citations made using BibTeX. It requires
`latex3` the use of the harvard and index packages and LaTeX 2ε.
Author: James Ashton; CTAN location: `macros/latex/contrib/supported/indxcite`

info — Documentation in GNU info form.
`doc2` Author: unknown

inhyph — Hyphenation patterns for Bahasa Indonesia.
Author: Joerg Knappen and Terry Mart; CTAN location: `language/hyphenation`

initials — A special font (yinit) is defined to be used for initial dropped capitals.
Author: unknown; CTAN location: `fonts/gothic/yinit`

inlinebib — Inlined `\cites`.
`latex3` Author: Rene Seindal; CTAN location: `biblio/bibtex/contrib/inlinebib`

inputenc — Control input encoding.
Author: LaTeX Project Team; CTAN location: `macros/latex/base`

insbox — A TeX macro for inserting pictures/boxes into paragraphs.
`generic3` Author: Michal Gulczyński; CTAN location: `macros/generic/insbox`

ipa — No description available.
`latex3` Author: unknown

isi2bibtex — Converter for ISI to BibTeX.
Author: John J. Lee; CTAN location: `biblio/bibtex/utils/isi2bibtex`

isodate
latex3
Tune the output format of the \today command. This package provides four commands to switch the output format of the \today command: \isodate switches to yyyy–mm–dd; \numdate switches to dd. mm. yyyy, dd/mm/yyyy, or mm/dd/yyyy; \shortdate switches to dd. mm. yy, dd/mm/yy, or mm/dd/yy; TEX format yyyy/mm/dd; and \origdate switches to the original LATEX format (which is language dependent). The package contains two additional commands to print a date given as an argument using the actual date format for output: \printdateiso{yyyy-mm-dd} and \printdatenumger{dd.mm.yyyy}.
Author: Harald Harders; CTAN location: macros/latex/contrib/supported/isodate

isorot
latex3
Rotation of document elements. The isorot package is for rotation of document elements. It is a combination of the lscape package and an extension of the rotating package. It is designed for use with the iso class but may be used with any normal class.
Author: Peter Wilson; CTAN location: macros/latex/contrib/supported/isorot

isostds
latex3
Typeset ISO International Standard documents. Class and package files for typesetting ISO International Standard documents. Several standard documents have been printed by ISO from camera-ready copy prepared using LATEX and these files. One set of files is for generic ISO typesetting and the other is an extension set of packages for typesetting ISO 10303 standards.
Author: Peter Wilson; CTAN location: macros/latex/contrib/supported/isostds

ithyph
Italian hyphenation.
Author: Claudio Beccari; CTAN location: language/italian

izhitsa
Support for the old Russian font "Izhitsa". Includes MetaFont code and LATEX style file.
Author: Oleg V. Motygin; CTAN location: fonts/cyrillic/old_slavonic/izhitsa

jadetex
formats2
Macros to implement Jade DSSSL output Macro package on top of LATEX to typeset TEX output of Jade DSSSL implementation.
Author: Sebastian Rahtz; CTAN location: macros/jadetex

jas99˙m
BIBTEX style for American Meteorological Society (AMS).
Author: Ryo Furue; CTAN location: biblio/bibtex/contrib/

javatex
A Java implementation of TEX.
Author: Tim Murphy; CTAN location: systems/java/javatex

jeep
No description available.
Author: George Pearson; CTAN location: macros/latex/contrib/jeep

jhep
latex3
JHEP style. A LATEX class file used to typeset manuscripts in JHEP style.
Author: F. Nesti

jknappen
latex2
Miscellaneous packages by Joerg Knappen. Miscellaneous macros, mostly for making use of extra fonts, by Joerg Knappen, including sgmlcmpt.
Author: Joerg Knappen; CTAN location: macros/latex/contrib/supported/jknappen

jkthesis
Document class for formatting a thesis.
Author: Jochen Kuepper; CTAN location: macros/latex/contrib/supported/jkthesis

jpeg2ps-os2
JPEG to PostScript converter for OS2. OS2 port of jpeg2ps.
Author: Rolf Niepraschk and Stefan A. Deutscher; CTAN location: support/jpeg2ps/os2

jpeg2ps
Convert JPEG files to PostScript Level 2 or 3 EPS. Converts JPEG files to PostScript Level 2 or 3 EPS. In fact, jpeg2ps is not really a converter but a "wrapper": it reads the image parameters (width, height, number of color components) in a JPEG file, writes the according EPS header and then copies the compressed JPEG data to the output file. Decompression is done by the PostScript interpreter (only PostScript Level 2 and 3 interpreters support JPEG compression and decompression).
Author: Rolf Niepraschk; CTAN location: support/jpeg2ps

jqt1999
Journal of Quality Technology BIBTEX format. This is a derivative work of Oren Patashnik's apalike BIBTEX style. It is a BIBTEX file for the Journal of Quality Technology that can be used with natbib. It puts semicolons between authors, quotes around titles, and 'pp.' before page numbers.
Author: David Forrest; CTAN location: biblio/bibtex/contrib

jsmisc
plain3
Miscellaneous useful macros by Joachim Schrod.
Author: Joachim Schrod; CTAN location: macros/plain/contrib/js-misc

jspell
An ASCII file spelling checker.
Author: Joohee Jeong; CTAN location: support/jspell

jura
latex3
A document class for German legal texts. Implements the standard layout for German term papers in law (one-and-half linespacing, 7 cm margins, etc.). Includes alphanum that permits alphanumeric section numbering (e.g., A. Introduction; III. International Law).
Author: Felix Braun; CTAN location: macros/latex/contrib/supported/jura

jurabib
latex3
BibTeX databases for German legal texts. Allows the use of BibTeX databases for German legal texts. It can be used both together with or independently from the jura documentclass. The package allows the dynamic citation of an abbreviated title, depending on a multiple citation of an author with different books. It is easy to modify the layout of the citations and the entries in the bibliography.
Author: Jens Berger; CTAN location: macros/latex/contrib/supported/jura

kalendar
A calendar style.
Author: unknown; CTAN location: macros/latex/contrib/other/kalender

kalender
latex3
Style file for creating a calendar; in German.
Author: Joerg Soehner; CTAN location: macros/latex/contrib/other/kalender

karnaugh
latex3
Typeset Karnaugh-Veitch-maps. Macros intended for typesetting Karnaugh-Maps and Veitch-Charts in a simple and user-friendly way. Karnaugh-Maps and Veitch-Charts are used to display and simplify logic functions "manually". These macros can typeset Karnaugh-Maps and Veitch-Charts with up to ten variables (= 1024 entries).
Author: Andreas W. Wieland; CTAN location: macros/latex/contrib/other/karnaugh

kdgreek
fonts3
Greek fonts.
Author: unknown; CTAN location: fonts/greek/kd

kix
Implements KIX codes as used by the Dutch PTT for bulk mail addressing. (Royal Mail 4 State Code.) KIX is a registered trade mark of PTT Post Holdings B. V.
Author: Sander Stoks; CTAN location: macros/latex/contrib/other/misc

kluwer
latex3
A LaTeX 2_ε class file for submissions of journal articles to Kluwer Academic Publishers, Dordrecht, the Netherlands.
Author: Taco Hoekwater; CTAN location: macros/latex/contrib/supported/kluwer

knst
A package supporting the generation and correction of multiple option tests as appears in *TUGboat* Volume 17, Number 3: "Fast and secure multiple option tests".
Author: Jordi Saludes; CTAN location: macros/generic/knst

knuth
doc3
Knuth's own documentation, including the TeXbook and the MetaFontbook.
Author: Donald Knuth; CTAN location: systems/knuth

koi8
A package to perform internal translation from the KOI-8 encoding (de-facto standard of the UNIX world) to the so called "alternative encoding" used by most Cyrillic packages. You still need one of these packages for the actual Russian typesetting. The style works with all major Cyrillic packages: cmcyr, cmcyralt, LH.
Author: Uri Blumenthal; CTAN location: macros/latex/contrib/supported/koi8

koma-script
latex2
European typography for article/book/report classes. A drop-in replacement for the article/report/book classes with emphasis on European rules of typography and paper formats as laid down by Tschichold. The article class, for example, becomes scrartcl.
Author: Markus Kohm; CTAN location: macros/latex/contrib/supported/koma-script

kuvio
graphics3
Drawing macros and fonts for diagrams.
Author: unknown; CTAN location: macros/generic/diagrams/kuvio

labelmag
Manage a collection of labels. A MS-Win32 program for managing a collection of labels to be typeset by TeX and printed on demand. The collection will be held together within a single file; labels may be kept within categories. As an advanced feature, mailing labels, e.g., may query an odbc data source.
Author: Peter Willadt; CTAN location: systems/win32/texhelpers/labelmag

labels
latex3
Support for printing sheets of sticky labels (but could also be used for business cards). The number of rows and columns of labels, and their size, can be changed.
Author: unknown; CTAN location: macros/latex/contrib/supported/labels

lamstex
formats3
A merge of the best in AMS-TeX and LaTeX.
Author: Michael Spivak; CTAN location: macros/lamstex

lastpage
latex3
Reference last page for Page N of M type footers. Reference the number of pages in your LaTeX document through the introduction of a new label which can be referenced like `\pageref{LastPage}` to give a reference to the last page of a document. It is particularly useful in the page footer that says: Page N of M.
Author: Jeffrey Goldberg; CTAN location: `macros/latex/contrib/other/lastpage`

lated
A graphical editor for drawings in the LaTeX "picture" environment. It runs under MS-DOS and MS-Windows. The distribution includes full sources, including LaTeX source for its documentation.
Author: Gene Ressler; CTAN location: `systems/msdos/lated`

latex
Macro package for TeX (the most popular). LaTeX is a (and probably the most) popular macro package for TeX, providing many basic document formatting commands extended by many of the packages included in this current list.
Author: Leslie Lamport; CTAN location: `macros/latex`

latex2e
Documentation on LaTeX 2_ε in OS2 hypertext format and html.
Author: Rolf Niepraschk; CTAN location: `info/latex2e-help-texinfo`

latex2html
latex2
Convert LaTeX into HTML documents. A Perl program that translates LaTeX into HTML (HyperText Markup Language) creating separate HTML files corresponding to each unit (e.g., section) of the document.
Author: unknown; CTAN location: `support/latex2html`

latex2man
Translate LaTeX-based manual pages into Unix man format. A tool to translate UNIX manual pages written with LaTeX into a man-page format understood by the UNIX man(1) command. Alternatively HTML or TexInfo code can be produced. Output of parts of the text may be suppressed using the conditional text feature.
Author: Juergen Vollmer; CTAN location: `support/latex2man`

latex2rtf
Convert LaTeX into Rich Text Format. Translates LaTeX text into RTF (Rich Text Format as used by Microsoft Word).
Author: Fernando Dorner and Andreas Granzer; CTAN location: `support/latex2rtf`

latexcad
A CAD drawing package.
Author: John Leis; CTAN location: `obsolete/systems/msdos/latexcad`

latexdraw
X-Windows based and CAD orientated drawing program. An X-Windows based and CAD orientated drawing program which generates LaTeX output using latexdraw.sty, based on pstricks. The picture may be generated as complete LaTeX-source or as a picture-environment to be included in other documents. You must translate the dvi-file generated by LaTeX to a postscript-file using dvips before you can view or print the document.
Author: Hans-Jurgen Siegert; CTAN location: `support/latexdraw`

latexfonts
latex1
No description available.
Author: unknown

latexmk
Fully automated LaTeX document generation routine. A utility written in Perl which deals with the task of running LaTeX the appropriate number of times to ensure cross-references, etc., are completely defined. Also supports printing and viewing.
Author: Evan McLean and David J. Musliner; CTAN location: `support/latexmk`

latexn
Run LaTeX as many times as needed. A csh script to run LaTeX as many times as needed (and hopefully no more) on a given file to resolve cross references, and to ensure that the table of contents and index (if any) are up-to-date.
Author: John Collins; CTAN location: `support/latexn`

LaTeX-WIDE
Multifunctional editor for LaTeX in MS-Windows.
Author: YVL; CTAN location: `systems/win32/LaTeX_WIDE`

latin2jk
A definition file for the inputenc package, where all characters from ISO-8859-2 (Latin-2) are loaded as text characters. This allows verbatim setting of Latin-2 encoded files.
Author: Joerg Knappen, Mainz; CTAN location: `macros/latex/contrib/supported/jknappen`

layout
Produces an overview of the layout of the current document.
Author: Kent McPherson; CTAN location: `macros/latex/required/tools`

layouts
latex3
Display various elements of a document's layout. This includes: text positioning on a page; disposition of floats; layout of paragraphs, lists, footnotes, table of contents, and sectional headings; font boxes. Facilities are provided for a document designer to experiment with the layout parameters.
Author: Peter Wilson; CTAN location: `macros/latex/contrib/supported/layouts`

leaflet
latex3
Create small, single page handouts. A document class to create small handouts that fit on a single sheet of paper which is then folded twice, with a script to rearrange pages so that they print correctly (on a PostScript printer) on a single sheet.
Author: Juergen Schlegelmilch; CTAN location: `macros/latex/contrib/supported/leaflet`

leftidx
latex3
Left subscripts and superscripts in math mode. These subscripts and superscripts are automatically raised for better fitting to the symbol they belong to.
Author: Harald Harders; CTAN location: `macros/latex/contrib/other/leftidx`

letter
The standard LaTeX 2ε letter document class.
Author: Leslie Lamport, Frank Mittelbach and Rainer Schöpf; CTAN location: `macros/latex/base`

letterspacing
Letter spacing.
Author: Philip Taylor; CTAN location: `macros/generic`

lettrine
latex3
Typeset dropped capitals. Supports various dropped capitals styles, typically those described in the French typographic books.
Author: Daniel Flipo; CTAN location: `macros/latex/contrib/supported/lettrine`

levy
latex3
Macros for using Silvio Levy's Greek fonts.
Author: unknown; CTAN location: `macros/latex/contrib/supported/levy`

lexikon
latex3
Implements commands to generate a two-language dictionary.
Author: Axel Kielhorn; CTAN location: `macros/latex/contrib/other/lexikon`

lgreek
latex3
Macros for using Silvio Levy's Greek fonts.
Author: unknown; CTAN location: `macros/latex/contrib/other/lgreek`

lgrind
Produce beautiful listings of source code with LaTeX. Lgrind is a descendant of the Unix utility vgrind. It prepares various programming language source code (e.g., C, C plus plus, Pascal, BASIC, Modula-2, Fortran, RATFOR, Yacc, PostScript, Prolog, MLisp, Icon, LaTeX, Perl, CSH Bourne Shell, assembler, 68000 assembler, asm68 VMS assembler, ISP, LDL, Linda, MODEL, MatLab, Russell) for pretty-printing within LaTeX. Options for producing includable files and pro- cessing embedded listings in LaTeX texts are provided.
Author: Michael Piefel; CTAN location: `support/lgrind`

lh
fonts2
Olga Lapko's LH fonts. The LH fonts for the 'T2'/X2 encodings (for cyrillic languages).
Author: Vladimir Volovich; CTAN location: `fonts/cyrillic/lh`

lhcyr
latex3
A collection of three LaTeX 2ε styles intended for typesetting Russian and bilingual English-Russian documents: lhcyralt, lhcyrkoi, and lhcyrwin.
Author: Vadim V. Zhytnikov; CTAN location: `macros/latex/contrib/supported/lhcyr`

lhelp
latex3
Miscellaneous helper packages. This package defines macros which are useful for many documents. It is a large collection of simple "little helpers" which do not really warrant a separate package on their own. Included are, among other things, definitions of common units with preceding thinspaces, framed boxes where both width and height can be specified, starting new odd or even pages, draft markers, notes, conditional includes, including EPS files, and versions of enumerate and itemize which allow the horizontal and vertical spacing to be changed.
Author: Volker Kuhlmann; CTAN location: `macros/latex/contrib/supported/lhelp`

lilypond
Support for music notation. GNU LilyPond is a program which converts music definition files into visual or auditive output. LilyPond can typeset formatted sheet music to a TeX file and (mechanical) performances to MIDI files.
Author: Han-Wen Nienhuys; CTAN location: `support/lilypond`

limap
latex3
Typeset maps and blocks according to the Information Mapping method. The Information Mapping method provides a methodology for structuring and presenting information. It claims to be useful for readers who are more concerned about finding the right information than reading the document as a whole. Thus short, highly structured, and context free pieces of information are used. A LaTeX style and a LaTeX class are provided. The style contains definitions to typeset maps and blocks according to the Information Mapping method. The class provides all definitions to typeset a whole document.
Author: Gerd Neugebauer; CTAN location: `macros/latex/contrib/other/gene/limap`

linearb
Linear B script used in the Bronze Age for Mycenaean Greek. The linearb package provides a Metafont version of the Linear B script which was a syllabary used in the Bronze Age for writing Mycenaean Greek. It is one of a series of archaic fonts.
Author: Peter R. Wilson; CTAN location: `fonts/archaic/linearb`

lineno
latex3
Line numbers on paragraphs. Adds line numbers to selected paragraphs with reference possible through the LaTeX `\ref` and `\pageref` cross reference mechanism.
Author: Stephan Boettcher; CTAN location: `macros/latex/contrib/supported/lineno`

linguex
latex3
Format linguist examples. A package to facilitate the formatting of linguist examples, automatically taking care of example numbering, indentations, indexed brackets, and the "*" in grammaticality judgments.
Author: Wolfgang Sternefeld; CTAN location: `macros/latex/contrib/supported/linguex`

lintex
A C program that removes auxiliary TeX and LaTeX files that are usually not needed after a run (log, aux, dvi, files), and only if their modification time is more recent than the source.
Author: Maurizio Loreti; CTAN location: `support/lintex`

lips
latex3
Text ellipses in LaTeX. A LaTeX package defining `\lips`, which generates text ellipses that are closer to what The Chicago Manual of Style suggests than what `\dots` produces. It does the right thing in most circumstances, and so is easier to use, as well.
Author: Matt Swift; CTAN location: `macros/latex/contrib/supported/frankenstein`

listbib
latex3
Lists contents of BibTeX files for archival purposes. Generates listings of bibliographic data bases in BibTeX format. This is meant for archival purposes. Included is a listbib.bst which is better suited for this purpose than the standard styles.
Author: Volker Kuhlmann; CTAN location: `macros/latex/contrib/supported/listbib`

listing
Produce formatted program listings. The listing environment is provided and is similar to figure and table, although it is not a floating environment. Include support for `\caption`, `\label`, `\ref`, and introduces `\listoflistings`, `\listingname`, `\listlistingname`. It produces a .lol. It does not change `\@makecaption` (unless the option "bigcaptions" is used), so packages that change the layout of `\caption` still work.
Author: Volker Kuhlmann; CTAN location: `macros/latex/contrib/other/misc`

listings
latex3
Typeset source code listings using LaTeX. Typeset programming code within LaTeX. The source code is read directly by TeX. Keywords, comments and strings can be typeset using different styles, e.g., default is bold for keywords, italic for comments and no special style for strings. Includes support for hyperref.
Author: Carsten Heinz; CTAN location: `macros/latex/contrib/supported/listings`

lkort
doc3
No description available.
Author: unknown

localloc
latex3
Macros for localizing TeX register allocations.
Author: unknown; CTAN location: `macros/latex/contrib/supported/localloc`

logic
fonts3
A MetaFont font for drawing logic diagrams.
Author: unknown

logo-ps
PostScript fonts for the logo font.
Author: Taco Hoekwater; CTAN location: `fonts/cm/utilityfonts/logo/ps-type1/hoekwater`

lollipop
formats3
A new generation format.
Author: Victor Eijkhout; CTAN location: `macros/lollipop`

longtable
Support for tables longer than a page. Generally easier to use and more flexible than supertabular.
Author: David Carlisle; CTAN location: `macros/latex/required/tools`

losymbol
Defines a lot of symbol macros.
Author: unknown; CTAN location: `macros/latex209/contrib/misc`

lscape
Place selected parts of a document in landscape. Modifies the margins and rotates the page contents but not the page number. Useful, for example, with large multipage tables, and is compatible with longtable and supertabular.
Author: David Carlisle; CTAN location: `macros/latex/required/graphics`

lshort-english
doc2
A (Not So) Short Introduction to LaTeX 2_ε.
Author: Tobias Oetiker; CTAN location: `info/lshort/english`

lshort-finnish
doc3
Finnish version of A Short Introduction to LaTeX 2_ε Finnish version of A Short Introduction to LaTeX 2_ε with an emphasis on Finnish typesetting rules.
Author: Timo Hellgren; CTAN location: `info/lshort/finnish`

lshort-french
doc3
French version of A Short Introduction to LaTeX 2_ε.
Author: Matthieu Herrb; CTAN location: `info/lshort/french`

lshort-german
doc3
German version of A Short Introduction to LaTeX 2ε: LaTeX 2ε-Kurzbeschreibung.
Author: Walter Schmidt; CTAN location: info/lshort/german

lshort-italian
doc3
Italian translation of the (Not So) Short Introduction to LaTeX.
Author: Giuseppe Bilotta; CTAN location: info/lshort/italian

lshort-mongolian
doc3
Mongolian version of A Short Introduction to LaTeX 2ε.
Author: Oliver Corff; CTAN location: info/lshort/mongolian

lshort-polish
doc3
Introduction to LaTeX in Polish. This is the Polish translation of A Short Introduction to LaTeX 2ε.
Author: Janusz Gołdasz, Ryszard Kubiak, Tomasz Przechlewski; CTAN location: info/lshort/polish

lshort-portuguese
doc3
Introduction to LaTeX in Portuguese. This is the Portuguese translation of A Short Introduction to LaTeX 2ε.
Author: Lenimar N. Andrade; CTAN location: info/lshort/portuguese

lshort-russian
doc3
Russian version of A Short Introduction to LaTeX2e.
Author: unknown; CTAN location: info/lshort/russian

lshort-spanish
doc3
Spanish version of A Short Introduction to LaTeX 2ε.
Author: unknown; CTAN location: info/lshort/spanish

