

The `skeycommand` Package[☆]

Version 0.3

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SUMMARY

The `skeycommand` package provides tools for defining L^AT_EX-style commands and environments using parameters and keys together. The advantages of keys over parameters include the facts that the former aren't limited to nine but can rise as desired by the user, and keys are much easier to match to their values than parameters to arguments, especially if the parameters are many. Moreover, keys can have natural functions. The design approach and user interfaces in the `skeycommand` package differ from those found in the `keycommand` package. This package also provides the `\newtwoptcmd` and `\newtwoptenvirom` macros for defining new commands and environments with two options/optional arguments. At both key command definition and invocation times there is no reference by the user to the semantics of key parsing and management. All the complex semantics and calculations involved in defining and setting keys are transparent to the user. The user of the `skeycommand` package has access to some (but not all) of the machinery of `xkeyval` and `skeyval` packages (including the pointer mechanism) at the much lesser cost of worrying only about the key names and their values. Native boolean keys are automatically recognized and handled appropriately. However, because of the need to keep the user interface simple, toggle boolean keys aren't available in this package; neither are choice keys.

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[☆]The package is available at <http://www.ctan.org/tex-archive/macros/latex/contrib/skeycommand/>.

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1 PACKAGE OPTIONS

The package has only one option (namely, `verbose`) and can be invoked at the time of loading the package or via the `\skeycommand` macro. The option `verbose` is a boolean, initially set to false (i.e., its complement, `silent`, is true by default). Setting `silent` to false is tantamount to setting `verbose` to true.

Example

```

1 % In style files:
2 \RequirePackage[verbose=true or false or on or off]{skeycommand}
3
4 % In document files:
5 \usepackage[verbose=true or false or on or off]{skeycommand}
6
7 % In all cases:
8 \skeycommand{verbose=true or false or on or off}

```

If you enter the boolean `verbose` (or `silent`) without value, the value is assumed to be true. The `verbose` option is simply passed on to the `skeyval` package to log informational messages in the transcript file. The major task of key parsing for the `skeycommand` package is undertaken by the `skeyval` package.

2 USER INTERFACES

2.1 Defining new key commands and environments

The user interfaces for defining new key commands and environments are as follows:

Macro

```

7 \newkeycmd⟨cmd⟩⟨mprefix⟩⟨keyval⟩ [⟨narg⟩] [⟨default1⟩]{⟨defn⟩}
8 \newkeycmd*⟨cmd⟩⟨mprefix⟩⟨keyval⟩ [⟨narg⟩] [⟨default1⟩]{⟨defn⟩}
9
10 \renewkeycmd⟨cmd⟩⟨mprefix⟩⟨keyval⟩ [⟨narg⟩] [⟨default1⟩]{⟨defn⟩}
11 \renewkeycmd*⟨cmd⟩⟨mprefix⟩⟨keyval⟩ [⟨narg⟩] [⟨default1⟩]{⟨defn⟩}
12
13 \newkeyenviron⟨env⟩⟨mprefix⟩⟨keyval⟩ [⟨narg⟩] [⟨default1⟩]{⟨defn⟩}
14 \newkeyenviron*⟨env⟩⟨mprefix⟩⟨keyval⟩ [⟨narg⟩] [⟨default1⟩]{⟨defn⟩}
15
16 \renewkeyenviron⟨env⟩⟨mprefix⟩⟨keyval⟩ [⟨narg⟩] [⟨default1⟩]{⟨defn⟩}
17 \renewkeyenviron*⟨env⟩⟨mprefix⟩⟨keyval⟩ [⟨narg⟩] [⟨default1⟩]{⟨defn⟩}

