L'extension caption* Personnalisation des légendes de flottants

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http://sourceforge.net/projects/latex-caption/

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Résumé

L'extension caption permet de personnaliser les légendes de flottants comme figure et table et coopère avec de nombreuses autres extensions.

Note: de nombreuses classes de document disposent déjà d'options et de commandes internes pour personnaliser les légendes. Si ces possibilités vous suffisent, vous n'avez en général pas à vous servir de l'extension caption. Et si vous êtes juste intéressés par la commande \captionof, le chargement de la très petite extension capt-of est normalement suffisant.

Introduction

*Within the standard LATEX document classes captions haven't received the attention they deserve. Simply typeset as an ordinary paragraph there is no remarkable visual difference from the rest of the text, like here:

FIGURE 1 – White sand beaches. The pink smoothness of the conch shell. A sea abundant with possibilities. Duty-free shops filled with Europe's finest gifts and perfumes. Play your favorite game of golf amidst the tropical greens on one of the many championship courses.

There should be possibilities to change this; for example, it would be nice to make the text of the caption a little bit smaller as the normal text, add an extra margin, typeset the caption label with the same font family and shape as your headings etc. Just like this one:

FIGURE 2 – White sand beaches. The pink smoothness of the conch shell. A sea abundant with possibilities. Duty-free shops filled with Europe's finest gifts and perfumes. Play your favorite game of golf amidst the tropical greens on one of the many championship courses.

^{*}Ce fichier a pour numéro de version v3.3-144 et a été mis à jour le 02/11/2011. Son titre original est « Customizing captions of floating environments ».

You can do this easily with this package as there are many ready-to-use caption formatting options, but you are free to define your very own stuff, too.

Please note that l'extension caption is only controlling the look & feel of the captions. It does *not* control the placement of the captions. (But you could do so by using other packages like the floatrow package[8].)

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1 Using this package

\usepackage

Insert

```
\usepackage[\langle options \rangle] \{caption\}[2016/02/21]
```

into the preamble of your document, i.e. the part of your document between \class and \class and \class . The options control how your captions will look like; e.g.,

would result in captions looking like the second one in the introduction.

\captionsetup

For a later change of options l'extension caption provides the command

```
\captionsetup[\langle float type \rangle] {\langle options \rangle} .

So
\usepackage[margin=10pt, font=small, labelfont=bf] {caption}
and
\usepackage {caption}
\captionsetup {margin=10pt, font=small, labelfont=bf}
```

are equal in their results.

It's good to know that \captionsetup has an effect on the current environment only. So if you want to change settings for the current figure or table only, just place the \captionsetup command inside the figure or table right before the \caption command. For example

```
\begin{figure}
...
  \captionsetup{singlelinecheck=off}
  \caption{...}
\end{figure}
```

switches the single-line-check off, but only for this figure, so all the other captions remain untouched.

(For a detailed description of \captionsetup see section 3.2: Setting options.)

2 Options

2.1 Formatting

format=

A figure or table caption mainly consists of three parts: the caption label, which says if this object is a 'Figure' or 'Table' and what number is associated with it, the caption text itself, which is normally a short description of contents, and the caption separator which separates the text from the label.

The *caption format* determines how this information will be presented; it is specified with the option

```
format = \langle format \ name \rangle,
```

having the name of the caption format as its argument.

There are two standard caption formats:

olain Typesets the captions as a normal paragraph.

hang Indents the caption text, so it will 'hang' under the first line of the

text.

.. Own formats can be defined using \DeclareCaptionFormat.

(See section 4: Own enhancements)

An example: Specifying the option

```
format=hang
yields captions like this:
```

FIGURE 3 – White sand beaches. The pink smoothness of the conch shell. A sea abundant with possibilities. Duty-free shops filled with Europe's finest gifts and perfumes. Play your favorite game of golf amidst the tropical greens on one of the many championship courses.

indention=

For both formats (plain and hang) you can setup an extra indention starting at the second line of the caption. You do this with the option

```
indention = \langle amount \rangle.
```

Two examples:

```
format=plain,indention=.5cm
```

FIGURE 4 – White sand beaches. The pink smoothness of the conch shell. A sea abundant with possibilities. Duty-free shops filled with Europe's finest gifts and perfumes. Play your favorite game of golf amidst the tropical greens on one of the many championship courses.

```
format=hang,indention=-0.5cm
```

FIGURE 5 – White sand beaches. The pink smoothness of the conch shell. A sea abundant with possibilities. Duty-free shops filled with Europe's finest gifts and perfumes. Play your favorite game of golf amidst the tropical greens on one of the many championship courses.

labelformat= With the option

labelformat=\langle label format name \rangle

you specify how the caption label will be typeset. There are five standard caption label formats:

default	The caption label will l	be typeset as specified b	by the document class,

usually this means the name and the number (like simple). (This

is the default behaviour.)

empty The caption label will be empty.

The caption label will be typeset as a name and a number.

The caption label will be closed with a single (right) brace.

parens
The number of the caption label will be typeset in parentheses.

Own label formats can be defined using \DeclareCaption-

LabelFormat. (See section 4: Own enhancements)

An example : Using the options

format=plain, labelformat=parens, labelsep=quad
gives captions like this one:

FIGURE (6) White sand beaches. The pink smoothness of the conch shell. A sea abundant with possibilities. Duty-free shops filled with Europe's finest gifts and perfumes. Play your favorite game of golf amidst the tropical greens on one of the many championship courses.

Note: Some environments, e.g. the algorithm environment offered by the algorithm2e package, might react allergic to a change of the caption label format.

labelsep=

With the option

labelsep= $\langle labelseparator name \rangle$

you specify what caption separator will be used. ¹ You can choose one of the following:

none	There is no caption separator.
colon	The caption label and text will be separated by a colon and a space.
period	The caption label and text will be separated by a period and a space.
space	The caption label and text will be separated by a single space.
quad	The caption label and text will be separated by a .
newline	The caption label and text will be separated by a line break (\\). Please note that this separator does not work with all caption formats (e.g. format=hang), and you'll get an error message trying such combination of options.
endash	The caption label and text will be separated by an en-dash, surrounded by spaces ().
• • •	Own separators can be defined using \DeclareCaptionLabel-Separator. (See section 4: Own enhancements)

Three examples:

^{1.} If the caption label or the caption text is empty, no separator will be used.

format=plain,labelsep=period

FIGURE 7. White sand beaches. The pink smoothness of the conch shell. A sea abundant with possibilities. Duty-free shops filled with Europe's finest gifts and perfumes. Play your favorite game of golf amidst the tropical greens on one of the many championship courses.

```
format=plain,labelsep=newline,singlelinecheck=false
```

FIGURE 8

White sand beaches. The pink smoothness of the conch shell. A sea abundant with possibilities. Duty-free shops filled with Europe's finest gifts and perfumes. Play your favorite game of golf amidst the tropical greens on one of the many championship courses.

format=plain,labelsep=endash

FIGURE 9 – White sand beaches. The pink smoothness of the conch shell. A sea abundant with possibilities. Duty-free shops filled with Europe's finest gifts and perfumes. Play your favorite game of golf amidst the tropical greens on one of the many championship courses.

textformat=

With the option

```
textformat = \(\lambda text format name \rangle \)
```

you specify how the caption text will be typeset. There are two standard caption text formats:

2.2 Justification

justification=

As addition to the caption format you could also specify a *caption justification*; it is specified with the option

```
justification=\( justification name \) .
```

You can choose one of the following:

justified Typesets the caption as a normal paragraph.

centering Each line of the caption will be centered.

centerlast The last line of each paragraph of the caption text will be centered.

centerfirst Only the first line of the caption will be centered.

raggedright Each line of the caption will be moved to the left margin.

RaggedRight Each line of the caption will be moved to the left margin, too. But this time the command \RaggedRight of the ragged2e package will be used to achieve this. The main difference to raggedright

is that the word breaking algorithm of TEX will work inside cap-

raggedleft Each line of the caption will be moved to the right margin.

.. Own justifications can be defined using \DeclareCaptionJustification. (See section 4: Own enhancements)

Three examples:

format=plain, justification=centerlast

FIGURE 10 – White sand beaches. The pink smoothness of the conch shell. A sea abundant with possibilities. Duty-free shops filled with Europe's finest gifts and perfumes. Play your favorite game of golf amidst the tropical greens on one of the many championship courses.

format=hang, justification=raggedright

FIGURE 11 – White sand beaches. The pink smoothness of the conch shell. A sea abundant with possibilities. Duty-free shops filled with Europe's finest gifts and perfumes. Play your favorite game of golf amidst the tropical greens on one of the many championship courses.

White sand beaches. The pink smoothness of the conch shell. A sea abundant with possibilities. Duty-free shops filled with Europe's finest gifts and perfumes. Play your favorite game of golf amidst the tropical greens on one of the many championship courses.

singlelinecheck=

The standard LATEX document classes (article, report, and book) automatically center a caption if it fits in one single line :

FIGURE 13 – A short caption.

L'extension caption adapts this behavior and therefore usually ignores the justification & indention you have set with justification= & indention= in such case. But you can switch this special treatment of such short captions off with the option

singlelinecheck= $\langle bool \rangle$

Using false, no, off or 0 for $\langle bool \rangle$ switches the extra centering off:

singlelinecheck=false

Doing so the above short caption would look like

FIGURE 14 – A short caption.

You switch the extra centering on again by using true, yes, on or 1 for $\langle bool \rangle$. (The default is on.)

2.3 Fonts

font= There are three font options which affects different parts of the caption: One affecting the labelfont=

textfont=

whole caption (font), one which only affects the caption label and separator (labelfont) and at least one which only affects the caption text (textfont). You set them up using the options

```
\begin{split} & \text{font=} \{ \langle \textit{font options} \rangle \} & , \\ & \text{labelfont=} \{ \langle \textit{font options} \rangle \} & , \text{and} \\ & \text{textfont=} \{ \langle \textit{font options} \rangle \} & , \end{split}
```

where $\langle font \ options \rangle$ is a list of comma separated font options.

And these are the available font options:

scriptsize	Very small size
footnotesize	The size usually used for footnotes
small	Small size
normalsize	Normal size
large	Large size
Large	Even larger size
normalfont	Normal shape & series & family
up	Upright shape
it	Italic shape
sl	Slanted shape
sc	SMALL CAPS SHAPE
md	Medium series
bf	Bold series
rm	Roman family
sf	Sans Serif family
tt	Typewriter family
singlespacing	Single spacing (See section 6.12: setspace)
onehalfspacing	One-and-a-half spacing (See section 6.12: setspace)
doublespacing	Double spacing (See section 6.12: setspace)
$stretch=\langle amount \rangle$	$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$
normalcolor	\normalcolor
$color = \langle colour \rangle$	\color { $\langle colour \rangle$ } (If the color or xcolor package is loaded, see section 4: <i>Own enhancements</i> for an example)

^{2.} The need for the ragged2e package will be detected at run-time, therefore you maybe need a second \LaTeX run if this option is used for the first time.

normal
The combination of the options normalcolor, normalfont, normalsize, and singlespacing
...
Own font options can be defined using \DeclareCaptionFont. (See section 4: Own enhancements)

If you use only one of these options you can omit the braces; e.g., the options font={small} and font=small will give the same result.