ltablex
latex3
Modifies the tabularx environment to combine the features of the tabularx package (auto-sized columns in a fixed width table) with those of the longtable package (multi-page tables).
Author: unknown; CTAN location: macros/latex/contrib/supported/ltablex

ltnews
The latest LaTeX news.
Author: unknown; CTAN location: macros/latex/doc

ltoh
A converter from LaTeX to HTML.
Author: Russell Quong; CTAN location: support/ltoh

ltt
doc3
Example code for "LaTeX Tips und Tricks" book. This is the code for the examples in the book "LaTeX Tips und Tricks", dpunkt 2000, ISBN 3-932588-37-1. The code includes application examples as well as packages and class files developed in the book.
Author: Ingo Kloeckl; CTAN location: info/ltt

ltx2rtf
texlive2
A conversion program from LaTeX to Rich Text Format.
Author: Daniel Taupin; CTAN location: support/ltx2rtf

ltx2x
Replace LaTeX commands in a document by user-defined strings. A program to replace LaTeX commands by user-defined characters. Typical uses are for deTeXing and pretty-printing, or for replacing LaTeX commands by SGML, HTML, and RTF tags, etc.
Author: Peter Wilson; CTAN location: support/ltx2x

ltxbase
latex1
The core LaTeX.
Author: LaTeX Project Team; CTAN location: macros/latex/base

ltxdoc
doc2
Class for documented LaTeX 2ε classes.
Author: LaTeX Project Team; CTAN location: macros/latex/base

ltxinput
An MSDOS utility which recursively searches a file for input (and include) statements, writing a list of files which are input to stdout and to a batch file which sets an environmental variable LTXINPUT to point to this filelist. The C source, MSDOS binary, documentation and test files are included in the distribution.
Author: Jim Green; CTAN location: support/ltxinput

ltxmisc
latex2
Miscellaneous LaTeX styles.
Author: unknown; CTAN location: macros/latex/contrib/other/misc

ltxsrc
The core source files for LaTeX 2ε.
Author: LaTeX Project Team; CTAN location: macros/latex/base

ltxtable
Longtable and tabularx merge.
Author: David Carlisle; CTAN location: macros/latex/contrib/supported/carlisle

lucida
fonts2
Package to make Lucida Bright fonts usable with LaTeX.
Author: unknown; CTAN location: fonts/lucida

lucold — Use old-style digits with Lucida fonts. A package to switch the rendering of all the digits to the so-called "old-style" numbers, when using Lucida fonts. The switch affects all digits in text mode, or all digits in text and math mode. It works both for normal weight and boldface text and math; since the boldface old-style digits are in the "Lucida Expert" font set, you need it for the boldface digits. Includes a set of AWK programs used to automatically build fd, tfm and vf files from the existing Lucida PSNFSS distribution, and that may easily changed for the generation of different virtual files for whatever font.
Author: Maurizio Loreti; CTAN location: `macros/latex/contrib/supported/lucold`

lw35nfsx — LaTeX psnfss support for the 35 printer resident PostScript fonts using ly1 text font encoding, employing the Berry names. This is similar to the existing lw35nfss.zip support using T1/TS1, but much simpler (lw35nfsx.zip is about 150k bytes while lw35nfss.zip is about 800 kbytes). It includes needed additions to dvips's psfonts.map, TFM metric files for TeX, FD font definition files, and STY files for LaTeX.
Author: Berthold K. P. Horn; CTAN location: `fonts/psfonts`

ly1 — Support for LY1 LaTeX encoding, i.e. The Y&Y texnansi (TeX 'n ANSI) encoding.
`latex3` Author: unknown; CTAN location: `macros/latex/contrib/supported/psnfssx/ly1`

m-pictex — Solves the 'out of dimen' problem that sometimes occurs when using PiCTeX (especially together with LaTeX).
Author: Tobias Burnus; CTAN location: `macros/context/cont-tfm`

macbibtex — BibTeX for the Macintosh. A port of BibTeX which is distributed with OzTeX for the Macintosh OS.
Author: Vince Darley; CTAN location: `systems/mac/oztex`

macgreek — Greek language support.
Author: Apostolos Syropoulos; CTAN location: `language/greek/package-babel/encodings`

magaz — Magazine layout. Provides several functions that are used in many magazines' layout. Current version only does special formatting for the first line of text in a paragraph.
Author: Donald Arseneau; CTAN location: `macros/latex/contrib/other/misc`

mailing — Macros for mail merging.
`latex3` Author: unknown; CTAN location: `macros/latex/contrib/supported/mailing`

makecmds — The new `\makecommand` command always (re)defines a command. The package provides a `\makecommand`
`latex3` command, which is like `\(re)newcommand` except it always (re)defines a command. There is also `\makeenvironment` and `\provideenvironment` for environments.
Author: Peter R. Wilson; CTAN location: `macros/latex/contrib/supported/misc`

makefonts — Shell scripts to generate pk files. This package contains shell scripts which generate the required pk files. Some people prefer to generate a basic set of pk files, leaving the automatic font generation mechanism for more esoteric fonts. This is based on the script allcm.
Author: Volker Kuhlmann; CTAN location: `fonts/utilities/makefonts`

makeglos — Include a glossary into a document. A LaTeX package to include a glossary into a document. The glossary must be prepared by an external program, like xindy or makeindex, in the same way that an index is made.
Author: Thomas Henlich; CTAN location: `macros/latex/contrib/supported/makeglos`

makeidx — Standard LaTeX package for creating indexes.
Author: LaTeX Project Team; CTAN location: `macros/latex/base`

makeindex — A general purpose hierarchical index generator; it accepts one or more input files (often produced by
`doc1` a text formatter such as TeX or troff), sorts the entries, and produces an output file which can be formatted. The formats of the input and output files are specified in a style file; by default, input is assumed to be an idx file, as generated by LaTeX.
Author: Pehong Chen and Nelson H. F. Beebe; CTAN location: `indexing/makeindex`

malayalam — Fonts for typesetting Malayalam, with a pre-processor.
`lang3` Author: Jeroen Hellingman; CTAN location: `language/malayalam`

malvern — A new sans-serif font family.
`fonts3` Author: Damian Cugley; CTAN location: `fonts/malvern`

manfnt — LaTeX support for the TeX book symbols. A package for easy access to the symbols of the manfnt,
`latex3` such as Dangerous Bend and Man-errata Arrow.
Author: Axel Kielhorn; CTAN location: `macros/latex/contrib/supported/manfnt`

manyfoot
Implements a command, `\newfootnote`, that adds footnote levels to the standard LaTeX's footnote mechanism. Footnotes of every additional level are automatically grouped together on a LaTeX 2ε output page and are separated from another levels by the special vertical spaces. The command `\newfootnote` allows customisation of the way foonotes of additional level be represented in LaTeX 2ε documents. Two customisation styles are available now: the plain style is the ordinary LaTeX's style of footnote representation; the para style causes footnotes to be typeset as a run-in paragraph.
Author: A. I. Rozhenko; CTAN location: `macros/latex/contrib/supported/ncctools`

mapcodes
`latex3`
Support for multiple character sets and encodings.
Author: unknown; CTAN location: `macros/latex/contrib/supported/mapcodes`

maple
`latex3`
Styles and examples for the MAPLE newsletter.
Author: unknown; CTAN location: `macros/latex/contrib/supported/maple`

margbib
`latex3`
A package for displaying bibliography tags in the margins.
Author: Karsten Tinnefeld; CTAN location: `macros/latex/contrib/supported/margbib`

marvosym-mac
A Macintosh version of the marvosym font. The files include both a PostScript and TrueType version, as well as configuration files to use the font with OzTeX. You still need the marvosym package separately.
Author: Rowland McDonnell; CTAN location: `fonts/psfonts/marvosym/mac`

marvosym
`fonts3`
A Type 1 font: Martin Vogels Symbole (marvosym) font. Martin Vogel's Symbol (marvosym) font is a font containing: the Euro currency symbol as defined by the European commission; Euro currency symbols in typefaces Times, Helvetica and Courier; Symbols for structural engineering; Symbols for steel cross-sections; Astronomy signs (Sun, Moon, planets); The 12 signs of the zodiac; Scissor symbols; CE sign and others.
Author: Thomas Henlich; CTAN location: `fonts/psfonts/marvosym`

mathcmd
Provides a slightly modified version of the commands for making integrals and sums. Moreover, it provides commands to deal with derivatives an vector operators.
Author: Francesco Bosisio; CTAN location: `macros/latex/contrib/supported/bosisio`

mathcomp
`latex2`
A package which provides access to some interesting characters of the Text Companion fonts (TS1 encoding) in math mode.
Author: Tilmann Boess; CTAN location: `macros/latex/contrib/supported/mathcomp`

mathematica
`fonts3`
Virtual TeX fonts that can be used with the PostScript fonts distributed with Mathematica 3.0. The archives use a TDS conforming directory structure. A style file for LaTeX 2ε is included, that enables use of the fonts and the new symbols from LaTeX 2ε.
Author: unknown; CTAN location: `fonts/psfonts/Mathematica3.0`

mathenv
Defines some often useful math-mode environments. The "Equation" environment is defined as having an optional argument used as a label. The "MultiLine" environment is used for long formulas that don't fit on a single line, but no ampersand mark is needed, since all lines but the first are authomatically indented by a predefined amount of space. The "System" environment is for grouping a set of equations with one number and with an enclosing left brace. These two environments also have an optional argument used as a label. All the above environments have a *-form, which does not generate a number.
Author: Francesco Bosisio; CTAN location: `macros/latex/contrib/supported/bosisio`

mathinst
A script to create proper math fonts for use by TeX and LaTeX using one the family of Roman types and the raw math fonts (any of the commercial MathTime, Euler, or Lucida New Math fonts). All fonts are properly scaled for compatibility with the Roman fonts.
Author: Alan Hoenig; CTAN location: `fonts/utilities/mathinst`

mathkit
Creates math fonts that match outline fonts (Times Palatino, and others) for typesetting math with TeX.
Author: Alan Hoenig; CTAN location: `fonts/utilities/mathkit`

mathpazo
fonts3
Pazo Math fonts and LaTeX package to typeset Palatino. The Pazo Math fonts are a family of PostScript fonts suitable for typesetting math in combination with the Palatino family of text fonts. The Pazo Math family is made up of five fonts provided in Type1 format (PazoMath, PazoMath-Italic, PazoMath-Bold, PazoMath-BoldItalic, and PazoMathBlackboardBold). These contain, in designs that suit Palatino, glyphs that are usually not available in Palatino and for which Computer Modern looks odd when combined with Palatino. These glyphs include the uppercase Greek alphabet in upright and slanted shapes in regular and bold weights, the lowercase Greek alphabet in slanted shape in regular and bold weights, several math glyphs (partialdiff, summation, product, coproduct, emptyset, infinity, and proportional) in regular and bold weights, other glyphs (Euro and dotlessj) in upright and slanted shapes in regular and bold weights, and the uppercase letters commonly used to represent various number sets (C, I, N, Q, R, and Z) in blackboard bold. The LaTeX macro package mathpazo.sty defines the Palatino family as the default roman font and uses the virtual mathpazo fonts, built around the Pazo Math family, for typesetting math in a style that suits Palatino.
Author: Diego Puga ; CTAN location: `fonts/mathpazo`

mathpple
fonts3
Use PostScript Palatino for typesetting maths. The package defines the PostScript font family 'Palatino' (ppl) as the default roman font and then uses the 'mathpple' fonts for typesetting math. These virtual fonts have been created for typesetting math in a style that suits the Palatino text fonts. The AMS fonts, when used additionally, will be scaled to fit Palatino.
Author: Walter Schmidt; CTAN location: `fonts/mathpple`

mathptm
Extends the usage of the PostScript times fonts to the math environment.
Author: Sebastian Rahtz; CTAN location: `macros/latex/required/psnfss`

mathrsfs
Maths rsfs (Ralph Smith's Fancy Script) font support.
Author: Joerg Knappen; CTAN location: `macros/latex/contrib/supported/jknappen`

mathspad
An XWindows WYSIWYG structure editor implementing stencils which define two views of a document, the on-screen view and the output view (which might be LaTeX, TeX, HTML, troff).
Author: unknown; CTAN location: `support/mathspad`

mathspic
An MS-DOS filter program for use with PiCTeX. MathsPIC parses a plain text input file and generates a plain text output-file containing PiCTeX and TeX commands, which can then be TeX/LaTeXed in the usual way. It also outputs a comprehensive log-file. MathsPIC facilitates creating figures using PiCTeX by providing an environment for manipulating named points and also allows the use of variables and maths (advance, multiply, and divide) - in short - it takes the pain out of PiCTeX.
Author: Dick Nickalls; CTAN location: `graphics/pictex/mathspic`

mathtime
The Mathtime fonts have a number of characters remapped to positions different from the ones normally used by the corresponding TeX CM-fonts. For the symbol font "operators" the corresponding mathtime style files use the Times Roman font (often called something like: ptmr or ptmr7t or ptmrq).
Author: Aloysius Helminck; CTAN location: `fonts/metrics/adobe/mathtime`

matlabweb
Literate programming system for Matlab. A literate programming system for the Matlab language. Similar to CWEB, created with a slightly modified version of the Spider system. Can be used with plain TeX or LaTeX, the latter with help from the webfiles package.
Author: Mark Potse; CTAN location: `web/matlabweb`

mcite
latex3
Support for collapsing multiple citations into one, as customary in physics journals.
Author: unknown; CTAN location: `macros/latex/contrib/supported/mcite`

mdwtools
latex3
Miscellaneous tools by Mark Wooding. This collection of tools includes support for `@`, a doafter command, footnotes, mathenv for various alignment in maths, list handling, trivial maths oddments, rewrite of LaTeX's tabular and array environments, verbatim handling, and syntax diagrams.
Author: Mark Wooding; CTAN location: `macros/latex/contrib/supported/mdwtools`

meta-mode
A GNU Emacs Lisp package that implements a major mode for editing MetaFont or MetaPost sources. It provides many features commonly found in Emacs editing modes for programming languages, such as automatic indenting of source code, syntactic highlighting (a.k.a. fontification), symbol completion, as well as miscellaneous other basic editing functions adapted to the mode-specific semantics such as motion commands or commands to mark, reindent, or comment-out environments or regions.
Author: Ulrik Vieth; CTAN location: `support/emacs-modes`

metafp
Some Experiences in Running METAFONT and MetaPost.
Author: Peter R. Wilson; CTAN location: `info`

metapost
metapost1
A tool based on MetaFont for producing precise technical illustrations, creating scalable PostScript instead of bitmaps.
Author: John Hobby; CTAN location: graphics/metapost

method
latex3
Typeset method and variable declarations. This LaTeX package supports the typesetting of programming language method and variable declarations. It includes an option to typeset in French.
Author: Thomas Leineweber; CTAN location: macros/latex/contrib/supported/method

mex
lang2
A Polish format for TeX. MeX is an adaptation of Plain TeX and LaTeX209 formats to the Polish language and to the Polish printing customs. It contains a complete set of MetaFont sources of Polish fonts, hyphenation rules for the Polish language and sources of formats.
Author: B. Jackowski, M. Ryćko; CTAN location: language/polish

mf-ps
fonts3
A MetaFont-PostScript link. A MetaFont package including: epstomf a tiny AWK script for converting EPS files into MF lingo; and mftoeps for generating (encapsulated) PostScript files readable, e.g., by CorelDRAW!, Adobe Illustrator and Fontographer. MetaFont writes PostScript code to a LOG-file, and from the LOG-file the code can be extracted by either TeX or AWK.
Author: B. Jackowski; CTAN location: graphics/MF-PS

mf2pt3
Perl script to generate PostScript Type 3 fonts from MetaFont sources by processing MetaPost output.
Author: Apostolos Syropoulos; CTAN location: fonts/utilities/mf2pt3

mf2tex
A package of macros in TeX and MetaFont which allows a user to easily add labels to MetaFont sources (text or mathematics). Normally you can only draw in MetaFont and all labels you must write into the TeX source before (or after) inserting the picture. This package allows you to write TeX labels straight into the MetaFont source and to generate corresponding TeX source.
Author: Robert Spalek; CTAN location: graphics/mf2tex

mff
latex3
A package to provide something similar to 'multiple master' fonts, but using MetaFont; you specify a font by a set of MetaFont parameters, and TeX makes up an mf file to generate the required font; this package is not integrated with NFSS (or MakeTeXTFM) yet fun.
Author: Sasha Berdnikov; CTAN location: macros/latex/contrib/supported/mff

mflogo
latex1
LaTeX support for MetaFont and logo fonts. LaTeX package and font definition file to access the Knuthian 'logo' fonts described in 'The MetaFontbook' and the MetaFont and logos in LaTeX documents. (CTAN:fonts/mflogo).
Author: Ulrik Vieth; CTAN location: macros/latex/contrib/supported/mflogo

mfnfss
latex2
Font description files to use extra fonts like yinit and ygoth.
Author: unknown; CTAN location: macros/latex/contrib/supported/mfnfss

mfpic
graphics3
Macros which generate MetaFont code for drawing pictures.
Author: unknown; CTAN location: graphics/mfpic

mhequ
Multicolumn equations, tags, labels, sub-numbering. MHequ simplifies the creation of multi-column equation environments, and to tag the equations therein. It supports sub-numbers of blocks of equations (like (1.2a), (1.2b), etc.) and references to each equation individually (1.2a) or to the whole block (1.2). The labels can be shown in draft mode.
Author: Martin Hairer; CTAN location: macros/latex/contrib/other/mhequ

mhs
latex3
No description available.
Author: unknown

midnight
generic3
A set of useful macro tools.
Author: unknown; CTAN location: macros/generic/midnight

midpage
Environment for vertical centering.
Author: Peter Wilson; CTAN location: macros/latex/contrib/supported/misc

miktex-axp
A port of MiKTeX to MS-Windows-NT on the Alpha.
Author: Alexander Dong; CTAN location: systems/win32/miktex-AXP

miktex
A free TeX distribution for MS-Windows32. A distribution of TeX and friends for MS-Windows95 and MS-Windows-NT. Features include easy installation and configuration, and full TeX and LaTeX support. MiKTeX includes a 'basic' distribution which is a (useful) sub-set of the complete distribution removing pdfTeX, Computer Modern PostScript Fonts, AMSFonts, PostScript Fonts, MetaPost Texinfo, Makeinfo, and Web. The TEXMF tree is a subset of the standard teTeX TEXMF. A command-line utility, 'texify', simplifies the production of DVI (PDF) documents by automatically invoking LaTeX (pdfLaTeX), Makeindex, and BibTeX as many times as necessary to produce a DVI (PDF) file with sorted indices and all cross-references resolved.
Author: Christian Schenk; CTAN location: systems/win32/miktex

mil3 Samples from Math into LaTeX.
Author: George Gratze; CTAN location: `info/mil3`

miniltx Part of the plain TeX graphics collection which allows the use of LaTeX's graphics, colour, and picture mode commands in plain TeX based formats.
Author: David Carlisle; CTAN location: `macros/plain/graphics`

minitoc Produce a table of contents for each chapter.
`latex3` Author: Jean-Pierre Drucbert; CTAN location: `macros/latex/contrib/supported/minitoc`

minutes Package for writing minutes of meetings. Supports the creation of a collection of minutes. Features
`latex3` include: Support of tasks (who, schedule, what, time of finishing; possibility of creating a list of open tasks; inclusion of open tasks from other minutes); Support of attachments; Support of schedule dates (in planning: support of calendar.sty); Different versions ('secret parts'); Macros for votes and decisions (list of decisions).
Author: Knut Lickert; CTAN location: `macros/latex/contrib/supported/minutes`

mirr PostScript mirror header (for dvips). A small header for making a mirror of dvipsed files.
`generic2` Author: BOP; CTAN location: `macros/generic/TeX-PS`

mitpress Support for MIT Press.
Author: unknown; CTAN location: `macros/latex209/contrib/misc`

mkpic A Perl interface to mfpic making it possible to enter simple commands with tab separated arguments and without braces/brackets to design figures. The script produces a style file, mkpic.sty, containing one LaTeX command for each picture.
Author: Wybo H. Dekker; CTAN location: `support/mkpic`

mla A bibliography style for the Modern Language Association's manual of style.
Author: Thomas Weissert; CTAN location: `biblio/bibtex/contrib/mla`

mlbib Support for multilingual bibliographies.
Author: Wenzel Matiaske; CTAN location: `macros/latex/contrib/supported/mlbib`

mltex Support for MLTeX, the multilingual TeX extension from Michael J. Ferguson.
`latex2` Author: Bernd Raichle; CTAN location: `macros/latex/contrib/supported/mltex`

mmafm Font metrics for multiple-master font. Creates an AFM file (font metrics) corresponding to an instance of a multiple-master font by interpolating at a given point in a multiple master's design space. It reads the AMFM and AFM files distributed with the font.
Author: Eddie Kohler; CTAN location: `fonts/utilities/mmtools`

mmpfb Create instance of multiple-master font. Creates a normal, single-master font program which looks like an instance of a multiple-master font. It reads the multiple master font program in PFA or PFB format.
Author: Eddie Kohler; CTAN location: `fonts/utilities/mmtools`

mmtools Multiple master fonts tools. Two tools for working with multiple master fonts: mmafm creates an AFM by interpolating at a given point in a multiple master's design space; mmpfb creates a "normal" PFB font by interpolating at a given point in a multiple master's design space.
Author: Eddie Kohler; CTAN location: `fonts/utilities/mmtools`

mnras Styles for the Monthly Notices of the Royal Astronomical Society.
`plain3` Author: unknown; CTAN location: `macros/latex209/contrib/mnras`

modes A collection of MetaFont mode_def's. Also includes common definitions for write/white printers, 'special' information, and landscape mode.
Author: Karl Berry; CTAN location: `fonts/modes`

monotype Font metrics, and macro support in LaTeX 2ε, for a large set of Monotype fonts.
`fonts3` Author: unknown; CTAN location: `fonts/psfonts/monotype`

montex Mongolian LaTeX. MonTeX provides Mongolian support for LaTeX 2ε (now Cyrillic, but soon also
`lang3` Classical Mongolian).
Author: Oliver Corff; CTAN location: `language/mongolian/montex`

