# iBioSim Installation Instructions

Chris J. Myers

January 25, 2015

## Contents

1	General Requirements	2
2	Java Installation	2
3	MacOS Installation	2
4	Windows Installation	2
5	Linux Installation	5

### 1 General Requirements

There are versions of iBioSim available for Windows, Linux, and MacOS. You can download the appropriate installation file from:

http://www.async.ece.utah.edu/iBioSim. iBioSim requires that you have Java Runtime Environment 1.6 or higher install on your system. It is also useful to have Graphviz. Also, you should associate files with a ".dot" extension with the Graphviz tool, and files with the ".xhtml" extension to your web browswer. There is also a pure java version available that supports most though not all features of iBioSim. This is a good option when having trouble with the other installations, since it is machine independent.

#### 2 Java Installation

To install the pure Java version, you need to download iBioSim-2.8-Java.zip and unzip it in the directory you wish to install. The iBioSim.jar file should be executable, but may require being invoked using the explicit command: java -jar iBioSim.jar. The iBioSim.mac64 script makes it look better on Mac environment.

#### 3 MacOS Installation

To install on MacOS, you need to download <code>iBioSim-(version)-MacOS.dmg</code> file. You should then open this file with <code>DiskImageMounter.app</code>. This should open up this disk image in <code>finder</code>. You should then copy the contents of this disk image to your Applications folder. You should then be able to start <code>iBioSim</code> by double-clicking on this application.

#### 4 Windows Installation

Download and execute iBioSim-(version)-Setup.exe.

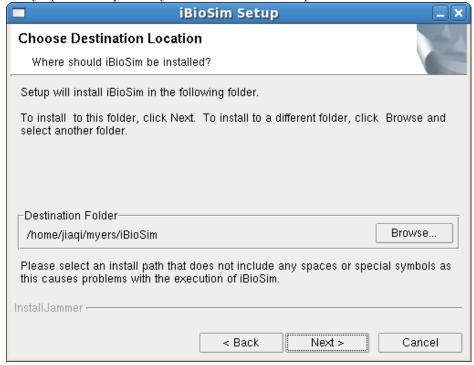
The installation uses InstallJammer. It first asks you for your preferred installation language. Make your selection and press OK.



The next screen tells you that you what version you are installing. Press Next to continue.



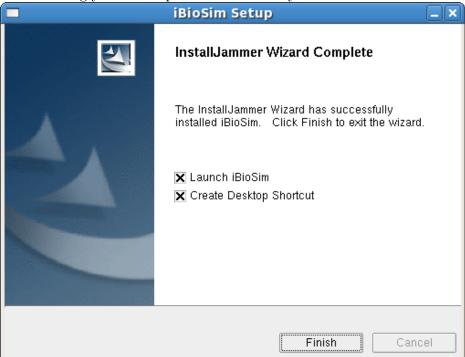
Next, it ask you for an installation location. Please make sure to select a path that does not have any spaces or special symbols as these cause problems with iBioSim.



You are now ready to install. Press Next to continue.



You are all done. Press Finish. If selected, iBioSim will launch immediately. Otherwise, you can start it using your desktop shortcut or from your start menu.



In your start menu, there should be an option to uninstall. If you select this, it will ask if you are sure then proceed to completely remove iBioSim from your system. It is highly recommended that you remove iBioSim using this uninstall procedure before installing a new version.

#### 5 Linux Installation

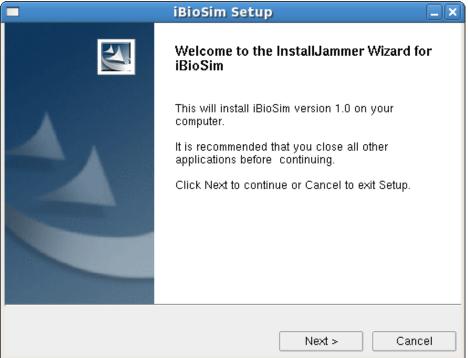
Since InstallJammmer is also used for the Linux install, the installation instructions are essentially the same. First, download <code>iBioSim-(version)-Linux-x86\_64-Install</code>. Open a terminal and browse to where this file was download. You must make this file executable:

chmod u+x iBioSim-(version)-Linux-x86\_64-Install. You should then execute this file:

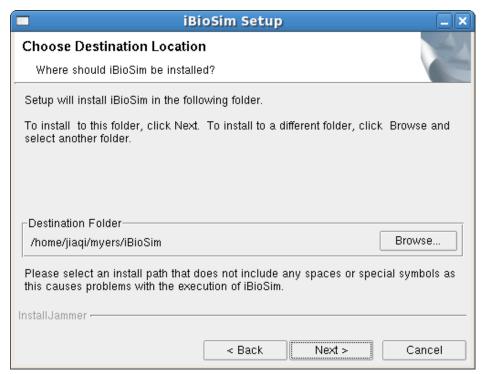
./iBioSim-\(\version\)-Linux-x86\_64-Install. This starts InstallJammer. It first asks you for your preferred installation language. Make your selection and press OK.



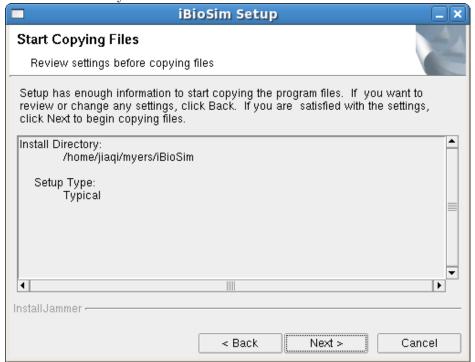
The next screen tells you that you what version you are installing. Press Next to continue.



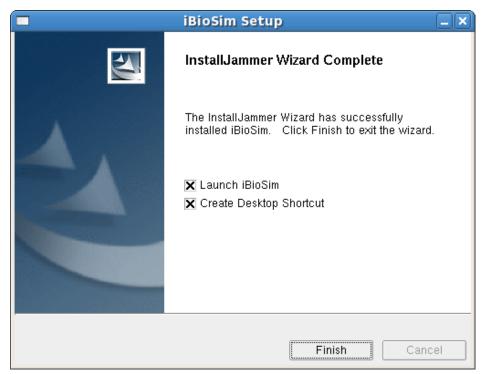
Next, it ask you for an installation location. Please make sure to select a path that does not have any spaces or special symbols as these cause problems with iBioSim.



You are now ready to install. Press Next to continue.



You are all done. Press Finish. If selected, iBioSim will launch immediately. Otherwise, you can start it using your desktop shortcut or from your start menu.



In your start menu, there should be an option to uninstall. If you select this, it will ask if you are sure then proceed to completely remove iBioSim from your system. It is highly recommended that you remove iBioSim using this uninstall procedure before installing a new version.

Note that since there are a large number of different linux installations, there can be problems especially with older installations. If you are having problems though, first log out and back in. There are some environment variables that need to be set. If you are still having problems, then read on. Our linux installations are currently built for 32-bit and 64-bit versions of Fedora 15. While the Java parts of our program port smoothly, there are often issues with the dynamic libraries and the C/C++ programs reb2sac and GeneNet. If you are having a problem, the first step is to download and build libsbml Version 5.0. You will need to replace the libsbml.so\* and libsbmlj.so files with your build of libsbml in either lib or lib64 depending on whether you are using a 32-bit or 64-bit machine. At this point, you should be able to start iBioSim. However, if you are still having problems, send an email to myers@ece.utah.edu including information about your OS and any error messages when you try to execute iBioSim from the command line.

You should also now test reb2sac and GeneNet. In your install directory, try the following:

- cd bin
- export LD\_LIBRARY\_PATH=\$BIOSIM/lib:\$LD\_LIBRARY\_PATH

  Note that this is for bash shell, so you may need to change for your shell, if not bash.
- ./reb2sac
- ./GeneNet

You should see the usage lines for these programs. If you do not, you may need custom builds, contact myers@ece.utah.edu.