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The gmverb Package^{*}

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This is (a documentation of) file gmverb.sty, intended to be used with L^AT_EX 2_E as a package for a slight redefinition of the \verb macro and verbatim environment and for short verb marking such as |\mymacro|.

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LPPL status: "author-maintained".

Many thanks to my T_EX Guru Marcin Woliński for his T_EXnical support.

⁷³ \NeedsTeXFormat{LaTeX2e}

⁷⁴ \ProvidesPackage{gmverb}

⁷⁵ [2008/11/12 vo.91 After \shortverb (FM) but my way (GM)]

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Intro, usage

This package redefines the \verb command and the verbatim environment so that the verbatim text can break into lines, with % (or another character chosen to be the comment char) as a 'hyphen'. Moreover, it allows the user to define his own verbatim-like environments provided their contents would be not *horribly* long (as long as a macro's argument may be at most).

This package also allows the user to declare a chosen char(s) as a 'short verb' e.g., to write |\a\verb|\example| instead of \verb|\a\verb|\example|.

The gmverb package redefines the \verb command and the verbatim environment in such a way that \, { and \ are breakable, the first with no 'hyphen' and the other two with the comment char as a hyphen. I.e. {\<subsequent text>} breaks into {%

* This file has version number vo.91 dated 2008/11/12.

| | |
|--------------------------------|--|
| | <p><code>\mymacro</code> and <code>\text\mymacro</code> breaks into <code>\text%</code> <code>\mymacro</code>.</p> |
| <code>\fixbslash</code> | <p>(If you don't like linebreaking at backslash, there's the <code>\fixbslash</code> declaration (observing the common scoping rules, hence OCSR) and an analogous declaration for the left brace: <code>\fixlbrace</code>.)</p> |
| <code>\VerbHyphen</code> | <p>The default 'hyphen' is % since it's the default comment char. If you wish another char to appear at the linebreak, use the <code>\VerbHyphen</code> declaration that takes <code>\char</code> as the only argument. This declaration is always global.</p> |
| <code>\verb+0K</code> | <p>Another difference is the <code>\verb+0K</code> declaration (OCSR). Within its scope, <code>\verb</code> allows an end of a line in its argument and typesets it just as a space.</p> |
| | <p>As in the standard version(s), the plain <code>\verb</code> typesets the spaces blank and <code>\verb*</code> makes them visible.</p> |
| <code>\MakeShortVerb</code> | <p>Moreover, gmverb provides the <code>\MakeShortVerb</code> macro that takes a one-char control sequence as the only argument and turns the char used into a short verbatim delimiter, e.g., after <code>\MakeShortVerb*\ </code> (as you guess, the declaration has its starred version, which is for visible spaces, and the non-starred for the spaces blank) you may type <code>\% \mymacro</code> to get <code>\mymacro</code> instead of typing <code>\verb+\mymacro+</code>. Because the char used in this example is my favourite and used just this way by DEK in the <i>The TeXbook</i>'s format, gmverb provides a macro <code>\dekclubs</code> as a shorthand for <code>\MakeShortVerb(*)\%</code> <code>\ </code>.</p> |
| <code>\DeleteShortVerb</code> | <p>Be careful because such active chars may interfere with other things, e.g., the <code> </code> with the vertical marker in tables and with the tikz package. If this happens, you can declare e.g., <code>\DeleteShortVerb\ </code> and the previous meaning of the char used shall be restored.</p> |
| <code>\OldMakeShortVerb</code> | <p>One more difference between gmverb and shortverb is that the chars <code>\activeated</code> by <code>\MakeShortVerb</code> in the math mode behave as if they were 'other', so you may type e.g., <code>\\$ \\$</code> to get <code> </code> and <code>+ \activeated</code> this way is in the math mode typeset properly etc.</p> |
| <code>\dekclubs</code> | <p>However, if you don't like such a conditional behaviour, you may use <code>\OldMakeShortVerb</code> instead, what I do when I like to display short verbatims in displaymath.</p> |
| <code>\dekclubs*</code> | <p>There's one more declaration provided by gmverb: <code>\dekclubs</code>, which is a shorthand for <code>\MakeShortVerb\ </code>, <code>\dekclubs*</code> for <code>\MakeShortVerb*\ </code> and <code>\olddekclubs</code> for <code>\OldMakeShortVerb\ </code>.</p> |
| <code>\edverbs</code> | <p>There's one more declaration, <code>\edverbs</code> that makes <code>\[</code> checks if the next token is an active char and opens an <code>\hbox</code> if so. That is done so that you can write (in <code>\edverbs'</code> and <code>\dekclubs'</code> scope)</p> |
| | <pre>\[<verbatim stuff> \]</pre> |
| | <p>instead of</p> |
| | <pre>\[\hbox{ <verbatim stuff> }\]</pre> |
| | <p>to get a displayed shortverb.</p> |
| | <p>Both versions of <code>\dekclubs</code> OCSR.</p> |
| | <p>The <code>verbatim</code> environment inserts <code>\topsep</code> before and after itself, just as in standard version (as if it was a list).</p> |
| <code>\VisSpacesGrey</code> | <p>In August 2008 Will Robertson suggested grey visible spaces for gmdoc. I added a respective option to gmdoc but I find them so nice that I want to make them available for all verbatim environments so I bring here the declaration <code>\VisSpacesGrey</code>. It redefines only the visible spaces so affects <code>\verb*</code> and <code>verbatim*</code> and not the unstarred versions. The colour of the visible spaces is named <code>visspacesgrey</code> and you can redefine it xcolor way.</p> |
| | <p>As many good packages, this also does not support any options.</p> |

