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Section 1

xframed Implementation

1.1 xframed.sty – Main file

```
1  \<package>
2  \<@@=xframed>
3  %%
4  %% This is file `xframed.sty',
5  %% -----
6  %%
7  %% Author's name: Marco Daniel
8  %% License type: lppl
9  %%
10 %% =====
11 %% ===== Currently the package has a pre-pre-alpha-status =====
12 %% =====
13 %%
14 %% Copyright (c) 2013 Marco Daniel
15 %%
16 \RequirePackage{expl3}
17 \GetIdInfo$Id: xframed.dtx 13 2012-06-08 14:11:22Z marco $
18     {package xframed}
19
20 \ProvidesExplPackage {xframed} {2013/06/21} {0.01 ALPHA} {package xframed}
21
22 \@ifpackagelater { expl3 } { 2011/09/05 }
23     { }
```

```

24 {
25   \PackageError { xframed } { Support~package~expl3~too~old. }
26   {
27     You~need~to~update~your~installation~of~the~bundles~'l3kernel'~and~
28     'l3packages'.\\
29     Loading~xframed~will~abort!
30   }
31   \tex_endinput:D
32 }

```

Load all needed packages. The packages longtable and lengthconvert are only needed to print out developer info. The package tikz can't be loaded with \ExplSyntaxOn.

```

33 \RequirePackage{ xparse , l3keys2e }
34 \RequirePackage{xcolor}
35 \ExplSyntaxOff
36 \RequirePackage{tikz}
37 \usetikzlibrary{backgrounds,shadows,calc,positioning,shapes.misc}
38 \ExplSyntaxOn
39 \RequirePackage{ longtable , lengthconvert }
40
41 \RequirePackage{etoolbox}%as long as regexpatch has alpha status

```

`__xframed__load_deffiles:n`

Load all files of xframed with the extension def. It is also a test whether the package is installed correctly or not.

```

42 \cs_new_protected:Npn __xframed__load_deffiles:n #1 {
43   \IfFileExists {xframed-#1.def}
44   { \input{xframed-#1.def} }
45   { \msg_error:nnx { xframed } { def-not-available } {#1} }
46 }
47 \msg_new:nnnn { xframed } { def-not-available }
48 { File~xframed-'#1'.def~is~not~available. }
49 {
50   The~file~xframed-#1-.def~is~not available\\

```

```

51     but~xframed~needs~the~file~.\\
52     I~guess~you~installed~xframed~wrong.
53 }
54 %!input all new variables
55 \__xframed__load_deffiles:n { initial }
56 %!input dim/skip functions
57 \__xframed__load_deffiles:n { dim }
58 %!input helper functions
59 \__xframed__load_deffiles:n { funct }
60 %!input development functions
61 \__xframed__load_deffiles:n { dev }
62 %!input messages
63 \__xframed__load_deffiles:n { msg }
64 %!input user keys
65 \__xframed__load_deffiles:n { keys }
66 %!input title-foot-coffin-setup
67 \__xframed__load_deffiles:n { titlefoot }
68 %!input split
69 \__xframed__load_deffiles:n { split }
70 %!input drawing method default
71 \__xframed__load_deffiles:n { default }
72 %!input user commands
73 \__xframed__load_deffiles:n { user }

```

(End definition for __xframed__load_deffiles:n. This function is documented on page ??.)

```

\__xframed__load_ifrequested:n

```

Load some packages if they are really needed.

```

74 \cs_new_protected:Npn \__xframed__load_ifrequested:n #1 {
75   \bool_if:cT { 1__xframed_#1_bool }
76   {
77     \IfFileExists {xframed-#1.def}
78     { \input{xframed-#1.def} }
79     { \msg_error:nnx { xframed } { def-not-available } {#1} }

```

```

80   }
81 }
82 \__xframed__load_ifrequested:n { listings }
83 \__xframed__load_ifrequested:n { minted   }
84 \__xframed__load_ifrequested:n { tikz     }
85 \__xframed__load_ifrequested:n { pstricks }
86 \__xframed__load_ifrequested:n { theorem  }
87 \__xframed__load_ifrequested:n { mdframed }

```

(End definition for `__xframed__load_ifrequested:n`. This function is documented on page ??.)

xframed

Definition of the main user environment. That's the reason why the definition is sourced out from the other user commands.

```

88 % \begin{xframed}[<options>]...\end{xframed}
89 \NewDocumentEnvironment { xframed } { O{} }
90 {
91   \group_begin:
92     \xframedsetup { #1 }
93     \__xframed__start_environment:n
94     {
95       \__xframed__get_length:n
96       {
97         minimum-space
98       }
99     }
100   \__xframed__environment_precode:
101     \vcoffin_set:Nnw \l__xframed_main_coffin
102                     { \l__xframed_coffin_width_dim }
103     \@minipagetrue
104     \__xframed_prevent_firstindent:
105     \__xframed__environment_inner_precode:
106     \__xframed__inner_head:
107 }

```

```

108 {
109     \__xframed__environment_inner_postcode:
110     \@minipagefalse
111     \vcoffin_set_end:
112     \__xframed__set_list:
113     \__xframed__environment_postcode:
114     \__xframed__set_endlist:
115     \group_end:
116 }

```

(End definition for xframed. This function is documented on page ??.)

__xframed_prevent_firstindent:

The first line of the environment doesn't need any indent.

```

117 \cs_new:Nn \__xframed_prevent_firstindent:
118 {
119     \@afterindentfalse\@afterheading
120 }

```

(End definition for __xframed_prevent_firstindent:. This function is documented on page ??.)

__xframed__inner_head:

The definition of the inner head inside the environment itself.

```

121 \cs_new:Nn \__xframed__inner_head:
122 {
123     \tl_if_blank:VF \l___xframed_head_tl
124     {
125         \group_begin:
126         \tl_use:N \l___xframed_headprecode_tl
127         \color
128         {
129             \__xframed__get_color:n { head-font-color }
130         }
131         \tl_use:N \l___xframed_head_font_tl
132         \tl_use:N \l___xframed_head_tl

```

```

133     \tl_use:N \l__xframed_headpostcode_tl
134     \group_end:
135 }
136 }

```

(End definition for `__xframed__inner_head:`. This function is documented on page ??.)

`\xframeddivide`

MAYBE LATER!!!!

```

137 \cs_new_nopar:Npn \xframeddivide
138 {
139     \__xframed__environment_head_postcode:
140     \vcoffin_set_end:
141     \coffin_set_eq:NN \l__xframed_head_coffin \l__xframed_main_coffin
142     \bool_set_true:N \l__xframed_head_bool
143     \vcoffin_set:Nnw \l__xframed_main_coffin
144         { \l__xframed_coffin_width_dim }
145     \__xframed__environment_afterhead_precode:
146 }

```

(End definition for `\xframeddivide`. This function is documented on page ??.)

`__xframed__environment_afterhead_precode:`

`__xframed__environment_head_postcode:`

`__xframed__environment_precode:`

Provides some macros which can be extended by options. Normally hooks.

```

147 \cs_new:Npn \__xframed__environment_afterhead_precode: {}
148
149 \cs_new:Npn \__xframed__environment_head_postcode: {}
150
151 \cs_new:Npn \__xframed__environment_precode:
152 {
153     \__xframed__developer_tools:

```

```

154 %%\__xframed__minimum_space:
155 \__xframed__test_ifSplittable:
156 \__xframed__frame_linewidth:
157 \__xframed__calculate_width:
158 \__xframed__declare_footnotes:
159 \tl_use:N \l__xframed_codebefore_tl
160 }

```

(End definition for `__xframed__environment_afterhead_precode:`, `__xframed__environment_head_postcode:`, and `__xframed__environment_precode:`. These functions are documented on page ??.)

`__xframed__calculate_width:`

Calling this command means to calculate the complete width for the contents of the frame.

The result will be save inside `\l__xframed_coffin_width_dim`.

```

161 \cs_new:Npn \__xframed__calculate_width:
162 {
163   \dim_set:Nn \l__xframed_coffin_width_dim { \__xframed__get_length:n { width } }
164   \clist_map_inline:nn
165     {
166       margin-left , line-width-left , inner-margin-left ,
167       inner-margin-right , line-width-right , margin-right
168     }
169     {
170       \dim_sub:Nn \l__xframed_coffin_width_dim
171         {
172           \__xframed__get_length:n { ##1 }
173         }
174     }
175   \dim_compare:nNnT { \l__xframed_coffin_width_dim } > { \linewidth }
176     {
177       \__xframed__msg_log:n { oversized~environment }
178     }
179 }

```

(End definition for `__xframed__calculate_width:`. This function is documented on page ??.)

`_xframed_declare_footnotes:`

xframed shall handle footnotes like minipage.

```

180 \cs_new:Npn \_xframed\_declare\_footnotes:
181 {
182   %% START
183   \cs_set:Npn \@mpfn { mpfootnote }
184   %% set the counter output
185   \cs_set:Npn \thempfn { \thempfootnote }
186   %%reset counter
187   \int_set_eq:NN \c@mpfootnote \c_zero
188   %%
189   \cs_set_eq:NN \@footnotetext \@mpfootnotetext
190 }

```

(End definition for _xframed_declare_footnotes:. This function is documented on page ??.)

`_xframed_environment_inner_precode:`

Execute some code at the beginning of the environment. Remove first \parskip, set font and color.

```

191 \cs_new:Npn \_xframed\_environment\_inner\_precode:
192 {
193   \skip_vertical:n { - \parskip }
194   \tl_use:N \l__xframed_main_font_tl
195   \color { \_xframed\_get\_color:n { font-color } }
196   \tl_use:N \l__xframed_codebegin_tl
197 }

```

(End definition for _xframed_environment_inner_precode:. This function is documented on page ??.)

`_xframed_environment_inner_postcode:`

Execute some code at the end of the environment.

```

198 \cs_new:Npn \_xframed\_environment\_inner\_postcode:
199 {
200   \_xframed\_ignore\_last\_skip:
201   \_xframed\_ignore\_last\_descenders:

```

```

202 \tl_use:N \l__xframed_codeend_tl
203 }

```

(End definition for `__xframed__environment_inner_postcode:`. This function is documented on page ??.)

```

\__xframed__ignore_last_skip:

```

Remove last skip added by some environments like `list`.

```

204 \cs_new:Npn \__xframed__ignore_last_skip:
205 {
206   \bool_if:NT \l__xframed_ignore_lastskip_bool
207   {
208     \par \tex_unskip:D
209     \skip_vertical:N \tex_lastskip:D
210   }
211 }

```

(End definition for `__xframed__ignore_last_skip:`. This function is documented on page ??.)

```

\__xframed__ignore_last_descenders:

```

Ignore descenders in the last line.

```

212 \cs_new:Npn \__xframed__ignore_last_descenders:
213 {
214   \bool_if:NT \l__xframed_descenders_bool
215   {
216     \par
217     \strut
218     \par \tex_unskip:D \tex_unskip:D
219     \setbox0=\tex_lastbox:D
220     \skip_vertical:n { 0.7 \tex_baselineskip:D - \tex_baselineskip:D }
221   }
222 }

```

(End definition for `__xframed__ignore_last_descenders:`. This function is documented on page ??.)

`_xframed_environment_postcode:`

After closing the save box this code is executed.

```

223 \cs_new:Npn \_xframed\_environment\_postcode:
224 {
225 % \_xframed\_check\_title\_first:
226 \_xframed\_check\_footnotes:
227 \_xframed\_title:
228 \_xframed\_foot:
229 \_xframed\_coffin\_output:
230 \tl\_use:N \l\_xframed\_codeafter\_tl
231 \skip\_vertical:n { - \parskip }
232 }
```

(End definition for `_xframed_environment_postcode:`. This function is documented on page ??.)

`_xframed_check_footnotes:`

Test if footnotes are presented and save them in the main coffin as part of the output.

```

233 \cs_new:Npn \_xframed\_check\_footnotes:
234 {
235 \box\_if\_empty:NTF \@mpfootins
236 {
237 \_xframed\_msg\_log:n { no~footnotes~presented }
238 }
239 {
240 \_xframed\_msg\_log:n { footnotes~are~found }
241 %%Save the footnoterule inside a coffin
242 \vcoffin\_set:Nnn \l\_xframed\_temp\_coffin
243 { \l\_xframed\_coffin\_width\_dim }
244 {
245 \skip\_vertical:n
246 {
247 \_xframed\_get\_skip:n { footnote-distance }
248 }
249 \_xframed\_footnote\_rule:
```

```

250             \vbox_unpack_clear:N \@mpfootins
251         }
252     %%Join main coffin with footnote-rule coffin
253     \coffin_join:NnnNnnnn
254     \l__xframed_main_coffin {b}{l}
255     \l__xframed_temp_coffin {t}{l}
256     { 0pt }{ 0pt }
257     %%reset structure of main coffin:
258     \__xframed__coffin_restructure:N \l__xframed_main_coffin
259     }
260 }

```

(End definition for `__xframed_check_footnotes:`. This function is documented on page ??.)

`__xframed_footnote_rule:`

It's the equal definition of \TeX 2_{ϵ} but with the new options provided by xframed.

```

261 \cs_new:Npn \__xframed_footnote_rule:
262 {
263     \tex_kern:D \c_zero_skip
264     \tex_hrule:D
265     width \__xframed__get_length:n { footnote-line-length }
266     height \__xframed__get_length:n { footnote-line-width }
267     \scan_stop:
268     \tex_kern:D 2.6 pt
269 }

```

(End definition for `__xframed_footnote_rule:`. This function is documented on page ??.)

`__xframed__frame_linewidth:`

Helper functions. It test whether a line shall be drawn. If the line shall be hidden the width is set to 0pt.

```

270 \cs_new:Nn \__xframed__frame_linewidth:
271 {
272     \__xframed__test_linewidth:nnn
273     { topline } { length } { line-width-top }

```

```

274 \__xframed__test_linewidth:nnn
275     { leftline } { length } { line-width-left }
276 \__xframed__test_linewidth:nnn
277     { rightline } { length } { line-width-right }
278 \__xframed__test_linewidth:nnn
279     { bottomline } { length } { line-width-bottom }
280 }

```

(End definition for `__xframed__frame_linewidth:`. This function is documented on page ??.)

`__xframed__coffin_output:`

Starting the output routine

```

281 \cs_new:Npn \__xframed__coffin_output:
282 {
283   \__xframed__coffin_restructure:N \l__xframed_temp_coffin
284   \__xframed__coffin_restructure:N \l__xframed_main_coffin
285   \tl_set_eq:NN \l__xframed_temptitle_tl \l__xframed_firsttitle_tl
286   \tl_set_eq:NN \l__xframed_tempfoot_tl \l__xframed_lastfoot_tl
287   \__xframed__title:
288   \__xframed__foot:
289   \dim_set:Nn \l__xframed_maincoffin_htdp_dim
290   {
291     \coffin_ht:N \l__xframed_main_coffin +
292     \coffin_dp:N \l__xframed_main_coffin
293   }
294   \__xframed__coffin_output_aux:
295 }

```

(End definition for `__xframed__coffin_output:`. This function is documented on page ??.)

`__xframed__coffin_output_aux:`

Helper functions for the output. A combination with the former one isn't possible because this functions is used later too.

```

296 \cs_new:Npn \__xframed__coffin_output_aux:
297 {

```

```

298  \__xframed__test_ifSplittable:
299  \bool_if:NT \l__xframed_allowbreaking_bool { \__xframed_needed_height: }
300  \__xframed__output_and_draw:
301  }

```

(End definition for __xframed__coffin_output_aux:. This function is documented on page ??.)

__xframed_needed_height:

Calculate the height of the unsplitted and complete environment. The result is printed to the log-file if the option `developer-info` is used.

```

302 \cs_new:Npn \__xframed_needed_height:
303 {
304   \dim_set:Nn \l__xframed_computed_coffin_height_dim
305     {
306       \l__xframed_maincoffin_htdp_dim
307       +
308       \l__xframed_title_htdp_dim
309       +
310       \l__xframed_foot_htdp_dim
311     }
312   \__xframed__frame_linewidth:
313   \clist_map_inline:nn
314     {
315       extra-skip-above , line-width-top , line-width-bottom ,
316       inner-top-margin, inner-bottom-margin , line-width-title ,
317       line-width-foot
318     }
319     {
320       \dim_add:Nn \l__xframed_computed_coffin_height_dim
321         {
322           \__xframed__get_length:n { ##1 }
323         }
324     }
325   \dim_compare:nNnTF

```

```

326     { \l__xframed_computed_coffin_height_dim } < { \l__xframed_free_vs-
pace_dim }
327     %break needed
328     { \bool_set_false:N \l__xframed_allowbreaking_bool }
329     %no break needed
330     { \bool_set_true:N \l__xframed_allowbreaking_bool }
331     \msg_log:n
332     {
333         xframed~info~\msg_line_number:\\\
334         \ coffin~dimension =~\dim_use:N \l__xframed_computed_coffin_height_dim\ =
335         \ \__xframed__convert:n{\l__xframed_computed_cof-
fin_height_dim} \
336         \ used =~\dim_use:N \tex_pagetotal:D\ =
337         \ \__xframed__convert:n{\tex_pagetotal:D} \
338         \ free =~\dim_use:N \l__xframed_free_vspace_dim\ =
339         \ \__xframed__convert:n{\l__xframed_free_vspace_dim}
340     }
341 }

```

(End definition for __xframed_needed_height:. This function is documented on page ??.)

```

342 \tex_endinput:D
343 </package>

```

1.2 xframed-default.def – Drawing algorithm with \rule

```

344 <*package-default>
345 <@@=xframed>
346 %%=====%%
347 %% file to define all basic draw functions using \rule %%
348 %%=====%%
349
350

```

```

351
352
353 \cs_new:Nn \__xframed__draw_default_frame:
354 {
355   \begin{tikzpicture}[remember~picture]
356     %%Inner part -- defines node xframed-inner
357     \__xframed__default_innerpart:
358     %%title part -- defines node xframed-title
359     \__xframed__default_titlepart:
360     %%foot part -- defines node xframed-foot
361     \__xframed__default_footpart:
362     %%%%%%%%%%
363     %Outer part -- defines node xframed-outer
364     \__xframed__default_drawframe:
365     %\pgfnodealias{xframed-outer}{xframed-inner}
366     %use the correct bounding box
367     \pgfresetboundingbox\useasboundingbox%
368         ($(\xframed-outer.south~west)+(-\__xframed__get_length:n { mar-
369         gin-left },0)$)
370         rectangle
371         ($(\xframed-outer.north~east)+( \__xframed__get_length:n { mar-
372         gin-right },0)$)
373         +(0,\__xframed__get_length:n { extra-skip-above } )$) ;
374     %Show development tools
375     %%User hook
376     \tl_use:N \l__xframed_posttikz_tl
377     \l__xframed_singletikz_tl
378     %%xframed-developer info
379     %\__xframed__nodepoints_development:
380     \end{tikzpicture}
381     %%%% \__xframed__all_option_output:
382   }
383
384

