

# The `eventB` package\*

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## Abstract

This class provides a template for typesetting Event-B models. It was developed at the Swiss Federal Institute of Technology Zurich (ETH-Zurich).

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## 1 Introduction

This package was developed in order to ease the typesetting of Event-B models in  $\text{\LaTeX}$ .

## 2 Usage

See `sample-eventB.tex` for an example of how to use the package.

### 2.1 Package Options

The package offers the following options:

- `nobox`: to disable to bounding boxes for the Event-B modelling elements,
- `small`, `compact`, `tiny`: options for font size,
- `colour` (or `color`): to colour several modelling elements.

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\*This document corresponds to `eventB` v1.1.1, dated 2012/02/21.

## 3 Implementation

### 3.1 Package Loading

We begin by loading the required package `xspace` and `xcolor`.

```
1 \RequirePackage{xspace}
2 \RequirePackage{xcolor}
3 \RequirePackage{ifthen}
```

### 3.2 Declaration of Options for the Package

In this part various options for the package are defined.

**Option for rounding boxes** By default, Event-B modelling elements, e.g., invariants, events, etc., are displayed in a rounding box. This option enables them to be displayed without the rounding box.

```
4 \newlength{\B@oldfboxsep}
5 \newcommand{\event}[7] [] {
6   \setlength{\B@oldfboxsep}{\fboxsep}
7   \setlength{\fboxsep}{2ex}
8   \fbox{
9     \ensuremath{
10      \B@event[#1]{#2}{#3}{#4}{#5}{#6}{#7}
11    }
12  }
13  \setlength{\fboxsep}{\B@oldfboxsep}
14 }
15
16 \newcommand{\B@declaration}[2] {
17   \setlength{\B@oldfboxsep}{\fboxsep}
18   \setlength{\fboxsep}{2ex}
19   \fbox{
20     \ensuremath{
21      \B@declarationbase[#1]{#2}
22    }
23  }
24  \setlength{\fboxsep}{\B@oldfboxsep}
25 }
26
27 \newcommand{\B@section}[3] [] {
28   \setlength{\B@oldfboxsep}{\fboxsep}
29   \setlength{\fboxsep}{2ex}
30   \fbox{
31     \ensuremath{
32      \B@sectionbase[#1]{#2}{#3}
33    }
34  }
35  \setlength{\fboxsep}{\B@oldfboxsep}
36 }
37
38 \DeclareOption{nobox}{
39   \renewcommand{\event}[7] [] {
40     \B@event[#1]{#2}{#3}{#4}{#5}{#6}{#7}
```

```

41 }
42
43 \renewcommand{\B@declaration}[2]{
44   \B@declarationbase{#1}{#2}
45 }
46
47 \renewcommand{\B@section}[3][]{
48   \B@sectionbase{#1}{#2}{#3}
49 }
50 }
51

```

**Options for font size and spacing** We define the default values for font size and some spacing commands, and how they are redefined according to options `small`, `compact`, and `tiny`. In particular, option `compact` and `tiny` implies option `nobox`.

```

52 \newcommand{\B@fontsize}{\normalsize} % The font size used in Bcode environment
53 \newcommand{\Bvspace}[1][2ex]{\[[#1]} % Vertical space
54 \newcommand{\Bhspace}[1][2em]{\hspace{#1}} % Horizontal space
55 \newcommand{\B@tab}{\quad} % A small separation space
56
57 \DeclareOption{small}{
58   \renewcommand{\B@fontsize}{\small}
59   \renewcommand{\Bvspace}[1][1ex]{\[[#1]}
60   \renewcommand{\Bhspace}[1][1em]{\hspace{#1}}
61   \renewcommand{\B@tab}{\ }
62 }
63 \DeclareOption{compact}{
64   \renewcommand{\B@fontsize}{\footnotesize}
65   \renewcommand{\Bvspace}[1][0ex]{\[[#1]}
66   \renewcommand{\Bhspace}[1][0.5em]{\hspace{#1}}
67   \renewcommand{\B@tab}{\ }
68   \ExecuteOptions{nobox}
69 }
70 \DeclareOption{tiny}{
71   \renewcommand{\B@fontsize}{\scriptsize}
72   \renewcommand{\Bvspace}[1][-0.5ex]{\[[#1]}
73   \renewcommand{\Bhspace}[1][0.5em]{\hspace{#1}}
74   \renewcommand{\B@tab}{\ }
75   \ExecuteOptions{nobox}
76 }
77