Installation

Unpack the gmverb-tds.zip archive (this is an archive conforming the TDS standard, see CTAN/tds/tds.pdf) in a texmf directory or put the gmverb.sty somewhere in the texmf/tex/latex branch on your own. Creating a texmf/tex/latex/gm directory may be advisable if you consider using other packages written by me.

Then you should refresh your TeX distribution's files' database most probably.

Contents of the gmverb.zip archive

The distribution of the gmverb package consists of the following three files and a TDS-compliant archive.

```
gmverb.sty  
README  
gmverb.pdf  
gmverb.tds.zip
```

This package requires another package of mine, gmuutils, also available on CTAN.

Compiling of the documentation

The last of the above files (the .pdf, i.e., *this file*) is a documentation compiled from the .sty file by running Xe²TeX on the gmverb.sty file (xelatex_gmverb.sty in the directory you wish the documentation to be in, you don't have copy the .sty file there, TeX will find it) twice, then MakeIndex on the gmverb.idx file, and then L^ATeX on gmverb.tex once more.

MakeIndex shell command:

```
makeindex -r gmverb
```

The -r switch is to forbid MakeIndex to make implicit ranges since the (code line) numbers will be hyperlinks.

Compiling the documentation requires the packages: gmdoc (gmdoc.sty and gmdoc.cls), gmverb.sty, gmuutils.sty and also some standard packages: hyperref.sty, color.sty, geometry.sty, multicol.sty, lmodern.sty and fontenc.sty that should be installed on your computer by default.

If you had not installed the mwcls classes (available on CTAN and present in TeX Live e.g.), the result of your compilation might differ a bit from the .pdf provided in this .zip archive in formatting: If you had not installed mwcls, the standard article.cls class would be used.

The code

Preliminaries

²⁵¹ \RequirePackage{gmuutils}[2008/10/08]

For \firstofone, \afterfi, \gmobeyspaces, \@ifnextcat, \foone and \noexpand's and \expandafter's shorthands \onx and \xa resp.

Someone may want to use another char for comment, but we assume here 'orthodoxy'. Other assumptions in gmdoc are made. The 'knowledge' what char is the comment char is used to put proper 'hyphen' when a verbatim line is broken.

\verbhyphen ²⁶³ \let\verbhyphen\xiipercent

Provide a declaration for easy changing it. Its argument should be of \langle char\rangle form (of course, a \langle char\rangle₁₂ is also allowed).

```
\VerbHyphen 269 \def\VerbHyphen#1{%
270   {\escapechar\m@ne
271     \gdef\verbhyphen{\string#1}}}
```

As you see, it's always global.

