ednotes.styfor critical editions with PT_EX

Lazy $ASCII \rightarrow PDF$ listings

Uwe Lück

June 26, 2006

Preface

ednotes[.sty] is a macro package or bundle of macro files for critical editions typed by U.L.¹ It is little more than a user interface for combining Stephan I. Böttcher's lineno.sty and Alexander I. Rozhenko's manyfoot.

Nowadays, PDF files are very wanted for documentation of T_EX macro files. Well, sorry, a documentation of this kind doesn't exist at present for ednotes ...—I am just offering some ersatz PDF documentation: listings of the .sty files belonging to the ednotes bundle, structured and navigatable through a table of contents.

For making use of the options that ednotes.sty provides, it is vital to know the underlying lineno.sty—and its documentation. ednotes just passes lineno commands and options to the latter. So please notice

CTAN:/macros/latex/contrib/lineno/lineno.pdf

as well as (if you need it)

CTAN:/macros/latex/contrib/lineno/lnosuppl.pdf.

In the same directory, there are other macro files that ednotes.sty may need and whose documentation may be contained in lnosuppl.pdf (in the same pseudo-PDF-style as present).

Please don't overlook that

CTAN:/macros/latex/contrib/lineno/ednotugb.pdf

contains a (printable) *overview* on the facilities of ednotes, as well as a comparison with Peter Wilson's alternative ledmac.

¹... originally under the direction of Christian Tapp at a research project granted by the Deutsche Forschungsgemeinschaft (DFG).

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1 The .txt files

1.1 README.txt

FIRST INSTRUCTIONS for EDNOTES Distribution April 2005 (this file April 26, 2005)

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CONTENTs of the present file:

Purpose -- recent changes -- RIGHTS -- installing 'ednotes' -learning about 'ednotes' -- standalone packages -- contact us -newsletter -- glossary

PURPOSE of the macros:

Here are macros for typesetting CRITICAL EDITIONS with LaTeX. Packages 'lineno' by Stephan I. B"ottcher, 'manyfoot' by Alexander I. Rozhenko, and 'longtable' by David Carlisle are enhanced and combined. -- For a few first informations, you may have a look at http://ednotes.sty.de.vu. ** RECENT CHANGES: **

If you have used 'ednotes' earlier than September 2004, we urge you to read the 'CHANGES' file in the 'ednotes' directory, especially concerning the changes of September/October 2004. 'ednotes', 'lineno', and 'manyfoot' have been changed at one time and interact differently than before. Some files have been removed, and former extension packages are now automatically loaded on 'ednotes' package options.

RIGHTs:

For COPYRIGHTs as well as conditions of use (NO WARRANTY), MODIFYING, and (RE)DISTRIBUTION, please see inside the files mentioned in the present 'README' file, as well as 'README-lineno.txt' and 'README-ncctools.txt'. Usually, the LaTeX Project Public License applies, a recent version of which can be found on

http://www.latex-project.org/lppl.txt

Any REDISTRIBUTION of 'ednotes.sty' must contain the present 'README' file.

If you DISTRIBUTE 'manyfoot.sty' and 'nccfoots.sty', they must be accompanied by 'manyfoot.dtx', 'nccfoots.dtx', and 'README-ncctools.txt'.

INSTALLATION of 'ednotes':

For enabling yourself to make use of all the options that 'ednotes' provides, download

edcntwd0.sty ednmath0.sty ednotes.sty edtable.sty lineno.sty ltabptch.sty manyfoot.sty mfparptc.sty nccfoots.sty perpage.sty vplref.sty

from

http://www.ctan.org/tex-archive/macros/latex/contrib/ednotes

(e.g., cf. 'CTAN' in the glossary). Note that clicking on "entire directory" suffices.

Moreover, you may need

longtable.sty

from the LaTeX Tools Bundle -- you should have it already with your LaTeX distribution.

You then have to make the .sty files listed above "visible" (see the glossary below) to (La)TeX when it runs your job.

(You may find out through reading documentations that it partially depends on your intentions which .sty files actually must be there. E.g., 'ednotes.sty' works already when it is accompanied by 'lineno.sty', 'manyfoot.sty', and 'nccfoots.sty'.)

USAGE of 'ednotes':

We recommend not to load (by \usepackage) .sty files other than 'ednotes.sty' (except for "standalone uses" as explained below). They are handled through 'ednotes' package options as explained in the documentation.

Sorry, the "user guide" and documentation for 'ednotes' is, at present, scattered over the listed .sty files and over the listed CTAN folders. Here is just a guide through files and folders to increase your knowledge step by step:

- 0. Oh, recently some of these explanations have been collected in ednotes.pdf -- .txt input with .pdf output.
- An overview of 'ednotes' has appeared in TUGboat vol. 24. no. 2; the above 'ednotes' directory of CTAN contains an updated .pdf version 'ednotugb.pdf' of it. It demonstrates through some examples what output certain commands produce. It also compares 'ednotes' with two other (La)TeX packages for critical edition typesetting.
- 2. Next (or even first) we recommend reading the explanations at the beginning of 'ednotes.sty'.

- 3. You may find references to .sty files from the 'ednotes' and the 'lineno' folder for reading about additional details of usage.
- 4. 'lineno.sty' provides commands and options that are very useful to know for creating critical editions by 'ednotes'. You can read about these commands and options in 'lineno.sty'. Moreover, the explanations from 'lineno.sty' can be printed through 'lineno.tex' or 'lineno.pdf' obtainable from the above 'ednotes' directory. You find there as well an attempt at a user's guide for 'lineno' -- 'ulineno.tex' and 'ulineno.pdf'. The latter is not quite up to date, but it may be helpful though. -- When you use 'ednotes', don't believe what the 'lineno' documentation tells about, e.g.,

\usepackage[edtable]{lineno}

(such statements address usage of 'lineno' without 'ednotes'). Many package options of 'ednotes.sty' are just passed to 'lineno.sty', so the 'lineno' documentation is 'ednotes' documentation in this respect.

5. 'manyfoot' is another essential module for making 'ednotes' work, though you may hardly need to know about it, 'ednotes' is a kind of user interface for 'manyfoot'. However, you may inform yourself about offers of 'manyfoot' for certain fine points of critical edition typesetting through 'manyfoot.dtx' or 'manyfoot.pdf' -- which you find in

http://www.ctan.org/tex-archive/macros/latex/contrib/ncctools

(e.g., cf. 'CTAN' in the glossary). There are 'nccfoots.dtx' and 'nccfoots.pdf' as well. Indeed you may find functions of 'manyfoot' useful just for your commentary passages.

- 6. 'perpage.sty' is mentioned here mainly to allow use of 'manyfoot's 'perpage' option. It contains brief explanations.
- 7. 'longtable', of course, is explained in 'longtable.dtx' and various guides for LaTeX.
- We have prepared something for listing line numbers for index terms. We don't take the time to integrate it here -- please contact us (see below) if you are interested.

Standalone files:

Some of the listed .sty files which are our work may be useful without using 'ednotes':

 Whenever you use 'manyfoot', you can load 'mfparptc.sty' after 'manyfoot.sty' just to modify the behaviour of 'manyfoot' in the way that is explained in 'mfparptc.sty'.

Moreover, there is a file 'mfparxsp.sty', made for the possibility that some 'manyfoot' user has used an earlier version of 'mfparxsp.sty' which has become obsolete.

2. For extending lineno.sty by packages from here, see

http://www.ctan.org/tex-archive/macros/latex/contrib/lineno

(e.g., cf. 'CTAN' in the glossary).

- 3. 'ltabptch.sty', a patch for 'longtable', can be used whenever 'longtable' is used.
- 4. An additional file 'lblchng1.sty' deals with page break oscillations, by code as well as by explanations and discussion. It can be used entirely independently from any of the packages mentioned before.

Contact us:

We would be happy about your suggestions and (in a way) about your bug reports. Since documentation is so poor at present, please feel free to ask us for help if needed. Please contact us via

http://www.contact-ednotes.sty.de.vu

(Note: in TeX terms, the names in the file heading are 'L\"uck' and 'G\"ottingen.)

Newsletter:

E.g., you may ask us to take your e-mail address into a mailing list for reporting 'ednotes' changes.

Lucky typesetting!

GLOSSARY:

```
* 'CTAN'
abbreviates 'Comprehensive TeX Archive Network', cf., e.g.,
```

http://www.ctan.org

and read about "mirrors" there. You will understand that you may replace 'www.ctan.org/tex-archive' by 'www.dante.de/CTAN' (e.g.) in the above-mentioned URL. (But dante doesn't offer the "entire directory" function.)

* visible to (La)TeX

-- see the file 'visible.txt' in the above 'ednotes' directory. [END of README.txt]_____

1.2 CHANGES.txt

CHANGES for ednotes.sty v1.23 2006/01/16:

- Now works with \includeonly, which may be helpful with editing a work consisting of "books" ("libri") or a collection of rather large single works.
- 2. The mechanism for identifying a word in a lemma when it occurs multiply in a line (option 'countoccurrences') didn't work when the first \countword appeared in a lemma tag -- fixed.
- Additional screen (.log) messages concerning not-yetworking (properly) (line/place number) references.
- 4. Concerning oscillating page breaks (also certain effects of \marginpar on footnotes), there is a variant \warningpagebreak of \pagebreak, reminding you to check whether your manual page breaks are still appropriate when preceding page breaks have changed.
- 5. I have changed the algorithm of displaying page numbers when a lemma crosses a page break. The difference anyway

should show up only when due to some LaTeX bug a footnote doesn't start on the page where the lemma starts to which it refers. (In this case the page number of the lemma end is displayed in any case. This aims at a future feature of referring to edited passages from comments.)

CHANGES for ednotes.sty v1.22 2006/01/21:

- The ellipsis mechanism for "long" lemmas works with nested lemmas (or with different kinds of remarks to the same lemma).
- 2. Hyphenation of lemma word is enabled.
- 3. The lemma may be part of a heading sent to the table of contents. New commands \RobustTestOpt and \NewEdnotesCommand deal with user-defined commands with optional arguments for notes whose lemmas appear in headings sent to the table of contents (without the notes).

CHANGES for UNDERLYING lineno.sty v4.41 2005/11/02:

- 1. Loadable after amsmath.
- 2. Removed some nonsense from documentation.

CHANGES for UNDERLYING lineno.sty v4.4 2005/10/27: [failed to be uploaded to CTAN]:

- Proper effective line depth at end of paragraphs. The spacing bug was quite obvious in two-column mode when a paragraph end was at a column bottom.
- 2. Another bug concerning two-column mode that had been introduced in v4.22 has been removed again.
- Support for \addvspace introduced more and more bugs in versions of v4.32 and v4.33. The reasons seem to be clear now, v4.4 should be stable, and the series of bug reports seems to have stopped.

- CHANGES for UNDERLYING lineno.sty v4.32 2005/10/17: (see lineno.pdf ...)
- Support for \addvspace
 (a math display or a list meets a heading -- or the like).
- 2. Clearly explained former option 'displaymath' and its change to a default.

CHANGES for ednotes.sty v1.2 and UNDERLYing lineno.sty v4.31 2005/10/01:

- ednotes.sty offers \PrecedeLevelWith for visually identifying apparatuses (think of pages where only one of them appears) or for controlling the shape of one or another apparatus paragraph (maybe depending on apparatus). (Requires manyfoot.sty v1.9!)
- 3. To prevent lemma code from working in the apparatus ('fol...', e.g.), ednotes.sty now offers \notinnote (replacing \notthislemma, now without 'undefined c...').
- 4. Improved lineno.sty's explanation of \firstlinenumber and package options.
- 5. Supplied some hash mark doublings in advice for customizing ednotes.sty .

CHANGES for UNDERLYing lineno.sty v4.3 2005/04/28--05/16:

- Re-implemented modulo mode -- disabling certain users' tricks see lineno.pdf sec. 5.5, also for a still supported substituting trick.
- 2. Option 'displaymath' (proper numbering at paragraphs containing math displays) becomes default.
- 3. Compatibility with hyperref now indeed (at least much more).

- 4. Documentation tidied up.
- Restored "global" version of numbering lines of a \parbox or minipage or ..., explained in documentation (lineno.pdf/dvi subsec. 7.2).
- 6. Additional internal improvements that perhaps hardly are observable (no more spurious linenumbers in math displays from vertical mode; \flushbuttom with 'twocolomnuns' and 'switch' etc.; some compatibity with packages that use \holdinginserts; \linelabel in headings etc.).

CHANGES for UNDERLYing lineno.sty v4.2 2005/04/26:

- 1. Re-enabled package option 'displaymath' (needed rearrangement after lineno.pdf sec. 5).
- New package option 'addpageno' for adding page numbers to line number references -- see sec. 6.1 of lineno.pdf.
- Improved support for \includeonly (and improved lineno.pdf sec. 5.3, p. 27).
- 4. Please note problems with \marginpar, figures, and tables which tameflts.sty deals with -- see ...:
- 5. Improved compatibility with other packages that change \output (tameflts.sty, e.g., for saving footnotes against \marginpar and floats), added advice on this matter -- see lineno.pdf sec. 2.3, pp. 7, 14f.

CHANGE OF EDNOTES BUNDLE 2005/04/09

Due to my (ul) misconception of 'nccfoots', unwanted footnote marks could occur. This is corrected with v1.12 . (Earlier today a package ennccptc.sty appeared, please remove it in case you have used it.)

CHANGES OF EDNOTES BUNDLE 2005/03/08

This update is mainly concerned with 1. the number of possible notes, 2. page break oscillations,

- 3. 'array' and similar mathematical environments, and with
- 4. a hopefully helpful error message; also with
- 5. amendments of documentation.

Namely:

1. Reimplementation of 'ednotes.sty' with version v1.1, vital for huge editions ("commercial"/"professional" applications): "compression" of note placement data, a single control string instead of three per note stores them. So you can now make three times as many notes as before, regarding the memory compartment for multiletter control strings. -- One user exhausted this by 10.000 notes on 450 pages (recent MiKTeX installation). Now he can go on ... (These note placement data are needed for references in the apparatus.)

WARNINGs:

(a) If you have customized or used \repeatref and/or \linewithpage, please read what the section on 'customizing' of 'ednotes.sty' tells concerning v1.1 (changes were required).

(b) In case you really use option 'countoccurrences' of 'ednotes.sty', edcntwd0.sty needs to be updated to v0.31.

2. A checking function has been added for finding startings of page break oscillations. These typically must be fixed for getting correct references to lemmas in the apparatus.

WARNING: You may recently have noticed 'lblchng1.sty' and what it tells about page break oscillations. With ednotes.sty v1.1, 'lblchng1.sty' v0.2 is no longer quite correct, please notice v0.32 (if the problem interests or tortures you).

- 3. The 'edtable' option of 'ednotes.sty' now supports math environments like 'array'. This requires updating edtable.sty to v1.3. (The claim in previous versions of 'edtable.sty' on this support simply was wrong, sorry.) For how to make use of this support, we urge you to read the usage instructions in 'edtable.sty' (v1.3). These have been extended very much, structured more clearly, and supplied with examples.
- 4. \linelabel now complains when appearing outside line numbering mode. This may be useful when you have forgotten to switch into line numbering mode and wonder why all notes

refer to line 1. If you don't know about \linelabel: Each note uses it internally, therefore you may profit.

5. The subsection on 'edtable' in 'lineno.sty/tex/pdf' and its final list of user commands in lineno.sty/tex/pdf were not quite correct or complete -- corrected or somewhat improved. 'ednotugb.pdf', which derives from a TUGboat article on the subject, now briefly refers to the memory problem of 1. above and amends the description of 'edtable'.

CHANGES OF EDNOTES BUNDLE 2005/01/20

1. Thanks to Alexander Rozhenko, you now can download most recent "unpacked" versions of manyfoot.sty and nccfoots.sty -- no more generating procedure.

2. The README.txt addresses indexing with line numbers.

3. The original TUGboat article 'tb77lueck.pdf' has been corrected and updated -- resulting in 'ednotugb.pdf'.

4. 'ednotes.sty' and 'ednotugb.pdf' refer to the 'ellipsis' package concerning spacing with the ellipsis dots.

CHANGES OF EDNOTES BUNDLE 2004/10/26

You may find a file README4U.txt that is more detailed than the present one and that just addresses changes from 2004/08/23 to 2004/10/19, especially for earlier users.]

CHANGES OF EDNOTES BUNDLE 2004/10/19

1. Module files are now handled by new ednotes.sty options 'edtable', 'longtable', 'nolongtablepatch', 'edmacpara', 'countoccurrences', and 'mathnotes' (+ 'perpage', new module) --so they are no longer loaded by explicit \usepackage.

-> UPDATE RECOMMENDATION:

To support these package options, the following packages were changed, at least concerning instructions.

edcntwd0.sty

```
ednotes.sty
ednmath0.sty
edtable.sty
lineno.sty
mfparptc.sty
mfparxsp.sty
```

So we recommend that you download these from

[CTAN]/macros/latex/contrib/ednotes

and overwrite the earlier versions with them! -- And be sure to have manyfoot.sty v1.7! (See README.txt for how to obtain it.)

