

libSBML

Status update

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on behalf of the

SBML Team

libSBML

- API library for working with SBML
- read/write SBML
- create/manipulate SBML
- validate SBML
- convert between Levels/Versions of SBML

libSBML

- Standard ANSI C++

- C
- C#
- Python
- MATLAB
- Java
- Octave
- Perl
- Ruby

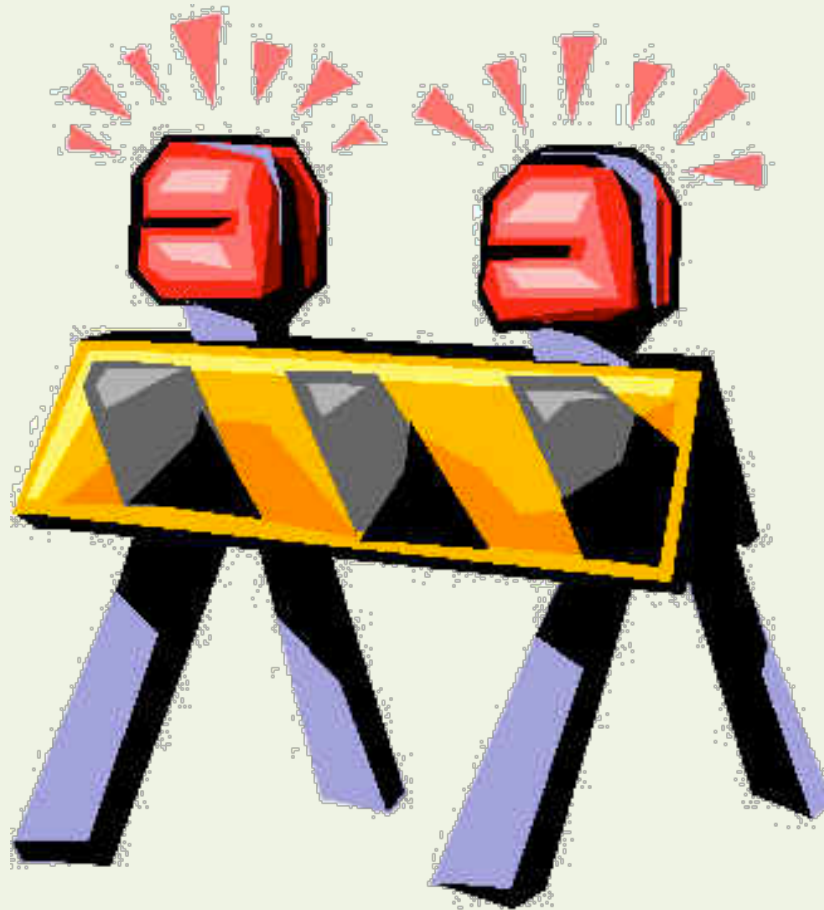


LGPL

Current status

libSBML 4.3.1

- no further support



libSBML 4.3.1

Upgrade

... please

libSBML 5.1.0-b0

Home / libsbml / 5.1.0-b0

Name ↕

↑ Parent folder

Mac OS X

Windows

Linux

libSBML-5.1.0-b0-src.tar.gz

libSBML-5.1.0-b0-src.zip

README.txt

Totals: 6 Items

l i b S B M L 5.1.0-b0

libSBML 5.1.0-b0

Home / libsbml / 5.1.0-b0 / Mac OS X

Name ↕

↑ Parent folder

libSBML-5.1.0-b0-libxml2-macosx-10.6-snowleopard.dmg

libSBML-5.1.0-b0-libxml2-macosx-10.7-lion.dmg

README.txt

libSBML-5.1.0-b0-libxml2-macosx-10.5-leopard.dmg

Totals: 4 Items

```
l i b S B M L   5.1.0-b0
Installers for Mac OS X operating systems
```


libSBML 5.1.0-b0

Home / libsbml / 5.1.0-b0 / Windows / 64-bit

Name ↕

↑ Parent folder

📁 Python

libSBML-5.1.0b0-win-x64.exe

libSBML-5.1.0b0-win-matlab-x64.exe

README.txt

Totals: 4 Items

```
libSBML 5.1.0-b0  
Installers for 64-bit Microsoft Windows operating systems
```

libSBML 5.1-packages-beta

Home / libsbml / 5.1-packages-beta

Name ↕

[↑ Parent folder](#)