```

**Options for colouring** Keywords, labels and identifiers in Event-B can be coloured. We define several commands and redefine them accordingly for colouring. When `colour` (or `color`) option is enabled, one can customise the colours for Event-B keywords, labels or identifier or proof obligation labels.

```

78 \newcommand{\B@keyword}[1]{\ensuremath{\B@keywordbase{#1}}\xspace}
79 \newcommand{\B@identifier}[1]{\ensuremath{\B@identifier{#1}}\xspace}
80 \newcommand{\B@label}[2][]{\ensuremath{\B@label{#1}{#2}}\xspace}
81 \newcommand{\B@po}[1]{\ensuremath{\B@po{#1}}\xspace}
82 \DeclareOption{colour}{

```

```

83 \newcommand{\setBKeywordColour}[1]{\colorlet{B@keywordcolor}{#1}}
84 \setBKeywordColour{blue}
85 \newcommand{\setBIdentifierColour}[1]{\colorlet{B@identifiercolor}{#1}}
86 \setBIdentifierColour{blue!50!red}
87 \newcommand{\setBLabelColour}[1]{\colorlet{B@labelcolor}{#1}}
88 \setBLabelColour{green!50!black}
89 \newcommand{\setBP0Colour}[1]{\colorlet{B@pocolor}{#1}}
90 \setBP0Colour{red}
91 \renewcommand{\B@keyword}[1]{
92   \ensuremath{\textcolor{B@keywordcolor}{\B@keywordbase{#1}}}\xspace
93 }
94 \renewcommand{\B@identifier}[1]{
95   \ensuremath{\textcolor{B@identifiercolor}{\B@identifier{#1}}}\xspace
96 }
97 \renewcommand{\B@label}[2][ ]{
98   \ensuremath{\textcolor{B@labelcolor}{\B@label{#1}{#2}}}\xspace
99 }
100 \renewcommand{\B@po}[1]{
101   \ensuremath{\textcolor{B@pocolor}{\B@po{#1}}}\xspace
102 }
103 }
104 \DeclareOption{color}{
105   \ExecuteOptions{colour}
106 }
107

```

After declaration of options, we execute them accordingly.

```

108 \ProcessOptions

```

### 3.3 Commands for Pretty-Print Event-B Models

We start with the definition of the `\eventB` macro.

```

109 \newcommand{\eventB}{Event-B\xspace}

```

The `Bcode` environment for displaying Event-B models. The environment has an optional argument for specifying the font size. By default, it is the same as the `\B@fontsize` controlled by the package option.

```

110 \newenvironment{Bcode}[1][\B@fontsize]{\begin{center}#1{\end{center}}

```

**Declarations and Collections** Event-B modelling elements are organised into declarations (e.g., variables, constants, etc.) or collections (e.g., invariants, axioms). For each declaration, the input is a comma-separated list of elements. For each collection, the input is a newly(`\`)-separated list of elements.

```

111 \newcommand{\carriersets}[1]{
112   \B@declaration{sets}{#1}
113 }
114 \newcommand{\constants}[1]{
115   \B@declaration{constants}{#1}
116 }
117 \newcommand{\axioms}[2][ ]{
118   \B@section{#1}{axioms}{#2}
119 }

