The **skrapport** document class*†

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Version 0.11a

Abstract   A document class intended for simple documents *e.g.* reports handed in to courses and such. It is small, straightforwars and heavily inspired by the PracTEX Journal style.

Contents

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*Available on `http://www.ctan.org/pkg/skrapport`.

†Development version available on `https://github.com/urdh/skrapport`.

1 Documentation

1.1 Loading the class

The document class is loaded using `\documentclass` as usual, but it has a bunch of options that you might want to know about.

1.1.1 Compatibility options

There are a couple of options that are mostly provided for compatibility with the standard LaTeX 2$_\varepsilon$ document classes. These will do exactly the same thing they do in the standard classes, although they may differ in default value. Although some of these are key-value options, for compatibility their valid values may also be passed as keys.

paper   a4paper, a5paper   (a4paper)

Specifying paper size is possible using the `paper` option (the values of which are based on European paper sizes; use the geometry package for other standards). Only A4 and A5 are defined since these two sizes cover pretty much all intended use of the class. `a4paper` is the default value of this option, and the only other valid value is `a5paper`.

`ptsize` 10pt, 11pt, 12pt   (11pt)

The same font sizes specified in the standard classes are also available in skrapport (*i.e.* `10pt`, `11pt` and `12pt`. The default font size is `11pt`, and there should be no compelling reason to change this.

`draft` The `draft` and `final` options work as expected, triggering or untrig-
`final` gering the familiar draft mode. The default is `final`.

`fleqn` Purely for compatibility skrapport also defines the `fleqn` and `leqno`
`leqno` options. As with the standard LaTeX 2$_\varepsilon$ classes, `fleqn` aligns equations with the left-hand margin and `leqno` places equation numbers to the left. None of these are activated by default.

1.1.2 Typographic options

There is also a number of options available to change certain aspects of the typography of the typeset document.

`titles` rm, bf, sf   (rm)

There are three different ways to typeset section headings in skrapport: `rm` (upright serif), `bf` (boldfaced serif) and `sf` (sans serif). The default is `rm`.

`font` nofont, lmodern, palatino, kpfonts, minion, skdoc   (kpfonts)

In addition, the specific font can also be changed — the available choices are `lmodern` (Latin Modern), `kpfonts` (Kp-Fonts), `minion` (Adobe Minion Pro), `palatino` (either TeX-Gyre Pagella or Pazo Math depending on what's available) and `skdoc` (PT Serif and Open Sans, the style used by skdoc), with the default being `kpfonts`. It is also possible to tell skrapport not to use any font (`nofont`), which is sometimes useful when using X$_\exists$LaTeX, among other things.

`indent` Controlling indentation is posible using the options `(no)indent`. The
`noindent` default, `noindent`, behaves much like the parskip package in that it replaces paragraph indentation with vertical spacing.

`onecolumn`
`twocolumn`

Similar to the options available in the standard classes, these options specify wether to typeset the document in one or two columns. Unlike the standard classes, the two-column mode is implemented using multicol. The default is onecolumn.

1.1.3 Other options

swe   Either babel or polyglossia (depending on engine) is loaded by the eng package. These options specify what language should be used as the main language (swedish or english); both languages are always loaded. The default is swe.

color   It is also possible to load xcolor inside the package. If this is done, a nocolor range of color themes (discussed later) will be available in the package and these will affect the document. The default value is color.

math   Loading the skmath package is recommended and as such it is loaded nomath by default. If this for some reason is undesirable, the nomath option will supress this behaviour.

1.2 Macros and environments

In general, the class defines the same macros as the article class, and adds a few. Only the novel ones are described here, as the inherited ones should behave identically.

1.2.1 Front-matter and metadata

\license   {⟨*license*⟩}

The \license macro specifies the name of a license under which the document is available. This will be typeset on the lower right corner of the title page. (***Note:*** *The license will only be printed if the* titlepage *environment is used.*)

`\regarding` {⟨*text*⟩}

>The class adds a `\regarding` macro, which is used like the standard `\author` and `\title` macros and should be given an accurate but short description of the purpose of the report (i.e. course name or similar). This is printed along with the date on the top of the title/first page.

`\author` [⟨*email*⟩]{⟨*author*⟩}

>The `\author` macro is redefined in two ways. To begin with, the macro now acceps an optional argument specifying the email address of the author. If the macro is used multiple times, authors are appended to the list of author names displayed by `\maketitle`.

`\maketitle`

>The title page (or rather, block) has been refashioned to mimic the PracTeX Journal style. This means a fairly compact block, starting with a line of text containing the date and subject matter, followed by a large skip and then the title, author and optionally an abstract set ragged-right and fairly close together.

1.2.2 Useful macros

The class defines a few additional macros that aren't available in article but don't fit in any specifiv 'set' of features. These include commands to typeset comments.

`\comment` *{⟨*comment*⟩}
`\com` *{⟨*comment*⟩}
`\note` *{⟨*comment*⟩}

>The `\comment` macro (also available in an unstarred variant) typesets a comment. The starred variant typesets the commen in red prefixed by the word 'Comment', while the unstarred variant typesets the comment as a margin note (but still prefixed). The `\com` and `\note` macros are aliases of `\comment`.

1.2.3 Two-column mode

`\begin{onecol}`
⟨content⟩
`\end{onecol}`

In `twocolumn` mode, the package defines an environment `onecol` which typesets its contents in a single column. Additionally, it redefines `figure` and `table` as non-floats, leaving the starred versions intact.

1.2.4 Color themes

`\colortheme` `{⟨theme⟩}`

If the package is loaded with the `color` option, changing the color theme is possible using `\colortheme`, which loads an appropriate package. At the moment, four color themes are available.

default The default theme is fairly conservative, only coloring hyperef links with more readable, slightly darker colors than the standard ones. It should print well even on non-color printers.

unscathed The unscathed theme is based on a palette with the same name on COLOURlovers[1], and applies a dark brown color to emphasized text, a rusty color to links, a darker rust color to titles and a lighter brown to quotes.

cruelwater The cruelwater theme is also based on a palette from COLOURlovers[2], and applies a dark blue color to bold text and captions, a slightly less dark blue to titles and emphasized text, a light gray color to small print and a darker gray to quotes.

violet The violet theme, like unscathed and cruelwater, is based on a COLOUR-lovers palette[3]. It colors all links bright purple, applies a dark puple color to titles, bold text and captions, a grayish purple to small print, a dark brown color to quotes and a pastel violet color to emphasized text.

skdoc The skdoc theme is loosely based on the skdoc document class, with which this documentation is typeset.

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[1]`http://www.colourlovers.com/palette/1440498/unscathed`
[2]`http://www.colourlovers.com/palette/126030/Cruel_Water_at_Night`
[3]`http://www.colourlovers.com/palette/1831303/Violet_White_Bedrm`

1.3 Additional information

The document class includes a number of packages by default. This is useful to know, since passing explicit options to these packages will require you to utilize the \PassOptionsToPackage macro before you load the class using \documentclass. Table 1 lists the packages included by skrapport along with their options (if applicable).

2 Known issues

A list of current issues is available in the Github repository of this package[4], but as of the release of v0.11a, there are no known issues:

If you discover any bugs in this package, please report them to the issue tracker in the skrapport Github repository.

3 Implementation

Start by including expl3, l3keys2e and some other useful packages, as well as declaring the class.

⟨class⟩   1 \RequirePackage{expl3,l3keys2e,xparse,xstring,etoolbox}
        2 \ProvidesExplClass{skrapport}%
        3   {2013/04/10}{0.11a}{stylish report document class}

3.1 Messages

Tons of messages are declared for future use.

⟨class⟩   4 \msg_new:nnnn{skrapport}{option-deprecated}{Option~'#1'~deprecated!}
        5   {Please~use~'#2'~instead.}
        6 \msg_new:nnnn{skrapport}{option-no-effect}{Option~'#1'~deprecated!}
        7   {It~has~no~effect;~simply~use~nothing~instead.}
        8 \msg_new:nnnn{skrapport}{invalid-paper-size}{Invalid~paper~size~'#1'!}
        9   {\token_to_str:N__skrapport_setup_paper:n~was~invoked~with~an~

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[4]https://github.com/urdh/skrapport/issues

Table 1: *User-level packages included by skrapport.*

Package	Options	Comments
amsmath	`intlimits`	Provides $\mathcal{AMS}$ commands and environments.
amssymb		Only if not using `kpfonts`.
babel	see options swe and eng	Only loaded if *not* using X$\exists$T$_E$X.
calc		
fontenc	`T1`	Only loaded if *not* using X$\exists$T$_E$X. Makes sure we are using a good font encoding for crisp appearance on-screen (OT1 is horrible).
fontspec	`quiet`	Only loaded if using X$\exists$T$_E$X. Provides basic OTF font selection commands.
geometry	a4paper or a5paper	This is used by the `paper` option to set the paper area.
icomma		
inconsolata		
microtype		Provides micro-typographic improvements.
multicol		Only loaded with the `twocolumn` option.
polyglossia	see options swe and eng	Only loaded if using X$\exists$T$_E$X.
skmath		Only if it exists and `nomath` isn't set.
textcomp		Only if not using `kpfonts`.
xcolor		Only loaded with the `color` option.

```
 10        invalid~argument;~paper~size~will~remain~unchanged.}
 11   \msg_new:nnnn{skrapport}{invalid-point-size}{Invalid~point~size~'#1'!}
 12       {\token_to_str:N\__skrapport_setup_ptsize:n~was~invoked~with~an~
 13        invalid~argument;~cannot~continue~without~setting~a~valid~point~
 14        size.~Please~fix~the~issue~before~typesetting~again.}
 15   \msg_new:nnnn{skrapport}{invalid-titles}{Invalid~title~type~'#1'!}
 16       {\token_to_str:N\__skrapport_setup_titles:n~was~invoked~with~an~
 17        invalid~argument;~falling~back~to~'#2'.}
 18   \msg_new:nnnn{skrapport}{invalid-lang}{Invalid~language~'#1'!}
 19       {\token_to_str:N\__skrapport_setup_lang:n~was~invoked~with~an~
 20        invalid~argument;~'babel'~and/or~'polyglossia'~will~remain~
 21       unloaded.}
 22   \msg_new:nnnn{skrapport}{invalid-font}{Invalid~font~'#1'!}
 23       {\token_to_str:N\__skrapport_setup_font:n~was~invoked~with~an~
 24        invalid~argument;~no~font~package~has~been~loaded.~This~may~result~
 25        in~bad~rendering~due~to~old~Computer~Modern~fonts.}
 26   \msg_new:nnnn{skrapport}{noop-call}{No-op~invokation~of~macro!}
 27       {\token_to_str:N#1~was~invoked,~but~circumstances~dictate~that~the~
 28       macro~should~do~nothing.~Will~do~\token_to_str:N\prg_do_nothing:~
 29       instead.}
```

This message should probably not be used at all. Except in development versions straight off Github, of course.

⟨class⟩ 30   \msg_new:nnn{skrapport}{not-implemented}
         31   {Unimplemented~macro~\token_to_str:N#1!}

3.2 Options

First, a few booleans used by parts of the option handling code.

_skrapport_draft_bool   (no arguments)

Are we in draft mode?

⟨class⟩ 32   \bool_new:N\g__skrapport_draft_bool

_skrapport_color_bool   (no arguments)

Are we supposed to be using `colors`?