```

Here, $\langle\text{cmd}\rangle$ is the new control sequence; $\langle\text{env}\rangle$ is the new environment name; $\langle\text{mprefix}\rangle$ is the prefix for macros deriving from the defined keys whose values will be used in the new command or environment (this is called the *macro prefix* in the parlance of keys); $\langle\text{keyval}\rangle$ is the key-value list [e.g., $(\text{keya}=\text{valuea}, \text{keyb}=\text{valueb})$]; $\langle\text{narg}\rangle$ is the number of arguments for the new command or environment (excluding the keys), as you would enter it in `\newcommand` and `\newenvironment`; $\langle\text{default1}\rangle$ is the default value for your optional argument (normally the first argument in `\newcommand` and `\newenvironment`); $\langle\text{defn}\rangle$ is the replacement text (as in `\newcommand` and `\newenvironment`). If you don't supply the optional $\langle\text{mprefix}\rangle$, the package will use the first three letters of the key command or environment name, excluding the escape character but including an added “at sign” (`@`). The aim of default “at sign” is to aid the visual separation of key names from macro prefixes.

Please note the angle bracket surrounding $\langle\text{mprefix}\rangle$, and the parenthesis surrounding $\langle\text{keyval}\rangle$ in the above syntaxes. The $\langle\text{mprefix}\rangle$ can't be empty (i.e., don't enter `<>`) because it will be used by the package to build unique names for the macros that will hold the key values. You can choose not to enter anything for $\langle\text{mprefix}\rangle$, and the package will happily use the default prefix `<xxx@>`, where “xxx” represents the first three letters of the new command or environment name. Also, $\langle\text{keyval}\rangle$ can't be empty: if it was empty, then we should ask: why use key commands instead of L^AT_EX's `\newcommand` and `\newenvironment`?

In $\langle\text{defn}\rangle$, you refer to your arguments in the normal way. You refer to the values of the keys using macros whose first three characters (after the escape character) are the $\langle\text{mprefix}\rangle$ or, if $\langle\text{mprefix}\rangle$ is not supplied, the first three letters of the declared key command (excluding the escape character). The family name of the keys defined via a key command is the key command name itself (without the escape character). The package uses this internally in developing the keys. The key prefix is always “KV”. If any of your key values contains parenthesis, simply enclose it in braces, to avoid confusing it with $\langle\text{keyval}\rangle$ list.

The starred variants (`*`) give “short” macros, while the unstarred variants yield “long” macros.

The optional $\langle\text{mprefix}\rangle$ will be useful if you fear clashes with previously defined key commands. Although, to be defined, key commands must be definable, two key commands may have their first three or four characters identical, thereby leading to clashes of their key-value prefixes.

2.2 Final tokens of every environment

The user can add some tokens to the very end of every subsequent environment by declaring those tokens in `\everyyoe`, which by default contains only L^AT_EX's `\ignorespacesafterend`, that is, the `skeycommand` package automatically issues

Example

```
15 \everyyoe{\ignorespacesafterend}
```

It is important to note that new tokens are prepended (not appended) to the hook that underlies `\everyyoe`, such that by default `\ignorespacesafterend` always comes last in the list. You can empty the token list `\everyyoe` by issuing the command `\everyyoe{}` and rebuild the list afresh, still by prepending elements to it. `\everyyoe` isn't actually a token list register, but has been designed to behave like one. It is safe to issue `\everyyoe` and/or `\everyyoe{}` in the pre-code part of the environment. The following example illustrates this point.

Example

```
16 \newkeyenviron*{testenv}<mp@>(xwidth=2cm,ywidth=1.5cm,
17   bool=off,body=\null,author=\null){%
18   \centering\fbbox{\parbox{\mp@xwidth}{\mp@body}}
```

```

19 \ifmp@bool\color{red}\fi
20 \fbox{\parbox{\mp@ywidth}{\mp@body}}%
21 \normalcolor
22 \everyeof{}%
23 \everyeof{\ignorespacesafterend}%
24 \everyeof{\endgraf\vskip\baselineskip\centerline{\itshape\mp@author}}
25 }{}

26 \begin{document}
27 \begin{testenv}(xwidth=5cm,ywidth=4cm,bool=on,
28   author={Cornelius Tacitus \textup{(55--120~AD)}}},body={%
29   Love of fame is the last thing even learned men can bear
30   to be parted from.
31 })%
32 \end{testenv}
33 \end{document}

```

Result of example code

Love of fame is the last thing
even learned men can bear to be
parted from.

Love of fame is the last thing even
learned men can bear to be parted
from.