```

```

120 \newcommand{\variables}[1]{
121   \B@declaration{variables}{#1}
122 }

123 \newcommand{\invariants}[2][ ]{
124   \B@section[#1]{invariants}{#2}
125 }

126 \newcommand{\variant}[1]{
127   \B@declaration{variant}{#1}
128 }

```

**Event-B keywords** We define the keywords for pretty-print Event-B models.

```

129 \newcommand{\Bany}{\B@keyword{any}}
130 \newcommand{\Bbegin}{\B@keyword{begin}}
131 \newcommand{\Bend}{\B@keyword{end}}
132 \newcommand{\Brefines}{\B@keyword{refines}}
133 \newcommand{\Bstatus}{\B@keyword{status}}
134 \newcommand{\Bthen}{\B@keyword{then}}
135 \newcommand{\Bwhen}{\B@keyword{when}}
136 \newcommand{\Bwhere}{\B@keyword{where}}
137 \newcommand{\Bwith}{\B@keyword{with}}

```

**Event-B modelling elements** We define several macros for pretty-print Event-B modelling elements.

```

138 \newcommand{\Bctx}[1]{\ensuremath{\mathbf{#1}}\xspace}
139 \newcommand{\Bset}[1]{\Bidentifier{#1}}
140 \newcommand{\Bcst}[1]{\Bidentifier{#1}}
141 \newcommand{\Baxm}[1]{\Blabel{#1}}
142 \newcommand{\Bthm}[1]{\Blabel{thm}{#1}}
143
144 \newcommand{\Bmch}[1]{\ensuremath{\mathbf{#1}}\xspace}
145 \newcommand{\Bvrb}[1]{\Bidentifier{#1}}
146 \newcommand{\Binv}[1]{\Blabel{#1}}
147 \newcommand{\Bevt}[1]{\Blabel{#1}}
148 \newcommand{\Bpar}[1]{\Bidentifier{#1}}
149 \newcommand{\Bact}[1]{\Blabel{#1}}
150 \newcommand{\Bgrd}[1]{\Blabel{#1}}
151 \newcommand{\Bbap}[1]{\hbox{\sl\bfseries #1}}

```

**Meta-macros for creating macros for modelling elements** We define meta-macros to create macros for different modelling elements.

```

152 \newcommand{\B@newmacro}[3][ ]{
153   \ifthenelse{\equal{#1}{}}{
154     \expandafter\def\csname #2\endcsname{#3{#2}}
155   }{
156     \expandafter\def\csname #1\endcsname{#3{#2}}
157   }
158 }

159 \newcommand{\newBctx}[2][ ]{\B@newmacro{#1}{#2}{\Bctx}}
160 \newcommand{\newBset}[2][ ]{\B@newmacro{#1}{#2}{\Bset}}
161 \newcommand{\newBcst}[2][ ]{\B@newmacro{#1}{#2}{\Bcst}}