(mfparxsp.sty may even be deleted, see inside or previous change described below. Using new option 'perpage', moreover, may require downloading and installing perpage.sty)

lineno.sty climbs to version 4.1, ednotes.sty to 1.0.

2. lineno.tex/pdf has been updated accordingly. A new interim version of a TUGboat article (tb77lueck.pdf, same ednotes directory) describes the bundle as it appears now. The final version of the article will be exhibited at the TUGboat web site.

CHANGES OF EDNOTES BUNDLE 2004/09/21

1. With lineno.sty version 4.00 (CTAN folder /macros/latex/contrib/lineno), linenox0.sty, linenox1.sty, and lnopatch.sty are obsolete. Don't load them any more! lineno.sty should produce a reminder for changing your related \usepackage commands. For a slight change of \firstlinenumber, see lineno.sty/tex/pdf.

2. With manyfoot.sty version 1.7 (CTAN folder /macros/latex/contrib/ncctools), mfparxsp.sty is obsolete. Please replace \MFparaxbuffer by \ExtraParaSkip and don't load mfparxsp.sty any more. For your earlier documents, we offer a new version of mfparxsp.sty which just reminds you of the change and ("for this time") redirects your \MFparaxbuffer to Alex Rozhenko's \ExtraParaSkip. You may delete it right now--or when you are sure that you won't anymore compile a .tex containing \MFparaxbuffer and \usepackage{mfparaxbuffer}.

1.3 Advice for installation: visible.txt

These are some very down-to-earth advices for real T_FX-newbies.

VISIBLE -- Advice for placing new LaTeX files.

Author: Uwe L"uck, http://www.contact-ednotes.sty.de.vu, 2004/10/18; aided by Karl Berry.

--derived from a TUGboat (vol. 24) article on Ednotes.

* The problem: *

E.g., a user downloads a LaTeX file from CTAN. Or: often there is a pair of a .dtx and an .ins file for producing a .sty file. ("Run LaTeX on the .ins file ..." This may be difficult enough, but we assume now that the user manages this.) Typically the user is told to put the (.sty) file to a folder "where LaTeX can find it", or "visible to TeX". Indeed, the user cannot use the file otherwise. However, some users have had no idea how to arrange things so that (La)TeX finds the file.

Unfortunately, the procedure for this is somewhat non-trivial indeed. It depends very much on the user's LaTeX installation, so it is difficult to indicate a procedure that helps everyone.

* Principles for solutions: *

Technically, the searching agent is the TeX program, not LaTeX --we choose our wordings accordingly here. LaTeX is rather a kind of input ("format") to the TeX program. (If this doesn't make sense to you, don't worry about it.)

I think of three kinds of approaches:

1. Put the file into the folder where the files you are editing are (call them "job files" here). This is easy; but if the user wants to use the file for another project pursued in a different folder, the approach would require another copy of the file--or a link! Therefore, it has been common to place macro (.sty) or 1 THE .TXT FILES

similar files in folders that TeX searches independent of the folder containing the job files.

2. Put the file into a folder that TeX has searched so far.

3. Put the file anywhere (or into an extra folder newly created with care)--and extend the set of folders that TeX searches accordingly. The TeX installation ("shell") usually offers a facility for this--which unfortunately is not always known to the user.

* Advices from TeX Users Groups: *

I recommend to study the following web pages. The first two of them deal with installation more generally and give some hints that I consider worth to remind of.

http://tug.ctan.org/installationadvice

http://www.tex.ac.uk/cgi-bin/texfaq2html?label=instpackages

These prefer approach 3 of the above, especially the TDS standard of arranging folders, see

http://www.tex.ac.uk/cgi-bin/texfaq2html?label=tds

The narrower subject matter is concerned at

http://{www.tex.ac.uk/cgi-bin/texfaq2html?label=wherefiles

* Easy tricks that I prefer: *

I must confess that I have never worked with the shells that are chosen as examples on these web pages. Moreover, some Windows users may find the examples little helpful. So my personal hints use approach 2 of the above.

o Typically, the file is from CTAN folder /tex-archive/macros/latex/contrib/, and you find a folder .../latex/contrib/ in the installation at your workplace. Then the latter should be a good guess for placing the new file.

o You may find a folder .../texinput/ (or TeXinput!?) which

should be another good guess.

o Search your installation for files with the same file name extension (usually '.sty'), try their folder.

(Updates are a special case of the last idea, of course.)

Ok, if all this doesn't help, you may ask at comp.text.tex or your local TeX guru.

Good luck!

2 The main file: ednotes.sty

```
%% Macro package 'ednotes.sty' for LaTeX2e,
%% copyright (C) 2002--2005 Uwe L\"uck & Christian Tapp (direction)
                 2006
%%
                            Uwe L\"uck
%% http://www.contact-ednotes.sty.de.vu
\% --author-maintained, for critical editions
%% (varying J. Lavagnino's and D. Wujastyk's EDMAC).
%%
\def\fileversion{1.23} \def\filedate{2006/06/16} %% TODO
%
\% This file can be redistributed and/or modified under
%% the terms of the LaTeX Project Public License; either
%% version 1.3a of the License, or any later version.
%% The latest version of this license is in
%%
%%
      http://www.latex-project.org/lppl.txt
%%
%% We did our best to help you, but there is NO WARRANTY.
%%
%% Please report bugs, problems, and suggestions via
%%
%%
   http://www.contact-ednotes.sty.de.vu
%
%% * USAGE: *
%
% *Overview:*
% This package provides facilities for notes in (critical) editions.
% '\Anote{LEMMA}{NOTE}' prints NOTE in an extra footnote apparatus,
```

```
% referring to LEMMA by its line numbers (as generated by
\% 'lineno.sty') and by repeating LEMMA in the note. By calling the
\% package with extra options, you can add \Bnote etc. and choose
\% whether notes of one apparatus appear in a single paragraph on
% each page or in separate paragraphs ('manyfoot.sty').
% appear in the note. There are further facilities to customize
% appearance of notes.
% Commands \Anotelabel{LABEL}, \donote{LABEL}{NOTE} etc. vary \Anote
% etc. in admitting overlapping lemmas.
\% ---The package is made for those who need something like EDMAC
% but who want to employ LaTeX2e at the same time.
% More detailed description below is divided into
\% 'packages required', 'user commands', 'package options',
% 'customizing', 'Note on EDMAC', and 'Comparison with LEDMAC'.
%
% *Note on "rival" package LEDMAC:* Peter R. Wilson has made a
% LaTeX package LEDMAC (available on CTAN) for about the same
\% purpose as the present package. See 'Note on EDMAC' and
% 'Comparison with LEDMAC' below.
%
\% *Printed presentation:* An article on 'ednotes' with user
\% instructions, examples, and comparisons with '[L]EDMAC'
% appeared in the TUGboat volume for 2003. A version of it is
% obtainable from the 'ednotes' CTAN folder ('ednotugb.pdf').
%
% *Packages required:*
% This package will not work without the following ones
% ("visible"--cf. visible.txt in CTAN ednotes folder):
% o Packages 'manyfoot.sty' and 'nccfoots.sty' by
    Alexander I. Rozhenko from the 'ncctools' bundle.
%
%
    You needn't know anything about these
    except perhaps options 'para' and 'para*'
%
    choosing footnote indentation (see 'package options' below).
%
% o Package 'lineno.sty' by Stephan I. B"ottcher.
%
    We here suppose that you know and employ some of the
%
    line numbering commands from 'lineno.sty'.
% However, please don't load these packages on your own.
% Instead of calling them with some options, put these options
% into the brackets of \usepackage[<options>]{ednotes}.
%
% *Availability:*
% o In case you have not received 'manyfoot.sty' and 'nccfoots.sty',
    you find them in the CTAN folder
%
%
       'macros/latex/contrib/ncctools/unpacked' .
%
    You find PDF documentations in
```

2 THE MAIN FILE: EDNOTES.STY

```
'macros/latex/contrib/ncctools/doc' .
%
    'lineno.sty' is in CTAN folder 'macros/latex/contrib/lineno'.
% 0
    In the same folder, there is 'lineno.pdf' for documentation.
%
%
% *Optional packages:*
\% o Some package options may need additional package files (for
    a while). They may be in the 'ednotes' or 'lineno' CTAN folder.
%
%
    The README files there will name them or tell where they are
%
                                                                     %% TODO
    named.
%
% *Other useful files:*
% Look at the README file in CTAN folder
% 'macros/latex/contrib/ednotes' for quick information on what other
% files in the folder provide.
                                                            %% TODO: indeed?
%
% *User commands:*
% *Basic:* -----
% \Anote{LEMMA}{NOTE} prints LEMMA where it occurs
% and sends NOTE into an extra footnote apparatus.
% The lines where the command occurs must be numbered
% by using commands from package 'lineno.sty'.
% In the footnote, NOTE is preceded by line numbers of LEMMA,
\% by a version of LEMMA (see below), and by some separating stuff.
% Separating stuff by default is a properly spaced right bracket
% according to \lemmafmt (see below).
% \Anote may be nested in LEMMA.
\% (Overlapping lemmas may be generated by \Anotelabel etc. as
% described below.)
\% For customizing appearance of notes, see 'package options' and
% 'customizing' (\lemmafmt and \lemmaellipsis, e.g.) below.
% For additional analogous commands \Bnote etc., see
% '"optional" user commands' below.
% *Short lemma substitute in note:* -----
\% (The following describes a comfortable extension of
% EDMAC's \lemma.)
% LEMMA argument of \Anote as above may appear as 'L1\<L2\>L3', then
\% only L1 and L3 appear in the footnote with some ellipsis symbols
% between them. By default, these are \textsymmdots according to
% \lemmaellipsis.
% (For \textsymmdots vs. ordinary \dots see 'miscellaneous' below.)
\% L2, however, may start with '<ELL>', then ELL is used instead of
\% \textsymmdots or whatever else \lemmaellipsis might call.
\% (To be sure, symbols '\<', '<', '>', '\>' work in a special way
\% in LEMMA. '>' might be used inside ELL if inside braces, e.g.,
\% '\<<{$>$}>'. <
ELL> works as an optional argument of 
\< like
% brackets usually do in LaTeX---we thought you might use '[' here
```

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```
% as a symbol to be printed in main text. Care for proper spacing in
\% both versions of the lemma by spaces touching \backslash <, \ \rangle >, and braces.
\% ---A special version of the package would be necessary for those
% having no '<', '>' on their keyboards.)
% *Overlapping lemmas:* ------
                                             _____
% \Anotelabel{LABEL}LEMMA\donote{LABEL}{NOTE}
% works just like \Anote{LEMMA}{NOTE} above. However, by using
% proper LABELs, you can indicate which of overlapping lemmas
% begins and ends where. Note that the second command is only
% \donote, not \Adonote. In LEMMA, \pause{LABEL} and \resume{LABEL}
\% act analogously to \backslash\!< and \backslash\!> above for lemma substitutes, and
% \pause{LABEL}<ELL> employs your own ELL for the ellipsis.
% LEMMA may contain \Anote and the other way round (in some way).
% However, \pause{LABEL} must not be hidden in braces etc.
% *Commands in lemma as repeated in a note:* -----
\% Some commands should work in main text, but not in the lemma
% text of the note, e.g. \label. With respect to some of them,
% 'ednotes.sty' makes an adjustment for this. Nesting of lemmas,
% e.g., is enabled this way.
% For other commands, you can hide code from a note
% by \notinnote, e.g.: \notinnote{\footnote{...}}.
% If you know about relevant (La)TeX internals, you can define
% behaviour of commands in lemmas using \addlemmaexpands, e.g.
% \addlemmaexpands{\let\footnote\@gobble}.
% (However, the latter code is bad if \footnote should occur
\% with an optional argument. Moreover, in some cases
\% \let...\notinnote may handle spaces better than
% \let...\@gobble, since \notinnote uses a variant of LaTeX's
\% ---\addlemmaexpands has only local effect inside group.)
\% \showlemma
expands displays all these extra definitions
% which would apply in the lemma ahead.
% (A lot of commands might be changed here, we chose only few.
% Cf. EDMAC's \no@expands; EDMAC, however, deals with the
% problem in a different way and needs more changes
% than we do.)
% *"Optional" user commands:* -----
% Each of \Bnote, \Bnotelabel, \Cnote, \Cnotelabel, \Dnote,
% \Dnotelabel, \Enote, and \Enotelabel is defined by calling
% respective package options 'Bpara' or 'Bplain' etc., see
% 'package options' below. They work like \Anote and \Anotelabel,
% respectively, and nesting and overlapping of their lemmas works
\% as for \Anote and \Anotelabel. \donote works with each of
\% \Anotelabel, \Bnotelabel etc.---care for different labels.
\% \nopunct may help you in case of certain changes of \notefmt, see
% 'customizing' below (not active outside notes).
```

```
% *Miscellaneous:* ------
% As a byproduct, we provide \textsymmdots as an alternative to
% \dots or (more specific) to LaTeX2e's \textellipsis. We feel that,
\% in the middle of the short version of a lemma, the text dropped
% should be replaced by symmetrically spaced dots, i.e., in
\% L1 \ldots L3, the space between L1 and the dots should be the same
\% as the space between the dots and L3. \textellipsis obstructs this
% by calling a space after the final dot which is not balanced by a
% space before the first dot. \textsymmdots just closes without that
% final space---that's all the difference to \textellipsis. (Cf.
% TeXbook p. 73 where $\ldots$ is recommended for the same purpose.)
% Of course, it is now your job to care for proper spacing on left
% and right, e.g., use it this \textsymmdots\ way.
\% Note that with a comma following \dots is quite right while
% '\textsymmdots,' is bad. %% TODO: delimiters!? e.g. [...]
\% -- Now (since Sep 2004) indeed there is the 'ellipsis' package
% by Peter J. Heslin on CTAN in the /macros/latex/contrib directory!
% It deals with this problem much more thoroughly.
% *Wrong placement:* ------
% We do not provide helpful error messages for badly placed \langle,
\% \pause, and the like in this version. You will just get
% 'undefined' errors, complaints about \mskip, or 'runaway
% argument' errors.---Doubling labels with \Anotelabel etc. may
% work well if you know what you are doing.
%
% *Package options:*
% 1.) Options 'left', 'right', 'switch', 'switch*', 'columnwise',
% 'pagewise', 'running', 'modulo', 'mathlines', 'displaymath',
% 'edtable' (edit tabular environments), 'longtable' (edit
\% 'longtable' environments), 'nolongtable
patch' are passed to
% package 'lineno'; cf. the latter package for information
% (not yet tested all).
                                                                      %% TODO
% 'left' and 'running' act by default.
% Option 'mathnotes' calls 'lineno.sty' package option 'mathrefs',
% see 'lineno' documentation as well.
\% 2.) Option 'Aplain' arranges all notes for one page generated
\% by \Anote and \Anotelabel in a single footnote paragraph.
% Option 'Bplain' generates an apparatus using one footnote
% paragraph for each note, with commands \Bnote, and \Bnotelabel.
% Option 'Bpara' does the same but arranging all notes
% for one page in a single footnote paragraph.
% Analogues apply to 'Cplain', 'Cpara', 'Dplain', 'Dpara',
\% 'Eplain', and 'Epara'. (There is 'Apara' as well---default.)
% Option 'para*' suppresses indentation of footnote paragraphs
% coming from options like 'Apara' (cf. package 'manyfoot').
%% TODO: para indent correct?
```

```
% 3.) Option 'edmacpara' makes up for problems with 'para'
\% footnotes that are discussed in 'EDMAC.doc' section
% 'Paragraphed footnotes'. See our package 'mfparptc.sty' for
% details (for the time being).
\% 4.) Option 'perpage' is just passed to 'manyfoot.sty'.
\% 5.) Option 'countoccurrences' provides a command \countword
\% for a half-way solution of the problem of lemma words that
% occur more than once in a line. See our package 'edcntwd0.sty'.
% (With 'ednotes.sty' v1.1 you need 'edcntwd0.sty' v0.31.)
%
% *Customizing:* (important change v1.1!)
% Appearance of notes is directed by macros \extrafootnoterule,
% \linesfmt etc. occurring in the following lines
% (each starting with \renewcommand).
% For customizing, copy the respective lines to your own file,
% remove left hand comment mark, and change the definition in the
% right hand pair of braces. (The definition you find there is our
% original one; we hope you understand from these definitions how
% they work in general and what the arguments are. E.g., \linesfmt
% applies to printing of line numbers and, originally, renders them
% bold-faced, followed by \enspace.)
% This controls identical behaviour in *every apparatus*.
% For changing appearance of a single apparatus without changing
% the remaining, see below.---Note: With v1.1, \ref has been
\% removed from the definition of \repeatref, and a \ref in any
% customization of it will not work any longer. As well, earlier
% \linewithpage used \ref and \pageref, and this will not work any
% longer. \linewithpage has been replaced by \pageandline.
% \renewcommand{\extrafootnoterule}{\footnoterule}
% ---This is a 'manyfoot.sty' command for separating each extra
% apparatus from the other ones.---
% \renewcommand*{\sameline}[1]{\linesfmt{#1}}
% \renewcommand*{\differentlines}[2]{\linesfmt{#1--#2}}
% %% TODO: \linesfmt into \@EN@note!?
% \renewcommand*{\linesfmt}[1]{\textbf{#1}\enspace}
% \renewcommand*{\pageandline}[2]{#1.#2} % #1 page, #2 line.
% \renewcommand{\lemmafmt}[1]{#1\thinspace]\enskip}
% \renewcommand*{\repeatref}[1]{#1}
% ---E.g., for replacing repeated line numbers by non-bold slash:
% % \renewcommand*{\repeatref}[1]{\textnormal{/}}
% \renewcommand{\lemmaellipsis}{\textsymmdots}
% \renewcommand{\notefmt}[1]{#1}
% Note: \notefmt, originally, takes your note just as it is.
% By redefinition
      \renewcommand*{\notefmt}[1]{#1.}
%
```

% you might add an automatic closing full stop to each note.