Three examples:

```
font=it,labelfont=bf
```

FIGURE 15 – White sand beaches. The pink smoothness of the conch shell. A sea abundant with possibilities. Duty-free shops filled with Europe's finest gifts and perfumes. Play your favorite game of golf amidst the tropical greens on one of the many championship courses.

```
labelfont=bf, textfont=it
```

FIGURE 16 – White sand beaches. The pink smoothness of the conch shell. A sea abundant with possibilities. Duty-free shops filled with Europe's finest gifts and perfumes. Play your favorite game of golf amidst the tropical greens on one of the many championship courses.

```
font={small,stretch=0.80}
```

FIGURE 17 – White sand beaches. The pink smoothness of the conch shell. A sea abundant with possibilities. Duty-free shops filled with Europe's finest gifts and perfumes. Play your favorite game of golf amidst the tropical greens on one of the many championship courses.

font+=
labelfont+=
textfont+=

You can also add font options to the current ones, so for example

```
\captionsetup{font=small}
\captionsetup{font+=it}
```

is identical to

\captionsetup{font={small, it}}

2.4 Margins and further paragraph options

margin=
width=

For all captions you can specify *either* an extra margin *or* a fixed width: ³

```
\begin{array}{ll} \operatorname{margin} = \langle \mathit{amount} \rangle & -\mathit{or} - \\ \operatorname{margin} = \{ \langle \mathit{left amount} \rangle \text{, } \langle \mathit{right amount} \rangle \} & -\mathit{or} - \\ \operatorname{width} = \langle \mathit{amount} \rangle \end{array}
```

oneside twoside If you specify just one $\langle amount \rangle$ for the margin, it will be used for both, the left and right margin, e.g. margin=10pt is equivalent to margin={10pt,10pt}. In two-side documents the left and right margin will be swapped on even pages. To prevent this you can specify the option oneside additionally, e.g. \captionsetup{margin={0pt,10pt},oneside}.

But if you are specifying a width, then both, the left and the right margin, will have the same amount.

Three examples will illustrating this:

^{3.} Only fixed widths are supported here; if you are looking for a way to limit the width of the caption to the width of the figure or table, please take a look at the floatrow[8] or threeparttable[22] package.

margin=10pt

FIGURE 18 – White sand beaches. The pink smoothness of the conch shell. A sea abundant with possibilities. Duty-free shops filled with Europe's finest gifts and perfumes. Play your favorite game of golf amidst the tropical greens on one of the many championship courses.

margin={1cm,0cm}

FIGURE 19 – White sand beaches. The pink smoothness of the conch shell. A sea abundant with possibilities. Duty-free shops filled with Europe's finest gifts and perfumes. Play your favorite game of golf amidst the tropical greens on one of the many championship courses.

width=.75\textwidth

FIGURE 20 – White sand beaches. The pink smoothness of the conch shell. A sea abundant with possibilities. Duty-free shops filled with Europe's finest gifts and perfumes. Play your favorite game of golf amidst the tropical greens on one of the many championship courses.

Note: When the caption is placed beside the contents (for example in a SCfigure environment offered by the sidecap package[18]) or the figure is an in-text figure (for example in a wrapfigure environment offered by the wrapfig package[23]), the margin setting will be automatically reset to Opt at the very beginning of the environment. But if you really want to setup an extra margin for these environments, you can do so by setting this margin either inside the environment itself, of by specifying a margin for this particular environment, e.g. \captionsetup[SCfigure] {margin=10pt}.

margin*=

There is also a starred variant of the margin= option, margin*=, which only changes the margin if no width was set.

minmargin=
maxmargin=

You can also set a minimum or maximum margin amount. This can be useful for limiting the margin amount in smaller environments, e.g. minipages. For example the SMF document classes limit the margin amount to maxmargin=0.1\linewidth. (See section 5.6: SMF: smfart and smfbook)

parskip=

This option is useful for captions containing more than one paragraph. It specifies the extra vertical space inserted between them:

```
parskip=\(amount\)
```

One example:

```
margin=10pt,parskip=5pt
```

FIGURE 21 – First paragraph of the caption. This one contains some test, just to show how these options affect the layout of the caption.

Second paragraph of the caption. This one contains some text, too, to show how these options affect the layout of the caption.

hangindent=

The option

```
hangindent=\(amount\)
```

is for setting up a hanging indention starting from the second line of each paragraph. If the caption contains just a single paragraph, using this option leads to the same result as the option $indention = \langle amount \rangle$ you already know about. But if the caption contains multiple paragraphs you will notice the difference :

```
format=hang, indention=-.5cm
```

FIGURE 22 – First paragraph of the caption. This one contains some test, just to show how these options affect the layout of the caption.

Second paragraph of the caption. This one contains some text, too, to show how these options affect the layout of the caption.

```
format=hang, hangindent=-.5cm
```

FIGURE 23 – First paragraph of the caption. This one contains some test, just to show how these options affect the layout of the caption.

Second paragraph of the caption. This one contains some text, too, to show how these options affect the layout of the caption.

Note: If your caption contains more than one paragraph, you have to specify an alternative caption for the list-of-figures using the optional argument of \caption or \captionof, otherwise you will get an error message.

2.5 Styles

A suitable combination of caption options is called *caption style*. You can compare them more or less to page styles which you set up with \pagestyle; the caption style provides all settings for a whole caption layout.

You switch to an already defined caption style with the option

```
style = \langle style \ name \rangle.
```

L'extension caption pre-defines two styles : base and default.

The base style puts all options you already know about to values reflecting the look of the captions when using one of the base LATEX document classes article, report, and book. This means that specifying the option

```
style=base
```

has the same effect as specifying all these options:

```
format=plain, labelformat=default, labelsep=colon,
justification=justified, font={}, labelfont={},
textfont={}, margin=0pt, indention=0pt
parindent=0pt, hangindent=0pt, singlelinecheck=true
```

(But justification=centering, indention=0pt will be set if the caption fits into a single line.)

In contrast the default style follows the default values, reflecting the look of the captions given by the document class you actually use. This style is selected by default and represents these options:

```
format=default,labelformat=default,labelsep=default,
justification=default,font=default,labelfont=default,
textfont=default,margin=0pt,indention=0pt
parindent=0pt,hangindent=0pt,singlelinecheck=true
```

(But again justification=centering, indention=0pt will be set if the caption fits into a single line.)

So if you use one of the base LATEX document classes article, report, or book, both caption styles, base and default, point to (nearly) the same settings.

Note: Own caption styles can be defined using \DeclareCaptionStyle.(See section 4: *Own enhancements*)

2.6 Skips

skip= The vertical space between the caption and the figure or table contents is controlled by the option

```
skip=\langle amount \rangle .
```

The standard LATEX document classes article, report and book preset it to skip=10pt, but other document classes may use a different amount.

position=

The \caption command offered by LATEX has a design flaw: The command does not know if it stands on the beginning of the figure or table, or at the end. Therefore it does not know where to put the space separating the caption from the content of the figure or table. While the standard implementation always puts the space above the caption in floating environments (and inconsistently below the caption in longtables), the implementation offered by this package is more flexible: By giving the option

```
position=top or position=above
```

it's assumed that the caption is standing at the top of the environment and therefore the space setup with $skip=\langle amount\rangle$ is placed below the caption. (Please note that position=top does NOT mean that the caption is actually placed at the top of the figure or table. Instead the caption is usually placed where you place the \caption command.) But with

```
position=bottom or position=below
```

it's assumed that the caption is standing at the *bottom* of the environment and therefore the space is placed above the caption. And finally with

```
position=auto (which is the default setting)
```

l'extension caption tries its best to determine the actual position of the caption on its own. Please note that while this is successfully in most cases, it could give wrong results under rare circumstances.

figureposition=
 tableposition=

The position option is especially useful when used together with the optional argument of the \captionsetup command. (See also section 3.2: Setting options)

For example

```
\captionsetup[table] {position=above}
```

causes all captions within tables to be treated as captions *above* the table (regarding spacing around it). Because this is a very common setting, l'extension caption offers the abbreviating options figureposition= $\langle pos \rangle$ and tableposition= $\langle pos \rangle$, e.g.

```
\usepackage[...,tableposition=top]{caption}
is equivalent to
   \usepackage[...]{caption}
   \captionsetup[table]{position=top}
```

Please note that the options skip=, position=, figureposition=, and table-position= do not always have an effect. Since it's a matter of the document class to supply the environments figure and table, it could use its very own spacing, and could decide for itself if the caption will be typeset as "top" or "bottom" caption. For example the KOMA-Script document classes support the skip= setting, but will always typeset figure captions as "bottom" captions, and table captions are dependent on the global option tablecaptionsabove resp. tablecaptionsbelow. (See section 5.4: KOMA-Script: scrartcl, scrrept, and scrbook)

Furthermore some packages control the behavior of the spacing above and below the caption for themself, e.g. the float, the floatrow, and the supertabular package.

Internally the skip between caption and contents is represented by \abovecaptionskip (which is always set above the caption in LATEXs implementation). But there is a second value \belowcaptionskip (usually set to Opt by default) which is set below the caption in LATEXs implementation, but on the other side than \abovecaptionskip by this package. So technically speaking, this package swaps the meaning of these two skips when position=top is set. Please note that there are several packages around which do the same trick (like the ftcap, the nonfloat, and the topcap package), so the usage of the caption option position= is not supported if one of these packages will be used, too.

2.7 Lists

list=

The \caption command usually places an entry in the List of Figures resp. List of Tables. You can either suppress that individually by giving an empty optional argument to \caption (see section 3.1: *Typesetting captions*), or programmatically by saying

list=no (or any other boolean value instead of no) .4

listformat=

With the option

listformat=\langle list format name \rangle

you can specify how the figure or table number will be typeset within the List of Figures resp. List of Tables. There are five standard caption list formats:

empty	No number will be typeset.
simple	The number will be typeset with label prefix.
parens	The number will be typeset in parentheses, with label prefix.
subsimple	Same as simple, but without label prefix. (default)
subparens	Same as parens, but without label prefix.
• • •	Own list formats can be defined using \DeclareCaptionList-Format. (See section 4: Own enhancements)

^{4.} Please note that the subfig package [20] is not supporting this option, it uses the counters lofdepth & lotdepth for this purpose instead.

The prefix (=\p@figure resp. \p@table), which runs ahead of the number (=\the-figure resp. \thetable) in lists (e.g. List of Figure/Table) and references, is usually empty, so the list formats simple and subsimple gives equal results; same with parens and subparens. But this can be different for sub-figures or sub-tables listed in the List of Figures resp. List of Tables, or when the label prefix is redefined for a different purpose. ⁵

2.8 Names

name= The option

```
name = \langle name \rangle
```

changes the name of the *current* environment. This could be useful in conjunction with the optional argument of \captionsetup, e.g.

```
\captionsetup[wrapfigure] {name=Fig.}
```

changes the name to "Fig." for all wrapfigures (while all the other figure captions will still have "Figure" as name).