moredefs LaTeX defining, expansion, and debugging commands. A LaTeX package providing numerous defin-
`latex3` ing, expansion, and debugging commands for programming in LaTeX and writing LaTeX packages and classes.
Author: Matt Swift; CTAN location: `macros/latex/contrib/supported/frankenstein`

morefloats — Increase the number of simultaneous LaTeX floats. LaTeX can, by default, only cope with 18 outstanding floats; any more, and you get a 'too many unprocessed floats' error. This package increases that limit to 36 outstanding floats. However, if you're specifying floats that can't be placed anywhere, the package merely delays the arrival of the error message.
Author: Don Hosek; CTAN location: `macros/latex209/contrib/misc`

morehelp — A package to enhance LaTeX 2ε error messages by providing descriptions of the possible causes including those that may not be obvious. This style is effectively an online substitute for error lists found in the LaTeX books, although it cannot completely replace them. Only true LaTeX errors are included; TeX errors are beyond the reach of ordinary macros.
`latex3`
Author: Olaf Kummer; CTAN location: `macros/latex/contrib/supported/morehelp`

moresize — Allows font sizes up to 35.83pt. A package for using font sizes up to 35.83pt, for example with the new EC fonts. New commands `\HUGE` and `\ssmall` for selecting font sizes are provided together with some options working around current LaTeX 2ε shortcomings in using big font sizes. The package also provides options for improving the typesetting of paragraphs (or headlines) with embedded math expressions at font sizes above 17.28pt.
`latex3`
Author: Christian Cornelssen; CTAN location: `macros/latex/contrib/other/moresize`

moreverb — Extended verbatim. A verbatim mode that can handle TABs properly, can number lines, can number lines in an included file, can produce boxed verbatims, etc.
`latex3`
Author: Robin Fairbairns, Angus Duggan, Rainer Schoepf and Victor Eijkhout; CTAN location: `macros/latex/contrib/supported/moreverb`

morse — A package for printing Morse code signs.
`fonts3`
Author: unknown; CTAN location: `fonts/morse`

mparhack — A workaround for the LaTeX bug in marginpars. Implements a workaround for the LaTeX bug that marginpars will sometimes come out at the wrong margin.
`latex3`
Author: Stefan Ulrich; CTAN location: `macros/latex/contrib/supported/mparhack`

mpattern — Patterns in MetaPost. A package for defining and using patterns in MetaPost, using the Pattern Color Space available in PostScript Level 2.
`metapost2`
Author: Piotr Bolek; CTAN location: `graphics/metapost/macros/mpattern`

mpfnmark — A package which provides the command `\mpfootnotemark`, which can be used in the same way as `\footnotemark`. The difference between these two macros is that within minipage environments the latter uses the standard footnote marker style (defined by `\thefootnote`), while the new command uses the minipage footnote marker style (defined by `\thempfootnote`).
`latex3`
Author: Wolfgang Kowarschick; CTAN location: `macros/latex/contrib/other/mpfnmark`

ms — Various LaTeX packages by Martin Schröder.
`latex3`
Author: Martin Schröder; CTAN location: `macros/latex/contrib/supported/ms/contrib`

mslapa — LaTeX and BibTeX style files for a respectably close approximation to APA (American Psychological Association) citation and reference style.
`latex3`
Author: unknown; CTAN location: `macros/latex/contrib/supported/mslapa`

mt11p — A package to use the MathTime and MathTimePLUS ("MathTime complete") fonts in LaTeX 2ε. Everything is included, incl. (patched) font metrics, except, of course, the fonts themselves. The package cooperates with the AMS packages (amsmath, amssymb, etc.) T1 and OT1 encodings (as operator fonts!) are fully supported. It does not assume you own any other commercial (non-resident) fonts. This package has no connection with the "mathtime" package by Frank Mittelbach and David Carlisle, commissioned by Y&Y.
Author: Drahoslav Lim; CTAN location: `fonts/mt11p`

mtbe — Examples from Mathematical TeX by Example by Arvind Borde.
`plain3`
Author: unknown; CTAN location: `macros/plain/contrib/mtbe`

multenum — Multi-column enumerated lists.
`latex3`
Author: unknown; CTAN location: `macros/latex/contrib/supported/multenum`

multibib — Multiple bibliographies within one document. Allows the creation of references to multiple bibliographies within one document. It thus provides complementary functionality to packages like bibunits and chapterbib, which allow the creation of one bibliography for multiple, but different parts of the document. It is compatible with inlinebib, natbib, and koma-script.
`latex3`
Author: Thorsten Hansen; CTAN location: `macros/latex/contrib/supported/multibib`

multicol Intermix single and multiple columns. This package allows, for example, to shift between two and one columns anywhere.
Author: Frank Mittelbach; CTAN location: `macros/latex/required/tools`

multido A loop facility for Generic TEX.
Author: Timothy Van Zandt; CTAN location: `macros/generic/multido`

multirow `latex3` Creates tabular cells spanning multiple rows. Includes an option for specifying multirows with a "natural" column width.
Author: Piet van Oostrum; CTAN location: `macros/latex/contrib/supported/multirow`

multitoc Set table of contents in multiple columns. A LATEX package which automatically sets only the table of contents, list of figures and list of tables in two or more columns. The number of columns can be configured. Uses the multicol package.
Author: Martin Schroeder; CTAN location: `macros/latex/contrib/supported/ms`

musictex `generic3` Typesetting music with TEX.
Author: unknown; CTAN location: `macros/musictex`

musixtex `generic3` Extended MusicTeX, with better slurs.
Author: unknown; CTAN location: `macros/musixtex`

muthesis `latex3` Document classes for University of Manchester Department of Computer Science. Includes thesis and project report document classes from the University of Manchester's Department of Computer Science.
Author: Graham Gough; CTAN location: `macros/latex/contrib/supported/muthesis`

mxedruli Georgian fonts including the xedruli Alphabet and the Xucuri-Alphabet.
Author: Johannes Heinecke; CTAN location: `fonts/georgian/mxedruli`

mylatex MyLATEX.
Author: David Carlisle; CTAN location: `macros/latex/contrib/supported/carlisle`

myletter Another letter package.
Author: unknown; CTAN location: `macros/latex/contrib/supported/akletter/myletter`

nassflow `latex3` Drawing Nassi-Schneidermann diagrams.
Author: unknown; CTAN location: `macros/latex/contrib/supported/nassflow`

natbib `bibtex2` Bibliography style with author-year and numbered references.
Author: Patrick W. Daly; CTAN location: `macros/latex/contrib/supported/natbib`

nccfoots Implements commands for generating footnotes marked by hands. For example, to mark a footnote by a star you can write `\Footnote{*}{Footnote text}`.
Author: A. I. Rozhenko; CTAN location: `macros/latex/contrib/supported/ncctools`

ncctools `latex3` Various LATEX packages written and supported by Alexander Rozhenko.
Author: Alexander Rozhenko; CTAN location: `macros/latex/contrib/supported/ncctools`

needspace Insert pagebreak if not enough space. Provides a command to disable pagebreaking within a given vertical space. If there is not enough space between the command and the bottom of the page, a new page will be started.
Author: Peter R Wilson; CTAN location: `macros/latex/contrib/supported/misc`

nestquot Alternate quotes between double and single with nesting. Provides two new commands: `\nlq` and `\nrq` for nesting left and right quotes that properly change between double and single quotes according to their nesting level, e.g. the input `\nlq Foo \nlq bar\nrq bletch\nrq` will be typeset as if it had been entered as "Foo 'bar' bletch".
Author: Florian Hars; CTAN location: `macros/latex/contrib/other`

newalg `latex3` Format algorithms like Cormen, Leiserson and Rivest.
Author: unknown; CTAN location: `macros/latex/contrib/supported/newalg`

newclude New `\include` system for LATEX. New `\include` system for LATEX. A LATEX package providing a backwards-compatible reimplementation of `\include` and `\includeonly`. The restriction that `\clearpages` must surround an included file are removed, as is the restriction that `\includes` cannot be nested. An optional argument to `\include` is executed before the included file, whenever it is processed. This package is useful but may have problems and is unsupported. Newclude and includex are both attempts to provide similar features. Newclude is more ambitious, but includex is still more successful in certain ways.
Author: Matt Swift; CTAN location: `macros/latex/contrib/supported/frankenstein/unsupported`

newlfm
latex3
Write letters, facsimilies, and memos. Integrates the letter class with fancyhdr and geometry to automatically make letterhead stationary. Useful for writing letters, fax, and memos. You can set up an address book using "wrapper" macros. You put all the information for a person into a wrapper and then put the wrapper in a document. The class handles letterheads automatically. You place the object for the letterhead (picture, information, etc.) in a box and all sizing is set automatically.
Author: Paul Thompson; CTAN location: `macros/latex/contrib/supported/newlfm`

newsletr
plain3
Macros for making newsletters.
Author: unknown; CTAN location: `macros/plain/contrib/newsletr`

newthm
latex3
A modified version of the theorem-style which provides generation of lists of theorems. This has been superseded by ntheorem.
Author: Andreas Schlechte; CTAN location: `macros/latex/contrib/other/newthm`

newvbtm
Define your own verbatim-like environment. Defines general purpose macro named `\newverbatim` to define your own verbatim-like environment. It also has a supplementary style file varvbtm.sty to provide set of macros for variants of verbatim, such as tab emulation.
Author: Hiroshi Nakashima; CTAN location: `macros/latex/contrib/supported/newvbtm`

nextpage
Generalisations of the `\clear...page` and `\newpage` commands.
Author: Peter Wilson; CTAN location: `macros/latex/contrib/supported/misc`

niceframe
latex3
Support for fancy framing of pages.
Author: unknown; CTAN location: `macros/latex/contrib/supported/niceframe`

nomencl
latex3
Produce lists of symbols as in nomenclature. Produces lists of symbols using the capabilities of the MakeIndex program.
Author: Bernd Schandl; CTAN location: `macros/latex/contrib/supported/nomencl`

nonfloat
latex3
Non-floating table and figure captions. Adjusts the figure and table environments to ensure that centered objects as one line captions are centered as well. Also the vertical spaces for table captions above the table are changed.
Author: Kai Rasche; CTAN location: `macros/latex/contrib/supported/nonfloat`

nopageno
No page numbers in LaTeX documents. LaTeX's standard styles use two page styles, one on normal pages and one on 'opening' pages with `\maketitle` or `\chapter` etc. Unfortunately there is only easy access to changing one of these two so if you want something other than 'plain' on the opening pages you must use `\thispagestyle` on each such page. The fancyhdr package does provide a more flexible interface, but if you just want an empty page style on all pages then this package will do the job.
Author: David Carlisle; CTAN location: `macros/latex/contrib/supported/carlisle`

norbib
Norwegian adaptions of the four standard BibTeX style files.
Author: Dag Langmyhr; CTAN location: `biblio/bibtex/contrib/norbib`

notoccite
Prevent erroneous numbering of cites when using BibTeX/unsrt.
Author: Donald Arseneau; CTAN location: `macros/latex/contrib/other/misc`

nrc
latex3
Format of the NRC Canadian Journal of Physics.
Author: Robin Fairbairns; CTAN location: `macros/latex/contrib/supported/nrc`

ntabbing
Simple tabbing extension for automatic line numbering. An extension of the tabbing environment that supports automatic line numbering. The lines can be referenced using the standard `\label` and `\ref` mechanism.
Author: Gideon Stupp; CTAN location: `macros/latex/contrib/other/ntabbing`

ntg
doc3
Dutch TeX Users Group information.
Author: unknown

ntgclass
latex2
Versions of the standard LaTeX article and report classes, rewritten to reflect a more European design, by the Dutch TeX Users Group.
Author: unknown; CTAN location: `macros/latex/contrib/supported/ntgclass`

ntheorem
latex3
Enhanced theorem environment. Enhancements for theorem-like environments: easier control of layout; proper placement of endmarks even when the environment ends with `\end{enumerate}` or `\end{displaymath}` (including support for amsmath displayed-equation environments); and support for making a list of theorems like `\listoffigures`.
Author: Wolfgang Andreas Schlechte; CTAN location: `macros/latex/contrib/supported/ntheorem`

numline
latex3
Macros for numbering lines.
Author: unknown; CTAN location: `macros/latex/contrib/supported/numline`

oands — Characters used as symbols when transliterating ancient scripts.
Author: Peter R Wilson; CTAN location: `fonts/archaic/oands`

objectz — Macros for typesetting Object Z.
`latex3` Author: unknown; CTAN location: `macros/latex/contrib/supported/objectz`

oca — OCR font.
`fonts3` Author: unknown; CTAN location: `fonts/oca`

ochem — Typeset chemical formulae with LaTeX. A perl script to translate chemical formulae and reaction schemes into PostScript or LaTeX. Includes a LaTeX package to include the chemical reaction description in a LaTeX document.
Author: Ingo Kloeckl; CTAN location: `support/ochem`

ocr-a — Fonts for OCR-A.
`fonts3` Author: unknown; CTAN location: `fonts/ocr-a`

ocr-b — Fonts for OCR-B.
Author: unknown; CTAN location: `fonts/ocr-b`

ogham — Fonts for typesetting Ogham script.
`fonts3` Author: unknown; CTAN location: `fonts/ogham`

ogonek — Support for Polish typography and the ogonek.
`latex3` Author: unknown; CTAN location: `macros/latex/contrib/other/ogonek`

oldstyle — Font information needed to load the cmmi and cmmib fonts for use to produce oldstyle numbers.
`latex3` Author: unknown; CTAN location: `macros/latex/contrib/other/oldstyle`

omega — Omega.
Author: Yannis Haralambous and John Plaice; CTAN location: `systems/omega`

omegabase — Basic support files for Omega.
`omega2` Author: unknown

omegafonts — Omega fonts.
`omega2` Author: unknown

onepagem — If the document has only one page, omit page number. The page number must be produced by the usual means of `\thepage`. Requires two passes through to have effect.
Author: Mike Piff; CTAN location: `macros/latex/contrib/supported/piff`

optional — Facilitate optional printing of parts of a document.
Author: Donald Arseneau; CTAN location: `macros/latex/contrib/other/misc`

oriya — Typesetting the Oriya script using TeX.
Author: Jeroen Hellingman; CTAN location: `language/oriya`

oryia — Typesetting the Oriya script using TeX.
Author: Jeroen Hellingman; CTAN location: `language/oriya`

os2tex — A distribution of TeX for OS2 Warp.
Author: Juergen Kleinboehl; CTAN location: `systems/os2/os2tex`

osmanian — Osmanian fonts by Alan Stanier for writing Somali.
`fonts3` Author: unknown; CTAN location: `fonts/osmanian`

ot2cyr — Macros to use the OT2 Cyrillic encoding.
`fonts2` Author: unknown; CTAN location: `fonts/cyrillic/ot2cyr`

outliner — Change section levels easily. Allows you to write "`\Level 2 {Some heading}`" instead of the usual
`latex3` `\section` stuff; the definitions of the levels can then easily be changed. There is a mechanism for shifting all levels. This makes it easy to bundle existing articles into a compilation.
Author: Victor Eijkhout; CTAN location: `macros/latex/contrib/supported/outliner`

overcite — Compressed lists of superscript numerical citations.
Author: Donald Arseneau; CTAN location: `macros/latex/contrib/supported/cite`

overpic — Combine LaTeX commands over included graphics. The overpic environment is a cross between the
`latex3` LaTeX picture environment and the `\includegraphics` command of graphicx. The resulting picture environment has the same dimensions as the included eps graphic. LaTeX commands can be placed on the graphic at defined positions. A grid for orientation is available.
Author: Rolf Niepraschk; CTAN location: `macros/latex/contrib/supported/overpic`

overword — Provides two macros which can be used as building blocks for the parsing of text. For an example of their use, see the calendar package.
Author: Frank Bennett; CTAN location: `macros/latex/contrib/supported/overword`

oxford `bibtex3` — A BibTeX style of citations for the humanities. It implements the Oxford style interpreted through the eye of a Swede working in the field of the history of ideas. It is based on Harvard and a heavily hacked bst-file generated with custom-bib. It currently only supports `\cite[]` and `\cite` and only in abbrevation mode.
Author: Peter Antman; CTAN location: `biblio/bibtex/contrib/oxford`

oztex-german — German version of oztex.
Author: Lothar Meyer-Lerbs; CTAN location: `systems/mac/oztex-german`

oztex — TeX for the Macintosh.
Author: Andrew Trevorrow; CTAN location: `systems/mac/oztex`

pacioli `fonts3` — Fonts designed by Fra Luca de Pacioli in 1497. The font is uppercase letters together with punctuation and some analphabetics; no lowercase or digits.
Author: Peter Wilson; CTAN location: `fonts/pacioli`

pagedraw — A free vector-graphics program capable of creating EPS files suitable for inclusion in TeX documents.
Author: unknown; CTAN location: `graphics/pagedraw`

pageno `latex3` — A LaTeX package that can re-define the plain page style under the control of options, so you can have page numbers: at the top or bottom of the page; in the inside corner, outside corner, or in the middle. It was inspired by Axel Sommerfeldt's rplain package.
Author: unknown; CTAN location: `macros/latex/contrib/supported/pageno`

pagesel — Selecting shipout pages. Selects single pages, page areas, odd, or even pages for output.
Author: Heiko Oberdiek; CTAN location: `macros/latex/contrib/supported/oberdiek`

pandey — Support for the Bengali language.
Author: Anshuman Pandey; CTAN location: `language/bengali/pandey`

pandora `fonts3` — The Pandora font family.
Author: Neenie Billawalla; CTAN location: `fonts/pandora`

paper `latex3` — A class derived from article, tuned for producing papers for journals. Introduces new layout options and font commands for sections/parts. Defines a new keywords environment, and subtitle and institution commands for the title section. New commands for revisions. And more.
Author: Wenzel Matiaske; CTAN location: `macros/latex/contrib/supported/paper`

paralist `latex3` — Enumerate and itemize within paragraphs. Provides enumerate and itemize environments that can be used within paragraphs to format the items either as running text or as separate paragraphs with a preceding number or symbol.
Author: Bernd Schandl; CTAN location: `macros/latex/contrib/supported/paralist`

parallel `latex3` — Provides a parallel environment which allows two columns of text to be typeset. Useful for typesetting two languages side-by-side.
Author: unknown; CTAN location: `macros/latex/contrib/supported/parallel`

parskip — Layout with zero `\parindent`, non-zero `\parskip`. Simply changing `\parskip` and `\parindent` leaves a layout that is untidy; this package (though it is no substitute for a properly-designed class) helps alleviate this untidiness
Author: Robin Fairbairns; CTAN location: `macros/latex/contrib/other/misc`

passivetex `formats2` — Support package for XML/SGML typesetting Packages providing XML parsing, UTF-8 parsing, Unicode entities, and common formatting object definitions for JadeTeX.
Author: Sebastian Rahtz; CTAN location: `macros/passivetex`

patch `latex3` — Macros for package management.
Author: unknown

path — A LaTeX package to break long strings at convenient places. The strings might be directory paths, email addresses, URLs, etc.
Author: Philip Taylor; CTAN location: `macros/eplain`

pawpict `latex3` — Using graphics from PAW. Support for the easy inclusion of graphics made by PAW (Physics Analysis Workstation). You need to have PAW installed on your system to benefit from this package. This package is now obsolete and will not be supported anymore.
Author: Christian Holm; CTAN location: `macros/latex/contrib/other/pawpict`

pb-diagram
latex3
A diagram package using LAMSTEX or Xy-pic fonts.
Author: Paul Burchard; CTAN location: macros/latex/contrib/supported/pb-diagram

pbmtogf
Convert pbm images to gf font files. A utility to convert a pbm (portable bitmap) file to a gf (font) and a pl (perl) file, effectively creating a font from the bitmap. The font can then be used in any TEX/LATEX files.
Author: Wai Wong; CTAN location: fonts/utilities/pbmtogf

pcfonts
Support for Hebrew.
Author: Rama Porrat; CTAN location: language/hebrew/fonts/pccode

pdcmac
plain3
Damian Cugley's macro tools.
Author: unknown; CTAN location: macros/plain/contrib/pdcmac

pdfscreen
latex2
Support screen-based document design. An extension of the hyperref package to provide a screen-based document design. This package helps to generate pdf documents that are readable on screen and will fit the screen's aspect ratio. Also it can be used with various options to produce regular print versions of the same document without any extra effort.
Author: C. V. Radhakrishnan; CTAN location: macros/latex/contrib/supported/pdfscreen

pdfslide
latex2
Presentation slides using pdftex. This is a package for use with pdftex, to make nice presentation slides. Its aims are: to devise a method for easier technical presentation; to help the mix of mathematical formulae with text and graphics which the present day wysiwyg tools fail to accomplish; to exploit the platform independence of TEX so that presentation documents become portable; and to offer the freedom and possibilities of using various backgrounds and other embellishments that a user can imagine to have in as presentation.
Author: C. V. Radhakrishnan; CTAN location: macros/latex/contrib/supported/pdfslide

pdftex-djgpp
A PDFTEX executable compiled with DJGPP v.2.01, to be used with the DJGPP v.2.01 port of web2c for MS-DOS and MS-Windows 95.
Author: Weiqi Gao; CTAN location: systems/pdftex/bin/DJGPP

pdftex
pdftex2
Generate PDF from TEX directly. An extension of TEX which directly generates PDF documents instead of DVI. This is under development and regarded as beta software. It is, non-the-less, quite reliable, and produces good PDF. Various TEX distributions, including teTeX and MiKTeX include pdftex and pdflatex.
Author: unknown; CTAN location: systems/pdftex

pdftex'oztex
PdfTEX designed to run with OzTeX.
Author: Tom Kiffe; CTAN location: systems/mac/pdftex

permute
latex3
Supportfor symmetric groups. A package for symmetric groups, allowing you to input, output, and calculate with them.
Author: Carsten Heinz; CTAN location: macros/latex/contrib/supported/permute

pf2afm
AFM generator for Adobe Type 1 fonts. A PostScript program for generating missing AFM files from PFB/PFA and (optionally) PFM font files.
Author: BOP; CTAN location: fonts/utilities/pf2afm