```

```

162 \newcommand{\newBaxm}[2] [] {\B@newmacro[#1]{#2}{\Baxm}}
163 \newcommand{\newBthm}[2] [] {\B@newmacro[#1]{#2}{\Bthm}}
164 \newcommand{\newBmch}[2] [] {\B@newmacro[#1]{#2}{\Bmch}}
165 \newcommand{\newBvrb}[2] [] {\B@newmacro[#1]{#2}{\Bvrb}}
166 \newcommand{\newBinvt}[2] [] {\B@newmacro[#1]{#2}{\Binvt}}
167 \newcommand{\newBevt}[2] [] {\B@newmacro[#1]{#2}{\Bevt}}
168 \newcommand{\newBpar}[2] [] {\B@newmacro[#1]{#2}{\Bpar}}
169 \newcommand{\newBgrd}[2] [] {\B@newmacro[#1]{#2}{\Bgrd}}
170 \newcommand{\newBact}[2] [] {\B@newmacro[#1]{#2}{\Bact}}
171
172 %%%% Theorem Proof Obligation
173 %%%% Print the theorem proof obligation, given the theorem label.
174 %%%% Arguments:
175 %%%% 1. Theorem label
176 %%%%
177 %%%% Usage:
178 %%%% - \thmpo{thm} will produce "thm/THM"
179 \newcommand{\thmpo}[1]{\Bthm[#1]/\Bpo{THM}}
180
181 %%%% Axiom Well-definedness Proof Obligation
182 %%%% Print the axiom well-definedness proof obligation, given the
183 %%%% axiom label.
184 %%%% Arguments:
185 %%%% 1. Axiom label
186 %%%%
187 %%%% Usage:
188 %%%% - \axmwdpo{axm} will produce "axm/WD"
189 \newcommand{\axmwdpo}[1]{\Baxm[#1]/\Bpo{WD}}
190
191 %%%% Invariant Proof Obligation
192 %%%% Print the invariant proof obligation, given the event name and
193 %%%% invariant label
194 %%%% Arguments:
195 %%%% 1. Event name
196 %%%% 2. Invariant label
197 %%%%
198 %%%% Usage:
199 %%%% - \invpo{evt}{inv} will produce "evt/inv/INV"
200 \newcommand{\invpo}[2]{\Bevt[#1]/\Binvt[#2]/\Bpo{INV}}
201
202 %%%% Theorem (in guard) Proof Obligation
203 %%%% Print the simulation proof obligation, given the event name and
204 %%%% the theorem (in guard) label.
205 %%%% Arguments:
206 %%%% 1. Event name
207 %%%% 2. Theorem (in guard) label
208 %%%%
209 %%%% Usage:
210 %%%% - \grdthmpo{evt}{thm} will produce "evt/thm/THM"

```

```

211 \newcommand{\grdthmpo}[2]{\Bevt{#1}/\Bthm{#2}/\Bpo{THM}}
212
213 %%%% Feasibility Proof Obligation
214 %%%% Print the feasibility proof obligation, given the event name and
215 %%%% the action label
216 %%%% Arguments:
217 %%%% 1. Event name
218 %%%% 2. Action label
219 %%%%
220 %%%% Usage:
221 %%%% - \fispo{evt}{act} will produce "evt/act/FIS"
222 \newcommand{\fispo}[2]{\Bevt{#1}/\Bact{#2}/\Bpo{FIS}}
223
224 %%%% Variant finiteness Proof Obligation
225 %%%% Print the Variant finiteness proof obligation
226 %%%% Arguments: No arguments
227 %%%%
228 %%%% Usage:
229 %%%% - \finpo will produce "FIN"
230 \newcommand{\finpo}{\Bpo{FIN}}
231
232 %%%% Variant Proof Obligation
233 %%%% Print the guard strengthen proof obligation, given the event name
234 %%%% Arguments:
235 %%%% 1. Event name
236 %%%%
237 %%%% Usage:
238 %%%% - \grdpo{evt} will produce "evt/VAR"
239 \newcommand{\varpo}[1]{\Bevt{#1}/\Bpo{VAR}}
240
241 %%%% Simulation Proof Obligation
242 %%%% Print the simulation proof obligation, given the event name and
243 %%%% the action label.
244 %%%% Arguments:
245 %%%% 1. Event name
246 %%%% 2. Action label
247 %%%%
248 %%%% Usage:
249 %%%% - \simpo{evt}{act} will produce "evt/act/SIM"
250 \newcommand{\simpo}[2]{\Bevt{#1}/\Bact{#2}/\Bpo{SIM}}
251
252 %%%% Guard Strengthen Proof Obligation
253 %%%% Print the guard strengthen proof obligation, given the event
254 %%%% name and the guard label
255 %%%% Arguments:
256 %%%% 1. (Abstract) Event name
257 %%%% 2. (Abstract) Guard label
258 %%%%
259 %%%% Usage:
260 %%%% - \grdpo{evt}{grd} will produce "evt/grd/GRD"
261 \newcommand{\grdpo}[2]{\Bevt{#1}/\Bgrd{#2}/\Bpo{GRD}}
262

