

# The **skrapport** document class<sup>\*†</sup>

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**Abstract** A document class intended for simple documents *e.g.* reports handed in to courses and such. It is small, straightforward and heavily inspired by the PracT<sub>E</sub>X Journal style.

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<sup>\*</sup>Available on <http://www.ctan.org/pkg/skrapport>.

<sup>†</sup>Development version available on <https://github.com/urdh/skrapport>.

## 1 Documentation

The `skrapport` document class aims to make typesetting simple but stylish documents (mostly reports) as effortless as possible. It does this by mostly reimplementing the default article class in  $\text{\LaTeX}$ 3, while making modifications to both form and function along the way.

Because it is reimplemented in  $\text{\LaTeX}$ 3, it may be incompatible with any number of packages that patch or otherwise modify internals of article or other document classes. For commonly used packages (especially those used frequently by the author), this shouldn't be a problem. The author gladly accepts reports of any such issues at the project issue tracker — see 'Known issues' on page 11.

### 1.1 Options

As with other document classes, the class is loaded, possibly with options, by issuing `\documentclass[options]{skrapport}`. The class has a number of options controlling both form and function, by *e.g.* setting the font size, selecting a font stack, setting the section title style, and so on.

#### 1.1.1 Layout

Two options controlling the overall layout of the document are provided. Collectively they control the paper size and text layout of the document.

`paper`     `a4`, `a5` (`a4`)

The `paper` option controls the paper size of the document. Internally, this is set by the `typearea` package, so in theory many more paper sizes could be available, but the current options cover most useful documents.

`twocolumn`     The `twocolumn` option sets up a two-column mode. This is not provided by internal  $\text{\LaTeX}$  mechanics as in the original article class, but instead by patching environments and macros and using a combination of the

multicol and grid packages. In theory, this means that baselines of adjacent columns should be aligned, and that three- or four-column modes are possible in the future (but that'd be ridiculous).

### 1.1.2 Style

A couple of options to control the style of the document are provided. Two of them, `leqno` and `fleqn`, are mainly provided for compatibility with the `article` class.

`leqno` This option makes display math environments typeset their labels on the left-hand side of the formula instead of the right-hand side.

`fleqn` This option makes display math environments left-align the entire formula as opposed to centering it.

`indent` true, false (false)

The `indent` option enables or disables the indentation of paragraphs, with the default being not to indent anything. The default behaviour thus is similar to that obtained using the `parskip` package with the `article` package.

`titles` rm, bf, sf (bf)

Section titles (and a few other elements) are controlled by this option in that they are typeset either using the regular roman font, the boldfaced roman font or the sans serif font. For historical reasons the default is a boldfaced roman font, but the sans serif option is very handsome.

`color` *<color theme>* (default)

This option tells the class to activate color theme support and optionally load a color theme. Several color themes are available (as detailed by ‘Color themes’ on page 10), and the special value `false` disables color support entirely (which only means that the `xcolor` package isn’t loaded, and that `\colortheme` remains undefined).

### 1.1.3 Fonts

Only two options control the font setup of the document class. The class provides the same point sizes as `article`, but also provides a large number of font stacks to choose from.

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

**Table 1:** *Font stacks provided by skrapport.*

Font stack	Serif font	Math font	Sans serif font	Monospace font
kpfonts	Kp-Fonts	Kp-Fonts	Kp-Fonts	Kp-Fonts
lmodern	Latin Modern	Latin Modern	Latin Modern	Inconsolata
palatino	T <sub>E</sub> X Gyre	—	—	Inconsolata
minion	Minion Pro	Minion Pro	—	Inconsolata
skdoc	PT Serif	—	Open Sans	Inconsolata
word	Cambria	Cambria Math	Calibri	Consolas

The document class provides the same three point sizes as the article class. There is room for expansion, but there really shouldn't be any reason to use other point sizes.

**font** none, kpfonts, lmodern, palatino, minion, skdoc, word(kpfonts)  
Several different font stacks, detailed by table 1, are provided. Most of these work with pdfL<sup>A</sup>T<sub>E</sub>X, but there are two special font stacks: none and word. The former, predictably, loads no fonts whatsoever leaving the document with Computer Modern fonts. This is useful if the fonts are replaced later anyway, such as when using XeL<sup>A</sup>T<sub>E</sub>X. The word font stack, however, does load a few fonts. The fonts must be present and installed on the system as OTF or TTF fonts, and the font stack requires either XeL<sup>A</sup>T<sub>E</sub>X or LuaL<sup>A</sup>T<sub>E</sub>X.

1.1.4 Functionality

The final three options affect functionality in one way or another. Since skrapport was originally designed for reports written in either swedish or english, the class always loads either babel or polyglossia with either of these languages. Additionally, the class may load the skmath package if desirable.