The breakables

Let's define a `\discretionary` left brace such that if it breaks, it turns `{%` at the end of line. We'll use it in almost Knuthian `\ttverbatim`—it's part of this 'almost'.

```
\breakbrace 280 \def\breakbrace{%
281   \discretionary{\xilbrace\verbhyphen}{\xilbrace}{%
284   \foone{\catcode`\[=\_1\catcode`\{=\active\catcode`\]=_2}%
285   [%}
286   \def\dobreakbrace[\catcode`\{=\active
287   \def{%
288     [\breakbrace\gm@lbracehook]]%
289   ]
```

Now we only initialize the hook. Real use of it will be made in `gmdoc`.

```
293 \relaxen\gm@lbracehook
```

The `\bslash` macro defined below I use also in more 'normal' `\TeX`ing, e.g., to `\typeout` some `\outer` macro's name.

```
298 \foone{\catcode`\!=\_o\makeother\{}\%
299 {%
\bslash 300 !def!bslash{\}%
301 !def!breakbslash{!discretionary{!verbhyphen}{\}{\}}%
302 }
```

Sometimes linebreaking at a backslash may be unwelcome. The basic case, when the first `cs` in a verbatim breaks at the lineend leaving there `%`, is covered by line 622. For the others let's give the user a countercrank:

```
309 \newcommand*\fixbslash{\let\breakbslash=\bslash}% to use due to the com-
310   mon scoping rules. But for the special case of a backslash opening a verbatim
311   scope, we deal specially in the line 622.
```

Analogously, let's provide a possibility of 'fixing' the left brace:

```
\fixbrace 315 \newcommand*\fixbrace{\let\breakbrace=\xilbrace}
316 \foone{\catcode`\!=\_o\catcode`\{=\active}\%
317 {%
\dobreakbslash 318 !def!dobreakbslash{!catcode`\!\!=\!active\!def\{!breakbslash}\}%
319 }%
```

The macros defined below, `\visiblebreakspaces` and `\xiiclus` we'll use in the almost Knuthian macro making verbatim. This 'almost' makes a difference.

```
328 \foone{\catcode`\_=_12\%} note this space is _10 and is gobbled by parsing the
329   number. \visibleinspace is \let in gmutils to \xiispace or \xxt@visibleinspace
330   of xltextra if available.
```

```
\breaklevisspace 332 \def\breaklevisspace{\discretionary{\visibleinspace}{\visibleinspace}{%
333   \visibleinspace}}
```

```
335 \foone\obeyspaces% it's just re\catcode'ing.
336 {%
```

```
\activespace 337 \newcommand*\activespace{\_}%
\dobreakvisiblespace 338 \newcommand*\dobreakvisiblespace{\def\_{\breakablevisspace}\obeyspaces}%
\breakablevisspace
\defining it caused a stack overflow disaster with gmdoc.
\dobreakblankspace 340 \newcommand*\dobreakblankspace{\let\_=\space\obeyspaces}%
341 }
\foone{`@makeother\|}{%
\xiiclub 344 \foone{`@makeother\|}{%
345 \def\xiiclub{|}}}
```

Almost-Knuthian \ttverbatim

`\ttverbatim` comes from *The T_EXbook* too, but I add into it a L^AT_EX macro changing the `\catcodes` and make spaces visible and breakable and left braces too.

```
\ttverbatim 354 \newcommand*\ttverbatim{%
 355   \let\do=\do@noligs\verb@atnolig@list
 356   \let\do=\@makeother\dospecials
 357   \dobreaklbrace\dobreakbslash
 358   \dobreakspace
 359   \tt
 360   \ttverbatim@hook}
```

While typesetting stuff in the qx fontencoding I noticed there were no spaces in verbatims. That was because the qx encoding doesn't have any reasonable char at position 32. So we provide a hook in the very core of the verbatim making macros to set proper fontencoding for instance.

```
367 \@emptyify\ttverbatim@hook  
VerbT1 \def\VerbT1{\def\ttverbatim@hook{\fontencoding{T1}\selectfont}}  
VerbT We wish the visible spaces to be the default.  
\ttverbatim@hook 374 \let\dobreakspace=\dobreakvisiblespace
```