⟨class⟩ 33 `\bool_new:N\g__skrapport_color_bool`

`as_polyglossia_bool` (no arguments)

Has polyglossia been loaded?

⟨class⟩ 34 `\bool_new:N\g__skrapport_has_polyglossia_bool`

Let's define some l3keys corresponding to the options. Note that most of them just refer to a macro in their `.code:n` block — these macros are defined after the `\keys_define:nn` block.

⟨class⟩ 35 `\keys_define:nn{skrapport}{`

paper Option with values `a4paper, a5paper, a4, a5`

a4paper (option)

a5paper (option)

Declare the paper size options. Note that having to handle the deprecated `a4paper` and `a5paper` values of the `paper` option makes the code less readable. In a few versions, when these options are removed, the code should probably be refactored to look something like the `ptsize` option below.

⟨class⟩ 36 `    paper .choice:,`
37 `    paper / a4 .code:n =`
38 `        {\__skrapport_setup_paper:n{a4}},`
39 `    paper / a5 .code:n =`
40 `        {\__skrapport_setup_paper:n{a5}},`
41 `    paper / a4paper .code:n =`
42 `        {\msg_warning:nnnn{skrapport}{option-deprecated}`
43 `            {paper=a4paper}{paper=a4}`
44 `         \keys_set:nn{skrapport}{paper=a4}},`
45 `    paper / a5paper .code:n =`
46 `        {\msg_warning:nnnn{skrapport}{option-deprecated}`
47 `            {paper=a5paper}{paper=a5}`
48 `         \keys_set:nn{skrapport}{paper=a4}},`
49 `    paper .value_required:,`

```
50    paper .initial:n = a4,
51    a4paper .code:n =
52        {\msg_warning:nnnn{skrapport}{option-deprecated}
53            {a4paper}{paper=a4}
54        \keys_set:nn{skrapport}{paper=a4}},
55    a5paper .code:n =
56        {\msg_warning:nnnn{skrapport}{option-deprecated}
57            {a5paper}{paper=a5}
58        \keys_set:nn{skrapport}{paper=a5}},
```

ptsize   Option with values `10pt, 11pt, 12pt`

10pt   (option)

11pt   (option)

12pt   (option)

Declare point size options. Note that we don't deprecate the non-`ptsize` aliases as they are much easier to type.

⟨class⟩
```
59    ptsize .choices:nn =
60        { 10pt, 11pt, 12pt }
61        {\__skrapport_setup_ptsize:x{\tl_use:N\l_keys_choice_tl}},
62    ptsize .value_required:,
63    ptsize .initial:n = 11pt,
64    10pt .meta:n = {ptsize=10pt},
65    11pt .meta:n = {ptsize=11pt},
66    12pt .meta:n = {ptsize=12pt},
```

twocolumn   (option)

Declare column options. The code here should be run through `\AtEndClass` so that the setup code can patch everythin properly.

onecolumn   (option)

The `onecolumn` option has no effect and is deprecated.

⟨class⟩
```
67    twocolumn .code:n =
68        {\AtEndClass{\__skrapport_setup_twocolumn:}},
69    onecolumn .code:n =
70        {\msg_warning:nnn{skrapport}{option-no-effect}{onecolumn}},
```

draft Option with values `true`, `false`

final (option)

Declare `draft` and `final` options. Note that even if the `final` option does absolutely nothing, users may expect it to be there and as such it is not deprecated.

```
⟨class⟩  71    draft .choice:,
         72    draft / true .code:n =
         73        {\bool_gset_true:N\g__skrapport_draft_bool
         74         \__skrapport_setup_draft:},
         75    draft / false .code:n =
         76        {\bool_gset_false:N\g__skrapport_draft_bool},
         77    draft .default:n = true,
         78    draft .initial:n = false,
         79    final .code:n = {\prg_do_nothing:},
```

Declare the `fleqn` and `leqno` options, mainly for compatibility with the article class.

leqno (option)

```
⟨class⟩  80    leqno .code:n =
         81        {\__skrapport_setup_leqno:},
```

fleqn (option)

```
⟨class⟩  82    fleqn .code:n =
         83        {\__skrapport_setup_fleqn:},
```

titles Option with values `rm`, `bf`, `sf`

Declare options for section titles. The old `??titles` aliases are deprecated and will be removed in a future version.

rmtitles (option)

bftitles (option)

sftitles (option)

```
⟨class⟩  84    titles .choices:nn =
         85        { rm, bf, sf }
```

```
86        {\__skrapport_setup_titles:x{\tl_use:N\l_keys_choice_tl}},
87      titles .value_required,
88      titles .initial:n = bf,
89      rmtitles .code:n =
90          {\msg_warning:nnnn{skrapport}{option-deprecated}
91              {rmtitles}{titles=rm}
92           \keys_set:nn{skrapport}{titles=rm}},
93      bftitles .code:n =
94          {\msg_warning:nnnn{skrapport}{option-deprecated}
95              {bftitles}{titles=bf}
96           \keys_set:nn{skrapport}{titles=bf}},
97      sftitles .code:n =
98          {\msg_warning:nnnn{skrapport}{option-deprecated}
99              {sftitles}{titles=sf}
100          \keys_set:nn{skrapport}{titles=sf}},
```

lang Option with values `sv, en`

swe (option)

eng (option)

Declare options for swedish/english babel or polyglossia support. Again, the old swe and eng aliases are deprecated and will be removed.

⟨class⟩
```
101     lang .choices:nn =
102         { sv, en }
103         {\__skrapport_setup_lang:x{\tl_use:N\l_keys_choice_tl}},
104     lang .value_required:,
105     lang .initial:n = sv,
106     swe .code:n =
107         {\msg_warning:nnnn{skrapport}{option-deprecated}
108             {swe}{lang=sv}
109          \keys_set:nn{skrapport}{lang=sv}},
110     eng .code:n =
111         {\msg_warning:nnnn{skrapport}{option-deprecated}
112             {eng}{lang=en}
113          \keys_set:nn{skrapport}{lang=en}},
```

font   Option with values none, kpfonts, lmodern, palatino, minion, skdoc

Declare font options. Again, aliases are deprecated.

kpfonts (option)

lmodern (option)

palatino (option)

minion   (option)

skdoc   (option)

nofont   (option)

```
⟨class⟩  114    font .choices:nn =
         115        { none, kpfonts, lmodern, palatino, minion, skdoc }
         116        {\__skrapport_setup_font:x{\tl_use:N\l_keys_choice_tl}},
         117    font .value_required:,
         118    font .initial:n = kpfonts,
         119    nofont .code:n =
         120        {\msg_warning:nnnn{skrapport}{option-deprecated}
         121            {nofont}{font=none}
         122         \keys_set:nn{skrapport}{font=none}},
         123    kpfonts .code:n =
         124        {\msg_warning:nnnn{skrapport}{option-deprecated}
         125            {kpfonts}{font=kpfonts}
         126         \keys_set:nn{skrapport}{font=kpfonts}},
         127    lmodern .code:n =
         128        {\msg_warning:nnnn{skrapport}{option-deprecated}
         129            {lmodern}{font=lmodern}
         130         \keys_set:nn{skrapport}{font=lmodern}},
         131    palatino .code:n =
         132        {\msg_warning:nnnn{skrapport}{option-deprecated}
         133            {palatino}{font=palatino}
         134         \keys_set:nn{skrapport}{font=palatino}},
         135    minion .code:n =
         136        {\msg_warning:nnnn{skrapport}{option-deprecated}
         137            {minion}{font=minion}
```

```
138        \keys_set:nn{skrapport}{font=minion}},
139      skdoc .code:n =
140          {\msg_warning:nnnn{skrapport}{option-deprecated}
141            {skdoc}{font=skdoc}
142          \keys_set:nn{skrapport}{font=skdoc}},
```

indent Option with values `true, false`

noindent (option)

      Declare indentation options. Since the `noindent` option technically has no effect and is an alias of `indent=false`, it has been deprecated.

⟨class⟩
```
143      indent .choice:,
144      indent / true .code:n = {\prg_do_nothing:},
145      indent / false .code:n = {\__skrapport_setup_parskip:},
146      indent .default:n = true,
147      indent .initial:n = false,
148      noindent .code:n =
149          {\msg_warning:nnn{skrapport}{option-no-effect}{noindent}},
```

color Option with values `true, false`

nocolor (option)

      Declare color options. Note that we explicitly set the boolean `\g__skrapport_color_bool` as well as setting up the colors through `\__skrapport_setup_color:`, so that we can keep track of the color usage even after the options have been set up.

⟨class⟩
```
150      color .choice:,
151      color / true .code:n =
152          {\bool_gset_true:N\g__skrapport_color_bool
153            \__skrapport_setup_color:},
154      color / false .code:n =
155          {\bool_gset_false:N\g__skrapport_color_bool},
156      color .default:n = true,
157      color .initial:n = true,
158      nocolor .meta:n = {color=false},
```

nomath Option with values `true, false`

math (option)

Declare math options. As with the `noindent` option, `math` has been deprecated since it is an alias and has no effect.

⟨class⟩ 159   `nomath .choice:,`
160   `nomath / false = .code:n {\__skrapport_setup_math:},`
161   `nomath / true = .code:n {\prg_do_nothing:},`
162   `nomath .default:n = true,`
163   `nomath .initial:n = false,`
164   `math .code:n =`
165   `{\msg_warning:nnn{skrapport}{option-no-effect}{math}},`

That's it, we're done setting up the l3keys for the options. Next up is the actual setup code for all the options.

⟨class⟩ 166 `}`

3.3 Option setup macros

In this section, all options declared in the previous section are implemented using setup macros. Some of these may have to be called in an appropriate order, but I haven't checked that yet.

rapport_setup_paper:n #1: Paper size (a4 or a5)

The paper size is set by loading geometry *and* explicitly setting the `\paperheight` and `\paperwidth` dimensions. Perhaps this can be improved.

⟨class⟩ 167 `\cs_new:Npn\__skrapport_setup_paper:n#1{`
168   `\str_case:nnn{#1}{`

An A4 paper as defined by ISO216[5] is $210\,\text{mm} \times 297\,\text{mm}$.

⟨class⟩ 169   `{a4}{`
170   `\RequirePackage[a4paper]{geometry}`
171   `\dim_gset:Nn\paperheight {297mm}`
172   `\dim_gset:Nn\paperwidth  {210mm}`

---

[5]International Organization for Standardization, Technical Committee 6 2007.

```
173              }
```

An A5 paper as defined by ISO216[6] is $148\,\text{mm} \times 210\,\text{mm}$.

⟨class⟩ 174   {a5}{
175   \RequirePackage[a5paper]{geometry}
176   \dim_gset:Nn\paperheight {210mm}
177   \dim_gset:Nn\paperwidth {148mm}
178   }
179   }{

Invalid paper sizes (such calls should never happen) are handled by issuing a warning and hoping that the default paper size is acceptable.

⟨class⟩ 180   \msg_warning:nnn{skrapport}{invalid-paper-size}{#1}
181   }
182 }

`apport_setup_ptsize:n`   #1: Point size (10pt, 11pt or 12pt)

The standard point sizes are defined much like in the article class, *i.e.* by saving a number and loading `size10.clo`, `size11.clo` or `size12.clo` as appropriate

⟨class⟩ 183 \cs_new:Npn__skrapport_setup_ptsize:n#1{
184   \str_case:nnn{#1}{

⟨class⟩ 185   {10pt}{\token_new:Nn\c__skrapport_ptsize_token{0}}
186   {11pt}{\token_new:Nn\c__skrapport_ptsize_token{1}}
187   {12pt}{\token_new:Nn\c__skrapport_ptsize_token{2}}

⟨class⟩ 188   }{

Invalid point sizes are critical errors, since we can't recover from them in any reasonable way. Loading a default point size is unreasonable, since all in-class calls to this macro should know what sizes are available, and if you're calling it with invalid parameters from elsewhere, you should be punished.