2.9 Types

type=

The \caption command can typeset captions for different types, e.g. figure and table. If you try to use the \caption command outside these environments you will get an error message, because it does not know what kind of caption do you want to have here. But in such situations you can set the caption type manually with

```
type = \langle float type \rangle
```

prior to the usage of the \caption command (and other commands like \Continued-Float, or \subcaptionbox offered by the subcaption package, or \subfloat offered by the subfig package[20]), for example within an non-floating environment like minipage:

```
\noindent\begin{minipage} {\textwidth}
  \captionsetup{type=figure}
  \subfloat{...}
  ...
  \caption{...}
\end{minipage}
```

There is also a starred variant of this option, $type *= \langle float \ type \rangle$, which behaves different than $type = \langle float \ type \rangle$ if the hyperref package[10] is loaded: While type = sets an hyperlink anchor (if hypeap = true is set), type *= does not. (See also section 6.5: hyperref)

Note: Please don't re-define the internal macro $\ensuremath{\texttt{Qcaptype}}$ for yourself, like suggested by some documentations, always use $\ensuremath{\texttt{Qcaptype}}$: instead.

Own float types can be defined with \DeclareFloatingEnvironment offered by the newfloat package, \newfloat offered by the float package[6], or \DeclareNew-FloatType offered by the floatrow package[6].

Please note that you should use the option type= only *inside* boxes or environments (like \parbox or minipage), at best one where no page break could happen between contents and caption. Furthermore some visual side-effects (e.g. mixed-up figure and table settings regarding captions) could occur without using a box or environment, therefore a warning message will be issued if you try to do so. ⁶

^{5.} Sub-figures and sub-tables can be typeset using the subcaption or subfig package.

^{6.} You only get this warning message if you use ε -T_EX as underlying T_EX engine.

3 Commands

3.1 Typesetting captions

\caption

The command

```
\langle caption[\langle list\ entry \rangle] \{\langle heading \rangle\}
```

typesets the caption inside a floating environment like figure or table. Well, you already know this, but l'extension caption offers an extension : If you leave the argument $\langle list\ entry \rangle$ empty, no entry in the list of figures or tables will be made. For example :

```
\caption[]{A figure without list entry.}
```

Please remember that the $\langle heading \rangle$ is a so-called *moving* argument, if no $\langle list\ entry \rangle$ has been given. But if a $\langle list\ entry \rangle$ is given, this argument is moving instead. "*Moving* argument" means that the argument will be written to the list-of file, make it appearing in the "List of Figures" resp. "List of Tables", too. *Moving* arguments are not allowed to contain *fragile* commands, everything must be *robust*, otherwise the argument could get *broken*, resulting in strange errors at the next Late X run. Some *fragile* commands could be *protected* by a leading <code>\protect</code>, own definitions could get defined with <code>\DeclareRobustCommand</code> instead of <code>\newcommand</code> to make them *robust*.

An example : \caption{\${}^{137}_{\phi} constant of \${}^{137}_{\phi} constant of \${}^{137}_{\phi} constant of \$fragile. So we have either have to use the optional argument \$\$\langle list entry \rangle\$ (e.g. \caption[\${}^{137}_{55}\$Cs]{\${}^{137}_{\phi} constant of \$\$\langle list entry \rangle\$ (e.g. \caption[\${}^{137}_{55}\$Cs] \$\$\langle list entry \rangle\$ (e.g. \caption[\${}^{137}_{55}\$Cs]) or add \protect to prevent the \phantom command from getting \$\$broken: \caption{\${}^{137}_{\phi} (protect 55)\$Cs}.

But sometimes even this is not sufficient. The reason behind is the so-called single-line-check: It puts the $\langle heading \rangle$ into a horizontal box to determine the width of the caption, and this could cause error messages, too. An example: $\coloning A scheme. \coloning A scheme. \colon$

For more information about *moving* arguments and *fragile* & *robust* commands, take a closer look at your LATEX manual or visit http://www-h.eng.cam.ac.uk/help/tpl/textprocessing/teTeX/latex/latex2e-html/fragile.html.

\caption*

The longtable package defines the command \caption* which typesets the caption without label and without entry in the list of tables. An example :

```
\begin{longtable}{...}
  \caption*{A table}\\
   ...
\end{longtable}
```

looks like

A table

L'extension caption offers this feature, too, so you can use this command now within every floating environment like figure or table, like:

```
\begin{table}
  \caption*{A table}
  ...
\end{table}
```

\captionof \captionof*

Sometimes you want to typeset a caption *outside* a floating environment, putting a figure within a non-floating minipage for instance. For this purpose l'extension caption offers the command

```
\colon \{ \langle float type \rangle \} [\langle list entry \rangle] \{ \langle heading \rangle \}
```

Note that the first argument, the $\langle float\ type \rangle$, is mandatory here, because the \captionof command needs to know which name to put into the caption label (e.g. "Figure" or "Table") and in which list to put the contents entry. An example :

```
\captionof{table}{A table}
```

typesets captions like this:

TABLE 1 - A table

The star variant \captionof* has the same behavior as the \caption* command: It typesets the caption without label and without entry to the list of figures or tables.



Since \captionof uses the option type internally, the same restrictions as for the type option apply here, so you should use both \captionof and \captionof* only *inside* boxes or environments, too. (See section 2.9: *Types*)

\captionlistentry

Under certain circumstances it could be useful to make a list-of-figure (or table) entry on its own. This could be achieved with

```
\captionlistentry[\langle float\ type \rangle] {\langle list\ entry \rangle} .
```

One example: It's quite easy to have a longtable with captions above the contents and a single list entry which points to the first page of the table:

```
\begin{longtable} {... }
   \caption{... } \
\endfirsthead
   \caption[] {... } \
\endhead
```

But since the longtable package does not offer an $\ensuremath{\mathsf{Nendfirstfoot}}$ command, you cannot easily have captions below the table contents and a single list entry which points to the first page of the table. Here is were the $\ensuremath{\mathsf{Nendfirstfoot}}$ command could be used:

```
\begin{longtable}{...}
  \caption[]{...}\\
\endfoot
  \captionlistentry{...}
```

(Another example can be found in section 4.1: Further examples.)

There is also a starred variant, \captionlistentry*, which does not increment the \(\float type \) counter. (Note that inside longtable environments \captionlistentry never increments the table counter. See also section 6.8: longtable.)

Please note that $\langle list\ entry \rangle$ is a *moving* argument, so everything it contains must be *robust*. (See also explanation of \caption)

3.2 Setting options

\captionsetup

We already know the \captionsetup command (see section 1: *Using this package*), but this time we get enlighten about its optional argument $\langle float \ type \rangle$.

Remember, the syntax of this command is

```
\colon \colon
```

If a $\langle float\ type \rangle$ gets specified, all the $\langle options \rangle$ don't change anything at this time. Instead they only get marked for a later use, when a caption inside of a floating environment of the particular type $\langle float\ type \rangle$ gets typeset. For example

```
\captionsetup[figure] {\langle options \rangle \}
```

forces captions within a figure environment to use the given *(options)*.

Here comes an example to illustrate this:

```
\captionsetup{font=small}
\captionsetup[figure]{labelfont=bf,textfont=it}
gives captions like this:
```

FIGURE 24 – A figure

TABLE 2 – A table

As you see the command \captionsetup[figure] {...} only changes the look of the figure caption labels, not touching the other ones.

As \(\langle float type \rangle \) you can usually give one of these two only: figure or table. But as we will see later some LATEX packages (like the floatrow, longtable, and sidecap package for example) and also this package offer additional environments with captions and these two commands can also be used with them. (See section 4: Own enhancements and section 6: Package support)

There is also a starred variant of $\colon setup$:

```
\captionsetup*[\langle float type \rangle] {\langle options \rangle}
```

While the non-starred variant can give you warnings—for example if the $\langle options \rangle$ are actually not used throughout the document (e.g. a \captionsetup[table] {font=sf} without a table)—the starred variant will not.

\clearcaptionsetup

If you want to get rid of these parameters marked for an automatic use within a particular environment you can use the command

```
\clearcaptionsetup[\langle option \rangle] \{\langle float \ type \rangle\}.
```

For example $\clearcaptionsetup\{figure\}\$ would clear all the extra handling for figures in the example above :

```
\captionsetup{font=small}
\captionsetup[figure]{labelfont=bf,textfont=it}
...
  \caption{A figure}
...
\clearcaptionsetup{figure}
...
  \caption{A figure}
...
```

FIGURE 25 - A figure

FIGURE 26 – A figure

If an optional argument $\langle option \rangle$ is given, only the settings regarding this particular $\langle option \rangle$ are cleared. While the example above not only clears the options labelfont=bf, textfont=it for figures (but all options for figures instead), this one would only clear the labelfont=bf setting, leaving all other settings for figures intact:

```
\captionsetup{font=small}
\captionsetup[figure] {labelfont=bf, textfont=it}
...
   \caption{A figure}
...
\clearcaptionsetup[labelfont] {figure}
...
   \caption{A figure}
...
   \rmaterial \text{FIGURE 27 - A figure}
```

FIGURE 28 - A figure

Analogous to \captionsetup* there is also a starred form \clearcaptionsetup* which suppresses warnings if the given $\langle option \rangle$ was not setup for the specified $\langle float\ type \rangle$.

\showcaptionsetup

For debugging purposes the command

```
\showcaptionsetup{\langle float \ type \rangle}
```

is offered. It generates a log file entry, showing the given options for the specified $\langle float type \rangle$. For example

```
\captionsetup[figure] {labelfont=bf,textfont=it}
\showcaptionsetup{figure}

gives the info:
    Caption Info: Option list on 'figure'
    Caption Data: {labelfont=bf,textfont=it} on input line 5.
```

^{7.} You can only specify *one* option here, not a list of options. If you want to clean more than one option, you need to use more than one \clearcaptionsetup.

3.3 Continued floats

\ContinuedFloat

Sometimes you want to split figures or tables without giving them their own reference number. This is what the command

```
\ContinuedFloat
```

is for; it should be used as first command inside the floating environment. It prevents the incrementation of the relevant counter (usually done by \caption), so a figure or table containing a \ContinuedFloat inside gets the same reference number as the figure or table before. An example :

```
\begin{table}
    \caption{A table}
    ...
  \end{table}
    ...
  \begin{table}\ContinuedFloat
    \caption{A table (cont.)}
    ...
  \end{table}
gives the following result:

    TABLE 3 - A table
    ...

TABLE 3 - A table (cont.)
```

Furthermore the \ContinuedFloat command executes options associated with the type name "ContinuedFloat". For example this can be used to switch to a different label format for continued figures or tables, as shown here:

```
\DeclareCaptionLabelFormat{continued} {Continued #1~#2}
\captionsetup[ContinuedFloat] {labelformat=continued}
...
\begin{table}\ContinuedFloat
   \caption{A table}
...
\end{table}
```

Continued TABLE 3 – A table

(See section 4: Own enhancements for an explanation of \DeclareCaptionLabelFormat.)

There is also a LATEX counter called <code>ContinuedFloat</code> which could be used for own purposes. For ordinary (floating) environments it's set to zero, to one for the first continued float, to two inside the second one, and so on. So every <code>\ContinuedFloat</code> increments this counter and a floating environment without <code>\ContinuedFloat</code> command resets this counter to zero. An example :

```
\DeclareCaptionLabelFormat{cont}{#1~#2\alph{ContinuedFloat}}
\captionsetup[ContinuedFloat]{labelformat=cont}
...
\begin{table}\ContinuedFloat
   \caption{A table}
...
\end{table}
TABLE 3c - A table
```

A reference to this table would still result in the output "Tableau 3" since only the caption label format was changed. If you would like to use the ContinuedFloat counter for the references, too, you could redefine the command \theContinuedFloat instead, which will be appended to the figure or table counter automatically in continued floats and is preset to be empty.

```
\renewcommand\theContinuedFloat{\alph{ContinuedFloat}}
...
\begin{table}\ContinuedFloat
   \caption{A table}
   ...
\end{table}
```

Table 3d - A table

. . .