The core: from shortverb

The below is copied verbatim ;-) from doc.pdf and then is added my slight changes.

```

\MakeShortVerb 383 \def\MakeShortVerb{%
 384   \@ifstar
 385   {\def\@shortvrbdef{\verb*}\@MakeShortVerb}%
 386   {\def\@shortvrbdef{\verb}\@MakeShortVerb}}
 387
\@MakeShortVerb 387 \def\@MakeShortVerb#1{%
 388   \xa\ifx\csname cc\string#1\endcsname\relax
 389   \@shortvrbinfo{Made }{#1}\@shortvrbdef
 390   \add@special{#1}%
 391   \AddtoPrivateOthers#1% a macro to be really defined in gmdoc.
 392   \xa
 393   \xdef\csname cc\string#1\endcsname{\the\catcode`#1}%
 394   \begingroup
 395   \catcode`\~\active\lccode`\~`#1%
 396   \lowercase{%
 397     \global\xdef\csname ac\string#1\endcsname~%
 398     \xdef\gdef\xdef\string#1\endcsname~%
 399     \xdef\ifmmode\xdef\string#1\endcsname~%
 400     \xdef\ifmmode\xdef\string#1\endcsname~%
 401     \xdef\ifmmode\xdef\string#1\endcsname~%
 402     \xdef\ifmmode\xdef\string#1\endcsname~%
 403     \xdef\ifmmode\xdef\string#1\endcsname~%
}

```

```

404      \@xa\else\@xa\afterfi{\@shortvrbdef~}\fi}}% This terrible number
        of \expandafters is to make the shortverb char just other in the math
        mode (my addition).
405      \endgroup
406      \global\catcode`#1\active
407      \else
408      \@shortvrbinfo\@empty{#1already}{\@empty\verb(*)}%
409      \fi}
410
\DeleteShortVerb 411
412 \def\DeleteShortVerb#1{%
413     \@xa\ifx\csname_cc\string#1\endcsname\relax
414     \@shortvrbinfo\@empty{#1not}{\@empty\verb(*)}%
415     \else
416     \@shortvrbinfo{Deleted}_{#1as}{\@empty\verb(*)}%
417     \rem@special{#1}%
418     \global\catcode`#1\csname_cc\string#1\endcsname
419     \global\@xa\let\csname_cc\string#1\endcsname\relax
420     \ifnum\catcode`#1=\active
421     \begingroup
422     \catcode`\~\active\lccode`\~`#1%
423     \lowercase{%
424         \global\@xa\let\@xa~%
425         \csname_ac\string#1\endcsname}%
426     \endgroup\@xa\fi}
427
428 \endgroup\@xa\fi}

```

My little addition

```

432 \@ifpackageloaded{gmdoc}{%
\gmv@packname 433   \def\gmv@packname{gmdoc}{%
\gmv@packname 434   \def\gmv@packname{gmverb}{}
435
@shortvrbinfo 436 \def\@shortvrbinfo#1#2#3{%
437   \PackageInfo{\gmv@packname}{%
438     ^~J\@empty_{#1}\@xa\@gobble\string#2_a_short_reference
439     for_{\@xa\string#3}}
440
\add@special 441 \def\add@special#1{%
442   \rem@special{#1}%
443   \@xa\gdef\@xa\dospecials\@xa
444   {\dospecials\do_{#1}%
445   \@xa\gdef\@xa\@sanitize\@xa
446   {\@sanitize\@makeother_{#1}}}

```

For the commentary on the below macro see the doc package's documentation. Here let's only say it's just amazing: so tricky and wicked use of \do. The internal macro \rem@special defines \do to expand to nothing if the \do's argument is the one to be removed and to unexpandable cses \do and \do's argument otherwise. With \do defined this way the entire list is just globally expanded itself. Analogous hack is done to the \@sanitize list.

```

\rem@special 459 \def\rem@special#1{%
460   \def\do##1{%
461     \ifnum`#1=`##1\else\@nx\do\@nx##1\fi}%
462   \xdef\dospecials{\dospecials}%
463   \begingroup
464   \def\@makeother##1{%
465     \ifnum`#1=`##1\else\@nx\@makeother\@nx##1\fi}%