⟨class⟩ 189   \msg_critical:nnn{skrapport}{invalid-point-size}{#1}

---

[6]International Organization for Standardization, Technical Committee 6 2007.

```
190        }
191        \file_input:n{size1\c__skrapport_ptsize_token .clo}
192  }
```

port_setup_twocolumn: (no arguments)

Setting up for twocolumn mode isn't implemented yet. Note that this macro should be called from \AtEndClass to ensure that we patch everything correctly.

⟨class⟩
```
193  \cs_new:Nn\__skrapport_setup_twocolumn:{
194        \RequirePackage{etoolbox}
195        \RequirePackage{multicol}
196        \msg_fatal:nnn{skrapport}{not-implemented}
197            {\__skrapport_setup_twocolumn:}
198  }
```

krapport_setup_leqno: (no arguments)

Instead of loading leqno.clo, we reimplement the (tiny) file as LaTeX3 code and include it directly. It's not terribly advanced.

⟨class⟩
```
199  \cs_new:Nn\__skrapport_setup_leqno:{
200        \RenewDocumentCommand\@eqnnum{}{
201            \hbox_to_wd:nn{.01pt}{}
202            \hbox_overlap_right:n{
203                \normalfont\normalcolor
204                \skip_horizontal:n{-\displaywidth}
205                (\theequation)
206            }
207        }
208  }
```

krapport_setup_fleqn: (no arguments)

The fleqn.clo functionality is more complex, so we include the file instead of reimplementing.

⟨class⟩
```
209  \cs_new:Nn\__skrapport_setup_fleqn:{
```

```
210       \file_input:n{fleqn.clo}
211  }
```

__skrapport_setup_titles:n   #1: Title style (rm, bf or sf)

The title styles are implemented by creating a new macro __skrapport_title_style:
which will later be used by \section and friends.

⟨class⟩
```
212  \cs_new:Npn\__skrapport_setup_titles:n#1{
213       \str_case:nnn{#1}{
```

⟨class⟩
```
214           {rm}{\cs_new:Nn\__skrapport_title_style:{\rmfamily}}
215           {bf}{\cs_new:Nn\__skrapport_title_style:{\bfseries}}
216           {sf}{\cs_new:Nn\__skrapport_title_style:{\sffamily}}
```

The fall-back for incorrect parameters is an informational message
along with setting up for \rmfamily titles.

⟨class⟩
```
217       }{
218           \msg_info:nnnn{skrapport}{invalid-titles}{#1}{rm}
219           \__skrapport_setup_titles:n{rm}
220       }
221  }
```

__skrapport_setup_lang:n   #1: Language (sv or en)

Thus far only two language options are implemented, each of them
setting the other as the 'other' language. We check if polyglossia has
been loaded (this is done by __skrapport_setup_xelatex:): if it has,
we use the polyglossia interface for setting languages, otherwise we load
the babel package with appropriate options.

⟨class⟩
```
222  \cs_new:Npn\__skrapport_setup_lang:n#1{
223       \str_case:nnn{#1}{
224           {sv}{
225               \bool_if:NTF\g__skrapport_has_polyglossia_bool{
226                   \setmainlanguage{swedish}
227                   \setotherlanguage[variant=british]{english}
228               }{
229                   \RequirePackage[british,swedish]{babel}
```

```
230                    }
231                }
232            {en}{
233                \bool_if:NTF\g__skrapport_has_polyglossia_bool{
234                    \setmainlanguage[variant=british]{english}
235                    \setotherlanguage{swedish}
236                }{
237                    \RequirePackage[swedish,british]{babel}
238                }
239            }
240        }{
```

Fallback prints an informational message and leaves both babel and polyglossia unloaded.

⟨class⟩ 241   \msg_info:nnn{skrapport}{invalid-lang}{#1}
242   }
243 }

__skrapport_setup_font:n   #1: Font (none, kpfonts, lmodern, palatino, minion or skdoc)
                              We set up the somewhat involved font stack.

⟨class⟩ 244 \cs_new:Npn__skrapport_setup_font:n#1{

To begin with, we load inconsolata as our monospace font, letting it be overridden later if another font stack provides a monospace font. But we don't load it when using the none font stack.

⟨class⟩ 245   \str_if_eq:nnF{#1}{none}{
246   \RequirePackage[scaled=1.03]{inconsolata}
247   }
248   \str_case:nnn{#1}{

The none font stack does literally nothing.

⟨class⟩ 249   {none}{\prg_do_nothing:}

The kpfonts font stack simply loads kpfonts…

⟨class⟩ 250   {kpfonts}{
251   \RequirePackage[easyscsl,intlimits,sumlimits]{kpfonts}
```

```
252        }
```

...and the `lmodern` font stack loads lmodern.

```
253        {lmodern}{
254            \RequirePackage{lmodern}
255        }
```

The `palatino` font stack loads tgpagella if available, but falls back to mathpazo otherwise.

```
256        {palatino}{
257            \file_if_exist:nTF{tgpagella.sty}{
258                \RequirePackage{tgpagella}
259            }{
260                \RequirePackage[osf]{mathpazo}
261            }
262        }
```

Minion Pro, provided by the `minion` font stack, loads both minionpro (the font) and MnSymbol (appropriate math symbols).

```
263        {minion}{
264            \RequirePackage{minionpro}
265            \RequirePackage{MnSymbol}
266        }
```

Finally, the `skdoc` font stack loads PTSerif and opensans, inspired by the style of the skdoc class.

```
267        {skdoc}{
268            \RequirePackage{PTSerif}
269            \RequirePackage[defaultsans,osfigures,scale=0.95]{opensans}
270        }
271    }{
```

As a fallback, we print a waning and load no font packages.

```
272        \msg_warning:nnn{skrapport}{invalid-font}{#1}
273    }
```

All font stacks except `none` and `kpfonts` require additional packages. Or, rather, `none` can't load these packages by definition, and `kpfonts`

already loads them internally[7]. They are always useful.

```
⟨class⟩  274      \str_if_eq:nnF{#1}{kpfonts}{
         275          \str_if_eq:nnF{#1}{none}{
         276              \BeforeEndPreamble{
         277                  \let\Finv\relax
         278                  \let\Game\relax
         279                  \let\beth\relax
         280                  \let\gimel\relax
         281                  \let\daleth\relax
         282                  \RequirePackage[intlimits]{amsmath}
         283                  \RequirePackage{amssymb}
         284                  \RequirePackage{textcomp}
         285              }
         286          }
         287      }
         288  }
```

apport_setup_parskip: (no arguments)

This part mixes LaTeX 2$_\varepsilon$ and LaTeX3, which may not be a good thing. On the other hand, it seems hard to avoid. Most of the code is half-lifted from parskip and converted to LaTeX3.

```
⟨class⟩  289  \cs_new:Nn\__skrapport_setup_parskip:{
         290      \skip_gset:Nn\parskip{0.5\baselineskip plus 2pt}
         291      \dim_gzero:N\parindent
         292      \skip_gset:Nn\parfillskip{30pt plus 1fil}

⟨class⟩  293      \cs_gset:Npn\@listI{
         294          \dim_gset_eq:NN\leftmargin\leftmargini
         295          \dim_gset_eq:NN\parsep\parskip
         296          \dim_gzero:N\topsep
         297          \dim_gzero:N\itemsep
         298      }
         299      \cs_gset_eq:NN\@listi\@listI
```

---

[7]Caignaert 2010, p. 1.

```
⟨class⟩ 300      \@listi

⟨class⟩ 301      \cs_gset:Npn\@listii{
        302          \dim_gset_eq:NN\leftmargin\leftmarginii
        303          \dim_gset_eq:NN\labelwidth\leftmarginii
        304          \dim_gset_eq:NN\parsep\parskip
        305          \dim_gsub:Nn\labelwidth{-\labelsep}
        306          \dim_gzero:N\topsep
        307          \dim_gzero:N\itemsep
        308      }

⟨class⟩ 309      \cs_gset:Npn\@listiii{
        310          \dim_gset_eq:NN\leftmargin\leftmarginiii
        311          \dim_gset_eq:NN\labelwidth\leftmarginiii
        312          \dim_gset_eq:NN\parsep\parskip
        313          \dim_gsub:Nn\labelwidth{-\labelsep}
        314          \dim_gzero:N\topsep
        315          \dim_gzero:N\itemsep
        316      }

⟨class⟩ 317      \dim_gzero:N\partopsep

⟨class⟩ 318      \RenewDocumentCommand\@starttoc{m}{
        319          \group_begin:
        320          \dim_gzero:N\parskip
        321          \file_if_exist:nT{\c_job_name_tl.#1}{
        322              \file_input:n{\c_job_name_tl.#1}
        323          }
        324          \if@filesw
        325              \iow_new:c{tf@#1}
        326              \iow_open:cn{tf@#1}{\c_job_name_tl.#1}
        327          \fi
        328          \@nobreakfalse
        329          \group_end:
        330      }

⟨class⟩ 331  }
```

skrapport_setup_math: (no arguments)

This is the simplest option, only loading skmath if it exists.

```
⟨class⟩  332  \cs_new:Nn\__skrapport_setup_math:{
         333      \file_if_exist:nT{skmath.sty}{\RequirePackage{skmath}}
         334  }
```

skrapport_setup_draft: (no arguments)

Setting up the draft mode is also fairly easy, as we only need wider (wider than $0\,\mathrm{pt}$, that is) \overfullrules.

```
⟨class⟩  335  \cs_new:Nn\__skrapport_setup_draft:{
         336      \bool_if:NTF\g__skrapport_draft_bool{
         337          \dim_gset:Nn\overfullrule{5pt}
         338      }{
         339          \msg_log:nnn{skrapport}{noop-call}{\__skrapport_setup_draft:}
         340          \prg_do_nothing:
         341      }
         342  }
```

skrapport_setup_color: (no arguments)

Setting up colors is also fairly easy, as we only have to load the xcolor package. All the other color-related code is in other places, utilizing the \g__skdoc_color_bool boolean.

```
⟨class⟩  343  \cs_new:Nn\__skrapport_setup_color:{
         344      \bool_if:NTF\g__skrapport_color_bool{
         345          \RequirePackage{xcolor}
         346      }{
         347          \msg_log:nnn{skrapport}{noop-call}{\__skrapport_setup_color:}
         348          \prg_do_nothing:
         349      }
         350  }
```

skrapport_setup_xelatex: (no arguments)

This macro contains special setup code for the X∃TEX and LuaTEX engines, such as loading fontspec, providing missing commands (which have been replaced by equivalent Unicode characters, apparently) and loading polyglossia.

```
⟨class⟩ 351 \cs_new:Nn\__skrapport_setup_xelatex:{
        352     \RequirePackage[quiet]{fontspec}
```

\nobreakspace (no arguments)

```
⟨class⟩ 353     \DeclareDocumentCommand\nobreakspace{}{\leavevmode\nobreak\space}
```

```
⟨class⟩ 354     \RequirePackage{polyglossia}
        355     \bool_gset_true:N\g__skrapport_has_polyglossia_bool
        356 }
```

rapport_setup_pdftex: (no arguments)

This macro contains special setup code for the pdfTEX engine. Currently, it only sets the font encoding to T1.