A reference to that table would result in the output "Tableau 3d".

\ContinuedFloat*

Suppose you want to start the first figure or table of such a series with a kind of "Figure 7a" and not with "Figure 7" (and the second one with "Figure 7b" instead of "Figure 7a"). This is possible, too, by using the starred variant \ContinuedFloat* which—just like \ContinuedFloat—executes options associated with the type name "ContinuedFloat" and increments the LATEX counter ContinuedFloat, but marks the first figure or table of a series instead:

```
\renewcommand\theContinuedFloat{\alph{ContinuedFloat}}
...
\begin{figure}\ContinuedFloat*
...
  \caption{First figure of a series}
\end{figure}
...
\begin{figure}\ContinuedFloat
...
  \caption{Second figure of a series}
\end{figure}
...
\begin{figure}\ContinuedFloat
...
  \caption{Second figure of a series}
...
\begin{figure}\ContinuedFloat
...
\begin{figure}\ContinuedFloat
...
\end{figure}\ContinuedFloat
```

```
\caption{Third figure of a series}\
\end{figure}

FIGURE 29a - First figure of a series

FIGURE 29b - Second figure of a series

FIGURE 29c - Third figure of a series
```

Note: Unfortunately \ContinuedFloat* is not available if the subfig package[20] is loaded.

A note about longtables

If you want to have a different caption label in longtables (offered by the longtable package[13]) after a page break, this can not be archived by using \ContinuedFloat, but instead you could write something like:

```
\DeclareCaptionLabelFormat{continued}{Continued #1~#2}
...
\begin{longtable}{...}
  \caption{A longtable}\\
\endfirsthead
  \captionsetup{labelformat=continued}
  \caption[]{A longtable}\\
\endflongtablead
  ...
\end{longtable}
```

4 Own enhancements

A family of commands is provided to allow users to define their own formats etc. This enables information on separators, justification, fonts, and styles to be associated with a name and kept in one place. (These commands need to appear in the document preamble, this is the part between \documentclass and \begin{document}.)

\DeclareCaption-Format You can define your own caption formats using the command

\DeclareCaptionFormat $\{\langle name \rangle\} \{\langle code \ using \#1, \#2 \ and \#3 \rangle\}$.

At usage the system replaces #1 with the caption label, #2 with the separator and #3 with the text. So the standard format plain is pre-defined by l'extension caption as

```
\DeclareCaptionFormat{plain}{#1#2#3\par} .
```

There is also a starred variant, \DeclareCaptionFormat*, which causes the code being typeset in TeXs vertical (instead of horizontal) mode, but does not support the indention= option.

\DeclareCaption-LabelFormat Likewise you can define your own caption label formats:

```
\DeclareCaptionLabelFormat { \( name \) \} \{ \( code using #1 \) and #2 \) \}
```

At usage #1 gets replaced with the name (e.g. "figure") and #2 gets replaced with the reference number (e.g. "12"). An example :

```
\DeclareCaptionLabelFormat{bf-parens}{(\textbf{#2})}
\captionsetup{labelformat=bf-parens, labelsep=quad}
```

(30) White sand beaches. The pink smoothness of the conch shell. A sea abundant with possibilities. Duty-free shops filled with Europe's finest gifts and perfumes. Play your favorite game of golf amidst the tropical greens on one of the many championship courses.

\bothIfFirst \bothIfSecond

If you define your own caption label formats and use the subcaption or subfig[20] package, you should take care of empty caption label names. For this purpose the commands

```
\bothIfFirst{\langle first \ arg \rangle} {\langle second \ arg \rangle} and \bothIfSecond{\langle first \ arg \rangle} {\langle second \ arg \rangle}
```

are offered. \bothIfFirst tests if the first argument exists (means: is not empty), \bothIfSecond tests if the second argument exists. If yes, both arguments get typeset, otherwise none of them.

For example the standard label format simple is *not* defined as

```
\DeclareCaptionLabelFormat{simple}{#1~#2} ,
```

because this could cause an extra space if #1 is empty. Instead simple is defined as

```
\label{lem:labelFormat} $$ \end{areCaptionLabelFormat} $$ \begin{array}{ll} $$ (\bothIfFirst{#1}{~}#2) $$, $$ (\end{array}) $$ (\end{array})
```

causing the space to appear only if the label name is present.

\DeclareCaption-TextFormat Likewise you can define your own caption text formats:

 $\verb|\DeclareCaptionTextFormat{|\langle name \rangle| \{\langle code \ using \ \#I \rangle\}|}$

At usage #1 gets replaced with the caption text.

\DeclareCaption-LabelSeparator You can define your own caption label separators with

```
\DeclareCaptionLabelSeparator\{\langle name \rangle\} \{\langle code \rangle\}.
```

Again an easy example taken from l'extension caption itself :

```
\DeclareCaptionLabelSeparator{colon}{: }
```

There is also a starred variant, \DeclareCaptionLabelSeparator*, which causes the code being type-set without using the labelfont= setting. So for example the label separators quad, newline, and endash are defined in this way.

\DeclareCaption-Justification

You can define your own caption justifications with

```
\DeclareCaptionJustification{\langle name \rangle} {\langle code \rangle}.
```

The $\langle code \rangle$ simply gets typeset just before the caption. E.g. using the justification raggedright, which is defined as

\DeclareCaptionJustification{raggedright}{\raggedright} ,

typesets captions with all lines moved to the left margin.

\DeclareCaption-Font

You can define your own caption fonts with

```
\DeclareCaptionFont{\langle name \rangle}{\langle code \rangle} .
```

For example this package defines the options small and bf as

```
\DeclareCaptionFont{small}{\small} and
\DeclareCaptionFont{bf}{\bfseries} .
```

An example which brings color into life:

```
\usepackage{color}
\DeclareCaptionFont{red} {\color{red}}
\DeclareCaptionFont{green} {\color{green}}
\DeclareCaptionFont{blue} {\color{blue}}
\captionsetup{labelfont={blue,bf},textfont=green}
```

FIGURE 31 – White sand beaches. The pink smoothness of the conch shell. A sea abundant with possibilities. Duty-free shops filled with Europe's finest gifts and perfumes. Play your favorite game of golf amidst the tropical greens on one of the many championship courses.

But since l'extension caption already includes the tricky definition

\DeclareCaption-Style

You can define your own caption styles with

```
\DeclareCaptionStyle\{\langle name \rangle\} [\langle additional\ options \rangle] \{\langle options \rangle\}.
```

Remember, caption styles are just a collection of suitable options, saved under a given name. You can wake up these options at any time with the option style=\style name\.

All caption styles are based on the base set of options. (See section 2.5: *Styles* for a complete list.) So you only need to specify options which are different to them.

If you specify $\langle additional\ options \rangle$ they get used in addition when the caption fits into a single line and this check was not disabled with the option singlelinecheck=off.

Again a very easy example taken from the core of this package: The caption style base is predefined as

FIGURE 32: A short caption.

\DeclareCaption-ListFormat You can define your own caption list formats with

```
\DeclareCaptionListFormat\{\langle name \rangle\} \{\langle code \ using \#1 \ and \#2 \rangle\}.
```

At usage #1 gets replaced with the label prefix (e.g. \p@figure), and #2 gets replaced with the reference number (e.g. \thefigure).

4.1 Further examples

Example 1

If you would like to have a line break between caption label and text you could define it this way : $\label{like to have a line break between caption label and text you could define it this way : \\ \label{like to have a line break between caption label and text you could define it this way : \\ \label{like to have a line break between caption label and text you could define it this way : \\ \label{like to have a line break between caption label and text you could define it this way : \\ \label{like to have a line break between caption label and text you could define it this way : \\ \label{like to have a line break between caption label and text you could define it this way : \\ \label{like to have a line break between caption label and text you could define it this way : \\ \label{like to have a line break between caption label and text you could define it this way : \\ \label{like to have a line break between caption label and text you could define it this way : \\ \label{like to have a line break between caption label and text you could define it this way : \\ \label{like to have a line break between caption label and text you could define it this way : \\ \label{like to have a line break between caption label and text you could define it this way : \\ \label{like to have a line break between caption label and text you could define it this way : \\ \label{like to have a line break between caption label and text you could define it this way : \\ \label{like to have a line break between caption label and text you could define it this way : \\ \label{like to have a line break between caption label and text you could define it this way : \\ \label{like to have a line break between caption label and text you could define it this way : \\ \label{like to have a line break between caption label and text you could define it this way : \\ \label{like to have a line break between caption label and text you could define it this way : \\ \label{like to have a line break between caption label and text you could define it this way : \\ \la$

If you select this format with \captionsetup{format=myformat} you get captions like this:

FIGURE 34 -

White sand beaches. The pink smoothness of the conch shell. A sea abundant with possibilities. Duty-free shops filled with Europe's finest gifts and perfumes. Play your favorite game of golf amidst the tropical greens on one of the many championship courses.

You could even use an indention with this caption format:

```
\captionsetup{format=myformat,indention=1cm}
```

This would look like this:

FIGURE 35 -

White sand beaches. The pink smoothness of the conch shell. A sea abundant with possibilities. Duty-free shops filled with Europe's finest gifts and perfumes. Play your favorite game of golf amidst the tropical greens on one of the many championship courses.

Instead, you would like to have an indention only of the first line of the caption text? No problem, e.g.

would give you captions like

FIGURE 36 -

White sand beaches. The pink smoothness of the conch shell. A sea abundant with possibilities. Duty-free shops filled with Europe's finest gifts and perfumes. Play your favorite game of golf amidst the tropical greens on one of the many championship courses.

But you want to have an caption option for this indention, so you can use it for example with \captionsetup[figure] {myindention=...}? This could be done, too:

Example 2

You want captions to look like this:

White sand beaches. The pink smoothness of the conch shell. A sea abundant with possibilities. Duty-free shops filled with Europe's finest gifts and perfumes. Play your favorite game of golf amidst the tropical greens on one of the many championship courses.

(FIGURE 37)

You could do it this way:

Example 3

The caption text should go into the left margin? A possible solution would be:

```
\label{lap} $$ \end{1} ap { $11ap { $1$42} $3 $ \captionsetup { format=llap, labelsep=quad, single line check=no } $$
```

As a result you would get captions like this:

FIGURE 38 White sand beaches. The pink smoothness of the conch shell. A sea abundant with possibilities. Duty-free shops filled with Europe's finest gifts and perfumes. Play your favorite game of golf amidst the tropical greens on one of the many championship courses.

If the indention into the margin shall be fixed, you could use a combination of \label{lap} and \label{lap} and \label{lap} for example :

FIGURE 39 White sand beaches. The pink smoothness of the conch shell. A sea abundant with possibilities.

Duty-free shops filled with Europe's finest gifts and perfumes. Play your favorite game of golf amidst the tropical greens on one of the many championship courses.

Example 4

This example puts a figure aside a table, but uses only one common caption for both. This will be achieved by a combination of $\DeclareCaptionLabelFormat$ and \captionlistentry :

FIGURE 40 & TABLE 4 – A figure and a table with a common caption ⁸

(Please remember that \captionlistentry increments the figure resp. table counter.)