Cornelius Tacitus (c.55–c.120 AD)

2.3 Invoking new key commands and environments

The syntaxes for calling new key commands and environments are as follows:

	Macro
34	<code>\cmd[⟨arg1⟩]{⟨arg2⟩}...{⟨argn⟩}(⟨keyval⟩)</code>
35	<code>\begin{env}[⟨arg1⟩]{⟨arg2⟩}...{⟨argn⟩}(⟨keyval⟩)</code>
36	<code>environment body</code>
37	<code>\end{env}</code>

where `\cmd` and `env` have been previously defined using key command and key environment. You refer to your arguments using parameter number one `#1` onwards, up to a maximum of `#8` (yes, `#8`, not `#9`). Here, `⟨keyval⟩` (including the parenthesis) are optional arguments: you can omit them if you want to use the values of the keys set at key command definition time. Using keys is preferable to using parameters: you don't have to match parameters to arguments and, in principle, there is no limit to the number of keys that are permissible.

2.4 Commands and environments with two optional arguments

The `keycommand` package uses the following macros internally. They can be used to define new commands and environments with two optional arguments. Their philosophy, intent, and use syntaxes differ from those of the `twoopt` package. They may be useful to some users, although I recommend the use of the above key commands.

	Macro
38	<code>\newtwoptcmd⟨cmd⟩[⟨narg⟩][⟨default1⟩]{⟨defn⟩}</code>
39	<code>\newtwoptcmd*⟨cmd⟩[⟨narg⟩][⟨default1⟩]{⟨defn⟩}</code>

```

40 \renewtwoptcmd⟨cmd⟩ [⟨narg⟩] [⟨default1⟩] {⟨defn⟩}
41 \renewtwoptcmd*⟨cmd⟩ [⟨narg⟩] [⟨default1⟩] {⟨defn⟩}
42
43 \newtwoptenvirom⟨cmd⟩ [⟨narg⟩] [⟨default1⟩] {⟨defn⟩}
44 \newtwoptenvirom*⟨cmd⟩ [⟨narg⟩] [⟨default1⟩] {⟨defn⟩}
45
46 \renewtwoptenvirom⟨cmd⟩ [⟨narg⟩] [⟨default1⟩] {⟨defn⟩}
47 \renewtwoptenvirom*⟨cmd⟩ [⟨narg⟩] [⟨default1⟩] {⟨defn⟩}

```

⟨narg⟩ is the total number of arguments, including the first and second optional arguments. Where are the second optional arguments here, you might be wondering? The second optional argument is usually empty and doesn't appear at command definition time. The second optional argument isn't the second argument of your command (as in `twoopt` package), but the last. At command invocation, if you don't supply a value for the second optional argument, the command will assume it to be empty. But how do you supply a value for the second optional argument? The next section shows how.

2.4.1 Invoking commands and environments with two optional arguments

The syntaxes for calling commands and environments with two optional arguments are as follows:

	Macro
46	<code>\cmd[⟨1st optarg⟩]{⟨arg2⟩}...{⟨argn⟩}(⟨2nd optarg⟩)</code>
47	<code>\begin{env}[⟨1st optarg⟩]{⟨arg2⟩}...{⟨argn⟩}(⟨2nd optarg⟩)</code>
48	<code>environment body</code>
49	<code>\end{env}</code>

If ⟨2nd optarg⟩ is empty at command or environment invocation, the command or environment will assume it to be empty. Now you can see the conceptual link between `\newtwoptcmd` (and friends) and `\newkeycmd` (and friends).