```
⟨class⟩ 357 \cs_new:Nn\__skrapport_setup_pdftex:{
        358     \RequirePackage[T1]{fontenc}
        359     \bool_gset_false:N\g__skrapport_has_polyglossia_bool
        360 }
```

etup_engine_specific: (no arguments)

This macro detects the current engine and calls the appropriate engine setup macro.

```
⟨class⟩ 361 \cs_new:Nn\__skrapport_setup_engine_specific:{
        362     \bool_if:nTF{\luatex_if_engine_p: || \xetex_if_engine_p:}{
        363         \__skrapport_setup_xelatex:
        364     }{
        365         \__skrapport_setup_pdftex:
        366     }
        367 }
```

3.3.1 Variants with expandable arguments

Some option setup macros accept arguments, but those arguments are not expanded. Here, we provide variants which expand the parameters properly using the excellent l3prg functionality.

apport_setup_ptsize:x   (no arguments)

⟨class⟩ 368 `\cs_generate_variant:Nn\__skrapport_setup_ptsize:n{ x }`

apport_setup_titles:x   (no arguments)

⟨class⟩ 369 `\cs_generate_variant:Nn\__skrapport_setup_titles:n{ x }`

krapport_setup_lang:x   (no arguments)

⟨class⟩ 370 `\cs_generate_variant:Nn\__skrapport_setup_lang:n{ x }`

krapport_setup_font:x   (no arguments)

⟨class⟩ 371 `\cs_generate_variant:Nn\__skrapport_setup_font:n{ x }`

Finally, we process the class options using the keys defined earlier. We also run the engine-specific code implemented above.

⟨class⟩ 372 `\__skrapport_setup_engine_specific:`
        373 `\ProcessKeysOptions{skrapport}`

3.4 Loading packages

3.4.1 Required packages

We also include some essential packages per default. The calc package, for instance, is essential in later definitions.

⟨class⟩ 374 `\RequirePackage{calc}`

At the end of the class definition we load a couple of very useful packages that improve typesetting. These are microtype, icomma.

```
⟨class⟩ 375  \AtEndOfClass{
       376      \RequirePackage{microtype}
       377      \RequirePackage{icomma}
       378  }
```

When the document starts, we set the URL style if the user has loaded the url package.

```
⟨class⟩ 379  \AtBeginDocument{
       380      \cs_if_exist:NT\urlstyle{\urlstyle{same}}
       381  }
```

3.5 Utilities

We define useful LaTeX3 replacements of LaTeX 2_ε stuff that hasn't made its way into interface3. This includes counter mechanisms (compatible with LaTeX 2_ε code), a \settowidth clone and possibly more stuff later.

```
⟨class⟩ 382  \cs_new:Npn\dim_set_to_wd:Nn#1#2{
       383      \hbox_set:Nn\l_tmpa_box{#2}
       384      \dim_set:Nn#1{\box_wd:N\l_tmpa_box}
       385      \box_clear:N\l_tmpa_box
       386  }

⟨class⟩ 387  \cs_new:Npn\ctr_new:n#1{
       388      \@definecounter{#1} % !!!
       389      \@ifnextchar[{\@newctr{#1}}{} % !!!
       390  }

⟨class⟩ 391  \cs_new:Npn\ctr_gzero:n#1{
       392      \int_gzero:c{c@#1}
       393  }

⟨class⟩ 394  \cs_new:Npn\ctr_gset:nn#1#2{
       395      \int_gset:cn{c@#1}{#2}
       396  }

⟨class⟩ 397  \cs_new:Npn\ctr_gincr:n#1{
```

```
398        \int_gincr:cn{c@#1}
399    }
```

⟨class⟩ 400 `\cs_new:Npn\ctr_ref_gincr:n#1{`
```
401        \ctr_gincr:n{#1}
402        \cs_gset_protected:Nn\@currentlabel{
403            \cs:w p@#1\cs_end:
404            \cs:w the#1\cs_end:
405        }
406    }
```

3.6 Hidden things

Set some default measurements (should probably be replaced with simply loading scrpage2).

⟨class⟩ 407 `\dim_add:Nn\textwidth{0.5\oddsidemargin}`
408 `\dim_add:Nn\textwidth{0.5\evensidemargin}`
409 `\dim_add:Nn\oddsidemargin{-0.5\oddsidemargin}`
410 `\dim_add:Nn\evensidemargin{-0.5\evensidemargin}`
411 `\dim_gset:Nn\lineskip{1pt}`
412 `\dim_gset:Nn\normallineskip{1pt}`

`\baselinestretch`   (no arguments)

⟨class⟩ 413 `\RenewDocumentCommand\baselinestretch{}{}`

3.6.1 Penalties

⟨class⟩ 414 `\int_gset:Nn\@lowpenalty  {51}`
415 `\int_gset:Nn\@medpenalty {151}`
416 `\int_gset:Nn\@highpenalty{301}`
417 `\ctr_gset:nn{topnumber}{2}`
418 `\ctr_gset:nn{bottomnumber}{1}`
419 `\ctr_gset:nn{totalnumber}{4}`
420 `\ctr_gset:nn{dbltopnumber}{2}`

⟨class⟩ 421 `\RenewDocumentCommand\topfraction{}{.75}`
422 `\RenewDocumentCommand\bottomfraction{}{.5}`
423 `\RenewDocumentCommand\textfraction{}{.25}`
424 `\RenewDocumentCommand\floatpagefraction{}{.625}`
425 `\RenewDocumentCommand\dbltopfraction{}{.75}`
426 `\RenewDocumentCommand\dblfloatpagefraction{}{.625}`

3.7 User-level commands

3.7.1 The front page

`\author` #1: Optional email address
#2: Author name

The `\author` macro is redefined to accept an optional argument and to be used multiple times. This will be rewritten to store both author and email in a suitable data structure (probably some kind of token list) instead of simply dumb-appending to a local macro. The `\skrapport@email` helper macro typesets an email address using hyperref if that package is used. This is suboptimal, the macro behaves differently with respect to special characters depending on wether hyperref is loaded or not.

⟨class⟩ 427 `\cs_new_nopar:Npn\__skrapport_email:n#1{`
428 `    \texttt{#1}`
429 `}`
430 `\AtBeginDocument{`
431 `    \cs_if_exist:NT\href{`
432 `        \cs_gset_nopar:Npn\__skrapport_email:n#1{`
433 `            \href{mailto:#1}{\nolinkurl{#1}}`
434 `        }`
435 `    }`
436 `}`

⟨class⟩ 437 `\tl_new:N\g__skrapport_author_tl`

⟨class⟩ 438 `\DeclareDocumentCommand\author{om}{%`
439 `    \tl_set:Nx\l_tmpa_tl{`

```
440          #2 \IfNoValueF{#1}{
441               ˜\(\langle\)\__skrapport_email:n{#1}\(\rangle\)
442          }
443      }
444      \tl_if_empty:NF\g__skrapport_author_tl{
445          \tl_gput_right:Nn\g__skrapport_author_tl{\\[0.5ex]}
446      }
447      \tl_gconcat:NNN\g__skrapport_author_tl
448                    \g__skrapport_author_tl\l_tmpa_tl
449  }
```

\regarding#1: Text snippet

> This macro defines a variable used by \maketitle to insert a simple text into the header on the title page.

⟨class⟩ 450 `\tl_new:N\g__skrapport_regarding_tl`
451 `\DeclareDocumentCommand\regarding{m}{`
452 `    \tl_gset:Nn\g__skrapport_regarding_tl{#1}`
453 `}`

\license#1: Short license description

> This macro defines a variable used by \maketitle to insert a license into the footer on the titlepage.

⟨class⟩ 454 `\tl_new:N\g__skrapport_copyright_tl`
455 `\DeclareDocumentCommand\license{m}{`
456 `    \tl_gset:Nn\g__skrapport_copyright_tl{#1}`
457 `}`

\maketitle(no arguments)

> The standard \maketitle command as taken from the article class but with some basic restyling.

⟨class⟩ 458 `\cs_new:Nn\__skrapport_smallprint_style:{}`

⟨class⟩ 459 `\DeclareDocumentCommand\maketitle{}{`
460 `    \par`

```
461    \group_begin:
462        \RenewDocumentCommand\thefootnote{}{
463            \@fnsymbol\c@footnote
464        }
465        \RenewDocumentCommand\@makefnmark{}{
466            \hbox_overlap_right:n{
467                \@textsuperscript{\normalfont\@thefnmark}
468            }
469        }
470        \RenewDocumentCommand\@makefntext{m+}{
471            \parindent 1em\noindent
472            \hbox_to_wd:nn{1.8em}{
473                \hss\@textsuperscript{\normalfont\@thefnmark}
474            }
475            ##1
476        }
477        \newpage
478        \int_gzero:N\@topnum
479        \__skrapport_maketitle:
480        \thispagestyle{plain}
481        \__skrapport_thanks:
482    \group_end:
483    \ctr_gzero:n{footnote}
484  }
```

⟨class⟩
```
485  \cs_new:Nn\__skrapport_maketitle:{
486    \newpage
487    \hbox:n{}
488    \begin{flushleft}
489        \vspace{-\headsep}
490        {
491            \small\__skrapport_smallprint_style:
492            \tl_use:N\g__skrapport_regarding_tl
493            \@date\par
494        }
495        \vspace{1.5cm}
```

```
496        {
497            \Huge\__skrapport_title_style:
498            \@title
499            \par
500        }
501        \vspace{.125cm}
502        {
503            \Large\__skrapport_title_style:
504            \tl_use:N\g__skrapport_regarding_tl
505        }
506        \vspace{.75cm}
507    \end{flushleft}
508    \par
509 }
```

`abstract`   (no arguments)

Standard restyled abstract environment from the article class.

⟨class⟩
```
510 \dim_const:Nn\c__skrapport_abstract_separator_dim{1em}
511 \DeclareDocumentEnvironment{abstract}{}{
512    \dim_set_to_wd:\l_tmpa_dim{\bfseries\abstractname}
513    \dim_set:Nn\l_tmbp_dim
514        {\textwidth-\l_tmpa_dim-\c__skrapport_abstract_separator_dim}
515    \begin{minipage}[t]{\l_tmpa_dim}
516        \begin{flushright}
517            \leavevmode\bfseries\abstractname
518        \end{flushright}
519    \end{minipage}
520    \hspace{\c__skrapport_abstract_separator_dim}
521    \begin{minipage}[t]{\l_tmpb_dim}
522 }{
523    \end{minipage}
524 }
```

`titlepage`   (no arguments)

Titlepage environment.

```
⟨class⟩  525  \cs_new:Nn\ps@skrapport@titlepage:{
         526      \cs_gset:Nn\@oddhead{}
         527      \cs_gset:Nn\@evenhead{}
         528      \cs_gset:Nn\@oddfoot{
         529          \begin{minipage}{\textwidth}
         530              \raggedleft\small\par
         531              \__skrapport_smallprint_style:
         532              \tl_use:N\g__skrapport_copyright_tl
         533          \end{minipage}
         534      }
         535      \cs_gset_eq:Nn\@evenfoot\@oddfoot
         536  }

⟨class⟩  537  \DeclareDocumentEnvironment{titlepage}{}{
         538      \cleardoublepage\ctr_gset:nn{page}{1}
         539  }{
         540      \thispagestyle{skrapport@titlepage}
         541      \cleardoublepage\ctr_gset:nn{page}{1}
         542  }
```

3.7.2 Sectioning

Sectioning macros. This is kind of messy. We start with creaiting some
counters using our homemade LaTeX3 counter macros.