phoenician
fonts3
Fonts for the semitic script in use from about 1600 BC. This font formed the basis for all the world's alphabets. Mirrored forms are provided for typesetting either left-to-right or right-to-left (as the Phoenicians did).
Author: Peter Wilson; CTAN location: fonts/archaic/phoenician

phonetic
fonts3
MetaFont Phonetic fonts, based on Computer Modern.
Author: unknown; CTAN location: fonts/phonetic

photo
latex3
A float environment for photographs. This package introduces a new float type called photo which works similarly to the float types table and figure. Various options exist for placing photos, captions, and a "photographer" line. In twocolumn documents, a possibility exists to generate double-column floats automatically if the photo does not fit into one column. Photos do not have to be placed as floats, they can also be placed as boxes, with captions and photographer line still being available.
Author: Volker Kuhlmann; CTAN location: macros/latex/contrib/supported/photo

phppcf
A BIBTEX style derived from apalike with author names in all caps.
Author: unknown; CTAN location: biblio/bibtex/contrib

physe
formats3
PHYSE format.
Author: unknown; CTAN location: macros/physe

phyzzx
formats3
A TEX format for physicists.
Author: unknown; CTAN location: macros/phyzzx

picinpar
latex3
Insert pictures into paragraphs. (NOTE: Piet van Oostrum does not recommend this package. Picins is recommended instead.)
Author: unknown; CTAN location: macros/latex209/contrib/picinpar

picins
latex3
Insert pictures into paragraphs.
Author: unknown; CTAN location: macros/latex209/contrib/picins

pictex
graphics2
Picture drawing macros for TEX and LATEX.
Author: unknown; CTAN location: graphics/pictex

pictex2
graphics2
Adds relative coords and rules for dots in plots. Adds two user commands to standard PiCTEX. One command uses relative coordinates, thus eliminating the need to calculate the coordinate of every point manually as in standard PiCTEX. The other command modifies \plot to use a rule instead of dots if the line segment is horizontal or vertical.
Author: William Park; CTAN location: macros/latex/contrib/supported/pictex2

piff
latex3
Macro tools by Mike Piff.
Author: Mike Piff; CTAN location: macros/latex/contrib/supported/piff

piq
MetaFont package for the Klingon language with okuda orthography.
Author: Olaf Kummer; CTAN location: fonts/okuda/modified

pitthesis
latex3
Document class for University of Pittsburgh theses.
Author: Wonkoo Kim; CTAN location: macros/latex/contrib/supported/pitthesis

pkfind
The TDS standard specifies that pk and gf files contain \special strings to identify the contents of pk and gf files. Pkfind is a variant of the GNU find utility modified to understand those specials, and to act on them in some cases. For example, it can be used to delete all pk files created by gsftopk from a subdirectory tree.
Author: Paul Vojta; CTAN location: systems/unix/pkfind

pl-mf
fonts2
Polish extension of Computer Modern fonts in MF sources. The Polish extension of Computer Modern fonts (compatible with CMs); to be used with Polish TEX formats; actually, a part of MeX distribution.
Author: B. Jackowski and M. Ryćko; CTAN location: language/polish

pl-qx
fonts2
LATEX support for extra Polish fonts (antyktor, qfonts). LATEX support (fd, sty files) for extra Polish fonts (antyktor, qfonts).
Author: Piotr Kłosowski; CTAN location: fonts/psfonts/polish

pl
latex3
Literate Programming for Prolog with LATEX.
Author: unknown; CTAN location: macros/latex/contrib/other/gene/pl

placeins
Control float placement. Defines a \FloatBarrier command, beyond which floats may not pass; useful, for example, to ensure all floats for a section appear before the next \section command.
Author: Donald Arseneau; CTAN location: macros/latex/contrib/other/misc

plain
Make plain TEX files LATEXable.
Author: David Carlisle; CTAN location: macros/latex/contrib/supported/carlisle

plainmisc
plain2
Miscellaneous useful macros for plain TEX.
Author: unknown; CTAN location: macros/plain/contrib/misc

plaintex
plain1
Basic Plain TEX macros.
Author: Donald Knuth

plari
latex3
A document class for typesetting stageplay scripts.
Author: Antti-Juhani Kaijanaho; CTAN location: macros/latex/contrib/supported/plari

platex
lang2
Typeset Polish documents with LATEX and Polish fonts. Tools to typeset documents in Polish using LATEX 2ε with Polish fonts (so-called PL fonts), or EC fonts, and CM fonts.
Author: M. Olko and M. Wolinski; CTAN location: language/polish

play
latex3
Typeset plays. A class and style file that supports the typesetting of plays, including options for line numbering.
Author: James Kilfiger; CTAN location: macros/latex/contrib/supported/play

plcalendar
plain3
Plain macros for making nice calendars.
Author: unknown; CTAN location: macros/plain/contrib/calendar

plfonts
fonts2
Polish extension to CM fonts. Polish extension of Computer Modern fonts. These fonts are compatible with CM fonts; only Polish characters (as in EC/Cork encoding) and quotes are added. The fonts are distributed in METAFONT sources and in Type1 format.
Author: Multiple authors; CTAN location: language/polish

plgraph
generic3
LaTeX graphics package with wrapper to allow it to be used with generic plain TeX.
Author: unknown

plpatch
plain3
No description available.
Author: unknown

plpsfont
fonts2
Polish extension of Computer Modern fonts in Type1 format. Polish extension of Computer Modern fonts, PL fonts in Type1 (PostScript) format. Fonts use the same .tfm files as for .pk fonts generated by MetaFont. The new release of fonts was eventually adapted to the (mostly guessed) demands of the Windows environment. Still, the fonts are usable with TeX; however, encoding files are now added, as Windows and TeX use different encoding schemes.
Author: J. Nowacki; CTAN location: language/polish/plpsfont

pmcstex
LaTeX in emTeX IDE/FrontEnd for EPM. A macro package that implements many (em)TeX related features for the OS2 EPM editor. A menu item is added to the EPM menu, a new toolbar is provided, and hotkeys for some (La)TeX commands are defined.
Author: Petr Mikulik; CTAN location: systems/os2/pmcstex

pmgraph
latex3
A set of extensions to LaTeX picture environment, including a wider range of vectors, and a lot more box frame styles.
Author: Sasha Berdnikov; CTAN location: macros/latex/contrib/supported/pmgraph

poligraf
generic3
A TeX macro package for prepress. A set of macros (employing PostScript) for the professional page preparation for prepress; includes color separation, crop-marks, color and gray scale bars, booklet preparation, etc.
Author: Janusz M. Nowacki; CTAN location: macros/generic/TeX-PS/poligraf

polish-doc
doc3
General TeX and LaTeX documentation in Polish.
Author: many people

polyglot
latex3
A package for LaTeX 2ε multilingual support.
Author: Javier Bezos; CTAN location: macros/latex/contrib/other/polyglot

postcards
latex3
Facilitates mass-mailing of postcards (junkmail). A modification of the standard LaTeX letter class which prints multiple, pre-stamped, 5.5″ by 3.5″ postcards (a US standard size) via the envlab and mailing packages. An address database is employed to address the front side of each postcard and a message is printed on the back side of all. An illustrative example is provided.
Author: Bil Kleb; CTAN location: macros/latex/contrib/other/postcards

poster
Scale PostScript images for larger media or tiling. Enlarge PostScript images and print them on larger media and/or tile them to print on multiple sheets. Supports foreign (non European A*) media sizes. An OS2 port (suitable also for DOS) is available (see the os2 sub-directory).
Author: Jos van Eijndhoven; CTAN location: support/poster

ppchtex
A package that can be used to typeset chemical formulas. The package is a separate module of the context macro package for TeX (context is a full featured, parameter driven macro package, which fully supports advanced interactive documents). It is available as the file cont-ppc.zip.
Author: Hans Hagen; CTAN location: macros/context

ppower4
latex2
A postprocessor for PDF presentations created by pdf(La)TeX. A postprocessor for PDF presentations created by pdftex. It can be used to prepare presentations which include pages building up step by step when viewed with Acrobat Reader (v4.x). The software is written in Java.
Author: Klaus Guntermann; CTAN location: unknown

prelim2e
Allows the marking of preliminary versions of a document.
Author: Martin Schröder; CTAN location: macros/latex/contrib/supported/ms

prettyref
latex3
Additional functionality for the LaTeX 2ε label–reference mechanism allowing the "preformat" of all types of labels. This package is compatible with hyperref and other packages.
Author: unknown; CTAN location: macros/latex/contrib/supported/prettyref

progkeys
latex3
The file 'programs.sty' is intended to allow a parameterized way of typesetting programs with TeX/LaTeX commands inside. The file 'keywords.sty' allows definition and use of sets of keywords that will be typeset with different fonts, according to the wish of the user.
Author: unknown; CTAN location: macros/latex/contrib/supported/progkeys

program — Typesetting programs and algorithms.
latex3 — Author: unknown; CTAN location: `macros/latex/contrib/supported/program`

proofs — Macros for building proof trees.
latex3 — Author: Paul Taylor; CTAN location: `macros/generic/proofs/taylor`

protex — Literate programming package.
generic3 — Author: Eitan M. Gurari

protocol — Typeset meeting protocols.
Author: Thomas Leineweber; CTAN location: `macros/latex/contrib/supported/protocol`

prv — Compile, preview, and print LaTeX documents. A Perl script. Also includes prvps for PostScript previewing. Derived from LatexMk version 2.0.
Author: Wybo H. Dekker; CTAN location: `support/prv`

ps2eps — Produce Encapsulated PostScript from single page PostScript. Produce Encapsulated PostScript Files (EPS/EPSF) from usual one-paged PostScript documents. It calculates correct Bounding Boxes for those EPS files and filters some special PostScript command sequences that can produce erroneous results on printers. EPS files are needed for including (scalable) graphics into TeX documents. Other programs like "ps2epsi" don't always calculate the correct bounding box (because the values are put on the PostScript stack which may get corrupted by bad PostScript code) or rounded it off so that clipping the EPS cut some part of the image. Therefore ps2eps uses a resolution of 144 dpi to get the correct bounding box. ps2eps needs perl, ghostscript and an ANSI-C compiler if your platform is not Linux, Solaris, Digital Unix or Windows 2000/9x/NT (binaries included).
Author: Roland Bless; CTAN location: `support/ps2eps`

psboxit — Enables one to put a PostScript drawing behind a TeX box. The drawing is parameterised by the position and the size of the TeX box.
Author: unknown; CTAN location: `macros/latex209/contrib/misc`

psfig — No description available.
generic3 — Author: unknown

psfixbb — Computes the BoundingBox of a PostScript file setting the BoundingBox comment in the file accordingly, using GhostScript, pnmfile and pnmcrop.
Author: Carsten Dominik; CTAN location: `support/psfixbb`

psfont — Intended as a replacement for psfonts of psnfss, psfont uses one file for redefining all default fonts instead of one file for each font. It also contains all parts of psfonts.dtx which are not covered by this general concept (i.e., the pifonts, mathptm and two fd-files for Adobe Symbol and Adobe Zapf Dingbats). This file is specific to PostScript fonts.
Author: Sebastian Kirsch; CTAN location: `macros/latex/contrib/supported/altfont`

psfonts — PostScript fonts for use with TeX and LaTeX.
Author: unknown; CTAN location: `fonts/psfonts`

psfrag — Allows LaTeX constructions (equations, picture environments, etc.) to be precisely superimposed over
graphics2 — Encapsulated PostScript figures, using your own favorite drawing tool to create an EPS figure and placing simple text "tags" where each replacement is to be placed, with PSfrag automatically removing these tags from the figure and replacing them with a user specified LaTeX construction, properly aligned, scaled, and/or rotated.
Author: Michael Grant; CTAN location: `macros/latex/contrib/supported/psfrag`

psizzl — A TeX format from SLAC.
formats3 — Author: Arthur Ogawa; CTAN location: `macros/psizzl`

pslatex — Use PostScript fonts by default. A small package that makes LaTeX default to 'standard' PostScript
latex2 — fonts. It is basically a merger of the times and mathptm styles from the psnfss suite of packages. You must have installed standard LaTeX and the psnfss PostScript fonts to use this package. The main novel feature is that the pslatex package tries to compensate for the visual differences between the Adobe fonts by scaling Helvetica by 90%, and 'condensing' Courier (i.e. scaling horizontally) by 85%. The package is supplied with a (unix) shell file for a 'pslatex' command that allows standard LaTeX documents to be processed, without needing to edit the file.
Author: David Carlisle; CTAN location: `macros/latex/contrib/supported/pslatex`

psnfss-source — Sources (makefiles and fontinst scripts) of the PSNFSS.
Author: Walter Schmidt; CTAN location: `fonts/psfonts/psnfss-source`

psnfss
latex1
Font support for common PostScript fonts. Font definition files, macros and font metrics for common PostScript fonts.
Author: Walter Schmidt; CTAN location: macros/latex/required/psnfss

psnfssx
latex2
Extra styles and encodings for PS fonts, including Y&Y encoding support.
Author: unknown; CTAN location: macros/latex/contrib/supported/psnfssx

pspicture
latex2
PostScript picture support. Replacement for core LaTeX picture macros to use PostScript \special commands.
Author: David Carlisle; CTAN location: macros/latex/contrib/supported/carlisle

psrip
Extracts images from PostScript files. A Perl-script to extract images from PostScript files. The images are saved into the current directory if no other directory is given with the -d parameter. If there is no BoundingBox specified in the extracted image you have to insert it by hand.
Author: Christian Lackas; CTAN location: support/psrip

pssplit
Print selected pages from PostScript files.
Author: Peter Kleiweg; CTAN location: support/pssplit

pstoedit
Translate PostScript and PDF to other formats. Translate PostScript and PDF to other formats. Other formats include tgif, FrameMaker mif, XFig's fig, pdf, gnuplot, MS-Windows wmf, CAD exchange format dxf, LightWave 3D lwo, RenderMan rib, Real3D rib, Java applet, and Idraw format.
Author: Dr. Wolfgang Glunz; CTAN location: support/pstoedit

pstricks
graphics2
PostScript macros for TeX. An extensive collection of PostScript macros that is compatible with most TeX macro packages, including Plain TeX, LaTeX, AMS-TeX, and AMS-LaTeX. Included are macros for color, graphics, pie charts, rotation, trees and overlays. It has many special features, including: a wide variety of graphics (picture drawing) macros, with a flexible interface and with color support. There are macros for coloring or shading the cells of tables.
Author: Timothy Van Zandt; CTAN location: graphics/pstricks

psutils
supplement3
PostScript utilities. Utilities for manipulating PostScript documents, including page selection and rearrangement, resizing the page, arrangement into signatures for booklet printing, and page merging for n-up printing. Utilities include psbook, psselect, pstops, psnup, psresize, epsffit.
Author: Angus Duggan; CTAN location: support/psutils

ps˙conv
A converter from PostScript to Encapsulated PostScript. A PostScript program for converting one-page PostScript files into EPS (encapsulated PostScript) files acceptable by CorelDRAW!(R), Adobe Illustrator(TM) and Fontographer(R).
Author: BOP; CTAN location: support/ps_conv

ps˙view
A PostScript previewer of PostScript files. A PostScript preamble providing an interactive environment for fast previewing of PostScript documents with GhostScript, enabling scaling rotation, grids, printing specified pages, on-line help etc.
Author: BOP; CTAN location: support/ps_view

punk
fonts3
Donald Knuth's punk font. Donald Knuth's punk font
Author: Donald Knuth; CTAN location: fonts/punk

qbibman
Graphical frontend to BibTool.
Author: Ralf Goertz; CTAN location: biblio/bibtex/utils/qbibman

qfig
A DOS graphics program to generates output for PiCTeX and epic.
Author: William Ofosu-Amaah; CTAN location: support/qfig

qfonts
fonts2
A collection of PostScript (Adobe Type 1) fonts in QX layout. Public domain Adobe Type 1 fonts; include Quasi-Palladio and Quasi-Times (regular, italic, bold and bold italic), based on URW's Palladio and Times. The fonts are encoded according to QX layout which facilitates multilingual and technical typesetting using TeX, preserving usability in Windows applications.
Author: B. Jackowski; CTAN location: fonts/psfonts/polish/qfonts

qobitree
graphics3
LaTeX macros for typesetting trees.
Author: unknown; CTAN location: macros/latex/contrib/other/qobitree

qsymbols
latex3
For defining systematic mnemonic abbreviations, starting with ‘ for math symbols and \" for arrows, from the amssymb and stmaryrd packages.
Author: unknown; CTAN location: macros/latex/contrib/supported/qsymbols

quotchap
latex3
Decorative chapter headings. A package for creating decorative chapter headings with quotations, a PostScript output device and the psnfss package are needed, the color package and a greyscale output device are recommended.
Author: Karsten Tinnefeld; CTAN location: macros/latex/contrib/supported/quotchap

quotes
A package to automatically translate the character " to `` or '' so that opening and closing quotes are correctly produced.
Author: Francesco Bosisio; CTAN location: macros/latex/contrib/supported/bosisio

qxcm
fonts3
An experimental collection of extended CM fonts in PostScript Type 1 format An experimental collection of extended CM fonts in PostScript Type 1 format. The collection contains fonts based on cmr10, cmbx10, cmti10, and cmbxti10: qcmrr.pfb, qcmrri.pfb, qcmrb.pfb, qcmrbi.pfb (and .afm, .pfm, .tfm files). The original Computer Modern layout is extended to QX layout as an alternative to EC (Cork) encoding, usable also in Windows environment. Fonts can be adapted to any needed TEX encoding; since they contain most common European characters, the fonts can serve, e.g., for preparing good PDF files.
Author: J. Nowacki; CTAN location: fonts/psfonts/polish/antp

r-und-s
latex3
This package decodes the german 'R- und S-Sätze', which are numerically coded security advice for chemical substances into plain text. This is, e.g., used to compose security sheets or lab protocols and especially useful for students of chemistry.
Author: Thiemo Nordenholz; CTAN location: macros/latex/contrib/other/r_und_s

ragged
Ragged left and ragged right options. Provides any TEX format (including LATEX) with 'raggedleft' and 'raggedcenter' formatting of paragraphs while maintaining full control of hyphenation and degree of raggedness.
Author: unknown; CTAN location: macros/generic

ragged2e
Defines \Centering, \RaggedLeft, and \RaggedRight, and corresponding environments. A LATEX package which defines new commands \Centering, \RaggedLeft, and \RaggedRight and new environments Center, FlushLeft, and FlushRight, which set ragged text and are easily configurable to allow hyphenation.
Author: Martin Schroeder; CTAN location: macros/latex/contrib/supported/ms

raggedr
Set an entire document raggedright.
Author: James Kilfiger; CTAN location: macros/latex/contrib/other/misc

rail
A C program and LATEX package to draw syntax diagrams specified in EBNF.
Author: Klaus Georg Barthelmann; CTAN location: support/rail

random
Generating "random" numbers in TEX. Generates pseudo-random integers in the range 1 to 2^{31}. Macros are to provide random integers in a given range, or random dimensions which can be used to provide random 'real' numbers, are also available.
Author: Donald Arseneau; CTAN location: macros/generic

rangecite
Will turn a range of citations into something like [1..3]. Will turn a range of citations into something like [1..3].
Author: unknown; CTAN location: macros/latex209/contrib/misc

rawfonts
A LATEX 2_ε package providing emulation of LATEX 2.09 documents which used low-level font commands such as \tenrm.
Author: Alan Jeffrey; CTAN location: macros/latex/required/tools

rawprint
Print raw Russian text. A package for "quick and dirty" printing of raw (i.e., non-TEX) Russian texts by persons who do not have Russian printer fonts (but have Cyrillic TEX). It makes various symbols "normal" letters and converts the "unisex" quote character " into Russian-style << and >> quotes.
Author: Boris Veytsman; CTAN location: macros/latex/contrib/supported/koi8

rcs
latex3
Use RCS (revision control system) tags in LATEX documents.
Author: unknown; CTAN location: macros/latex/contrib/supported/rcs

rcsinfo
latex3
Support for the revision control system. A package to extract RCS (Revision Control System) information and use it in a LATEX document. For users of LATEX2HTML rcsinfo.perl is included.
Author: Juergen Vollmer; CTAN location: macros/latex/contrib/supported/rcsinfo

realcalc
generic3
Macros for real arithmetic calculations.
Author: unknown; CTAN location: macros/generic/realcalc

recipe
A LATEX 2_ε class file to typeset recipes.
Author: Maurizio Moreti; CTAN location: macros/latex/contrib/other/recipe

refcheck
latex3
Check references (in figures, table, equations, etc.). Intended to check references in a document, looking for numbered but unlabelled equations, for labels which are not used in the text, for unused bibliography references. It can also display label names in text near corresponding numbers of equations and/or bibliography references.
Author: Oleg Motygin; CTAN location: `macros/latex/contrib/supported/refcheck`

references
Bibliographic software supporting LaTeX/BibTeX. REFERENCES is bibliographic software supporting preparation of scientific manuscripts, storage of bibliographic data of articles in periodicals, books and articles in books. Supports the TeX/LaTeX document preparation systems including the BibTeX program and commercial word processors. REFERENCES allows import of bibliographic data from material downloaded in the MEDLINE format. Database functions allows retrieval of references by keywords, authors' or editors' names, date of publication, strings in title of article, in book title or journal names. Lists of references can be compiled in all (user-defined) formats required by the publishers of scientific journals.
Author: Volker Kiefel; CTAN location: `support/references`

refman
latex3
Format technical reference manuals. A new document class for writing technical reference manuals. It offers a wide left margin for notes to the reader, like some of the manuals distributed by Adobe.
Author: Axel Kielhorn; CTAN location: `macros/latex/contrib/supported/refman`

regcount
latex3
Display the allocation status of the TeX registers. Adds a macro `\rgcount` which displays the allocation status of the TeX registers. The display is written into the .log file as it is a bit verbose. An automatic call to `\rgcount` is done at `\begin{document}` and `\end{document}`.
Author: Jean-Pierre Drucbert; CTAN location: `macros/latex/contrib/supported/regcount`