3 EXAMPLES

	Example
50	<code>% The following is a macro of 3 parameters and 4 keys:</code>
51	<code>\newkeycmd*\demomacro(name=Steve,height=1.60m,weight=75kg,</code>
52	<code>tested=true) [3] [Registered]{%</code>
53	<code>\def\x{#1}\def\y{#2}\def\z{#3}%</code>
54	<code>\ifdem@tested</code>
55	<code>\edef\cleared{\dem@name}%</code>
56	<code>\else</code>
57	<code>\let\cleared\relax</code>
58	<code>\fi</code>
59	<code>}</code>
60	<code>% \dem@name will hold the value supplied for 'name' by the user of</code>
61	<code>% \demomacro. 'dem' is from 'demomacro'. Notice the LaTeX-like</code>
62	<code>% syntax of this command. The user doesn't have to bother about</code>
63	<code>% the nitty-gritty of key infrastructure.</code>
64	<code>% You can use the following statement to instruct the user</code>
65	<code>% to always supply value for 'name' in \demomacro macro:</code>

```
66 \uservaluekeys [KV]{demomacro}{name}
```

Instead of using the macro `\uservaluekeys`, you can use the full pointer system of the `skeyval` package. For example, the following requires the user to supply a value for ‘name’ and the package will save that value for some later use:

Example

```
67 \newkeycmd*\demomacro(\uservalue\savevalue{name}=Steve,
68   height=1.60m,wieght=75kg,tested=true) [3] [Registered]{%
69   \def\x{#1}\def\y{#2}\def\z{#3}%
70   \edef\xxx{\dem@name}%
71 }
72 % User now calls the \demomacro macro:
73 \demomacro[data1]{data2}{data3}(name,height=1.55m,wieght=55kg,
74   tested=true)
75 → Error: no value supplied for ‘name’
```

You can use the saved value of key `name` within `\demomacro`. Suppose, oddly, that the key `height` can use the value of the key `name`, then we can do

Example

```
76 \demomacro[data1]{data2}{data3}(name=John,
77   height=\usevalue{name},wieght=55kg,tested=true)%
```

If for any key in `\demomacro` you don’t supply a key-value pair, the macro will use the above default value of that key. For example, in the following, the key `height` is missing, so the macro will use its default value specified at key definition time:

Example

```
78 \demomacro[data1]{data2}{data3}(name=John,weight=55kg,tested=true)
```

Example

```
79 \newkeycmd*\firstmacro<skc@>(name=Steve,
80   height=1.6m) [8] [xxx]{%
81   \noindent Name: \skc@name\\
82   Height: \skc@height\\
83   Details: #1#2#3#4#5#6#7#8%
84   \endgraf
85 }
86 \begin{document}
87 \firstmacro[1]{-2}{-3}{-4}{-5}{-6}{-7}{-8}%
88   (name=John {(Winner)},height=1.54m)
89 \end{document}
```

[Result of example code](#)

```
Name: John (Winner)
Height: 1.54m
Details: 1-2-3-4-5-6-7-8
```

Example

```

90 \newkeyenviron*{vdescription}<skv@>(labelwidth=5pt,
91   labelsep=5pt) [2] [\qqquad]
92   {\begin{list}{}{\redef*\makelabel##1{\sffamily ##1:\hfil}}%
93     \settowidth\labelwidth{\makelabel{#1}}%
94     \SKV@dimdef\leftmargin{\labelwidth+\skv@labelwidth
95       +\labelsep+\skv@labelsep}}%
96     \item[Description Preamble] #2%
97   }\end{list}}

98 \begin{document}
99 \begin{vdescription}[Description Postamble]%
100   {${\star\star\star}$}(labelwidth=10pt,labelsep=10pt)
101   \item[Item 1] xxx
102   \item[Item 2] yyy
103   \item[Description Postamble] $\langle$End of my
104     environment$\rangle$
105 \end{vdescription}
106 \end{document}

```

Result of example code

Description Preamble: $\langle***\rangle$

Alexandre Pére Dumas (1802–1870): All for one, and one for all.

Alexandre Fils Dumas (1824–1895): All generalizations are dangerous, even this one.