```
⟨class⟩  543  \ctr_gset:nn{c@secnumdepth}{3}
         544  \ctr_new:n{section}
         545  \ctr_new:n{subsection}[section]
         546  \ctr_new:n{subsubsection}[subsection]
         547  \ctr_new:n{paragraph}[subsubsection]
         548  \ctr_new:n{subparagraph}[paragraph]
```

Next up, we have macros to display the section numberings.

```
⟨class⟩  549  \RenewDocumentCommand\thesection{}{
         550      \@arabic\c@section
         551  }
         552  \RenewDocumentCommand\thesubsection{}{
```

```
553        \thesection.\@arabic\c@subsection
554   }
555   \RenewDocumentCommand\thesubsubsection{}{
556        \thesubsection.\@arabic\c@subsubsection
557   }
558   \RenewDocumentCommand\theparagraph{}{
559        \thesubsubsection.\@arabic\c@paragraph
560   }
561   \RenewDocumentCommand\thesubparagraph{}{
562        \theparagraph.\@arabic\c@subparagraph
563   }
```

Pre- and post-section spacing   Here comes the tricky part. We define two generic macros that add spacing before and after the section title, to condense the code a bit. Note that many of the following macros constitute a reimplementation of \@startsection, \@ssect, \@sect and friends.

```
⟨class⟩ 564  \cs_new:Npn\__skrapport_pre_section:n#1{
565        \leavevmode\par
566        \skip_set:Nn\l_tmpa_skip{#1}
567        \@afterindenttrue % !!!
568        \dim_compare:nT{\l_tmpa_skip<0}{
569            \skip_set\l_tmpa_skip{-\l_tmpa_skip}
570            \@afterindentfalse % !!!
571        }
572        \if@nobreak \everypar{} \else
573            \addpenalty\@secpenalty % !!!
574            \skip_vertical:N\l_tmpa_skip
575        \fi
576   }

⟨class⟩ 577  \cs_new:Npn\__skrapport_post_section:n#1{
578        \@xsect{#1} % !!!
579   }
```

Starred sections   These two macros (the first only being an alias for the second with its last argument empty) correspond to unnumbered sections. Or, rather, they do all the typesetting and none of the TOC/-counter stuff. This means that starred sections only call this macro, while unstarred ones call other macros in addition to this macro.

⟨class⟩
```
580  \cs_new:Npn\__skrapport_section_star:nnnn#1#2#3{
581      \__skrapport_section_star:nnnn{#1}{#2}{#3}{}
582  }
583  \cs_new:Npn\__skrapport_section_star:nnnn#1#2#3#4{
584      \group_begin:
585          #2
586          \hbox_set:Nn\l_tmpa_box{{\skip_horizontal:n{#1}#4}}
587          \hangindent{#1}\box_wd:N\l_tmpa_box
588          \noindent\box_use_clear:N\l_tmpa_box
589          \interlinepenalty\@M % !!!
590          #3\par
591      \group_end:
592  }
```

Unstarred sections   This macro typesets an unstarred section, *i.e.* a numbered one. It defines a temporary macro containing the section number (maybe, depends on the \c@secnumdepth counter) which it passes on to __skrapport_section_star:nnnn, and then writes some things to the TOC.

⟨class⟩
```
593  \cs_new:Npn\__skrapport_section_nostar:nnnnnn#1#2#3#4#5#6{
594      \if_int_compare:w #2>\c@secnumdepth % !!!
595          \cs_set:Nn\__skrapport_saved_section:{}
596      \else:
597          \ctr_ref_ginrc:n{#1}
598          \cs_set_protected:Nn\__skrapport_saved_section:{
599              \cs:w #1\cs_end:
600          }
601      \fi:
602      \__skrapport_section_star:nnn
```

```
603        {#3}{#4}{#5}{\__skrapport_saved_section:}
604      \cs:w #1mark\cs_end:{#6}
605      \addcontentsline{toc}{#1}{
606          \if_int_compare:w #2>\c@secnumdepth \else: % !!!
607              \protect\numberline{\csname the#1\endcsname} % !!!
608          \fi:
609          #6
610      }
611  }
```

Generic sectioning macros   We will now set up a generic sectioning macro. First, we need version of the above macros that expand their arguments.

⟨class⟩ 612 `\cs_generate_variant:Nn\__skrapport_pre_section:n{x}`

⟨class⟩ 613 `\cs_generate_variant:Nn\__skrapport_post_section:n{x}`

⟨class⟩ 614 `\cs_generate_variant:Nn\__skrapport_section_star:nnn{xxn}`

⟨class⟩ 615 `\cs_generate_variant:Nn\__skrapport_section_nostar:nnnnnn{nnxxnn}`

Now, the generic sectioning macro basically takes the sectioning macro arguments straight up (arguments 3–5), additionally requiring a section counter name and a section level. It expects that constant dimensions (see definition of \section below) and a formatting macro are available, and passes these as arguments to the underlying sectioning macros as appropriate.

```
⟨class⟩ 616 \cs_set:Nn\__skrapport_generic_section:nnnnn{
617      \__skrapport_pre_section:x{\cs:w c__skrapport_#1_pre_skip\cs_end:}
618      \IfBooleanTF#3{
619          \__skrapport_section_star:xxn
620              {\cs:w c__skrapport_#1_indent_dim\cs_end:}
621              {\cs:w __skrapport_#1_style:\cs_end:}
622              {#5}
623      }{
624          \IfNoValueTF{#4}{
```

```
625              \__skrapport_section_star:nnxxnn
626                  {#1}{#2}
627                  {\cs:w c__skrapport_#1_indent_dim\cs_end:}
628                  {\cs:w __skrapport_#1_style:\cs_end:}
629                  {#5}
630                  {#5}
631          }{
632              \__skrapport_section_star:nnxxnn
633                  {#1}{#2}
634                  {\cs:w c__skrapport_#1_indent_dim\cs_end:}
635                  {\cs:w __skrapport_#1_style:\cs_end:}
636                  {#5}
637                  {#4}
638          }
639      }
640      \__skrapport_post_section:x{\cs:w c__skrapport_#1_post_skip\cs_end:}
641 }
```

Public sectioning API   It's time to define the public sectioning macros. They all follow the same format: first, two skips and one dimension (used by __skrapport_generic_section:nnnnn) are defined, as well as a macro defining the text style of the section. Then, the actual macro is provided.

\section   (no arguments)

This is the skip *before* a section title.

⟨class⟩ 642 \skip_const:Nn\c__skrapport_section_pre_skip{-4ex plus 1ex minus -1ex}

This is the skip *after* a section title.

⟨class⟩ 643 \skip_const:Nn\c__skrapport_section_post_skip{.5ex plus .5ex}

This is the *indentation* of a section title.

⟨class⟩ 644 \dim_const:Nn \c__skrapport_section_indent_dim{\c_zero_dim}

This is the text style of a section title.

```
⟨class⟩ 645 \cs_set:Nn\__skrapport_section_style:
        646     {\normalfont\LARGE\__skrapport_title_style:}
```

Finally, the public macro is provided.

```
⟨class⟩ 647 \DeclareDocumentCommand\section{som}{
        648     \__skrapport_generic_section:nnnnn{section}{1}{#1}{#2}{#3}
        649 }
```

The other sectioning macros (macros from section to subparagraph are available) are defined in an analogous manner.

\subsection   (no arguments)

```
⟨class⟩ 650 \skip_const:Nn\c__skrapport_subsection_pre_skip{-3ex plus 1ex minus -1ex}

⟨class⟩ 651 \skip_const:Nn\c__skrapport_subsection_post_skip{.25ex plus .25ex}

⟨class⟩ 652 \dim_const:Nn \c__skrapport_subsection_indent_dim{\c_zero_dim}

⟨class⟩ 653 \cs_set:Nn\__skrapport_subsection_style:
        654     {\normalfont\Large\__skrapport_title_style:}

⟨class⟩ 655 \DeclareDocumentCommand\subsection{som}{
        656     \__skrapport_generic_section:nnnnn{subsection}{2}{#1}{#2}{#3}
        657 }
```

\subsubsection   (no arguments)

```
⟨class⟩ 658 \skip_const:Nn\c__skrapport_subsubsection_pre_skip{-2ex plus .5ex minus -.5ex}

⟨class⟩ 659 \skip_const:Nn\c__skrapport_subsubsection_post_skip{.125ex plus .125ex}

⟨class⟩ 660 \dim_const:Nn \c__skrapport_subsubsection_indent_dim{\c_zero_dim}

⟨class⟩ 661 \cs_set:Nn\__skrapport_subsubsection_style:
        662     {\normalfont\large\__skrapport_title_style:}

⟨class⟩ 663 \DeclareDocumentCommand\subsubsection{som}{
        664     \__skrapport_generic_section:nnnnn{subsubsection}{3}{#1}{#2}{#3}
        665 }
```

\paragraph   (no arguments)

⟨class⟩ 666 `\skip_const:Nn\c__skrapport_paragraph_pre_skip{1ex plus .25ex minus -.25ex}`

⟨class⟩ 667 `\skip_const:Nn\c__skrapport_paragraph_post_skip{-1em}`

⟨class⟩ 668 `\dim_const:Nn \c__skrapport_paragraph_indent_dim{\c_zero_dim}`

⟨class⟩ 669 `\cs_set:Nn\__skrapport_paragraph_style:`
670 `    {\normalfont\normalsize\bfseries}`

⟨class⟩ 671 `\DeclareDocumentCommand\paragraph{som}{`
672 `    \__skrapport_generic_section:nnnnn{paragraph}{4}{#1}{#2}{#3}`
673 `}`

\subparagraph   (no arguments)

⟨class⟩ 674 `\skip_const:Nn\c__skrapport_subparagraph_pre_skip{1ex plus .25ex minus -.25ex}`

⟨class⟩ 675 `\skip_const:Nn\c__skrapport_subparagraph_post_skip{-1em}`

⟨class⟩ 676 `\dim_const:Nn \c__skrapport_subparagraph_indent_dim{\parindent}`

⟨class⟩ 677 `\cs_set:Nn\__skrapport_subparagraph_style:`
678 `    {\normalfont\normalsize\itshape}`

⟨class⟩ 679 `\DeclareDocumentCommand\subparagraph{som}{`
680 `    \__skrapport_generic_section:nnnnn{subparagraph}{5}{#1}{#2}{#3}`
681 `}`

3.7.3 Macros from article

List environments   First, several dimensions are provided and three penalties defined.

⟨class⟩ 682 `\dim_gset:Nn\leftmargini{2em}`
683 `\dim_gset_eq:NN\leftmargin\leftmargini`
684 `\dim_gset:Nn\leftmarginii{2em}`