```
% In a single note of the same apparatus, however, you might then
\% want to close by a question mark (e.g.) instead of the fullstop.
% For this purpose, close that note by '?\nopunct'. \nopunct then
\% gobbles the full stop waiting ahead. (So much as to <code>\notefmt.)</code>
% ---Customizing a *single apparatus*:
\% For changing appearance of the apparatus feeded by \Anote
% without changing remaining apparatuses (feeded by \Bnote etc.),
% take the following lines (the one with a single right brace
% being the last one) to your own file and remove the left hand
\% column of comment marks. Remove then left hand comment marks
\% of single lines containing commands whose behaviour in the
% apparatus you want to change. Change their definitions in
% right hand braces. (It is quite important never to remove
% right hand comment marks, as you may know!)
% \newcommand{\Anotefmt}{%
% % \renewcommand*{\sameline}[1]{\linesfmt{##1}}%
% % \renewcommand*{\differentlines}[2]{\linesfmt{##1\textendash##2}}%
% % \renewcommand*{\linesfmt}[1]{\textbf{##1}\enspace}%
% % \renewcommand*{\pageandline}[2]{##1.##2}% ##1 page, ##2 line.
% % \renewcommand*{\repeatref}[1]{##1}% E.g., ...
% % % \renewcommand*{\repeatref}[1]{\textnormal{/}}% ... instead.
% % \renewcommand{\lemmafmt}[1]{##1\thinspace]\enskip}%
% % \renewcommand{\lemmaellipsis}{\textsymmdots}%
% % \renewcommand{\notefmt}[1]{##1}%
%}
\% For changing the \Bnote apparatus, do the same and change
% \Anotefmt into \Bnotefmt. Analogues apply to \Cnote etc.
\% ---You can, moreover, add code in the definition of \Anotefmt etc.
\% for additional settings to be active throughout the note
% (including line numbers and lemma reference),
% e.g., for selection of a certain font type.
% ---- 'manyfoot' v1.9 offers a command \SetFootnoteHook for
% controlling the appearance of the whole paragraph of an apparatus
% in 'para' or 'para*' style---please see the 'manyfoot'
% documentation for examples. 'ednotes' v1.2 makes use of this
% through a new command \PrecedeLevelWith{X}{CODE}. E.g.,
% \PrecedeLevelWith{A}{\textit{Var.:}} and
% \PrecedeLevelWith{B}{\textit{Sim.:}} (once and for all)
% may distinguish the variant from the similia apparatus.
% CODE may also be used to contol the paragraph indent of
% the apparatus (so the paragraphs may have different
% indents) or to shape the paragraph more generally
% (according to TeXbook chapter 14, especially pp. 101f.).
% To give a general rule, \PrecedeLevelWith{X}{CODE} has
% the same effect as \SetFootnoteHook{CODE}
```

% \DeclareNewFootnote[para]{X} would have with 'manyfoot'.

```
% Without the 'para' option or with the 'plain' style of
% notes, CODE just is executed starting each note (preceding
\% even the line number and the lemma).
% ---*Special characters:* As is noted in EDMAC's documentation,
% the en-dash for line number printing or the separating right
\% square bracket might be coded unusually in some special font
% which has been chosen and so may escape being printed. Should you
% encounter this problem indeed, you can use the previous for remedy
% (e.g., change \lemmafmt). (EDMAC's solution is use of
\% \endashchar etc. for taking these characters from the \rm font.)
\% ---You may *redefine* most of the commands provided by the
% package. *Exceptions* are \donote, \<, and \>. So you might
% put \newcommand{\variant}{\Anote} or even (for TeXperts)
% \let\variant\Anote into your file (after 'ednotes.sty' has been
\% read). No problem about nesting will arise (as did with EDMAC).
% EDMAC's suggestion to make <...> a shorthand, however, would
% conflict with our lemma mechanism. (Coexistence would be possible
% by suitable use of braces and repeating present definitions
% after change of <'s catcode.)
%
% *Your shorthands:*
\% \Anote etc. prevent editorial notes from appearing in the
% table of contents when such commands (\Anote etc., i.e.)
% appear in a heading (e.g.). But when you define a shorthand macro
\% (using \newcommand) that has an optional parameter and \Anote
\% or so in the defining code, something more is needed to have
\% the lemma, without the note, in the table of contents (or ...)
% E.g., you might \newcommand*{\variant}[1][A]{\Anote{#2}{#1}}
% so \variant{res} works like \Anote{res}{A} and \variant[B]{res}
% works like \Anote{res}{B}. ednotes v1.22 offers two solutions
% to this problem:
% 1. You can precede your shorthand with \RobustTestOpt whenever it
     appears in a "moving" argument like a chapter heading --
%
                                 as well as
%
     \RobustTestOpt\variant{res}
     \RobustTestOpt\variant[B]{res} , e.g.
%
% 2. You can save yourself from caring for \RobustTestOpt by using
%
     \NewEdnotesCommand instead of \newcommand --
     \NewEdnotesCommand*{\variant}[2][A]{\Anote{#2}{#1}}
%
% These facilities work only when the shorthand has an *optional*
% parameter and at least one *mandatory* parameter -- well, if it
% doesn't have, you can use \RobustTestOpt if you put a pair of
% braces after the shorthand macro name, this would work as well.
%
% *Known problems:*
% With run-in-paragraph footnotes (options 'para' or 'para*'), notes
% may end too deep on the page or (with 'longtable.sty') even overlap
```

```
% with main text. 'ednotes.sty' shares this "feature" with EDMAC and
\% LEDMAC. Output gets worse as the number of paragraphed-footnote
% series increases. 'manyfoot.sty' version 1.7 (!) accounts for this
% by a command \ExtraParaSkip (as an interim solution). This command
% reserves additional vertical space for the notes (so there is less
\% space for main text---at the expense of too large empty space on
% some pages). After 'ednotes.sty' (or 'manyfoot.sty') has been
% loaded (i.e., below \usepackage...), type '\ExtraParaSkip{<skip>}'
% (still in the preamble) where <skip> may be any glue parameter.
% <skip> may be a multiple of any absolute space unit (e.g., '4pt' or
\% '2mm'), it may even be a multiple of a space unit depending on the
% font size of notes (\footnotesize)---like 'em', 'ex', or
\% (\normalbaselineskip' (e.g., '.5\normalbaselineskip'). (However,
% stretch and shrink of, e.g., \normalbaselineskip are ignored.)
% Experiment with choices for <skip> such that notes neither overlap
\% with main text nor hang too deep on the page. The most safe choice
% is '\ExtraParaSkip{.5\normalbaselineskip}'.
% ---Manyfoot.sty did something similar before; i.e., it reserved
% .5\normalbaselineskip (with respect to \footnotesize) for the notes.
% This may not be needed on some pages (on such pages there may be
% too much empty vertical space).
\% ---For the best solution you should, when your work is ready and
% only needs optimization of formatting, type
% \ExtraParaSkip{-.5\normalbaselineskip}
\% (to remove the space that Manyfoot.sty reserves) and then insert
% \pagebreak's in your main text to avoid overful pages.
\% ---We formerly offered a command \MFparaxbuffer in file
\% 'mfparxsp.sty' instead. This could be used once only in the
% document preamble. \ExtraParaSkip does not have this limitation.
% This allows, e.g., first setting a "default" value and changing it
% under certain conditions, e.g.:
% \ExtraParaSkip{<skip1>} ... \if... \ExtraParaSkip{<skip2>} ... \fi
\% (Thanks to Florian Kragl who presented a similar first remedy for
% the problem.)
%
% *The problem of oscillating page breaks:*
\% In typesetting critical editions, there is an increased danger
% of page break oscillations, causing wrong numberings,
% placements, and cross-references. Our package 'lblchng1.sty'
% (same CTAN directory) offers help with this. However,
% 'ednotes.sty' v1.1 takes over most of the job from
\% 'lblchng1.sty'. We still recommend to *read the file*
% 'lblchng1.sty' on how to use the messages from 'lblchng1.sty'
\% and 'ednotes.sty' on page number changes (be sure that it is
\% v0.32 or higher). The warnings from ednotes.sty may suffice.
\% Just look at the final messages on screen or in .log.
```

```
% -- You can overcome such problems using \pagebreak
% (Standard LaTeX) or \warningpagebreak (from present package)
% -- force the earlier page break!
% \warningpagebreak works like Standard LaTeX \pagebreak, it just
% adds a reminder for the case that such a manual page break
% may become bad after revisions of your entire work.
%
% *A problem with 'hyperref.sty':*
% To guarantee compatibility with 'hyperref', updating lineno.sty
% to v4.3 is recommended.
%
% *Note on EDMAC:*
% 'edmac.doc' is a macro package by John Lavagnino and
% Dominik Wujastyk made for critical editions to be used in presence
\% of Plain TeX only. We refer to the macros and documentation of
% this package by 'EDMAC'. There is an enhancement 'edmacfss.sty'
% for additionally employing the New Font Selection Scheme (NFSS)
% from LaTeX2e. With 'edmacfss.sty', some LaTeX commands work by
% accident. However, it replaces LaTeX's \end by PlainTeX's \end,
% so LaTeX environments don't work. Moreover,
% EDMAC defines its own output routine in place of LaTeX's,
% so LaTeX's page assembly and related commands (\marginpar ...)
\% are disabled. EDMAC still provides facilities
% (columnar footnotes, endnotes, sublines) which are neither
% implemented here nor in packages 'manyfoot' and 'lineno'
\% on which the present one is based. However, there are authors
% who have had a desire to stay in LaTeX's paradise and to enjoy
%% TODO: Hilbert translation
\% EDMAC features at the same time. (E.g., edition may be only part
% of your document, or you want to use many LaTeX packages.)
% Fortunately, Christian was led to packages 'manyfoot' and 'lineno'
% which implement the most desirable of EDMAC's facilities for use
\% with LaTeX. A version of EDMAC's \text and assembly of notes
% remained to be done. We even go beyond EDMAC concerning lemma
% substitutes and overlapping lemmas.
\% ---For explanation of present solutions, we sometimes refer to
\% EDMAC where similar problems are dealt with in similar but
% sometimes essentially differing ways. Therefore, knowledge of
% EDMAC may foster your understanding commands and remarks
% presented here, but it is not required.
% ---Dominik maintains a homepage for EDMAC and related software:
% http://www.homepages.ucl.ac.uk/~ucgadkw/edmac/
%
% *Comparison with LEDMAC:*
% (Cf. http://ednotes.sty.de.vu and 'ednotugb.pdf'.)
```

% Peter Wilson's LEDMAC ports EDMAC to LaTeX, i.e., you get

% almost exactly EDMAC *functionality* and same *user interface* % as in good old EDMAC (some slight changes of command names % were necessary). Thus it offers a very easy switch to LaTeX % for EDMAC addicts and is superior in functionality to 'ednotes.sty' % where EDMAC is (columnar footnotes, endnotes, sublines, etc.? % --first two might change over the years). 'ednotes.sty' might % be favoured if you really need overlapping lemmas, and we tried % to offer further user-friendly features as spelled out above. % --Some users want to edit tables. For EDMAC there is the % TABMAC package providing special commands for this. A TABMAC % port is part of LEDMAC. This is nice for EDMAC/TABMAC addicts. % Our additional package 'edtable.sty' allows for lemmas in (some) % LaTeX tabular environments and numbers their rows as if they were % lines. This is nice for those who only know the LaTeX tabular % environments. However, TABMAC and its mirror in LEDMAC offer % facilities which are not provided by LaTeX/ednotes/edtable. % --LEDMAC *implementation* is very close to EDMAC's as well, % differing very much from 'ednotes.sty', especially concerning % use of auxiliary files. However, this seems to have no practical % effects. On very old machines, EDMAC/LEDMAC might be slower, while % Ednotes might cause memory overflow with small TeX versions and % many notes. Peter Wilson [3/3 2004] estimates that rather % EDMAC's/LEDMAC's typesetting everything twice might be a % disadvantage in comparison with 'ednotes.sty'. % ---In 2004 LEDMAC has been enhanced considerably beyond the % functionality of EDMAC and 'ednotes.sty'. % It now also includes indexing by line as well as by page, % a port of Wayne Sullivan's EDSTANZA, new options for line % numbering, a minipage-like environment (which may break across % pages) such that remarks are printed immediately after some piece % of edited text (a letter, e.g.), and "sidenotes". % Finally an extension package 'ledpar' adds parallel typsetting. % --At least for some time LEDMAC will be more user-friendly % in providing all functions in a single file with *one* % *printable* documentation file. %% TODO % On the other hand, packages we build on are still being enhanced % in functionality by their authors. % % %% Acknowledgements % % Christian saved me from most of the work by having found % packages 'lineno.sty' by Stephan I. B"ottcher and 'manyfoot.sty' % by Alexander I. Rozhenko which do the output stuff. Thanks to

% Christian, Stephan and Alex! I appreciate their work (especially % Stephan's approach to adding and remembering line numbers), and I

```
% admire John Lavagnino's and Dominik Wujastyk's work on EDMAC.
% I am also grateful for their encouragement. U.L.
%
\% Moreover I am much indebted to Stephan B"ottcher and Alex
% Rozhenko for their co-operation in reducing the number of
% package files that 'ednotes.sty' needs. (This was 2004,
% version v1.0.)
%
% For pointing out errors and problems, we are grateful to test
% users Robert Alessi, Sergei Mariev---see version history.
% Florian Kragl contributed to now 'manyfoot.sty's \ExtraParaSkip
% as described above. v1.1 is due to problems that Roy Flechner
% reported. v1.12 is due to Hillel Chayim Yisraeli's discovery
% of spurious footnote marks.
%
\NeedsTeXFormat{LaTeX2e}[1994/12/01]
% 1994/12/01: \newcommand* etc.
                                      %% TODO: more recent needed?
\ProvidesPackage{ednotes}
                [\filedate\space v\fileversion,
                 for critical editions]
                 %%%(ul)]%%%by Uwe L\string\"uck.]
%
%% Our warnings:
\def\@EN@warning{\PackageWarning{ednotes}}
%
%% Package Options:
%
% Own options
% (must appear before 'para*' so this can override 'para'):
%% TODO: true!?
%% TODO: Something to make use of Alex' \SplitNote!?
\let\if@EN@Apara\iftrue % Makes option 'Apara' default.
\DeclareOption{Apara}{% Redundant, just in case ...
  \@EN@warning{Package Option 'Apara' is redundant}
%
    \PassOptionsToPackage{para}{manyfoot}%
%
   \AtEndOfPackage{%
%
     \newfootnote[para]{A}%
%
      \newcommand{\Anote}{\@EN@note A}%
%
      \newcommand{\Anotelabel}{\@EN@notelabel A}%
% }}
}
\DeclareOption{Aplain}{%
  \let\if@EN@Apara\iffalse
   \AtEndOfPackage{%
%
%
     \newfootnote{A}%
%
      \newcommand{\Anote}{\@EN@note A}%
```

```
\newcommand{\Anotelabel}{\@EN@notelabel A}%
%
% }}
}
\DeclareOption{Bpara}{%
  \PassOptionsToPackage{para}{manyfoot}%
  \AtEndOfPackage{%
    \SetFootnoteHook{\@EN@MF@hook@B}%
    \let\@EN@MF@hook@B\@empty
    \newfootnote[para]{B}%
    \newcommand{\Bnote}{\@EN@note B}%
    \newcommand{\Bnotelabel}{\@EN@notelabel B}%
}}
\DeclareOption{Bplain}{%
  \AtEndOfPackage{%
    \SetFootnoteHook{\@EN@MF@hook@B}%
    \let\@EN@MF@hook@B\@empty
    \newfootnote{B}%
    \newcommand{\Bnote}{\@EN@note B}%
    \newcommand{\Bnotelabel}{\@EN@notelabel B}%
}}
\DeclareOption{Cpara}{%
  \PassOptionsToPackage{para}{manyfoot}%
  \AtEndOfPackage{%
    \SetFootnoteHook{\@EN@MF@hook@C}%
    \let\@EN@MF@hook@C\@empty
    \newfootnote[para]{C}%
    \newcommand{\Cnote}{\@EN@note C}%
    \newcommand{\Cnotelabel}{\@EN@notelabel C}%
}}
\DeclareOption{Cplain}{%
  \AtEndOfPackage{%
    \SetFootnoteHook{\@EN@MF@hook@C}%
    \let\@EN@MF@hook@C\@empty
    \newfootnote{C}%
    \newcommand{\Cnote}{\@EN@note C}%
    \newcommand{\Cnotelabel}{\@EN@notelabel C}%
}}
\DeclareOption{Dpara}{%
  \PassOptionsToPackage{para}{manyfoot}%
  \AtEndOfPackage{%
    \SetFootnoteHook{\@EN@MF@hook@D}%
    \let\@EN@MF@hook@D\@empty
    \newfootnote[para]{D}%
    \newcommand{\Dnote}{\@EN@note D}%
    \newcommand{\Dnotelabel}{\@EN@notelabel D}%
}}
```