^{8.} The picture was taken with permission from the LATEX Companion[1] examples.

5 Document classes & Babel support

This section will give you an overview of the document classes the caption supports, what do they already offer regarding captions, what side effects will occur when using the caption package with them, and what are the 'default' settings for them.

The 'default' settings depend on the document class you use; they represent how the class author wanted the captions to look like. So for example setting format=default can give you different visual designs when used with different document classes.



If you don't find the document class you use in this section, you usually don't have to worry: Many document classes (e.g. the octavo class) are derived from one of the standard document classes article, report, or book, and behave the same regarding captions. L'extension caption automatically does a compatibility check against the document class used and will give you the clear warning

Package caption Warning: Unsupported document class (or package) detected, (caption) usage of the caption package is not recommended. See the caption package documentation for explanation.

if such an incompatibility was detected. If you don't get such warning everything is fine, but if you get it the usage of l'extension caption is not recommended and especially not supported.

If you get such a compatibility warning but decide to use l'extension caption anyway, you should watch carefully what side-effects occur, usually the look and feel of your captions will change by just including l'extension caption without options, meaning they do not look like as intended by the author of the document class. If this is fine for you, you should first specify the option style=base via \usepackage[style=base] {caption} or \captionsetup{style=base} to set l'extension caption into a well-defined state. Afterwards you can start setting your own options additionally and keep your fingers crossed.

5.1 Standard LATEX: article, report, and book

Option	default value	
format=	plain	
labelformat=	simple	
labelsep=	colon	
justification=	justified	
font=	none	
labelfont=	none	
textfont=	none	

(This also applies to document classes derived from them.)

5.2 AMS: amsart, amsproc, and amsbook

Option	default value
format=	plain
labelformat=	simple
labelsep=	.\enspace
justification=	justified
font=	\@captionfont
labelfont=	\@captionheadfont
textfont=	\@captionfont\upshape

(\@captionfont will be set to \normalfont, and \@captionheadfont to \scshape by the $\mathcal{A}_{\!M}\mathcal{S}$ document classes.)

Furthermore the margin will be set to \captionindent for more-than-one-line captions (which will be set to 3pc by the $\mathcal{A}_{\mathcal{M}}\mathcal{S}$ classes), the margin for single-line captions will be set to the half of it instead. If you want to use a common margin for both, insert \clearcaptionsetup[margin*] {singleline} into the preamble of your document, after loading l'extension caption.

Additionally the options figureposition=b, tableposition=t will be set. You can override these settings by specifying other values for figureposition= or tableposition= in the option list while loading l'extension caption.

5.3 beamer

Option	default value
format=	plain
labelformat=	not numbered
labelsep=	colon
justification=	raggedright
font=	beamer "caption" settings
labelfont=	beamer "caption name" settings
textfont=	none

Build-in features, and side-effects

You can setup font and color settings with \setbeamerfont{caption} { $\langle options \rangle$ } and \setbeamerfont{caption name} { $\langle options \rangle$ }. This will still work, unless you set a different font with \captionsetup{font= $\langle options \rangle$ } or \captionsetup{labelfont= $\langle options \rangle$ }.

Furthermore the beamer classes offer different caption templates which can be chosen with \setbeamertemplate{caption} [$\langle template \rangle$]. Since l'extension caption replaces this caption template mechanism, \defbeamertemplate*{caption} { $\langle template \rangle$ } and \setbeamertemplate{caption} [$\langle template \rangle$] will have no effect when l'extension caption is used. (Exception: Selecting the template default, numbered, or caption name own line will be recognized by l'extension captionand be mapped to corresponding options.)

5.4 KOMA-Script : scrartcl, scrreprt, and scrbook

Option	default value
format=	<pre>uses \setcapindent & \setcaphanging settings</pre>
labelformat=	like simple, but with support of "autodot"
labelsep=	\captionformat
justification=	justified
font=	\setkomafont{caption} settings
labelfont=	\setkomafont{captionlabel} settings
textfont=	none

Build-in features

The KOMA-Script document classes offer many ways to customize the look and feel of the captions. For an overview and a full description please take a look at the KOMA-Script documentation, section 'Tables and Figures'.

Side effects

The optional argument of \setcapwidth is not supported and will be ignored if used in conjunction with the caption package. Furthermore the KOMA-Script options tablecaptionabove & tablecaptionbelow and the commands \captionabove & \captionbelow are stronger than the position= setting offered by the caption package.

5.5 NTG: artikel, rapport, and book

Option	default value
format=	plain
labelformat=	simple
labelsep=	colon
justification=	justified
font=	none
labelfont=	\CaptionLabelFont
textfont=	\CaptionTextFont

Build-in features, and side-effects

\CaptionLabelFont and \CaptionTextFont can be set either directly or by using \CaptionFonts. Both is still supported unless you use one of the two options labelfont= or textfont= offered by l'extension caption.

5.6 SMF: smfart and smfbook

Since the SMF document classes are derived from the $\mathcal{A}_{\mathcal{M}}\mathcal{S}$ document classes the same default values are valid here.

Additionally the margin is limited up to the tenth of the \linewidth. If you don't like this limitation, you can switch it off with the option maxmargin=off or maxmargin=false (which both means the same).

5.7 thesis

Option	default value
format=	hang
labelformat=	like simple, but with short name
labelsep=	colon
justification=	justified
font=	none
labelfont=	\captionheaderfont
textfont=	\captionbodyfont

Build-in features, and side-effects

The caption label font can be set with \captionheaderfont, the caption text font with \captionbodyfont. Both is still supported unless you use one of the two options labelfont= or textfont= offered by l'extension caption.

5.8 frenchb babel option

If you use the frenchb option of the babel package with one of the three standard LATEX classes (or a one derived from them) the default labelsep= will be set to \CaptionSeparator (offered by frenchb), overriding the default value set by the document class. So redefining \CaptionSeparator will still work, unless you don't select a different labelsep= than the default one.



Please load l'extension caption after the babel package.

5.9 frenchle and frenchpro packages

If you use the frenchle or frenchpro package, the default labelsep= will be set to \captionseparator (offered by frenchle/pro) plus \space, overriding the default value set by the document class. So redefining \captionseparator will still work, unless you don't select a different labelsep= than the default one.

Furthermore the default textfont= will be set to textfont=it, since this emulates the default setting of \captionfont defined by the frenchle or frenchpro package. Please note that the command \captionfont is used by the caption package internally for a different purpose, so you should not change it (anymore).

The command \unnumberedcaptions { $\langle figure \text{ or } table \rangle$ } will still work, but only unless you don't select a different labelformat= than the default one.



Please load l'extension caption after the frenchle or frenchpro package.

6 Package support

L'extension caption was adapted to the following packages which deals with captions, too:

float, floatflt, fltpage, hyperref, hypcap, listings, longtable, picinpar, picins, rotating, setspace, sidecap, subfigure, supertabular, threeparttable, wrapfig, and xtab

Furthermore the floatrow package[8], the subcaption package (which is part of the caption package bundle), and the subfig package[20] support l'extension caption and use its \captionsetup interface.

i

If a package (or document class) unknown to l'extension caption redefines the \caption command as well, this redefinition will be preferred over the one this package offers, providing maximum compatibility and avoiding conflicts. If such a potential incompatibility is detected, you will see this warning message: 9

```
Package caption Warning: \caption will not be redefined since it's already (caption) redefined by a document class or package which is (caption) unknown to the caption package.
```

As a result, the following features offered by l'extension caption will not be available :

- the options labelformat=, position=auto, list=, and listformat=
- \caption* (to produce a caption without label)
- \caption[] {...} (to produce no entry in the List of Figures or Tables)
- \caption{} (to produce an empty caption without label separator)
- \ContinuedFloat
- correctly justified captions in environments like wide and addmargin which add extra margins
- the hypcap feature (See section 6.5: *hyperref*)
- the sub-caption feature (See subcaption package documentation)

compatibility=

You can override this compatibility mode by specifying the option

```
compatibility=false
```

when loading l'extension caption. But please note that using this option is neither recommended nor supported since unwanted side-effects or even errors could occur afterwards. (For that reason you will get a warning about this.)

6.1 algorithms

The algorithms package bundle[5] provides two environments: The algorithmic environment provides a possibility for describing algorithms, and the algorithm environment provides a "float" wrapper for algorithms.

Since the algorithm environment is implemented via \newfloat provided by the float package[6], please see section 6.2: *float*.

^{9.} You can suppress this warning by specifying the option compatibility=true when loading l'extension caption.

6.2 float

The float package[6] introduces the commands \restylefloat to give existing floating environments a new look & feel and \newfloat to define new floating environments. It also provides the "H" float placement option which places the environments "here" instead of letting them floating around.

For floating environments defined with \newfloat or \restylefloat the position option has no effect on the main caption anymore, since its placement and spacing will be controlled by the selected float style instead.

A caption style and options defined with the name of the float style will be executed additionally to the regular ones. Using this mechanism l'extension caption emulates the default look & feel of the ruled captions: It defines the caption style

```
\DeclareCaptionStyle{ruled}%
     {labelfont=bf,labelsep=space,strut=off} .
```

So to change this you need either define your own caption style called ruled or use \captionsetup[ruled] {\(\langle options \rangle \rangle \) to specify additional options.

Also by using this mechanism the skip between a boxed float and its caption is specified, overriding its global value:

```
\captionsetup[boxed]{skip=2pt}
```

For changing this, just use \captionsetup[boxed] {skip=\(value\)} with an appropriate value. Or if you want to use the global skip setting instead, you can remove the usage of the local setting for these floats with \clearcaptionsetup[skip] {boxed}.

Note: Only one single caption can be typeset inside environments defined with \newfloat or \restylefloat, furthermore these environments are not behaving exactly like the pre-defined floats figure and table. As a consequence many packages do not cooperate well with these. Furthermore the float package has some caveats & limitations, so if you just want to define a new simple floating environment—behaving like figure or table—I recommend using \Declare-FloatingEnvironment offered by the newfloat package instead. And for defining non-simple floating environments and customization I recommend using \DeclareNewFloatType offered by the floatrow package[8].

6.3 floatflt

The floatfit package[7] offers figures and tables which do not span the full width of a page and are float around by text.

If you want to setup special options for the floatingfigure and floatingtable environments you can use

```
\captionsetup[floatingfigure]{\langle options \rangle} and \captionsetup[floatingtable]{\langle options \rangle}.
```

These options will be executed additionally to the regular ones for figure resp. table.

Note: The margin resp. width setting will not be used for these figures resp. tables, unless you set it explicit with \captionsetup[floatingfigure] $\{...\}$ resp. \captionsetup[floatingtable] $\{...\}$.

6.4 fltpage

The fltpage package[9] offers the outhouse of the caption for figures or tables which needs the whole page for its contents. This will be done by placing the caption on the bottom of the previous or next page.

If you want to setup special options for the FPfigure and FPtable environments you can use

```
\captionsetup[FPfigure]{\langle options \rangle} and \captionsetup[FPtable]{\langle options \rangle}.
```

These options will be executed additionally to the regular ones for figure or table.

6.5 hyperref

The hyperref package[10] is used to handle cross referencing commands in LaTeX to produce hypertext links in the document.

There are two options available to control the placement of hyperlink anchors: 10

```
hypcap=true or hypcap=false
```

If set to true all hyperlink anchors – where entries in the List of Figures, \ref, and \autoref will link to – are placed at the beginning of the (floating) environment.