```
685 \dim_gset:Nn\leftmarginiii{1.5em}
686 \dim_gset:Nn\leftmarginiv{1.5em}
687 \dim_gset:Nn\leftmarginv{1em}
688 \dim_gset:Nn\leftmarginvi{1em}
689 \dim_gset:Nn\labelsep{.5em}
690 \dim_gset_eq:NN\labelwidth\leftmargini
691 \dim_gsub:Nn\labelwidth{-\labelsep}
692 \int_gset:Nn\@beginparpenalty{-\@lowpenalty}
693 \int_gset:Nn\@endparpenalty  {-\@lowpenalty}
694 \int_gset:Nn\@itempenalty    {-\@lowpenalty}
```

Then, we define the appearance of the item numbers. The first level consists of arabic numbers $(1, 2, 3, \ldots)$.

⟨class⟩ 695 `\RenewDocumentCommand\theenumi{}  {\@arabic\c@enumi}`

The second level consists of lower-case alphabetic characters $(a, b, c, \ldots)$.

⟨class⟩ 696 `\RenewDocumentCommand\theenumii{} {\@alph\c@enumii}`

The third level consists of lower-case roman numerals $(i, ii, iii, \ldots)$.

⟨class⟩ 697 `\RenewDocumentCommand\theenumiii{}{\@roman\c@enumiii}`

The fourth level consists of upper-case alphabetic characters $(A, B, C, \ldots)$.

⟨class⟩ 698 `\RenewDocumentCommand\theenumiv{}  {\@Alph\c@enumiv}`

We also need macros that typeset the actual labels. Here, different levels have a different postfix: all levels except the second are postfixed by a period, while the second level is postfixed by a closing bracket.

⟨class⟩ 699 `\NewDocumentCommand\labelenumi{\theenumi.}`

⟨class⟩ 700 `\NewDocumentCommand\labelenumii{\theenumii)}`

⟨class⟩ 701 `\NewDocumentCommand\labelenumiii{\theenumiii.}`

⟨class⟩ 702 `\NewDocumentCommand\labelenumiv{\theenumiv.}`

We also fix the referencing of lower-level items so that one can refer

to them properly (*i.e.* as 1b(iii) and so on).

⟨class⟩ ₇₀₃ `\renewcommand\p@enumii{\theenumi}`

⟨class⟩ ₇₀₄ `\renewcommand\p@enumiii{\theenumi(\theenumii)}`

⟨class⟩ ₇₀₅ `\renewcommand\p@enumiv{\p@enumiii\theenumiii}`

All that was for numbered lists (`enumerate`). Now, we define the 'labels' of `itemize` items. In progression, they are a bullet (•), an open bullet (), a boldfaced dash (**–**) and an arrow ().

⟨class⟩ ₇₀₆ `\newcommand\labelitemi{\textbullet}`

⟨class⟩ ₇₀₇ `\newcommand\labelitemii{\textopenbullet}`

⟨class⟩ ₇₀₈ `\newcommand\labelitemiii{\normalfont\bfseries\textendash}`

⟨class⟩ ₇₀₉ `\newcommand\labelitemiv{\textrightarrow}`

The last of the commonly used list environments is `description`. Defining it is fairly simple — we define a list with empty item labels and a bit of hackery for the `\makelabel` macro inside.

`description` (no arguments)

```
710 \DeclareDocumentEnvironment{description}{}{
711     \list{}{
712         \dim_zero:N\labelwidth
713         \dim_set:Nn\itemindent{-\leftmargin}
714         \cs_set_eq:Nn\makelabel\descriptionlabel
715     }
716 }{
717     \endlist
718 }
```

`\descriptionlabel` (no arguments)

Additionally, the `\descriptionlabel` macro is defined.

⟨class⟩ ₇₁₉ `\NewDocumentCommand\descriptionlabel{m}{`
₇₂₀ `    \hspace{\labelsep}\normalfont\bfseries #1`

721 `}`

Quotation environments quote quotation verse

‹class› 722 `\newenvironment{quote}{\list{}{\rightmargin\leftmargin}\item\relax\itshape}{\endlis`

quotation (no arguments)

‹class› 723 `\newenvironment{quotation}{\bigskip\begin{quote}}{\end{quote}\bigskip}`

verse (no arguments)

‹class› 724 `\newenvironment{verse}{\begin{quote}}{\end{quote}}`

\appendix (no arguments)

Appendix macro.

‹class› 725 `\newcommand\appendix{\par\setcounter{section}{0}\setcounter{subsection}{0}\gdef\thes`

Old font commands.

\rm (no arguments)

‹class› 726 `\DeclareOldFontCommand{\rm}{\normalfont\rmfamily}{\mathrm}`

\sf (no arguments)

‹class› 727 `\DeclareOldFontCommand{\sf}{\normalfont\sffamily}{\mathsf}`

\tt (no arguments)

‹class› 728 `\DeclareOldFontCommand{\tt}{\normalfont\ttfamily}{\mathtt}`

\bf (no arguments)

‹class› 729 `\DeclareOldFontCommand{\bf}{\normalfont\bfseries}{\mathbf}`

`\it`   (no arguments)

⟨class⟩ 730 `\DeclareOldFontCommand{\it}{\normalfont\itshape}{\mathit}`

`\sl`   (no arguments)

⟨class⟩ 731 `\DeclareOldFontCommand{\sl}{\normalfont\slshape}{\@nomath\sl}`

`\sc`   (no arguments)

⟨class⟩ 732 `\DeclareOldFontCommand{\sc}{\normalfont\scshape}{\@nomath\sc}`

`\emph`   (no arguments)

Redefining the `\emph` style to be bold when nested.

```
⟨class⟩ 733 \let\@emstyle\relax
       734 \DeclareRobustCommand\em{%
       735     \@nomath\em%
       736     \ifdim \fontdimen\@ne\font >\z@%
       737         \itshape\bfseries%
       738     \else%
       739         \itshape%
       740     \fi%
       741     \@emstyle%
       742 }
```

Footnote code.

```
⟨class⟩ 743 \renewcommand\footnoterule{%
       744     \kern-3\p@
       745     \hrule\@width.4\columnwidth
       746     \kern2.6\p@}
       747 \newcommand\@makefntext[1]{%
       748     \parindent 1em%
       749     \noindent
       750     \hb@xt@1.8em{\hss\@makefnmark}#1}
```

Basic translatable texts.

\contentsname   (no arguments)

⟨class⟩ 751 `\newcommand\contentsname{Innehll}`

\refname   (no arguments)

⟨class⟩ 752 `\newcommand\refname{Referenser}`

\figurename   (no arguments)

⟨class⟩ 753 `\newcommand\figurename{Figur}`

\tablename   (no arguments)

⟨class⟩ 754 `\newcommand\tablename{Tabell}`

\appendixname   (no arguments)

⟨class⟩ 755 `\newcommand\appendixname{Bilaga}`

\abstractname   (no arguments)

⟨class⟩ 756 `\newcommand\abstractname{Sammanfattning}`

\today   (no arguments)

⟨class⟩ 757 `\def\today{\year--\month--\day}`

3.7.4 Floats

Figure and table floats.

⟨class⟩ 758 `\setlength\arraycolsep{5\p@}`
       759 `\setlength\tabcolsep{6\p@}`

```
760 \setlength\arrayrulewidth{.4\p@}
761 \setlength\doublerulesep{2\p@}
762 \setlength\tabbingsep{\labelsep}
763 \skip\@mpfootins=\skip\footins
764 \setlength\fboxsep{3\p@}
765 \setlength\fboxrule{.4\p@}
```

⟨class⟩ 766 `\renewcommand\theequation{\@arabic\c@equation}`

⟨class⟩ 767 `\newcounter{figure}\renewcommand\thefigure{\@arabic\c@figure}`
```
768 \def\fps@figure{tb}
769 \def\ftype@figure{1}
770 \def\ext@figure{lof}
771 \def\fnum@figure{\figurename~\thefigure}
```

`figure` (no arguments)

⟨class⟩ 772 `\newenvironment{figure}{\@float{figure}}{\end@float}`
```
773 \newenvironment{figure*}{\@dblfloat{figure}}{\end@dblfloat}
```

⟨class⟩ 774 `\newcounter{table}\renewcommand\thetable{\@arabic\c@table}`
```
775 \def\fps@table{tb}
776 \def\ftype@table{2}
777 \def\ext@table{lot}
778 \def\fnum@table{\tablename~\thetable}
```

`table` (no arguments)

⟨class⟩ 779 `\newenvironment{table}{\@float{table}}{\end@float}`
```
780 \newenvironment{table*}{\@dblfloat{table}}{\end@dblfloat}
```

Captions.

⟨class⟩ 781 `\let\@captionstyle\relax`
```
782 \newlength\abovecaptionskip\setlength\abovecaptionskip{10\p@}
783 \newlength\belowcaptionskip\setlength\belowcaptionskip{10\p@}
```

⟨class⟩ 784 `\long\def\@makecaption#1#2{%`
```
785     \vskip\abovecaptionskip
786     \sbox\@tempboxa{\small{\bfseries\@captionstyle#1:} \itshape#2}%
```

```
787        \ifdim \wd\@tempboxa >\hsize
788            \small{\bfseries\@captionstyle#1:} \itshape#2\par
789        \else
790            \global \@minipagefalse
791            \hb@xt@\hsize{\hfil\box\@tempboxa\hfil}%
792        \fi
793        \vskip\belowcaptionskip}
```

3.7.5 Table of contents

⟨class⟩ 794 `\newcommand\@pnumwidth{1.55em}`
795 `\newcommand\@tocrmarg{2em}`
796 `\newcommand\@dotsep{1.7}`
797 `\setcounter{tocdepth}{5}`

`\tableofcontents` (no arguments)

```
⟨class⟩ 798 \newcommand\tableofcontents{%
       799   \section*{\contentsname
       800     \@mkboth{\MakeUppercase\contentsname}{\MakeUppercase\contentsname}
       801   }%
       802     \vskip\baselineskip%
       803   \@starttoc{toc}%
       804 }
```

⟨class⟩ 805 `\newcommand*\l@section{\@dottedtocline{1}{0em}{1.3em}}`
806 `\newcommand*\l@subsection{\@dottedtocline{2}{1.3em}{2em}}`
807 `\newcommand*\l@subsubsection{\@dottedtocline{3}{3.3em}{3.15em}}`
808 `\newcommand*\l@paragraph{\@dottedtocline{4}{6.45em}{4.15em}}`
809 `\newcommand*\l@subparagraph{\@dottedtocline{5}{10.6em}{5.15em}}`

Fix for *e.g.* tocloft package.

⟨class⟩ 810 `\let\l@figure\@empty`
811 `\let\l@table\@empty`

3.7.6 Basic bibliography support

⟨class⟩ 812 `\newdimen\bibindent`
813 `\setlength\bibindent{2em}`

`thebibliography`(no arguments)

⟨class⟩ 814 `\newenvironment{thebibliography}[1]`
815 `{\section*{\refname}%`
816 `\@mkboth{\MakeUppercase\refname}{\MakeUppercase\refname}%`
817 `\list{\@biblabel{\@arabic\c@enumiv}}%`
818 `{\settowidth\labelwidth{\@biblabel{#1}}%`
819 `\leftmargin\labelwidth`
820 `\advance\leftmargin\labelsep`
821 `\@openbib@code`
822 `\usecounter{enumiv}%`
823 `\let\p@enumiv\@empty`
824 `\renewcommand\theenumiv{\@arabic\c@enumiv}}%`
825 `\sloppy`
826 `\clubpenalty4000`
827 `\@clubpenalty \clubpenalty`
828 `\widowpenalty4000}%`
829 `{\def\@noitemerr`
830 `{\@latex@warning{Empty thebibliography environment}}%`
831 `\endlist}`

⟨class⟩ 832 `\newcommand\newblock{\hskip .11em\@plus.33em\@minus.07em}`

⟨class⟩ 833 `\let\@openbib@code\@empty`

`theindex`(no arguments)

⟨class⟩ 834 `\newenvironment{theindex}`
835 `{\twocolumn[\section*{\indexname}]%`
836 `\@mkboth{\MakeUppercase\indexname}%`
837 `{\MakeUppercase\indexname}%`
838 `\thispagestyle{plain}\parindent\z@`
839 `\parskip\z@ \@plus .3\p@\relax`

```
840        \columnseprule \z@
841        \columnsep 35\p@
842        \let\item\@idxitem}
843      {\onecolumn}
```

⟨class⟩ 844 `\newcommand\@idxitem{\par\hangindent 40\p@}`

`\subitem`   (no arguments)

⟨class⟩ 845 `\newcommand\subitem{\@idxitem \hspace*{20\p@}}`

`\subsubitem`   (no arguments)

⟨class⟩ 846 `\newcommand\subsubitem{\@idxitem \hspace*{30\p@}}`

⟨class⟩ 847 `\newcommand\indexspace{\par \vskip 10\p@ \@plus5\p@ \@minus3\p@\relax}`

3.7.7 Two-column mode

The twocolumn hacks implemented.

⟨class⟩ 848 `\ifskrapport@twocolumn`
849 `    \AtBeginDocument{`

We include the grid package in two-column mode, because it looks
way better that way.