Description Postamble: $\langle\bullet\bullet\bullet\rangle$

Example

```

107 \newkeyenviron*{dialog}<dia@>(labelwidth=5pt,labelsep=5pt) [1] [\qqquad]
108   {\begin{list}{}{\redef*\makelabel##1{\sffamily ##1:\hfil}}%
109     \centering\textbf{G. H. Hardy vs.\ Srinivasa Ramanujan (1920)}}%
110     \settowidth\labelwidth{\makelabel{#1}}%
111     \SKV@dimdef\leftmargin{\labelwidth+\dia@labelwidth
112       +\labelsep+\dia@labelsep}}%
113   }\end{list}}

114 \begin{dialog}[Ramanujan](labelwidth=20pt,labelsep=10pt)%
115   \item[Hardy] Srinivasa, can you see that number from here, the
116     one on that taxi cab?
117   \item[Ramanujan] I can see it, it is 1729.
118   \item[Hardy] What a dull registration number to have on your vehicle?
119   \item[Ramanujan] No, it is a very interesting number.
120   \item[Hardy] What is interesting about it?
121   \item[Ramanujan] It is the smallest number expressible as a sum of two
122     cubes in two different ways.
123   \item[Hardy] What are the different ways?
124   \item[Ramanujan] They are  $1^3 + 12^3$  and  $9^3 + 10^3$ .
125   \item[Hardy] I am impressed! When did you work that out?
126 \end{dialog}

```

Result of example code**G. H. Hardy vs. Srinivasa Ramanujan (1920)**

Hardy: Srinivasa, can you see that number from here, the one on that taxi cab?

Ramanujan: I can see it, it is 1729.

Hardy: What a dull registration number to have on your vehicle?

Ramanujan: No, it is a very interesting number.

Hardy: What is interesting about it?

Ramanujan: It is the smallest number expressible as a sum of two cubes in two different ways.

Hardy: What are the different ways?

Ramanujan: They are $1^3 + 12^3$ and $9^3 + 10^3$.

Hardy: I am impressed! When did you work that out?

Example

```

127 \def\@barbara{An author writing an article for publication
128   in TUGboat is encouraged to create it on a computer file
129   and submit it on magnetic tape.}
130 \def\barbara{BARBARA BEETON,\@ \emph{How to Prepare a File For
131   Publication in TUGboat} (1981)}
132 \def\@hieronymus{The printer should refuse to employ wandering
133   men, foreigners who, after having committed some grievous
134   error, can easily disappear and return to their own country.}
135 \def\hieronymus{HIERONYMUS HORNSCHUCH (1608)}

136 % The macros \@barbara, \barbara, etc. are just shorthands:
137 % you can enter their contents directly in key commands,
138 % as we shall see later.

139 \newkeyenviron{Quote}<mp@>(left=\leftmargin,
140   right=\rightmargin,mode=false,whoby=\null,
141   source=\null){%
142   \begin{list}{}{%
143     \setlength\leftmargin{\mp@left}%
144     \setlength\rightmargin{\mp@right}%
145   }%
146   \item[]\makebox[0pt][r]{' '%}
147 }{%
148   \unskip\makebox[0pt][l]{' '%}
149   \item[] \flushright\mp@whoby
150   \item[] \flushleft\small Source: \mp@source
151   \end{list}
152   \vskip\baselineskip
153 }
154 \usepackage{lipsum}
155 \lipsum[1]
156 \begin{Quote}(left=30pt,right=30pt,mode=false,
157   whoby=\barbara,source={The \TeX Book})%
158   {\ifmp@mode\color{red}\else\color{blue}\fi \@barbara}
159 \end{Quote}

```



```

160 \lipsum[1]
161 \begin{Quote}(left=20pt,right=20pt,mode=true,
162   whoby=\hieronimus,source={The \TeX Book})%
163   {\ifmp@mode\color{red}\else\color{blue}\fi\@hieronimus}
164 \end{Quote}

165 \lipsum[1]
166 \begin{Quote}(left=40pt,right=40pt,mode=false,
167   whoby={EDWARD ELGAR},source={Letter to A.\ J.\ Jaeger (1898)})%
168   {\ifmp@mode\color{red}\else\color{blue}\fi
169     If I write a tune you all say it's commonplace---if I
170     don't, you all say it's rot.%
171   }%
172 \end{Quote}

173 \begin{Quote}(left=40pt,right=40pt,mode=false,
174   whoby={ALBERT EINSTEIN},source={The World As I See It})%
175   {\ifmp@mode\color{red}\else\color{blue}\fi
176     If you want to find out anything from the theoretical physicists
177     about the methods they use, I advise you to stick closely to
178     one principle: don't listen to their words, fix your attention
179     on their deeds.%
180   }%
181 \end{Quote}

```

Result of example code

“An author writing an article for publication in TUGboat is encouraged to create it on a computer file and submit it on magnetic tape.”