```



```

382 \cs_new:Nn \__xframed__default_innerpart:
383 {
384   \begin{scope}
385     \tikzset{every~node/.style={inner~sep=0pt,outer~sep=0pt,}}
386     \node[] (xframed-inner)
387     {
388       \hbox:n{} \skip_horizontal:n { \__xframed__get_length:n { in-
ner-margin-left } }
389       \__xframed__display_coffins:N \l__xframed_main_coffin
390       \skip_horizontal:n { \__xframed__get_length:n { inner-margin-right } } \hbox:n{}
391     };
392   \end{scope}
393 }
394
395 \cs_new:Nn \__xframed__default_titlepart:
396 {
397   \tl_if_blank:VTF \l__xframed_firsttitle_tl
398   {
399     \pgfnodealias{xframed-title}{xframed-inner}
400   }
401   {
402     \begin{scope}
403       \tikzset{every~node/.style={inner~sep=0pt,outer~sep=0pt,}}
404       \node[anchor=south,
405         yshift= \__xframed__get_length:n { line-width-title } ] (xframed-title) at (xframed-inner)
406       {
407         \hbox:n{} \skip_horizontal:n { \__xframed__get_length:n { in-
ner-margin-left } }
408         \__xframed__display_coffins:N \l__xframed_title_coffin
409         \skip_horizontal:n { \__xframed__get_length:n { in-
ner-margin-right } } \hbox:n{}
410       };
411

```

```

412     \end{scope}
413   }
414 }
415 \cs_new:Nn \__xframed__default_footpart:
416 {
417   \tl_if_blank:VTF \l__xframed_lastfoot_tl
418   {
419     \pgfnodealias{xframed-foot}{xframed-inner}
420   }
421   {
422     \begin{scope}
423       \tikzset{every~node/.style={inner~sep=0pt,outer~sep=0pt,}}
424       \node[anchor=north,
425         yshift= {-\__xframed__get_length:n { line-width-foot }},
426         ] (xframed-foot) at (xframed-inner.south)
427         {
428           \skip_horizontal:n { \__xframed__get_length:n { inner-margin-left } }
429           \__xframed__display_coffins:N \l__xframed_foot_coffin
430           \skip_horizontal:n { \__xframed__get_length:n { in-
431             ner-margin-right } } \hbox:n{}
432         };
433     \end{scope}
434   }
435 }
436 \cs_new:Nn \__xframed__default_drawframe:
437 {
438   \begin{scope}[on~background~layer]
439     %%Draw the main frame
440     \coordinate (fxx) at %fxx=left bottom
441       ($ (xframed-foot.south~west)+(-\__xframed__get_length:n { line-width-left },-\__xframed__get_length:n { line-width-bottom })$);
442     \coordinate (fyy) at %fyy=right top
443       ($ (xframed-title.north~east)+(\__xframed__get_length:n { line-width-right },\__xframed__get_length:n { line-width-top })$);

```

```

444     \tikzset{every~node/.style={inner~sep=0pt,outer~sep=0pt,}}
445     \node[anchor=south,
446           yshift= -\__xframed__get_length:n { line-width-bottom },
447           xshift= .5*\__xframed__get_length:n { line-width-right }-.5*\__xframed__get_length:n
448           (xframed-outer) at (xframed-foot.south)
449           {\tikz\path(fxx) rectangle (fyy)};
450     \clip[xframed/outer~arc](xframed-outer.south~west) rectangle (xframed-outer.north~east);
451     \__xframed__default_drawframe_lines:
452     \__xframed__default_drawframe_titlefoot:
453     \end{scope}
454   }
455   \cs_new:Nn \__xframed__default_drawframe_lines:
456   {
457     %left line
458     \path[fill = \__xframed__get_color:n { line-color-left }]
459     (xframed-outer.north~west) -- (xframed-outer.south~west) -- (xframed-inner.center) --cycle;
460     %right line
461     \path[fill = \__xframed__get_color:n { line-color-right }]
462     (xframed-outer.north~east) -- (xframed-outer.south~east) -- (xframed-inner.center) --cycle;
463     %top line
464     \path[fill = \__xframed__get_color:n { line-color-top }]
465     (xframed-outer.north~east) -- (xframed-outer.north~west) -- (xframed-inner.center) --cycle;
466     %bottom line
467     \path[fill = \__xframed__get_color:n { line-color-bottom }]
468     (xframed-outer.south~east) -- (xframed-outer.south~west) -- (xframed-inner.center) --cycle;
469   }
470
471   \cs_new:Nn \__xframed__default_drawframe_titlefoot:
472   {
473     \begin{scope}
474       %inner frame
475       \clip[xframed/inner~arc] (xframed-foot.south~west) rectangle (xframed-title.north~east);
476       \path[xframed/bg] (xframed-foot.south~west) rectangle (xframed-title.north~east);

```

```

477 %draw title componente (1) title (2) foot rule:
478 \tl_if_blank:VF \l___xframed_firsttitle_tl
479 {
480     \path[xframed/title~bg] (xframed-title.south~west) rectan-
gle (xframed-title.north~east);
481     \bool_if:NT \l___xframed_footline_bool
482     {
483         \path[xframed/title~rule]
484         ([yshift= .5*\__xframed__get_length:n { line-width-foot }]xframed-inner.north~we
485         ([yshift= .5*\__xframed__get_length:n { line-width-foot }]xframed-inner.north~ea
486     }
487 }
488 %draw foot componente (1) foot (2) foot rule:
489 \tl_if_blank:VF \l___xframed_lastfoot_tl
490 {
491     \path[xframed/foot~bg] (xframed-foot.south~west) rectan-
gle (xframed-foot.north~east);
492     \bool_if:NT \l___xframed_footline_bool
493     {
494         \path[xframed/foot~rule]
495         ([yshift= -.5*\__xframed__get_length:n { line-width-foot }]xframed-inner.south~w
496         ([yshift= -.5*\__xframed__get_length:n { line-width-foot }]xframed-inner.south~e
497     }
498 }
499 \end{scope}
500 }
501
502 \tex_endinput:D
503 %%%%%%%%%%%
504 %DEVELOPER INFO
505 %%%%%%%%%%%
506 \cs_new:Nn \__xframed__nodepoints_development:
507 {

```

```

508 \bool_if:NT \l__xframed_developer_info_bool
509 {
510   \begin{scope}
511     %%%%Inner nodes
512     \__xframed__nodepoints_inner_development:
513     %%%%title nodes
514     \__xframed__nodepoints_title_development:
515     %%%%foot nodes
516     \__xframed__nodepoints_foot_development:
517     %%%%Outer nodes
518     \__xframed__nodepoints_outer_development:
519     %%%%length
520     \__xframed__outerlength_development:
521   \end{scope}
522 }
523 }
524
525 \cs_new:Nn \__xframed__nodepoints_inner_development:
526 {
527   \fill[red!70!black] (xframed-inner.north~west) circle (2pt)
528   node[above=0.5cm,font=\footnotesize\ttfamily] {xframed-inner.north~west};
529   \fill[red!70!black] (xframed-inner.north~east) circle (2pt)
530   node[above=0.5cm,font=\footnotesize\ttfamily] {xframed-inner.north~east};
531   \fill[red!70!black] (xframed-inner.south~west) circle (2pt)
532   node[below=0.5cm,font=\footnotesize\ttfamily] {xframed-inner.south~west};
533   \fill[red!70!black] (xframed-inner.south~east) circle (2pt)
534   node[below=0.5cm,font=\footnotesize\ttfamily] {xframed-inner.south~east};
535   \fill[red!70!black] (xframed-inner.center) circle (2pt)
536   node[draw,rectangle,fill=yellow,above=0.5cm,font=\footnotesize\ttfamily] {xframed-inner
537 }
538
539 \cs_new:Nn \__xframed__nodepoints_outer_development:
540 {

```

```

541 \fill[blue!70!black] (xframed-outer.north~west) circle (2pt)
542 node[above=0.75cm,font=\footnotesize\ttfamily] {xframed-outer.north~west};
543 \fill[blue!70!black] (xframed-outer.north~east) circle (2pt)
544 node[above=0.75cm,font=\footnotesize\ttfamily] {xframed-outer.north~east};
545 \fill[blue!70!black] (xframed-outer.south~west) circle (2pt)
546 node[below=0.75cm,font=\footnotesize\ttfamily] {xframed-outer.south~west};
547 \fill[blue!70!black] (xframed-outer.south~east) circle (2pt)
548 node[below=0.75cm,font=\footnotesize\ttfamily] {xframed-outer.south~east};
549 \fill[blue!70!black] (xframed-outer.center) circle (2pt)
550 node[draw,rectangle,fill=yellow,below=0.5cm,font=\footnotesize\ttfamily] {xframed-outer}
551 }
552
553 \cs_new:Nn \__xframed__nodepoints_title_development:
554 {
555 \tl_if_blank:VF \l__xframed_firsttitle_tl
556 {
557 \fill[green!70!black] (xframed-title.north~west) circle (2pt)
558 node[above=0.5cm,font=\footnotesize\ttfamily] {xframed-title.north~west};
559 \fill[green!70!black] (xframed-title.north~east) circle (2pt)
560 node[above=0.5cm,font=\footnotesize\ttfamily] {xframed-title.north~east};
561 \fill[green!70!black] (xframed-title.south~west) circle (2pt)
562 node[below=0.5cm,font=\footnotesize\ttfamily] {xframed-title.south~west};
563 \fill[green!70!black] (xframed-title.south~east) circle (2pt)
564 node[below=0.5cm,font=\footnotesize\ttfamily] {xframed-title.south~east};
565 \fill[green!70!black] (xframed-title.center) circle (2pt)
566 node[draw,rectangle,fill=yellow,above=0.5cm,font=\footnotesize\ttfamily] {xframed-title}
567 }
568 }
569
570 \cs_new:Nn \__xframed__nodepoints_foot_development:
571 {
572 \tl_if_blank:VF \l__xframed_lastfoot_tl
573 {

```

```

574     \fill[green!70!black] (xframed-foot.north~west) circle (2pt)
575     node[above=0.5cm,font=\footnotesize\ttfamily] {xframed-foot.north~west};
576     \fill[green!70!black] (xframed-foot.north~east) circle (2pt)
577     node[above=0.5cm,font=\footnotesize\ttfamily] {xframed-foot.north~east};
578     \fill[green!70!black] (xframed-foot.south~west) circle (2pt)
579     node[below=0.5cm,font=\footnotesize\ttfamily] {xframed-foot.south~west};
580     \fill[green!70!black] (xframed-foot.south~east) circle (2pt)
581     node[below=0.5cm,font=\footnotesize\ttfamily] {xframed-foot.south~east};
582     \fill[green!70!black] (xframed-foot.center) circle (2pt)
583     node[draw,rectangle,fill=yellow,above=0.5cm,font=\footnotesize\ttfamily] {xframed-foot.center};
584   }
585 }
586
587 \cs_new:Nn \__xframed__outerlength_development:
588 {
589   \draw[latex-latex] (xframed-outer.east) --++ ( \__xframed__get_length:n { mar-
    gin-right },0) ;
590   \draw[latex-latex] (xframed-outer.west) --++ (-\__xframed__get_length:n { mar-
    gin-left }, 0) ;
591   \draw[latex-latex] (xframed-outer.north) --++ ( 0 , \__xframed__get_skip:n { skip-above } )
592   \draw[latex-latex] (xframed-outer.south) --++ ( 0 , -\__xframed__get_skip:n { skip-below } )
593 }
594
595
596
597
598
599 </package-default>

```

1.3 xframed-dev.def – Developer info

The idea of the package is to define commands which can be count to developer information.

```

600 <*package-dev>

```

```

601 <@@=xframed>
602 %%=====%%
603 %% file to define all development functions          %%
604 %%=====%%

```

`__xframed__developer_tools:`

The command `__developer_tools:` test whether the output should contain developer infos. If it's true the output of the contents of `xframed` shows the coffin coordinates and it sets the `__xframed__msg_log:n` to print information to the `log` file. By default the command `__xframed__msg_log:n` simple gobbles its argument.

```

605 \cs_new:Npn \__xframed__developer_tools:
606 {
607   \bool_if:NT \l__xframed_developer_info_bool
608   {%developer info true
609     %print coffin coordinates
610     \cs_set:Npn \__xframed__display_coffins:N ##1
611       {
612         \coffin_display_handles:Nn ##1 { blue!70!black }
613       }
614     %print extra information to log file
615     \cs_set:Npn \__xframed__msg_log:n ##1
616       {
617         \msg_log:n { xframed~developer~info~line~
618                     \msg_line_number:\#\#1
619                   }
620       }
621   }
622 }
623 \__xframed__developer_tools:

```

(End definition for `__xframed__developer_tools:`. This function is documented on page ??.)

`__xframed__all_option_output:`

Internal command to print out all options of `xframed` inside a `longtable`.

```

624 \cs_new:Nn \__xframed__all_option_output:
625 {
626   \tl_set:Nn \l_tmpa_tl
627   {
628     \group_begin:
629     \renewcommand\arraystretch{1.25}
630     \begin{longtable}{@{}l|l|@{}}
631       \caption*{Options}\\\hline
632       \endhead
633       \multicolumn{3}{@{}r@{}}{\ldots}\\\hline
634       \endfoot
635       \hline
636       \endlastfoot
637     }
638     \tl_put_right:Nn \l_tmpa_tl { \multicolumn{3}{@{}c@{}}{length} \\\hline }
639     \tl_put_right:Nn \l_tmpa_tl
640     {
641       \prop_map_inline:Nn \l__xframed_length_option_prop
642       { ##1 & \dim_eval:n { ##2 } & \Convert{##2} \\\ }
643     }
644     \tl_put_right:Nn \l_tmpa_tl
645     { \\\hline\multicolumn{3}{@{}c@{}}{skips} \\\hline }
646     \tl_put_right:Nn \l_tmpa_tl
647     {
648       \prop_map_inline:Nn \l__xframed_skip_option_prop
649       { ##1 & \skip_eval:n { ##2 } & \Convert{##2} \\\ }
650     }
651     \tl_put_right:Nn \l_tmpa_tl
652     { \\\hline\multicolumn{3}{@{}c@{}}{color} \\\hline }
653     \tl_put_right:Nn \l_tmpa_tl
654     {
655       \prop_map_inline:Nn \l__xframed_color_option_prop
656       { ##1 & ##2 & \color{ ##2 } ##1 \\\ }

```

```

657     }
658     \tl_put_right:Nn \l_tmpa_tl { \end{longtable} \group_end: }
659     \tl_use:N \l_tmpa_tl
660 }

```

(End definition for `__xframed__all_option_output:`. This function is documented on page ??.)

`__xframed__length_output_aux:`

Internal command to print out all length options of xframed inside a longtable.

```

661 \cs_new:Nn \__xframed__length_output_aux:
662 {
663     \tl_set:Nn \l_tmpa_tl
664     {
665         \group_begin:
666         \renewcommand\arraystretch{1.25}
667         \begin{longtable}{@{}l@{}}
668             \caption*{Length-options}\\ \hline
669             \endhead
670             \multicolumn{3}{@{}r@{}}{\ldots}\\ \hline
671             \endfoot
672             \hline
673             \endlastfoot
674     }
675     \tl_put_right:Nn \l_tmpa_tl
676     {
677         \prop_map_inline:Nn \l__xframed__length_option_prop
678         { ##1 & \dim_eval:n { ##2 } & \Convert{##2} \\ }
679     }
680     \tl_put_right:Nn \l_tmpa_tl { \end{longtable} \group_end: }
681     \tl_use:N \l_tmpa_tl
682 }

```

(End definition for `__xframed__length_output_aux:`. This function is documented on page ??.)

_xfamed__skip_output_aux:

Internal command to print out all skip options of xframed inside a longtable.

```

683 \cs_new:Nn \_xfamed__skip_output_aux:
684 {
685   \tl_set:Nn \l_tmpa_tl
686   {
687     \group_begin:
688     \renewcommand\arraystretch{1.25}
689     \begin{longtable}{@{}l|l@{}}
690       \caption*{Skip~options}\\\hline
691       \endhead
692       \multicolumn{3}{@{}r@{}}{\ldots}\\\hline
693       \endfoot
694       \hline
695       \endlastfoot
696     }
697   \tl_put_right:Nn \l_tmpa_tl
698   {
699     \prop_map_inline:Nn \l___xfamed_skip_option_prop
700     { ##1 & \skip_eval:n { ##2 } & \Convert{##2} \ \ }
701   }
702   \tl_put_right:Nn \l_tmpa_tl { \end{longtable} \group_end: }
703   \tl_use:N \l_tmpa_tl
704 }

```

(End definition for _xfamed__skip_output_aux:. This function is documented on page ??.)

_xfamed__color_output_aux:

Internal command to print out all color options of xframed inside a longtable.

```

705 \cs_new:Nn \_xfamed__color_output_aux:
706 {
707   \tl_set:Nn \l_tmpa_tl
708   {
709     \group_begin:

```

```

710    \renewcommand\arraystretch{1.25}
711    \begin{longtable}{@{}l|l@{}}
712        \caption*{Color~options}\hline
713    \endhead
714        \multicolumn{3}{@{}r@{}}{\ldots}\hline
715    \endfoot
716        \hline
717    \endlastfoot
718    }
719    \tl_put_right:Nn \l_tmpa_tl
720    {
721        \prop_map_inline:Nn \l__xframed_color_option_prop
722        { ##1 & ##2 & \color{ ##2 } ##1 \ }
723    }
724    \tl_put_right:Nn \l_tmpa_tl { \end{longtable} \group_end: }
725    \tl_use:N \l_tmpa_tl
726    }

```

(End definition for `__xframed__color_output_aux:.` This function is documented on page ??.)

`__xframed__show_length:n`

`__xframed__show_skip:n`

Internal command to print out all a length/skip option of xframed.

```

727 \cs_new:Npn \__xframed__show_length:n #1
728 {
729     \dim_set:Nn \l_tmpa_dim { \__xframed__get_length:n { #1 } }
730     \dim_use:N \l_tmpa_dim
731 }
732 \cs_new:Npn \__xframed__show_skip:n #1
733 {
734     \skip_set:Nn \l_tmpa_skip { \__xframed__get_skip:n { #1 } }
735     \skip_use:N \l_tmpa_skip
736 }

```

(End definition for `__xframed__show_length:n` and `__xframed__show_skip:n`. These functions are documented on page ??.)

```
737 \tex_endinput:D
```

```
738 </package-dev>
```

1.4 xframed-dim.def – dimension functions

The following functions are internal functions to handle dimension. xframed is saving all length-/skip options inside property lists and so a length must be popped.

```
739 <*package-dim>
```

```
740 <@@=xframed>
```

`__xframed__get_skip:n`

Get a skip option from the relevant property list.

```
741 % \__xframed__get_skip:n { <skip option> }
742 \cs_new:Npn \__xframed__get_skip:n #1
743 {
744   \skip_eval:n
745   {
746     \prop_get:Nn \l__xframed_skip_option_prop { #1 }
747   }
748 }
```

(End definition for `__xframed__get_skip:n`. This function is documented on page ??.)