```
\DeclareOption{Dplain}{%
  \AtEndOfPackage{%
    \SetFootnoteHook{\@EN@MF@hook@D}%
    \let\@EN@MF@hook@D\@empty
    \newfootnote{D}%
    \newcommand{\Dnote}{\@EN@note D}%
    \newcommand{\Dnotelabel}{\@EN@notelabel D}%
}}
\DeclareOption{Epara}{%
  \PassOptionsToPackage{para}{manyfoot}%
  \AtEndOfPackage{%
    \SetFootnoteHook{\@EN@MF@hook@E}%
    \let\@EN@MF@hook@E\@empty
    \newfootnote[para]{E}%
    \newcommand{\Enote}{\@EN@note E}%
    \newcommand{\Enotelabel}{\@EN@notelabel E}%
}}
\DeclareOption{Eplain}{%
  \AtEndOfPackage{%
    \SetFootnoteHook{\@EN@MF@hook@E}%
    \let\@EN@MF@hook@E\@empty
    \ensuremath{\mathsf{Newfootnote}}{E}\
    \newcommand{\Enote}{\@EN@note E}%
    \newcommand{\Enotelabel}{\@EN@notelabel E}%
}}
% This is as much as EDMAC provides.
%% TODO: efficiency!?
%% TODO: shorten previous by temporary defining macro
%%
         \@EN@tempa!? (dangerous)
%
% Load 'mfparptc.sty' after 'manyfoot.sty':
\DeclareOption{edmacpara}{%
  \AtEndOfPackage{\RequirePackage{mfparptc}[2004/08/21]}}
% <- 'center' bug fix.
%
% Load 'edcntwd0.sty' after 'lineno.sty':
\DeclareOption{countoccurrences}{%
 \AtEndOfPackage{\RequirePackage{edcntwd0}[2006/07/15]}}
% <- first occurrence bug fix.
%
\% 'edtable' options remain "unknown" and thus are passed to
% 'lineno.sty'.
%
% Options for package 'manyfoot':
% Calling option 'ruled' or 'para' for 'ednotes' is redundant,
% but in case ...
```

```
\DeclareOption{ruled}{\@EN@warning%
  {Package Option 'ruled' is redundant}}
\DeclareOption{para}{\@EN@warning%
  {Package Option 'para' is redundant}}
\DeclareOption{para*}{\PassOptionsToPackage{para*}{manyfoot}}
% Suppresses footnote indentation.
% Overrides 'para' as called from own options.
\DeclareOption{perpage}{\PassOptionsToPackage{perpage}{manyfoot}}
%
% Options for package 'lineno':
\DeclareOption{mathnotes}{\PassOptionsToPackage{mathrefs}{lineno}}
\DeclareOption*{\PassOptionsToPackage{\CurrentOption}{lineno}}
%
% %% TODO: Really load lineno.sty here!? Otherwise remove options.
% %% TODO: Interfaces for alternative auxiliary packages.
% \ExecuteOptions{Apara} % \newcommand... bad for opposite option.
\ProcessOptions
%
%% Load required packages:
\RequirePackage[ruled\if@EN@Apara,para\fi]{manyfoot}
%% TODO: Leave choice to user!?
%% TODO: 2004/10/20 v1.7!? (\ExtraParaSkip)
              -- cf. reminder about 'mfparxsp.sty' below.
%%
%% TODO: ruled -> \Execute...!?
\RequirePackage{lineno}[2004/10/11]
\% Hack for 'lineno.sty' version. If \QLNQpostlabel is defined, assume
% 'lineno' version 4 has been loaded. %% TODO
\@ifundefined{@LN@postlabel}{%
  \CENCwarning{We urge you to use 'lineno.sty' version 4!}
  \RequirePackage{linenox0}[2004/08/12]%% No page break after heading
%%
                                          (left to 'linenox1.sty').
}\relax
%
%% Execute option concerning first apparatus:
\SetFootnoteHook{\@EN@MF@hook@A}
\let\@EN@MF@hook@A\@empty
\if@EN@Apara
  \newfootnote[para]{A}% Needs 'manyfoot.sty'.
  \newcommand{\Anote}{\@EN@note A}%
  \newcommand{\Anotelabel}{\@EN@notelabel A}%
\else
  \newfootnote{A}%
  \newcommand{\Anote}{\@EN@note A}%
  \newcommand{\Anotelabel}{\@EN@notelabel A}%
\fi
```

```
%
%% User commands (if not defined in option code etc.):
\newcommand{\addlemmaexpands}{\@EN@addtomacro\@EN@lemmaexpands}
%% <- local; cf. using LaTeX's \g@addto@macro: %% TODO: decide</pre>
% \newcommand{\addlemmaexpands}{\g@addto@macro\@EN@lemmaexpands}
\newcommand{\showlemmaexpands}{%
  \typeout{\string\@EN@lemmaexpands=\meaning\@EN@lemmaexpands}%
}
%
\DeclareTextCommandDefault{\textsymmdots}{%
  .\kern\fontdimen3\font.\kern\fontdimen3\font.\@%
}
%
%
%% Customizable commands:
%
\newcommand*{\sameline}[1]{\linesfmt{#1}}
\newcommand*{\differentlines}[2]{\linesfmt{#1\textendash#2}}
%% TODO: \linesfmt into \@EN@note!?
\newcommand*{\linesfmt}[1]{\textbf{#1}\enspace}
\newcommand*{\pageandline}[2]{#1.#2}
\newcommand*{\repeatref}[1]{#1}
% \newcommand*{\repeatref}[1]{\textnormal{/}}
\newcommand{\lemmafmt}[1]{#1\thinspace]\enskip} %% TODO: \long!?
\newcommand{\lemmaellipsis}{\textsymmdots}
\newcommand{\notefmt}[1]{#1} \let\notefmt\@firstofone
%% <- TODO: \long!?
% \newcommand{\notefmt}[1]{#1.}
%
%% Core code:
% Interface for manyfoot's \SetFootnoteHook facility:
\newcommand{\PrecedeLevelWith}[2]{%
  \expandafter \renewcommand \csname @EN@MF@hook@#1\endcsname{#2}}
\% \renewcommand might help when an level is addressed that
% has not been called through an option.
% Auxiliary needed before calling \addlemmaexpands below:
\long\def\@EN@addtomacro#1#2{% #1 cs, #2 new.
% Local, cf. LaTeX's \g@addto@macro.
  \expandafter\def\expandafter#1\expandafter{#1#2}%
ľ
% %% TODO: \long!? see building of lemmaarg and lemmatag.
%% TODO: \tok@ so no doubling of '#'!?
%
% Our sphack for going around control sequences in text:
```

```
\def\@EN@sphack{\relax
  \ifhmode\ifdim\lastskip>\z@ \ignorespaces \fi\fi}
%
\def\@EN@xpxpxp{\expandafter\expandafter\expandafter} % :-) v1.23
% Basic handling of \Anote etc.:
\long\def\@EN@note#1#2{% #1 note family, #2 lemma.
% %% TODO: \long!?
  \ifx\protect\@typeset@protect \expandafter \@firstoftwo
                                \expandafter \@secondoftwo
  \else
  \fi
  {\def\@EN@notefam{#1}\@EN@process #2\<\>\@nil}%
  {\@EN@robust@process #2\<\>\@nil}%
}
%
% Lemma versions and preparing label:
\long\def\@EN@process#1\<#2\>#3\@nil{% %% TODO: \long!?
% Usage: \@EN@process #k\<\>\@nil.
%% TODO: simplify using LaTeX's \in@!?
% Implementation: don't leave control to user's input unless \<, \>
% have been processed. <...> is postponed in main text.
  \def\@EN@lemmaarg{\ignorespaces#1}%
% \ifx\@EN@lemmaarg\@empty %% \fi %% TODO: complain!?
   \let\@EN@lemmatag\@EN@lemmaarg %% Would be overridden.
%
  \ifx\@nnil#2#3\@nnil
    % No ellipsis, #1 all of user's input, dummy \<>> gobbled.
    \@EN@addtomacro\@EN@lemmaarg\unskip
    \@EN@simplelemmatag
%
      \let\@EN@lemmatag\@EN@lemmaarg
    \@EN@mathlemmatag
  \else
   \@EN@simplelemmatag
   %% TODO: this case is the rare one, so put it into an extra
%
             macro for efficiency!?
%
   %%
    \ifx\@nnil#3\@nnil % \<, but no \> from user.
                       % #2 ends on \<, \>\@nil gobbled.
      \@EN@gobble@pause#2\@nil
    \else
      \% #3 ends on dummy \<\>.
      \@EN@gobble@resume\@EN@gobble@pause#2\@EN@sphack\@nil#3%
      % This \@EN@sphack replacing \> in main text.
   \fi
  \fi
  \ifLemmaTag \expandafter \@firstoftwo
              \expandafter \@secondoftwo
  \else
  %% <- TODO: \...process might be redirected to
  %%
              \...robust@process immediately.
```

```
\fi
  {\@EN@lemmaarg\@gobble}%
  {\stepcounter{EN@label}%
                                    % v1.23
% {\global\advance\c@EN@label\@ne
\% Much must be expanded, especially for storing the note in a
% hook (some tables):
   \edef\@EN@tempa{\noexpand\@EN@putdown{EN@l\number\c@EN@label}}%
   \@EN@xpxpxp \@EN@tempa
     \expandafter \@EN@notefam \expandafter {\@EN@lemmatag}}%
7
\long\def\@EN@gobble@pause#1\<{\@EN@finishlemma#1\@nil} %% TODO: \long!?</pre>
% #1 contains \@nil separating arguments.
% Variant of LaTeX's \@ifnextchar---don't gobble spaces:
\def\@EN@finishlemma{\futurelet\@let@token\@EN@finlem}
\def\@EN@finlem{%
  \ifx\@let@token<%
    \let\@EN@next\@EN@xfinlem
  \else
    \def\@EN@next{\@EN@xfinlem<\lemmaellipsis>}%
  \fi
  \@EN@next
7
\long\def\@EN@xfinlem<#1>#2\@nil#3\@nil{% %% TODO: \long!?
  \@EN@addtomacro\@EN@lemmaarg{\@EN@sphack#2#3\unskip}%
  \@EN@addtomacro\@EN@lemmatag{#1\@EN@CWhook{#2}#3\unskip}%
  \@EN@mathlemmatag
  % %% TODO: doc.: final \unskip -> space properly!
}
% Brackets might have been used instead of <ELL>; however,
\% I am afraid that the user might use brackets at symbols to be
% printed right here. Alternative (but needs extra code to test
% for \extraellipsis): \extraellipsis{ELL}.
                                                                %% TODO: decide
% Think of keyboards without '<', '>'?
\long\def\@EN@gobble@resume#1\>{#1}
                                        %% TODO: \long!?
\let\@EN@CWhook\@gobble %% For counting words package.
\def\@EN@simplelemmatag{\let\@EN@lemmatag\@EN@lemmaarg}
% Useful for math mode extension as well.
\label{eq:let_density} $$ \eqref{eq:let_density} Hook for math mode. $$
%
\newcounter{EN@label} %% for \includeonly; v1.23
%% <- TODO: problem with final label test
% \newcount\c@EN@label
%
\% New mechanism for ellipsis in lemma -- supporting nested lemmas
\% or at least lemmas shared by apparatuses exceeding one
% (v1.22b 2006/01/13):
```

```
\def\@EN@lemma@ellipsis{%
     \futurelet\@let@token\@EN@make@nested@lemmaellipsis}%
\def\@EN@make@nested@lemmaellipsis{%
    \ifx\@let@token<%
          \expandafter \@EN@ellipsis@only
     \else
          \expandafter \@EN@ellipsis@only
               \expandafter <\expandafter \lemmaellipsis \expandafter >%
    \fi}
\long\def\@EN@ellipsis@only<#1>#2\>{#1}
%
\% .aux entries, note, and lemma in main text:
\% (v1.1: much changes. I just remove what was before, see stored
% older version.)
\long\def\@EN@putdown#1#2#3#4{%
% #1 label, #2 note family, #3 lemma tag, #4 note.
% %% TODO: \long!?
    \linelabel{-#1}% Ensures hmode.
% Insert footnote:
  \@EN@hookfn{%
     \csname Footnotetext#2\endcsname\@empty{%
\%\ \@empty v1.12, due to HCY's report of spurious footnote marks.
          \csname#2notefmt\endcsname
          \let\@currentlabel\@empty
          \label{#1}% Need page number of note.
          \let\nopunct\@gobble % or by \if...
% Print line numbers:
          \ensuremath{0}\ensuremath{0}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}\ensuremath{1}
%%% ...unknown + ...incomplete@ref v1.23: %%%
               {\differentlines\@EN@unknown\@EN@unknown}%
               {\let\@EN@incomplete@ref\relax
                 \@EN@xpxpxp \@EN@extract\csname r@#1\endcsname
                      \@EN@incomplete@ref\@EN@incomplete@ref
                           \@EN@incomplete@ref\@EN@incomplete@ref
                 \ifx\@EN@elemp\@EN@Incomplete
                      \G@refundefinedtrue
                      \let\@EN@incomplete@ref\@EN@unknown
                 \fi
                 \@tempswatrue
                 \ifx\@EN@bleml\@EN@eleml \else \@tempswafalse \fi
% Restart of line numbers / different page!?
                 \ifx\@EN@blemp\@EN@elemp \else \@tempswafalse \fi
                 \if@tempswa
                      \sameline{\@EN@plref\@EN@blemp\@EN@bleml}%
                 \else
```

```
\@EN@lastline@z@
         \differentlines{\@EN@plref\@EN@blemp\@EN@bleml}%
                        {\ifx\@EN@blemp\@EN@elemp
                                                        % v1.23
                           \@EN@eleml
                         \else
                           \pageandline\@EN@elemp\@EN@eleml
                         \fi}%
%
                          {\@EN@plref\@EN@elemp\@EN@eleml}%
         \@EN@lastline@z@
       \fi}%
%
      \strut % Redundant (\rule\z@\footnotesep TODO: CHECK)
      \expandafter \let \csname r0#1\endcsname \relax %% v1.1.
%
%% <- 2005/02/21: No, need label for testing.
    \lemmafmt{{\@EN@lemmaexpands#3}}%
    \t = {#4}%
 }%
 }%
 % Lemma in main text:
  \nobreak \hskip\z@skip %% 2006/01/12 cf. german.sty: \allowhyphens
  \@EN@lemmaarg %% Should not end with space so \linelabel...
%% \allowhyphens not needed here (tested) 2006/01/12
  \linelabel{+#1}%
  % \csname #1rightmark\endcsname %% Suggested.
}
\let\@EN@hookfn\@firstofone
\def\@EN@extract#1#2#3#4#5{%
% #1 note page, #2 first lemma line, #3 first lemma page,
%
                #4 last lemma line #5 last lemma page.
  \def\@EN@tempa{#1}%
  \def\@EN@blem1{#2}\def\@EN@blemp{#3}%
  \def\@EN@elem1{#4}\def\@EN@elemp{#5}%
}
\def\@EN@unknown{\textnormal{\bfseries ??}}
                                                         % v1.23
                                                         % v1.23
\def\@EN@Incomplete{\@EN@incomplete@ref}
\def\@EN@lastline@z@{\global\let\@EN@lastline\z@}
\@EN@lastline@z@ % Next line number in note explicitly.
\def\@EN@plref#1#2{% #1 page, #2 line.
                     \@EN@tempa is note page from \@EN@extract.
%
  \ifx#1\@EN@tempa
                        %% Note and lemma part on same page.
    \ifx#2\@EN@lastline %% Same line as before.
      repeatref#2\%
                        %% v1.1: changed use!
    \else
      #2\global\let\@EN@lastline#2%
    \fi
  \else
    \pageandline#1#2%
                       %% v1.1: new!
```