If set to false the hyperlink anchor is (usually) placed at the caption.

(The default setting is hypcap=true.)

```
hypcapspace=\(amount\)
```

Because it looks poor if the hyperlink points exactly at the top of the figure or table, you can specify a vertical distance between the hyperlink anchor and the (floating) environment itself, e.g. hypcapspace=0pt removes this distance.

```
(The default setting is hypcapspace=0.5\baselineskip.)
```

Both settings have no effect in lstlistings (provided by the listings package), longtables (provided by the longtable package), supertabulars (provided by the supertabular package), and xtabulars (provided by the xtab package), within these environments hyperlink anchors will always be placed as if hypcap=true and hypcapspace=0pt would be set.

Please note:

```
\colon \{ \langle type \rangle \} \{ ... \}  vs. \colon \{ type = \langle type \rangle \} + \colon \{ ... \}
```

Without hyperref loaded, both will give you identical results. But with hyperref loaded, and with hyperap=true requested, the hyperlink anchor will be placed different. For example:

```
\begin{minipage} {\linewidth}
...
\captionof{figure}{A figure}
\end{minipage}
```

will place the hyperlink anchor at the caption. (And if hypeap=true is set, you will get a warning about this.) But

```
\begin{minipage} {\linewidth}
  \captionsetup{type=figure}
  ...
  \caption{A figure}
\end{minipage}
```

^{10.} These options are named after the hypcap package which they supersede.

will place the hyperlink anchor at the beginning of the minipage, since \caption-setup{type=figure} does not only set the caption type to "figure" but does place a hyperlink anchor, too.

```
\caption[]{...} vs. \captionsetup{list=false}+\caption{...}
```

Again, without hyperref loaded, both will give you identical results. But with hyperref loaded, the difference is in the nuances. So for example the optional argument of \caption will also be written to the aux file, and will be used by the \nameref command. So if you choose to use \caption with empty optional argument, \nameref will also give you an empty result. So it's better to use \captionsetup{list=false} if you don't want an entry in the List of Figures or List of Tables.

6.6 hypcap

The hypcap package [11] offers a solution to the problem that links to a float using hyperref may anchors to the caption rather than the beginning of the float. Since l'extension caption v3.1 already solves this problem for itself, the hypcap package is usually not needed.

If the hypcap package is loaded additionally to the hyperref package, it takes over the control of the hyperlink anchor placement from l'extension caption, overriding the options hypcap= and hypcapspace=.

So for a manual placement of hyperlink anchors $\texttt{captionsetup}\{\texttt{type} \mid \texttt{type} \}$ is not sufficient anymore, instead you need to use capstart (provided by the hyperpackage) for this.

Regarding the automatically placement the hypcap package offers good placement of hyperlink anchors for the floating environments figure and table only. In contrast the hypcap=true option of l'extension caption also offers good placements of hyperlink anchors for floating-figures (provided by the floatfilt package), FPfigures & FPtables (provided by the fltpage package), figwindows (provided by the picinpar package), parpics (provided by the picins package), SCfigures (provided by the sidecap package), threeparttables (provided by the threeparttable package), and wrapfigures (provided by the wrapfig package).

6.7 listings

The listings package[12] typesets programming code.

If you want to setup special options for the lstlisting environment you can use

```
\color= \col
```

Please note that the listings package has its very own options for controlling the position and the skips of the caption: captionpos=, abovecaptionskip=, and belowcaptionskip=. (See listings documentation for details.) These listings options override the caption's ones, but can be again overwritten by \captionsetup[lstlisting] {...}, e.g.

```
\captionsetup[lstlisting]{skip=10pt} .
```

6.8 longtable

The longtable package[13] offers an environment which behaves similar to the tabular environment, but the table itself can span multiple pages.

If you want to setup special options for the longtable environment you can use

```
\colon = \
```

These options will be executed additionally to the regular ones for table.

The margin and width settings usually override \LTcapwidth, so you get an equal look & feel of the captions in tables and longtables. But if you set \LTcapwidth to a value different than its default = 4in, l'extension caption will follow that. (But \LTcapwidth will be overwritten by \captionsetup[longtable] {width= $\langle value \rangle$ }, even if it is set to a value different than 4in.)

Note: \caption of and \ContinuedFloat do *not* work for longtables. Furthermore neither \caption nor \captionlistentry will increment the table counter here; it's incremented by the longtable environment instead. If you need a longtable which does not increment the table counter please use the longtable* environment (offered by the Itcaption package which is part of l'extension caption bundle and will be loaded automatically).

6.9 picinpar

Similar to the floatfit package the picinpar package [14] offers figures and tables which do not span the full width of a page and are float around by text. For a detailed discussion about the differences between these packages please take a look at The LATEX Companion [1].

If you want to setup special options for the figwindow and tabwindow environments you can use

```
\captionsetup[figwindow]{\( options \) \} and
\captionsetup[tabwindow]{\( options \) \}.
```

These options will be executed additionally to the regular ones for figure or table.

Note: The margin resp. width setting will not be used for these figures and tables, unless you set it explicit with \captionsetup[figwindow] {...} or \captionsetup[figtable] {...}.

6.10 picins

Similar to the floatflt and picinpar package the picins package [15] offers figures and tables which do not span the full width of a page and are float around by text. For a detailed discussion about the differences between these packages please take a look at The LATEX Companion[1].

If you want to setup special options for the parpic environment you can use

```
\colon = \
```

These options will be executed additionally to the regular ones for figure or table.

Furthermore $\pi[]\{\dots\}$ produce no entry in the List of Figures, and $\pi[]$ caption $\{\dots\}$ gives an unlabeled & unnumbered caption.

Note: The margin resp. width setting will not be used for these figures and tables. But you can override this by setting it explicit with \captionsetup[parpic] {...}.

If you want to have a \piccaption of another type as figure, please do *not* re-define \@captype as suggested by the picins documentation. Please use the \piccaptiontype { $\langle type \rangle$ } command which is offered by l'extension caption instead, e.g. :

```
\piccaptiontype{table}
\piccaption{An example table}
\parpic(50mm,10mm)[s]{...}
```

6.11 rotating

The rotating package[16] offers the floating environments sidewaysfigure and sidewaystable which are just like normal figures and tables but rotated by 90 resp. 270 degree. Furthermore a command \rotcaption is offered for rotated captions only.

The command \rotcaption will be extended by l'extension caption, so \rotcaption* and \rotcaptionof can be used analogous to \caption* and \captionof.

6.12 setspace

If the setspace package is used in conjunction with l'extension caption, the caption will be typeset with single spacing as default. This can be changed by specifying either font=onehalf-spacing, font=doublespacing, or font= $\{stretch=\langle amount\rangle\}$. (See also section 2.3: *Fonts*)

6.13 sidecap

The sidecap package[18] offers the floating environments SCfigure and SCtable which are like usual figures and tables but the caption will be put *beside* the contents.

If you want to setup special options for the SCfigure and SCtable environments you can use

```
\label{eq:captions} $$ \operatorname{SCfigure} {\langle options \rangle} $$ and $$ \operatorname{Captionsetup} [\operatorname{SCtable}] {\langle options \rangle} $$ .
```

These options will be executed additionally to the regular ones for figure or table.

Note: The sidecap package offers its own options for justification. If set, they will override the one specified with the caption option justification= for captions beside their contents.

Note: The margin resp. width setting will not be used for these figures and tables, unless you set it explicit with \captionsetup[SCfigure] {...} or \captionsetup[SCtable] {...}

(Instead of using the sidecap package you can also use the more powerful and flexible floatrow package[8] for typesetting captions beside the contents.)

Undocumented features

The sidecap package v1.6 has some undocumented package options and commands which allow further customization of the side-captions:

margincaption

The package option

```
margincaption (e.g. \usepackage[margincaption] {sidecap})
```

causes all side-captions to be placed into the margin.

\sidecaptionvpos

The command

```
\sidecaptionvpos{\langle float type \rangle} {\langle pos \rangle}
```

sets the vertical position of the side-caption. $\langle pos \rangle$ can be either 't' (for top alignment), 'b' (for bottom alignment), or 'c' (for center alignment). The default setting for table is 't', for figure and all other ones defined with \DeclareFloatingEnvironment it's 'b'.

6.14 subfigure

The subfigure package[19] provides support for small or 'sub' figures and tables within a single figure or table environment. This package is obsolete, new users should use subfig instead.

Since the subfigure package is obsolete it will only be supported in a way that old documents (which have used l'extension caption v1.x during development) should still compile as expected.

Please use the subfig or subcaption package instead which both supports l'extension caption v3.x. (See the subfig package[20] documentation for details.)

6.15 supertabular and xtab

The supertabular[21] and xtab[24] packages offer an environment which can span multiple pages and is quite similar to the longtable environment provided by the longtable package[13]. For a detailed discussion about the differences between these powerful packages please take a look at The LATEX Companion[1].

If you want to setup special options for the supertabular resp. xtabular environment you can use

```
\captionsetup[supertabular]{\langle options\rangle resp.
\captionsetup[xtabular]{\langle options\rangle \rangle .
```

These options will be executed additionally to the regular ones for table.

Note: \ContinuedFloat does not work for supertabulars and xtabulars.

6.16 threeparttable

The threeparttable package[22] provides a scheme for tables that have a structured note section after the table contents and the caption. This scheme provides an answer to the old problem of putting footnotes in tables—by making footnotes entirely unnecessary.

If you want to setup special options for the threeparttable and measuredfigure environments you can use

```
\label{lem:captionsetup} $$ \operatorname{captionsetup[threeparttable]} {\operatorname{options}} $$ and $$ \operatorname{captionsetup[measuredfigure]} {\operatorname{options}} $$ .
```

These options will be executed additionally to the regular ones for table or figure.

Note: Since the caption will have the same width as the contents here, the margin resp. width setting will not be used for these figures and tables, at least unless you set it explicit with $\colon=0$ setup [threeparttable] {...} or $\colon=0$ [measuredfigure] {...}.

(Instead of using the threeparttable package you can also use the floatrow package[8] for this purpose.)

6.17 wrapfig

Similar to the floatfit, the picinpar, and the picins package the wrapfig package[23] offers figures and tables which do not span the full width of a page and are float around by text. For a detailed discussion about the differences between these packages please take a look at The LATEX Companion[1].

If you want to setup special options for the wrapfigure and wraptable environments you can use

```
\label{lem:captionsetup} $$ \operatorname{wrapfigure} \{\langle options \rangle\} $$ and $$ \operatorname{captionsetup}[\operatorname{wraptable}] \{\langle options \rangle\} $$.
```

These options will be executed additionally to the regular ones for figure or table.

Note: The margin resp. width setting will not be used for these figures and tables, unless you set it explicit with $\colon=0$ with $\colon=0$ or $\colon=0$ or $\colon=0$ wraptable] $\colon=0$.