relenc
latex3
LaTeX package providing a relaxed font encoding to make available to a font designer more slots for insertion of ligatures and accented characters.
Author: Lars Hellström; CTAN location: `macros/latex/contrib/supported/relenc`

relsize
latex2
Set the font size relative to the current font size.
Author: Matt Swift; CTAN location: `macros/latex/contrib/other/misc`

remreset
Remove counters from reset list. `\@removefromreset` is a companion to the standard `\@addtoreset` command which allows counters to be removed from the reset list of a controlling counter.
Author: David Carlisle; CTAN location: `macros/latex/contrib/supported/carlisle`

repeat
A really general loop macro, which can be nested to arbitrary depth without any grouping or such.
Author: Victor Eijkhout; CTAN location: `macros/generic/eijkhout`

revnum
Provides a reverse-enumerate environment where all items are numbered in reverse order.
Author: Joern Wilms; CTAN location: `macros/latex/contrib/supported/revnum`

revtex
latex2
Styles for various Physics Journals. Includes styles for American Physical Society, American Institute of Physics, and Optical Society of America. Only works in compatibility mode under LaTeX 2_ε.
Author: unknown; CTAN location: `macros/latex209/contrib/revtex`

rlepsf
generic3
A macro package for use with epsf.tex which allows PostScript labels in an eps file to be replaced by TeX labels.
Author: Colin Rourke; CTAN location: `macros/generic/rlepsf`

rmligs
Remove incorrectly used ligatures from German LaTeX documents.
Author: Bjoern Jacke; CTAN location: `support/rmligs`

rmpage
latex3
A package to help change page layout parameters in LaTeX. It lets you change page layout parameters in small steps over a range of values using options. It can set `\textwidth` appropriately for the main fount, and ensure that the text fits inside the printable area of a printer. An rmpage-formatted document can be typeset identically without rmpage after a single cut and paste operation. Local configuration can set defaults: for all documents; and by class, by printer, and by paper size. The geometry package is better if you want to set page layout parameters to particular measurements.
Author: Rowland McDonnell; CTAN location: `macros/latex/contrib/supported/rmpage`

romaniantex
LaTeX support for Romanian. A LaTeX 2_ε package for type-setting Romanian in a multi-lingual TeX environment.
Author: Adrian Rezus; CTAN location: `language/romanian/RomanianTeX`

romanneg
Roman Neg.
Author: unknown; CTAN location: `macros/latex/contrib/other/misc`

romannum
latex3
Generate roman numerals instead of arabic digits. The romannum package changes LaTeX generated numbers to be printed with roman numerals instead of arabic digits. It requires the stdclsdv package. Users of the bookhands fonts may find this package useful.
Author: Peter R. Wilson; CTAN location: macros/latex/contrib/supported/romannum

rotating
latex2
A package built on the standard LaTeX graphics package to perform all the different sorts of rotation one might like, including complete figures and tables and captions.
Author: Sebastian Rahtz; CTAN location: macros/latex/contrib/supported/rotating

rotfloat
latex3
Rotate floats.
Author: unknown; CTAN location: macros/latex/contrib/supported/rotfloat

rplain
latex3
Redefines the 'plain' pagestyle. The page numbers are now in the lower right corner.
Author: unknown; CTAN location: macros/latex/contrib/supported/rplain

rsfs-ps
Converted (PostScript) outlines of the rsfs fonts.
Author: Taco Hoekwater; CTAN location: fonts/rsfs/ps-type1/hoekwater

rsfs
fonts2
Contains MetaFont sources for fonts of uppercase script letters for use as symbols in scientific and mathematical typesetting, in contrast to the informal script fonts such as that used for the 'calligraphic' symbols in the TeX math symbol font.
Author: Ralph Smith; CTAN location: fonts/rsfs

rtf2latex2e
Convert Rich Text Format (RTF) files to LaTeX 2ε. Converts Rich Text Format (RTF) files to LaTeX 2ε. It has support for figures and tables. Equations are read as figures. It can the handle the latest RTF versions from Microsoft Word 97/98/2000, StarOffice, and other word-processors. It has support for tables, figures, and to some extent equations. It runs on Macintosh, Linux, Unix, Windows.
Author: Ujwal Sathyam; CTAN location: support/rtf2latex2e

ruhyphen
lang1
Russian hyphenation. A collection of Russian hyphenation patterns supporting a number of Cyrillic font encodings, including T2, UCY (Omega Unicode Cyrillic), LCY, LWN (OT2), and KOI8-r.
Author: Vladimir Volovich; CTAN location: language/hyphenation/ruhyphen

ruler
A ruler for TeX.
Author: Victor Eijkhout; CTAN location: macros/generic

runic
fonts3
Fonts for Anglo-Saxon futharc script. This font was used in England until just after printing was established.
Author: Peter Wilson; CTAN location: fonts/archaic/runic

russian-help
LaTeX help in Russian.
Author: Yuri Lubenets; CTAN location: info/win-help/latex/russian

s2latex
A scribe to LaTeX converter. The patchfile s2latex.patch provides a port to ANSI C and cleans up the Makefile.
Author: unknown; CTAN location: support/s2latex

saferef
Provides a means of expressing 'typed' references (as it were) within a document.
Author: James Ashton; CTAN location: macros/latex/contrib/supported/saferef

sanskrit
fonts3
A font and pre-processor suitable for the production of documents written in Sanskrit.
Author: Charles Wikner; CTAN location: language/sanskrit

sauter
Extensions to the CM fonts, providing a parameterization scheme to build fonts at true design sizes.
Author: unknown; CTAN location: fonts/cm/sauter

sauterfonts
latex3
A package providing font definition files (plus a replacement for the package exscale) to access many of the fonts in Sauter's (Knappen's, Holin's) collection. These fonts are available in all point sizes and look nicer for such "intermediate" document sizes as 11pt. The package sbbm is an alternative to access the bbm fonts, a nice collection of blackboard bold symbols.
Author: Klaus Georg Barthelmann; CTAN location: macros/latex/contrib/supported/sauterfonts

savefnmark
latex3
Save name of the footnote mark for reuse. Sometimes the same footnote applies to more than one location in a table. With this package the mark of a footnote can be saved into a name, and re-used subsequently without creating another footnote at the bottom.
Author: Volker Kuhlmann; CTAN location: macros/latex/contrib/supported/savefnmark

scale
latex3
Scale document by sqrt(2) or magstep(2). A package to scale a document by sqrt(2) (or by \magstep{2}). This is useful if you are preparing a document on, for example, A5 paper and want to print on A4 paper to achieve a better resolution.
Author: Soren Sandmann; CTAN location: macros/latex/contrib/supported/scale

scalefnt — Rescale fonts to arbitrary sizes. `\scalefont{2}` selects the current font in twice the current size. `\scalefont{.75}` reduces the current font size by three quarters.
Author: David Carlisle; CTAN location: `macros/latex/contrib/supported/carlisle`

schedule
`latex3` — A package intended to automatically format weekly schedules using LaTeX's picture environment. It requires the packages calc and color. Its main feature is the accuracy with which appointments are represented: boxes drawn to represent a particular appointment are accurate to the minute – i.e., a 31 minute appointment will have a box 1/60th longer than a 30 minute appointment. A number of features are included to allow the user to customize the output.
Author: Jason Alexander; CTAN location: `macros/latex/contrib/supported/schedule`

script
`latex3` — Variant report / book styles.
Author: unknown; CTAN location: `macros/latex/contrib/other/script`

scrnger — Support for ngerman in scrlettr and scrdate in koma-script.
Author: Heiko Oberdiek; CTAN location: `macros/latex/contrib/supported/koma-script/contrib`

secdot — Section numbers with trailing dots. Makes the numbers of `\section` commands come out with a trailing dot. Includes a command whereby the same can be made to happen with other sectioning commands.
Author: Robin Fairbairns; CTAN location: `macros/latex/contrib/other/misc`

section — Sections.
Author: Oliver Pretzel; CTAN location: `macros/latex/contrib/other/misc`

sectsty
`latex3` — Control sectional headers. A LaTeX 2ε package to help change the style of any or all of LaTeX's sectional headers in the article, book, or report classes. Examples include the addition of rules above or below a section title.
Author: Rowland McDonnell; CTAN location: `macros/latex/contrib/supported/sectsty`

selectp

Author: Donald Arseneau; CTAN location: `macros/latex/contrib/other/misc`

semantic
`latex3` — Eases the typesetting of notation of semantics and compilers. Includes T-diagrams, various derivation symbols and inference trees.
Author: Peter Møller Neergaard; CTAN location: `macros/latex/contrib/supported/semantic`

semaphor
`fonts3` — Semaphore alphabet font in METAFONT.
Author: Vit Zyka; CTAN location: `fonts/semaphor`

seminar
`latex2` — Overhead slides. Produce overhead slides (transparencies) with bells and whistles.
Author: Timothy Van Zandt; CTAN location: `macros/latex/contrib/other/seminar`

serial — Generate serial letters. The serial package provides a wrapper to the KOMA Script letter class scrlettr for the generation of serial letters. It contains different interfaces to database generated address files. Additionally, a configuration file allows easy customization of the letterheads etc. Requires scrlettr.cls from KOMA-Script and the following are recommended: inputenc, textmerg, delimtxt.
Author: Bjoern Pedersen; CTAN location: `macros/latex/contrib/supported/serial`

setspace
`latex3` — Set space between lines: e.g., double and one and a half spacing. Support for double, one-and-a-half, and other line spacings based on pt size.
Author: Geoffrey Tobin; CTAN location: `macros/latex/contrib/supported/setspace`

sf298
`latex3` — Standard form 298. A LaTeX package for generating a completed standard form 298 (Rev. 8-98) as prescribed by ANSI Std. Z39.18 for report documentation as part of a document delivered, for instance, on a U.S. government contract.
Author: Steven Douglas Cochran; CTAN location: `macros/latex/contrib/supported/sf298`

sfg — Defines some commands to draw signal flow graphs as used by electrical and electronics engineers and graph theorists.
Author: Hanspeter Schmid; CTAN location: `macros/latex/contrib/supported/sfg`

sfheaders — Print part/chapter/section headers with the sans-serif font of the current family in the the standard book/report/article document classes.
Author: Maurizio Loreti; CTAN location: `macros/latex/contrib/supported/sfheaders`

sgmlcmpt
`latex2` — Support for LaTeX formulae as SGML PCDATA. Replacement control sequences for the characters `>`, `<`, and `&`. The replacements make it possible to enter LaTeX formulae as SGML PCDATA.
Author: Joerg Knappen; CTAN location: `macros/latex/contrib/supported/jknappen`

shadbox
`latex3` — A tool to shade the background of any box – text, figure, table etc. – using Plain (LA)TeX.
Author: Dmitry A. Glazkov; CTAN location: `macros/latex/contrib/other/shadbox`

shadethm
latex3
Package that allows declarations of the form `\newshadetheorem{thm}{Theorem}` or `\newshadetheorem{}[]{}` or `\newshadetheorem{}{}[]` to produce shaded boxes from the usual command `\begin{theorem}` ... `\end{theorem}`. The color package is required.
Author: unknown; CTAN location: `macros/latex/contrib/supported/shadethm`

shading
A LaTeX Style file for putting text on a shaded background. Requires a PostScript printer and dvi-file converter.
Author: unknown; CTAN location: `macros/latex209/contrib/shading`

shadow
Shadows.
Author: Mauro Orlandini; CTAN location: `macros/latex209/contrib/misc`

shapepar
A macro to typeset paragraphs in specific shapes.
Author: Donald Arseneau; CTAN location: `macros/latex/contrib/other/misc`

shhyphl
Serbo-Croat hyphenation written in the latin alphabet.
Author: Dejan Muhamedagic; CTAN location: `language/hyphenation`

shortlst
latex3
Provides four environments for typesetting lists of short items which may be laid out horizontally as well.
Author: Mogens Lemvig Hansen; CTAN location: `macros/latex/contrib/supported/shortlst`

shorttoc
latex3
Table of contents with different depths. A package to create another table of contents with a different depth, useful in large documents where a detailed table of contents should be accompanied by a shorter one, giving only a general overview of the main topics in the document.
Author: Jean-Pierre Drucbert; CTAN location: `macros/latex/contrib/supported/shorttoc`

showdim
latex3
A package for LaTeX providing a number of commands for printing the value of a TeX dimension. For example, `\tenthpt\baselineskip` yields the current value of `\baselineskip` rounded to the nearest tenth of a point.
Author: Michael J Downes; CTAN location: `macros/latex/contrib/supported/showdim`

showkeys
Show label, ref, cite and bib keys.
Author: David Carlisle; CTAN location: `macros/latex/required/tools`

showlabels
latex3
Show label commands in the margin.
Author: Norman Gray; CTAN location: `macros/latex/contrib/supported/showlabels`

siam
generic3
Styles for SIAM publications.
Author: unknown; CTAN location: `macros/latex/contrib/other/siam`

sidecap
latex3
Typeset captions sideways. Defines environments called SCfigure and SCtable (analogous to figure and table) to typeset captions sideways. Options include outercaption, innercaption, leftcaption and rightcaption.
Author: Rolf Niepraschk and Hubert Gäßlein; CTAN location: `macros/latex/contrib/supported/sidecap`

siggraph
latex3
Document class for formatting papers according to the specifications for submission to the annual ACM Siggraph conference.
Author: unknown; CTAN location: `macros/latex/contrib/supported/siggraph`

simplified-latex
A Simplified Introduction to LaTeX.
Author: Harvey Greenberg; CTAN location: `info/simplified-latex`

simpsons
fonts3
MetaFont source for Simpsons characters.
Author: unknown; CTAN location: `usergrps/uktug/baskervi/4_4`

sinhala
Support for the sinhala language.
Author: Vasantha Saparamadu; CTAN location: `language/sinhala`

sirlin
A set of files for typing the Tibetan language in TeX or LaTeX.
Author: Sam Sirlin; CTAN location: `language/tibetan/sirlin`

siunits
latex3
International System of Units. Typeset physical units following the rules of the International System of Units (SI).
Author: Marcel Heldoorn; CTAN location: `macros/latex/contrib/supported/SIunits`

skak
fonts3
Typeset chess games. This package can be used to typeset chess games using PGN and show diagrams of the current board in the document. The package builds on work by Piet Tutelaers - the main novelty is the use of PGN for input instead of the more cumbersome coordinate notation (g1f3 becomes the more readable Nf3 in PGN).
Author: Torben Hoffmann; CTAN location: `fonts/skak`

slashbox — Draw an oblique (slash) line in a 'tabular' column in LaTeX.
latex3 — Author: Toru Sato; CTAN location: `macros/latex/contrib/other/slashbox`

slashed — Put a slash through characters. Useful for the Physicist's 'Feynman slashed character' notation.
Author: David Carlisle; CTAN location: `macros/latex/contrib/supported/carlisle`

slemph — Slanted emphasis in LaTeX. A LaTeX package defining `\itswitch`, `\slswitch`, `\textitswitch`, and
latex3 — `\textslswitch`, which switch between slanted or italic type and upright type. Can be used to represent emphasis with slanted type.
Author: Matt Swift; CTAN location: `macros/latex/contrib/supported/frankenstein`

slidenotes — A class package for the easy production of a slide collection with annotations. Builds on the report style
latex3 — (or variants).
Author: unknown; CTAN location: `macros/latex/contrib/supported/slidenotes`

slides — This is a standard LaTeX 2_ε class for the production of overhead transparencies (foils), replacing the older SliTeX format. Can be used in conjunction with lscape and fancyhdr, for example.
Author: LaTeX Project Team; CTAN location: `macros/latex/base`

slovak — Typeset Slovakian documents.
Author: unknown; CTAN location: `macros/latex/required/babel`

smallcap — Support for all 4 shapes of small caps in DC1.3 where SC becomes a family, rather than a shape
latex3 — (`\scshape` is replaced by `\scfamily`). Thus you can write `\bf\scfamily\slshape` to get small caps bold slanted.
Author: taupin@lps.u-psud.fr; CTAN location: `macros/latex/contrib/other/smallcap`

smartmn — This package activates the minus sign such that it guesses whether to print as a hyphen or as minus sign in text mode (which is one of the most common typographical errors in LaTeX texts).
Author: Joerg Knappen, Mainz; CTAN location: `macros/latex/contrib/supported/jknappen`

smartref — Extend LaTeX's `\ref` capability. Extend the capability of the the `\ref` command: whenever a label is
latex3 — set this package records, along with the label, the values of some other counters (which, can be selected by the user). Then, the value of these counters can be recalled with a command similar to `\pageref`. Moreover, this package adds a command (`\s[name]ref`) for each counter added that displays something only if the value of the `[name]` counter is changed from when the label is set.
Author: Giuseppe Bilotta; CTAN location: `macros/latex/contrib/other/smartref`

smflatex — Classes conforming to Societé Mathématique de France. The Societé Mathématique de France
latex3 — provides a set of classes, packages and BibTeX styles that are used in its publications. They are based on AMS classes (whose code is sometimes recopied) and are mainly "upward-compatible". Their main features are: quite different design; new environments for typesetting some information in two languages (altabstract, alttitle, altkeywords); if necessary, use of babel (option frenchb) and deactivation of some features of frenchb. Includes smfart.cls, smfbook.cls, smfplain.bst, smfalpha.bst, amongst opthers.
Author: Antoine Chambert-Loir; CTAN location: `macros/latex/contrib/supported/smflatex`

snapshot — List the external dependencies of a LaTeX document. The snapshot package helps the owner of a
latex3 — LaTeX document obtain a list of the external dependencies of the document, in a form that can be embedded at the top of the document. It provides a snapshot of the current processing context of the document, insofar as it can be determined from inside LaTeX. If a document contains such a dependency list, then it becomes possible to arrange that the document be processed always with the same versions of everything, in order to ensure the same output. This could be useful for someone wanting to keep a LaTeX document on hand and consistently reproduce an identical DVI file from it, on the fly; or for someone wanting to shield a document during the final stages of its production cycle from unexpected side effects of routine upgrades to the TeX system.
Author: Michael J. Downes; CTAN location: `macros/latex/contrib/supported/snapshot`

snviewer — Scientific Notebook Viewer.
Author: unknown; CTAN location: `systems/win32/snviewer`

sober — Reduces the amount of white space on the page. Reduces the size of various skips.
Author: unknown; CTAN location: `macros/latex209/contrib/misc`

sobolev — Provides commands which are useful when dealing with Hilbert and Sobolev spaces (which occurs very often, for example, in numerical analysis). It also provides the `\Norm`, `\SemiNorm`, `\Scalar` and `\Crochet` commands which are also involved in the same context.
Author: Francesco Bosisio; CTAN location: `macros/latex/contrib/supported/bosisio`

somedefs — A programmer's toolkit package for use by package writers supporting the provision of options which switch definitions contained in a package on and off through package options. It thus does not require all of the package to be loaded into memory.
Author: Alan Jeffrey; CTAN location: `macros/latex/required/tools`

songbook (`latex3`) — Package for typesetting song lyrics.
Author: Christopher Rath; CTAN location: `macros/latex/contrib/supported/songbook`

sorhyph — Upper sorbian hyphenations patterns.
Author: Eduard Werner; CTAN location: `language/hyphenation`

soul (`latex3`) — Hyphenation for letterspacing, underlining, and more. Provides hyphenatable spacing out (letterspacing), underlining, striking out, etc., using the TEX hyphenation algorithm to find the proper hyphens automatically. The package also provides a mechanism that can be used to implement similar tasks, that have to treat text syllable by syllable. This is shown in two examples.
Author: Melchior Franz; CTAN location: `macros/latex/contrib/supported/soul`

spanish — Various TEX related files for typesetting documents written in Spanish, including hyphenation and dictionaries.
Author: Julio Sanchez; CTAN location: `language/spanish`

spanishb — Support for the Spanish language in Babel. This Spanish style for babel provides the functionality intended for the Spanish language when babel 3.7 comes to light. Very likely, its implementation will change in babel 3.7 because there are parts of code for it to work with 3.6; thus, it should be considered neither part of babel 3.7 nor babel 3.6.
Author: Javier Bezos; CTAN location: `macros/latex/required/babel/contrib/spanish`

sphack — Change bsphack/esphack so that it is invisible in vertical mode.
Author: Oliver Pretzel; CTAN location: `macros/latex/contrib/other/misc`

sprite (`graphics3`) — Macros to set bitmaps with TEX.
Author: unknown; CTAN location: `graphics/bit2spr`

ssqquote (`latex3`) — LATEX package and font definition file to access the 'cmssq' fonts, i.e. Computer Modern Sans Serif Quotation Style. The LATEX package also defines a chapterquotes environment as an example application.
Author: Ulrik Vieth; CTAN location: `macros/latex/contrib/supported/ssqquote`

startex (`formats3`) — A TEX format designed to help students write short reports and essays. It provides the user with a suitable set of commands for such a task. It is also more robust than plain TEX and LATEX.
Author: Dag Langmyhr; CTAN location: `macros/startex`

stdclsdv (`latex3`) — Provide sectioning information for package writers. The stdclsdv package is designed for package writers who need to know what sectioning divsions are provided by the document's class. It also provides a version of `\CheckCommand` that sets a flag rather than printing a warning.
Author: Peter Wilson; CTAN location: `macros/latex/contrib/supported/stdclsdv`

stmaryrd-ps — St Mary Road symbols in PostScript. Converted (PostScript) outlines of the stmaryrd fonts.
Author: Taco Hoekwater; CTAN location: `fonts/stmaryrd/ps-type1/hoekwater`

stmaryrd (`fonts2`) — St Mary Road symbols for functional programming.
Author: Alan Jeffrey and Jeremy Gibbons; CTAN location: `fonts/stmaryrd`

subeqn (`latex3`) — Package for subequation numbering.
Author: unknown; CTAN location: `macros/latex/contrib/supported/subeqn`

subeqnarray (`latex3`) — Equation array with sub numbering.
Author: unknown; CTAN location: `macros/latex/contrib/supported/subeqnarray`