```
\fi
}
%
% Expanding in note version of lemma:
\newif\ifLemmaTag \LemmaTagfalse
\let\@EN@lemmaexpands\@empty
%% TODO: \long below!? Cf. properly expanding versions.
\def\@EN@gobble{\@EN@sphack\@gobble}
\def\@EN@gobbletwo{\@EN@sphack\@gobbletwo}
\def\@EN@secondofthree#1#2#3{\@EN@sphack#2}
\addlemmaexpands{%
  \LemmaTagtrue
  \let\notinnote\@EN@gobble
  \let\@EN@note\@EN@secondofthree
  \let\@EN@notelabel\@EN@gobbletwo
  \let\donote\@EN@gobbletwo
  \let\label\notinnote \let\linelabel\notinnote
  \let<<\@EN@lemma@ellipsis</pre>
}
%% <- TODO: user commands only !? (no \let)
%% TODO: cf. EDMAC's tag (fonts? accents? -- lineno.sty commands?)
\let\notinnote\@firstofone
%
% Variant of \@EN@process when moving:
\long\def\@EN@robust@process#1\<#2\>#3\@nil#4{%
  #1%
  \ifx\@nnil#2#3\@nnil
    % No ellipsis, #1 all of user's input, dummy \<>> gobbled.
  \else
    \@EN@sphack
    \ifx\@nnil#3\@nnil % \<, but no \> from user.
      % #2 ends on \<, \>\@nil gobbled.
      \@EN@robust@gobble@pause#2%
    \else \% #3 ends on dummy \<\>.
      \@EN@gobble@resume
        \@EN@robust@gobble@pause#2\@EN@sphack#3%
      \% This \@EN@sphack replacing \> in main text.
    \fi
  \fi
}
\long\def\@EN@robust@gobble@pause#1\<{\@EN@gobble@opt#1<>\@nil\@empty}
\long\def\@EN@gobble@opt#1<#2>#3\@nil{%
  \ifx\@nnil#3\@nnil #1%
  \else \ifx\@nnil#1\@nnil\else#1<#2>\fi \@EN@gobble@diamond#3%
  \fi
}
```

```
\long\def\@EN@gobble@diamond#1<>{#1}
%% TODO: all of them \long?
%
% Shorthand macros for lemma in moving argument:
\newcommand\RobustTestOpt{%
  \ifx\protect\@typeset@protect \else
    \expandafter \@EN@robust@test@opt
  \fi
}
\long\def\@EN@robust@test@opt#1#2#{%
  \ifx\@nnil#2\@nnil
    \@EN@xpxpxp \@EN@expand@with@default
  \else
    \@EN@xpxpxp \@EN@expand@with@option
  \fi
  #1#2}
\newcommand\@EN@expand@with@default[4]{#3[{#4}]}
\newcommand\@EN@expand@with@option[4]{#3}
\newcommand\NewEdnotesCommand{%
  \@ifstar{\@EN@newcommand*}{\@EN@newcommand{}}}
\def\@EN@newcommand#1#2[#3][#4]{%
  \expandafter \newcommand \expandafter #2\expandafter {%
    \expandafter \RobustTestOpt \csname \string #2\endcsname}
  \def\@tempa{\newcommand#1}%
  \expandafter \@tempa \csname \string #2\endcsname[#3][#4]}
% Handling \Anotelabel etc.:
% \@EN@lemmaarg is to become the LEMMA argument for \@EN@process.
\% A first version is obtained by reading unto the \donote
% bearing the same label. \@EN@lemmaarg is then rebuilt,
% replacing \pause and \resume by \langle and \rangle.
% %% TODO: \long below!? -> lemma.
\def\@EN@notelabel#1#2{% #1 note family, #2 label.
  \def\@EN@notefam{#1}%
  \def\@EN@laplabel{#2}%
  \let\@EN@lemmaarg\@empty
  \let\@EN@next\@EN@firstnext
  \@EN@next
% The following removed braces urgently needed:
%
    \@EN@getlabel\donote
%
      {\@EN@laplabel
%
       \expandafter\def\expandafter\@EN@next\expandafter
%
         {\expandafter\@EN@replacepause
%
            \@EN@lemmaarg\pause\@nil\resume\@nil}%
%
       \else
```

```
%
         \@EN@appendwrong
%
       }%
}
\long\def\@EN@firstnext#1\donote#2#3{% %% TODO: \long!? Alex!?
  \def\@EN@tempa{#2}%
  \ifx \@EN@tempa \@EN@laplabel
    \@EN@addtomacro\@EN@lemmaarg{#1}%
    \expandafter \def \expandafter \@EN@next \expandafter {%
      \expandafter \@EN@replacepause
        \@EN@lemmaarg \pause\@nil\resume\@nil{#3}}%
  \else
    \@EN@addtomacro\@EN@lemmaarg{#1\donote{#2}{#3}}%
  \fi
  \@EN@next
}%
\def\@EN@getlabel#1#2{%
% jump to cs #1, #2: on \@EN@tempa=...
   \let#2\@empty
%
  \def\@EN@appendwrong{%
    \expandafter\@EN@addtomacro \expandafter\@EN@lemmaarg
        \expandafter {\expandafter#1\expandafter{\@EN@tempa}}%
 }%
  \long\def\@EN@next##1#1##2{% %% TODO: \long!? Alex!?
  % %% TODO: \let [pre-defined] for efficiency!?
    \@EN@addtomacro\@EN@lemmaarg{##1}%
    \def\@EN@tempa{##2}%
    \ifx\@EN@tempa#2\fi
    \@EN@next
 }%
  \@EN@next
}
\def\@EN@replacepause{%
  \let\@EN@lemmaarg\@empty
  \@EN@getlabel\pause
    {\@nnil
       \def\@EN@next\resume\@nil{\@EN@donote}%
       % %% TODO: \let [pre-defined] for efficiency!?
     \else
       \ifx\@EN@tempa\@EN@laplabel
         \@EN@addtomacro\@EN@lemmaarg\<%
         \let\@EN@next\@EN@replaceresume
       \else
         \@EN@appendwrong
       \fi
     }%
}
```

```
\long\def\@EN@replaceresume#1\pause\@nil{% %% TODO: \long!?
  \@EN@getlabel\resume
    {\@nnil
       \let\@EN@next\@EN@donote
     \else
       \ifx\@EN@tempa\@EN@laplabel
         \long\def\@EN@next####1\resume\@nil %% TODO: \long!?
         % %% TODO: \let [pre-defined] for efficiency!?
           {\@EN@addtomacro\@EN@lemmaarg{\>###1}\@EN@donote}%
       \else
         \@EN@appendwrong
       \fi
     7%
  #1% \resume\@nil ahead.
}
\def\@EN@donote{\expandafter\@EN@process\@EN@lemmaarg \<\>\@nil}
%
%% TODO: analogue to \@EN@robust@process.
%% TODO: \afterassignment possible anywhere?
%% TODO: \AtBeginDocument: \misplaced\< etc.</pre>
%% TODO: remove testing \typeout's.
\% v1.1: reduce number of control strings from \newlabel.
\% We keep using \linelabel and \label for kind of simplicity and
% because modifying them would hardly save time or save us from
% the difficulties that we face here. Instead we modify
\% \newlabel to prevent it from dealing with labels coming from
% annotations in the usual way.
%
% Storing and restoring of \newlabel and 'lineno.sty's
% \getpagewiselinenumber: %% TODO: do without the latter anyway?
\let\@EN@newlabel\newlabel
\let\@EN@getpagewiselno\getpagewiselinenumber
\let\getpagewiselinenumber\relax
\AtBeginDocument{\let\getpagewiselinenumber\@EN@getpagewiselno}
%
% For each lemma and note, there will be one macro carrying the
% corresponding line and page numbers. Below, \@EN@tempa will
% carry the name of that macro. \@EN@bleml will be the line
% number, \@EN@blemp the page number from the \newlabel arguments.
% \@EN@extractcslp will do the assignments for \@EN@tempa,
% \@EN@blem1, and \@EN@blemp. Three \newlabel's will come to
% deliver the numbers for one note, each will add to the
% expansion code of the corresponding macro. The page number of
\% the note is attached to the left; ensuring that it is on the
% same place in each case. (Indeed, usually the .aux entry from
\% the note comes .aux after the final entry from the lemma, but
```

```
% when a page break happens within the latter, this order may
% reverse.) \@EN@addtolabeldef will do this. It will at first
\% look as if \@EN@extractcslp and \@EN@addtolabeldef should
% better have been merged into one single macro; however, we
% need them for the final testing function below, where they
% appear in different contexts.
% TODO: The format of the numbers list is
% {<notepage>}{<blemline>}{<blempage>}{<elemline>}{<elempage>}
% This is LaTeX-like, cf. storing of the numbers for a usual
\% \ref. It is easy to read the second or so term. Yet it wastes
% a lot of memory with critical editions. It might be better to
% use a single token as separator, as (L)EDMAC do.
%
\def\@EN@addtolabeldef#1#2{% add #1 left, #2 right.
  \expandafter \protected@xdef \@EN@tempa{%
    #1\0EN0tempa#2\}
\def\@EN@fornotelabel#1#2#3{% #1 sign, #2 label, #3 def.
  \in0{\00#1EN01}{\00#2}% LaTeX's \in0, \ifin0.
  \ifin@
    \@EN@extractcslp#2\@nil#3\@nil
\% Now, in one step, \CENCtempa expands to the name of the macro
% that \newlabel defines at \begin{document}.
\% The \newlabel with '-' will always come first, so this macro
% has not been defined yet:
    \expandafter\@firstoftwo
  \else
    \expandafter\@secondoftwo
  \fi}
\def\newlabel#1#2{%
% It should be possible to read #2 later, but it's difficult.
% ...extractcslp might be split into parts of ...fornotelabel
% and some other macro doing more. [TODO]
  \@EN@fornotelabel-{#1}{#2}{%
    \@EN@addtolabeldef\@gobble{{\@EN@bleml}{\@EN@blemp}}%
%
     \typeout{\expandafter\string\@EN@tempa \space
%
            (-) \expandafter\meaning\@EN@tempa}%
  }{\@EN@fornotelabel+{#1}{#2}{%
      \@EN@addtolabeldef{}{{\@EN@bleml}{\@EN@blemp}}%
%
     \typeout{\expandafter\string\@EN@tempa \space
              (+) \expandafter\meaning\@EN@tempa}%
%
    }{\@EN@fornotelabel{}{#1}{#2}{%
        \@EN@addtolabeldef{{\@EN@blemp}}{}%
%
     \typeout{\expandafter\string\@EN@tempa \space
              (p) \expandafter\meaning\@EN@tempa}%
%
      }{\@EN@newlabel{#1}{#2}}%
    }% +
```

```
}% -
}
\Conlypreamble\newlabel % Unlike LaTeX, but get rid of all of
%
                       % this. A new version comes \AtEnd...
%
\def\@EN@extractcslp#1E#2\@nil#3#4#5\@nil{%
% #1 "sign", #2 label after 'E'; #5 for 'hyperref.sty'.
% The 'E' is needed when neither - nor + ...
  \expandafter \def \expandafter \@EN@tempa \expandafter{%
    \csname r@E#2\endcsname}%
% Use 'r@' for \ref, cf. \@EN@putdown.
  \def\@EN@blem1{#3}\def\@EN@blemp{#4}}
% <- Just avoid additional control strings.
% No \Conlypreamble, use it in the final run as well.
%
\% v1.1: final testing of label changes with the compressed
% definitions (cf. 'lblchng1.sty').
\% We use the compression mechanism from the beginning to
% determine the definitions for the next run. To compare them
\% with the present definitions, the latter must be stored
% before. With nesting or overlapping lemmas, other notes may
\% send their information before the new definition for one note
\% has been finished. And when we receive data from these other
% notes, we must store their previous data as well. So we cannot
\% use one single control string to \let it be the string that
\% carries the previous data corresponding to a note. Yet we
\% don't want to double the number of strings corresponding to
% notes here. So we store the definitions in one single list,
% yet only for as long as the comparison has not been completed.
%
\% To tell to the third \newlabel that it is the third indeed,
% the second \newlabel adds \@EN@ready together with number(s):
\def\@EN@test@addtolabeldef#1#2{%
  \expandafter
  \ifx \@EN@tempa \relax \else
\% Test whether this is the third \newlabel for the note:
    \@EN@xpxpxp \in@
      \expandafter\expandafter \@EN@ready
        \expandafter\expandafter {\@EN@tempa}%
    \ifin@ \let\@EN@ready\@empty \fi
    \@EN@addtolabeldef{#1}{#2}% Warning: should not use \in@!
    \ifin@
      \let\@EN@ready\relax
      \expandafter\@EN@prepare@fromtl\@EN@tempa\@nil
      \expandafter\@tempa\@EN@testinglist\@nil
      \expandafter
```

```
\ifx \@EN@tempa \@tempa \else
        \@tempswatrue
        \ifx\@tempa\relax \else
          \expandafter\@EN@takepagesto\@tempa\@tempa
          \@EN@xpxpxp \@EN@takepagesto\@EN@tempa\@EN@tempa
\% The message may come when line numbers have changed, not page
% numbers. This may puzzle some users, but should be harmless.
          \typeout{^^JPackage 'ednotes.sty':^^J%
            *** A lemma or note moved. Page numbers
            \@tempa\space turned into \@EN@tempa.^^J***
            Rerun and watch whether they come to rest and references
            get right. ^^J*** If they don't, use \string\pagebreak\space
            or \string\warningpagebreak\space to force^^J*** the earlier
            of oscillating page breaks. ^ J*** (Cf. package documentation
            on 'oscillating page breaks'.)}%
          \let\newlabel\@EN@newlabel
          \def\@newl@bel{\@gobblefour\relax}% Cf. 'lblchng1.sty'.
        \fi
      \fi
    \fi
  \fi
}%
\let\@EN@ready\relax
\let\@EN@testinglist\@empty
\def\@EN@testlabel#1#2{% Don't change \@testdef -- 'lblchng1.sty'.
% Cf. our \newlabel for details. \@EN@testlabel is an extension
% of it.
% \typeout{testinglist: \meaning\@EN@testinglist}%
  \mathbb{E}^{\pi} = \frac{1}{42}{\%}
    \expandafter
    \ifx \@EN@tempa \relax % Label #1 not used in previous run.
      \@tempswatrue % Just to behave like LaTeX's \@testdef.
    \else
                % Only otherwise delicate procedure is required.
% Put to testing list:
      \protected@edef \@EN@testinglist{\@EN@testinglist
          \expandafter \protect \@EN@tempa{\@EN@tempa}}%
% First contribution to ...:
      \@EN@addtolabeldef\@gobble{{\@EN@bleml}{\@EN@blemp}}%
    \fi
     \typeout{\expandafter\string\@EN@tempa \space
%
            (-) \expandafter\meaning\@EN@tempa}%
%
 }{\@EN@fornotelabel+{#1}{#2}{%
      \@EN@test@addtolabeldef\@EN@ready{%
        {\@EN@bleml}{\@EN@blemp}}%
%
     \typeout{\expandafter\string\@EN@tempa \space
%
              (+) \expandafter\meaning\@EN@tempa}%
```

```
}{\@EN@fornotelabel{}{#1}{#2}{%
        \@EN@test@addtolabeldef{{\@EN@blemp}}\@EN@ready
%
     \typeout{\expandafter\string\@EN@tempa \space
%
              (p) \expandafter\meaning\@EN@tempa}%
      }{\@EN@newlabel{#1}{#2}}%
   }% +
 }% -
}
%
\def\@EN@prepare@fromtl#1\@nil{%
  \def\@tempa##1\protect#1##2##3\@nil{%
    \def\@tempa{##2}\def\@EN@testinglist{##1##3}}}
\def\@EN@takepagesto#1#2#3#4#5#6{\def#6{#1, #3, #5}}
\AtEndDocument{\let\newlabel\@EN@testlabel
  \let\getpagewiselinenumber\relax} %% TODO without!?
%
% v1.23: \warningpagebreak:
\AtEndDocument{\@EN@pagebreaks@finalwarn}
\let\@EN@pagebreaks@finalwarn\relax
\def\@EN@pagebreaksfinalwarn{%
  \typeout{%
    Package ednotes: There have been \string\warningpagebreak\space
    occurrences. ^ JFor your final version, we recommend checking
    whether they still are^^Jappropriate.}%
}
\def\warningpagebreak{%
  \@EN@warning{Page break (\string\warningpagebreak)
    from user^J-- still appropriate in final version !? -- }%
  \global\let\@EN@pagebreaks@finalwarn\@EN@pagebreaksfinalwarn
  \pagebreak}
%% Reminder about 'mfparxsp.sty':
\AtBeginDocument{%
  \@ifpackageloaded{mfparxsp}{%
    \PackageWarningNoLine{ednotes}{%
%% TODO: \PackageError?
      You have loaded 'mfparxsp.sty', \MessageBreak
      which defines \string\MFparaxbuffer.\MessageBreak
      We recommend, instead, \string\ExtraParaSkip\space
        \MessageBreak
      from 'manyfoot.sty' version 1.7\MessageBreak
      (CTAN:macros/latex/ncctools).\MessageBreak
      Cf. ednotes package documentation%
    }%
  }\relax
}
```

\endinput

