

# The `eventB` package\*

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February 24, 2013

## 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}
```

### 3.2 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.

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

```

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

```

**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`.

```

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

```

**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.

```

77 \newcommand{\Bkeyword}[1]{\ensuremath{\B@keywordbase{#1}}\xspace}
78 \newcommand{\Bidentifier}[1]{\ensuremath{\B@identifier{#1}}\xspace}
79 \newcommand{\Blabel}[2][]{\ensuremath{\B@label{#1}{#2}}\xspace}
80 \newcommand{\Bpo}[1]{\ensuremath{\B@po{#1}}\xspace}
81 \DeclareOption{colour}{
82   \newcommand{\setBKeywordColour}[1]{\colorlet{B@keywordcolor}{#1}}

```

```

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

```

After declaration of options, we execute them accordingly.

```

107 \ProcessOptions

```

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

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

```

108 \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.

```

109 \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.

```

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

```

```

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

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

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

```

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

```

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

```

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

```

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

```

151 \newcommand{\B@newmacro}[3][ ]{
152   \def\input@macro{#1}
153   \ifx\input@macro\empty
154     \expandafter\def\csname #2\endcsname{#3{#2}}
155   \else
156     \expandafter\def\csname #1\endcsname{#3{#2}}
157   \fi
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{\newBinv}[2] [] {\B@newmacro{#1}{#2}{\Binv}}
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}/\Binv{#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   \def\is@thm{#1}
276   \ifx\is@thm\@empty
277     \mathsf{#2}
278   \else
279     \mathit{#2}
280   \fi
281 }
282
283
284
285 \newcommand{\eventinline}[7][ ]{
286   \setlength{\B@oldfboxsep}{\fboxsep}
287   \setlength{\fboxsep}{2ex}
288   \fbox{
289     \ensuremath{
290       \B@eventinline[#1]{#2}{#3}{#4}{#5}{#6}{#7}
291     }
292   }
293   \setlength{\fboxsep}{\B@oldfboxsep}
294 }
295
296
297 \newcommand{\B@declarationbase}[2]{
298   \begin{array}{l@{\B@tab}l}
299     \Bkeyword{#1:} & #2
300   \end{array}
301 }
302
303 \newcommand{\B@sectionbase}[3][ ]{
304   \def\no@title{#1}
305   \ifx\no@title\@empty
306     \begin{array}{l}
307       \Bkeyword{#2:} \\\
308       \begin{array}{l@{\B@tab}l}
309         #3
310       \end{array}
311     \end{array}
312   \else
313     \begin{array}{l@{\B@tab}l}
314       #3

```



```

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

```

```

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

```

```

422 \end{array}\\
423 }
424 \def\evt@acts@keyword{\B@tab\Bthen \\\}
425 \ifx\evt@pars\@empty
426 \ifx\evt@grds\@empty
427 \def\evt@acts@keyword{\B@tab\Bbegin \\\}
428 \else
429 \fi
430 \else
431 \fi
432 \def\pretty@acts{
433 \evt@acts@keyword
434 \evt@acts@tmp
435 }
436 % Really do it now
437 \begin{array}{l}
438 \Bevt{\evt@name} \\\
439 \pretty@sts
440 \pretty@absevs
441 \pretty@pars
442 \pretty@grds
443 \pretty@wits
444 \pretty@acts
445 \B@tab\Bend
446 \end{array}
447 }
448
449 %%%% Pretty print an general Event-B event
450 %%%% Arguments:
451 %%%% 1. (Optional) convergence status.
452 %%%% 2. Name of the event.
453 %%%% 3. Name of the abstract event.
454 %%%% 4. (Comma-separated) list of parameters.
455 %%%% 5. (Newline(\)-separated) list of guards.
456 %%%% 6. (Newline(\)-separated) list of witness predicates.
457 %%%% 7. (Newline(\)-separated) list of assignments.
458 %%%%
459 %%%% Usage: \B@event[conv]{conc}{abs}{x,y}{G1(x,y)\G2(x,y)}{W1\W2}{S1(v,x,y)\S2(w,x,y)}
460 %%%% will produce the following
461 %%%%
462 %%%% conc
463 %%%% refines abs
464 %%%% status conv
465 %%%% any x, y where
466 %%%% G1(x, y)
467 %%%% G2(x, y)
468 %%%% with
469 %%%% W1
470 %%%% W2
471 %%%% then
472 %%%% S1(v, x, y)
473 %%%% S2(w, x, y)
474 %%%% end
475 %%%%