`__xframed__get_length:n`

Get a length option from the relevant property list.

```
749 % \__xframed__get_length:n { <length option> }
750 \cs_new:Npn \__xframed__get_length:n #1
751 {
752   \dim_eval:n
753   {
```

```

754     \prop_get:Nn \l__xframed_length_option_prop { #1 }
755   }
756 }

```

(End definition for `__xframed__get_length:n`. This function is documented on page ??.)

`__xframed__length_add:Nn`

`__xframed__length_sub:Nn`

Add/sub a xframed length to a given dimension.

```

757 % \__xframed__length_add:Nn <dimen register> { <length option> }
758 \cs_new:Npn \__xframed__length_add:Nn #1 #2
759 {
760   \dim_add:Nn #1
761   {
762     \__xframed__get_length:n { #2 }
763   }
764 }
765 % \__xframed__length_sub:Nn <dimen register> { <length option> }
766 \cs_new:Npn \__xframed__length_sub:Nn #1 #2
767 {
768   \dim_sub:Nn #1
769   {
770     \__xframed__get_length:n { #2 }
771   }
772 }

```

(End definition for `__xframed__length_add:Nn` and `__xframed__length_sub:Nn`. These functions are documented on page ??.)

`__xframed__get_length:n`

Convert a dimension from pt to cm. Used for some developer infos.

```

773 % \__xframed_convert:n { <dimension> }
774 \cs_new:Npn \__xframed__convert:n #1
775 {

```

```

776 \fp_eval:n { round( \dim_to_fp:n { #1 } / 1cm, 5) }~cm
777 }

```

(End definition for _xframed_get_length:n. This function is documented on page ??.)

_xframed_get_stretch:Nn

Get the stretch component of a skip register.

```

778 % \_xframed\_get\_stretch:Nn <skip register> { <skipexpr> }
779 \cs_new:Npn \_xframed\_get\_stretch:Nn #1 #2
780 {
781   \skip_if_finite:nTF { #2 }
782   {
783     #1 = \etex_gluestretch:D #2 \scan_stop:
784   }
785   {
786     #1 = \c_zero_skip
787   }
788 }

```

(End definition for _xframed_get_stretch:Nn. This function is documented on page ??.)

_xframed_get_shrink:Nn

Get the shrink component of a skip register.

```

789 % \_xframed\_get\_shrink:Nn <skip register> { <skipexpr> }
790 \cs_new:Npn \_xframed\_get\_shrink:Nn #1 #2
791 {
792   \skip_if_finite:nTF { #2 }
793   {
794     #1 = \etex_glueshrink:D #2 \scan_stop:
795   }
796   {
797     #1 = \c_zero_skip
798   }
799 }

```

(End definition for _xframed_get_shrink:Nn. This function is documented on page ??.)

`_xframed_remove_skip_glue:Nn`

Remove any glue from a skip register and save the result in a new skip register.

```

800 % \_xframed_remove_skip_glue:Nn <dim register> { <skipexpr> }
801 \cs_new:Npn \_xframed_remove_skip_glue:Nn #1 #2
802 {
803   \skip_split_finite_else_action:nnNN { #2 } { } \l_tmpa_dim \l_tmpb_dim
804   \skip_set:Nn #1
805   {
806     #2 - \c_zero_dim ~ plus ~ \l_tmpa_dim
807     - \c_zero_dim ~ minus ~ \l_tmpb_dim
808   }
809 }
```

(End definition for `_xframed_remove_skip_glue:Nn`. This function is documented on page ??.)

`_xframed_maximum_skip:Nn`

Get the maximum skip considering the glue part.

```

810 % \_xframed_maximum_skip:Nn <dim register> { <skipexpr> }
811 \cs_new:Npn \_xframed_maximum_skip:Nn #1 #2
812 {
813   \skip_split_finite_else_action:nnNN { #2 } { } \l_tmpa_dim \l_tmpb_dim
814   \skip_set:Nn #1
815   {
816     #2 - \c_zero_dim ~ plus ~ \l_tmpa_dim
817     - \c_zero_dim ~ minus ~ \l_tmpb_dim
818     + \l_tmpa_dim
819   }
820 }
```

(End definition for `_xframed_maximum_skip:Nn`. This function is documented on page ??.)

```

821 \tex_endinput:D
```

```

822 </package-dim>
```


1.5 xframed-funct.def – helper functions

823 `<*package-funct>`

824 `<@@=xframed>`

`_xframed_coffin_restructure:N`

Restructure the vertical box. It's equal to `\setbox0=\vbox{\unvbox0}`

825 `% _xframed_coffin_restructure:N <coffing>`

826 `\cs_new:Npn _xframed_coffin_restructure:N #1`

827 `{`

828 `\vcoffin_set:Nnn #1`

829 `{ \coffin_wd:N \l__xframed_main_coffin }`

830 `{`

831 `\ vbox_unpack_clear:N #1`

832 `}`

833 `}`

(End definition for _xframed_coffin_restructure:N. This function is documented on page ??.)

`_xframed_display_coffins:N`

Output a coffin as a simple box.

834 `\cs_set_eq:NN _xframed_display_coffins:N \box_use:N`

(End definition for _xframed_display_coffins:N. This function is documented on page ??.)

`_xframed_msg_log:n`

By default all developer information for the log-file are gobbled.

835 `\cs_new:Npn _xframed_msg_log:n #1 {}`

(End definition for _xframed_msg_log:n. This function is documented on page ??.)

`_xframed_prop_set:Nnn\prop_put:Nnn`

`_xframed_prop_set:Nnn\prop_put:Nnx`

`_xframed__prop_set:Nnn\prop_put:cnn`

Internal handling of property list with some variants

```

836 % \_xframed__prop_set:Nnn <property list> {<key>} {<value>}
837 \cs_new_eq:NN \_xframed__prop_set:Nnn \prop_put:Nnn
838 \cs_generate_variant:Nn \_xframed__prop_set:Nnn { Nnx }
839 \cs_generate_variant:Nn \_xframed__prop_set:Nnn { cnn }

(End definition for \_xframed__prop_set:Nnn\prop_put:Nnn, \_xframed__prop_set:Nnn\prop_put:Nnx,
and \_xframed__prop_set:Nnn\prop_put:cnn. These functions are documented on page ??.)

```

`_xframed__prop_get:nn`

Get the value of a xframed property list.

```

840 % \_xframed__prop_set:Nnn {<xframed property list>} {<key>}
841 \cs_new:Npn \_xframed__prop_get:nn #1 #2
842 {
843   \prop_get:cn { l__xframed_#1_option_prop } { #2 }
844 }

(End definition for \_xframed__prop_get:nn. This function is documented on page ??.)

```

`_xframed_if:N`

Interface to $\text{\LaTeX 2}_{\epsilon}$ tests <http://tex.stackexchange.com/questions/119736/what-are-the-best-pract>

```

845 % \_xframed_if:N <LaTeX2e if test>
846 \prg_new_conditional:Npnn \_xframed_if:N #1 {p,T,F,TF}
847 {
848   #1 \prg_return_true: \else: \prg_return_false: \fi:
849 }

(End definition for \_xframed_if:N. This function is documented on page ??.)

```

`_xframed__get_color:n`

Get the value of xframed property list color

```

850 \cs_new:Npn \_xframed__get_color:n #1
851 {
852   \prop_get:Nn \l__xframed_color_option_prop { #1 }
853 }

```

(End definition for `_xframed_get_color:n`. This function is documented on page ??.)

`_xframed_test_linewidth:nnn`

Test the bool flag of line – if false set 0pt

```

854 % \_xframed\_test\_linewidth:nnn {<bool name>} {<prop-list>} {<lenght/skip>}
855 \cs_new:Npn \_xframed\_test\_linewidth:nnn #1 #2 #3
856 {
857   \bool_if:cF { l__xframed_ #1 _bool }
858   {
859     \_xframed\_prop\_set:cnn
860     { l__xframed_ #2 _option_prop }
861     { #3 }
862     { \c_zero_dim }
863   }
864 }
```

(End definition for `_xframed_test_linewidth:nnn`. This function is documented on page ??.)

`\tl_if_empty:nTf`

Variant of `\tl_if_empty:nTF` <http://tex.stackexchange.com/a/112345/5239>

```

865 \cs_generate_variant:Nn \tl_if_empty:nTF { f }
```

(End definition for `\tl_if_empty:nTF`. This function is documented on page ??.)

`_xframed_ignore_vbadness:`

`_xframed_restore_vbadness:`

Ignore any vbox-warning during splitting process

```

866 \cs_new:Npn \_xframed\_ignore\_vbadness:
867 {
868   \tl_set:Nx \l__xframed_vbadness_tl { \int_use:N \tex_vbadness:D }
869   \int_set:Nn \tex_vbadness:D { \c_ten_thousand }
870   \tex_afterassignment:D \_xframed\_restore\_vbadness:
871 }
872 \cs_new:Npn \_xframed\_restore\_vbadness:
```

```

873 {
874   \int_set:Nn \tex_vbadness:D { \l___xframed_vbadness_tl }
875 }

```

(End definition for `__xframed_ignore_vbadness:` and `__xframed_restore_vbadness:.` These functions are documented on page ??.)

`__xframed_local_boxdim:`

Setup box dimension for splitting

```

876 \cs_new_protected:Npn \__xframed_local_boxdim:
877 {
878   \dim_set:Nn \tex_boxmaxdepth:D { \c_zero_dim }
879   \dim_set:Nn \texSplittopskip:D { \c_zero_dim }
880   \dim_set:Nn \tex_splitmaxdepth:D { \c_zero_dim }
881 }

```

(End definition for `__xframed_local_boxdim:.` This function is documented on page ??.)

`__xframed_offinterlineskip:`

Trying to adapt $\text{\LaTeX} 2_{\epsilon}$ command `\offinterlineskip` by expl3 Syntax

```

882 \cs_new:Npn \__xframed_offinterlineskip:
883 {
884   \dim_set:Nn \tex_baselineskip:D { - \c_one_thousand \c_one_pt_dim }
885   \dim_set:Nn \tex_lineskip:D { \c_zero \c_one_pt_dim }
886   \dim_set:Nn \tex_lineskiplimit:D { \c_max_dim }
887 }

```

(End definition for `__xframed_offinterlineskip:.` This function is documented on page ??.)

`__xframed_start_environment:n`

Default start definition of xframed

```

888 % \__xframed_start_environment:n {<dimension>}
889 \cs_new:Npn \__xframed_start_environment:n #1
890 {
891   \par
892   \__xframed_enough_room:n { #1 }

```

```

893 \par
894 \dim_compare:nNnF
895   { \tex_prevdepth:D } { = } { - \c_one_thousand \c_one_pt_dim }
896   {
897     \int_set:Nn \l_tmpa_int
898     {
899       \fp_to_int:n
900       {
901         %%\prevdepth as integer in scale points
902         (\dim_to_fp:n { \tex_prevdepth:D } * 65536)
903         /
904         %%\baselineskip as integer in scale points
905         (\dim_to_fp:n { \baselineskip } * 65536)
906         +
907         \c_one
908       }
909     }
910     \dim_set:Nn \l_tmpa_dim
911     {
912       \tex_prevdepth:D - \l_tmpa_int\baselineskip + \topskip
913     }
914     \tex_kern:D \l_tmpa_dim
915   }
916 }

```

(End definition for `__xframed__start_environment:n`. This function is documented on page ??.)

`__xframed__enough_room:n`

Function to check the minimum space at the current page.

```

917 % \__xframed__enough_room:n {<dimension>}
918 \cs_new:Npn \__xframed__enough_room:n #1
919 {
920   \par
921   \group_begin:

```

```

922     \@nobreakfalse\addpenalty\z@
923   \group_end:
924   \dim_set_eq:NN \l___xframed_free_vspace_dim \tex_pagegoal:D
925   \dim_compare:nNnTF
926     { \l___xframed_free_vspace_dim } = { \c_max_dim }
927     { \dim_set_eq:NN \l___xframed_free_vspace_dim \vsize }
928     { \dim_add:Nn \l___xframed_free_vspace_dim { - \tex_pagetotal:D } }
929   \dim_set:Nn \l_tmpa_dim { #1 }
930   %\___xframed__msg_log:n
931   \msg_log:n
932   {
933     xframed~info~\msg_line_number:~\\\
934     \ dimension~of~the~current~page \
935     \ height~==\dim_use:N \tex_pagegoal:D\ =
936       \ \___xframed__convert:n{\tex_pagegoal:D} \
937     \ used~==\dim_use:N \tex_pagetotal:D\ =
938       \ \___xframed__convert:n{\tex_pagetotal:D} \
939     \ free~==\dim_use:N \l___xframed_free_vspace_dim\ =
940       \ \___xframed__convert:n{\l___xframed_free_vspace_dim} \
941     \ request~==\dim_use:N \l_tmpa_dim\ =
942       \ \___xframed__convert:n{ \l_tmpa_dim } \
943     \ request~is~provided~by~the~option:~minimum-space
944   }
945   \dim_compare:nNnTF
946     { \l___xframed_free_vspace_dim } < { \l_tmpa_dim }
947     { %not enough space on current page
948       \vfill\eject
949       \dim_set_eq:NN \l___xframed_free_vspace_dim \vsize
950     }{}
951   }

```

(End definition for ___xframed__enough_room:n. This function is documented on page ??.)

___xframed__trivlist:

`_xframed_end__trivlist:`

Modification of trivlist for the usage of xframed.

```

952 \cs_new:Npn \_xframed__trivlist:
953 {
954   \skip_set:Nn {\topsep}{\_xframed__prop_get:nn { skip }{ skip-above } }
955   \parsep\parskip
956   \@nmbrlistfalse
957   \@trivlist
958   \labelwidth\z@
959   \leftmargin\z@
960   \itemindent\z@
961   \let\@itemlabel\@empty
962   \def\makelabel##1{##1}
963 }
964
965 \cs_new:Npn \_xframed_end__trivlist:
966 {
967   \if@inlabel
968     \leavevmode
969     \global \@inlabelfalse
970   \fi
971   \if@newlist
972     \@noitemerr
973     \global \@newlistfalse
974   \fi
975   \ifhmode\unskip \par
976   \else
977     \@inmatherr{\end{\@currenvir}}}%
978   \fi
979   \if@nparlist \else
980     \ifdim\lastskip >\z@
981       \@tempskipa\lastskip \vskip -\lastskip
982       \advance\@tempskipa\parskip \advance\@tempskipa -\@outerparskip

```

```

983     \vskip\@tempskipa
984     \fi
985     \addpenalty\@endparpenalty
986     \addvspace { \__xframed__get_skip:n { skip-below } }
987     \@endpetrue
988     \fi
989 }

```

(End definition for __xframed__trivlist: and __xframed_end__trivlist:. These functions are documented on page ??.)

```

\__xframed__set_list:

```

```

\__xframed__set_endlist:

```

Set the trivlist

```

990 \cs_new_protected:Npn \__xframed__set_list:
991 {
992   \__xframed__trivlist:\item\relax\color_group_begin:
993   \color_ensure_current:
994 }
995
996
997 \cs_set_protected_nopar:Npn \__xframed__set_endlist:
998 {
999   \color_group_end:
1000   \__xframed_end__trivlist:
1001 }

```

(End definition for __xframed__set_list: and __xframed__set_endlist:. These functions are documented on page ??.)

```

1002 \tex_endinput:D

```

```

1003 </package-funct>

```


1.6 xframed-initial.def – Define all internal variables

```
1004 ⟨*package-initial⟩
1005 ⟨@@=xframed⟩

    All new coffins
1006 %new coffins
1007 \coffin_new:N \l__xframed_head_coffin
1008 \coffin_new:N \l__xframed_main_coffin
1009 \coffin_new:N \l__xframed_title_coffin
1010 \coffin_new:N \l__xframed_firsttitle_coffin
1011 \coffin_new:N \l__xframed_foot_coffin
1012 \coffin_new:N \l__xframed_lastfoot_coffin
1013 \coffin_new:N \l__xframed_footnotes_coffin
1014
1015
1016 \coffin_new:N \l__xframed_draw_coffin
1017
1018 \coffin_new:N \l__xframed_temp_coffin
1019 \coffin_new:N \l__xframed_two_coffin
1020 \coffin_new:N \l__xframed_save_coffin
1021
1022 \coffin_new:N \l__xframed_subtitle_coffin
1023 \coffin_new:N \l__xframed_subsubtitle_coffin

    All new dimension registers.
1024 %new length
1025 \dim_new:N \l__xframed_coffin_width_dim
1026 \dim_new:N \l__xframed_environment_width_dim
1027
1028
1029 \dim_new:N \l__xframed_title_htdp_dim
1030 \dim_new:N \l__xframed_firsttitle_htdp_dim
1031 \dim_new:N \l__xframed_foot_htdp_dim
```

```

1032 \dim_new:N \l__xframed_lastfoot_htdp_dim
1033
1034 \dim_new:N \l__xframed_maincoffin_htdp_dim
1035
1036 \dim_new:N \l__xframed_splitheight_dim
1037
1038
1039 \dim_new:N \l__xframed_free_vspace_dim
1040 \dim_new:N \l__xframed_computed_coffin_height_dim
1041 \dim_new:N \l__xframed_maximum_coffin_height_dim
1042
1043 \dim_new:N \l__xframed_tmpa_dim
1044 \dim_new:N \l__xframed_tmpb_dim
1045
    All new boxes.
1046 \box_new:N \l__xframed_tmpa_box
1047 \box_new:N \l__xframed_tmpb_box
1048
1049 \bool_new:N \l__xframed_head_bool
1050
1051 \dim_const:Nn \c_one_pt_dim { 1~pt }
    All new token lists.
1052 \tl_new:N \l__xframed_temptitle_tl
1053 \tl_new:N \l__xframed_tempfoot_tl
1054 \tl_new:N \l__xframed_framemethode_tl
1055 \tl_new:N \l__xframed_vbadness_tl
    All new interger variables
1056 \int_new:N \l__xframed__framemethode_int
1057 \tex_endinput:D
1058 </package-initial>

```

1.7 xframed-keys.def – Defining all options

```

1059 <*package-keys>
1060 <@@=xframed>

1061 %%=====%%
1062 %% file to define all allowed keys                                %%
1063 %%=====%%
1064
1065
1066 %!framemethod
1067
1068 \cs_new_protected:Npn \__xframed__set_framemethod:n #1
1069 {
1070   \tl_set:Nx \l_tmpa_tl { \tl_expandable_lowercase:n { #1 } }
1071   \clist_if_in:noTF { pgf , tikz } { \l_tmpa_tl }
1072   {
1073     \tl_set:Nn \l__xframed_framemethode_tl { tikz }
1074     \int_set_eq:NN \l__xframed__framemethode_int \c_one
1075   }
1076   {
1077     \clist_if_in:noTF { default , tex , latex , none } { \l_tmpa_tl }
1078     {
1079       \tl_set:Nn \l__xframed_framemethode_tl { default }
1080       \int_set_eq:NN \l__xframed__framemethode_int \c_two
1081     }
1082     {
1083       \clist_if_in:noTF { pstricks , ps , postscript } { \l_tmpa_tl }
1084       {
1085         \tl_set:Nn \l__xframed_framemethode_tl { pstricks }
1086         \int_set_eq:NN \l__xframed__framemethode_int \c_three
1087       }
1088       {
1089         \msg_error:nnx { xframed } { unknown-option } { \l_tmpa_tl }
1090       }