```
%% TODO: \newcommand whenever possible!?
%% TODO: with v1.1: warn about \label{[-+]EN@l...}. Maybe make
%%
         \label and \linelabel internal, new user versions check
%%
         the argument.
%% TODO: warn about \usepackage{foo} where foo is loaded by option!?
%% TODO: .dtx
%% TODO: license for *bundle*
%% TODO: ... or cf. the brief and clear conditions in Eurofont
%%
         (Rowland McDonnell)
%% TODO: Bigfoot/e-TeX (Kastrup)
%% TODO: compatibility with Parallel.sty -- Sergei Mariev 2003/06/19.
%%
         (hopeless, I'm afraid) -- 2005/02/19: Cf. Peter Wilson's
%%
         ledpar.
%% VERSION HISTORY:
v0.36 2003/01/13 First version sent around.
v0.37 2003/01/22 Added version history and reference to
                 'mfparptc.sty'.
v0.38 2003/01/27 Improved copyright notice.
v0.39 2003/02/06 Documentation: output + splitting problem,
                 explanations of recommended packages.
v0.4 2003/03/03 Splitting problem remedied by linenox0.
v0.41 2003/03/03 our owns -> ourselves. + !?
v0.42 2003/03/04 Some remarks/TODOs, especially concerning \SplitNote,
                 changed lppl hint.
v0.43 2003/03/23 Doc.: "may" -> "must" [not be hidden].
v0.44 2003/03/24 Took e-mail addresses list from edtab;
                 added comparison with LEDMAC.
                 TODOs for reading 'MFPartPtc.sty';
                 \Require...{linenox0}[2003/03/23];
                 changed acknowledgements: still remains?
                 Stephan's approach, encouragement, U.L.;
                 minor changes in 'overview'; point to
                 EDMAC homepage; TODO: ruled user's choice?
                 ---Sent to Peter and Dominik.
v0.45 2003/03/28 LEDMAC hint: replaced 'Correct me ...' by
                 "single printable file" + "enhanced";
                 Version History: 04 -> 03 at v0.44;
                 MFParPtc ToDo below: !! -> !?
                 ---Sent to Peter.
v0.46 2003/04/15 \renewcommand -> \newcommand in \Anotefmt
                 customization --- thanks to Robert Alessi!
                 added bug report acknowledgement.
```

| v0.47 | 2003/05/01 | Added \@ in \textsymmdots. |
|------------------|------------|--|
| v0.48 | 2003/06/22 | Replaced \@secondoftwo by \@EN@second (Hyperref); |
| | | <pre>placed \let\@EN@lastline correctlyboth</pre> |
| | | thanks to Sergei Mariev! |
| | | Added note on 'hyperref.sty'. |
| v0.49 | | Added documentation to evade the \donote bug. |
| | | Require corrected 'linenox0.sty'. |
| | | Require corrected 'lineno.sty'. |
| v0.5b | | Added \@EN@first and \@EN@gtempa for \repeatref. |
| 0 F | | Removed argument redundancy in \addlemmaexpands. |
| | | Added \@EN@CWhook for counting words package. |
| | | Require corrected 'linenox0.sty'. |
| VU.0 | 2004/03/01 | Removed two lines from preamble and mention of \donote bug (v0.49), fixed the latter. |
| v0 61 | 2004/04/15 | Changed 'Comparison with LEDMAC' concerning TABMAC |
| 10.01 | 2001/01/10 | and implementation, reformulated 'acknowledgements'. |
| | | Unified quotation marks with 'sty'. |
| | 2004/04/22 | Removed 'wait vor Alex' and 'CTAN soon' |
| | | concerning LEDMAC. |
| | 2004/04/28 | Removed 'New with v0.4'. |
| | 2004/05/12 | Removed 'few weeks' before 'similar' in doc., |
| | | changed doc. concerning effects of different |
| | | implementations. Mentioned indexing, 'Edstanza', |
| | | "minipage", and sidenotes concerning LEDMAC. |
| | | Included Florian Kragl in acknowledgements. |
| | | Added 'A problem' (notes height estimation). |
| | | Sent around. Added Christian to copyright, |
| | | L"uck \rightarrow L\"uck. 'edtab02' \rightarrow 'edtable'. |
| | | Suggested \csname #2leftmark etc. |
| 0 00 | | Used \DeclareOption*, removed 'BETA TEST RELEASE'. |
| v0.62 | 2004/08/16 | <pre>\RequirePackage{linenox0}[2004/08/12], LPPL v1.3;</pre> |
| | | \@EN@shortlemmatag, \@EN@initlemmatag, |
| 0 62 | 2004/09/16 | \@EN@finmathlemmatag. Replaced previous by \@EN@simplelemmatag and |
| v0.03 | 2004/08/10 | \@EN@mathlemmatag. |
| v0 64 | 2004/08/19 | Removed stars from new commands of macros |
| | 2001,00,10 | that have no parameter, added some with |
| | | parameters (undid this?), however made |
| | | \lemmafmt and \notefmt long (star). |
| | 2004/08/22 | Changed 'Packages required'. |
| | | Rearranged preamble concerning maintenance. |
| v0.7 | 2004/09/19 | \Req{linenox0} etc. only with lineno v<4. |
| | 2004/09/20 | Adjustment of instructions to bundle changes; |
| | | 'I.' after 'Alexander'. |
| v0.71 | 2004/09/21 | Took explanation for \ExtraP from 'mfparxsp.sty' |
| | | and removed mention of the latter; |
| | | |

removed a comment mark from a documentation line. Changed lineno.sty/tex into ...pdf. v1.0 2004/10/07 Changed documentation for additional options for 'edtable', 'edmacpara', 'countoccurrences'; hint at TUGboat article; removed mention of 'linenox0.sty'. 2004/10/08 Replaced \newif\if@EN@Apara@; replaced redundant option passes redundancy warnings; options 'edmacpara' and 'countoccurences'; removed TODOs concerning 'mfparptc.sty'. 2004/10/11 'perpage' option; acknowledgements for co-operation. 2004/10/13 Require debugged 'mfparptc.sty' and 'edcntwd0.sty' as well as 'lineno.sty' equipped with new options. 2004/10/18 Reminder on 'mfparxsp.sty', changed TODOs. v1.0a 2004/11/07 LPPL v1.3a. v1.0b 2005/01/10 Contact via http. 2005/01/19 Mentioned 'ellipsis' package. v1.01 2005/02/05 \Packagewarning -> \PackageWarning. v1.1b 2005/02/20 Documentation: 'ledpar', 'ednotugb.pdf', implementation. Only one cs per note -> much different! Require new 'edcntwd0,sty'. With v1.1b, testing ('lblchng1.sty') is disabled. v1.1c 2005/02/20 Deleted \tracingmacros, earlier kept erroneously. v1.1d 2005/02/21 Final testing of label changes. Moved v1.1 macros towards end. 2005/03/06 Reimplemented compression (v1.1b) and final testing (v1.1d) very much + minor changes. v1.1 2005/03/08 Notes on \repeatref, \pageandline, and new 'edcntwd0.sty' version. Top: 'editory notes' -> 'critical editions'. Acknowledgement to Roy Flechner. v1.11 2005/04/07 Doc typo with ...plref. 2005/04/09 \Provides...: 'editory notes' -> 'critical editions'. Sent to Ednotes.news . v1.12 2005/04/09 \@empty with Footnotetext... v1.12a /04/09 Acknowl. Hillel Chayim Yisraeli. 2005/04/10 Supplied LPPL URL, corrected \file... Sent to CTAN and Ednotes.news . /04/11 address -> URL . v1.12b 2005/05/01 Due to removing \@EN@first, older version of edcntwd0.sty suffices. 2005/05/12 Remark on hyperref changed due to lineno.sty v4.3 . [not sent, not tested] /09/21 Doubled some hash marks in explanation of v1.12c customization, adapted doc. to \@EN@sphack.

```
[not sent]
```

| v1.2b 2005/09/22 | Updated doc. wrt. availability of manyfoot.sty; \PrecedeLevelWith . |
|------------------|--|
| 2005/09/24 | \let\notthislemma\@firstofone (was bug without). |
| v1.2 2005/10/01 | \notthislemma -> \notinnote; explained \Precede |
| | Sent to CTAN. |
| v1.2a 2005/10/02 | supplied mention of HCY for v1.12. [not sent] |
| | \@EN@process tests #3 on empty without \@EN@tempa; |
| | withdummy -> gobble@pause, |
| | killresume -> gobble@resume; |
| | \@EN@robust@process. |
| v1.22b /11/21 | \if@EN@in@note; \@EN@firstnext. |
| 2005/11/28 | <pre>@EN@in@note -> LemmaTag; \@EN@gobble[two]</pre> |
| 2006/01/12 | \allowhyphens in \@EN@putdown. |
| | New \<<>\>. [to Lekhtman] |
| 2006/01/15 | \long with \CENClemmaCellipsis; |
| | removed general definition of $\setminus <$. |
| v1.22 2006/01/16 | \@EN@robust@process now really gobbles note, |
| | removed wrong \@empty from \@EN@gobble@diamond; |
| | \RobustTestOpt, \NewEdnotesCommand. |
| v1.23 2006/01/23 | Example on $\NewEdnotesCommand: default "B" -> "A".$ |
| 2006/06/07 | Changed page-line algorithm with \differentlines; |
| | <pre>edcntwd0.sty v0.32 required;</pre> |
| | <pre>\c@EN@label LaTeX counter;</pre> |
| | <pre>\expandafter\expandafter -> \@EN@xpxpxp</pre> |
| | \@EN@warning; edcntwd0.sty v0.32a required. |
| 2006/06/16 | Additional screen advice with oscillating page breaks |
| | + explanation in manual (\warningpagebreak). |

3 Supplementary macro files

3.1 Tracking page break oscillations: lblchng1.sty

%% LblChng1.sty--tell about the first changed LaTeX label. \def\fileversion{0.32c} \def\filedate{2005/10/01}

```
%% Copyright (C) 2005 Uwe L\"uck
%% Munich, http://contact-ednotes.sty.de.vu.
%% Current maintainer is Uwe L\"uck.
%% This program can be redistributed and/or modified under the terms
%% of the LaTeX Project Public License distributed from CTAN
%% archives in directory macros/latex/base/lppl.txt; either
```

```
%% version 1.3a of the License, or any later version.
%% We did our best to help you, but there is NO WARRANTY.
%% * SUMMARY: *
%%
% This package is intended to be a (primitive) tool for
% fixing oscillating page breaks -- a problem that especially
% sometimes occurs in typesetting critical editions. Thus it
% addresses especially users of LaTeX packages lineno, ednotes,
\% and ledmac (maybe even manyfoot and numline). When it has been
% invoked and some label(s) get an entry in the .aux file
% differing, with respect to page number, to that of the
% previous run, the first such label is reported on screen (and
\% in the .log), including the differing page numbers. This
% should help in finding the first unstable page -- which is
\% vital. The file also contains rather detailed explanations and
% discussions.
%
%% * CRITICAL EDITIONS, PACKAGES: *
%%
% For informations about macro packages mentioned in the present
\% text, or about critical edition typesetting in general, I
% refer you to the web page http://ednotes.sty.de.vu .
%
%% * THE PROBLEM TO BE SOLVED: *
%%
% Sometimes it happens that LaTeX's final warning "Label(s) may
% have changed. Rerun to get cross-references right." appears at
% *every* run, i.e., rerunning doesn't help. Or instead, it may
% be noticed that certain cross-references keep being wrong.
\% The only reason I know of is that the runs oscillate between
% two decisions about what material should be put onto a certain
\% page. And the only reason I know for this is that the space
% consumed by some cross-reference depends on the page breaking.
% I know this problem from critical edition typesetting.
%
\% * OUTLINE of the SOLUTION offered here: *
%%
% I simply propose that the user makes up her mind on the nasty
% page breaks and forces some at a certain lines, or contributes
% her opinion, through \pagebreak (or maybe even \nopagebreak, I
% have no idea whether this can be useful). -- A float ('figure'
% or 'table') may contribute to the problem as well, so you may
% move its LaTeX code or change the placement options (through
% the brackets argument).
%
```

% Typically, one position of such oscillating causes further % page breaking oscillations for many ensuing pages, yielding a % bunch of wrong cross-references and countings. Of course, the % user then should settle the first occurrence of oscillating % before bothering with others -- all the rest of them may % disappear when the first one is fixed. % % One problem with this solution ("?") is that it may be % bothersome to find out where the first oscillation occurs % indeed (by looking through the .dvi's or .pdf's). The present % package tries to help with this. % With Peter R. Wilson's ledmac, you have the "ballast" % procedure for influencing page breaks. (It is due to John % Lavagnino, Dominik Wujastyk, and Wayne Sullivan, inherited % from EDMAC). It saves you from looking for good positions for % \pagebreak's. I might offer something similar (with % lineno.sty/ednotes.sty). However, I would like to object that % the "ballast" procedure chooses between two page break % possibilities rather "by chance" (reinforcing the first break % idea encountered while the other idea might turn out to be % better). But I must concede: One of the two breaks between the % runs oscillate may turn out not to work, or even both of them % -- when the cross-references have been adjusted to that % decision. The "ballast" procedure may then save some time for % you. On the other hand, if *both* decisions turn out not to % work, I wonder whether the "ballast" method will certainly % find a working one. % %% * USAGE: * %% % 1. \usepackage{lblchng1} in every LaTeX document that you % create, or in every critical edition LaTeX document that you % create, or only when you run into the problem of not settling % label definitions. (Hope that you then remember that there is % such a package!) % % 2a. You will be told about the page numbers where some <code>\label</code> % (or, with Stephan I. B\"ottcher's lineno.sty or its extension % ednotes.sty, some \linelabel) appears. Observe the page breaks % in the .dvi's or .pdf's in the corresponding region. Note that % the passage which causes the oscillation may be a number of % pages earlier than the page number mentioned in the warning. % (Sorry, this is the price of cheapness.) You can get rid of % the warning without fixing the real problem -- fixing a late % page break preceding the \label -- but this may cause badly

```
% filled pages earlier. So it will be wise to identify the very
% first passage causing oscillating page breaks. -- Another
\% conjecturing hint: According to the diagnosis that I delivered
\% above, the first oscillation happens near a cross-reference
\% whose length varies due to the oscillation. So look for some
\% \ (or \lineref) referring forward(!). If you are lucky, the
% \ref refers to the label whose change has been warned about.
%
% 2b. If you are working with *ednotes.sty*: ednotes.sty v1.1
\% does something similar with internal informations about each
% note, and it delivers a similar message on screen and in .log.
% It reports on three page numbers. However, the first
% oscillation happens (I think) at most one page before the
% reported ones.
%
\% 3a. As indicated above, try to force a certain page break at
% this passage through \pagebreak (or \nopagebreak?) -- or
% change the position of a 'figure' or 'table' in code or in
% output (brackets argument), if it seems to contribute to the
% problem. Concerning \pagebreak (\nopagebreak), I personally
\% also think of using the optional argument in the brackets,
\% while I feel unable to judge the value of this. -- I also
\% recommend that you use \typeout near the \pagebreak or so to
% remind yourself of the \pagebreak -- in case the \pagebreak
% after some changes suddenly produces a very bad page break
\% and you don't examine the output with sufficient carefulness,
% being in a hurry, e.g.
%
% 3b. With *ledmac*, you may experiment with the "ballast"
% amount until that first oscillation stops.
%
%% * A minor WARNING: * (LaTeX version)
%%
\% A remark as of 1995/07/13 in ltmiscen.dtx makes me wonder
% whether the present package works with older versions of
% LaTeX.
%
%% * CRITICAL EDITIONS: * (lineno.sty, ednotes.sty, ledmac)
%%
% 1. With Stephan I. B\"ottcher's lineno.sty and its extension
% ednotes.sty, oscillating page breaking also results in wrong
\% pagewise numbering of lines and in wrongly placed-and-numbered
% footnotes. I am thinking of refining lineno.sty in addition to
\% the present package. On the other hand, I conjecture that
% wrong pagewise numbering is *always* (at least sufficiently
% often) closely accompanied by oscillating cross-references, so
```

% the present package may offer sufficient help. -- Well, sorry, % this may remain being true with respect to lineno.sty, but % since March 2005, ednotes.sty treats its internal line number % references in a way that makes them "invisible" to % lblchng1.sty. This is very necessary for huge editions with, % say, 10.000 notes or more, for a memory capacity reason. % ednotes.sty uses an own procedure to detect page number % changes, to which lblchng1.sty adds perhaps only little. % % 2. I guess that even ledmac users may find the present package % useful, to find out where they have to watch when trying to % adjust the "ballast" appropriately. However, its usefulness % depends on how dense LaTeX \label's appear in the edited text. % Indeed, it is the pages with the numerous critical footnotes % fall where oscillations are likely to occur. \label's may be % here when the comments refer to certain sections etc. of the % edited text, OK, but will they? The line number references % preceding the single notes (just on these "critical" -- in % two senses -- pages) might be much more helpful, yet they are, % with ledmac.sty, not implemented by \label. And it is wise not % to implement them by \label, similarly as with ednotes.sty % above. (ednotes.sty still uses \label, to be sure, but it % redefines \newlabel in a way that is specific to ednotes.sty's % way of storing data about the notes.) % %% * WONDERING REMARK: * %% % Oscillating label definitions do not necessarily result in % anything wrong. The page number in the label definition may % oscillate while not being used by any \pageref. -- I have no % idea at present what this tells us to do if it happens so ... % %% * ACKNOWLEDGEMENTs: * %% % This package is due to Roy Flechner's confidence in our % ednotes.sty and to frightening observations he reported to $\%\,$ us. Thanks also to Peter Wilson for moral support. %% Please send comments via http://contact-ednotes.sty.de.vu. \NeedsTeXFormat{LaTeX2e}[1994/10/30] %% <- \@onelevel@sanitize; also \CheckCommand \reserved@a. \ProvidesPackage{lblchng1}[\filedate\space\fileversion\space ^ Jexhibiting first changed label]