```

```

263 %%%% Variant Natural Number Proof Obligation
264 %%%% Print the Variant Natural Number proof obligation, given the event name
265 %%%% Arguments:
266 %%%% 1. Event name
267 %%%%
268 %%%% Usage:
269 %%%% - \natpo{evt} will produce "evt/NAT"
270 \newcommand{\natpo}[1]{\Bevt{#1}/\Bpo{NAT}}
271
272 \newcommand{\B@keywordbase}[1]{\mathbf{#1}}
273 \newcommand{\B@identifier}[1]{\mathit{#1}}
274 \newcommand{\B@label}[2][]{
275   \ifthenelse{\equal{#1}{}}{
276     \mathsf{#2}
277   }{
278     \mathit{#2}
279   }
280 }
281
282
283
284 \newcommand{\eventinline}[7][]{
285   \setlength{\B@oldfboxsep}{\fboxsep}
286   \setlength{\fboxsep}{2ex}
287   \fbox{
288     \ensuremath{
289       \B@eventinline[#1]{#2}{#3}{#4}{#5}{#6}{#7}
290     }
291   }
292   \setlength{\fboxsep}{\B@oldfboxsep}
293 }
294
295
296 \newcommand{\B@declarationbase}[2]{
297   \begin{array}{l@{\B@tab}l}
298     \B@keyword{#1:} & #2
299   \end{array}
300 }
301
302 \newcommand{\B@sectionbase}[3][]{
303   \def\no@title{#1}
304   \ifx\no@title\@empty
305     \begin{array}{l}
306       \B@keyword{#2:} \\\
307       \begin{array}{l@{\B@tab}l}
308         #3
309       \end{array}
310     \end{array}
311   \else
312     \begin{array}{l@{\B@tab}l}
313       #3
314     \end{array}
315   \fi
316 }

```



```

317
318 \newcommand{\B@po}[1]{\ensuremath{\mathsf{\#1}}\xspace}
319
320 %%%% (BEGIN) Macros for Pretty-Print Event-B Components %%
321 \newcommand{\SKIP}{\textsc{skip}}
322
323
324 %%%% Pretty print an general Event-B event
325 %%%% Arguments:
326 %%%% 1. (Optional) convergence status.
327 %%%% 2. Name of the event.
328 %%%% 3. Name of the abstract event.
329 %%%% 4. (Comma-separated) list of parameters.
330 %%%% 5. (Newline(\)-separated) list of guards.
331 %%%% 6. (Newline(\)-separated) list of witness predicates.
332 %%%% 7. (Newline(\)-separated) list of assignments.
333 %%%%
334 %%%% Usage: \B@event[conv]{conc}{abs}{x,y}{G1(x,y)\G2(x,y)}{W1\W2}{S1(v,x,y)\S2(w,x,y)}
335 %%%% will produce the following
336 %%%%
337 %%%% conc
338 %%%% refines abs
339 %%%% status conv
340 %%%% any x, y where
341 %%%% G1(x, y)
342 %%%% G2(x, y)
343 %%%% with
344 %%%% W1
345 %%%% W2
346 %%%% then
347 %%%% S1(v, x, y)
348 %%%% S2(w, x, y)
349 %%%% end
350 %%%%
351 %%%% Special case:
352 %%%% - Empty abstract event --> refines clause is omitted.
353 %%%% - Empty convergence status --> status clause is omitted.
354 %%%% - Empty witness --> with clause is omitted.
355 %%%% - Empty parameters, empty guards --> begin ... end
356 %%%% - Empty parameters --> when ... then ... end
357 %%%% - Empty actions --> \SKIP
358 \newcommand{\B@event}[7][]{
359   \def\evt@sts{\#1}
360   \def\evt@name{\#2}
361   \def\evt@absevt{\#3}
362   \def\evt@pars{\#4}
363   \def\evt@grds{\#5}
364   \def\evt@wits{\#6}
365   \def\evt@acts{\#7}
366   %% Pretty-print convergence status
367   \ifx\evt@sts\@empty
368     \def\pretty@sts{
369     \else