[spatial-5.1.0-beta-1.zip](#)

[req-5.1.0-beta-1.zip](#)

[groups-5.1.0-beta-1.zip](#)

[fbc-5.1.0-beta-1.zip](#)

[comp-5.1.0-beta-1.zip](#)

[README.txt](#)

Totals: 6 Items

```
l i b S B M L   5.1.0
SBML Level 3 extension packages
```

libSBML 5.1.0-b0

Why beta ??

- most code same as 5.0.0 (stable)
 - additions
 - bug fixes
- new conversion API (beta)

Developers of new packages

libSBML-5 Documentation

[Main Page](#)[Classes](#)[Files](#)

[About libSBML and its use](#)

How to implement a package extension

This section describes the summary of how to implement a package extension for libSBML-5.

(Note that since libSBML-5 is currently in development stage the API described in this documentation may be changed in the future.)

1. [Implement an SBMLExtension derived class](#)
2. [Implement SBase derived classes of the package extension](#)
3. [Implement SBasePlugin derived classes](#)
4. [Implement a forward declaration file](#)
5. [Implement a header file which includes all SBML types defined in the extension](#)
6. [Defines a macro value of the package extension](#)
7. [How to import a source tree of a package extension into the source tree of libSBML-5](#)

1. Implement an **SBMLExtension** derived class

Firstly, an **SBMLExtension** derived class for your package needs to be implemented based on the steps described in **SBMLExtension** class.

