SBML

A machine-readable format for representing computational models in systems biology
libSBML
an API library
• read
• create
• manipulate
• convert between levels/versions
• write
• validate
- Standard ANSI C++
  - C
  - C#
  - Java
  - Perl
  - Python
  - Ruby

Generated with SWIG
Advantages of libSBML

• closely mimic SBML structure
• different language bindings
• supports several XML parsers
• develop in line with specification
• backwards compatibility
The Systems Biology Markup Language (SBML): Language Specification for Level 3 Version 1 Core

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SBML Level 3 Version 1 Core
Release 1 ( Candidate)
31 December 2009

Please report errors, ambiguities, and other issues in this document using the form at http://sbml.org/specifications/sbml-level-3-release-1/core/issue-report-form

Corrections and other changes to the SBML language specification may appear over time.
Notifications of new releases are broadcast on the mailing list core-announce@lists.sbml.org

The latest release of the SBML Level 3 Version 1 Core specification is available at http://sbml.org/specifications/sbml-level-3/release-1/core

The release of the specification is available at http://sbml.org/specifications/sbml-level-3/release-1/core/release-1/

The list of known issues in all releases of SBML Level 3 Version 1 Core is available at http://sbml.org/specifications/sbml-level-3/release-1/core/known-issues/

Profile schemata for use with XML are available at http://sbml.org/specifications/sbml-level-3/release-1/core/profiles/
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Profile schemata for use with XML are available at

http://sbml.org/specifications/sbml-level-3-version-1/schema/

SBML Systems Biology Markup Language

SBML Level 3
The Systems Biology Markup Language (SBML):
Language Specification for Level 3 Version 1 Core

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This release of the specification is available at
http://sbml.org/specifications/sbml-level-3-version-1-core/releases/1/

The list of known issues in all releases of SBML Level 3 Version 1 Core is available at
http://sbml.org/specifications/sbml-level-3-version-1-core/known-issues/

Formal schemas for use with XML are available at
http://sbml.org/specifications/sbml-level-3-version-1-core/schemas/

SBML
Systems Biology Markup Language
SBML Level 3
libSBML and L3 packages

libSBML-5

- Layout package
- Spatial package
- libSBML core
- ABC package
- Comp package
libSBML and L3 packages

libSBML-5

libSBML core

Layout package

Spatial package

Comp package

Optionally included in build
libSBML and L3 packages
libSBML and L3 packages

![CMake configuration](image)

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libSBML-5

libSBML core
(very minor API changes from libSBML-4)

SBML Extension
SBasePlugIn
SBMLExtension Namespaces
SBasePlugIn Creator
SBMLExtension Registry
SBase ExtensionPoint
Implementing a package

libSBML core
(very minor API changes from libSBML-4)

- SBML Extension
- SBasePlugIn
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- SBMLExtension Registry

ABC Extension
Implementing a package

libSBML core
(very minor API changes from libSBML-4)
How does it work?

- SBase object
- read/write/other
- loads PlugIns
- SBMLExtensionRegistry object
Current status

Home / libsbml / 5.4.1 / experimental / src

Name ▼

Parent folder

README.txt

libSBML-5.4.1-Source.tar.gz

comp-5.4.1-beta-1.zip

spatial-5.4.1-beta-1.zip

req-5.4.1-beta-1.zip

render-5.4.1-beta-1.zip

groups-5.4.1-beta-1.zip

fbc-5.4.1-beta-1.zip
Current status

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- Air Force Office of Scientific Research (USA)
- STRI, University of Hertfordshire (UK)
- Beckman Institute, Caltech (USA)
- Molecular Sciences Institute (USA)
Links

http://sbml.org

http://sbml.org/Software/libSBML

http://sbml.org/Community/Wiki#SBML_Level_3