```

```

1091     }
1092   }
1093 }
1094
1095
1096 \keys_define:nn { xframed }
1097 {
1098   frame-method .code:n      = \__xframed__set_framemethod:n { #1 } ,
1099   frame-method .initial:n   = tikz ,
1100   no-tikz      .bool_gset:N = \g__xframed_notikz_bool ,
1101   no-tikz      .initial:n   = false ,
1102   no-pstricks  .bool_gset:N = \g__xframed_notikz_bool ,
1103   no-pstricks  .initial:n   = true ,
1104   default      .code:n      = \__xframed__set_framemethod:n { default } ,
1105   default      .value_forbidden: ,
1106   tikz         .code:n      = \__xframed__set_framemethod:n { tikz } ,
1107   tikz         .value_forbidden: ,
1108 }
1109 %!end framemethod
1110
1111 %!length options
1112 \prop_new:N \l__xframed_length_option_prop
1113
1114 \cs_new_protected:Npn \__xframed__lengthkeys_define:n #1
1115 {
1116   \__xframed__lengthkeys_define_aux:nn #1 \q_stop
1117 }
1118
1119 \cs_new_protected:Npn \__xframed__lengthkeys_define_aux:nn #1==#2 \q_stop
1120 {
1121   \keys_define:nn { xframed }
1122   {
1123     #1 .code:n = \__xframed__prop_set:Nnn \l__xframed_length_option_prop

```

```

1124             { #1 } { ##1 }
1125     }
1126     \keys_set:nn { xframed }
1127     {
1128         #1 = { #2 }
1129     }
1130 }
1131
1132 \clist_map_function:nN
1133 {
1134     margin-left          == \c_zero_dim      ,
1135     margin-right         == \c_zero_dim      ,
1136     inner-margin-left    == 10pt             ,
1137     inner-margin-right   == 10pt             ,
1138     inner-top-margin     == 5.0pt            ,
1139     inner-bottom-margin  == 5.0pt            ,
1140     line-width-top       == 0.8pt            ,
1141     line-width-left      == 0.8pt            ,
1142     line-width-right     == 0.8pt            ,
1143     line-width-bottom    == 0.8pt            ,
1144     line-width-title     == 0.6pt            ,
1145     line-width-foot      == 0.6pt            ,
1146     arc-inner            == 5.0pt            ,
1147     arc-outer            == 5.0pt            ,
1148     footnote-line-width  == .8pt             ,
1149     footnote-line-length == 1 in             ,
1150     width                == \linewidth      ,
1151     title-skip-above     == 5pt              ,
1152     title-skip-below     == 5pt              ,
1153     foot-skip-above      == 5pt              ,
1154     foot-skip-below      == 5pt              ,
1155     subtitle-skip-above  == 5pt              ,
1156     subtitle-skip-below  == 5pt              ,

```

```

1157 shadow-size == 2pt ,
1158 extra-skip-above == \c_zero_dim ,
1159 minimum-space == 2\baselineskip ,
1160 split-skip-top == 10pt ,
1161 split-skip-bottom == 10pt ,
1162 footnote-distance == 10pt ,
1163 } \__xframed__lengthkeys_define:n
1164
1165
1166 %!meta options
1167 \keys_define:nn { xframed }
1168 {
1169   margin .meta:n =
1170   {
1171     margin-left = #1 ,
1172     margin-right = #1 ,
1173   } ,
1174   inner-margin .meta:n =
1175   {
1176     inner-margin-left = #1 ,
1177     inner-margin-right = #1 ,
1178   } ,
1179   skip .meta:n =
1180   {
1181     skip-above = #1 ,
1182     skip-below = #1 ,
1183   } ,
1184   title-skip .meta:n =
1185   {
1186     title-skip-above = #1 ,
1187     title-skip-below = #1 ,
1188   } ,
1189 }

```

```

1190     foot-skip                .meta:n  =
1191     {
1192         foot-skip-above      = #1      ,
1193         foot-skip-below     = #1      ,
1194     }
1195     split-skip                .meta:n  =
1196     {
1197         split-skip-top       = #1      ,
1198         split-skip-bottom   = #1      ,
1199     }
1200     line-width                .meta:n  =
1201     {
1202         line-width-top       = #1      ,
1203         line-width-left     = #1      ,
1204         line-width-right    = #1      ,
1205         line-width-bottom   = #1      ,
1206     }
1207     line-color                .meta:n  =
1208     {
1209         line-color-top       = #1      ,
1210         line-color-left     = #1      ,
1211         line-color-right    = #1      ,
1212         line-color-bottom   = #1      ,
1213     }
1214     round-corner              .meta:n  =
1215     {
1216         arc-inner            = #1      ,
1217         arc-outer            = #1      ,
1218     }
1219     arc                        .meta:n  =
1220     {
1221         arc-inner            = #1      ,
1222         arc-outer            = #1      ,

```

```

1223     }
1224     show-all-lines      .meta:n      =
1225     {
1226         top-line          = #1          ,
1227         left-line         = #1          ,
1228         bottom-line       = #1          ,
1229         right-line        = #1          ,
1230     }
1231 }
1232 %!end meta options
1233
1234 %!end length options
1235 \prop_new:N \l__xframed_skip_option_prop
1236
1237 \cs_new_protected:Npn \__xframed__skipkeys_define:n #1
1238 {
1239     \__xframed__skipkeys_define_aux:nn #1 \q_stop
1240 }
1241
1242 \cs_new_protected:Npn \__xframed__skipkeys_define_aux:nn #1==#2 \q_stop
1243 {
1244     \keys_define:nn { xframed }
1245     {
1246         #1 .code:n = \__xframed__prop_set:Nnn \l__xframed_skip_option_prop
1247             { #1 } { \skip_eval:n { ##1 } }
1248     }
1249     \keys_set:nn { xframed }
1250     {
1251         #1 = { #2 }
1252     }
1253 }
1254 %!skip option
1255 \clist_map_function:nN

```



```

1256 {
1257     skip-above          == 10pt      ,
1258     skip-below          == 10pt      ,
1259     subtitle-skip-above == 5pt       ,
1260     subtitle-skip-below == 5pt       ,
1261 } \__xframed__skipkeys_define:n
1262 %!end skip options
1263
1264
1265 %!color options
1266 %\cs_new:Npn \__xframed__use_font_settings:N #1
1267 % {
1268 % \exp_args:No \color{ \__xframed__prop_get:nn { color } { #1-font-color } }
1269 % \tl_use:c {l__xframed_#1font_tl
1270 % }
1271
1272 \prop_new:N \l__xframed_color_option_prop
1273
1274 \cs_new_protected:Npn \__xframed__colorkeys_define:n #1
1275 {
1276     \__xframed__colorkeys_define_aux:nn #1 \q_stop
1277 }
1278
1279 \cs_new_protected:Npn \__xframed__colorkeys_define_aux:nn #1==#2 \q_stop
1280 {
1281     \keys_define:nn { xframed }
1282     {
1283         #1 .code:n = \__xframed__prop_set:Nnn \l__xframed_color_option_prop
1284                     { #1 } { ##1 }
1285     }
1286     \keys_set:nn { xframed }
1287     {
1288         #1 = { #2 }

```

```

1289     }
1290 }
1291 \clist_map_function:nN
1292 {
1293     line-color-left      == black      ,
1294     line-color-right     == black      ,
1295     line-color-top       == black      ,
1296     line-color-bottom    == black      ,
1297     bg-color             == gray!20    ,
1298     font-color           == black      ,
1299     title-font-color     == black      ,
1300     foot-font-color      == black      ,
1301     head-font-color      == black      ,
1302     title-line-color     == black      ,
1303     title-bg-color       == gray!35    ,
1304     foot-bg-color        == gray!35    ,
1305     foot-line-color      == black      ,
1306     subtitle-font-color  == black      ,
1307     subtitle-line-color  == black      ,
1308     subtitle-bg-color    == white      ,
1309     shadow-color         == black!50   ,
1310 } \__xframed__colorkeys_define:n
1311 %!end color options
1312
1313 %!font option
1314 \keys_define:nn { xframed }
1315 {
1316     font .tl_set:N = \l__xframed_main_font_tl ,
1317     font .initial:n = \normalfont ,
1318     head-font .tl_set:N = \l__xframed_head_font_tl ,
1319     head-font .initial:n = \normalfont\sffamily\bfseries ,
1320     title-font .tl_set:N = \l__xframed_title_font_tl ,
1321     title-font .initial:n = \bfseries\sffamily\large ,

```

```

1322  foot-font          .tl_set:N = \l__xframed_foot_font_tl      ,
1323  foot-font          .initial:n = \bfseries\sffamily\small      ,
1324  subtitle-font      .tl_set:N = \l__xframed_subtitle_font_tl   ,
1325  subtitle-font      .initial:n = \bfseries\sffamily             ,
1326  }
1327  %!end font option
1328
1329  %!hooks
1330  \keys_define:nn { xframed }
1331  {
1332  code-before        .tl_set:N = \l__xframed_codebefore_tl      ,
1333  code-after         .tl_set:N = \l__xframed_codeafter_tl       ,
1334  code-begin         .tl_set:N = \l__xframed_codebegin_tl       ,
1335  code-end           .tl_set:N = \l__xframed_codeend_tl         ,
1336  subtitle-before    .tl_set:N = \l__xframed_codebefore_tl      ,
1337  subtitle-after     .tl_set:N = \l__xframed_codeafter_tl       ,
1338  code-frame-single  .tl_set:N = \l__xframed_code_single_frame_tl ,
1339  code-frame-first   .tl_set:N = \l__xframed_code_first_frame_tl ,
1340  code-frame-middle  .tl_set:N = \l__xframed_code_middle_frame_tl ,
1341  code-frame-last    .tl_set:N = \l__xframed_code_last_frame_tl  ,
1342  tikz-code-post     .tl_set:N = \l__xframed_posttikz_tl        ,
1343  tikz-code-single   .tl_set:N = \l__xframed_singletikz_tl      ,
1344  tikz-code-first    .tl_set:N = \l__xframed_firsttikz_tl       ,
1345  tikz-code-middle   .tl_set:N = \l__xframed_middletikz_tl      ,
1346  tikz-code-last     .tl_set:N = \l__xframed_lasttikz_tl        ,
1347  setup-tikz         .code:n = { \xframedsetuptikz {#1} }      ,
1348  head-pre-code      .tl_set:N = \l__xframed_headprecode_tl     ,
1349  head-post-code     .tl_set:N = \l__xframed_headpostcode_tl    ,
1350  head-post-code     .initial:n = \space                        ,
1351  title-pre-code     .tl_set:N = \l__xframed_titleprecode_tl    ,
1352  title-post-code    .tl_set:N = \l__xframed_titlepostcode_tl   ,
1353  foot-pre-code      .tl_set:N = \l__xframed_footprecode_tl     ,
1354  foot-post-code     .tl_set:N = \l__xframed_footpostcode_tl    ,

```

```

1355 }
1356 %!end hooks
1357
1358 %!bool option
1359 \keys_define:nn { xframed }
1360 {
1361   top-line          .bool_set:N = \l__xframed_topline_bool      ,
1362   top-line          .initial:n  = true                          ,
1363   left-line         .bool_set:N = \l__xframed_leftline_bool     ,
1364   left-line         .initial:n  = true                          ,
1365   bottom-line       .bool_set:N = \l__xframed_bottomline_bool   ,
1366   bottom-line       .initial:n  = true                          ,
1367   right-line        .bool_set:N = \l__xframed_rightline_bool    ,
1368   right-line        .initial:n  = true                          ,
1369   title-line        .bool_set:N = \l__xframed_titleline_bool    ,
1370   title-line        .initial:n  = true                          ,
1371   foot-line         .bool_set:N = \l__xframed_footline_bool     ,
1372   foot-line         .initial:n  = true                          ,
1373   subtitle-line     .bool_set:N = \l__xframed_subtitleline_bool ,
1374   allow-breaking    .bool_set:N = \l__xframed_allowbreaking_bool ,
1375   allow-breaking    .initial:n  = true                          ,
1376   draw-everyline    .bool_set:N = \l__xframed_draweveryline_bool ,
1377   draw-everyline    .initial:n  = false                        ,
1378   %%!! footnote-inside not used and not described yet
1379   footnote-inside   .bool_set:N = \l__xframed_footnoteinside_bool ,
1380   twoside-mode      .bool_set:N = \l__xframed_usetwoside_bool    ,
1381   shadow            .bool_set:N = \l__xframed_shadow_bool        ,
1382   ignore-last-descender .bool_set:N = \l__xframed_descenders_bool ,
1383   ignore-last-skip   .bool_set:N = \l__xframed_ignore_lastskip_bool ,
1384   ignore-last-skip   .initial:n  = true                          ,
1385   developer-info    .bool_set:N = \l__xframed_developer_info_bool ,
1386   mdframed          .bool_set:N = \l__xframed_mdframed_bool      ,
1387   minted            .bool_set:N = \l__xframed_minted_bool        ,

```

```

1388 listings          .bool_set:N = \l__xframed_listings_bool      ,
1389 tikz                .bool_set:N = \l__xframed_tikz_bool         ,
1390 tikz                .initial:n = true                           ,
1391 pstricks            .bool_set:N = \l__xframed_pstricks_bool     ,
1392 mdframed            .bool_set:N = \l__xframed_mdframed_bool     ,
1393 theorem             .bool_set:N = \l__xframed_theorem_bool      ,
1394 theorem             .initial:n = true                           ,
1395 }
1396 %!end bool options
1397
1398
1399 %!string option
1400 \keys_define:nn { xframed }
1401 {
1402   head              .tl_set:N = \l__xframed_head_tl             ,%inside frame
1403   title              .tl_set:N = \l__xframed_title_tl           ,
1404   first-title       .tl_set:N = \l__xframed_firsttitle_tl       ,
1405   foot              .tl_set:N = \l__xframed_foot_tl            ,
1406   last-foot         .tl_set:N = \l__xframed_lastfoot_tl         ,
1407 }
1408 %!end string options
1409
1410 %!unknown option
1411 \keys_define:nn { xframed }
1412 {
1413   unknown .code:n =
1414     {
1415       \msg_error:nnx { xframed } { unknown-option }
1416       { \exp_not:V \l_keys_key_tl }
1417     }
1418 }
1419 %!end unknown option
1420

```

```

1421 \ProcessKeysOptions { xframed }
1422
1423 %!style option
1424 \keys_define:nn { xframed }
1425 {
1426   style .code:n =
1427   {
1428     \cs_if_exist:cTF { __xframed_style_#1_user }
1429     {
1430       \exp_args:Nf \xframedsetup { \use:c { __xframed_style_#1_user } }
1431     }
1432     {
1433       \msg_error:nnx { xframed } { unknown-style }
1434       { \exp_not:V \l_keys_key_tl }
1435     }
1436   }
1437 }
1438 %!end style option
1439
1440 \tex_endinput:D
1441 </package-keys>

```

1.8 xframed-listings.def – listings support

```

1442 <*package-listings>
1443 <@@=xframed>
1444 %%=====%%
1445 %% file to support predefined environments with listings %%
1446 %%=====%%
1447 \RequirePackage{listings}
1448 \tex_endinput:D
1449 </package-listings>

```

1.9 xframed-mdframed.def – NOT SUPPORTED

```

1450 <*package-mdframed>

1451 <@@=xframed>

1452 %%=====%%
1453 %% file to use xframed instead of mdframed          %%
1454 %%=====%%

1455 \tex_endinput:D

1456 </package-mdframed>

```

1.10 xframed-minted.def – minted support

```

1457 <*package-minted>

1458 <@@=xframed>

1459 %%=====%%
1460 %% file to support predefined environments with minted  %%
1461 %%=====%%

1462 \RequirePackage{minted,caption}
1463 \keys_define:nn {xframed-doc-minted }
1464 {
1465   caption      .tl_set:N = \l__xframed_minted_caption_tl ,
1466   label        .tl_set:N = \l__xframed_minted_label_tl   ,
1467   minted-opt    .tl_set:N = \l__xframed_minted_minted_tl   ,
1468   minted-opt    .initial:n = {linenos=true}                ,
1469   language     .tl_set:N = \l__xframed_minted_language_tl ,
1470   language     .initial:n = latex                          ,
1471   result        .bool_set:N = \l__xframed_minted_result_bool ,
1472   result        .initial:n = false                          ,
1473   xframed       .tl_set:N = \l__xframed_minted_xframed_tl  ,
1474   hook         .tl_set:N = \l__xframed_minted_hook_tl     ,
1475 }
1476

```

```

1477 \NewDocumentCommand \xframedmintedsetup { m }
1478 {
1479   \keys_set:nn { xframed-doc-minted } { #1 }
1480 }
1481
1482 \NewDocumentEnvironment {xframedexample} { O {} }
1483 {
1484   \keys_set:nn { xframed-doc-minted } { #1 }
1485   \group_begin:
1486     \tl_set:Nx \l__mdxex_temp_tl
1487     {
1488       \exp_not:V \l__xframed_minted_hook_tl
1489       \exp_not:N \VerbatimEnvironment
1490       \exp_not:N \xframedsetup
1491       {
1492         line-color          = brown!70!black      ,
1493         bg-color            = brown!10!white      ,
1494         inner-top-margin    = 12pt                ,
1495         inner-bottom-margin = 6pt                ,
1496         title-skip-above    = 6pt                ,
1497         title-skip-below    = 6pt                ,
1498         title-bg-color      = brown!15!white      ,
1499         line-width-top      = 2pt                ,
1500         margin              = 1cm                ,
1501       }
1502       \tl_if_empty:NTF \l__xframed_minted_caption_tl
1503       {
1504         \scan_stop:
1505       }
1506       {
1507         \exp_not:N \xframedsetup
1508         {
1509           first-title      =

```

```

1510         {
1511             \exp_not:N \captionsetup { skip = 0pt }
1512             \exp_not:N \captionof
1513                 { lstlisting }
1514                 { \exp_not:V \l___xframed_minted_caption_tl }
1515             \tl_if_empty:NF \l___xframed_minted_label_tl
1516                 {
1517                     \exp_not:N \label
1518                     { lst \exp_not:N : \l___xframed_minted_label_tl }
1519                 }
1520         }
1521     }
1522 }
1523 \exp_not:n { \begin{xframed} } [ \exp_not:V \l___xframed_minted_xframed_tl ]
1524     % \exp_not:n { \MakePercentComment }
1525     \exp_not:n { \begin{minted} } [ \l___xframed_minted_minted_tl ]
1526                                     { \l___xframed_minted_language_tl }
1527 }
1528 \l__mdxex_temp_tl
1529 }
1530 {
1531     \end{minted}
1532     % \MakePercentIgnore
1533     \end{xframed}
1534     \group_end:
1535     \bool_if:NT \l___xframed_minted_result_bool { \input{\jobname.pyg} }
1536 }
1537
1538 \RenewDocumentCommand\DeleteFile{m}{}
1539
1540 \tex_endinput:D
1541 </package-minted>