```
%% * Main idea: *
% Testing on label changes is done by \@testdef -- at least I
\% assume this here (and I will somewhat check it). I refine it
% so it shows the label name and the page numbers -- clearly,
% what could I do else? (Well, I could redefine \label so ...)
%
%% If LaTeX's \@testdef changes, the present package may better
%% be updated:
\CheckCommand*\@testdef[3]{%
  \def\reserved@a{#3}\expandafter \ifx \csname #10#2\endcsname
  \reserved@a \else \@tempswatrue \fi}
\def\@testdef#1#2#3{%% This is what I expect LaTeX to use.
  \@ifundefined{#1@#2}\@tempswatrue{%% Like LaTeX:
    \def\@tempa{#3}%
    \expandafter
    \ifx \csname #10#2\endcsname \0tempa
    \else \@tempswatrue
%% v0.3: moved disabling \@newl@bel from here to below.
    \fi %% But now:
%% To be sure, I additionally assume that the page number is the
%% second thing, and more. I have had bad experience with
\% hyperref and thus do not assume that there are just two
%% things in the last argument of \newlabel.
    \def\@tempb##1##2##3\@nil##4{%
      \def##4{##2}\@onelevel@sanitize##4}%
%% Well, why not use some initially defined \@LC@extractpno
%% instead of this \@tempb? %% TODO
%% -- With modern large and fast TeX versions, one should not
%% waste a second with such considerations. -- However:
%% different effects concerning compatibility.
    \expandafter \@tempb \@tempa \@nil\@tempa
    \expandafter\expandafter\expandafter
      \@tempb \csname#1@#2\endcsname \@nil\@tempb
    \ifx\@tempa\@tempb \else
      \typeout{^^JPackage 'lblchng1':^^J%
        *** Page number of label '#2' is changing: ***^J%
        \space\space\space
        was \@tempb, will be \@tempa.^^JWatch whether
        this stops and references get right.}%
%% Further testing wouldn't change anything:
      \def\@newl@bel{\@gobblefour\relax}\fi}}
%% Warning: this could create an incompatibility with some other
%%
            package or with some LaTeX version.
%% Again: this extra line doesn't pay well nowadays.
```

\endinput

VERSION HISTORY:

| v0.1 | 2005/02/15 | First release for Roy Flechner. |
|--------|------------|--|
| v0.2b | 2005/02/16 | Attempt at \getpagewiselinenumbers in |
| | | vain. Improved explanations. |
| v0.2 | 2005/02/17 | Changed implementation back; but keep |
| | | completely disabling \newlabel after the |
| | | report. Only page numbers are reported. |
| | | (CTAN and ednotes.news received slightly |
| | | different explanations than Roy Flechner.) |
| v0.3 | 2005/02/17 | \@newl@ble turned off with page no. change |
| | | only. Doc. warns on compatibility. |
| v0.31 | 2005/02/27 | Additional line on screen. |
| v0.32 | 2005/03/08 | Adapted explanations to ednotes.sty v1.1; |
| | | warned about usefulness with critical |
| | | editions. Changed some headings. |
| | | Acknowledgements. |
| v0.32a | 2005/03/21 | Minor corrections. |
| v0.32c | 2005/10/01 | Another typo fix. |

3.2 A lemma repeated in a line: edcntwd0.sty

%% EdCntWd0.sty--count word occurrences with ednotes.sty. \def\fileversion{0.32a} \def\filedate{2006/06/16} %% TODO

%% Copyright (C) 2004 Uwe L\"uck & Christian Tapp (direction) %% 2005 2006 Uwe L\"uck. %% Munich, http://www.contact-ednotes.sty.de.vu. %% Current maintainer is Uwe L\"uck. %% This program can be redistributed and/or modified under the terms %% of the LaTeX Project Public License distributed from CTAN %% archives in directory macros/latex/base/lppl.txt; either %% version 1.3a of the License, or any later version. %% We did our best to help you, but there is NO WARRANTY. %% * USAGE: * %% % 1.) The present file is loaded by the 'countoccurrences' package % option of version v0.8 (onwards) of 'ednotes.sty'. %% % 2.) If your source code somewhere contains <WORD><TEXT>\Anote{<WORD>}{<NOTE>} % % and produces some % <WORD><TEXT><WORD>

```
% in *one* printed line, the lemma preceding the note should indicate
% that the note is concerned with the *second* occurrence of <WORD>.
\% It would be extremly tedious to implement this requirement in a
\% LaTeX macro package. The present package does some part of it.
% If you are, in typing, not sure that the first and second
% occurrence of <WORD> will be printed in different lines, type
      \countword{<WORD>}<TEXT>\Anote{\countword{<WORD>}}{<NOTE>}
%
\% The macro \countword will then check whether the occurrences of
% <WORD> are printed in the same line, and if this happens, the lemma
% preceding the note will have an index '2'. The analogous thing
%
      <WORD><TEXT><WORD><MORE>\Anote{<WORD>}{<NOTE>}
% works as well (resulting in an index '3'), and so on.
%
\% (So the macros do not save you from looking for earlier word
% occurrences, but at least from counting occurrences in the printed
% lines, and you do not have to repeat the procedure when you
% change the width of the printed text.)
%
\% Of course, you only have to look for earlier occurrences in the
% same paragraph.
%%
\% 3.) Sometimes <WORD> may contain tokens which must not appear in
% label names, e.g., 'r\^ole'. In this case, e.g., \countword{r\^ole}
% will break. Then type, e.g., \countword[role]{r\^ole} instead.
% To be more precise: If <WORD> expands to something containing
% a token which is no character token, type
\ \countword[<SUBST>]{<WORD>} instead, where <SUBST> expands to
% nothing but character tokens. (Cf. \csname on p. 203 of TeXbook.)
% 4.) Customization: Index numbers appear as subscripts by default.
% To change this, type
   \renewcommand*{\CWtextscript}{\textsuperscript}
%
% or \let\CWtextscript\textsuperscript .
% 5.) Pagewise/running line numbering: Switching from pagewise to
% running line numbering needs an extra run or deletion of
% \jobname.aux. So don't be frightened by an error message.
%% Please send comments via http://www.contact-ednotes.sty.de.vu.
%% For wizards: changes lineno.sty's \linenumberpar.
\NeedsTeXFormat{LaTeX2e}[1994/12/01]
%% <- \newcommand*, \providecommand*
\ProvidesPackage{edcntwd0}[\filedate\space\fileversion\space
                           ^JCounting word occurrences with
                              ednotes.sty (ul)]
```

```
%%
%% * Main ideas: *
% \countword occurrences write their order (per paragraph) and line
% numbers into the .aux-file. With these informations from the
\% latter, a table is created which assigns line and place
\% numbers to words. A second table re-orders the first one and
% assigns an index to each place number. An index of 0 means that the
% corresponding word appears only once in a line. A higher index
% tells the order in which an occurrence follows others in the line.
% When processed for the lemma tag, \countword realizes its place
\% number and, using this, reads the index from the former table and
% prints or does not print an index accordingly.
% \RequirePackage{ednotes}[2004/01/04]
\% Does this work for mere version checking?
%% No--had the problem with edtable. See LaTeX bug latex/3730.
% Auxiliaries:
\def\@CW@stepcnt#1{\advance#1\@ne}
\def\@CW@emptylist{\@eltt} %% Need bound for table rows.
% \newif\if@CW@firstinpar \global\@CW@firstinpartrue %% !
% \c@CW@par identifies paragraphs which contain \countword.
% From v0.32a onwards, it is a LaTeX counter in order to
% work properly with \includeonly
\newcounter{CW@par} % \newcount\c@CW@par
% \@CW@wordlist is made a list of \countword-arguments in one
% paragraph, to be written to the .aux .
\global\let\@CW@wordlist\@empty
% At the first occurrence of \countword in a paragraph,
\% \ CW@makeplaceindex reads the corresponding \@CW@wordlist
\% and transforms it into \@CW@wordlinelist -- if it has been
\% written in the previous run. Whether the latter is the case
% is recorded by \if@CW@pardef.
\global\let\@CW@make@placindexlist\@CW@makeplaceindexlist
\newif\if@CW@pardef \global\@CW@pardeffalse
\global\let\@CW@wordlinelist\@CW@emptylist
\% When there is evidence that there are more occurrences of
% \countword than in the previous run:
\def\@CW@missingdata{\G@refundefinedtrue
 \@EN@warning{Missing data for \string\countword}%
  \CWtextscript?}
%% <- TODO: warning when some \countword has been removed!?
```

```
\def\@CW@makeplaceindexlist{%
  \global\let\@CW@make@placeindexlist\relax
  \stepcounter{CW@par}%
                                 % v0.32a
%
   \global\@CW@stepcnt\c@CW@par
  \@ifundefined{CWp\romannumeral\c@CW@par}%
%
                 {\G@refundefinedtrue \global\@CW@pardeffalse}%
               {\global\@CW@pardeffalse}%
               {%
    \global\@CW@pardeftrue
%
    \global\let\@CW@wordlinelist\@CW@emptylist
%% \@CW@wordlinelist is built as a "table", each row being
%% <WORD>\@elt<LINENO>\@elt<PLACENO>\@eltt
%% --and there is an extra leading \@eltt.
%% Latter needed for determining exact matching.
%
    \global\let\@CW@placeindexlist\@CW@emptylist
    \begingroup
      \count@\z@ \let\@elt\relax \let\@eltt\relax
      \edef\@tempa{\noexpand\@tfor \noexpand\@tempa :=%
        \csname CWp\romannumeral\c@CW@par\endcsname}%
      \@tempa\do{%
        \@CW@stepcnt\count@
        \edef\@tempc{r@CWw@\number\c@CW@par @\number\count@}%
%% 2004/07/27: hack for pagewise line numbering:
        \expandafter \@ifundefined \expandafter{\@tempc}%
            {\gdef\@gtempa{?}}%% \global: cf. below!
            {\ifx\c@linenumber\c@runninglinenumber
               \gdef\@gtempa{%
                 \expandafter\expandafter\expandafter \@car
%% Beware hyperref.
                 \csname\@tempc\endcsname \@nil}%
             \else
               \begingroup
                 \def\thelinenumber{%
                   \xdef\@gtempa{\number\c@linenumber}}%
%% Assumes \getpagewisenumber -> {... \thelinenumber}
\% Local vs. global assignments to \clinenumber OK according to
%% Stephan. (!?)
                 \expandafter\expandafter\expandafter \@car
                 \csname\@tempc\endcsname \@nil
               \endgroup
             \fi}%
        \typeout{G:\meaning\@gtempa}% TEST
%
        \edef\@tempb{%
          \noexpand\g@addto@macro \noexpand\@CW@wordlinelist{%
          \@tempa \@elt
```

```
\@gtempa
%
            \expandafter \@ifundefined \expandafter{\@tempc}{?}%
%
              {\expandafter\expandafter \@car
%
               \csname\@tempc\endcsname \@nil}%
          \@elt
          \number\count@ \@eltt}}%
        \@tempb}%
%% TODO: empty referring macros after use -> ednotes as well.
      \xdef\@CW@numberofwords{\number\count@}%
%% \@CW@wordlinelist next is transformed into \@CW@placeindexlist:
      \loop
% \typeout{WL=\meaning\@CW@wordlinelist}%% TEST
      \ifx\@CW@wordlinelist\@CW@emptylist \else
        \global\let\@CW@nextwordlinelist\@empty
        \expandafter\@CW@takerow\@CW@wordlinelist\@nil
        \ifx\@CW@nextwordlinelist\@empty
          \global\let\@CW@wordlinelist\@CW@emptylist
        \else
          \global\let\@CW@wordlinelist\@CW@nextwordlinelist
        \fi
      \repeat
    \endgroup
               }%
   \typeout{PI=\meaning\@CW@placeindexlist}%% TEST
%
    \global\let\countword\@CW@cntwii
%
%
    \@CW@cntwii
}
%% \@CW@placeindexlist has, after starting \@eltt, rows of form
%% <PLACE>\@elt<INDEX>\@eltt .
\global\let\@CW@placeindexlist\@CW@emptylist
\def\@CW@takerow\@eltt#1\@elt#2\@elt#3\@eltt#4\@nil{%
  \count@\@ne
  \g@addto@macro\@CW@placeindexlist{#3\@elt}%
%% \@CW@placeindexlist always closes with mostly spurios
%% 0\@eltt, don't know why, but harmless for reading the list.
  \def\@CW@matchline##1\@eltt#1\@elt#2\@elt##2\@eltt##3\@nil{%
% \typeout{WL=\meaning\@CW@wordlinelist}%% TEST
    \def\@tempa{##1}%
     \typeout{##1}%% TEST
%
    \ifx\@tempa\@CW@emptylist
      \g@addto@macro\@CW@placeindexlist{0\@eltt}%
    \else
  %% \@tempcnta determines one out of four cases,
  %% while \count@ counts equal words in a line:
```

```
\@tempcnta \ifnum\count@=\@ne \z@ \else \tw@ \fi
```

```
\ifx\@nnil##2\@nnil %% No match.
        \let\@CW@next\relax
      \else %% Match.
        \@CW@stepcnt\@tempcnta \@CW@stepcnt\count@
        \@CW@buildnextwordlinelist{##1}%
        \def\@CW@next{\@CW@matchline\@eltt##3\@nil}%
      \fi
  %% Cases determined.
%
     \typeout{\number\@tempcnta}%% TEST
      \ifcase\@tempcnta %% \typeout{Case 0: \count@=1, no match}%
        \g@addto@macro\@CW@placeindexlist{0\@eltt}%
        \xdef\@CW@nextwordlinelist{\@eltt#4}%
      \or %% \typeout{Case 1: \count@=1, match}%
        \g@addto@macro\@CW@placeindexlist{1\@eltt##2\@elt2\@eltt}%
      \or %% \typeout{Case 2: \count@>1, no match}%
        \@CW@buildnextwordlinelist{##1}%
      \or %% \typeout{Case 3: \count@>1, match}%
        \edef\@tempc{\noexpand\g@addto@macro \noexpand\@CW@placeindexlist
          {##2\@elt \number\count@ \@eltt}}%
        \@tempc
      \fi
      \@CW@next
    \fi
  }%
  \@CW@matchline\@eltt#4\@eltt#1\@elt#2\@elt\@eltt\@nil
  %% TODO #4 void!? Cf. dummy above, \@CW@next.
7
%% \@CW@buildnextwordlinelist{#1} appends non-void #1 to
%% \@CW@nextwordlinelist:
\def\@CW@buildnextwordlinelist#1{%
  \ifx\@nnil#1\@nnil \else
    \g@addto@macro\@CW@nextwordlinelist{\@eltt#1}\fi}
% \c@CW@repword counts occurrences of \countword in a paragraph:
\newcount\c@CW@repword
\newcommand*\countword[2][\@nil]{%
% \newcommand*\@CW@cntwii[2][\@nil]{%
    \global\@CW@firstinparfalse
%
  \@CW@make@placeindexlist
  \global\@CW@stepcnt\c@CW@repword
  def\0tempa{#1}%
  \ifx\@tempa\@nnil
    \g@addto@macro\@CW@wordlist{{#2}}%
  \else
    \g@addto@macro\@CW@wordlist{{#1}}%
```

```
\fi
  \edef\@tempa{\noexpand\linelabel{%
    CWw@\number\c@CW@par @\number\c@CW@repword}}%
  \@tempa
  #2}
% \@ifdefinable\countword{\global\let\countword\@CW@cntwi}
% In the lemma tag of the note, \countword behaves as follows.
\addlemmaexpands{\let\countword\@CW@cntwl
                 \global\c@CW@nrepword\c@CW@repword}
\newcount\c@CW@nrepword
\newcommand*\@CW@cntwl[2][]{%% First argument just gobbled,
%% using place number instead.
  #2%
  \@CW@make@placeindexlist
  \if@CW@pardef
    \global\@CW@stepcnt\c@CW@nrepword
    \ifnum\c@CW@repword>\@CW@numberofwords\relax
      \@CW@missingdata
    \else
      \edef\@tempc{%
        \def\noexpand\@tempb####1\noexpand\@eltt
          \number\c@CW@nrepword}%
      %% "look up".
      \@tempc \@elt##2\@eltt##3\@nil{\def\@tempa{##2}}%
      \expandafter\@tempb \@CW@placeindexlist \@nil
      \if 0\@tempa \else
%
          \CWtextscript{\if ?\@tempa ?\else \@tempa \fi}%
        \if ?\@tempa \@CW@missingdata
        \else
                     \CWtextscript\@tempa \fi
      \fi
    \fi
  \else
%% \if@CW@pardef and the question marks could have been given up,
\% since there is already the 'undefined references' warning.
      \if@CW@firstinpar \CWtextscript 1\else \CWtextscript ?\fi
%
%
      \CWtextscript?%
    \@CW@missingdata
  fi
\providecommand*\textsubscript[1]{%
%% Cf. LaTeX \textsuperscript: we will be in a note here!
  $\m@th_{\mbox{\fontsize\sf@size\z@\selectfont#1}}$}
\let\CWtextscript\textsubscript
\def\@EN@CWhook{\setbox\z@\hbox} %% To recognize stepping counters.
```