```

```

370 \def\pretty@sts{\B@tab\Bstatus \B@tab \evt@sts \}
371 \fi
372 % Pretty-print abstract events
373 \ifx\evt@absevt\empty
374 \def\pretty@absevt{}
375 \else
376 \def\pretty@absevt{\B@tab\Brefines \B@tab \evt@absevt \}
377 \fi
378 % Pretty-print parameters
379 \ifx\evt@pars\empty
380 \def\pretty@pars{}
381 \else
382 \def\pretty@pars{\B@tab\Bany \B@tab \evt@pars \B@tab \Bwhere \}
383 \fi
384 % Pretty-print guards
385 \ifx\evt@grds\empty
386 \def\pretty@grds{}
387 \else
388 \def\evt@grds@tmp{
389   \begin{array}{@{\B@tab\B@tab}l@{\B@tab}l}
390     \evt@grds
391   \end{array}\\
392 }
393 \ifx\evt@pars\empty
394 \def\pretty@grds{
395   \B@tab \Bwhen \}
396   \evt@grds@tmp
397 }
398 \else
399 \def\pretty@grds{\evt@grds@tmp}
400 \fi
401 \fi
402 % Pretty-print witnesses
403 \ifx\evt@wits\empty
404 \def\pretty@wits{}
405 \else
406 \def\pretty@wits{
407   \B@tab\Bwith\\
408   \begin{array}{@{\B@tab\B@tab}ll}
409     \evt@wits
410   \end{array}\\
411 }
412 \fi
413 % Pretty-print actions
414 \ifx\evt@acts\empty
415 \def\evt@acts{\SKIP}
416 \else
417 \fi
418 \def\evt@acts@tmp{
419   \begin{array}{@{\B@tab\B@tab}l@{\B@tab}l}
420     \evt@acts
421   \end{array}\\
422 }
423 \def\evt@acts@keyword{\B@tab\Bthen \}

```

```

424 \ifx\evt@pars\@empty
425 \ifx\evt@grds\@empty
426 \def\evt@acts@keyword{\B@tab\Bbegin \\\}
427 \else
428 \fi
429 \else
430 \fi
431 \def\pretty@acts{
432   \evt@acts@keyword
433   \evt@acts@tmp
434 }
435 % Really do it now
436 \begin{array}{l}
437   \Bevt{\evt@name} \\\
438   \pretty@sts
439   \pretty@absevs
440   \pretty@pars
441   \pretty@grds
442   \pretty@wits
443   \pretty@acts
444   \B@tab\Bend
445 \end{array}
446 }
447
448 %%%% Pretty print an general Event-B event
449 %%%% Arguments:
450 %%%% 1. (Optional) convergence status.
451 %%%% 2. Name of the event.
452 %%%% 3. Name of the abstract event.
453 %%%% 4. (Comma-separated) list of parameters.
454 %%%% 5. (Newline\\)-separated list of guards.
455 %%%% 6. (Newline\\)-separated list of witness predicates.
456 %%%% 7. (Newline\\)-separated list of assignments.
457 %%%%
458 %%%% Usage: \B@event[conv]{conc}{abs}{x,y}{G1(x,y)\G2(x,y)}{W1\\W2}{S1(v,x,y)\S2(w,x,y)}
459 %%%% will produce the following
460 %%%%
461 %%%% conc
462 %%%% refines abs
463 %%%% status conv
464 %%%% any x, y where
465 %%%% G1(x, y)
466 %%%% G2(x, y)
467 %%%% with
468 %%%% W1
469 %%%% W2
470 %%%% then
471 %%%% S1(v, x, y)
472 %%%% S2(w, x, y)
473 %%%% end
474 %%%%
475 %%%% Special case:
476 %%%% - Empty abstract event --> refines clause is omitted.
477 %%%% - Empty convergence status --> status clause is omitted.

