

The SBML Java[™] library

http://sbml.org/Software/JSBML

JSBML

- Compromise:
 - High compatibility to libSBML
 - Java-like library

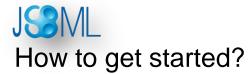
- Main developers
 - Nicolas Rodriguez and Andreas Dräger
 - NR available during the whole meeting to answer JSBML-related questions

Status

- Version 0.8-rc2 just released (https://sourceforge.net/projects/jsbml/files/jsbml/0.8-rc2/)
 - Final release close
 - Support all levels and versions

- Version 1.0
 - Support for SBML level 3 packages
 - Adding a libsbml compatibility module

- SBML L3 packages implemented :
- Qual
- Layout
- Groups
- Fbc
- On the way: Render, Spatial, Multi



Obtaining JSBML

 https://sourceforge.net/projects/jsbml/ files/jsbml

• Download the file jsbml-X.Y-with-dependencies.jar.

 Once you have added it to the Java CLASSPATH, you can start working with JSBML.



Visualizing the content of an SBML file

case00026

listOfEventAssignments

```
SBML Level 3 Version 1
                                                              case00026
    import javax.swing.*;
                                                                 listOfUnitDefinitions
   import org.sbml.jsbml.*;
                                                                 listOfCompartments
   /** Displays the content of an SBML file in a
                                                                  compartment
   public class JSBMLvisualizer extends JFrame {
                                                                 listOfSpecies
6
      /** Oparam document The sbml root node of an
      public JSBMLvisualizer(SBMLDocument document)
9
        super(document.getModel().getId());
                                                                 listOfParameters
10
        getContentPane().add(new JScrollPane(new JT
                                                                   k1
11
        pack();
                                                                 listOfReactions
12
        setVisible (true);
13
                                                                    reaction1
14
      /** @param args Expects a valid path to an SB
                                                                      listOfReactants
15
     public static void main(String[] args) throws
                                                                      listOfProducts
16
        new JSBMLvisualizer((new SBMLReader()).read.
                                                                      kineticLaw(reaction1)
17
                                                                 listOfEvents
18
                                                                    event1
                                                                      S1 < 0.1
```

How to compile a L3 package

Checkout the sources from sourceforge

```
svn co https://jsbml.svn.sourceforge.net/svnroot/jsbml/trunk jsbml
cd jsbml/core
ant jar
cd ../extension/qual
ant jar
now, includes the jar file from core/build, core/lib, extension/qual/build
```

Generating a big jar, including jsbml-qual:

```
cp extension/qual/build/*.jar core/lib
cd core
ant bigjar
now, you have a jsbml-X.Y-with-dependencies.jar that contains jsbml-qual as
well
```

 All of this will be automatised and we will provides the pre-compile jar files in the future

How to contribute

Creating a patch:

- Checkout the sources from sourceforge svn co "https://jsbml.svn.sourceforge.net/svnroot/jsbml/trunk jsbml" JSBML
- Do your modifications, then create a patch file:
 svn diff > jsbml-patch.txt
- Attach it to a tracker item or send it through the development list.

Bug trackers:

- http://sourceforge.net/tracker/?group_id=279608&atid=1186776
- https://www.pivotaltracker.com/projects/499447

Mailing lists:

- <u>jsbml-development@caltech.edu</u>: public list with discussion about the development of JSBML and support for users.
- jsbml-team@caltech.edu: private list for the JSBML team were anybody can send mails for support or bugs reports.

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JSBML: a flexible Java library for working with SBML

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Thanks

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