

SBML Level 3 package: Render, Version 1, Release 1

Frank T. Bergmann¹, Sarah M. Keating², Ralph Gauges³, Sven Sahle¹, Katja Wengler⁴

¹BioQuant/COS,

Heidelberg University, Heidelberg, DE

²European Bioinformatics Institute (EMBL-EBI),

Hinxton, Cambridgeshire, UK

³Hochschule Albstadt-Sigmaringe,

Sigmaringen, DE

⁴University of Hertfordshire,

Hertfordshire, UK

Abstract

Many software tools provide facilities for depicting reaction network diagrams in a visual form. Two aspects of such a visual diagram can be distinguished: the layout (i.e.: the positioning and connections) of the elements in the diagram, and the graphical form of the elements (for example, the glyphs used for symbols, the properties of the lines connecting them, and so on). This document describes the SBML Level 3 *Render* package that complements the SBML Level 3 Layout package and provides a means of capturing the precise rendering of the elements in a diagram.

The SBML Level 3 *Render* package provides a flexible approach to rendering that is independent of both the underlying SBML model and the *Layout* information.

There can be one block of render information that applies to all layouts or an additional block for each layout.

Many of the elements used in the current render specification are based on corresponding elements from the SVG specification. This allows us to easily convert a combination of layout information and render information into a SVG drawing.