```

1.11 xframed-msg.def – Defining all messages

Using exple allows the outsourcing of messages. This is done here.

```
1542 ⟨*package-msg⟩

1543 ⟨@@=xframed⟩

1544 \msg_new:nnn { xframed } { inside-box }
1545 {
1546   You~are~using~the~environment~xframed~inside~a~non~breakable\\
1547   box.~By~this~the~option~nobreak~is~used.~For~further~information\\
1548   see~the~documentation.
1549 }

1550 \msg_new:nnn { xframed } { package-not-available }
1551 {
1552   The~#1~package~is~not~available~but~xframed~needs~the~package~.\\
1553   For~further~information~see~the~documenation.
1554 }

1555 \msg_new:nnn { xframed } { unknown-option }
1556 {
1557   The~option~file~'#1'~is~not~known~by~xframed.\\
1558   Perhaps~it~is~spelled~incorrectly.
1559 }

1560 \msg_new:nnn { xframed } { unknown-style }
1561 {
1562   The~style~'#1'~is~not~known~by~xframed:
1563   perhaps~it~is~spelled~incorrectly.
1564 }

1565 \msg_new:nnn { xframed } { style-not-defined }
1566 {
1567   You~are~trying~to~expand~the~style~#1.\\
```

```
1568   The~style~is~undefined.~xframed~uses \\
1569   the~command~\newxframedstyle~instead.
1570 }

1571 \msg_new:nnn { xframed } { style-already-defined }
1572 {
1573   You~are~trying~to~define~the~style~#1.\\
1574   The~style~is~alread~defined.~xframed~uses \\
1575   the~command~\addtoxframedstyle~instead.
1576 }

1577 \msg_new:nnn { xframed } { prop-key-not-available }
1578 {
1579   The~key~'#1'~is~not~defined~\\
1580   in~current~property~list~of~#2.\\
1581   Perhaps~it~is~spelled~incorrectly.
1582 }

1583 \msg_new:nnn { xframed } { patching-worked }
1584 { Patching~the~command~#1~was~successful. }
1585
1586 \msg_new:nnn { xframed } { patching-failed }
1587 { Patching~the~command~#1~failed. }

1588 \msg_new:nnn { xframed } { output-option-failed }
1589 {
1590   You~are~trying~to~print~all~#1~options.\\
1591   These~options~are~not~defined~by~xframed. \\
1592   Allowed~are:~length,~skip~and~color.\\
1593   Perhaps~it~is~spelled~incorrectly.
1594 }

1595 \tex_endinput:D

1596 </package-msg>
```

1.12 xframed-split.def – splitting algorithm

```

1597 ⟨*package-split⟩
1598 ⟨@@=xframed⟩

1599 %%=====%%
1600 %% file to define the algorithm to split xframed      %%
1601 %%=====%%
1602
1603 %%%%%%%%%%%
1604 %%%=====%%
1605 %%%              Starting Output of the frame              %%%
1606 %%%=====%%
1607 %%%%%%%%%%%
1608 %%do the output related to the previous tests
1609 %%if splittable or split needed
1610 %% \l__xframed_allowbreaking_bool = true
1611 %%if split need not or isn't needed
1612 %% \l__xframed_allowbreaking_bool = false
1613 \cs_new:Nn \__xframed__output_and_draw:
1614 {
1615   \bool_if:NTF \l__xframed_allowbreaking_bool
1616     {%need~split
1617       \__xframed__output_and_draw_aux:
1618     }
1619     {%no~split
1620       \__xframed_draw_frame:
1621     }
1622 }
1623
1624
1625 %%%%%%%%%%%
1626 %%%=====%%
1627 %%%              Output of the frame              %%%

```

```

1628 %%%=====
1629 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1630 % draw the frame and print the material
1631 % all calculations are done at this point
1632 \cs_new:Nn \__xframed_draw_frame:
1633 {
1634   \int_case:nnn { \l__xframed__framemethode_int }
1635   {
1636     { 1 } { \__xframed__draw_tikz_frame: }%tikz
1637     { 2 } { \__xframed__draw_tikz_frame: }%default
1638     { 3 } { \__xframed__draw_tikz_frame: }%pstricks
1639   }
1640   {
1641     \__xframed__msg_log:n { xframed~undefined~style }%need a good warning
1642   }
1643 }
1644
1645 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1646 %%%=====
1647 %%%                                Splitting allowed?                                %%%
1648 %%%=====
1649 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1650 %%Test if xframed can be splitted
1651 %% not possible if inside
1652 %% minipage, parbox, float, boxes
1653 \cs_new:Nn \__xframed__test_ifSplittable:
1654 {
1655   \bool_if:nTF
1656   {
1657     \__xframed_if_p:N \if@minipage                || %compatible to LaTeX2e
1658     \mode_if_inner_p:                             || %compatible to LaTeX2e
1659     \int_compare_p:nNn { \@floatpenalty } < { 0 } || %compatible to LaTeX2e
1660     \bool_if_p:N \l__xframed__allowbreaking_bool

```

```

1661     }
1662     {
1663         \bool_if:NF \l__xframed_allowbreaking_bool
1664         {
1665             \msg_warning:nn { xframed } { inside-box }
1666         }
1667         \__xframed__msg_log:n { xframed~uses~nonsplittable~output }
1668         %%can't be splitted
1669         % \__xframed_use_nonsplittable_output:
1670         \bool_set_false:N \l__xframed_allowbreaking_bool
1671     }
1672     {
1673         \__xframed__msg_log:n { xframed~uses~splittable~output }
1674         %%can be splitted
1675         % \__xframed_use_splittable_output:
1676         \bool_set_true:N \l__xframed_allowbreaking_bool
1677     }
1678 }
1679
1680 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1681 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1682 %%%%                               Setup the different parts of the frame                               %%%%
1683 %%%%=====%%
1684 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1685 %must be used local!!!
1686 \cs_new:Npn \__xframed_setup_firstframe:
1687 {
1688     %bottom line required, otherwise bottomline 0pt.
1689     \bool_if:NF \l__xframed_draweveryline_bool
1690     {
1691         \bool_if:NT \l__xframed_bottomline_bool
1692         {
1693             \__xframed__prop_set:Nnn \l__xframed_length_option_prop

```

```

1694         { line-width-bottom } { 0pt }
1695     \bool_set_false:N \l___xframed_bottomline_bool
1696 }
1697 }
1698 %no last-foot -- only foot
1699 \tl_set_eq:NN \l___xframed_lastfoot_tl \l___xframed_foot_tl
1700 % \cs_set_eq:NN \__xframed__last_foot: \__xframed__foot:
1701 %no inner-bottom-margin -- instead split-skip-bottom
1702 \__xframed__prop_set:Nnn \l___xframed_length_option_prop
1703     { inner-bottom-margin } { \__xframed__get_length:n { split-skip-bottom } }
1704 %no skip below
1705 \__xframed__prop_set:Nnn \l___xframed_skip_option_prop
1706     { skip-below } { 0 pt }
1707 }
1708
1709 %must be used local!!!
1710 \cs_new:Npn \__xframed_setup_middleframe:
1711 {
1712     %top/bottom line required, otherwise top/bottom line 0pt.
1713     \bool_if:NF \l___xframed_draweveryline_bool
1714     {
1715         \bool_if:NT \l___xframed_bottomline_bool
1716         {
1717             \__xframed__prop_set:Nnn \l___xframed_length_option_prop
1718                 { line-width-bottom } { 0pt }
1719             \bool_set_false:N \l___xframed_bottomline_bool
1720         }
1721         \bool_if:NT \l___xframed_topline_bool
1722         {
1723             \__xframed__prop_set:Nnn \l___xframed_length_option_prop
1724                 { line-width-top } { 0pt }
1725             \bool_set_false:N \l___xframed_topline_bool
1726         }

```

```

1727     }
1728     %no extra skip above
1729     \__xframed__prop_set:Nnn \l__xframed_length_option_prop
1730         { extra-skip-above } { 0 pt }
1731     %no first-title -- only title
1732     \tl_set_eq:NN \l__xframed_firsttitle_tl \l__xframed_title_tl
1733     % \cs_set_eq:NN \__xframed__first_title: \__xframed__title:
1734     %no last-foot -- only foot
1735     \tl_set_eq:NN \l__xframed_lastfoot_tl \l__xframed_foot_tl
1736     % \cs_set_eq:NN \__xframed__last_foot: \__xframed__foot:
1737     %no inner-top-margin -- instead split-skip-top
1738     \__xframed__prop_set:Nnn \l__xframed_length_option_prop
1739         { inner-top-margin } { \__xframed__get_length:n { split-skip-top } }
1740     %no inner-bottom-margin -- instead split-skip-bottom
1741     \__xframed__prop_set:Nnn \l__xframed_length_option_prop
1742         { inner-bottom-margin } { \__xframed__get_length:n { split-skip-bottom } }
1743     %no skip below
1744     \__xframed__prop_set:Nnn \l__xframed_skip_option_prop
1745         { skip-below } { 0 pt }
1746 }
1747
1748 %must be used local!!!
1749 \cs_new:Npn \__xframed_setup_lastframe:
1750 {
1751     %top line required, otherwise top line 0pt.
1752     \bool_if:NF \l__xframed_draweveryline_bool
1753     {
1754         \bool_if:NT \l__xframed_topline_bool
1755         {
1756             \__xframed__prop_set:Nnn \l__xframed_length_option_prop
1757                 { line-width-top } { 0pt }
1758             \bool_set_false:N \l__xframed_topline_bool
1759         }

```



```

1760   }
1761   %no extra skip above
1762   \__xframed__prop_set:Nnn \l__xframed_length_option_prop
1763     { extra-skip-above } { 0 pt }
1764   %no first-title -- only title
1765   \tl_set_eq:NN \l__xframed_firsttitle_tl \l__xframed_title_tl
1766   % \cs_set_eq:NN \__xframed__first_title: \__xframed__title:
1767   %no inner-top-margin -- instead split-skip-top
1768   \__xframed__prop_set:Nnn \l__xframed_length_option_prop
1769     { inner-top-margin } { \__xframed__get_length:n { split-skip-top } }
1770   }
1771
1772
1773   %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1774   %%%=====
1775   %%%                                Test if split is in title of foot                                %%%
1776   %%%=====
1777   %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1778
1779   \cs_set_eq:NN \__xframed__setup_frame: \q_stop
1780
1781   \cs_new:Npn \__xframed__dimtest_title_foot:
1782   {
1783     \dim_compare:nNnTF
1784       { \vsize }
1785       <
1786       {
1787         \l__xframed_title_htdp_dim + \l__xframed_foot_htdp_dim
1788         +
1789         \__xframed__get_length:n { line-width-title }
1790         +
1791         \__xframed__get_length:n { line-width-foot }
1792       }

```

```

1793     {%title+foot too big for one page -- error
1794     \__xframed__msg_log:n { xframed~foot~title~too~big }%need a good warning
1795     }
1796     {%we can work:
1797     \dim_compare:nNnTF
1798       { \l__xframed_free_vspace_dim }
1799       <
1800       {
1801         \l__xframed_firsttitle_htdp_dim + \l__xframed_foot_htdp_dim
1802         +
1803         \__xframed__get_length:n { line-width-title }
1804         +
1805         \__xframed__get_length:n { line-width-foot }
1806         +
1807         \__xframed__get_length:n { minimum-space }
1808       }
1809       {%title+foot too big for current page
1810       \xframed__pagebreak:
1811       \__xframed__coffin_output_aux:
1812       \__xframed__msg_log:n { xframed~foot~title~not~too~big~with~mini-
mum-space}
1813       }
1814       {
1815         \__xframed__msg_log:n { xframed~foot~title~not~too~big }
1816       }
1817     }
1818   }
1819
1820
1821 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1822 %%%=====
1823 %%% Starting splitting algorithm -- first part %%%
1824 %%%=====

```

```

1825 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1826 \cs_new:Npn \xframed__pagebreak:
1827 {
1828   \vfill\eject
1829   \dim_set_eq:NN \l__xframed_free_vspace_dim \vsize
1830   % \__xframed__output_and_draw_aux_i:
1831 }
1832
1833
1834 \cs_new:Npn \__xframed__output_and_draw_aux:
1835 {
1836   \group_begin:
1837     \tl_set_eq:NN \l__xframed_temptitle_tl \l__xframed_firsttitle_tl
1838     \tl_set_eq:NN \l__xframed_tempfoot_tl \l__xframed_foot_tl
1839     \__xframed__title:
1840     \__xframed__foot:
1841     \__xframed__dimtest_title_foot:
1842     %calculate the maximum height of first frame:
1843     \dim_set:Nn \l__xframed_splitheight_dim { \l__xframed_free_vs-
pace_dim }
1844     \clist_map_inline:nn
1845       {
1846         extra-skip-above , line-width-top , inner-top-margin ,
1847         split-skip-bottom , line-width-title , line-width-foot ,
1848         title-height , foot-height
1849       }
1850       {
1851         \__xframed__length_sub:Nn \l__xframed_splitheight_dim { ##1 }
1852       }
1853     \__xframed__maximum_skip:Nn \l_tmpa_dim
1854     { \__xframed__get_skip:n { skip-above } }
1855     \dim_sub:Nn \l__xframed_splitheight_dim { \l_tmpa_dim }
1856     \bool_if:NT \l__xframed_draweveryline_bool

```

```

1857 {
1858   \bool_if:NT \l___xframed_bottomline_bool
1859   {
1860     \__xframed__length_sub:Nn
1861       \l___xframed_splitheight_dim { line-width-bottom }
1862   }
1863 }
1864 \__xframed__msg_log:n
1865 {
1866   Maximum~height~of~first~frame:\\
1867   \dim_eval:n { \l___xframed_splitheight_dim } \ =\
1868   \__xframed__convert:n{ \l___xframed_splitheight_dim }
1869 }
1870 \dim_compare:nNnTF
1871   { \l___xframed_splitheight_dim }
1872   <
1873   { \__xframed__get_length:n { minimum-space } }
1874   { \xframed__pagebreak: \__xframed__output_and_draw_aux: }
1875   {
1876     \__xframed_splitting_algorithm:
1877     \group_begin:
1878       \__xframed_setup_firstframe:
1879       \coffin_set_eq:NN \l___xframed_main_coffin \l___xframed_temp_coffin
1880       \vcoffin_set:Nnn \l___xframed_main_coffin
1881         { \l___xframed_coffin_width_dim }
1882       {
1883         \__xframed__offinterlineskip:
1884         \skip_vertical:n { \__xframed__get_length:n { inner-top-margin } }
1885         \vbox_unpack_clear:N \l___xframed_main_coffin
1886         \skip_vertical:n { \__xframed__get_length:n { inner-bottom-margin } }
1887       }
1888     \__xframed_draw_frame:

```

```

1889     \group_end:
1890     \xframed__pagebreak:
1891     \__xframed__output_and_draw_aux_i:
1892   }
1893   \group_end:
1894 }
1895 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1896 %%%=====
1897 %%%                Starting splitting algorithm -- middle part                %%%
1898 %%%=====
1899 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1900
1901 \cs_new:Npn \__xframed__output_and_draw_aux_i:
1902 {
1903   \dim_compare:nNnTF { \box_wd:N \l__xframed_main_coffin } < { 1pt }
1904   {%\box_if_empty:NNTF \l__xframed_main_coffin
1905     {
1906       %WARNING
1907     }
1908     {
1909       \tl_set_eq:NN \l__xframed_temptitle_tl \l__xframed_title_tl
1910       \tl_set_eq:NN \l__xframed_tempfoot_tl \l__xframed_lastfoot_tl
1911       \__xframed__title:
1912       \__xframed__foot:
1913       %calculate the maximum height of current / maybe last frame:
1914       \dim_set:Nn \l__xframed_splitheight_dim { \l__xframed_free_vs-
pace_dim }
1915       \clist_map_inline:nn
1916         {
1917           split-skip-top , inner-bottom-margin ,
1918           line-width-title , line-width-foot , line-width-bottom
1919         }
1920         {

```

```

1921     \__xframed__length_sub:Nn \l__xframed_splitheight_dim { ##1 }
1922   }
1923   \bool_if:NT \l__xframed_draweveryline_bool
1924   {
1925     \bool_if:NT \l__xframed_topline_bool
1926     {
1927       \__xframed__length_sub:Nn \l__xframed_splitheight_dim { line-width-top }
1928     }
1929   }
1930   \dim_compare:nNnTF
1931   { \box_ht:N \l__xframed_main_coffin + \box_dp:N \l__xframed_main_cof-
fin }
1932   <
1933   { \l__xframed_splitheight_dim }
1934   {%last frame
1935     \group_begin:
1936       \__xframed_setup_lastframe:
1937       \vcoffin_set:Nnn \l__xframed_main_coffin
1938       { \l__xframed_coffin_width_dim }
1939       {
1940         \__xframed__offinterlineskip:
1941         \skip_vertical:n { \__xframed__get_length:n { split-skip-top } }
1942         \vbox_unpack_clear:N \l__xframed_main_coffin
1943         \skip_vertical:n { \__xframed__get_length:n { in-
ner-bottom-margin } }
1944       }
1945       \__xframed_draw_frame:
1946     \group_end:
1947   }
1948   {%we have a middle part
1949   \tl_set_eq:NN \l__xframed_temptitle_tl \l__xframed_title_tl
1950   \tl_set_eq:NN \l__xframed_tempfoot_tl \l__xframed_foot_tl
1951   \__xframed__title:

```

```

1952     \__xframed__foot:
1953         \dim_set:Nn \l__xframed_splitheight_dim { \l__xframed_free_vs-
pace_dim }
1954     \clist_map_inline:nn
1955     {
1956         split-skip-top , split-skip-bottom, line-width-title ,
1957         line-width-foot , title-height , foot-height
1958     }
1959     {
1960         \__xframed__length_sub:Nn \l__xframed_splitheight_dim { ##1 }
1961     }
1962     \bool_if:NT \l__xframed_draweveryline_bool
1963     {
1964         \bool_if:NT \l__xframed_topline_bool
1965         {
1966             \__xframed__length_sub:Nn
1967             \l__xframed_splitheight_dim { line-width-top }
1968         }
1969         \bool_if:NT \l__xframed_bottomline_bool
1970         {
1971             \__xframed__length_sub:Nn
1972             \l__xframed_splitheight_dim { line-width-bottom }
1973         }
1974     }
1975     \__xframed__msg_log:n
1976     {
1977         Maximum~height~of~middle~frame:\\
1978         \dim_eval:n { \l__xframed_splitheight_dim }\ =\
1979         \__xframed__convert:n{ \l__xframed_splitheight_dim }
1980     }
1981     \__xframed_splitting_algorithm:
1982     \group_begin:
1983         \__xframed_setup_middleframe:

```

```

1984 \coffin_set_eq:NN \l__xframed_main_coffin \l__xframed_temp_coffin
1985 \vcoffin_set:Nnn \l__xframed_main_coffin
1986 { \l__xframed_coffin_width_dim }
1987 {
1988 \__xframed__offinterlineskip:
1989 \skip_vertical:n { \__xframed__get_length:n { split-skip-top } }
1990 \vbox_unpack_clear:N \l__xframed_main_coffin
1991 \skip_vertical:n { \__xframed__get_length:n { split-skip-bottom } }
1992 }
1993 \__xframed_draw_frame:
1994 \group_end:
1995 \xframed__pagebreak:
1996 \__xframed__output_and_draw_aux_i:
1997 }
1998 }
1999 }
2000
2001 %%%%%%%%%%%
2002 %%%=====
2003 %%% Splitting with loop %%%
2004 %%%=====
2005 %%%%%%%%%%%
2006 \cs_new:Npn \__xframed_splitting_algorithm:
2007 {
2008 \__xframed__local_boxdim:
2009 \__xframed__ignore_vbadness:
2010 \vbox_set_split_to_ht:NNn
2011 \l__xframed_tmpb_box
2012 \l__xframed_main_coffin
2013 { \l__xframed_splitheight_dim - \tex_pageshrink:D }
2014 \vbox_set:Nn \l__xframed_tmpb_box
2015 { \vbox_unpack_clear:N \l__xframed_tmpb_box }
2016 \dim_set:Nn \l__xframed_tmpa_dim

```



```

2017     {
2018         \box_ht:N \l___xframed_tmpb_box + \box_dp:N \l___xframed_tmpb_box
2019     }
2020 \dim_compare:nNnTF { \l___xframed_splitheight_dim } > { \l___xframed_tmpa_dim }
2021 { %splitting successful
2022     \__xframed__msg_log:n { Splitting~successful }
2023 }
2024 {
2025     \__xframed__msg_log:n { Splitting~not~successful }
2026     \int_set:Nn \l_tmpa_int { 0 }
2027     \dim_set:Nn \l_tmpa_dim { 0pt }
2028 \dim_while_do:nNnn { \l___xframed_tmpa_dim } < { \l___xframed_splitheight_dim }
2029 {
2030     \coffin_set_eq:NN \l___xframed_main_coffin \l___xframed_save_coffin
2031     \int_incr:N \l_tmpa_int
2032     \dim_add:Nn \l_tmpa_dim { 8 pt }
2033     \__xframed__ignore_vbadness:
2034     \vbox_set_split_to_ht:NNn
2035         \l___xframed_tmpb_box
2036         \l___xframed_main_coffin
2037         { \l___xframed_splitheight_dim - \tex_pageshrink:D - \l_tmpa_dim }
2038     \vbox_set:Nn \l___xframed_tmpb_box
2039         { \vbox_unpack_clear:N \l___xframed_tmpb_box }
2040     \dim_set:Nn \l___xframed_tmpa_dim
2041     {
2042         \box_ht:N \l___xframed_tmpb_box + \box_dp:N \l___xframed_tmpb_box
2043     }
2044     \__xframed__msg_log:n { Splitting~Try~\int_use:N \l_tmpa_int }
2045     \int_compare:nNnT { \l_tmpa_int } > { 50 }
2046     {
2047         \__xframed__msg_log:n { too~much~loops }
2048         \dim_set:Nn \l___xframed_tmpa_dim { 0pt }
2049     }

```

```

2050     }
2051   }
2052   \vcoffin_set:Nnn
2053     \l__xframed_temp_coffin
2054     { \l__xframed_coffin_width_dim }
2055     { \vbox_unpack_clear:N \l__xframed_tmpb_box }
2056   \__xframed__coffin_restructure:N \l__xframed_temp_coffin
2057   \__xframed__coffin_restructure:N \l__xframed_main_coffin
2058   \__xframed__msg_log:n
2059   {
2060     height~of~split~frame:\\
2061     \dim_eval:n { \l__xframed_tmpa_dim } \ = \
2062     \__xframed__convert:n{ \l__xframed_tmpa_dim }
2063   }
2064 }
2065
2066
2067 \tex_endinput:D
2068 </package-split>

```

1.13 xframed-theorem.def – theorem support

```

2069 <*package-theorem>
2070 <@@=xframed>
2071 %%=====%%
2072 %% file to supports theorems %%
2073 %%=====%%
2074 \tex_endinput:D
2075 </package-theorem>

```

1.14 xframed-tikz.def – drawing method tikz

```

2076 <*package-tikz>

```

```

2077 <@@=xframed>

2078 %%=====%%
2079 %% file to define all tikz functions to draw the frame %%
2080 %%=====%%

2081
2082
2083
2084 %%initial~of~styles
2085 \def\xframedsetuptikz{\pgfqkeys{/tikz/xframed}}
2086 \pgfqkeys{/tikz/xframed}{
2087 %main
2088   bg/.style=
2089     {
2090       fill = { \_xframed\_get_color:n { bg-color } },
2091       rounded~corners= { 0pt }
2092     },
2093 %title
2094   title~bg/.style=
2095     {
2096       draw=none,
2097       fill= \_xframed\_get_color:n { title-bg-color },
2098       rounded~corners= { 0pt }
2099     },
2100   title~rule/.style=
2101     {
2102       draw= \_xframed\_get_color:n { title-line-color },
2103       line~width= \_xframed\_get_length:n { line-width-title },
2104     },
2105 %foot
2106   foot~bg/.style=
2107     {
2108       fill= \_xframed\_get_color:n { foot-bg-color },
2109       rounded~corners= { 0pt }

```

```

2110     },
2111     foot~rule/.style=
2112     {
2113         draw = \_xframed\_get\_color:n { foot-line-color },
2114         line~width=\_xframed\_get\_length:n { line-width-foot }
2115     },
2116     %%%%%%%%%title
2117     %%%%%%%%% left~line/.style={line~width=2pt},
2118     %%%%%%%%%arc
2119     inner~arc/.style={rounded~corners=\_xframed\_get\_length:n { arc-inner }},
2120     outer~arc/.style={rounded~corners=\_xframed\_get\_length:n { arc-outer }},
2121     %frame
2122     right~line/.style=
2123     {
2124         draw = \_xframed\_get\_color:n { line-color-right } ,
2125         line~width= { \_xframed\_get\_length:n { line-width-right } },
2126     },
2127     left~line/.style=
2128     {
2129         draw = \_xframed\_get\_color:n { line-color-left } ,
2130         line~width={ \_xframed\_get\_length:n { line-width-left } },
2131     },
2132     top~line/.style=
2133     {
2134         draw = \_xframed\_get\_color:n { line-color-top } ,
2135         line~width={ \_xframed\_get\_length:n { line-width-top } },
2136     },
2137     bottom~line/.style=
2138     {
2139         draw = \_xframed\_get\_color:n { line-color-bottom } ,
2140         line~width={ \_xframed\_get\_length:n { line-width-bottom } },
2141     },
2142     %subtitle

```

```

2143 % subtitle~bg/.style={fill=red},
2144 % subtitle~above~rule/.style={draw=black,line~width=2pt},
2145 % subtitle~below~rule/.style={draw=black,line~width=2pt},
2146 % subtitle~rule/.style={subtitle~above~rule=#1,subtitle~below~rule=#1},
2147 %clear definition
2148 }
2149
2150
2151 \cs_new:Nn \__xframed__draw_tikz_frame:
2152 {
2153   \begin{tikzpicture}[remember~picture]
2154     %%Inner part -- defines node xframed-inner
2155     \__xframed__tikz_innerpart:
2156     %%title part -- defines node xframed-title
2157     \__xframed__tikz_titlepart:
2158     %%foot part -- defines node xframed-foot
2159     \__xframed__tikz_footpart:
2160     %%%%%%%%%%%
2161     %Outer part -- defines node xframed-outer
2162     \__xframed__tikz_drawframe:
2163     %\pgfnodealias{xframed-outer}{xframed-inner}
2164     %use the correct bounding box
2165     \pgfresetboundingbox\useasboundingbox%
2166         ($(\xframed-outer.south~west)+(-\__xframed__get_length:n { mar-
margin-left },0)$)
2167         rectangle
2168         ($(\xframed-outer.north~east)+( \__xframed__get_length:n { mar-
margin-right },0)$
2169         +(0,\__xframed__get_length:n { extra-skip-above } )$) ;
2170     %Show development tools
2171     %%User hook
2172     \tl_use:N \l__xframed_posttikz_tl
2173     \tl_use:N \l__xframed_singletikz_tl

```

```
2174    %%xframed-developer info
2175    \__xframed__nodepoints_development:
2176    \end{tikzpicture}
2177    %%% \__xframed__all_option_output:
2178    }
2179
2180    \cs_new:Nn \__xframed__tikz_innerpart:
2181    {
2182    \begin{scope}
2183    \tikzset{every~node/.style={inner~sep=0pt,outer~sep=0pt,}}
2184    \node[] (xframed-inner)
2185    {
2186    \hbox:n{}
2187    \skip_horizontal:n
2188    {
2189    \__xframed__get_length:n { inner-margin-left }
2190    }
2191    \__xframed__display_coffins:N \l__xframed_main_coffin
2192    \skip_horizontal:n
2193    {
2194    \__xframed__get_length:n { inner-margin-right }
2195    }
2196    \hbox:n{}
2197    };
2198    \end{scope}
2199    }
2200
2201    \cs_new:Nn \__xframed__tikz_titlepart:
2202    {
2203    \tl_if_blank:VTF \l__xframed_firsttitle_tl
2204    {
2205    \pgfnodealias{xframed-title}{xframed-inner}
2206    }
```

```

2207 {
2208   \begin{scope}
2209     \tikzset{every~node/.style={inner~sep=0pt,outer~sep=0pt,}}
2210     \node[anchor=south, yshift= \_xframed\_get\_length:n { line-width-title } ]
2211       (xframed-title) at (xframed-inner.north)
2212       {
2213         \hbox:n{}
2214         \skip_horizontal:n { \_xframed\_get\_length:n { inner-margin-left } }
2215         \_xframed\_display\_coffins:N \l__xframed_title_coffin
2216         \skip_horizontal:n { \_xframed\_get\_length:n { in-
ner-margin-right } }
2217         \hbox:n{}
2218       };
2219   \end{scope}
2220 }
2221 }
2222 \cs_new:Nn \_xframed\_tikz\_footpart:
2223 {
2224   \tl_if_blank:VTF \l__xframed_lastfoot_tl
2225   {
2226     \pgfnodealias{xframed-foot}{xframed-inner}
2227   }
2228   {
2229     \begin{scope}
2230       \tikzset{every~node/.style={inner~sep=0pt,outer~sep=0pt,}}
2231       \node[anchor=north,
2232         yshift= {-\_xframed\_get\_length:n { line-width-foot }},
2233         ] (xframed-foot) at (xframed-inner.south)
2234         {
2235           \skip_horizontal:n { \_xframed\_get\_length:n { inner-margin-left } }
2236           \_xframed\_display\_coffins:N \l__xframed_foot_coffin
2237           \skip_horizontal:n { \_xframed\_get\_length:n { in-
ner-margin-right } }

```

```

2238         \hbox:n{}
2239     };
2240     \end{scope}
2241 }
2242 }
2243
2244 \cs_new:Nn \__xframed__tikz_drawframe:
2245 {
2246     \begin{scope}[on~background~layer]
2247         %%Draw the main frame
2248         \coordinate (fxx) at %fxx=left bottom
2249             ($(\xframed-foot.south~west)
2250             +(-\__xframed__get_length:n { line-width-left },
2251             -\__xframed__get_length:n { line-width-bottom }
2252             )
2253             $);
2254         \coordinate (fyy) at %fyy=right top
2255             ($(\xframed-title.north~east)
2256             +(\__xframed__get_length:n { line-width-right },
2257             \__xframed__get_length:n { line-width-top }
2258             )
2259             $);
2260         \tikzset{every~node/.style={inner~sep=0pt,outer~sep=0pt,}}
2261         \node[anchor=south,
2262             yshift= -\__xframed__get_length:n { line-width-bottom },
2263             xshift= .5*\__xframed__get_length:n { line-width-right }
2264             -.5*\__xframed__get_length:n { line-width-left }, ]
2265             (xframed-outer) at (xframed-foot.south)
2266             {\tikz\path(fxx) rectangle (fyy);};
2267         \clip[xframed/outer~arc](xframed-outer.south~west) rectangle
2268             (xframed-outer.north~east);
2269         \__xframed__tikz_drawframe_lines:
2270         \__xframed__tikz_drawframe_titlefoot:

```



```

2271 \end{scope}
2272 }
2273 \cs_new:Nn \__xframed__tikz_drawframe_lines:
2274 {
2275   %left line
2276   \path[fill = \__xframed__get_color:n { line-color-left }]
2277     (xframed-outer.north~west) -- (xframed-outer.south~west)
2278     -- (xframed-inner.center) --cycle;
2279   %right line
2280   \path[fill = \__xframed__get_color:n { line-color-right }]
2281     (xframed-outer.north~east) -- (xframed-outer.south~east)
2282     -- (xframed-inner.center) --cycle;
2283   %top line
2284   \path[fill = \__xframed__get_color:n { line-color-top }]
2285     (xframed-outer.north~east) -- (xframed-outer.north~west)
2286     -- (xframed-inner.center) --cycle;
2287   %bottom line
2288   \path[fill = \__xframed__get_color:n { line-color-bottom }]
2289     (xframed-outer.south~east) -- (xframed-outer.south~west)
2290     -- (xframed-inner.center) --cycle;
2291 }
2292
2293 \cs_new:Nn \__xframed__tikz_drawframe_titlefoot:
2294 {
2295   \begin{scope}
2296     %inner frame
2297     \clip[xframed/inner~arc] (xframed-foot.south~west) rectangle
2298       (xframed-title.north~east);
2299     \path[xframed/bg] (xframed-foot.south~west) rectangle
2300       (xframed-title.north~east);
2301     %draw title componente (1) title (2) foot rule:
2302     \tl_if_blank:VF \l__xframed_firsttitle_tl
2303     {

```

```

2304 \path[xframed/title~bg] (xframed-title.south~west) rectangle
2305 (xframed-title.north~east);
2306 \bool_if:NT \l___xframed_footline_bool
2307 {
2308 \path[xframed/title~rule]
2309 ([yshift= .5*\__xframed__get_length:n { line-width-foot }]
2310 xframed-inner.north~west) --
2311 ([yshift= .5*\__xframed__get_length:n { line-width-foot }]
2312 xframed-inner.north~east);
2313 }
2314 }
2315 %draw foot componente (1) foot (2) foot rule:
2316 \tl_if_blank:VF \l___xframed_lastfoot_tl
2317 {
2318 \path[xframed/foot~bg] (xframed-foot.south~west) rectangle
2319 (xframed-foot.north~east);
2320 \bool_if:NT \l___xframed_footline_bool
2321 {
2322 \path[xframed/foot~rule]
2323 ([yshift= -.5*\__xframed__get_length:n { line-width-foot }]
2324 xframed-inner.south~west) --
2325 ([yshift= -.5*\__xframed__get_length:n { line-width-foot }]
2326 xframed-inner.south~east);
2327 }
2328 }
2329 \end{scope}
2330 }
2331
2332
2333 %%%%%%%%%%%
2334 %DEVELOPER INFO
2335 %%%%%%%%%%%
2336 \cs_new:Nn \__xframed__nodepoints_development:

```

```

2337 {
2338   \bool_if:NT \l__xframed_developer_info_bool
2339   {
2340     \begin{scope}
2341       %%%%Inner nodes
2342       \__xframed__nodepoints_inner_development:
2343       %%%%title nodes
2344       \__xframed__nodepoints_title_development:
2345       %%%%foot nodes
2346       \__xframed__nodepoints_foot_development:
2347       %%%%Outer nodes
2348       \__xframed__nodepoints_outer_development:
2349       %%%%length
2350       \__xframed__outerlength_development:
2351     \end{scope}
2352   }
2353 }
2354
2355 \cs_new:Nn \__xframed__nodepoints_inner_development:
2356 {
2357   \fill[red!70!black] (xframed-inner.north~west) circle (2pt)
2358   node[above=0.5cm,font=\footnotesize\ttfamily] {xframed-inner.north~west};
2359   \fill[red!70!black] (xframed-inner.north~east) circle (2pt)
2360   node[above=0.5cm,font=\footnotesize\ttfamily] {xframed-inner.north~east};
2361   \fill[red!70!black] (xframed-inner.south~west) circle (2pt)
2362   node[below=0.5cm,font=\footnotesize\ttfamily] {xframed-inner.south~west};
2363   \fill[red!70!black] (xframed-inner.south~east) circle (2pt)
2364   node[below=0.5cm,font=\footnotesize\ttfamily] {xframed-inner.south~east};
2365   \fill[red!70!black] (xframed-inner.center) circle (2pt)
2366   node[draw,rectangle,fill=yellow,above=0.5cm,font=\footnotesize\ttfamily]
2367     {xframed-inner.center};
2368 }
2369

```

```

2370 \cs_new:Nn \__xframed__nodepoints_outer_development:
2371 {
2372   \fill[blue!70!black] (xframed-outer.north~west) circle (2pt)
2373     node[above=0.75cm,font=\footnotesize\ttfamily]
2374     {xframed-outer.north~west};
2375   \fill[blue!70!black] (xframed-outer.north~east) circle (2pt)
2376     node[above=0.75cm,font=\footnotesize\ttfamily]
2377     {xframed-outer.north~east};
2378   \fill[blue!70!black] (xframed-outer.south~west) circle (2pt)
2379     node[below=0.75cm,font=\footnotesize\ttfamily]
2380     {xframed-outer.south~west};
2381   \fill[blue!70!black] (xframed-outer.south~east) circle (2pt)
2382     node[below=0.75cm,font=\footnotesize\ttfamily] {xframed-outer.south~east};
2383   \fill[blue!70!black] (xframed-outer.center) circle (2pt)
2384     node[draw,rectangle,fill=yellow,below=0.5cm,font=\footnotesize\ttfamily]
2385     {xframed-outer.center};
2386 }
2387
2388 \cs_new:Nn \__xframed__nodepoints_title_development:
2389 {
2390   \tl_if_blank:VF \l__xframed_firsttitle_tl
2391   {
2392     \fill[green!70!black] (xframed-title.north~west) circle (2pt)
2393       node[above=0.5cm,font=\footnotesize\ttfamily]
2394       {xframed-title.north~west};
2395     \fill[green!70!black] (xframed-title.north~east) circle (2pt)
2396       node[above=0.5cm,font=\footnotesize\ttfamily]
2397       {xframed-title.north~east};
2398     \fill[green!70!black] (xframed-title.south~west) circle (2pt)
2399       node[below=0.5cm,font=\footnotesize\ttfamily]
2400       {xframed-title.south~west};
2401     \fill[green!70!black] (xframed-title.south~east) circle (2pt)
2402       node[below=0.5cm,font=\footnotesize\ttfamily]