7 Further reading

I recommend the following documents for further reading:

- The TEX FAQ Frequently asked questions about TEX and LATEX :
 - http://faq.tug.org/
- A French FAQ can be found at

```
http://www.grappa.univ-lille3.fr/FAQ-LaTeX/
```

— "What is a minimal working example?" from Christian Faulhammer and Ulrich Schwarz:

```
http://www.minimalbeispiel.de/mini-en.html
```

— epslatex from Keith Reckdahl contains many tips around including graphics in LATEX 2ε documents. You will find this document in the directory

```
http://mirror.ctan.org/info/epslatex/
```

8 Thanks

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A Alphabetical Reference

A.1 Options

Option	Short description	Section
aboveskip	sets the skip above caption	2.6
belowskip	sets the skip below caption	2.6
compatibility †	force (non-)compatibility	6
figureposition †	gives a hint about the figure caption position	2.6
font(+)	sets the font	2.3
format	sets the format	2.1
hangindent	sets the hang indention	2.4
hypcap	selects 'hypcap' feature	6.5
hypcapspace	sets the distance between hyperlink and contents	6.5
indention	sets the indention	2.4
justification	sets the justification	2.2
<pre>labelfont(+)</pre>	sets the font of the caption label	2.3
labelformat	sets the format of the caption label	2.1
labelsep	sets the label separator	2.1
labelseparator	-same as labelsep-	2.1
list	switches the entries in the List on or off	2.7
listformat	sets the 'List of Figure/Table' entry format	2.7
margin	sets the margin	2.4
margin*	sets the margin, but only if no width is set	2.4
maxmargin	sets the max. margin	2.4
minmargin	sets the min. margin	2.4
name	sets the name of the current environment	2.8
oneside	selects the one-side mode	2.4
options	executes the given option list	
parindent	sets the paragraph indention	2.4
parskip	sets the skip between paragraphs	2.4
position	gives a hint about the caption position	2.6
singlelinecheck	switches the single-line-check on or off	2.2
skip	sets the skip between content and caption	2.6
strut	switches the usage of \struts on or off	2.1
style	sets the caption style	2.5
subtype	sets the sub-caption type	_11
tableposition [†]	gives a hint about the table caption position	2.6
textfont(+)	sets the font of the caption text	2.3
textformat	sets the format of the caption text	2.1
twoside	selects the two-side mode	2.4
type	sets the caption type & places a hyperlink anchor	2.9
type*	sets the caption type only	2.9
width	sets a fixed caption width	24

Note: Obsolete options are not listed here. See section C.1: caption v1.x and section C.2: caption2 v2.x for a list of these options.

A.2 Commands

Command	Section
\abovecaptionskip	2.6
\belowcaptionskip	2.6
\caption	3.1
\caption*	3.1
\captionlistentry	3.1
\captionof	3.1
\captionof*	3.1
\captionsetup	3.2
\captionsetup*	3.2
\centerfirst	2.2
\centerlast	2.2
\clearcaptionsetup	3.2
\clearcaptionsetup*	3.2
\ContinuedFloat	3.3
\DeclareCaptionFont	4
\DeclareCaptionFormat	4
\DeclareCaptionFormat*	4
\DeclareCaptionJustification	4
\DeclareCaptionLabelFormat	4
\DeclareCaptionLabelSeparator	4
\DeclareCaptionLabelSeparator*	4
\DeclareCaptionListFormat	4
\DeclareCaptionOption	4
\DeclareCaptionStyle	4
\DeclareCaptionSubType	_ 12
\DeclareCaptionTextFormat	4
\showcaptionsetup	3.2

^{†.} These options are only available in the preamble of the document.

^{11.} The option subtype is explained in the subcaption package documentation.

12. \DeclareCaptionSubType is explained in the subcaption package documentation.

A.3 Warnings

```
\caption outside box or environment. -or- \captionsetup{type=...} outside box or environment. -or- \captionsetup{type*=...} or \captionof outside box or environment.
```

You have placed a \caption, \captionof, or \captionsetup{type= $\langle type \rangle$ } command outside an box, group, or environment. You should not do this since it could cause some bad side-effects.

(See section 2.9: Types and section 3.1: Typesetting captions)

```
\caption will not be redefined since it's already redefined by a document class or package which is unknown to the caption package.
```

If l'extension caption detects that some (unknown) document class or package has enhanced \caption, it will not redefine \caption, too, since this would simply kill the enhancement. As a result some features, like \caption*, \ContinuedFloat, using the optional argument of \captionsetup, or the options list= and hypcap= will not be available.

If you don't care about the original enhancements but would like to use the full range of features of l'extension caption instead you can give the unsupported(!) option compatibility=false a try and keep your fingers crossed. (But you will get the next warning instead.)

(See section 5: Document classes & Babel support and section 6: Package support)

```
Forced redefinition of \caption since the unsupported(!) package option `compatibility=false' was given.
```

Since you were so keen to specify the option compatibility=false l'extension caption will try to do its best to fulfill your wishes. But depending on the document class or other packages you use that can end in non-functional features or even errors. So keep your fingers crossed!

(See section 6: Package support)

```
Hyperref support is turned off because hyperref has stopped early.
```

If the hyperref package stops early during loading (because of what-ever reason), the hyperref support of l'extension caption will not be available. As a result you could get hyperref warnings and non-functional hyperlinks to figures or tables.

```
(See section 6.5: hyperref)
```

```
Ignoring optional argument [\langle pos \rangle] of \setcapwidth.
```

L'extension caption tries to emulate the KOMA-Script commands regarding captions as best as it can. But the optional argument of the KOMA-Script command \setcapwidth is not (yet) working if you use this package, so if you try to use it anyway, you will get this warning.

```
(See section 5.4: KOMA-Script: scrartcl, scrreprt, and scrbook)
```

Internal Warning: (warning message).

You should never see this warning, either you use a package which redefines figure or table and which is unknown to l'extension caption, or this is a bug in l'extension caption. Please send me an e-mail reporting this issue.

\label without proper \caption

Regarding \label the floating environments behave differently than its non-floating counterparts: The internal reference will not be generated at the beginning of the environment, but at \caption instead. So you have to place the \label command either just after or inside the caption text (mandatory argument of \caption).

```
Option '(option)' was not in list '(option list)'.
```

If you try to remove a specific option of an option list, for example with \clearcaptionsetup[position] {table}, and this option can not be found inside the option list, you will get this warning. If this is not because of a typo and you would like to suppress this warning, use \clearcaptionsetup* instead of \clearcaptionsetup.

(See section 3.2: Setting options)

```
Option list '\(option \list\)' undefined.
```

If you try to remove a specific option of an option list, for example with \clearcaption-setup[format]{figure}, and this option list is not defined (yet), you will get this warning. If this is not because of a typo and you would like to suppress this warning, use \clearcaptionsetup* instead of \clearcaptionsetup.

(See section 3.2: Setting options)

```
Obsolete option 'ignoreLTcapwidth' ignored.
```

The caption2 package option ignoreLTcapwidth will not be emulated by this version of l'extension caption, usually you can simply wipe it away.

(See section C.2: caption2 v2.x and section 6.8: longtable)

```
'ragged2e' support has been changed. Rerun to get captions right.
```

The ragged2e package will only be loaded by l'extension caption if it is actually needed. At least two LATEX runs are needed for that, so on the first run you could get this warning. Just compile your document again and this warning should go away.

(See section 2.2: Justification)

```
Reference on page (page no.) undefined.
```

If you use a twoside page layout, l'extension caption needs to track the page numbers to get the margins right. At least two LATEX runs are needed for that, on the first run you could get this warning. Just compile your document again and this warning should go away.

(See section 2.4: Margins and further paragraph options)

```
The caption type was already set to (type)'.
```

This warning informs you about mixed caption options. For example if you use a \caption-setup{type=table} or \captionof{table}{...} inside a figure environment, this would result in using both option sets for that specific caption, the one for figure (specified with \captionsetup[figure]{...}) and the one for table (specified with \captionsetup[table]{...}) as well.

(You can suppress this warning by using the starred form \captionsetup*{type=...}.) (See section 3.2: Setting options)

```
The option 'hypcap=true' will be ignored for this particular \caption.
```

L'extension caption hasn't found a proper hyperlink anchor for this particular caption, so it decides to ignore the setting hypcap=true (which is set by default). As a result a link to this caption (e.g. in the List of Figures, or set by \ref or \autoref) will link you to the caption of the figure or table, not to the figure or table itself.

This can happen if you use \captionof inside a non-floating environment, but also if you use some package which redefines figure or table, and which is unknown to l'extension caption.

If this is ok for you but you want to suppress this warning, simply place a \captionsetup{hypcap=false} just before the \caption or \captionof command which is causing the warning. If this is not ok for you, you can set a hyperlink anchor with \captionsetup{type= $\langle float\ type \rangle$ } for yourself.

```
(See section 6.5: hyperref)
```

```
Unsupported document class (or package) detected, usage of the caption package is not recommended.
```

Either the document class you use is unknown to l'extension caption, or you have included a package in your document which redefines \@makecaption (which is responsible for type-setting the caption internally) as well. This means l'extension caption will either change the design of captions in an unwanted way, or it even refuses to work correctly at all.

(See section 5: Document classes & Babel support and section 6: Package support)

```
Unused \captionsetup[\langle type \rangle].
```

You have specified options with \captionsetup[$\langle type \rangle$] which are not used later on. This can be because of a typo in $\langle type \rangle$, or because you use a package which redefines figure or table and which is unknown to l'extension caption, or simply because you don't have any usage of the environment $\langle type \rangle$ after this line. (If you want to suppress this warning you can use \captionsetup* instead of \captionsetup.)

(See section 3.2: Setting options)

```
Usage of the \langle package \rangle package together with the caption package is strongly not recommended. Instead of loading the \langle package \rangle package you should use the caption package option 'tableposition=top'.
```

The package $\langle package \rangle$ is dealing with caption skips as well. Please decide which one do you actually want to use, l'extension caption or the other one, using both can lead to wrong skips above or below the caption.

```
(See section 2.6: Skips)
```

A.4 Errors

```
Argument of \{0\ an extra \}.
-or-
Paragraph ended before \{0\ aption was complete.
```

If you want to typeset something special (like a tabular) as caption, you need to give an optional argument to \caption resp. \captionof for the List of Figures resp. List of Tables, too, even if you don't use such list.

(See section 3.1: Typesetting captions, section 2.7: Lists, and section 6.5: hyperref)

```
\caption outside float.
```

You have placed a \caption command outside a floating environment, or a longtable or wrapfigure. If this is what you want to, please use either \captionsetup{type= $\langle type \rangle$ } + \caption or \captionof.

(See section 3.1: Typesetting captions)

```
\ContinuedFloat outside float.
```

You have placed a \ContinuedFloat command outside a floating environment. If this is what you want to, please use the combination \captionsetup{type= $\langle type \rangle$ } + \ContinuedFloat.

Please note that \ContinuedFloat inside a longtable is not working, but maybe using the longtable* environment, which typesets a longtable without incrementing the table counter, if sufficient for you.

(See section 3.3: Continued floats and section 6.8: longtable)

```
Continued \langle type \rangle' after \langle type \rangle'.
```

Continued figures or tables are not allowed to be interrupted by a floating environment (or longtable) of another type, e.g. a table between a figure and a continued figure.