```

```

478 %%%% - Empty witness --> with clause is omitted.
479 %%%% - Empty parameters, empty guards --> begin ... end
480 %%%% - Empty parameters --> when ... then ... end
481 %%%% - Empty actions --> \SKIP
482 \newcommand{\B@eventinline}[7][]{
483   \def\evt@sts{#1}
484   \def\evt@name{#2}
485   \def\evt@absevt{#3}
486   \def\evt@pars{#4}
487   \def\evt@grds{#5}
488   \def\evt@wits{#6}
489   \def\evt@acts{#7}
490   %% Ignore convergence status
491   \def\pretty@sts{
492     % Pretty-print abstract events
493     \ifx\evt@absevt\@empty
494       \def\pretty@absevt{
495         \else
496         \def\pretty@absevt{\Brefines~\evt@absevt~}
497       \fi
498       % Pretty-print parameters
499       \ifx\evt@pars\@empty
500         \def\pretty@pars{
501         \else
502         \def\pretty@pars{\Bany~\evt@pars~\Bwhere~}
503       \fi
504       % Pretty-print guards
505       \ifx\evt@grds\@empty
506         \def\pretty@grds{
507         \else
508         \def\evt@grds@tmp{
509           \evt@grds
510         }
511         \ifx\evt@pars\@empty
512         \def\pretty@grds{
513           \Bwhen~
514           \evt@grds@tmp~
515         }
516         \else
517         \def\pretty@grds{\evt@grds@tmp~}
518       \fi
519       \fi
520       % Pretty-print witnesses
521       \ifx\evt@wits\@empty
522         \def\pretty@wits{
523         \else
524         \def\pretty@wits{
525           \Bwith~
526           \evt@wits~
527         }
528       \fi
529       % Pretty-print actions
530       \ifx\evt@acts\@empty
531         \def\evt@acts{\SKIP}

```

```

532 \else
533 \fi
534 \def\evt@acts@tmp{
535 \evt@acts
536 }
537 \def\evt@acts@keyword{\Bthen}
538 \ifx\evt@pars\@empty
539 \ifx\evt@grds\@empty
540 \def\evt@acts@keyword{\Bbegin}
541 \else
542 \fi
543 \else
544 \fi
545 \def\pretty@acts{
546 \evt@acts@keyword~
547 \evt@acts@tmp~
548 }
549 % Really do it now
550 \begin{array}{l}
551 \Bevt{\evt@name}\widehat{=}\sim
552 \pretty@sts
553 \pretty@absevs
554 \pretty@pars
555 \pretty@grds
556 \pretty@wits
557 \pretty@acts
558 \Bend
559 \end{array}
560 }
561
562 %%%% INITIALISATION label
563 \newBevt{init}
564
565 %%%% Pretty print the initialisation: no ‘refines’ clause. no parameters, no
566 %%%% guards
567 %%%% Arguments:
568 %%%% 1. (Newline\\)-separated) list of assignments.
569 %%%%
570 %%%% Usage: \init{S1(v,x,y)\S2(w,x,y)}
571 %%%% will produce the following
572 %%%%
573 %%%% init
574 %%%% begin
575 %%%% S1(v, x, y)
576 %%%% S2(w, x, y)
577 %%%% end
578 %%%%
579 \newcommand{\initialisation}[1]{
580 \event{\init}{-}{-}{-}{-}{#1}
581 }

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# Change History

v1.0		v1.1
General: Initial version . . . . .	1	General: Re-implement how options are defined, added options 'box' 1
v1.0.1		v1.1.1
General: Ensure that the keywords, labels are in math-mode . . . . .	1	General: Updated documentation . 1