```

```

466 \xdef\@sanitize{\@sanitize}%
467 \endgroup
```

And now the definition of `\verb+\\verb+im` itself. As you'll see (I hope), the internal macros of it look for the name of the current environment (i.e., `\@currenvir`'s meaning) to set their expectation of the environment's `\end` properly. This is done to allow the user to define his/her own environments with `\verb+\\verb+im` inside them. I.e., as with the `\verb+\verb+im` package, you may write `\verb+\\verb+im` in the `\begdef` of your environment and then necessarily `\end\verb+\\verb+im` in its `\enddef`. Of course (or maybe *surprisingly*), the commands written in the `\begdef` after `\verb+\\verb+im` will also be executed at `\begin{environment}`.

```

\verb+\\verb+im 480 \def\verb+\\verb+im{%
\verb+\\verb+im 481 \edef\gmv@hyphenpe{\the\hyphenpenalty}%
482 \edef\gmv@exhyphenpe{\the\exhyphenpenalty}%
483 \begin{parpenalty}\predisplaypenalty\verb+\\verb+im
484 \frenchspacing\gmobeyspaces\verb+\\xverb+im
485 \hyphenpenalty=\gmv@hyphenpe\relax
486 \exhyphenpenalty=\gmv@exhyphenpe
487 \hyphenchar\font=\m@ne}% in the LATEX version there's \vobeyspaces instead of \gmobeyspaces.
\verb+\\verb+im* 492 \cnamedef{\verb+\\verb+im*}{\begin{parpenalty}\predisplaypenalty\%
\verb+\\verb+im
493 \sxverb+im}

\end\verb+\\verb+im 495 \def\end\verb+\\verb+im{\@@par
496 \ifdim\lastskip>\z@
497 \tempskipa\lastskip\vskip\lastskip
498 \advance\tempskipa\parskip\advance\tempskipa-%
\outerparskip
\vskip\tempskipa
500 \fi
501 \addvspace\topsepadd
502 \endparenv}

505 \n@melet{\end\verb+\\verb+im*}{\end\verb+\\verb+im}
508 \begingroup\catcode`!=o%
509 \catcode`[=1\catcode`]=2%
510 \catcode`\{=\active
511 \makeother\}%
512 \catcode`\\=\active%
513 !gdef!\verb+\\verb+im[%
514 !edef!\verb+\\verb+im@edef[%%
515 !def!noexpand!\verb+\\verb+im@end%
516 #####1!noexpand\end!noexpand{!@currenvir}[%%
517 #####1!noexpand\end[!@currenvir]]%%
518 !verb+im@edef
519 !verb+im@end]%
520 !endgroup

@sxverb+im 524 \let\sxverb+im=\verb+\\verb+im
```

F. Mittelbach says the below is copied almost verbatim from LATEX source, modulo `\check@percent`.

```
\verb+\\verb+im 529 \def\verb+\\verb+im{%
```

Originally here was just `\trivlist\item[]`, but it worked badly in my document(s), so let's take just highlights of if.

```

535 \parsep\parskip
From \@trivlist:
537 \if@noskipsec\leavevmode\fi
538 \@topsepadd\topsep
539 \ifvmode
540 \advance\@topsepadd\partopsep
541 \else
542 \unskip\par
543 \fi
544 \@topsep\@topsepadd
545 \advance\@topsep\parskip
546 \outerparskip\parskip
(End of \trivlistlist and \@trivlist highlights.)
548 \@@par\addvspace\@topsep
549 \if@minipage\else\vskip\parskip\fi
551 \advance\@totalleftmargin\verbatimleftskip
552 \raggedright
553 \leftskip\@totalleftmargin% so many assignments to preserve the list
   thinking for possible future changes. However, we may be sure no internal
   list shall use \@totalleftmargin as far as no inner environments are
   possible in verbatim(*).
559 \@@par% most probably redundant.
560 \tempswafalse
561 \def\par{\% but I don't want the terribly ugly empty lines when a blank line is met.
   Let's make them gmdoc-like i.e., let a vertical space be added as in between
   stanzas of poetry. Originally \if@tempswa\hbox{}\fi, in my version will
   be
566 \ifvmode\if@tempswa\addvspace\stanzaskip\@tempswafalse\fi\fi
567 \@@par
568 \penalty\interlinepenalty\check@percent}%
569 \everypar{\@tempswatrue\hangindent\verbatimhangindent\hangafter%
   \one} since several chars are breakable, there's a possibility of breaking
   some lines. We wish them to be hanging indented.
572 \obeylines
573 \ttverbatim}
\stanzaskip
575 \@ifundefined{stanzaskip}{\newlength\stanzaskip}{}%
576 \stanzaskip=\medskipamount
\verbatimleftskip
579 \newskip\verbatimleftskip
581 \verbatimleftskip\leftmargini
\verbatimhangindent
583 \newskip\verbatimhangindent
585 \verbatimhangindent=3em
\check@percent
589 \providecommand*\check@percent{}}

In the gmdoc package shall it be defined to check if the next line begins with a comment char.
Similarly, the next macro shall in gmdoc be defined to update a list useful to that package. For now let it just gobble its argument.
\AddtoPrivateOthers
596 \providecommand*\AddtoPrivateOthers[1]{}

Both of the above are \provided to allow the user to load gmverb after gmdoc (which would be redundant since gmdoc loads this package on its own, but anyway should be harmless).
```