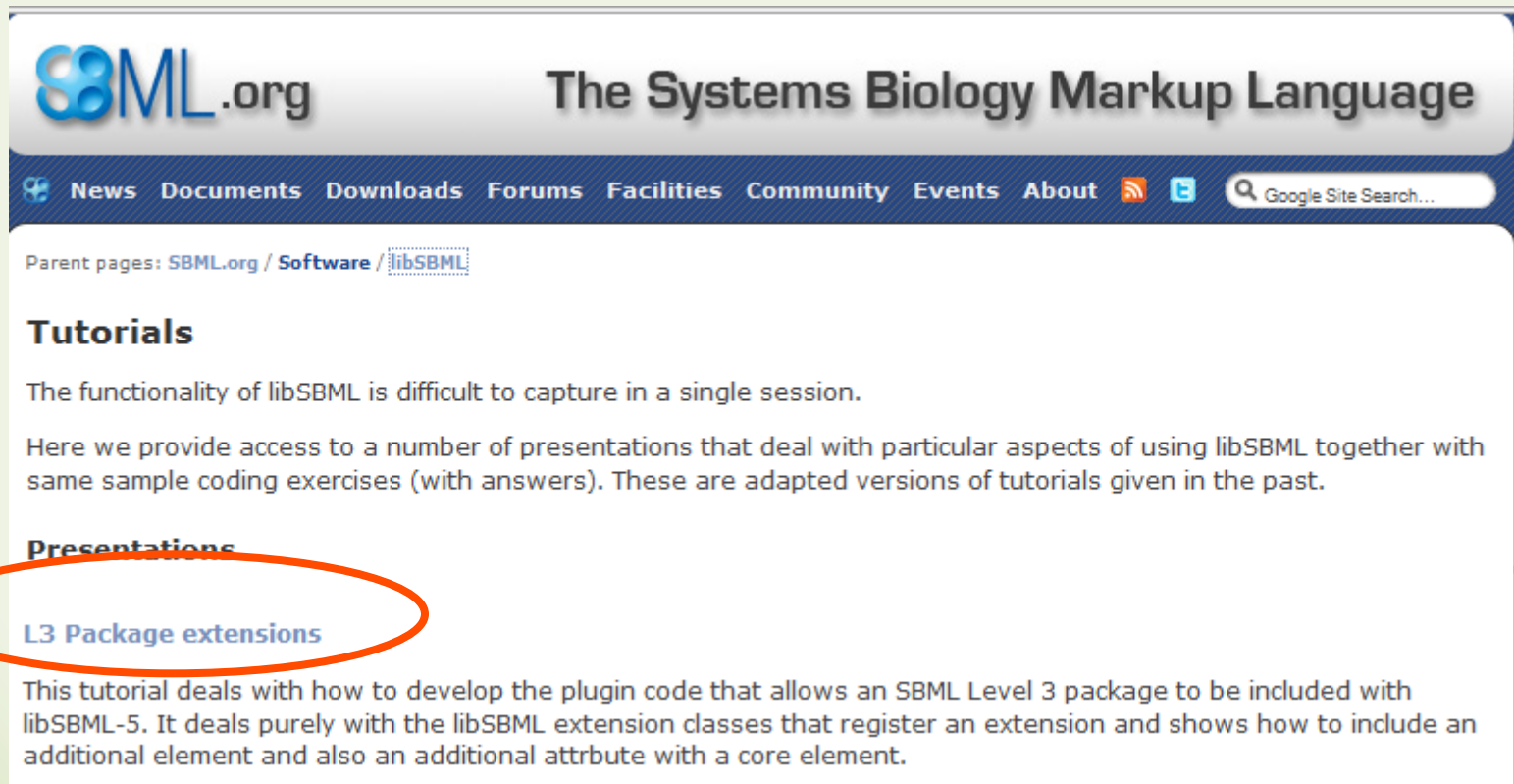
2. Implement **SBase** derived classes of the package extension

Secondly, **SBase** derived classes for your package need to be implemented based on the following steps:

Developers of new packages

libSBML-5 Documentation

<http://sbml.org/Software/libSBML/Tutorials>



The screenshot shows the SBML.org website. The header includes the SBML.org logo and the text "The Systems Biology Markup Language". A navigation bar contains links for News, Documents, Downloads, Forums, Facilities, Community, Events, and About, along with a search box labeled "Google Site Search...". The main content area shows the breadcrumb "Parent pages: SBML.org / Software / libSBML" and a section titled "Tutorials". Below this, there is a paragraph explaining that the functionality of libSBML is difficult to capture in a single session and that the page provides access to presentations and coding exercises. A section titled "Presentations" is visible, with a link for "L3 Package extensions" circled in orange. The text below the link describes how to develop plugin code for SBML Level 3 packages.

SBML.org The Systems Biology Markup Language

News Documents Downloads Forums Facilities Community Events About

Parent pages: [SBML.org](#) / [Software](#) / [libSBML](#)

Tutorials

The functionality of libSBML is difficult to capture in a single session.

Here we provide access to a number of presentations that deal with particular aspects of using libSBML together with some sample coding exercises (with answers). These are adapted versions of tutorials given in the past.

Presentations

[L3 Package extensions](#)

This tutorial deals with how to develop the plugin code that allows an SBML Level 3 package to be included with libSBML-5. It deals purely with the libSBML extension classes that register an extension and shows how to include an additional element and also an additional attribute with a core element.

Acknowledgements

- Bill Denny
- Christoph Flamm
- Akira Funahashi
- Ralph Gauges
- Martin Ginkel
- Alex Gutteridge
- Stefan Hoops
- Moriyoshi Koizumi
- Ben Kovitz
- Rainer Machné

Acknowledgements



Ben Bornstein
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Akiya Jouraku
Keio, Japan



Frank Bergmann
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