BARBARA BEETON,

How to Prepare a File For Publication in TUGboat (1981)

Source: The \TeX Book

“The printer should refuse to employ wandering men, foreigners who, after having committed some grievous error, can easily disappear and return to their own country.”

HIERONYMUS HORNSCHUCH (1608)

Source: The \TeX Book

“If I write a tune you all say it's commonplace—if I don't, you all say it's rot.”

EDWARD ELGAR (1898)

Source: Letter to A. J. Jaeger

“If you want to find out anything from the theoretical physicists about the methods they use, I advise you to stick closely to one principle: don’t listen to their words, fix your attention on their deeds.”

ALBERT EINSTEIN

Source: The World As I See It

Example

```

182 \usepackage{lipsum}
183 \newcounter{notecnt}
184 \def\noteparameters{\labelsep=\notelabelsep
185   \itemindent=\noteitemindent \leftmargin=\noteleft
186   \rightmargin=\noteright \labelwidth=\notelabelwidth}

187 \newkeyenviron*{notex}<note>(labelsep=8pt,itemindent=8pt,
188   left=\parindent,right=\parindent,labelwidth=0pt,
189   preskip=0ex,aftskip=0ex) [1] [\baselineskip]%
190   {\begin{list}{\textsc{Note}~\arabic{notecnt}:}%
191     \noteparameters\usecounter{notecnt}}%
192     \vskip#1}%
193   {\end{list}\vskip\noteaftskip}

194 \begin{document}
195 \noindent\lipsum[1]
196 \begin{notex}[\notepreskip] (labelsep=8pt,itemindent=8pt,
197   left=30pt,right=30pt,labelwidth=0pt,preskip=2ex,aftskip=2ex)
198 \item \lipsum[1]
199 \item \lipsum[1]
200 \end{notex}
201 \end{document}

```

How to make a recurring list

Note 1 The play was a great success, but the audience was a disaster. (Oscar Wilde, 1854–1900)

Note 2 If people behaved in the way nations do they would all be put in strait-jackets. (Tennessee Williams, 1911–1983)

Note 1 If you hate a person, you hate something in him that is part of yourself. What isn’t part of ourselves doesn’t disturb us. (Hermann Hesse, 1877–1962)

Note 2 If a man makes a better mouse-trap than his neighbor, though he builds his house in the woods, the world will make a beaten path to his door. (Ralph Waldo Emerson, 1803–1882)

Example

```

202 \def\sitation{}
203 \def\sitparameters{\leftmargin=\sit@left\rightmargin=\sit@right}
204 \newbox\sitname
205 \renewkeyenviron*{sitation}(left=\parindent,
206   right=\parindent,nolinebreak=1) [2] [\relax]%
207   {\def\quoteend{#1}\sitparameters

```

```

208     \sbox\sitname{\textit{#2}}%
209     \begin{quote}\quoteend
210   }%
211   {\hspace*{\fill}\nolinebreak[\sit@nolinebreak]}%
212   \quad\hspace*{\fill}\finalhyphendemerits\z@
213   \box\sitname
214   \end{quote}}

215 \begin{document}
216 \begin{sitation}[\sit@nolinebreak]%
217   {Theodore Roosevelt~(1858--1919)}%
218   (left=30pt,right=30pt,nolinebreak=2)
219   No man is justified in doing evil on the ground of expediency.
220 \end{sitation}

221 \begin{sitation}{George Bernard Shaw (1856-1950)}%
222 A man of great common sense and good taste; meaning thereby
223 a man without originality or moral courage.
224 \end{sitation}
225 \end{document}

```

Result of example code

No man is justified in doing evil on the ground of expediency.
Theodore Roosevelt (1858–1919)

A man of great common sense and good taste; meaning thereby a man without
 originality and/or moral courage. *George Bernard Shaw* (1856–1950)