(See section 3.3: Continued floats)

```
For a successful cooperation we need at least version '\langle date \rangle' of package \langle package \rangle, but only version '\langle old\text{-}date \rangle' is available.
```

L'extension caption does not work with such an outdated package, please update it to a more recent version, at least to the one requested.

```
Internal Error: (error message).
```

You should never see this error. Please send me an e-mail reporting this issue.

```
No float type '\langle type\rangle' defined.
```

The $\langle type \rangle$ you have specified in \captionsetup{type= $\langle type \rangle$ }, \captionof{ $\langle type \rangle$ }, or \DeclareCaptionSubType is not defined. $\langle type \rangle$ should be either 'figure' or 'table', or any other floating environment defined with \DeclareFloating-Environment offered by the newfloat package, \newfloat offered by the float package[6], or \DeclareNewFloatType offered by the floatrow package[8].

```
Not allowed in longtable* environment.
```

The usage of \caption is not allowed inside the longtable* environment. Please use either \caption* for a caption without label or use the regular longtable environment instead.

```
Not available in compatibility mode.
```

The feature required is not supported in compatibility mode. 'compatibility mode' means that l'extension caption has detected either an incompatible document class or an incompatible package which also extents the \caption command. Leaving the original extension intact, some features of l'extension caption are not supported.

(See section 6: Package support)

```
Only one \caption can be placed in this environment.
```

Inside the environments offered by the fltpage and sidecap package only *one* caption can be placed. (This is due implementation design.)

```
Option clash for package caption.
   -but sometimes also -
Missing \begin{document}.
```

L'extension caption has already been loaded by some other LATEX package, so you can't do that again specifying different options. A candidate causing this could be the subfig package; if this is the case, please load l'extension caption *before* the subfig package or specify the option caption=false while loading the subfig package.

(See the subfig package[20] documentation)

```
Paragraph ended before \caption@makecurrent was complete. -or-
```

Paragraph ended before \caption@prepareanchor was complete.

If you want to typeset multi-paragraph captions, you need to give an optional argument to \caption resp. \captionof for the List of Figures resp. List of Tables, too, even if you don't use such list.

(See section 3.1: Typesetting captions, section 2.7: Lists, and section 6.5: hyperref)

```
Something's wrong--perhaps a missing \caption in the last figure or table.
```

It seems that you have used a \subcaption command (or a different one which has typeset a sub-caption) without a corresponding \caption command. This is not supported.

```
The option 'labelsep=\langle name \rangle' does not work with 'format=hang'.

-or-

The option 'labelsep=\langle name \rangle' does not work with \setcaphanging (which is set by default).
```

A caption label separator which contains a \\ command (like labelsep=newline) can not be combined with a hanging caption format (like format=hang). Please select either another caption label separator (e.g. labelsep=colon) or another caption format (e.g. format=plain).

(See section 2.1: Formatting resp. section 5.4: KOMA-Script: scrartcl, scrreprt, and scrbook)

```
The package option 'caption=false' is obsolete.
Please pass this option to the subfig package instead
and do *not* load the caption package anymore.
```

You have specified the option caption=false. This used to be a workaround for not using the whole caption package (leaving the caption stuff offered by the document class or other packages intact), but keeping the subfig package working. This mechanism is obsolete and not offered anymore, please pass this option to the subfig package instead and do not load l'extension caption anymore.

(See the subfig package[20] documentation)

```
Undefined boolean value '(value)'.
```

You tried to set a boolean option (like singlelinecheck= or hypcap=) with an improper

```
value. Only false, no, off, 0 or true, yes, on, 1 is allowed here.
Undefined format '(name)'.
   You tried to set a caption format which does not exists. Maybe a typo!?
   (See section 2.1: Formatting)
Undefined label format '\(name\)'.
   You tried to set a caption label format which does not exists. Maybe a typo!?
   (See section 2.1: Formatting)
Undefined label separator \mbox{`(name)'}.
   You tried to set a caption label separator which does not exists. Maybe a typo!?
   (See section 2.1: Formatting)
Undefined list format '\(name\)'.
   You tried to set a caption list-of format which does not exists. Maybe a typo!?
   (See section 2.7: Lists)
Undefined position '(name)'.
```

You tried to set a caption position with an improper value. Maybe a typo!? (See section 2.6: Skips)

```
Undefined style \langle name \rangle'.
```

You tried to set a caption style which does not exists. Maybe a typo!?

(See section 2.5: Styles)

```
Usage of the 'position' option is incompatible
to the '\langle package \rangle' package.
```

The given package is dealing with caption skips as well. Please decide which one do you actually want to use: The position= option of l'extension caption or the mechanism of the other one; using both this way would lead to wrong skips above or below the caption and is therefore not supported.

```
(See section 2.6: Skips)
```

```
Undefined text format '\(\name\)'.

You tried to set a caption text format which does not exists. Maybe a typo!?

(See section 2.1: Formatting)

You can't use both, the (obsolete) caption2 *and*
the (current) caption package.

This error message says it all, you simply can't do that. Please use only l'extension caption.

(See section C.2: caption2 v2.x)
```

B Version history

The version 1.0 was written in 1994 and was offering a handful of options to customize the look & feel of the captions. Furthermore this version already supported the rotating and subfigure packages. Version 1.1 introduced the centerlast option; version 1.2 added the support of the float package. Version 1,3 offered a better support of the subfigure package, while version 1.4 came with the new option nooneline.

The caption2 package 2.0 was an experimental side-version of the regular caption package. It was made public as beta test version without proper documentation in 1995 because of the strong demand for new features and adaptations to additional packages like the longtable package. Furthermore it offered a revised support of the subfigure package. (An improved version 2.1 was offered in 2002.)

In 2003 I finally found some time, so a new regular release 3.0 of the caption package could be build in cooperation with Frank Mittelbach and Steven Cochran. It was released in December 2003 and superseded the neglected caption2 package. Main parts were re-written and it provided a complete re-work of the user interface. Furthermore it supported the hyperref, hypcap, listings, sidecap, and supertabular packages additionally.

While all the previous versions were designed for usage with the standard LATEX document classes article, report, and book, the current version 3.1 released in 2007 also supports the AMS, KOMA-Script, NTG, and SMF document classes, and the beamer class as well. Furthermore it was adapted to the frenchb Babel option, the frenchle & frenchpro packages, and the floatflt, fltpage, picinpar, picins, setspace, threeparttable, and wrapfig packages. New options and commands were introduced as well, among other things font+, figurewithin & tablewithin, list & listformat, maxmargin & minmargin, \captionlistentry, \DeclareCaptionListFormat. Further benefits are the new compatibility check (see section 6: *Package support*), the new "hypcap" feature (see section 6.5: *hyperref*), and the sub-caption feature (see subcaption package documentation).

C Compatibility to older versions

C.1 caption v1.x

This version of l'extension caption still supports the old options and commands provided by the version 1.0 to 1.4 of this package. So there shouldn't occur any problems compiling old documents, but please don't mix old options and commands with the new ones. This isn't supported and can cause ugly side effects.

Here comes a short oversight of the obsolete options and how they have been replaced within this version of l'extension caption :

caption v1.x	caption v3.x
normal	format=plain
hang	format=hang
isu	format=hang
center	justification=centering
centerlast	justification=centerlast
nooneline	singlelinecheck=off
scriptsize	font=scriptsize
footnotesize	font=footnotesize
small	font=small
normalsize	font=normalsize
large	font=large
Large	font=Large
up	labelfont=up
it	labelfont=it
sl	labelfont=sl
sc	labelfont=sc
md	labelfont=md
bf	labelfont=bf
rm	labelfont=rm
sf	labelfont=sf
tt	labelfont=tt

Beside the options for setting up the desired font there were also the commands \captionsize resp. \captionfont and \captionlabelfont who could be redefined with \renewcommand and allowed an alternate and more flexible way to change the font used for captions. This mechanism was replaced by the commands

```
\DeclareCaptionFont{...} {...} and
\captionsetup{font=...,labelfont=...}

(See section 4: Own enhancements)

Setting the margin for captions was done in v1.x with
\setlength{\captionmargin}{...}

This was replaced by
\captionsetup{margin=...}
```

(See section 2.4: Margins and further paragraph options)

For example the old-style code

The quite exotic option ruled which allowed a partial usage of the caption settings for ruled floats defined with the float package will be emulated by this version of the caption package, too. But using this option is not recommended anymore since this version of l'extension caption offers a more flexible way for changing the captions of these floating environments:

```
\DeclareCaptionStyle{ruled}{...}
resp.
   \captionsetup[ruled]{...}
   (See section 4: Own enhancements, section 3.2: Setting options, and section 6.2: float)
```

$\mathbf{C.2}$ caption 2 v2.x

Although they do very similar stuff, the packages caption and its experimental and now obsolete variant caption2 have a very different implementation design. Therefore a full compatibility could not be offered. For that reason you will still find a file called <code>caption2.sty</code> in this package distribution, so old documents using the caption2 package will still compile fine.

Newly created documents should use the actual version of l'extension caption instead. In most cases it's sufficient to replace the command

```
\usepackage[...]{caption2}
by
\usepackage[...]{caption}
```

But some options and commands will not be emulated, so you can get error messages afterwards. This section will hopefully help you removing these errors. If you have problems migrating from caption2 to caption please don't hesitate to send me an e-mail asking for help.

In addition to the obsolete options shown in the last section these ones will be emulated, too:

```
This was replaced by \captionsetup{margin=...} resp. \captionsetup{width=...} . (See section 2.4: Margins and further paragraph options)
```

Setting an indention was done in v2.x with

This is now done with

```
\captionsetup{format=plain,indention=...} .
```

The so-called single-line-check was controlled by the commands \oneline (for switching the check off) and \oneline captionstrue (for switching the check on). This was replaced by \oneline single-linecheck=off) resp. \oneline single-linecheck=on} . (See section 2.2: Justification)

The commands

```
\captionlabeldelim, \captionlabelsep, \captionstyle, \defcaptionstyle, \newcaptionstyle, and \renewcaptionstyle
```

do not have a simple replacement and therefore will not be emulated by this version of l'extension caption. (So using them will cause error messages.) Rewriting such code is not always easy and straight-ahead, but by conscientious reading of this manual you should be able to find appropriate options and commands instead.

The v2.x option ignoreLTcapwidth do not have a replacement, too. But in most cases you can simply drop using that option because in this version of l'extension caption the value of \LTcapwidth will be ignored anyway (unless you set it to a different value than the default one which is 4in). (See section 6.8: longtable)

C.3 caption v3.0

L'extension caption v3.0 did not support any document classes other than the standard LATEX ones : article, report, and book. Therefore the default settings used to be fixed, but now l'extension caption supports more classes, therefore they are now set in dependence on the document class used.

For example: While in v3.0 the default caption justification used to be always justified, it's now still justified when using one of the standard document classes, but raggedright will be used as default format when used with the beamer document class.

An easy way to select the 'old' defaults is using the option style=base when loading l'extension caption (or later on using \captionsetup).

Another new feature is the automatic check for compatibility; if an incompatibility will be found, a warning message will be issued and if a strong incompatibility was found some features of l'extension caption will be disabled. Please note that only this check was added to l'extension caption, so if you get such warning message, the previous versions of l'extension caption were incompatible as well, but did not issued such warning, they were "only" having side-effects or causing problems. So these warnings only say that some bad side effects or problems could happen, but not that they actually will happen. Anyway, if you use l'extension caption in such circumstances, you should use it with care.

Note: L'extension caption v3.0 offered the option caption=false, which used to be a workaround for not using the whole caption package (leaving the caption stuff offered by the document class or other packages intact), but keeping the subfig package[20] working. This mechanism is obsolete and not offered anymore, please pass this option to the subfig package instead and do not load l'extension caption anymore.

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