```
⟨class⟩ 850        \IfStrEq{\skrapport@paper}{a4paper}
851            {\def\@@@lines{40}}{\def\@@@lines{28}}
852        \IfStrEq{\skrapport@ptsize}{10pt}{
853            \RequirePackage[fontsize=10pt,%
854                            baseline=12pt,%
855                            lines=\@@@lines]{grid}
856        }{
857            \IfStrEq{\skrapport@ptsize}{11pt}{
858                \RequirePackage[fontsize=11pt,%
859                                baseline=13.2pt,%
860                                lines=\@@@lines]{grid}
```

```
861          }{
862              \RequirePackage[fontsize=12pt,%
863                              baseline=14.4pt,%
864                              lines=\@@@lines]{grid}
865          }
866        }
```

Now, we patch commands. First up is abstract.

867 `\renewenvironment{abstract}{\section*{\abstractname}}{}`

Then document and \maketitle.

868 `\AfterEndPreamble{\begin{multicols}{2}}`
869 `\AtEndDocument{\end{multicols}}`
870 `\pretocmd{\maketitle}{\end{multicols}}{}{}`
871 `\apptocmd{\maketitle}{\begin{multicols}{2}}{}{}`

Always typeset equation and friends outside the grid:

872 `\BeforeBeginEnvironment{equation}{\begin{gridenv}}`
873 `\AfterEndEnvironment{equation}{\end{gridenv}}`
874 `\BeforeBeginEnvironment{equation*}{\begin{gridenv}}`
875 `\AfterEndEnvironment{equation*}{\end{gridenv}}`
876 `\BeforeBeginEnvironment{multline}{\begin{gridenv}}`
877 `\AfterEndEnvironment{multline}{\end{gridenv}}`
878 `\BeforeBeginEnvironment{multline*}{\begin{gridenv}}`
879 `\AfterEndEnvironment{multline*}{\end{gridenv}}`
880 `\BeforeBeginEnvironment{gather}{\begin{gridenv}}`
881 `\AfterEndEnvironment{gather}{\end{gridenv}}`
882 `\BeforeBeginEnvironment{gather*}{\begin{gridenv}}`
883 `\AfterEndEnvironment{gather*}{\end{gridenv}}`
884 `\BeforeBeginEnvironment{align}{\begin{gridenv}}`
885 `\AfterEndEnvironment{align}{\end{gridenv}}`
886 `\BeforeBeginEnvironment{align*}{\begin{gridenv}}`
887 `\AfterEndEnvironment{align*}{\end{gridenv}}`
888 `\BeforeBeginEnvironment{flalign}{\begin{gridenv}}`
889 `\AfterEndEnvironment{flalign}{\end{gridenv}}`
890 `\BeforeBeginEnvironment{flalign*}{\begin{gridenv}}`

```
891    \AfterEndEnvironment{flalign*}{\end{gridenv}}
892    \BeforeBeginEnvironment{alignat}{\begin{gridenv}}
893    \AfterEndEnvironment{alignat}{\end{gridenv}}
894    \BeforeBeginEnvironment{alignat*}{\begin{gridenv}}
895    \AfterEndEnvironment{alignat*}{\end{gridenv}}
```

The figure environment is patched...

```
896    \expandafter\let\expandafter
897        \old@figurest\csname figure*\endcsname
898    \expandafter\let\expandafter
899        \old@endfigurest\csname endfigure*\endcsname
900    \RenewDocumentEnvironment{figure}{o}{%
901        \begin{gridenv}%
902        \vspace{\intextsep}%
903        \begin{minipage}{\linewidth}%
904        \def\@captype{figure}%
905    }{%
906        \end{minipage}%
907        \vspace{\intextsep}%
908        \end{gridenv}%
909    }
910    \RenewDocumentEnvironment{figure*}{o}{\old@figurest}%
911                                        {\old@endfigurest}
```

...as is table.

```
912    \expandafter\let\expandafter
913        \old@tablest\csname table*\endcsname
914    \expandafter\let\expandafter
915        \old@endtablest\csname endtable*\endcsname
916    \RenewDocumentEnvironment{table}{o}{%
917        \begin{gridenv}%
918        \vspace{\intextsep}%
919        \begin{minipage}{\linewidth}%
920        \def\@captype{table}%
921        \let\@old@caption\caption%
922        \renewcommand{\caption}[1]{%
```

```
923        \setlength{\@tempdima}{\abovecaptionskip}%
924        \setlength{\abovecaptionskip}{\belowcaptionskip}%
925        \setlength{\belowcaptionskip}{\@tempdima}%
926        \@old@caption{##1}%
927        \vspace{\belowcaptionskip}%
928    }%
929 }{%
930    \end{minipage}%
931    \vspace{\intextsep}%
932    \end{gridenv}%
933 }
934 \let\oldoldtablest\oldtablest
935 \renewcommand{\oldtablest}{%
936    \oldoldtablest%
937    \let\@old@caption\caption%
938    \renewcommand{\caption}[1]{%
939        \setlength{\@tempdima}{\abovecaptionskip}%
940        \setlength{\abovecaptionskip}{\belowcaptionskip}%
941        \setlength{\belowcaptionskip}{\@tempdima}%
942        \@old@caption{##1}%
943        \vspace{\belowcaptionskip}%
944    }%
945 }
946 \RenewDocumentEnvironment{table*}{o}{\old@tablest}%
947                                        {\old@endtablest}
```

onecol   (no arguments)

Finally, we define an environment onecol that typesets arbitrary material in a single column. This is a bit tricky to do, and probably cargo-cult as well. We define the start of the environment to immediately end itself (with the empty ending), then end the multiols environment, redefine our end macro to start multicols as well as redefining the start of onecol to simply reset itself, then start the environment again only to have it ended at once.

Basically, we trick LaTeX into thinking that we have an empty onecol environment at the end of the first multicols, then some content inside

a fake onecol, then an empty onecol at the start of the next multicols. Voil, no wierd group errors!

```
⟨class⟩ 948        \newenvironment{onecol}{
       949            \end{onecol}
       950            \end{multicols}
       951            \begingroup
       952            \def\endonecol{
       953                \endgroup
       954                \begin{multicols}{2}
       955                \let\old@onecol\onecol
       956                \def\onecol{
       957                    \let\onecol\old@onecol
       958                }
       959                \begin{onecol}
       960            }
       961            \def\onecol{}
       962            \begin{onecol}
       963        }{}
       964    }

⟨class⟩ 965 \fi
```

3.7.8 Miscellaneous

A macro \comment (alias \com/\note) is defined to let the user add comments and notes to the document.

\@comment   (no arguments)

```
⟨class⟩ 966 \NewDocumentCommand\@comment{m}{%
       967     {\textbf{Comment:} #1}%
       968 }
```

\comment (no arguments)

```
⟨class⟩ 969 \NewDocumentCommand\comment{sm}{%
```

```
970        \IfBooleanTF{#1}%
971            {\colorbox{red!50}{\@comment{#2}}}%
972            {\marginpar{\@comment{#2}}}%
973    }
```

\com(no arguments)

\note(no arguments)

⟨class⟩ 974 \ProvideDocumentCommand\com{sm}%
```
975        {\IfBooleanTF{#1}{\comment*{#2}}{\comment{#2}}}
976    \ProvideDocumentCommand\note{sm}%
977        {\IfBooleanTF{#1}{\comment*{#2}}{\comment{#2}}}
```

3.7.9 Color theme support

Color theme setup. Start by patching commands and declaring default
colors. Not implemented: background colors for e.g. quote environments
and sections headings, different colors for the different sectioning levels.

⟨class⟩ 978 \ifskrapport@color
```
979        \apptocmd{\bfseries}{\color{skrapport@boldcolor}}{}{\ClassError{skrapport}{Coul
980        \apptocmd{\itshape}{\color{skrapport@italiccolor}}{}{\ClassError{skrapport}{Coul
981        \apptocmd{\@titstyle}{\color{skrapport@titlecolor}}{}{\ClassError{skrapport}{Cou
982        \def\@smallprintstyle{\color{skrapport@smallprintcolor}}
983        \AtBeginDocument{%
984            \let\@abstractname\abstractname
985            \def\abstractname{\color{skrapport@titlecolor}\@abstractname}
986        }
987        \apptocmd{\quote}{\color{skrapport@quotecolor}}{}{}
988        \def\@captionstyle{\color{skrapport@captioncolor}}
989        \def\@emstyle{\color{skrapport@emphcolor}}
990        \ifskrapport@twocolumn\AtBeginDocument{%
991            \renewcommand\section{\@startsection {section}{1}{\z@}%
992                {-.999\baselineskip}{0.001\baselineskip}{\bfseries\mathversion{bold}\co
```

```
993      \renewcommand\subsection{\@startsection{subsection}{2}{\z@}%
994          {\baselineskip}{-.35\baselineskip}{\bfseries\color{skrapport@titlecolor}
995      \renewcommand\subsubsection{\@startsection{subsubsection}{3}{\z@}%
996          {\baselineskip}{-.35\baselineskip}{\itshape\color{skrapport@titlecolor}
997      }\fi
998      \renewcommand\paragraph{\@startsection{paragraph}{4}{\z@}%
999          {1ex \@plus .25ex \@minus -.25ex}{-1em}{\normalfont\normalsize\bfseries\col
1000      \renewcommand\subparagraph{\@startsection{subparagraph}{5}{\parindent}%
1001          {1ex \@plus .25ex \@minus -.25ex}{-1em}{\normalfont\normalsize\itshape\color
1002      \AtBeginDocument{\@ifpackageloaded{hyperref}{%
1003          \hypersetup{%
1004              citebordercolor=skrapport@citecolor,citecolor=skrapport@citecolor,%
1005              filebordercolor=skrapport@filecolor,filecolor=skrapport@filecolor,%
1006              linkbordercolor=skrapport@linkcolor,linkcolor=skrapport@linkcolor,%
1007              menubordercolor=skrapport@menucolor,menucolor=skrapport@menucolor,%
1008              urlbordercolor=skrapport@urlcolor,urlcolor=skrapport@urlcolor,%
1009              runbordercolor=skrapport@runcolor,runcolor=skrapport@runcolor%
1010          }
1011      }{}}
1012      \AtBeginDocument{\color{skrapport@defaultcolor}}
```

\colortheme(no arguments)

The \colortheme macro allows the end-user to load color themes
(described later) to customize the colors of the document when the class
is loaded with the color option.

⟨class⟩ 1013   \newcommand\colortheme[1]{\usepackage{skrapport-colortheme-#1}}

⟨class⟩ 1014   \colortheme{default}
1015 \fi

3.8 Final class setup

We end the document class by setting a few lengths along with the page
style and page numbering. Also, activate \raggedbottom and \onexolumn
(since we always do all the two-column stuff ourselves anyway).