subfigure (`latex3`) — Figures divided into subfigures. Provides support for the manipulation and reference of small or 'sub' figures and tables within a single figure or table environment. It is convenient to use this package when your subfigures are to be separately captioned, referenced, or whose captions are to be included in the List-of-Figures. A new `\subfigure` command is introduced which can be used inside a figure environment for each subfigure. An optional first argument is used as the caption for that subfigure.
Author: unknown; CTAN location: `macros/latex/contrib/supported/subfigure`

subfloat (`latex3`) — Sub-numbering for figures and tables. This package enables sub-numbering of different floats (figures and tables) similar to the subequations-environment of the amsmath package. It is not the same as the subfigure package which generates sub-figures within one normal figure.
Author: Harald Harders; CTAN location: `macros/latex/contrib/supported/subfloat`

subscript Provides the textsubscript command. Provides a command `\textsubscript`, which is copied from the command `\textsuperscript` that's part of LaTeX.
Author: unknown; CTAN location: `macros/latex/contrib/other/fragments`

substr `latex3` Deal with substrings in strings. This package provides commands to deal with substrings in strings: Determine if a string contains a substring, count appearances of a substring in a string.
Author: Harald Harders; CTAN location: `macros/latex/contrib/supported/substr`

supertabular `latex3` A multi-page tables package. Generally longtable is a little easier to use and more flexible.
Author: Johannes L. Braams; CTAN location: `macros/latex/contrib/supported/supertabular`

svjour Springer-Verlag journal macros.
Author: Joerg Knappen; CTAN location: `macros/latex/contrib/supported/springer/svjour`

swebib Swedish translation of standard BibTeX styles.
Author: Lars Engebretsen; CTAN location: `biblio/bibtex/contrib/swebib`

swiftex Edit doc.sty and normal LaTeX files with GNU Emacs. docTeX mode is for editing buffers containing self-documenting LaTeX code that uses the doc package, including the ltxdoc document class. For these buffers, docTeX mode is significantly more useful than the alternatives provided by standard Emacs and AUCTeX. swifTeX mode is for editing buffers containing normal LaTeX files and provides an alternative to the LaTeX modes in the standard Emacs distribution and the AUCTeX package.
Author: Matt Swift; CTAN location: `support/emacs-modes/swiftex`

syngen A tool for generating syntax diagrams from BNF. A tool for generating syntax diagrams from BNF. The diagrams use the LaTeX picture mode and can be included in any LaTeX 2_ε document.
Author: Jens Kloecker; CTAN location: `support/syngen`

syntax Typeset syntax descriptions.
Author: Mark Wooding; CTAN location: `macros/latex/contrib/supported/mdwtools`

syntax Creation of syntax-diagrams. Create syntax-diagrams using special environments and commands to represent the diagram structure. Includes documentation in german.
Author: Bernd Worsch; CTAN location: `macros/latex/contrib/other/syntax`

syntonly Implements the `\syntaxonly` declaration used for running a document through LaTeX without actually getting any output.
Author: LaTeX Project Team; CTAN location: `macros/latex/base`

synttree `latex3` A package to typeset syntactic trees such as those used in Chomsky's Generative grammar, based on a description of the structure of the tree.
Author: Matijs van Zuijlen; CTAN location: `macros/latex/contrib/supported/synttree`

t-angles `latex3` Draw tangles, trees, Hopf algebra operations and other pictures. A LaTeX 2_ε style for drawing tangles, trees, Hopf algebra operations and other pictures. It is based on emTeX or TPIC `\special`'s. Therefore, it can be used with the most popular drivers, including emTeX drivers, dviwin, xdvi and dvips.
Author: Volodymyr Lyubashenko; CTAN location: `macros/latex/contrib/supported/t-angles`

t1utils Simple type-1 font manipulation programs. A collection of simple type-1 font manipulation programs. Together, they allow you to convert between PFA (ASCII) and PFB (binary) formats, disassemble PFA or PFB files into human-readable form, reassemble them into PFA or PFB format. Additionally you can extract font resources from a Macintosh font file (ATM/Laserwriter), or create a Macintosh Type 1 font file from a PFA or PFB font.
Author: Eddie Kohler and Lee Hetherington; CTAN location: `fonts/utilities/t1utils`

t2 `lang3` No description available.
Author: Vladimir Volovich; CTAN location: `macros/latex/contrib/supported/t2`

tabbing `latex3` Tabbing with accented letters. A package offering a variant of the tabbing environment which allows accented letters.
Author: Jean-Pierre Drucbert; CTAN location: `macros/latex/contrib/supported/Tabbing`

tabls Better vertical spacing in tables and arrays (tabular lineskip).
Author: Donald Arseneau; CTAN location: `macros/latex/contrib/other/misc`

tabularx Tabulars that widen automatically.
Author: David Carlisle; CTAN location: `macros/latex/required/tools`

tap
generic2
An easy TEX macro package for typesetting complex tables. The package offers a simple notation for pretty complex tables (to Michael J. Ferguson's credit); with PostScript allows shaded/coloured tables, diagonal rules, etc; supposed to work with both Plain and LATEX; moreover, an AWK converter from ASCII semigraphic tables to TAP notation is included.
Author: BOP; CTAN location: macros/generic/tables

taylor
graphics3
Diagram macros by Paul Taylor.
Author: Paul Taylor; CTAN location: macros/generic/diagrams/taylor

tbe
plain3
Examples from Arvind Borde's TEX by Example.
Author: Arvind Borde; CTAN location: macros/plain/contrib/tbe

tcvn
A package for vietnamese TCVN encoding which is widely used in MS-Windows applications.
Author: Nguyen-Dai Quy; CTAN location: language/vietnamese/tcvn

tcx
texlive1
No description available.
Author: unknown

tds
doc1
The TEX Directory Structure documentation.
Author: unknown; CTAN location: info/tds

TeEncontreX
HTML-based help for TEX and LATEX.
Author: Manuel Gutierrez Algaba; CTAN location: documentation/spanish/TeEncontreX

tengwar
fonts3
Font for typesetting Tolkien Tengwar script, by Michael Urban.
Author: Michael Urban; CTAN location: fonts/tengwar

tensind
Typeset tensors. Typesets tensors with dots filling gaps and fine tuning of index placement.
Author: Javier Bezos; CTAN location: macros/latex/contrib/supported/bezos

tensor
A package which allows the user to set tensor-style super and subscripts with offsets between successive indices.
Author: Mike Piff; CTAN location: macros/latex/contrib/supported/piff

termcal
Print a class calendar. This package is intended to print a term calendar for use in planning a class. It has a flexible mechanism for specifying which days of the week are to be included and for inserting text either regularly on the same day each week, or on selected days, or for a series of consecutive days. It also has a flexible mechanism for specifing class and nonclass days. Text may be inserted into consecutive days so that it automatically flows around nonclass days.
Author: Bill Mitchell; CTAN location: macros/latex/contrib/supported/termcal

testmath
Examples of the AMS-LATEX package.
Author: American Mathematical Society; CTAN location: macros/latex/required/amslatex/math

tetex
doc1
The TEX distribution for Unix/Linux. A comprehensive distribution of TEX, LATEX and family, particularly designed to be very easy to install (20 minutes) and customise with a well organised and compliant TDS (TeX Directory Structure) and fast file searching. Include web2c, pdfTEX, e-TEX, Omega, xdvi, dvips, dvilj, ps2pk, makeinfo, texinfo, and texconfig. PDF files with hyperlinks and thumbnails can be created either by using dvips and ps2pdf/distiller or more directly by using pdfTEX. PostScript with resolution-independant fonts can be generated due to the included postscript type 1 fonts.
Author: Thomas Esser; CTAN location: systems/unix/teTeX

tex-math
A summary of TEX-commands used to create mathematical formulae (and certain other special characters). It can be viewed on any machine that runs OS2.
Author: unknown; CTAN location: systems/os2/doc/TeX-Math

tex-ps
generic2
TEX to PostScript generic macros and add-ons. TEX to PostScript generic macros and add-ons: transformations of EPS files, prepress preparation, color separation, mirror, etc.
Author: BOP and J. Nowacki; CTAN location: macros/generic/TeX-PS

tex2bib
Converts bibitems embedded in a document to bib format. It should be added as support/tex2bib.
Author: Michael Friendly; CTAN location: biblio/bibtex/contrib/tex2bib

tex2ltx
Useful for converting plain TEX (AMS) files into AMS-LATEX and convert plain AMS-TEX bibliographic references into BIBTEX.
Author: Pedro Fortuny; CTAN location: support/tex2ltx

tex2rtf
Translates LATEX text into RTF (Rich Text Format used by Microsoft Word), into MS-Windows Help RTF, into HTML and into wxHelp. Implemented using the free C++ class library wxWindows.
Author: Julian Smart; CTAN location: support/tex2rtf

tex4ht
latex2
Convert (LA)TEX to HTML/XML. Convert (LA)TEX to HTML/XML. A converter from TEX and LATEX to hypertext (HTML, XML, etc.), providing a configurable (LA)TEX-based authoring system for hypertext.
Author: Eitan Gurari; CTAN location: `support/TeX4ht`

texdepend
Find dependencies in a LATEX file. A Perl script for finding dependencies in a LATEX file. The script reads a .tex file, and (recursively) all `\input` and `\include` files referenced therein to build dependencies from includes (both `\input` and `\include`), packages (as in `\usepackage`), and figures (using `\includegraphics`).
Author: Michael Friendly; CTAN location: `support/texdepend`

texdoc
Documentation files for teTeX-texmf. TEXdoc is a Perl/Tk-based frontend for easy access of package documentation for the TEX typesetting system on Unix platforms; its database files texdoc-100.dat and texdoc-102.dat are based on teTeX v.1.0.0-2. Its purpose is to provide the users with a graphical interface that makes it easier to find package documentation about a certain topic. - Main requirements are some kind of Unix, Perl 5 and Perl/Tk 8.0.x.
Author: Thomas Ruedas; CTAN location: `systems/unix/teTeX/contrib`

texdoctk
Easy access to package documentation. A Perl/Tk-based GUI for easy access to package documentation for TEX on Unix platforms; the databases it uses are based on the texmf/doc subtrees of teTeX v.1.0.x, but database files for local configurations with modified/extended directories can be derived from them. Note that texdoctk is not a viewer itself, but an interface for finding documentation files and opening them with the appropriate viewer; so it relies on appropriate programs to be installed on the system. However, the choice of these programs can be configured by the sysadmin or user.
Author: Reinhard Zierke; CTAN location: `systems/unix/teTeX/1.0/contrib`

texdraw
graphics3
Graphical macros, using embedded PostScript.
Author: unknown; CTAN location: `graphics/texdraw`

texed
A TEX shell for OS2, FSS-TeXEdit provides an easy interface for LATEX 2_ε, dvips, GhostScript and ispell.
Author: Frank Stippich; CTAN location: `systems/os2/texed`

texemplar
A class for the journal of CervanTeX. CervanTEX is the Spanish TEX User's Group.
Author: Javier Bezos; CTAN location: `macros/latex/contrib/other/TeXemplar`

texinfo
plain2
Texinfo documentation system. Produces online or printed output from a single source.
Author: Free Software Foundation; CTAN location: `macros/texinfo`

texip
formats3
Macros from TEX in Practice.
Author: Stephan von Bechtolsheim; CTAN location: `macros/tip`

texlist
Typeset program (or ASCII text file) listings. Typeset program (or ASCII text file) listings. This is a C program that generates LATEX 2_ε.
Author: John Forkosh; CTAN location: `support/texlist`

texlive
texlive1
A CD-ROM distribution of TEX and friends. A CD-ROM distribution of TEX, LATEX, etc., with precompiled binaries for many systems, based on teTeX and MikTeX. The CD-ROM image is available (bzipped .iso file) for those who wish to burn their own CD.
Author: Sebastian Rahtz; CTAN location: `systems/texlive`

TeXmacs
Structured text editor for TEX. TEXmacs is a "structured text editor" with special support for mathematical expressions. The typesetting quality of the produced documents is intended to be as high as possible, i.e. comparable to the quality of documents produced with TEX. The user interface aims to be as natural and powerful as possible. In particular, the text you see on the screen corresponds exactly to what you get after printing. TEXmacs comes with a typed lisp extension language. Like emacs, this allows you for instance to redefine keyboard and menu actions. TEXmacs can also be used as an interface for computer algebra systems. In particular, automatically generated mathematical formulas are typeset in a satisfactory way. It is possible to generate LATEX and PostScript output from TEXmacs. After compilation, the LATEX output will resemble the PostScript output, although we guarantee no complete compatibility between TEXmacs and TEX. It is also possible to import "well written LATEX documents." The present release includes an interface with ghostscript, which enables you to include PostScript (and some other formats) of images.
Author: Joris van der Hoeven; CTAN location: `systems/unix/TeXmacs`

texmalli
A quick Finnish introduction to using LATEX.
Author: Antti-Juhani Kaijanaho; CTAN location: `info/finnish/texmalli`

TeXnicCenter Integrated development environment for LaTeX on MS-Windows. TeXnicCenter is an integrated development environment (IDE) for developing LaTeX documents on windows (Windows 95, 98, 2000, NT 4.0). Features include: Project orientated integrated development environment for LaTeX documents; Definition of unlimited "output types" (i.e. DVI, PostScript, PDF); Fully customizable editor; Structure View that shows the structure of the whole LaTeX document, even if it is split into several files using `\input` or `\include`; Simple insertion of LaTeX constructs by menu or toolbar; Compilation of the project in the IDE: simple jumping to errors, warnings and bad boxes; Support for document templates; Fully customizable menu and toolbars in modern look and feel; Support for english and german language.
Author: Sven Wiegand; CTAN location: `systems/win32/TeXnicCenter`

texperf A WordPerfect to LaTeX translator.
Author: John Forkosh; CTAN location: `support/texperf`

texpict Create drawings for LaTeX. A graphical program developed with Tcl-Tk (it must be installed on the system) for the creation of drawings for inclusion in LaTeX file as picture environments.
Author: Ramon Ribo; CTAN location: `graphics/texpict`

texshade `latex3` Package for setting nucleotide and peptide alignments. TeXshade is an alignment shading software completely written in TeX/LaTeX which can process multiple sequence alignments in the .MSF and the .ALN file format. It provides in addition to common shading algorithms special shading modes featuring functional aspects, e.g. charge or hydropathy, and a plenitude of commands for handling shading colors, text styles, labels, legends and even allows the user to define completely new shading modes. TeXshade combines highest flexibility and the habitual TeX output quality–with reasonable time expenditure.
Author: Eric Beitz; CTAN location: `macros/latex/contrib/supported/texshade`

texshell32 A free TeXShell for MS-Windows 95 and NT. Features include: All files kept in own directory (no extra DLLs that mess up your system directory); Syntax highlighting for TeX commands; External programs freely definable; Support for dviwins line specials; Predefined templates and dialogs that assist you in editing text or create new documents; User defined templates that can even embrace an existing text; Dialog for inserting images (works with dviwin only); Images can be opened directly from the texshell; It is small.
Author: Dirk Struve; CTAN location: `systems/win32/texshell32`

texsis `formats3` A Plain TeX macro package along the lines of LaTeX. TeXsis is a Plain TeX macro package which provides useful features for typesetting research papers and related documents. For example, it includes support specifically for: Automatic numbering of equations, figures, tables and references; Simplified control of type sizes, line spacing, footnotes, running headlines and footlines, and tables of contents, figures and tables; Specialized document formats for research papers, preprints and "e-prints," conference proceedings, theses, books, referee reports, letters, and memoranda; Simplified means of constructing an index for a book or thesis; Easy to use double column formatting; Specialized environments for lists, theorems and proofs, centered or non-justified text, and listing computer code; Specialized macros for easily constructing ruled tables. TeXsis was originally developed for physicists, but others may also find it useful. It is completely compatible with Plain TeX.
Author: Eric Myers; CTAN location: `macros/texsis`

texsk Simple LaTeX drawing program for OS2 PM. Uses the picture environment.
Author: Tim Bahnes; CTAN location: `graphics/texsketch`

text1 `formats3` TeX format from the University of Washington.
Author: unknown; CTAN location: `macros/text1`

textcase Case conversion ignoring mathematics. `\MakeTextUppercase` and `\MakeTextLowercase` are similar to the standard `\MakeUppercase` and `\MakeLowercase`, but they do not change the case of any sections of mathematics within the argument.
Author: David Carlisle; CTAN location: `macros/latex/contrib/supported/carlisle`

textcomp Text Companion fonts. Supports the Text Companion fonts which provide many text symbols (such as baht, bullet, copyright, musicalnote, onequarter, section, and yen) in the TS1 encoding.
Author: unknown; CTAN location: `fonts/psfonts/ts1`

textfit `latex3` Package to support fitting of text to a given width or height by scaling the font.
Author: unknown; CTAN location: `macros/latex/contrib/supported/textfit`

textmerg `latex3` Merge text in TeX and LaTeX. Useful, for example, in mail merge.
Author: Mike Piff; CTAN location: `macros/latex/contrib/supported/textmerg`

textoolspro A small set of utilities for doing documenation in LaTeX intended mainly for programmers. Includes: boxerer.py for creating structured boxes, one inside another so the structure of data and functions can be easily shown; sectioner.py, a front-end filter of LaTeX-modified code, so you can write sections in a relative way; and iarticle.cls, a LaTeX class that allows up to 14 levels of nesting, needed for doing documentation.
Author: Manuel Gutierrez Algaba; CTAN location: `support/textoolspro`

textopo `latex3` Annotated membrane protein topology plots. A LaTeX package for setting shaded and annotated membrane protein topology plots and helical wheels.
Author: Eric Beitz; CTAN location: `macros/latex/contrib/supported/textopo`

textpos `latex3` Place boxes absolutely. A package to facilitate placement of boxes at absolute positions on the LaTeX page, and useful for large-format conference posters, for example.
Author: Norman Gray; CTAN location: `macros/latex/contrib/supported/textpos`

theorem Enhancements to the theorem environments, giving more choice in theorem layout.
Author: Frank Mittelbach; CTAN location: `macros/latex/required/tools`

thesis `latex3` Typeset thesis. A class for producing a thesis based on the report class for a more European and more flexible look. Supports options like noindent, noitemization, headline, nocenter, crosshair, and chapterbib.
Author: Wenzel Matiaske; CTAN location: `macros/latex/contrib/supported/thesis`

threed `metapost2` 3D animations. Create animations of 3-dimensional objects (such as polyhedra) in MetaPost.
Author: Denis B. Roegel; CTAN location: `graphics/metapost/macros/3d`

threeparttable Tables with captions and notes all the same width.
Author: Donald Arseneau; CTAN location: `macros/latex/contrib/other/misc`

thumb `latex3` Thumb marks in documents. Can be used to place thumb marks in books, manuals,and reference manuals.
Author: Christian Holm; CTAN location: `macros/latex/contrib/other/thumb`

thumbpdf `latex3` Thumbnails for pdfTeX and dvips/ps2pdf. Provides support, using Perl5, for thumbnails in pdfTeX and dvips/ps2pdf, using ghostscript to generate the thumbnails which get represented in a TeX readable file that is read by the package thumbpdf.sty to automatically include the thumbnails. Works with both plain TeX and LaTeX.
Author: Heiko Oberdiek; CTAN location: `support/thumbpdf`

ticket Make labels, visiting-cards, pins with LaTeX. Provides an easy to handle interface to produce visiting cards, labels for your files, stickers, pins and other stuff for your office, conferences, etc. All you need is a definition of your "ticket" included in a ticket definition file and the two commands `\ticketdefault` and `\ticket`.
Author: Thomas Emmel; CTAN location: `macros/latex/contrib/supported/ticket`

tiff The tiff graphics package.
Author: unknown; CTAN location: `graphics/tiff`

tiff2ps A PostScript program for converting TIFF files to EPS. Supports compression (LZW, RLE, Flate) and ASCII85 encoding, and possibly used for generating colour-separated EPS, EPS thumbnails, header EPS containing only a pointer to a source TIFF file.
Author: BOP; CTAN location: `support/pstools/tiff2ps`

time Defines a macro `\now` to print the current time. Defines a macro `\now` to print the current time.
Author: Mike Piff; CTAN location: `macros/latex/contrib/supported/piff`

timesht `latex3` Package for typesetting time sheets.
Author: unknown; CTAN location: `macros/latex/contrib/other/timesht`

timing `latex3` Fonts and macro package for drawing timing diagrams.
Author: unknown

tinyc2l Pretty print C/C++/Java source code using LaTeX. A small converter for pretty printing C/C++/Java source code using LaTeX. Features include: ease of use; use roman font for standard output for better legibility of the generated text; use direct positioning of TeX boxes to preserve vertical structures in the source text; context-sensitive linebreaking—linebreaking is not done by TeX, only by the supported macros, so the language structure is considered when breaking a line. For example, if a C++ comment is broken, the continuation line starts also with //. If a string or preprocessor line is broken, it gets an \ at the end of the line. If you would convert the generated dvi file back to ASCII, you get a valid source text again; some special comment styles (fill comments, block comments, embedded LaTeX comments); insert LaTeX text into comments; special support for multiple file projects: The generated files can be used as standalone files or as include file in a larger project without modification (if they are used as include file, the wrapper file must only include the position package in the package list; everything else is done automagically); lines may be omitted from output.
Author: Michael Plugge; CTAN location: `support/tiny_c2l`

tipa Fonts and macros for IPA phonetics characters.
`fonts2` Author: unknown; CTAN location: `fonts/tipa`

tipos Description of fonts for TeX in Spanish. The document tipos.pdf describes (in Spanish) the large amount of types of files for fonts ('tipo' means 'font' in Spanish). The document fonteinf.pdf is a translation to German of tipos.pdf kindly made by Thomas Ruedas.
Author: Javier Bezos; CTAN location: `info/spanish`

titlefoot Add special material to footer of title page. Provides the capability of adding keywords (with a
`latex3` `\keywords` command), a running title (`\runningtitle`), AMS subject classifications (`\amssubj`), and an "authors footnote" as footnotes to the title or first page of a document. Works with any class for which the `\thanks` macro works (e.g., article).
Author: Brett Presnell; CTAN location: `macros/latex/contrib/supported/titlefoot`