Let's define the 'short' verbatim command.

```
\verb* 605 \def\verb{\relax\ifmmode\hbox\else\leavevmode\null\fi
\verb 606   \bgroup
607   \ttverbatim
608   \gm@verb@eol
609   \@ifstar{\@sverb@chbsl}{\gmobespaces\frenchspacing@sverb@chbsl}}% in
       the LATEX version there's \@vobespaces instead of \gmobespaces.
@\sverb@chbsl 613 \def@\sverb@chbsl#1{\@sverb#1\check@bslash}
\@def@breakbslash 616 \def@\def@breakbslash{\breakbslash}% because \ is \defined as \break-
                           slash not \let.
```

For the special case of a backslash opening a (short) verbatim, in which it shouldn't be breakable, we define the checking macro.

```
\check@bslash 622 \def\check@bslash{\@ifnextchar{\@def@breakbslash}{\bslash%
                           \@gobble}{}}
626 \let\verb@balance@group\empty
\verb@egroup 629 \def\verb@egroup{\global\let\verb@balance@group\empty\egroup}
\gm@verb@eol 633 \let\gm@verb@eol\verb@eol@error
```

The latter is a L^AT_EX 2_E kernel macro that \activeates line end and defines it to close the verb group and to issue an error message. We use a separate cs'cause we are not quite positive to the forbidden line ends idea. (Although the allowed line ends with a forgotten closing shortverb char caused funny disasters at my work a few times.) Another reason is that gmdoc wishes to redefine it for its own queer purpose.

However, let's leave my former 'permissive' definition under the \verb@eol name.

```
\check@percent 645 \begingroup
646   \obeylines\obeyspaces%
647   \gdef\verb@eolOK{\obeylines%
648   \def^~M{\check@percent}%
649 }%
650 \endgroup
```

The \check@percent macro here is \provided to be \empty but in gmdoc employed shall it be.

Let us leave (give?) a user freedom of choice:

```
\verb@eolOK 655 \def\verb@eolOK{\let\gm@verb@eol\verb@eolOK}
```

And back to the main matter,

```
658 \def@\sverb#1{%
659   \catcode`#1\active\lccode`\~`#1%
660   \gdef\verb@balance@group{\verb@egroup%
661     \@latex@error{Illegal use of \bslash_verb_command}\@ehc}%
662   \aftergroup\verb@balance@group
663   \lowercase{\let~\verb@egroup}}
```

```
\verb@nolig@list 665 \def\verb@nolig@list{\do`\\do\<\do\>\\do\,,\\do`'\do\-\}
```

```
\do@noligs 667 \def\do@noligs#1{%
668   \catcode`#1\active
669   \begingroup
670   \lccode`\~`#1\relax
671   \lowercase{\endgroup\def~{\leavevmode\kern\z@\char`#1}}}
```

And finally, what I thought to be so smart and clever, now is just one of many possible uses of a general almost Rainer Schöpf's macro:

```
676 \def\dekclubs{\@ifstar{\MakeShortVerb*}{\MakeShortVerb}}
677 \def\olddekclubs{\OldMakeShortVerb}
```