```

```

2403     {xframed-title.south~east};
2404     \fill[green!70!black] (xframed-title.center) circle (2pt)
2405     node[draw,rectangle,fill=yellow,above=0.5cm,font=\footnotesize\ttfamily]
2406     {xframed-title.center};
2407   }
2408 }
2409
2410 \cs_new:Nn \__xframed__nodepoints_foot_development:
2411 {
2412   \tl_if_blank:VF \l__xframed_lastfoot_tl
2413   {
2414     \fill[green!70!black] (xframed-foot.north~west) circle (2pt)
2415     node[above=0.5cm,font=\footnotesize\ttfamily]
2416     {xframed-foot.north~west};
2417     \fill[green!70!black] (xframed-foot.north~east) circle (2pt)
2418     node[above=0.5cm,font=\footnotesize\ttfamily]
2419     {xframed-foot.north~east};
2420     \fill[green!70!black] (xframed-foot.south~west) circle (2pt)
2421     node[below=0.5cm,font=\footnotesize\ttfamily]
2422     {xframed-foot.south~west};
2423     \fill[green!70!black] (xframed-foot.south~east) circle (2pt)
2424     node[below=0.5cm,font=\footnotesize\ttfamily]
2425     {xframed-foot.south~east};
2426     \fill[green!70!black] (xframed-foot.center) circle (2pt)
2427     node[draw,rectangle,fill=yellow,above=0.5cm,font=\footnotesize\ttfamily]
2428     {xframed-foot.center};
2429   }
2430 }
2431
2432 \cs_new:Nn \__xframed__outerlength_development:
2433 {
2434   \draw[latex-latex] (xframed-outer.east) ---+
2435   ( \__xframed__get_length:n { margin-right },0) ;

```

```

2436 \draw[latex-latex] (xframed-outer.west) ---+
2437             (-\__xframed__get_length:n { margin-left }, 0) ;
2438 \dim_set:Nn \l_tmpa_dim { \__xframed__get_skip:n { skip-above } }
2439 \draw[latex-latex] (xframed-outer.north) ---+ ( 0 , \l_tmpa_dim ) ;
2440 \dim_set:Nn \l_tmpa_dim { \__xframed__get_skip:n { skip-below } }
2441 \draw[latex-latex] (xframed-outer.south) ---+ ( 0 , -\l_tmpa_dim ) ;
2442 }
2443
2444
2445 \tex_endinput:D
2446 \</package-tikz>

```

1.15 xframed-titlefoot.def – handling title and foot

```

2447 \<*package-titlefoot>
2448 \<@@=xframed>
2449 %%=====%%
2450 %% file to define all functions to use title or foot      %%
2451 %%=====%%
2452
2453
2454 %%%%%%%%%%%
2455 %%%=====%%
2456 %%%% Declaration of title %%%%
2457 %%%=====%%
2458 %%%%%%%%%%%
2459 \__xframed__prop_set:Nnn \l__xframed_length_option_prop
2460 { title-height } { \c_zero_dim }
2461 \__xframed__prop_set:Nnn \l__xframed_length_option_prop
2462 { foot-height } { \c_zero_dim }
2463
2464
2465 \cs_new:Nn \__xframed__title:

```

```

2466 {
2467   \tl_if_blank:VTF \l___xframed_temptitle_tl
2468   {
2469     \coffin_set_eq:NN \l___xframed_title_coffin \c_empty_coffin
2470     \dim_set:Nn \l___xframed_title_htdp_dim { 0pt }
2471     \__xframed__prop_set:Nnn \l___xframed_length_option_prop
2472       { line-width-title } { 0pt }
2473     \bool_set_false:N \l___xframed_titleline_bool
2474     \__xframed__prop_set:Nnn \l___xframed_length_option_prop
2475       { title-height } { 0pt }
2476   }
2477   {
2478     %save the contents of title in coffin
2479     \vcoffin_set:Nnn
2480       \l___xframed_title_coffin
2481       { \l___xframed_coffin_width_dim }
2482       {
2483         \tl_use:N \l___xframed_titleprecode_tl
2484         \tl_use:N \l___xframed_title_font_tl
2485         \color { \__xframed__get_color:n { title-font-color } }
2486         \tl_use:N \l___xframed_temptitle_tl
2487         \__xframed__ignore_last_descenders:
2488         \__xframed__ignore_last_skip:
2489         \tl_use:N \l___xframed_titlepostcode_tl
2490       }
2491     \__xframed__coffin_restructure:N \l___xframed_title_coffin
2492     %add the needed vertical space to coffin
2493     \vcoffin_set:Nnn
2494       \l___xframed_title_coffin
2495       { \l___xframed_coffin_width_dim }
2496       {
2497         \__xframed__offinterlineskip:
2498         \skip_vertical:n { \__xframed__get_length:n { title-skip-above } }

```

1.15 XFRAMED-TITLEFOOT.DEF – HANDLING TITLE AND FOOTXFRAMED IMPLEMENTATION

```
2499     \vbox_unpack_clear:N \l___xframed_title_coffin
2500     \skip_vertical:n { \___xframed__get_length:n { title-skip-below } }
2501   }
2502   \dim_set:Nn \l___xframed_title_htdp_dim
2503     {
2504       \coffin_ht:N \l___xframed_title_coffin +
2505       \coffin_dp:N \l___xframed_title_coffin
2506     }
2507   \___xframed__prop_set:Nnn \l___xframed_length_option_prop
2508     { title-height } { \dim_use:N \l___xframed_title_htdp_dim }
2509   \bool_if:NF \l___xframed_titleline_bool
2510   {
2511     \___xframed__prop_set:Nnn \l___xframed_length_option_prop
2512       { line-width-title } { 0pt }
2513   }
2514 }
2515 }
2516 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
2517 %%%=====
2518 %%% Declaration of foot %%%
2519 %%%=====
2520 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
2521
2522 \cs_new:Nn \___xframed__foot:
2523 {
2524   \tl_if_blank:VTF \l___xframed_tempfoot_tl
2525   {
2526     \coffin_set_eq:NN \l___xframed_foot_coffin \c_empty_coffin
2527     \dim_set:Nn \l___xframed_foot_htdp_dim { 0pt }
2528     \___xframed__prop_set:Nnn \l___xframed_length_option_prop
2529       { line-width-foot } { 0pt }
2530     \bool_set_false:N \l___xframed_footline_bool
2531   }
```



```

2532 {
2533   \vcoffin_set:Nnn
2534     \l___xframed_foot_coffin
2535   { \l___xframed_coffin_width_dim }
2536   {
2537     \color { \__xframed__get_color:n { foot-font-color } }
2538     \tl_use:N \l___xframed_footprecode_tl
2539     \tl_use:N \l___xframed_foot_font_tl
2540     \tl_use:N \l___xframed_tempfoot_tl
2541     \__xframed__ignore_last_descenders:
2542     \__xframed__ignore_last_skip:
2543     \tl_use:N \l___xframed_footpostcode_tl
2544   }
2545   \vcoffin_set:Nnn
2546     \l___xframed_foot_coffin
2547   { \l___xframed_coffin_width_dim }
2548   {
2549     \__xframed__offinterlineskip:
2550     \skip_vertical:n { \__xframed__get_length:n { foot-skip-above } }
2551     \vbox_unpack_clear:N \l___xframed_foot_coffin
2552     \skip_vertical:n { \__xframed__get_length:n { foot-skip-below } }
2553   }
2554   \dim_set:Nn \l___xframed_foot_htdp_dim
2555     {
2556       \coffin_ht:N \l___xframed_foot_coffin +
2557       \coffin_dp:N \l___xframed_foot_coffin
2558     }
2559   \__xframed__prop_set:Nnn \l___xframed_length_option_prop
2560     { foot-height } { \dim_use:N \l___xframed_foot_htdp_dim }
2561   \bool_if:NF \l___xframed_footline_bool
2562   {
2563     \__xframed__prop_set:Nnn \l___xframed_length_option_prop
2564       { line-width-foot } { 0pt }

```

```

2565     }
2566   }
2567 }
2568
2569
2570 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
2571 %%%=====%%
2572 %%%                                END                                %%%
2573 %%%=====%%
2574 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
2575 \tex_endinput:D
2576 \</package-titlefoot>

```

1.16 xframed-todo.def – list of todos

```

2577 \<*package-todo>
2578 \<@@=xframed>
2579 %%=====%%
2580 %% file for developping -- only a small list of todos    %%
2581 %%=====%%
2582
2583 \</package-todo>

```

1.17 xframed-user.def – defining user commands

All user commands are defined here.

```

2584 \<*package-user>
2585 \<@@=xframed>

```

\Newxframedenv

Defining new document environment based on xframed

```

2586 %syntax \Newxframedenv[option list]{env name}

```

```
2587 \NewDocumentCommand \Newxframedenv { O{} m }
2588 {
2589   \NewDocumentEnvironment { #2 }{ }
2590   {
2591     \xframedsetup{#1}
2592     \begin{xframed}
2593   }
2594   {
2595     \end{xframed}
2596   }
2597 }
```

(End definition for \Newxframedenv. This function is documented on page ??.)

\Newxframedenv

Redefining document environment based on xframed

```
2598 %syntax \Renewxframedenv[option list]{env name}
2599 \NewDocumentCommand \Renewxframedenv { O{} m }
2600 {
2601   \RenewDocumentEnvironment { #2 }{ O{} }
2602   {
2603     \xframedsetup{#1}
2604     \begin{xframed}
2605   }
2606   {
2607     \end{xframed}
2608   }
2609 }
```

(End definition for \Renewxframedenv. This function is documented on page ??.)

\newxframedstyle

Specify a style for xframed

```
2610 %syntax \newxframedstyle{style name}{options}
2611 \NewDocumentCommand \newxframedstyle { m m }
```

```

2612 {
2613   \tl_if_exist:ctf { __xframed__style_#1_user_tl }
2614   {
2615     \msg_warning:nx { xframed } { style-already-defined } { #1 }
2616     \addtoxframedstyle { #1 } { #2 }
2617   }
2618   {
2619     \tl_new:c { __xframed__style_#1_user_tl }
2620     \tl_set:cn { __xframed__style_#1_user_tl } { #2 }
2621   }
2622 }

```

(End definition for \newxframedstyle. This function is documented on page ??.)

\renewxframedstyle

Redefine a style for xframed

```

2623 %syntax \renewxframedstyle{style name}{options}
2624 \NewDocumentCommand \renewxframedstyle { m m }
2625 {
2626   \tl_if_exist:ctf { __xframed__style_#1_user_tl }
2627   {
2628     \tl_set:cn { __xframed__style_#1_user_tl } { #2 }
2629   }
2630   {
2631     \msg_warning:nx { xframed } { style-not-defined } { #1 }
2632     \newxframedstyle { #1 } { #2 }
2633   }
2634 }

```

(End definition for \renewxframedstyle. This function is documented on page ??.)

\addtoxframedstyle

Add options to a style for xframed

```

2635 %syntax \addtoxframedstyle{style name}{options}
2636 \NewDocumentCommand \addtoxframedstyle { m m }

```

```

2637 {
2638   \tl_if_exist:ctf { __xframed__style_#1_user_tl }
2639   {\tl_put_right:cn { __xframed__style_#1_user_tl } { #2 } }
2640   {
2641     \msg_warning:nxx { xframed } { style-not-defined } { #1 }
2642     \newxframedstyle { #1 } { #2 }
2643   }
2644 }

```

(End definition for `\addtoxframedstyle`. This function is documented on page ??.)

`\xframedmethod`

Print out the current frame method.

```

2645 %%display the frame method
2646 \NewDocumentCommand \xframedmethod { }
2647 {
2648   \tl_use:N \l__xframed_framemethode_tl
2649 }

```

(End definition for `\xframedmethod`. This function is documented on page ??.)

`\usexframendlength`

Use the length of a given length option of xframed. <http://tex.stackexchange.com/a/112345/5239>

```

2650 %syntax \usexframendlength{key}
2651 \NewDocumentCommand \usexframendlength { m }
2652 {
2653   \tl_if_empty:ftf % return value is empty but only if we do "f" expansion
2654   { \prop_get:Nn \l__xframed_length_option_prop { #1 } }
2655   {
2656     Opt
2657     \msg_warning:nnnn
2658     { xframed }
2659     { prop-key-not-available }
2660     { #1 }

```

```

2661     { length }
2662   }
2663   {
2664     \prop_get:Nn \l__xframed_length_option_prop { #1 }
2665   }
2666 }

```

(End definition for `\usexframendlength`. This function is documented on page ??.)

`\showxframendlength`

Print the length of a given length option of xframed. <http://tex.stackexchange.com/a/112345/5239>

```

2667 %syntax \showxframendlength{key}
2668 \NewDocumentCommand \showxframendlength { m }
2669 {
2670   \tl_if_empty:FTF % return value is empty but only if we do "f" expansion
2671   { \prop_get:Nn \l__xframed_length_option_prop { #1 } }
2672   {
2673     \msg_warning:nnnn
2674       { xframed }
2675       { prop-key-not-available }
2676       { #1 }
2677       { length }
2678     \textcolor{red}{??}
2679   }
2680   {
2681     \dim_set:Nn \l_tmpa_dim { \__xframed__get_length:n { #1 } }
2682     \dim_use:N \l_tmpa_dim
2683   }
2684 }

```

(End definition for `\showxframendlength`. This function is documented on page ??.)

`\usexframendskip`

Allows the usage of skips defined by key=value <http://tex.stackexchange.com/a/>

112345/5239

```

2685 %syntax \usexframendskip{key}
2686 \NewDocumentCommand \usexframendskip { m }
2687 {
2688 % \__xframed__get_skips:n { #1 }
2689 \tl_if_empty:ftf % return value is empty but only if we do "f" expansion
2690 { \prop_get:Nn \l__xframed_skip_option_prop { #1 } }
2691 {
2692     opt
2693     \msg_warning:nnnn
2694     { xframed }
2695     { prop-key-not-available }
2696     { #1 }
2697     { skip }
2698 }
2699 {
2700     \prop_get:Nn \l__xframed_skip_option_prop { #1 }
2701 }
2702 }

```

(End definition for \usexframendskip. This function is documented on page ??.)

\showxframendskip

Allows the usage of skips defined by key=value <http://tex.stackexchange.com/a/112345/5239>

```

2703 %syntax \showxframendskip{key}
2704 \NewDocumentCommand \showxframendskip { m }
2705 {
2706 \tl_if_empty:ftf % return value is empty but only if we do "f" expansion
2707 { \prop_get:Nn \l__xframed_skip_option_prop { #1 } }
2708 {
2709     \msg_warning:nnnn
2710     { xframed }
2711     { prop-key-not-available }

```

```

2712     { #1 }
2713     { skip }
2714     \textcolor{red}{??}
2715   }
2716   {
2717     \skip_set:Nn \l_tmpa_skip { \__xframed__get_skip:n { #1 } }
2718     \skip_use:N \l_tmpa_skip
2719   }
2720 }

```

(End definition for \showxframendskip. This function is documented on page ??.)

\xframedprintalloption

Prints all options of xframed with the current settings.

```

2721 %syntax \xframedprintalloption[<option property>]
2722 \NewDocumentCommand \xframedprintalloption { o }
2723 {
2724   \IfNoValueTF { #1 }
2725   {
2726     \__xframed__all_option_output:
2727   }
2728   {
2729     \clist_map_inline:nn { #1 }
2730     {
2731       \cs_if_exist_use:cF { __xframed__##1_output_aux: }
2732       { \msg_error:nnn { xframed } { output-option-failed } { ##1 } }
2733     }
2734   }
2735 }

```

(End definition for \xframedprintalloption. This function is documented on page ??.)

\usexframendcolor

Use a color options of xframed with the current setting.

```

2736 %syntax \usexframendcolor{key}

```



```
2737 \NewDocumentCommand \usexfrendcolor { m }
2738 {
2739 % \color { \__xfamed__get_color:n { #1 } }
2740 \tl_if_empty:ftF % return value is empty but only if we do "f" expansion
2741 { \prop_get:Nn \l__xfamed_color_option_prop { #1 } }
2742 {
2743 \msg_warning:nnnn
2744 { xframed }
2745 { prop-key-not-available }
2746 { #1 }
2747 { color }
2748 \textcolor{red}{}
2749 }
2750 {
2751 \color{ \prop_get:Nn \l__xfamed_color_option_prop { #1 } }
2752 }
2753 }
```

(End definition for \usexfrendcolor. This function is documented on page ??.)

\showxfrendcolor

Prints a color options of xframed with the current setting.

```
2754 %syntax \showxfrendcolor{key}
2755 \NewDocumentCommand \showxfrendcolor { m }
2756 {
2757 % \__xfamed__get_color:n { #1 }
2758 \tl_if_empty:ftF % return value is empty but only if we do "f" expansion
2759 { \prop_get:Nn \l__xfamed_color_option_prop { #1 } }
2760 {
2761 \msg_warning:nnnn
2762 { xframed }
2763 { prop-key-not-available }
2764 { #1 }
2765 { color }
```

```

2766     \textcolor{red}{??}
2767   }
2768   {
2769     \prop_get:Nn \l__xframed_color_option_prop { #1 }
2770   }
2771 }

```

(End definition for `\showxframendcolor`. This function is documented on page ??.)

`\Surroundwithxframed`

Surround any environment with xframed.

```

2772 %syntax \Surroundwithxframed[option list]{env name}
2773 \NewDocumentCommand \Surroundwithxframed { O{} m }
2774 {
2775   \BeforeBeginEnvironment{#2}{\begin{xframed}[#1]}%
2776   \AfterEndEnvironment{#2}{\end{xframed}}%
2777 }

```

(End definition for `\Surroundwithxframed`. This function is documented on page ??.)

`\xframedsetup`

This command is the user interface to setup optio

```

2778 \NewDocumentCommand \xframedsetup { m }
2779 {
2780   \keys_set:nn { xframed } { #1 }
2781 }

```

(End definition for `\xframedsetup`. This function is documented on page ??.)