**math** true, false (true)  
When true, the skmath package is loaded, providing improvements to the math functionality of amsmath and friends.

**lang** en, sv (sv)

This option specifies what main language babel or polyglossia set up with. The other language is loaded as well, for use in constructs that allow for a second language.

**draft** true, false (false)  
The draft option, much like in article, enables `\overfullrules` and possibly similar functionality in loaded packages (if they react to the global draft option).

## 1.2 User-level commands and environments

Philosophy?

### 1.2.1 The front page

The front page is the part of the document that has seen the most changes in skrapport compared to article. In addition to the new, `PracTeX`-inspired layout, there are a few additional pieces of information in it. Also, the `\author` macro has been dramatically improved.

Also mention `\title` which isn't defined by us.

**\date** `{\ISO8601 date}`

The `\date` macro now internally employs `isodate` to typeset the date of the document. This means that the input must be either the string 'today', the token `\today` or a date as defined by ISO8601<sup>1</sup>. The mechanisms provided by `isodate` can be used to affect the output format.

**\author** `[\email]{\name}`

In contrast with the article package, the `\author` macro should no longer be used to typeset several author names at once. Instead, one `\author` command is to be issued for every author, optionally providing a corresponding email. These are then combined, in the order they are given, to form a list of authors and a corresponding list of email addresses.

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<sup>1</sup>International Organization for Standardization, Technical Committee 154 2004.

`\regarding {<topic>}`

This macro defines a topic or other short message detailing the purpose of the document. It is typeset along with the date in the upper left corner of the title page.

`\license {<license name>}`

The `\license` macro defines a short license name to be typeset in the lower right corner of the title page. This mechanism could of course be used to typeset an institution name or similar as well. It is only typeset when also using the `titlepage` environment described below.

`\maketitle`

As in article, the `\maketitle` macro typesets the information provided by `\title`, `\author` and friends to form a stylish front page. When combined with `abstract`, `titlepage` and/or `\tableofcontents`, you get a very good-looking preamble with almost no effort.

`\begin{abstract}`  
*<abstract text>*  
`\end{abstract}`

The `abstract` environment defines an abstract, which is typeset in a block with the `\abstractname` word next to it (see e.g. the title page of this manual for an example).

`\begin{titlepage}`  
*<title page contents>*  
`\end{titlepage}`

Normally, `\maketitle` doesn't reserve its own page. By enclosing `\maketitle` (and `abstract` if appropriate) in the `titlepage` environment, the contents are typeset on their own page, without page numbering and with the `\license` text in the lower right corner (if applicable).

### 1.2.2 Sectioning

```

\section    *[\short title]{\title}
\subsection *[\short title]{\title}
\subsubsection *[\short title]{\title}
\paragraph *[\short title]{\title}
\subparagraph *[\short title]{\title}

```

The sectioning macros are superficially very similar to those provided by article, but have been completely reimplemented in expl3 code. Additionally, the style of these sectioning macros, as detailed by the `titles` option documentation above, can be changed.

All of them have both arguments and behaviour in common, only differing in style. The starred versions are unnumbered, but still accept the optional short title (simply discarding it). The optional short title is used in the table of contents. The `secnumdepth` counter limits the depth of section numbering.

The first three macros, being section titles, are typeset as actual titles on their own line with appropriate spacing above and below. The paragraph macros instead typeset run-in titles.

### 1.2.3 Macros and environments from article

Aside from the `itemize` and `enumerate` environments and the font selection macros, which are carried without modification from L<sup>A</sup>T<sub>E</sub>X 2<sub>ε</sub>, a couple of environments and macros are defined.

The old font macros, whose use has been discouraged for a long time, are now deprecated. Instead of functioning correctly, they will emit an error and require user input. Use the `\*text??` macros instead. For emphasis, use the `\emph` macro.

```
\emph {\text}
```

Emphasized text will be typeset in italic, or bold italic if the macro is used in a context where italic is already used (such as inside another `\emph` invocation).

```

\begin{description}
\item[item] {description}
\end{description}

```

The `description` environment behaves as expected, typesetting a list of descriptions as in the article class.

<code>\begin{quote}</code> <i>⟨short quote⟩</i> <code>\end{quote}</code>	Intended for short quotes, the quote environment simply typesets a centered block of italic text.
<code>\begin{quotation}</code> <i>⟨long quote⟩</i> <code>\end{quotation}</code>	Longer quoted passages are typeset using the quotation environment. This is simply a quote environment with additional spacing above and below.
<code>\begin{verse}</code> <i>⟨pretentious poetry⟩</i> <code>\end{verse}</code>	The verse environment is intended for poetry and other text where line breaks are critical. Use <code>\\</code> to break lines.
<code>\appendix</code>	This macro signals the end of the main matter and the start of the appendix. In essence, it resets the section numbering counter and changes the section numbering to the upper-case alphabetic sequence.