But even if a shortverb is unconditional, the spaces in the math mode are not printed. So,

```
\edverbs 685 \newcommand*\edverbs{%
686   \let\gmv@dismath\%
687   \let\gmv@edismath\%
688   \def\[{%
689     \@ifnextac\gmv@disverb\gmv@dismath}%
690   \relaxen\edverbs}%
692 \def\gmv@disverb{%
693   \gmv@dismath
695   \hbox\bgroup\def\]{\egroup\gmv@edismath}}
```

doc- and shortverb-compatibility

One of minor errors while `TeXing` doc.dtx was caused by my understanding of a 'shortverb' char: at my settings, in the math mode an active 'shortverb' char expands to itself's 'other' version thanks to `\string`. doc/shortverb's concept is different, there a 'shortverb' char should work as usual in the math mode. So let it may be as they wish:

```
\old@MakeShortVerb 707 \def\old@MakeShortVerb#1{%
708   \@xa\ifx\csname_cc\string#1\endcsname\relax
709   \@shortvrbinfo{Made_}{#1}\@shortvrbdef
710   \add@special{#1}%
711   \AddtoPrivateOthers#1% a macro to be really defined in gmdoc.
713   \@xa
714   \xdef\csname_cc\string#1\endcsname{\the\catcode`#1}%
715   \begingroup
716   \catcode`\~\active\lccode`\~`#1%
717   \lowercase{%
718     \global\@xa\let\csname_ac\string#1\endcsname\relax
719     \@xa\gdef\@xa~\@xa{%
720       \@shortvrbdef~}}%
721   \endgroup
722   \global\catcode`#1\active
723   \else
724   \@shortvrbinfo{\empty{#1 already}}{\empty{\verb(*)}}%
725   \fi}
728 \def\OldMakeShortVerb{\begingroup
729   \let\@MakeShortVerb=\old@MakeShortVerb
730   \@ifstar{\eg@MakeShortVerbStar}{\eg@MakeShortVerb}}
733 \def\eg@MakeShortVerbStar#1{\MakeShortVerb*#1\endgroup}
734 \def\eg@MakeShortVerb#1{\MakeShortVerb#1\endgroup}
```

Grey visible spaces

In August 2008 Will Robertson suggested grey spaces for gmdoc. I added a respective option to that package but I like the grey spaces so much that I want provide them for any verbatim environments, so I bring the definition here. The declaration, if put

in the preamble, postpones redefinition of \visiblespace till \begin{document} to recognize possible redefinition of it when xltextra is loaded.

```

746 \let\gmd@preambleABD\AtBeginDocument
747 \AtBeginDocument{\let\gmd@preambleABD\firstofone}
749 \RequirePackage{xcolor}% for \providecolor
\VisSpacesGrey 751 \def\VisSpacesGrey{%
753   \providecolor{visspacesgrey}{gray}{0.5}%
754   \gmd@preambleABD{%
755     \edef\visiblespace{%
756       \hbox{@nx\textrm{visspacesgrey}}%
757       {\@xa\unexpanded\@xa{\visiblespace}}}%
758   }%
764 \endinput% for the Tradition.

```

Change History

| | | |
|-------|--|---|
| vo.79 | \edverbs: added, 677 | vo.87 General: CheckSum 661, o visible space tidyied and taken from xltextra if available. gmuilts required. The \xii... cses moved to gmutils. The documentation driver moved into the .sty file, 764 |
| vo.80 | \edverbs: debugged, i.e. \hbox added back and redefinition of \[, 677 \ttverbatim: \ttverbatim@hook added, 345 | vo.88 General: CheckSum 682, o \VisSpacesGrey: added, or rather moved here from gmdoc, 751 |
| vo.81 | General: \afterfi made two-argument (first undelimited, the stuff to be put after \fi, and the other, delimited with \fi, to be discarded, 764 | vo.89 General: \dekclubs, \dekclubs* and \olddekclubs made more consistent, shorthands for \MakeShortVerb{\ }, \MakeShortVerb*{\ } and \OldMakeShortVerb{\ } respectively., 764 CheckSum 686, o |
| vo.82 | General: CheckSum 663, o | vo.90 General: CheckSum 684, o some \b/egroup changed to \begin/endgroup, 764 |
| vo.83 | General: added a hook in the active left brace definition intended for gmdoc automatic detection of definitions (in line 288), 764 CheckSum 666, o | vo.91 General: CheckSum 686, o \verbatimleftskip: added, 579 |
| vo.84 | General: CheckSum 658, o | |
| vo.85 | General: added restoring of \hyphenpenalty and \exhyphenpenalty and setting \hyphenchar=-1, 764 CheckSum 673, o | |

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Numbers written in italic refer to the code lines where the corresponding entry is described; numbers underlined refer to the code line of the definition; numbers in roman refer to the code lines where the entry is used. The numbers preceded with ‘p.’ are page numbers. All the numbers are hyperlinks.

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