```
%% TODO: empty referring macros after use. -> ednotes as well.
% \CWClosePar writes \@CW@wordlist to the .aux-file and
% resets the lists and \if@CWpardef:
\newcommand*\CWClosePar{% %% TODO: -> doc.!? Useful?
  \ifx\@CW@wordlist\@empty \else
      \immediate\write\@mainaux{%
%
    \immediate\write\@auxout{%% for \includeonly
      \gdef\expandafter\noexpand
       \csname CWp\romannumeral\c@CW@par\endcsname
        {\@CW@wordlist}}%
    \global\let\@CW@wordlist\@empty
    \global\c@CW@repword\z@
  \fi
%
   \global\let\countword\@CW@cntwi
  \global\let\@CW@placeindexlist\@CW@emptylist
  \global\let\@CW@make@placeindexlist\@CW@makeplaceindexlist
  \global\let\@CW@wordlinelist\@CW@emptylist
  \global\let\@CW@nextwordlinelist\@empty
%
   \global\@CW@firstinpartrue
  \global\@CW@pardeffalse}
\expandafter\def\expandafter\linenumberpar\expandafter{%
  \expandafter\CWClosePar\linenumberpar}
\endinput
VERSION HISTORY:
v0.01 2004/01/05 Very first release under name 'ecntw0.sty'.
v0.1 2004/01/05 Changed names and documentation, new name
                  'edcntwd0.sty'.
v0.11 2004/01/05 renamed \CWnext -> \@CW@next, added main ideas of
                  implementation.
v0.12 2004/05/12 Added remark on 'linenox1.sty' (load earlier);
                  added '(C)' and Christian for copyright;
                  L"uck -> L\"uck. \RequirePackage{ednotes};
                  changed doc. accordingly.
      2004/07/06 Added explanation for order with 'linenox1.sty'
                  ("for wizards").
      2004/07/28 ^^J; cope with pagewise numbering; note on
                  switching from pagewise to running.
v0.12b .../08/31 Changed to LPPL v1.3, added maintenance.
v0.2 2004/09/20 Removed mentions of 'linenox1.sty', for
                  'lineno.sty' v4...
v0.3 2004/10/07 Usage: to be loaded by 'ednotes.sty' option.
      2004/10/11 Removed \RequirePackage{ednotes}; changed some
```

| | TODOs. | | | |
|---------------------|--|--|--|--|
| 2004/10/12 | latex/3730. | | | |
| v0.3a 2004/11/07 | LPPL v1.3a. | | | |
| v0.3b 2005/01/10 | Contact via http. | | | |
| v0.31 2005/02/20 | Added \@EN@first. | | | |
| 2005/03/08 | Added Copyright 2005. | | | |
| v0.32 2005/05/01 | Replaced \@EN@first by LaTeX's \@car. | | | |
| [sent to CT | AN, contrary to final line!] | | | |
| 2006/02/25 | Typo fix 'USAGE' 5. | | | |
| 2006/05/01 | \if@CW@firstinpar to avoid spurious '?'. | | | |
| [given to Lekhtman] | | | | |
| v0.32a /06/07 | \c@CW@par with \includeonly. | | | |
| 2006/06/15 | replaced \if@CW@firstinpar by | | | |
| | \@CW@make@placeindexlist etc.; | | | |
| | extended documentation; rearranged code. | | | |
| 2006/06/16 | \@CW@missingdata. | | | |

3.3 Some para-footnote hack: mfparptc.sty

This deals with a problem that still needs much thinking ...

```
%% MFParPtc.sty---Uwe L"uck http://www.contact-ednotes.sty.de.vu.
%% Modifies Alexander Rozhenko's manyfoot.sty.
%%
%% Copyright (C) 2003--2004 by Uwe L"uck--author-maintained.
%%
\% This file can be redistributed and/or modified under
%% the terms of the LaTeX Project Public License; either
%% version 1.3a of the License, or any later version.
\% The latest version of this license is in
%% http://www.latex-project.org/lppl.txt
%% We did our best to help you, but there is NO WARRANTY.
%%
%
\NeedsTeXFormat{LaTeX2e}
\ProvidesPackage{mfparptc}[2005/01/10 v0.4b %% TODO
    ^^J\string"patch\string" for manyfoot.sty's paragraph footnotes
       (ul)]
%
% The paragraphed-footnote style of Alexander Rozhenko's manyfoot.sty
% derives, like the same style of Dominik Wujastyk's and John
% Lavagnino's EDMAC.doc, from Donald Knuth's proposal on pp.
% 398--400 of the TeXbook. However, the two packages improve this
% proposal in different respects. EDMAC (i) adds to the TeXbook
% macros penalties solving a page breaking problem and (ii) accounts
\% for some problems of line breaking and hyphenation in the
```

```
% footnotes (see EDMAC.doc, Section
% 'Footnotes'--'Paragraphed footnotes'). manyfoot.sty does not deal
% with these things.
%
\% The present version of the "patch" rearms the latter with EDMAC's
\% remedies (maybe at the cost of \linebreak and \\, see below).
%% TODO
% We aim at manyfoot.sty v1.4 from 1998/12/19.
%
\% Alex and me could not convince ourselves entirely of these
\% "patches". They are *experimental*. When we have made up our minds,
% they may become part of other packages.
%
\% Indeed, the present "patches" disable the \SplitNote macro
\% from manyfoot.sty. So you have to choose between <code>\SplitNote</code>
\% (not loading present package) and the EDMAC enhancements
% (loading the present package).
%
% -- If you want to use this package for working with ednotes.sty,
% load the latter with option 'edmacpara'--this loads the
\% present file at a suitable time. This is useful only unless
% only 'plain' options of 'ednotes.sty' are called.
\% --If you don't work with ednotes.sty and want to use the present
% file only for modifying manyfoot functionality, load the present
\% file after manyfoot.sty has been loaded. This is useful only if
\% some footnote layer has been declared with option 'para' or
% 'para*'.
%
% Implementation:
%
%% Note: \Requirepackage[...]{manyfoot} would cause option clash.
%
% \MFL@fnotepara expected:
% (Also tests whether manyfoot.sty has been loaded with option
% 'para' or 'para*'.)
\CheckCommand*\MFL@fnotepara[3] {\let\@thefnmark\@empty
  \MCCOmakemark{#2}%
  \MFL@insert#1{\reset@font\footnotesize
    \ifx\@thefnmark\@empty \@tempswafalse \else
      \@tempswatrue
      \protected@edef\@currentlabel{\@thefnmark}%
    \fi
    \color@begingroup
      \if@tempswa
        \setbox\@tempboxa\hbox{\@makefnmark}%
        \ifMFL@paraindent
```

```
\@tempdima.8em \advance\@tempdima-\wd\@tempboxa
          \ifdim \@tempdima<\z@ \@tempdima\z@ \fi
        \else
          \@tempdima\z@
        \fi
      \fi
      \setbox\@tempboxa\hbox{%
        \if@tempswa
          \hskip\@tempdima\unhbox\@tempboxa\nobreak
        \fi
        \ignorespaces#3\unskip\strut
        \ifMFL@split \penalty\m@ne\space \else
          \penalty-10 \hskip\footglue
        \fi
      }%
      \dp\@tempboxa\z@ \ht\@tempboxa\MFL@fudgefactor\wd\@tempboxa
      \box\@tempboxa
    \color@endgroup
 }%
}
% For splitting footnote paragraphs EDMAC inserts a (low) \penalty
% after \box\@tempboxa at Wayne Sullivan's suggestion, see
% EDMAC.doc after \def\para@vfootnote.
% Another patch is needed to get \language whatsit nodes and
% \discretionary's---cf. EDMAC.doc's description of \para@vfootnote.
% This is due to Michael Downes, Wayne Sullivan, and Donald Knuth.
% The insert text is first typeset in an "infinitely" wide \vbox.
\% Some problems remain as in EDMAC. No \break should occur in the
\% insert text. We locally redefine \@M and \hfil hoping to repair
% \\ and \linebreak (even \break!) (experimental---please report!) %% TODO
% (EDMAC.doc refers to Michael Downes, 'Line breaking in \unhboxed
% Text', TUGboat 11 (1990), pp. 605--612.)
% TODO: Might redefine \hfill and more; cf. Michael Downes' paper.
\def\MFL@fnotepara#1#2#3{\let\@thefnmark\@empty
  \MCC@makemark{#2}%
  \MFL@insert#1{\reset@font\footnotesize
    \ifx\@thefnmark\@empty \@tempswafalse \else
      \@tempswatrue
      \protected@edef\@currentlabel{\@thefnmark}%
    \fi
    \color@begingroup
      \if@tempswa
        \setbox\@tempboxa\hbox{\@makefnmark}%
        \ifMFL@paraindent
          \@tempdima.8em \advance\@tempdima-\wd\@tempboxa
          \ifdim \@tempdima<\z@ \@tempdima\z@ \fi
```

```
\else
          \@tempdima\z@
        \fi
      \fi
      \setbox\@tempboxa\vbox{%
                                    <- PATCH!
        \@parboxrestore
                                  % <- PATCH
        \hsize\maxdimen \noindent % <- PATCH!</pre>
%
        \setbox\@tempboxa\hbox{%
        \if@tempswa
          \hskip\@tempdima\unhbox\@tempboxa\nobreak
        \fi
        \mathchardef\@M9999 %
                                     <- PATCH!
        \def\hfil{\hskip\linewidth\@minus\linewidth}% <- PATCH!</pre>
        \ignorespaces#3\unskip\strut
%
          \ifMFL@split \penalty\m@ne\space \else % PATCH: removed.
%
            \penalty-10 \hskip\footglue % PATCH: reinserted below.
%
          \fi
      }%
      \setbox\@tempboxa\hbox{% <- PATCH!</pre>
% Here is a suitable variant of EDMAC.doc's \unvxh, due to Michael
% Downes:
        \unvbox\@tempboxa \global\setbox\@ne\lastbox}%
        \unhbox\@ne \unskip \unskip \unpenalty
        \ifMFL@split % Moved here from above.
          \penalty\m@ne\space
        \else
          \penalty-10 \hskip\footglue
        \fi
      7%
      \dp\@tempboxa\z@ \ht\@tempboxa\MFL@fudgefactor\wd\@tempboxa
      \box\@tempboxa
      \penalty\z0 % <- PATCH!
    \color@endgroup
 }%
}
% Like in EDMAC.doc, the additional penalty is removed by
\% \ \ MFL@makehbbox which corresponds to \makehboxofhboxes.
% \MFL@makehhbox differs from \makehboxofhboxes, however, in even
% \unvbox'ing a note bundle from a minipage. It seems not to be easy
\% to tell a \penalty 0 placed by patched \MFL@fnotepara from another.
\% In this version we just hope that removing such other penalties
% causes no damage---after all, the bundle was not supposed to be
% splitted.
\def\MFL@makehhbox{%
  \loop
```

```
\unpenalty % <- PATCH!
  \setbox\z@\lastbox
  \ifhbox\z@
   \setbox\@tempboxa\hbox{\box\z@\unhbox\@tempboxa}%
  \repeat
   \ifvbox\z@ \unvbox\z@ \MFL@makehhbox \fi
}</pre>
```

\endinput

VERSION HISTORY:

| v0.1 2003/01/19 | First. Sent to John Lavagnino + |
|--------------------------------------|---|
| v0.2 2003/01/23 | Corrected \Provides file name; supplied \vbox in \unvxh (bug fix!). |
| v0.21 2003/02/27 | Stressed problem with \linebreak and \\ in doc. |
| v0.21 2003/02/21 v0.23 2003/02/28 | Further comment on \CheckCommand, |
| 10.20 2000, 02, 20 | improved explanation mentioning \para@vfootnote. |
| v0.3 2003/03/01 | Changed \@M and \hfil to enable \\ and \linebreak |
| | in para-style. |
| v0.31 2003/03/24 | Reminded above that v0.2 was a real bug fix; |
| | added ednotes.sty@web.de. |
| v0.32 2003/03/26 | Added TODO on Alex' provision. [!?? 2004/04/25] |
| v0.33 2003/03/28 | Added 'experimental'; 'missing' -> 'bad' (hyph.) |
| 2004/01/29 | Corrected, in the explanation for users, allusion |
| | to problems to be solved (line breaking, not only |
| | hyphenation) and added mention of \SplitNote |
| | problem. |
| v0.34 2004/04/25 | Added copyright etc.; added missing '%' before |
| | 'manyfoot.sty does not deal []'. Made |
| | (loading)' more clear. |
| 0.05.0004/05/40 | <pre>'patch' -> '"patch"'.</pre> |
| v0.35 2004/05/10 | Note on \RequirePackage[]{manyfoot}; enlarged |
| 2004/05/20 | on loading (Ednotes.sty); manyfoot -> Manyfoot. Enhanced comment on \CheckCommand. |
| 2004/03/20 | \string" with \Provides, ^J. |
| v0.36 2004/08/21 | Added \@parboxrestoreas a bug fix for 'center' |
| 10.30 2004/00/21 | environment. |
| 2004/08/23 | LPPL v1.3. |
| 2004/08/31 | Rearranged preamble concerning maintenance. |
| v0.4 2004/10/07 | Ednotes -> ednotes etc.; instructions: |
| | ednotes option 'edmacpara'. |
| v0.4a 2004/11/07 | LPPL v1.3a. |
| v0.4b 2005/01/10 | Contact via http. |
| | |

3.4 A reminder of obsoleteness: mfparxsp.sty

This file just tells that some earlier facility dealing with vertical spacing has been superseded by manyfoot's more recent \ExtraParaSkip.

```
%% MFParXSp.sty---Uwe L"uck http://www.contact-ednotes.sty.de.vu.
%%
%% mfparxsp.sty earlier defined \MFparaxbuffer.
%% manyfoot version 1.7 (September 2004) defines
%% \ExtraParaSkip instead, so former mfpaxsp.sty is
%% ***obsolete***. You may use the present file to
%% convert \MFparaxbuffer of your earlier document files
%% into \ExtraParaSkip, or just to remind you of the change
%% later. (On CTAN, the new manyfoot version is obtainable
%% from directory /macros/latex/contrib/ncctools/.)
%% See explanation of \ExtraParaSkip in ednotes.sty
%% (CTAN: /macros/latex/contrib/ednotes).
%%
%% Copyright (C) 2004 by Uwe L"uck--author-maintained.
%%
%% This program can be redistributed and/or modified under the
%% terms of the LaTeX Project Public License distributed from
%% CTAN archives in directory macros/latex/base/lppl.txt; either
%% version 1.3 of the License, or any later version.
%% We did our best to help you, but there is NO WARRANTY.
%%
%
\NeedsTeXFormat{LaTeX2e}
\ProvidesPackage{mfparxsp}[2005/01/10 v0.3b %% TODO
    \string\MFparaxbuffer\space (ul)]
%
\PackageWarningNoLine{mfparxsp}{%
%% Line number would be that of here.
This package is obsolete.\MessageBreak
Replace \string\MFparaxbuffer\space
by \string\ExtraParaSkip\MessageBreak
use manyfoot.sty version 1.7\MessageBreak
and don't load mfparxsp.sty any more.\MessageBreak
See ednotes.sty documentation%% Silly: full stop from LaTeX.
}
\let\MFparaxbuffer\ExtraParaSkip
```

\endinput

VERSION HISTORY:

| v0.1 2004/04/26 First. Sent to Florian Kragl and Christian. | | | | |
|--|-----|--|--|--|
| v0.2 2004/04/27 Previous version was wrong. Used \MFL@startpara | | | | |
| as a hook now. Sent to Florian Kragl, Alex Rozhe | nko | | | |
| and Christian. | | | | |
| v0.21 2004/05/10 Removed explanations on loading from Mfparptc.st | y. | | | |
| 2004/07/26 ^^J | | | | |
| 2004/08/31 'author-maintained'. | | | | |
| v0.3 2004/09/21 "Compatibility mode" for Manyfoot.sty version 1. | 7; | | | |
| removed earlier code and documentation; changed | | | | |
| .log display. | | | | |
| 2004/10/08 Changed explanation to users at top. | | | | |
| v0.3a 2004/11/07 LPPL v1.3a. | | | | |
| v0.3b 2005/01/10 Contact via http. | | | | |
| | | | | |
| *Florian Kragl's earlier suggestion:* | | | | |
| In preamble, type | | | | |
| \setlength{\footnotesep}{ <fns>}</fns> | | | | |
| \renewcommand*\footnoterule{\kern- <ra>\hrule\kern-<rb>}</rb></ra> | | | | |
| Here, find good values for <fns>, <ra>, and <rb> by trial and error.</rb></ra></fns> | | | | |
| | | | | |
| %% End of file 'MFParXSp.sty'. | | | | |
| | | | | |