#### 1.2.4 Floats

Both the figure and table float environments accept an optional positioning argument. The default positioning is tp. Both environments also have starred variants, which do nothing in one-column mode while typesetting the figure across both columns in two-column mode. As usual, `\centering`, `\caption` and `\label` should be used inside the floats.

<code>\begin{figure}</code> <i>⟨content⟩</i> <code>\end{figure}</code>	[position] This float environment is intended for figures. The most common contents are <code>\includegraphics</code> statements or <code>tikzpicture</code> environments.
<code>\begin{table}</code> <i>⟨content⟩</i> <code>\end{table}</code>	[position] A float intended for tables. Probably contains tabulars.

#### 1.2.5 Table of contents



`\tableofcontents`

The table of contents are typeset using this macro. The `tocdepth` counter limits the depth of the table of contents, but for stylistic reasons values higher than 3 are unsupported.

### 1.2.6 Miscellaneous

`\comment`  $\star\{\langle comment \rangle\}$   
`\note`  $\star\{\langle comment \rangle\}$   
`\com`  $\star\{\langle comment \rangle\}$

These macros, the two latter being aliases of the first one, typeset an author’s comment in the document. The starred variants typeset the comment inline with a red background, while the unstarred variant typesets the comment in a `\marginpar`.

### 1.2.7 Color theme support

`\colortheme`  $\{\langle theme \rangle\}$

The `\colortheme` macro, which is only available when the `color` option is true, applies a color theme to the document. For a list of available color themes, see ‘Color themes’ on the next page.

### 1.2.8 Font size macros

The font size macros, expectedly, set the size of the text. They do not take arguments, instead affecting all subsequent text of the current  $\text{T}_{\text{E}}\text{X}$  group, so use braces to provide and limit context. Also note that unlike article, these macros are *all* available, regardless of point size option.

`\tiny`

Typesets `\tiny` text.

`\scriptsize`

Typesets `script-size` text.

`\footnotesize`

Typesets footnote-sized text.

`\small`

Typesets small text.

`\normalsize`

Typesets normal text.

`\large`

Typesets large text.

`\Large`

Typesets slightly larger text.

`\LARGE`

Typesets even larger text.

`\huge`

Typesets huge text.

`\Huge`

Typesets really huge text.

### 1.3 Color themes

`\colortheme`  $\{\langle theme \rangle\}$

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<sup>2</sup>, 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<sup>3</sup>, 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 COLOURlovers palette<sup>4</sup>. It colors all links bright purple, applies a dark purple 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.

## 2 Known issues

A list of current issues is available in the Github repository of this package<sup>5</sup>, but as of the release of v0.12a-devel, there is one known issue:

- If a `\subsubsection` is the last item of the Table of Contents, it will not be indented properly.

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

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<sup>2</sup><http://www.colourlovers.com/palette/1440498/unscathed>

<sup>3</sup>[http://www.colourlovers.com/palette/126030/Cruel\\_Water\\_at\\_Night](http://www.colourlovers.com/palette/126030/Cruel_Water_at_Night)

<sup>4</sup>[http://www.colourlovers.com/palette/1831303/Violet\\_White\\_Bedrm](http://www.colourlovers.com/palette/1831303/Violet_White_Bedrm)

<sup>5</sup><https://github.com/urdh/skrapport/issues>

### 3 Installation

The easiest way to install this package is using the package manager provided by your  $\text{\LaTeX}$  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 `pdf $\text{\LaTeX}$` , *not* `tex` or `latex`.

### 4 Changes

v0.01

General: Initial version.

v0.03

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

v0.04

General: Added microtype package.

v0.05

General: Improved documentation.

v0.06

General: Corrected checksum, further improved documentation.

v0.07

General: Various bugfixes,  $\text{\LaTeX}$  compatibility, better float settings, quote style fix, `intllimits` option to `amsmath`.

v0.07a

General: Fixed `kpfonts` issues.

v0.09

General: Introduced `kvoptions`, fixed abstract in twocolumn mode.

v0.10

General: Include `skmath` if exists and wanted. Gobble op-

tional arguments to figure and table in two-column mode.	vo.11a	General: Added skdoc font option and skdoc color theme.
vo.10a		
General: Include xparse (fixes breakage).	vo.12	
vo.11		General: Deprecated several macros, moved to L <sup>A</sup> T <sub>E</sub> X3. Use of TOC depth above 3 is now unsupported.
General: Added minion for Adobe Minion Pro font.		

## 5 Index

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

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## 6 Bibliography

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