```
⟨class⟩  1016  \setlength\columnsep{10\p@}
          1017  \setlength\columnseprule{0\p@}
          1018  \pagestyle{plain}
          1019  \pagenumbering{arabic}
          1020  \raggedbottom
          1021  \onecolumn
          1022  \endinput
```

3.9 Color themes

As described earlier, the user can load color themes to customize the appearance of the document if the class was loaded with the color option. Four themes are available by default.

3.9.1 Default color theme

Default (theme)

```
⟨theme-default⟩   1  \NeedsTeXFormat{LaTeX2e}[1999/12/01]
                  2  \ProvidesPackage{skrapport-colortheme-default}%
                  3      [2012/06/07 v1.0 skrapport color theme default]
                  4  \definecolor{skrapport@citecolor}{named}{green}
                  5  \definecolor{skrapport@filecolor}{named}{teal}
                  6  \definecolor{skrapport@linkcolor}{named}{red}
                  7  \definecolor{skrapport@menucolor}{named}{red}
                  8  \definecolor{skrapport@urlcolor}{named}{cyan}
                  9  \definecolor{skrapport@runcolor}{named}{teal}
                 10  \definecolor{skrapport@boldcolor}{named}{black}
                 11  \definecolor{skrapport@titlecolor}{named}{black}
                 12  \definecolor{skrapport@italiccolor}{named}{black}
                 13  \definecolor{skrapport@smallprintcolor}{named}{black}
                 14  \definecolor{skrapport@quotecolor}{named}{black}
                 15  \definecolor{skrapport@captioncolor}{named}{black}
                 16  \definecolor{skrapport@emphcolor}{named}{black}
                 17  \definecolor{skrapport@defaultcolor}{named}{black}
                 18  \endinput
```

3.9.2 Unscathed color theme

Unscathed (theme)

⟨theme-unscathed⟩
```
1  \NeedsTeXFormat{LaTeX2e}[1999/12/01]
2  \ProvidesPackage{skrapport-colortheme-unscathed}%
3      [2012/06/07 v1.0 skrapport color theme unscathed]
4  \definecolor{skrapport@citecolor}{named}{skrapport@defaultcolor}
5  \definecolor{skrapport@filecolor}{named}{skrapport@defaultcolor}
6  \definecolor{skrapport@menucolor}{named}{skrapport@defaultcolor}
7  \definecolor{skrapport@runcolor}{named}{skrapport@defaultcolor}
8  \definecolor{skrapport@emphcolor}{HTML}{463335}
9  \definecolor{skrapport@linkcolor}{HTML}{CF5D3B}
10 \definecolor{skrapport@urlcolor}{named}{skrapport@linkcolor}
11 \definecolor{skrapport@titlecolor}{HTML}{B34430}
12 \definecolor{skrapport@captioncolor}{named}{skrapport@titlecolor}
13 \definecolor{skrapport@quotecolor}{HTML}{70524A}
14 \definecolor{skrapport@smallprintcolor}{named}{skrapport@quotecolor}
15 \endinput
```

3.9.3 Cruelwater color theme

Cruelwater (theme)

⟨theme-cruelwater⟩
```
1  \NeedsTeXFormat{LaTeX2e}[1999/12/01]
2  \ProvidesPackage{skrapport-colortheme-cruelwater}%
3      [2012/06/07 v1.0 skrapport color theme cruelwater]
4  \definecolor{skrapport@citecolor}{named}{black}
5  \definecolor{skrapport@filecolor}{named}{black}
6  \definecolor{skrapport@linkcolor}{named}{black}
7  \definecolor{skrapport@menucolor}{named}{black}
8  \definecolor{skrapport@urlcolor}{named}{black}
9  \definecolor{skrapport@runcolor}{named}{black}
10 \definecolor{skrapport@boldcolor}{HTML}{030C22}
11 \definecolor{skrapport@titlecolor}{HTML}{20293F}
12 \definecolor{skrapport@italiccolor}{named}{black}
```

```
13  \definecolor{skrapport@smallprintcolor}{HTML}{A9B0B3}
14  \definecolor{skrapport@quotecolor}{HTML}{404749}
15  \definecolor{skrapport@captioncolor}{HTML}{030C22}
16  \definecolor{skrapport@emphcolor}{HTML}{20293F}
17  \definecolor{skrapport@defaultcolor}{named}{black}
18  \endinput
```

3.9.4 Violet color theme

Violet (theme)

⟨theme-violet⟩
```
 1  \NeedsTeXFormat{LaTeX2e}[1999/12/01]
 2  \ProvidesPackage{skrapport-colortheme-violet}%
 3      [2012/06/07 v1.0 skrapport color theme violet]
 4  \definecolor{skrapport@citecolor}{HTML}{932444}
 5  \definecolor{skrapport@filecolor}{HTML}{932444}
 6  \definecolor{skrapport@linkcolor}{HTML}{932444}
 7  \definecolor{skrapport@menucolor}{HTML}{932444}
 8  \definecolor{skrapport@urlcolor}{HTML}{932444}
 9  \definecolor{skrapport@runcolor}{HTML}{932444}
10  \definecolor{skrapport@boldcolor}{HTML}{311A2A}
11  \definecolor{skrapport@titlecolor}{HTML}{311A2A}
12  \definecolor{skrapport@italiccolor}{named}{black}
13  \definecolor{skrapport@smallprintcolor}{HTML}{D6CBCF}
14  \definecolor{skrapport@quotecolor}{HTML}{463335}
15  \definecolor{skrapport@captioncolor}{HTML}{311A2A}
16  \definecolor{skrapport@emphcolor}{HTML}{98758D}
17  \definecolor{skrapport@defaultcolor}{named}{black}
18  \endinput
```

3.9.5 skdoc color theme

skdoc (theme)

⟨theme-skdoc⟩
```
 1  \NeedsTeXFormat{LaTeX2e}[1999/12/01]
 2  \ProvidesPackage{skrapport-colortheme-skdoc}%
```

```
 3     [2013/04/10 v1.0 skrapport color theme skdoc]
 4 \definecolor{skrapport@citecolor}{RGB}{140,35,24}
 5 \definecolor{skrapport@filecolor}{RGB}{73,10,61}
 6 \definecolor{skrapport@linkcolor}{RGB}{140,35,24}
 7 \definecolor{skrapport@menucolor}{RGB}{140,35,24}
 8 \definecolor{skrapport@urlcolor}{RGB}{73,10,61}
 9 \definecolor{skrapport@runcolor}{RGB}{73,10,61}
10 \definecolor{skrapport@boldcolor}{RGB}{73,10,61}
11 \definecolor{skrapport@titlecolor}{RGB}{11,72,107}
12 \definecolor{skrapport@italiccolor}{named}{black}
13 \definecolor{skrapport@smallprintcolor}{RGB}{11,72,107}
14 \definecolor{skrapport@quotecolor}{RGB}{140,35,24}
15 \definecolor{skrapport@captioncolor}{RGB}{11,72,107}
16 \definecolor{skrapport@emphcolor}{RGB}{73,10,61}
17 \definecolor{skrapport@defaultcolor}{named}{black}
18 \endinput
```

4 Installation

The easiest way to install this package is using the package manager
provided by your LaTeX installation if such a program is available. Failing
that, provided you have obtained the package source (`skrapport.tex`
and `Makefile`) from either CTAN or Github, running `make install` inside
the source directory works well. This will extract the documentation and
code from `skrapport.tex`, install all files into the TDS tree at TEXMFHOME
and run `mktexlsr`.

If you want to extract code and documentation without installing the
package, run `make all` instead. If you insist on not using `make`, remember
that packages distributed using skdoc must be extracted using `pdflatex`,
not `tex` or `latex`.

5 Changes

v0.01

General: Initial version.

v0.02

`indent`: Added option of indented paragraphs.

v0.03

General: Removed `\rd` and `\id`.

v0.04

General: Added `microtype` package.

v0.05

General: Improved documentation.

v0.06

General: Corrected cheksum, further improved documentation.

v0.07

General: Various bugfixes, X𝖣LATEX compatibility, better float settings, quote style fix, `intlimits` option to amsmath.

`\license`: Added command `\license`.

`kpfonts`: Added option `kpfonts`, set as default option for fonts.

v0.07a

General: Fixed kpfonts issues.

v0.08

`twocolumn`: Added option `twocolumn`.

v0.09

General: Introduced kvoptions, fixed abstract in twocolumn mode.

`color`: Added `color` option.

`sftitles`: Added `sftitles` option.

Cruelwater: Added "Cruelwater" color theme.

Default: Added default color theme.

Unscathed: Added "Unschathed" color theme.

Violet: Added "Violet" color theme.

v0.10

General: Include skmath if exists and wanted. Gobble optional arguments to `figure` and `table` in two-column mode..

`onecol`: Fixed, now not completely broken.

`\comment`: Added macro for comments.

v0.10a

General: Include xparse (fixes breakage)..

v0.10b

\author: Improved \author macro.

\note: Fixed a silly error in \com and \note.

v0.10c

\@makecaption: Fix missing coloring command for some captions.

v0.11

General: Added minion for Adobe Minion Pro font.

minion: Added option minion.

v0.11a

General: Added skdoc font option and skdoc color theme.

__skrapport_title_style:: Removed incorrect \bfseries, replaced \relax with \rmfamily.

skdoc: Added option skdoc.

skdoc: Added "skdoc" color theme.

v0.12

a4paper: Option is now deprecated.

a5paper: Option is now deprecated.

bftitles: Option is now deprecated.

eng: Option is now deprecated.

kpfonts: Option is now deprecated.

lang: Incompatible change: values swe and eng are now sv and en, respectively.

lmodern: Option is now deprecated.

math: Option is now deprecated.

minion: Option is now deprecated.

nofont: Option is now deprecated.

noindent: Option is now deprecated.

onecolumn: Option is now deprecated.

palatino: Option is now deprecated.

paper: Values a4paper and a5paper are now deprecated.

rmtitles: Option is now deprecated.

sftitles: Option is now deprecated.

skdoc: Option is now deprecated.

swe: Option is now deprecated.

6 Index

Numbers written in italic refer to the page where the corresponding entry is described; numbers underlined refer to the page were the implementation of the corresponding entry is discussed. Numbers in roman refer to other mentions of the entry.

7 Bibliography

Caignaert, Christophe (2010). 'KP-Fonts 3.31'. In: url: `http://www.tex.ac.uk/tex-archive/fonts/kpfonts/doc/kpfonts.pdf`.

International Organization for Standardization, Technical Committee 6 (2007). *ISO 216:2007. Writing paper and certain classes of printed matter – Trimmed sizes – A and B series, and indication of machine direction.*