Example

```

226 \newkeyenviron*{vdescription}(labelwidth=5pt,
227   labelsep=5pt) [2] [\qqquad]%
228   {\begin{list}{\redef*\makelabel##1{\sffamily ##1:\hfil}}%
229     \settowidth\labelwidth{\makelabel{#1}}%
230     \SKV@dimdef\leftmargin{\labelwidth+\vde@labelwidth
231       +\labelsep+\vde@labelsep}}%
232     \item[Description Preamble] #2%
233   }\end{list}}

234 \begin{document}
235 \begin{vdescription}[Description Postamble]{+++xxx+++}%
236   (labelwidth=10pt,labelsep=5pt)
237   \item[Item 1] xxx
238   \item[Item 2] yyy
239   \item[Description Postamble] $\langle$End of my
240     environment$\rangle$
241 \end{vdescription}
242 \end{document}

```

Example

```

243 \renewtwoptenviron*{vdescription}[3] [\qqquad]
244   {\begin{list}{\redef*\makelabel##1{\sffamily ##1:\hfil}}%

```

```

245     \settowidth\labelwidth{\makelabel{#1}}%
246     \SKV@dimdef\leftmargin{\labelwidth+\labelsep+#2}}%
247     \item[Description Preamble] #3%
248   }\end{list}}

249 \begin{document}
250 \begin{vdescription}[Description Postamble]{4cm}({(Begin
251 environment no.\ 1)})
252   \item[Item 1] xxx
253   \item[Item 2] yyy
254   \item[Description Postamble] (End of environment no.\ 1)
255 \end{vdescription}
256 \end{document}

```

Example

```

257 \newtwoptenvirom*{udescription}[3][\hspace{1cm}]
258   {\begin{list}{\redef*\makelabel##1{\sffamily ##1:\hfil}}%
259     \settowidth\labelwidth{\makelabel{#1}}%
260     \SKV@dimdef\leftmargin{\labelwidth+\labelsep+#3}}%
261     \item[Description Preamble] #2%
262   }\end{list}}

263 \begin{document}
264 \begin{udescription}[Description Postamble]{uuu}(4cm)
265   \item[Item 1] xxx
266   \item[Item 2] yyy
267   \item[Description Postamble] The End
268 \end{udescription}
269 \end{document}

```

Result of example code

Preamble:	Beginning of quotations
John Ruskin (1819–1900):	Whereas it has long being known and declared that the poor have no right to the property of the rich, I wish it also to be known and declared that the rich have no right to the property of the poor.
Bertrand Russell (1872–1970):	The megalomaniac differs from the narcissist by the fact that he wishes to be powerful rather than charming, and seeks to be feared rather than loved. To this type belong many lunatics and most of the great men of history.
Postamble:	End of quotations

Example

```

270 \def\firstmacro{}
271 \renewkeycmd*\firstmacro<skv>(name=Steve,
272   module=Martian logic,pass=true)[2][\@ptsize]{%
273   \edef\x{\skv@name}%
274   \wlog{\if0#1 10pt\else\if1#1 11pt\else
275     \if2#1 12pt\fi\fi\fi\space font used}%
276   \def\y{#2}%
277 }

```

```
278 \firstmacro[0]{aaa}(name=John,module=Philosophy,pass=false)
```

Example

```
279 \newtwoptcmd*\macro[3][xxx]{\def\x{#1}\def\y{#2}\def\z{#3}}
280 \macro[uuu]{vvv}(www)
281 \macro{vvv}(www)
282 \macro{vvv}
```

Example

```
283 \SKV@undef\macro
284 \newtwoptcmd*\macro[2][xxx]{\def\x{#1}\def\y{#2}}
285 \macro[uuu](vvv)
286 \macro(vvv)
```

Example

```
287 \renewtwoptcmd\macro[2][xxx]{\def\x{#1}\long\def\y{#2}}
288 \macro[uuu](\par)
289 \macro(\par)
```