`\xframedsetuptikz`

Set up TikZ options of xframed

```

2782 \NewDocumentCommand \xframedsetuptikz { m }
2783 {
2784   \pgfqkeys{/tikz/xframed}
2785 }
2786

```

(End definition for `\xframedsetuptikz`. This function is documented on page ??.)

```
2787 \tex_endinput:D
```

```
2788 </package-user>
```

1.18 xframed-doc.sty – internal package for documentation

The next steps aren't documented because it's only for internal using.

```
2789 <*doc-package>
```

```
2790 %%^^^A__xframed=xframed%no need
```

```
2791 %%=====%%
```

```
2792 %% generate sty-file for documentation %%
```

```
2793 %%=====%%
```

```
2794 \RequirePackage{expl3,xparse,ifxetex,ifluatex}
```

```
2795
```

```
2796 \ProvidesExplPackage
```

```
2797 {xframed-doc}{2013/05/13}{1.0}{documentation package for xframed}
```

```
2798 \@ifpackagelater { expl3 } { 2012/11/21 }
```

```
2799 { }
```

```
2800 {
```

```
2801 \PackageError { xframed-doc } { Support~package~expl3~too~old }
```

```
2802 {
```

```
2803 You~need~to~update~your~installation~of~the~bundles~'l3kernel'~and~
```

```
2804 'l3packages'.\MessageBreak
```

```
2805 Loading~xframed-doc~will~abort!
```

```
2806 }
```

```
2807 \tex_endinput:D
```

```
2808 }
```

```
2809 \@ifclassloaded{ l3doc }
```

```
2810 { }
```

```
2811 {
```

```

2812   \PackageError { xframed-doc } { Wrong~document~class }
2813   {
2814     This~package~requires~the~document~class~l3doc~which~
2815     is~part~of~the~bundles~'l3kernel'~and~
2816     'l3packages'.\MessageBreak
2817     Loading~xframed-doc~will~abort!
2818   }
2819   \tex_endinput:D
2820 }
2821
2822 \ifnum 0\ifxetex 1\fi\ifluatex 1\fi>0
2823   % code for XeTeX or LuaTeX
2824 \else
2825   \PackageError { xframed-doc } { Wrong~engine }
2826   {
2827     This~package~requires~the~engine~xetex~or~lualatex.\MessageBreak
2828     Loading~xframed-doc~will~abort!
2829   }
2830   \tex_endinput:D
2831 \fi
2832
2833
2834
2835 \RequirePackage{ l3keys2e , xparse}
2836
2837
2838 \keys_define:nn { xframeddoc }
2839 {
2840   tocdepth .int_set:N = \l__xframeddoc_tocdepth_int ,
2841   tocdepth .initial:n = 3 ,
2842   show-code .bool_set:N = \l__xframeddoc_showcode_bool ,
2843 }
2844

```

```

2845
2846 \keys_define:nn { xframeddoc } {
2847   unknown .code:n =
2848     {
2849       \msg_error:nnx { xframeddoc } { option-unknown }
2850       { \exp_not:V \l_keys_key_tl }
2851     }
2852 }
2853 \msg_new:nnnn { xframeddoc } { option-unknown }
2854 { Unknown~option~'#1'~for~package~#2. }
2855 {
2856   LaTeX~has~been~asked~to~set~an~option~called~'#1'~
2857   but~the~#2~package~has~not~created~an~option~with~this~name.
2858 }
2859
2860 \ProcessKeysOptions { xframeddoc }
2861
2862 \RequirePackage{geometry}
2863
2864 \RequirePackage{fontspec}
2865 \RequirePackage[ttscale=0.8]{libertine}
2866 \RequirePackage{fontawesome}
2867 \RequirePackage{metalogo}
2868 \RequirePackage{xspace}
2869 \NewDocumentCommand \Github {} {Github\faGithub\xspace }
2870
2871
2872 \RequirePackage{setspace}\onehalfspacing
2873
2874 \RequirePackage{titlesec}
2875
2876 \RequirePackage{xcolor}
2877 \colorlet{docblue}{blue!30!black}

```

```

2878 \colorlet{docred}{red!30!black}
2879 %Kopf- und Fusszeilen
2880 \RequirePackage{scrpage2}
2881 \clearscrheadfoot
2882 \pagestyle{scrheadings}
2883 \automark[subsection]{section}
2884 \ihead{\small\rightmark}
2885 \ohead{\small\leftmark}
2886 \tfoot[\small\pagemark]{\small\pagemark}
2887 \setheadtopline{2pt}
2888 \setheadsepline{.4pt}
2889 \ifoot[\small file:~\jobname]{\small file:~\jobname}
2890
2891 \RequirePackage{caption}
2892 \RequirePackage{listings}
2893 \lst@RequireAspects{writefile}
2894 \captionsetup[lstlisting]{font=sf,labelfont=bf,aboveskip=0pt,belowskip=0pt}
2895 \captionsetup[figure]{font=sf,labelfont=bf,position=above}
2896
2897 \hypersetup{%
2898     breaklinks=true,
2899     pdftitle={Documenation of mdframed},%
2900     pdfauthor={Marco Daniel},%
2901     colorlinks=true,%
2902     linkcolor=docblue,
2903     urlcolor=cyan,
2904     bookmarksdepth= \int_use:N \l__xframeddoc_tocdepth_int,
2905 }
2906
2907 \NewDocumentCommand \addsec { m }
2908 {
2909     \clearpage
2910     \phantomsection

```

```

2911 \addcontentsline{toc}{section}{#1}
2912 \section*{ #1 }
2913 \markboth { #1 }{}
2914 }
2915 \NewDocumentCommand \addsubsec { m }
2916 {
2917 \phantomsection
2918 \addcontentsline{toc}{subsection}{#1}
2919 \subsection*{ #1 }
2920 }
2921
2922 \NewDocumentCommand \minisec { m }
2923 {
2924 \subsubsection*{ #1 }
2925 }
2926
2927
2928 \newcommand{\sectionbreak}{\clearpage\null\thispagestyle{plain}}
2929
2930 \titleformat{\section}[display]{\normalfont\Large\bfseries\sffamily}%
2931          {Section~\thesecpreamble}{1em}{}%
2932          [{\vspace{10pt}\color{docred}\titlerule[.2em]}]
2933 \titleformat{\subsection}{\normalfont\large\bfseries\sffamily}%
2934          {\llap{\makebox[2em][l]{\thesubsection}}}{0em}{}
2935
2936 \box_new:N \g__doc_secpreable_box
2937
2938 \NewDocumentCommand \usesecpreable {}
2939 {
2940 \box_if_empty:NF \g__doc_secpreable_box
2941 {
2942 \hfill
2943 \hbox_overlap_left:n

```

```

2944     {
2945         \dim_set:Nn \l_tmpa_dim { \box_ht:N \g__doc_secpreamble_box }
2946         \box_set_dp:Nn \g__doc_secpreamble_box { \c_zero_dim }
2947         \box_set_ht:Nn \g__doc_secpreamble_box { \c_zero_dim }
2948         \box_move_up:nn { 0.5\l_tmpa_dim }
2949         { \box_use_clear:N \g__doc_secpreamble_box }
2950     }
2951 }
2952 }
2953
2954 \NewDocumentCommand \secpreamble { m }
2955 {
2956     \hbox_gset:Nn \g__doc_secpreamble_box { #1 }
2957 }
2958
2959
2960 \NewDocumentCommand \dictum { +o +m }
2961 {
2962     \IfNoValueTF { #1 }
2963     {
2964         \parbox{0.5\linewidth}
2965         {
2966             \normalfont\normalcolor\sffamily\small
2967             \raggedright
2968             #2\strut
2969         }
2970     }
2971     {
2972         \parbox{0.5\linewidth}
2973         {
2974             \normalfont\normalcolor\sffamily\small
2975             \raggedright
2976             #2\strut\par\vskip-1ex\hrulefill\par

```



```

2977     \itshape\raggedleft
2978     (#1)\strut\par
2979 }
2980 }
2981 }
2982
2983
2984
2985 %Modifikation of code
2986 \tl_gput_left:Nn \theCodelineNo { \color{gray} }
2987 \dim_set:Nn \MacroTopsep { 10pt }
2988 \tl_gput_right:Nn \MacroFont { \color{docblue} }
2989
2990
2991 %Anweisung zur Darstellung
2992
2993 \NewDocumentCommand \Opt { m }
2994 {
2995   {\hyperlink{doc-md-opt-#1}{\MacroFont #1}\xspace}
2996 }
2997
2998 \NewDocumentCommand \Env { m }
2999 {
3000   {\hyperlink{doc-md-env-#1}{\MacroFont #1}\xspace}
3001 }
3002
3003 \NewDocumentCommand \Cmd { m }
3004 {
3005   {\hyperlink{doc-md-cmd-#1}{\MacroFont\textbackslash #1}\xspace}
3006 }
3007
3008 \DeclareRobustCommand \Pack {\textsf}
3009

```

```

3010
3011 \NewDocumentCommand \OArgs { O{option-list} }
3012 {
3013   \texttt{[#1]}
3014 }
3015 \NewDocumentCommand \MArgs { O{option-list} }
3016 {
3017   \texttt{\{#1\}}
3018 }
3019
3020 \NewDocumentCommand \Metakey {}
3021 {
3022   \quad\textcolor{red!70!black}{\tiny\faStar}
3023 }
3024
3025
3026 \NewDocumentCommand \ExplEnv { o m O{[option-list]} }
3027 {
3028   \par
3029   \skip_vertical:n { 14pt~plus~0.3pt~minus~0.2pt }
3030   \noindent
3031   \hypertarget{doc-md-env-#2}
3032   {
3033     \hbox_to_wd:nn { \c_zero_dim }
3034     {
3035       \skip_horizontal:n { -2em }
3036       \@bsphack\def\arraystretch{1.25}
3037       \SpecialEnvIndex{#2}%
3038       \begin{tabular}{@{}l@{}}\hline
3039         \MacroFont \textbackslash begin\{#2\}\#3\\
3040         \MacroFont \textbackslash end\{#2\}\\ \hline
3041         \end{tabular}
3042       \@esphack

```

```

3043         }
3044     }
3045     \hfill\null
3046     \IfNoValueF { #1 }
3047     {
3048         \hbox:n { \small default=\ttfamily #1 }
3049     }
3050     \par\nobreak
3051     \skip_vertical:n { 12pt~plus~0.3pt~minus~0.2pt }
3052     \@afterheading
3053 }
3054
3055 \NewDocumentCommand \ExplCmd { o m O{} }
3056 {
3057     \par
3058     \skip_vertical:n { 14pt~plus~0.3pt~minus~0.2pt }
3059     \noindent
3060     \hypertarget{doc-md-cmd-#2}
3061     {
3062         \hbox_to_wd:nn { \c_zero_dim }
3063         {
3064             \skip_horizontal:n { -2em }
3065             \@bsphack\def\arraystretch{1.25}
3066             \begin{tabular}{@{}l@{}}\hline
3067             \MacroFont\textbackslash #2 #3
3068             \SpecialUsageIndex{#2}\\ \hline
3069             \end{tabular}
3070             \@esphack
3071         }
3072     }
3073     \hfill\null
3074     \IfNoValueF { #1 }
3075     {

```

```

3076     \hbox:n { \small default=\ttfamily #1 }
3077   }
3078   \par\nobreak
3079   \skip_vertical:n { 12pt~plus~0.3pt~minus~0.2pt }
3080   \@afterheading
3081 }
3082
3083 \NewDocumentCommand \ExplOpt { o m }
3084 {
3085   \par
3086   \skip_vertical:n { 14pt~plus~0.3pt~minus~0.2pt }
3087   \noindent
3088   \hbox_to_wd:nn { \c_zero_dim }
3089   {
3090     \skip_horizontal:n { -2em }
3091     \group_begin:
3092     \@bsphack\def\arraystretch{1.25}
3093     \tl_set:Nn \l_tmpa_tl { \begin{tabular}{@{}ll@{}}\hline }
3094     \clist_map_inline:nn {#2}
3095     {
3096       \tl_if_in:nnTF { ##1 } { * }
3097       {
3098         \tl_set:Nn \l_tmpb_tl { ##1 }
3099         \tl_remove_once:Nn \l_tmpb_tl { * }
3100         \tl_put_right:Nx \l_tmpa_tl
3101         {
3102           \exp_not:N \hypertarget{doc-md-opt-\l_tmpb_tl}
3103           {
3104             \exp_not:N \MacroFont \l_tmpb_tl \exp_not:N \Metakey
3105           }
3106         }
3107         \SpecialOptIndex{ ##1 }
3108         \tl_put_right:Nn \l_tmpa_tl { &\\ }

```

```

3109         }
3110     {
3111         \tl_put_right:Nn \l_tmpa_tl
3112         {
3113             \hypertarget{doc-md-opt-##1}
3114             {
3115                 \MacroFont ##1&=~<value>
3116             }
3117             \SpecialOptIndex{##1}
3118             \\
3119         }
3120     }
3121 }
3122 \tl_put_right:Nn \l_tmpa_tl {\hline\end{tabular} }
3123 \tl_use:N \l_tmpa_tl
3124 \@esphack
3125 \group_end:
3126 }
3127 \hfill\null
3128 \IfNoValueF { #1 }
3129 {
3130     \hbox:n { \small default=\ttfamily #1 }
3131 }
3132 \par\nobreak
3133 \skip_vertical:n { 12pt~plus~0.3pt~minus~0.2pt }
3134 \@afterheading
3135 }
3136
3137 \NewDocumentCommand \ExplTOpt { o m }
3138 {
3139     \par
3140     \skip_vertical:n { 14pt~plus~0.3pt~minus~0.2pt }
3141     \noindent

```

```

3142     \hbox_to_wd:nn { \c_zero_dim }
3143     {
3144         \skip_horizontal:n { -2em }
3145         \@bsphack\def\arraystretch{1.25}
3146         \begin{tabular}{@{}l@{}}\hline
3147             \MacroFont #2~
3148             \SpecialOptIndex{#2}\\ \hline
3149         \end{tabular}
3150         \@esphack
3151     }
3152     \hypertarget{doc-md-opt-#2}{}
3153     \hfill\null
3154     \IfNoValueF { #1 }
3155     {
3156         \group_begin:\small \ttfamily
3157         \tl_set:Nn \l_tmpa_tl { \begin{tabular}[t]{@{}r@{}} }
3158         \clist_map_inline:nn {#1}
3159         {
3160             \tl_put_right:Nn \l_tmpa_tl { ##1 \\ }
3161         }
3162         \tl_put_right:Nn \l_tmpa_tl { \end{tabular} }
3163         \tl_use:N \l_tmpa_tl
3164         \group_end:
3165     }
3166     \par\nobreak
3167     \skip_vertical:n { 12pt~plus~0.3pt~minus~0.2pt }
3168     \@afterheading
3169 }
3170
3171 %%%%%%%%%%%
3172 \cs_set_nopar:Npn \__codedoc_macro_single:n #1
3173 {
3174     \int_incr:N \l__codedoc_macro_int

```

```

3175
3176 \tl_set:Nx \l__codedoc_at_replaced_macro_tl { \token_to_str:N #1 }
3177 \__codedoc_replace_at_at:N \l__codedoc_at_replaced_macro_tl
3178 \tl_set_eq:NN \saved@macroname \l__codedoc_at_replaced_macro_tl
3179
3180 \topsep\MacroTopsep
3181 \trivlist
3182 \cs_set_nopar:Npn \makelabel ##1
3183 {
3184   \skip_horizontal:n { - 1.5cm }
3185   \begin{tabular}{@{}l@{}}
3186     \hline {##1} \\\hline
3187   \end{tabular}
3188 }
3189 \if@inlabel
3190   \cs_set_eq:NN \@tempa \@empty
3191   \count@ \macro@cnt
3192   \loop \ifnum\count@>\z@
3193     \cs_set_nopar:Npx \@tempa{\@tempa\hbox{\strut}}
3194     \advance\count@\m@ne
3195   \repeat
3196   \cs_set_nopar:Npx \makelabel ##1
3197   {
3198     \llap{\vtop to\baselineskip {\@tempa\hbox{##1}\vss}}
3199   }
3200   \advance \macro@cnt \@ne
3201 \else
3202   \macro@cnt \@ne
3203 \fi
3204
3205 \bool_if:NT \l__codedoc_macro_aux_bool
3206 {
3207   \cs_set_eq:NN \__codedoc_macroname_prefix:n \__codedoc_typeset_aux:n

```

```

3208   }
3209   \bool_if:NT \l__codedoc_macro_TF_bool
3210   {
3211     \cs_set_eq:NN \__codedoc_macroname_suffix: \__codedoc_typeset_TF:
3212   }
3213
3214   \bool_if:NF \l__codedoc_macro_aux_bool
3215   {
3216     \tl_gset:Nx \l__codedoc_macro_tl { \tl_to_str:N \l__codedoc_at_re-
placed_macro_tl }
3217     \exp_args:NNf \tl_greplace_all:Nnn \l__codedoc_macro_tl {\token_to_str:N _} {/}
3218     \exp_args:NNf \tl_greplace_all:Nnn \l__codedoc_macro_tl {\@back-
slashchar} {}
3219   }
3220
3221   \use:x
3222   {
3223     \exp_not:N \item [ \exp_not:N \__codedoc_print_macroname:n {
3224       \tl_to_str:N \l__codedoc_at_replaced_macro_tl
3225     } ] \exp_not:N \mbox{} \exp_not:N \par
3226   }
3227   \int_gincr:N \c@CodelineNo
3228
3229   \bool_if:NF \l__codedoc_macro_aux_bool
3230   {
3231     \bool_if:NTF \l__codedoc_macro_TF_bool
3232     {
3233       \seq_gput_right:Nx \g_doc_macros_seq { \tl_to_str:N \l__codedoc_at_re-
placed_macro_tl \tl_to_str:n {TF} }
3234       \seq_gput_right:Nx \g_doc_macros_seq { \tl_to_str:N \l__codedoc_at_re-
placed_macro_tl \tl_to_str:n {T} }
3235       \seq_gput_right:Nx \g_doc_macros_seq { \tl_to_str:N \l__codedoc_at_re-
placed_macro_tl \tl_to_str:n { F} }

```



```

3236     }
3237     {
3238     \seq_gput_right:Nx \g_doc_macros_seq { \tl_to_str:N \l__codedoc_at_re-
placed_macro_tl }
3239     }
3240     }
3241     \bool_if:NTF \l__codedoc_macro_TF_bool
3242     {
3243     \exp_args:Nx \SpecialMainIndex{ \tl_to_str:N \l__codedoc_at_re-
placed_macro_tl TF}\nobreak
3244     \exp_args:Nx \DoNotIndex{ \tl_to_str:N \l__codedoc_at_replaced_macro_tl TF}
3245     }
3246     {
3247     \exp_args:Nx \SpecialMainIndex{ \tl_to_str:N \l__codedoc_at_re-
placed_macro_tl }\nobreak
3248     \exp_args:Nx \DoNotIndex{ \tl_to_str:N \l__codedoc_at_replaced_macro_tl }
3249     }
3250
3251     \int_gdecr:N \c@CodelineNo
3252     \ignorespaces
3253     }
3254
3255
3256
3257
3258
3259
3260
3261
3262
3263
3264
3265

```

```

3266 %%%%%%%%%%
3267 \def\SpecialOptIndex#1{\@bsphack
3268   \index{#1\actualchar{\protect\ttfamily#1}
3269     (option)\encapchar usage}%
3270   \index{options:\levelchar#1\actualchar{\protect\ttfamily#1}\encapchar
3271     usage}\@esphack}
3272
3273 %\tex_endinput:D
3274 \</doc-package>

```

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v0.1alpha

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