```

```

476 %%%% Special case:
477 %%%% - Empty abstract event --> refines clause is omitted.
478 %%%% - Empty convergence status --> status clause is omitted.
479 %%%% - Empty witness --> with clause is omitted.
480 %%%% - Empty parameters, empty guards --> begin ... end
481 %%%% - Empty parameters --> when ... then ... end
482 %%%% - Empty actions --> \SKIP
483 \newcommand{\B@eventinline}[7][]{
484   \def\evt@sts{#1}
485   \def\evt@name{#2}
486   \def\evt@absevt{#3}
487   \def\evt@pars{#4}
488   \def\evt@grds{#5}
489   \def\evt@wits{#6}
490   \def\evt@acts{#7}
491   %% Ignore convergence status
492   \def\pretty@sts{}
493   % Pretty-print abstract events
494   \ifx\evt@absevt\@empty
495     \def\pretty@absevt{}
496   \else
497     \def\pretty@absevt{\Brefines~\evt@absevt~}
498   \fi
499   % Pretty-print parameters
500   \ifx\evt@pars\@empty
501     \def\pretty@pars{}
502   \else
503     \def\pretty@pars{\Bany~\evt@pars~\Bwhere~}
504   \fi
505   % Pretty-print guards
506   \ifx\evt@grds\@empty
507     \def\pretty@grds{}
508   \else
509     \def\evt@grds@tmp{
510       \evt@grds
511     }
512     \ifx\evt@pars\@empty
513       \def\pretty@grds{
514         \Bwhen~
515         \evt@grds@tmp~
516       }
517     \else
518       \def\pretty@grds{\evt@grds@tmp~}
519     \fi
520   \fi
521   % Pretty-print witnesses
522   \ifx\evt@wits\@empty
523     \def\pretty@wits{}
524   \else
525     \def\pretty@wits{
526       \Bwith~
527       \evt@wits~
528     }
529   \fi

```

```

530 % Pretty-print actions
531 \ifx\evt@acts@\empty
532 \def\evt@acts{\SKIP}
533 \else
534 \fi
535 \def\evt@acts@tmp{
536   \evt@acts
537 }
538 \def\evt@acts@keyword{\Bthen}
539 \ifx\evt@pars@\empty
540 \ifx\evt@grds@\empty
541 \def\evt@acts@keyword{\Bbegin}
542 \else
543 \fi
544 \else
545 \fi
546 \def\pretty@acts{
547   \evt@acts@keyword~
548   \evt@acts@tmp~
549 }
550 % Really do it now
551 \begin{array}{l}
552   \Bevt{\evt@name}~\widehat{=}\sim
553   \pretty@sts
554   \pretty@absevs
555   \pretty@pars
556   \pretty@grds
557   \pretty@wits
558   \pretty@acts
559   \Bend
560 \end{array}
561 }
562
563 %%%% INITIALISATION label
564 \newBevt{init}
565
566 %%%% Pretty print the initialisation: no ‘refines’ clause. no parameters, no
567 %%%% guards
568 %%%% Arguments:
569 %%%% 1. (Newline\\)-separated) list of assignments.
570 %%%%
571 %%%% Usage: \init{S1(v,x,y)\S2(w,x,y)}
572 %%%% will produce the following
573 %%%%
574 %%%% init
575 %%%% begin
576 %%%% S1(v, x, y)
577 %%%% S2(w, x, y)
578 %%%% end
579 %%%%
580 \newcommand{\initialisation}[1]{
581   \event{\init}{-}{-}{-}{-}{#1}
582 }

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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