titleref Cross-reference titles of sections and floats with caprions just like `\ref` and `\pageref`.
Author: Donald Arseneau; CTAN location: `macros/latex/contrib/other/misc`

titles Titles of books, articles, etc., in LaTeX. A LaTeX package defining macros that typeset the titles
`latex3` of books, journals, etc. and handle following spacing and punctuation intelligently, based on context. Useful for bibliographic databases and any document. Also includes other markup like `\word`, `\defn`, `\phrase`, etc.
Author: Matt Swift; CTAN location: `macros/latex/contrib/supported/frankenstein`

titlesec Select alternative section titles. A package providing an interface to sectioning commands for
`latex3` selection from various title styles. E.g., marginal titles and to change the font of all headings with a single command, also providing simple one-step page styles. Also includes a package to change the page styles when there are floats in a page. You may assign headers/footers to individual floats, too.
Author: Javier Bezos; CTAN location: `macros/latex/contrib/supported/titlesec`

titletoc Alternative headings for toc/tof/tol. A companion for titlesec handling toc/lof/lot entries.
Author: Javier Bezos; CTAN location: `macros/latex/contrib/supported/titlesec`

titling Control over the typesetting of the `\maketitle` command. The titling package gives you control over
`latex3` the typesetting of the `\maketitle` command, and makes the `\title`, `\author` and `\date` information permanently available.
Author: Peter R. Wilson; CTAN location: `macros/latex/contrib/supported/titling`

tkbibtex A portable editor and browser for BibTeX files. It supports browsing, editing, searching, and annotations.
Author: Peter Corke; CTAN location: `biblio/bibtex/utils/tkbibtex`

tmmath Support for using the Micropress TM-Math fonts. Support for typesetting math in a style that suits
`latex3` the Adobe Times text fonts. Relies on non-free fonts from Micropress Inc.
Author: Walter Schmid; CTAN location: `macros/latex/contrib/supported/tmmath`

tmview A DVI previewer for SVGA displays. An SVGA-lib based DVI-previewer offering xdvi-like anti-aliasing, text-string searching, arbitrary-zooming, bookmarks, some hypertex features, and rendering of eps-graphics by invoking ghostscript. It supports The GNU/Linux framebuffer device and double-page viewing.
Author: Thomas Moor; CTAN location: `dviware/tmview`

tocbibind Add bibliography/index/contents to Table of Contents. Automatically adds the bibliography and/or
`latex3` the index and/or the contents, etc., to the Table of Contents listing.
Author: Peter Wilson; CTAN location: `macros/latex/contrib/supported/tocbibind`

tocloft
latex3
Control table of contents, figures, etc. Provides control over the typography of the Table of Contents, List of Figures and List of Tables. The package requires the stdclsdv package.
Author: Peter Wilson; CTAN location: macros/latex/contrib/supported/tocloft

tocvsec2
latex3
Section numbering and table of contents control. Provides control over sectional numbering (without recourse to starred sectional commands) and/or the entries in the Table of Contents on a section by section basis.
Author: Peter Wilson; CTAN location: macros/latex/contrib/supported/tocvsec2

toil
An installer of PostScript fonts for TEX. A flexible, AWK+MetaFont-based Type One Install utiLity which facilitates installation of Adobe Type 1 fonts for (plain) TEX; an alternative for afm2tfm; starting from version 1.04, includes an option that enables neutralizing sidebars (via implicit kerning mechanism); currently, available for DOS.
Author: BOP; CTAN location: fonts/utilities/t1install/toil

topcapt
Place captions above figures and tables. Defines a command \topcapt which does the same as caption, except that it places itself correctly when put above the figure/table that it's a caption of.
Author: Robin Fairbairns; CTAN location: macros/latex/contrib/other/misc

topfloat
latex3
Move floats to the top of the page.
Author: Angelo Macchia; CTAN location: latex/support/contrib/supported/topfloat

totpages
latex3
Access last page number and page mark of last page.
Author: Wilhelm Mueller; CTAN location: macros/latex/contrib/supported/totpages

tracking
latex3
Automatically adjust spaces between symbols in words or phrases to fit them into a specified length. Any chain of symbols (including spaces) in the current font may be treated.
Author: Dmitry A. Glazkov; CTAN location: macros/latex/contrib/other/tracking

trajan
fonts3
Fonts from the Trajan column in Rome in 114 AD. Provides fonts based on the capitals carved on the Trajan column in Rome in 114 AD. Many typographers think these rank first among the Romans' artistic legacy. The font is uppercase letters together with some punctuation and analphabetics; no lowercase or digits.
Author: Peter Wilson; CTAN location: fonts/trajan

trans
generic2
A simple TEX macro package for PostScript transformations. Macros for easy transformations of PostScript objects, scaling, rotation, etc.
Author: BOP; CTAN location: macros/generic/TeX-PS

transfig
Transform xfig pictures into many other formats. Translates figures generated by xfig to a large variety of formats.
Author: Brian Smith; CTAN location: graphics/transfig

treesvr
latex3
Tree macros.
Author: Peter van Roose; CTAN location: macros/latex/contrib/supported/treesvr

treetex
plain3
Allows the automatic layout of n-ary trees with arbitrary node sizes in LATEX, using an external C program to do much of the hard work.
Author: unknown; CTAN location: macros/latex209/contrib/trees/tree_tex

trfsigns
latex3
Typeset transform signs. A package for typesetting various transformation signs for Laplace transforms, Fourier transforms and others.
Author: Kai Rascher; CTAN location: macros/latex/contrib/supported/trfsigns

True Type
doc2
How to use TrueType fonts with teTeX.
Author: Harald Harders; CTAN location: info/TrueType

truncate
Truncate text to a specified width.
Author: Donald Arseneau; CTAN location: macros/latex/contrib/other/misc

tsconfig
The tsconfig program tries to make the confguration of the TEXShell by J. Schlegelmilch easier, especially if you have a lot of computers with different processors.
Author: Dirk Nitschke; CTAN location: support/TeXshell/tsconfig

ttf-tetex
Using TrueType fonts with teTeX. This document describes how to use TrueType fonts with teTeX. It also describes how to use the automatically generated slanted and small capitals versions of the font.
Author: Harald Harders; CTAN location: info/TrueType

ttf2mf
An MS-Windows program which is intended to convert MS-Windows True Type fonts to MetaFont format.
Author: Oleg V. Motygin; CTAN location: support/ttf2mf

ttf2pk
texlive1
: This tool rasterizes the glyph outlines of a TrueType font into a bitmap font in PK format. It is part of the FreeType package.
Author: Werner Lemberg; CTAN location: `fonts/utilities/ttf2pk`

ttf2pt1
: Converts True Type fonts into PS Type 1 fonts. Converts True Type fonts into PS Type 1 fonts: creates hinting information; creates AFM files (preserving kerning information); supports all font encodings; supports Asian fonts.
Author: Thomas Henlich; CTAN location: `fonts/utilities/ttf2pt1`

ttf2tfm
: Extracts the metric and kerning information of a TrueType font and converts it into metric files usable by TEX (quite similar to afm2tfm which is part of the dvips package).
Author: Werner Lemberg; CTAN location: `fonts/utilities/ttf2pk`

ttftogf
: Convert MS-Windows True Type fonts to GF format.
Author: unknown; CTAN location: `support/ttftogf`

tth-rpm
: TEX to HTML translator packaged for RedHat Linux.
Author: Michael Sanders; CTAN location: `support/tth/rpm`

tth-win
: TEX-to-HTML converter for MS-Windows32.
Author: unknown; CTAN location: `systems/win32/miktex/util`

tth
: A TEX to HTML translator.
Author: Ian Hutchinson; CTAN location: `support/tth/dist`

ttt
: A Tibetan Transcript Transliterator for LATEX.
Author: Beat Steiner; CTAN location: `language/tibetan/steiner`

tugboat-toc
: The complete accumulation of *TUGboat* tables of contents.
Author: Barbara Beeton; CTAN location: `digests/tugboat/t-of-c`

tugboat
generic2
: LATEX macros for *TUGboat* articles.
Author: unknown; CTAN location: `macros/latex/contrib/supported/tugboat`

TVS
: TEX Versioning System. A Perl script to collect all files which are needed to re-typeset TEX documents. It does it by parsing TEX logs. TVS is able to handle filenames intelligently.
Author: David Antos; CTAN location: `support/TVS`

twg-list
: Members of the TUG Technical Working Groups. A list of the currently active Technical Working Groups of the TEX Users Group.
Author: unknown; CTAN location: `usergrps/tug`

twoopt
: Definitions with two optional arguments.
Author: Heiko Oberdiek; CTAN location: `macros/latex/contrib/supported/oberdiek`

twoup
latex3
: Print two virtual pages on each physical page. The package offers considerable flexibility as to paper size and layout, producing a standard dvi file not involving additional dvi or PostScript filters.
Author: unknown; CTAN location: `macros/generic/2up`

twoup
: Print two virtual pages on each physical page. MiKTeX and many other TEX implementations include tools for massaging PostScript into booklet and two-up printing - that is, printing two logical pages side by side on one side of one sheet of paper. However, some LATEX preliminaries are necessary to use those tools. The twoup package provides such preliminaries and gives advise on how to use the PostScript tools.
Author: Mogens Lemvig Hansen; CTAN location: `macros/latex/contrib/supported/twoup`

txt2tex
: Add LATEX markup to a text document. Converts plain text into something with a little LATEX formatting.
Author: Kalvis M. Jansons; CTAN location: `support/txt2tex`

type1
fonts2
: Public domain PostScript fonts, including the URW fonts distributed with Ghostscript.
Author: unknown

type1cm
latex3
: A package that removes the restriction when using scalable versions of the cm fonts (Bakoma, or versions from BSR/Y&Y, or True Type versions from Kinch, PCTEX, etc.) where LATEX restricts the cm fonts to discrete sizes.
Author: David Carlisle; CTAN location: `macros/latex/contrib/supported/type1cm`

typearea
: Set page margins.
Author: unknown; CTAN location: `macros/latex209/contrib/script`

typehtml
: Typeset HTML directly from LATEX. Can handle almost all of HTML2, and most of the math fragment of the draft HTML3.
Author: David Carlisle; CTAN location: `macros/latex/contrib/supported/carlisle`

typespec
plain3
Creates a type specimen page with useful information about the typeface.
Author: Stephen Moye; CTAN location: macros/plain/contrib/TypeSpec

uaclasses
latex3
This package provides a LaTeX 2ε document class named 'ua-thesis' for typesetting theses and dissertations in the official format required by the University of Arizona. Moreover, there is a fully compatible alternative document class 'my-thesis' for private "nice" copies of the dissertation, and the respective title pages are available as separate packages to work with "any" document class.
Author: Marcel Oliver; CTAN location: macros/latex/contrib/supported/uaclasses

ucthesis
latex3
A modified version of the standard LaTeX report style that is accepted for use with University of California PhD dissertations and Masters theses.
Author: unknown; CTAN location: macros/latex/contrib/supported/ucthesis

uhc-gothic
Fonts for the Korean language. Support for Korean documents written in Korean standard KSC codes for LaTeX 2ε.
Author: Koaunghi Un; CTAN location: fonts/korean/HLaTeX

ukhyph
Hyphenation patterns for British English. This replaces the earlier version of 1992, by adding a short list of hyphenation exceptions. The actual patterns themselves are unchanged.
Author: Dominik Wujastyk; CTAN location: language/hyphenation

ukrhyph
lang3
Ukranian hyphenation. This package allows the use of different hyphenation patterns for the Ukrainian language for various Cyrillic font encodings. Contains packages implementing traditional rules, modern rules, and combined English-Ukrainian hyphenation.
Author: Maksym Polyakov and Andrij Shvaika; CTAN location: language/hyphenation/ukrhyph

ulem
Package for underlining. Be advised that underlining is considered bad style in typesetting.
Author: Donald Arseneau; CTAN location: macros/latex/contrib/other/misc

ulsy
latex3
Extra mathematical characters.
Author: unknown; CTAN location: macros/latex/contrib/supported/ulsy

umlaute
latex3
An interface to inputenc for using alternate input encodings.
Author: unknown; CTAN location: macros/latex/contrib/supported/umlaute

umoline
Underlines text allowing line breaking.
Author: Hiroshi Nakashima; CTAN location: macros/latex/contrib/supported/umoline

umrand
fonts3
Package for page frames.
Author: unknown; CTAN location: macros/latex/contrib/supported/niceframe

uncial
Manuscript book-hand fonts. The uncial and alluncl packages provide Metafont fonts based on the Uncial manuscript book-hand used between the 3rd and 6th century AD. The font consists of minuscules and digits, with some appropriate period punctuation marks. Both normal and bold versions are provided. This is one in a series of manuscript fonts.
Author: Peter Wilson; CTAN location: fonts/bookhands/uncial

underlin
latex3
Package for underlining. Be advised that underlining is considered bad style in typesetting. See also ulem which is a specific package for LaTeX.
Author: unknown; CTAN location: macros/generic

underscore
Make "_" print as \textunderscore in text. Make "^" print as \textunderscore in text.
Author: Donald Arseneau; CTAN location: macros/latex/contrib/other/misc

uni
fonts3
The Universal font. An implementation of the universal font by Herbert Bayer of the Bauhaus school for MetaFont. It is supported in LaTeX with a package and font definition file.
Author: Christian Holm; CTAN location: fonts/uni

uniqleaf
Check filesystem tree (or union of several trees) for unique leaf names; useful for spotting ambiguities that path-searching programs could trip over. For each non-unique leaf name found, it prints out "ls" and "md5" information for each candidate file.
Author: Martyn Johnson; CTAN location: support/uniqleaf

units
latex3
Includes two packages for typesetting fractions and physical units.
Author: Axel Reichert; CTAN location: macros/latex/contrib/supported/units

universa
fonts3
An implementation of Herbert Bayers 'universal' font, with LaTeX support.
Author: Christian Holm; CTAN location: fonts/universa

unsupported
fonts3
MetaFont sources from Knuth, unsupported.
Author: unknown

url Verbatim with URL-sensitive line breaks. A form of `\verb` that allows linebreaks at certain characters or combinations of characters, accepts reconfiguration, and can usually be used in the argument to another command. It is intended for email addresses, hypertext links, directories/paths, etc., which normally have no spaces.
Author: Donald Arseneau; CTAN location: `macros/latex/contrib/other/misc`

urw Font metrics, and macro support in LaTeX 2ε, for free URW fonts.
Author: unknown; CTAN location: `fonts/psfonts/urw`

urwstd No description available.
`fonts2` Author: unknown

urwvf A collection of virtual fonts generated with fontinst 1.6, that provide the fonts which URW has made available under the GNU License: Antiqua, Grotesk, Nimbus and Nimbus Sans, (and which are available as raw fonts urw) in OT1, T1, 8r and OT4 encodings, to be used with LaTeX 2ε.
Author: unknown; CTAN location: `fonts/urwvf`

ut-backref A version of backref which adds to bibliography entries an entry saying where this particular reference was cited.
Author: Sven Utcke; CTAN location: `macros/latex/contrib/other/fragments`

ut-thesis University of Toronto thesis style.
`latex3` Author: Francois Pitt; CTAN location: `macros/latex/contrib/supported/ut-thesis`

utf2any Converting UTF-7 and UTF-8 to LaTeX, HTML, and other text formats. utf2any translates a file encoded in UTF-7 or UTF-8 (Unicode) into any 7- or 8-bit text format. Currently, mapping tables are supplied for LaTeX, HTML, ISO-8859-1, ISO-8859-15 and RFC-1345. These tables don't provide a complete mapping, but they can be easily extended to personal needs.
Author: Peter Kleiweg; CTAN location: `support/utf2any`

utorontothesis A LaTeX 2ε thesis class definition for University of Toronto.
Author: Robert Bernecky; CTAN location: `macros/latex/contrib/supported/utorontothesis`

utthesis LaTeX package for preparation of a thesis that meets the requirements of the Graduate School of the
`latex3` University of TEXas at Austin.
Author: Dinesh Das; CTAN location: `macros/latex/contrib/supported/utthesis`

uwthesis University of Washington thesis style.
`latex3` Author: unknown; CTAN location: `macros/latex/contrib/supported/uwthesis`

varindex Luxury frontend to the `\index` command. Provides a convenient front-end for the `\index` command. For example, with it you can generate multiple index entries in almost any form by a single command. Extremely customizable. Works with all versions of LaTeX and probably most other TeX formats.
Author: Martin Vaath; CTAN location: `macros/latex/contrib/supported/misc`

varioref Intelligent page references.
Author: Frank Mittelbach; CTAN location: `macros/latex/required/tools`

vdm Typesetting VDM schemas.
`latex3` Author: unknown; CTAN location: `macros/latex/contrib/other/vdm`

vector Macros for more convenient representation of vectors in LaTeX 2ε, both symbolically and as implicit or
`latex3` explicit rows/columns of elements.
Author: unknown; CTAN location: `macros/latex/contrib/supported/vector`

verbatim The LaTeX verbatim environment.
Author: Rainer Schoepf; CTAN location: `macros/latex/required/tools`

version Conditionally include text.
Author: Stephen Bellantoni; CTAN location: `macros/latex/contrib/other/misc`

vertex Styles for economics working papers and journals.
`plain3` Author: unknown; CTAN location: `macros/plain/contrib/vertex`

vfcomb A system to support the writers of virtual fonts; this is written in Turbo Pascal, and sources are included.
Author: Sasha Berdnikov; CTAN location: `systems/msdos/utilities/vfcomb`

vfinst A set of scripts and Perl files which aim to make the installation of families of PostScript fonts and creation of necessary virtual fonts and outline fonts 'virtually' automatic. Uses fontinst.
Author: Alan Hoenig; CTAN location: `fonts/utilities/vfinst`

vicentino Vicentino fonts.
Author: Willibald Kraml; CTAN location: `fonts/vicentino`

viiptart — An article-like document class which is 7pt rather then 10pt.
Author: Moshe Zadka; CTAN location: `macros/latex/contrib/supported/viiptart`

vita — This class provides necessary macros to prepare your Curriculum Vitae or Resume.
`latex3` Author: unknown; CTAN location: `macros/latex/contrib/other/vita`

vmargin — Set various dimensions. Provides a macro to set various margins as well as dimensions for header/
`latex2` footer and page dimensions. Most common paper sizes, paper orientation, disabling of headers and footers, and two sided printing are supported. The vmargin package does not rely on other packages and was designed with speed and size in mind. Its user interface might not be very fancy, but it's fast, small, and gets the job done. If you are looking for something more elaborate try the geometry package.
Author: Volker Kuhlmann; CTAN location: `macros/latex/contrib/supported/vmargin`

vncmr — A Vietnamese extension of the cmr fonts. Contains MetaFont source files, tfm files, and various LaTeX 2ε and plain TeX files for VISCII encoding.
Author: Werner Lemberg; CTAN location: `fonts/vietnamese/vncmr`

vpage — Set page sizes. Set page sizes for many different pages. This is now superseded by vmargin.
Author: Volker Kuhlmann; CTAN location: `obsolete/macros/latex/contrib/other/misc`

vrb — Verbatim macros via plain TeX.
`latex3` Author: unknown; CTAN location: `macros/generic/vrb`

vrsion — Add version number to DVI file. Defines a command which produces a version number in the dvi-file
`latex3` when LaTeX is run.
Author: Mats Dahlgren; CTAN location: `macros/latex/contrib/supported/vrsion`

vruler — A package for adding a vertical numbering to the general text so that the text can be properly referenced. The vertical ruler can be scaled and moved freely. Supports LaTeX and plain TeX.
Author: Zhuhan Jiang; CTAN location: `macros/latex/contrib/other/misc`