Example

```
290 \let\tcl\textcolor
291 \newkeycmd*firstrule(raise=.5ex,width=1em,thick=2pt,
292   proclaim=false)[1]{%
293   \tcl{blue}{\rule[\fir@raise]{\fir@width}{\fir@thick}}%
294   #1%
295   \tcl{cyan}{\rule[\fir@raise]{\fir@width}{\fir@thick}}%
296   \iffir@proclaim \color{red}\fi\textdaggerdbl
297 }

298 \usepackage[left=2cm,right=2cm]{geometry}
299 \begin{document}
300 \parindent\z@
301 \begin{tabular*}{\textwidth}{lr}
302 \verb+\firstrule{Hello World}(width=2em,thick=4pt,
303   proclaim)+:&
304   \firstrule{Hello World}(width=2em,thick=4pt)\cr
305 \verb+\firstrule{Hello}(width=2em,thick=.5pt,
306   proclaim=true)+:&
307   \firstrule{Hello}(width=2em,thick=.5pt,proclaim=true)\cr
308 \verb+\firstrule{Hello World}(thick=2pt,
309   proclaim=true)+:&
310   \firstrule{Hello World}(thick=2pt,proclaim=true)\cr
311 \verb+\firstrule{Hello World}(raise=1ex,width=2em,
312   thick=1pt)+:&
313   \firstrule{Hello}(raise=1ex,width=2em,thick=1pt)
314 \end{tabular*}
315 \end{document}
```

[Result of example code](#)

```

\firstrule{HelloWorld}(width=2em,thick=4pt,proclaim):      Hello World
\firstrule{Hello}(width=2em,thick=.5pt,proclaim=true):    Hello
\firstrule{HelloWorld}(thick=2pt,proclaim=true):          Hello World
\firstrule{HelloWorld}(raise=1ex,width=2em,thick=1pt):   Hello

```

Example

```

316 \let\tcl\textcolor
317 \newkeycmd\secondrule<mp@>(raise=.5ex,width=1em,thick=2pt,
318   proclaim=false)[2][\tcl{magenta}{${\star$}}]{%
319   \tcl{cyan}{\rule[\mp@raise]{\mp@width}{\mp@thick}}%
320   #1#2#1%
321   \tcl{blue}{\rule[\mp@raise]{\mp@width}{\mp@thick}}%
322   \ifmp@proclaim \color{red}\fi\textdaggerdbl
323 }
324 \usepackage[left=2cm,right=2cm]{geometry}
325 \begin{document}
326 \parindent\z@
327 \begin{tabular*}\textwidth{lr}
328 \verb+\secondrule[\textbullet]{Hello World}(width=2em,
329   thick=4pt,proclaim)+:&
330 \secondrule[\textbullet]{Hello World}(width=2em,
331   thick=4pt)\cr
332 \verb+\secondrule{Hello}(width=2em,thick=.5pt,
333   proclaim=true)+:&
334 \secondrule{Hello}(width=2em,thick=.5pt,proclaim=true)\cr
335 \verb+\secondrule{Hello World}(thick=2pt,
336   proclaim=true)+:&
337 \secondrule{Hello World}(thick=2pt,proclaim=true)\cr
338 \verb+\secondrule{Hello World}(raise=1ex,width=2em,
339   thick=1pt)+:&
340 \secondrule{Hello}(raise=1ex,width=2em,thick=1pt)
341 \end{tabular*}
342 \end{document}

```

Result of example code

```

\secondrule[\textbullet]{HelloWorld}(width=2em,thick=4pt,proclaim):  Hello World
\secondrule{Hello}(width=2em,thick=.5pt,proclaim=true):             *Hello*
\secondrule{HelloWorld}(thick=2pt,proclaim=true):                   *Hello World*
\secondrule{HelloWorld}(raise=1ex,width=2em,thick=1pt):           Hello

```

4 VERSION HISTORY

The numbers on the right-hand side of the following lists are section numbers; the star sign (*) means the subject features in the package but is not reflected anywhere in this user guide.

Version 0.1 [2010/05/05]

First public release *

Version 0.2 [2010/05/20]

Addressed the case of \newkeycmd without parameters *

Version 0.3 [2010/05/21]

Introduced `\everyeoe` 2.2