VTeX/Free — TeX system and PDF support for Linux and OS2. VTeX/Free is a TeX program that generates
`latex3` PDF or PostScript output immediately from the TeX source file. The distribution includes a complete working LaTeX system. VTeX/Free is available for Linux and OS2.
Author: MicroPress; CTAN location: `systems/vtex`

warpcol — Defines a tabular column type for formatting numerical columns in LaTeX. The column type enables
`latex3` numerical items to be right justified relative to each other, while centred beneath the column label. In addition, macros are provided to enable variations on this column type to be defined. Usage of the package is superficially similar to that of dcolumn; however, the alignment scheme is different, and the packages have different, though overlapping, applications.
Author: Wayne A. Rochester; CTAN location: `macros/latex/contrib/other/warpcol`

wasy-ps — Converted (PostScript) outlines of the wasy fonts.
Author: Taco Hoekwater; CTAN location: `fonts/wasy/ps-type1/hoekwater`

wasy — The wasy fonts (Waldis symbol fonts). The wasy fonts (Waldis symbol fonts).
`fonts2` Author: unknown; CTAN location: `fonts/wasy`

wasy2-ps — Converted (PostScript) outlines of the wasy fonts.
Author: Taco Hoekwater; CTAN location: `fonts/wasy2/ps-type1/hoekwater`

wasy2 — The wasy fonts (Waldis symbol fonts). The wasy fonts (Waldis symbol fonts).
Author: unknown; CTAN location: `fonts/wasy2`

wasysym — Extra characters from the Waldis symbol fonts. Makes some additional characters available that
`latex2` come from the wasy fonts (Waldis symbol fonts). These fonts are not automatically included in NFSS2/ LaTeX 2ε since they take up important space and often aren't necessary if one makes use of the packages amsfonts or amssymb. Symbols include: join box, diamond, leadsto, sqsubset, lhd, rhd, apple, ocircle invneg, logof, varint, male, female, phone, clock lightning, pointer, sun, bell, permil, smiley, various electrical symbols, shapes, music notes, circles, signs, astronomy, etc.
Author: Axel Kielhorn; CTAN location: `macros/latex/contrib/supported/wasysym`

wbarcode — Typeset common (and less common) barcodes with TeX.
Author: Peter Willadt; CTAN location: `fonts/barcodes/willadt`

web — Establishes a page layout for an on-screen (PDF) document. The web package (for LaTeX) is a set of macros that establishes a page layout for a (PDF) document that is meant to be read on-screen and not meant to be printed. The package also redefines the table of contents to a web style and defines optional navigational aids. The package has options for use with dvipsone, dvips, and pdftex.
Author: D. P. Story; CTAN location: `macros/latex/contrib/supported/webeq`

web2c-win32 — Web2c for MS-Windows32, including a complete collection of TeX related executables.
Author: Fabrice Popineau; CTAN location: `systems/win32/web2c`

web2c — The "standard" source C version of the TeX system. Uses the GNU autconfig package to compile and install effortlessly. Simply ./configure; make; make install.
Author: Olaf Weber; CTAN location: `systems/web2c`

webfiles — Include several CWEB and/or Spidery WEB documents in a single LaTeX.
Author: Mark Potse; CTAN location: `web/webfiles`

webguide — Brief Guide to LaTeX Tools for Web publishing.
`doc2` Author: Peter R. Wilson; CTAN location: `info/webguide`

williams — Miscellaneous macros by Peter Williams.
`latex3` Author: Peter Williams; CTAN location: `macros/latex/contrib/other/williams`

win95-guide — An installation-guide for a complete TeX-System consisting of MiKTeX, WinEdt and GhostView.
Author: Studienrat Andreas Hirsch; CTAN location: `systems/win32`

windvi — MS-Windows DVI driver. There are many previewers for dvi files under MS-Windows. The most
`doc1` popular is probably Dviwin. However it lacks some important features such as the ability to recursively search directories for font files, the ability to use .vf files or display PostScript fonts, and the ability to display PostScript images. Unfortunately, the Dviwin sources were never put into the public domain; on the other side of the fence, Xdvi under Unix has these features, is widely used and its sources are available. Xdvi(k) uses the kpathsea library to search directories, already used in the Web2c-win32 port of TeX, so there was some interest in porting Xdvi(k) to Win32. As it turned out, this turned into far more than just a port, as X Windows is far from Win32. All the user interface and the graphical part has been rewritten.
Author: Fabrice Popineau; CTAN location: `systems/win32/fptex`

winedt — MS-Windows shell and editor for TeX. A full-featured text editor and Shell for MS-Windows (and MS-Windows NT or MS-Windows 3.x), allowing the editing of large, multiple, text files in the usual MS-Windows way, using a Multiple Documents Interface (MDI) and following or extending the MS-Windows' Standards in every respect, and supporting (LaTeX) Syntax Highlighting and Input/Output ASCII Code Translation Tables with a comprehensive context-sensitive Help.
Author: Aleksander Simonic; CTAN location: `systems/win32/winedt`

winlatex — FrontEnd for TeX, Win98/NT, needs Microsoft VisualBasic-DLLs.
Author: Thomas Reinhardt; CTAN location: `systems/win32/winlatex`

winshell — A MS-Windows32 user interface for TeX. It is not a TeX-system—you need an additional TeX package for DOS/MS-Windows (e.g., miktex and web2c-win32). For previewing documents you will need something like GhostScript or dviwin.
Author: Ingo de Boer; CTAN location: `systems/win32/winshell`

wmf2eps — Windows meta file conversion. A program to simplify MS-Windows Metafile Graphics (WMF) containing either vector-images or bitmaps into Encapsulated PostScript format having tight bounding-boxes (WinNT and Win95) at exactly the same size as the WMF-originals.
Author: Wolfgang Schulter; CTAN location: `support/wmf2eps`

wnri — MetaFont fonts for Old English, Indic languages in transcription, and American Indian languages.
`fonts3` Author: unknown; CTAN location: `fonts/wnri`

wntamil — Tamil to TeX converter. Fonts (MetaFont) and support for Tamil, created at the University of
`lang3` Washington.
Author: unknown; CTAN location: `language/tamil/wntamil`

word2x — A word 6 to anything converter, currently supporting output formats in text and LaTeX.
Author: Duncan Simpson; CTAN location: `tools/word2x`

wordcount
latex3
: Estimate the number of words in a LaTeX document. Provides a relatively easy way of estimating the number of words in a LaTeX document that does not require dvitty or other DVI converters; it does however require something like Unix grep -c that can search a file for a particular string and report the number of matching lines. An accompanying shell script wordcount.sh contains more information in its comments.
Author: Michael J. Downes; CTAN location: `macros/latex/contrib/supported/wordcount`

wp-conv
doc2
: A list (in HTML format) of packages for converting between LaTeX and TeX documents and a variety of other formats including RTF, Word, and Wordperfect.
Author: Wilfried Hennings; CTAN location: `help/wp-conv`

wp2latex
: Convert WordPerfect documents to LaTeX.
Author: Jaroslav Fojtik; CTAN location: `support/wp2latex`

wrapfig
: Produces figures which text can flow around. Does not work in combination with list environments, but can be used in a parbox or minipage, and in twocolumn format.
Author: unknown; CTAN location: `macros/latex/contrib/other/misc`

wsuipa
fonts2
: Style for using International Phonetic Alphabet fonts.
Author: Anshuman Pandey; CTAN location: `fonts/wsuipa`

wsuipa2tipa
: Translate wsuipa font commands into tipa font commands. Old wsuipa fonts don't compile well on newer TeX distributions, and may be unavailable on your local installation. The fonts are superseded by the newer tipa fonts. The program wsu2tipa works as a filter that translates an old LaTeX document, replacing all wsuipa font commands with tipa font commands.
Author: Peter Kleiweg; CTAN location: `support/wsuipa2tipa`

wtex95
: A flexible, 32-bit MS-Windows-TeX-editor with Highlight-O-Matic syntax-highlighting.
Author: Michael Mucke; CTAN location: `systems/win32/wtex95`

xarticle
: A class that allows use of 7pt, 8pt and 9pt style options. Not fully compatible with article class though.
Author: unknown; CTAN location: `macros/latex209/contrib/xarticle`

xcomment
: Allows selected environments to be included/excluded.
Author: unknown; CTAN location: `macros/latex/contrib/other/seminar/src`

xdvi
: A dvi previewer for the X Window System.
Author: Paul Vojta; CTAN location: `dviware/xdvi`

xdvik
: A version of xdvi with recursive searching. A (now standard) variant of xdvi with recursive searching for font files in subdirectories.
Author: unknown; CTAN location: `dviware/xdvik`

xfig
: XWindows vector drawing program. A menu-driven tool that allows the user to draw and manipulate objects interactively in an X window. Generates pictures for PostScript and a variety of other formats (e.g. for inclusion in LaTeX documents).
Author: Brian Smith; CTAN location: `graphics/xfig`

xml-catalogue
: Use xmltex to format the TeX Catalogue. This package uses xmltex to generate a printed copy of the TeX Catalogue. This is not a partuclarly useful idea as such, as the Catalogue is far better suited to presentation on the web. However, this package provides an example of what can be done with xmltex.
Author: James Kilfiger; CTAN location: `macros/xmltex/contrib/xml-catalogue`

xmlplay
formats2
: Typeset Shakespeare's plays as marked up by Bosak. This is an xmltex package for typsetting the plays of Shakespeare, as marked up by Jon Bosak. See `http://www.oasis-open.org/cover/bosakShakespeare200.html`.
Author: James Kilfiger; CTAN location: `macros/xmltex/contrib/xmlplay`

xmltex
formats2
: Support for parsing XML documents. This package provides an implementation of a parser for documents matching the XML 1.0 and XML Namespace Recommendations. In addition to parsing commands are provided to attatch TeX typesetting instructions to the various markup elemenets as they are encounted. Sample files for typesetting a subset of TEI, MathML, are included. Element and Attribute names, as well as character data, may use any characters allowed in XML, using utf-8 or a suitable 8bit encoding.
Author: David Carlisle; CTAN location: `macros/xmltex/base`

xr
: References to other LaTeX documents.
Author: David Carlisle; CTAN location: `macros/latex/required/tools`

xspace — Define commands that don't eat spaces.
Author: David Carlisle; CTAN location: `macros/latex/required/tools`

xtab — Break tables across pages. An extended version of supertabular to automatically break tables across pages and includes extra functionality.
`latex3`
Author: Peter Wilson; CTAN location: `macros/latex/contrib/supported/xtab`

xtcapts — Defining language-dependent text macros.
`latex3`
Author: unknown

xtem — An X11 TEX menu built on Tcl/Tk. Provides a simple and comfortable graphical user interface to control file and directory selection, directory creation, vi, emacs, TEX, LATEX, previewing, etc. Written in Tcl/Tk.
Author: Guenther Lamprecht, Wolfhard Lotz and Roland Weibezahn; CTAN location: `support/xtem_texmenu`

xtrcode — Extract contents of LATEX environments.
Author: Thomas Ruedas; CTAN location: `support/xtrcode`

xymtex — Typesetting chemical structures.
`latex3`
Author: unknown; CTAN location: `macros/latex/contrib/other/xymtex`

xypic — A package for typesetting a variety of graphs and diagrams with TEX. Xy-pic works with most formats
`graphics2`
(including LATEX, AMS-LATEX, AMS-TEX, and plain TEX), in particular Xy-pic is provided as a LATEX 2_ε 'supported package'.
Author: Kristoffer H. Rose; CTAN location: `macros/generic/diagrams/xypic`

yafoot — Miscellaneous footnote commands. Contains three style files; pfnote.sty to enclose footnote numbers within a page; fnpos.sty to control the position of footnotes; dblfnote to make footnotes double-columned.
Author: Hiroshi Nakashima; CTAN location: `macros/latex/contrib/supported/yafoot`

yannisgr — Greek fonts by Yannis Haralambous.
`fonts3`
Author: unknown; CTAN location: `fonts/greek/yannis`

yfonts — Support for old German fonts. A LATEX interface to the old-german fonts designed by Yannis
`latex3`
Haralambous: Gotisch, Schwabacher, Fraktur and the baroque initials.
Author: Walter Schmidt; CTAN location: `macros/latex/contrib/supported/yfonts`

yhmath — Extended maths fonts for LATEX.
`latex3`
Author: Yannis Haralambous; CTAN location: `macros/latex/contrib/supported/yhmath`

yi4latex — Package to provide support in LATEX for writing all standardized Yi characters. Yi (also known as Lolo)
`lang3`
is spoken in Southern China; the script is syllabic, based on an older, ideographic system.
Author: Oliver Corff; CTAN location: `language/yi4latex`

yinit — A special font (yinit) is defined to be used for initial dropped capitals.
Author: unknown; CTAN location: `fonts/gothic/yinit`

youngtab — Typeset Young-Tableaux. A package for typesetting Young-Tableaux, mathematical symbols for
`latex3`
the representations of groups, providing two macros, `\yng(1)` and `\young(1)` to generate the whole Young-Tableaux.
Author: Volker Boerchers; CTAN location: `macros/latex/contrib/supported/youngtab`

yplan — Daily planner type calendar. Prints two six-monthly vertrical-type daily planner (i.e., months along
`latex3`
the top, days downwards), with each 6-month period fitting onto a single A4 (or US letter) sheet. Updated annually. Support for English, French, German, Spanish and Portuguese.
Author: Dick Nickalls; CTAN location: `macros/latex/contrib/other/yplan`

ytex — Macro package developed at MIT.
`formats3`
Author: unknown; CTAN location: `macros/ytex`

zed-csp — Typesetting Z and CSP format specifications.
`latex3`
Author: unknown; CTAN location: `macros/latex/contrib/other/zed-csp`

zefonts — Virtual T1 encoded Computer Modern fonts based on (OT1) Computer Modern, Times, and Helvetica
`fonts2`
fonts, intended to simulate 'dc' fonts. (Wayne Sullivan's 'dm' fonts are another approach to the substitution of 'dc' fonts by virtual ones.)
Author: Robert Fuster; CTAN location: `fonts/zefonts`

Macros

The bag of tricks

Victor Eijkhout

The plain TEX `\loop` macro has been a headache for as long as it has existed. Already in *TUGboat* #2 of 1987, Alois Kabelschacht gave an improved implementation of this macro, and there are regular questions about it on the TEX newsgroup. The main problem is that the original implementation, which is used as

```
\loop ... \if ... \repeat
```

suggests that

```
\loop ... \if ... \else \repeat
```

should also be possible, which it is not.

The problem lies in the implementation

```
\def\loop#1\repeat
    {\def\body{#1}\iterate}
\def\iterate{\body \let\next\iterate
     \else \let\next\relax \fi \next}
```

which already contains an `\else`, so there can not be another one at the end of the body.

A simple solution is

```
\def\iterate
    {\let\next\relax \body
     \let\next\iterate \fi \next}
```

However, this presumes that in the body the control sequence `\next` does not get redefined; it would be better to use a unique name such as `\nextloop`.

The suggestion in that old *TUGboat* issue is

```
\def\loop#1\repeat{%
     \def\iterate{%
         #1\expandafter\iterate\fi}%
     \iterate \let\iterate\relax}
```

which can contain `\else`.

Another solution comes from David Kastrup, who wrote an `\ifnot` macro for inverting the conditional:

```
\def\ifnot#1{#1\else
   \expandafter\expandafter\fi
   \iffalse\iftrue\fi}
```

which can be used as, for instance,

```
\loop  ...
   \ifnot{\ifeof\stream} ... \repeat
```

This macro is worth studying for a moment: let us see what happens to

```
\ifnot\iftrue  /  \ifnot\iffalse
```

First of all the true case: the expansion is

```
\iftrue\else\expandafter\expandafter\fi
   \iffalse\iftrue\fi
```

and everything from `\else` to the first `\fi` gets skipped; what's left is

```
\iffalse\iftrue\fi
```

which is basically `\iffalse`, that is, the negation of the original `\iftrue`.

In the false case,

```
\iffalse\else
   \expandafter\expandafter\fi
   \iffalse\iftrue\fi
```

becomes

```
\expandafter\expandafter\fi
   \iffalse\iftrue\fi
```

The first `\expandafter` reaches to the `\fi`, which is taken to conclude the original `\iffalse` conditional. We are left with

```
\expandafter\iffalse\iftrue\fi
```

Here `\expandafter` eliminates the `\iftrue`, and TEX notes that an `\iftrue` conditional has started. Next,

```
\iffalse\fi
```

expands to nothing, and the net result is that we are now in an `\iftrue` conditional, the negation of the original `\iffalse`.

A pretty impressive macro which can of course also be used outside the context of `\loop`. In closing let me remark that I recently wrote a drastic revision of the `\loop` macro, which you can find as `repeat.tex` in the usual archives.

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Calendar

2000

Apr 1 – Jun 11 — Exhibition, "Sumner Stone, Calligraphy and Type Design in a Digital Age", Ditchling Museum, Ditchling, Sussex, UK. For information, visit http://www.letteringtoday.co.uk/.

Apr 30 – May 2 — BachoTEX 2000, 8th annual meeting of the Polish TEX Users' Group (GUST), "TEX on the turn of the 20th century", Bachotek, Brodnica Lake District, Poland. For information, visit http://www.gust.org.pl/.

May 10 – 12 — GUTenberg 2000, "LATEX et XML : coopération pour l'internet", Toulouse, France. For information, visit http://www.gutenberg.eu.org/manif/gut2000/gut2000.html.

May 19 – 21 — Typography Forum, "Navigation durch Text Bild Raum", Museum der Arbeit, Hamburg, Germany. For information, visit http://www.forumtypographie2000.de.

Jun 1 – 3 — Society for Scholarly Publishing, 22nd annual meeting, Baltimore, Maryland. For information, visit http://www.sspnet.org.

Jun 12 – 16 — XML Europe 2000, Palais des Congrès de Paris, France. For information, visit http://www.gca.org/attend/2000_conferences/europe_2000/.

Jun 15 — NTG 25th Meeting, Rijksuniversiteit Groningen, The Netherlands. For information, contact ntg@ntg.nl.

Jun 16 – 18 — TypeCon 2000, Westborough, Massachusetts. For information, visit http://www.typesociety.org.

Jun 21 – 23 — Typo[media]2000, "Links to Minds", Mainz, Germany. Linotype's design conference; for information, visit http://www.typomedia.com.

Jul 21 – 25 — ALLC-ACH 2000: Joint International Conference of the Association for Literary and Linguistic Computing, and Association for Computers and the Humanities, Glasgow, Scotland, UK. For information, visit http://www.ach.org/.

Jul 23 – 28 — SIGGRAPH 2000, New Orleans, Louisiana. For information, visit http://www.siggraph.org/calendar/.

Aug 12 – 18 — **TUG 2000** — The 21st annual meeting of the TEX Users Group, "TEX enters a new millennium", Wadham College, Oxford, UK. For information, visit http://tug2000.tug.org/.

Aug 28 – Sep 1 — Seybold San Francisco, San Francisco, California. For information, visit http://www.seyboldseminars.com/Events.

Sep 11 – 12 — PODDP '00: 5th International Workshop on Principles of Digital Document Processing, Munich, Germany. For information, visit http://www.cs.uwm.edu/~poddp00.

Sep 12 — *TUGboat* **21** (3), deadline for reports and news items.

Sep 13 – 15 — DDEP00: 8th International Conference on Digital Documents and Electronic Publishing, Munich, Germany. For information, visit http://www11.in.tum.de/DDEP00.

Sep 21 — DK-TUG, 2nd Annual General Meeting, Aarhus University. For information, visit http://sunsite.auc.dk/dk-tug/.

Oct 6 – 7 — DANTE, 23rd meeting, Fern-universität Hagen, Germany. For information, visit http://www.dante.de/dante/mv/mv23/.

Oct 20 – 21 — MathML and Technologies for Math on the Web, Urbana-Champaign, Illinois. For information, visit http://www.mathmlconference.org.

Oct 23 — *TUGboat* **21** (4), deadline for technical submissions.

Status as of 31 July 2000

For additional information on TUG-sponsored events listed above, contact the TUG office (+1 503 223-9994, fax: +1 503 223-3960, e-mail: office@tug.org). For events sponsored by other organizations, please use the contact address provided.

Additional type-related events and news items are listed in the Sans Serif Web pages, at http://www.quixote.com/serif/sans.

Nov 13 – Jan 6	Gutenberg exhibit, including working replica of his original printing press, Louisville Free Public Library, Louisville, Kentucky.
Nov 17 – 19	Conference: Eric Gill & St. Dominic's Press, University of Notre Dame, Notre Dame, Indiana; three concurrent exhibitions of Gill's and related work will be held in the University museums and library. For information, visit `http://www.nd.edu/~jsherman/gill/`.
Nov 20	*TUGboat* **21** (4), deadline for reports and news items.
Dec 3 – 7	XML 2000/Markup Technologies 2000, Washington, DC. For information, visit `http://www.gca.org/attend/2000_conferences/XML_2000/`.

2001

Feb/Mar	DANTE 2001 and 24^{th} meeting, Fachhochschule Rosenheim, Germany. For information, visit `http://www.dante.de/events/`.
Aug 12 – 17	SIGGRAPH 2001, Los Angeles, California. For information, visit `http://www.siggraph.org/s2001/`.
Sep 23 – 27	EuroTEX 2001, "TEX and Meta: the Good, the Bad and the Ugly Bits", Kerkrade, Netherlands. For information, visit `http://www.ntg.nl/eurotex/`.

Late-Breaking News

Production Notes

Mimi Burbank

Do I hear that familar refrain? . . . "We're late again, but. . . " the reasons for which this time are largely due to fatal disk crashes and corrupted backup tapes and various other interesting "lurches" in the production process. (This summer I learned that cross-platform commands from Linux to Unix are not always the same — the system path heirarchy definitely is NOT! When we lost system disks and user disks, I found that all of the directory names were there — just no files. As Barbara Beeton would say via email: `<sigh>`)

As mentioned by Mimi Jett on page 5, we have also had difficulty getting a stockpile of articles which would be of interest to the TEX community. We need help from *you* to make all of it work.

This issue contains the **TEX Live 5** CD-ROM. More information may be obtained from the article within this issue on page 16.

Output The final camera copy was prepared at CSIT on a Linux running Red Hat 7, using the *TEX Live* 4 setup, i386-linux, which is based on the *Web2c* TEX implementation version 7.3 by Karl Berry and Olaf Weber. PostScript output, using outline fonts, was produced using Radical Eye Software's dvips(k) 5.85, and printed on an HP LaserJet 4000 TN printer at 1200dpi.

Coming In Future Issues The next issue will contain the CTAN CD-ROM collection (three CDs), an interview with Don Knuth, and much more information in our Treasure Chest column.

The third issue for 2000 will contain the proceedings of TUG 2000, with Robin Fairbairns ably functioning as Proceedings Editor.

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2000 TUG Membership Form

Rates for TUG membership and TUGboat subscription are listed below. Please check the appropriate boxes and mail payment (in US dollars, drawn on a United States bank) along with a copy of this form. If paying by credit card, you may fax the completed form to the number at left.

• 2000 TUGboat includes Volume 21, nos. 1–4.

• 2000 CD-ROMs include TEX Live 5 (1 disk) and Dante's CTAN (3 disk set).

• *Multi-year orders:* You may use this year's rate to pay for more than one year of membership.

• Orders received after March 1, 2000: please add $10 to cover the additional expense of shipping back numbers of TUGboat and CD-ROMs.

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*The Bursary Fund provides financial assistance to members who otherwise would be unable to attend the TUG Annual Meeting.

† If you are a new TUG member wishing to receive TEX Live and CTAN right away, please order this item along with your 2000 membership.

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I write in TEX, LATEX, METAFONT, MetaPost, PostScript, HTML, Perl, Awk, C, C++, Visual C++, Java, JavaScript, and do CGI scripting. I take special care with mathematics. I also copyedit, proofread, write documentation, do spiral binding, scan images, program, hack fonts, and design letterforms, ads, newsletters, journals, proceedings and books. I'm a journeyman typographer and began typesetting and designing in 1979. I coauthored *TEX for the Impatient* (Addison-Wesley, 1990) and some psychophysics research papers. I have an MFA in Painting/Sculpture/Graphic Arts and an MSc in Computer Science. Among numerous other things, I'm currently doing some digital type and human vision research, and am a webmaster at the Department of Engineering and Applied Sciences, Harvard University. For more information, see: http://www.cs.umb.edu/ kathryn.

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