

# **HOWTO: JBookTrader on Mac OS X & Eclipse**

**Author: Martin Koistinen**  
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## **Background**

As of the date of this writing, Apple Mac users face a dilemma in that Eclipse doesn't yet support Java 1.6 on the Mac, and JBookTrader requires it. The following is a HOWTO in order to get it working (as best it can).

## **Prerequisites**

### **A. 64-bit Mac Hardware**

Ensure you have a 64bit capable Mac. I have a MacBookPro and it is. My older MacMini isn't.

### **B. Mac OS X 10.5.7 (Leopard) or later**

Ensure you are running Mac OS X 10.5.7 or later.

### **C. Java 1.6.x or later**

Ensure you've installed Apple's Java for Mac OS X 10.5 Update 4 (or later). If this hasn't already presented itself to you in the Software Updater, then re-visit points A and B above. If these check out OK, then go to Apple.com's download section and manually install it.

## Steps

### 1. Configure the default JVM on your system to 1.6.x

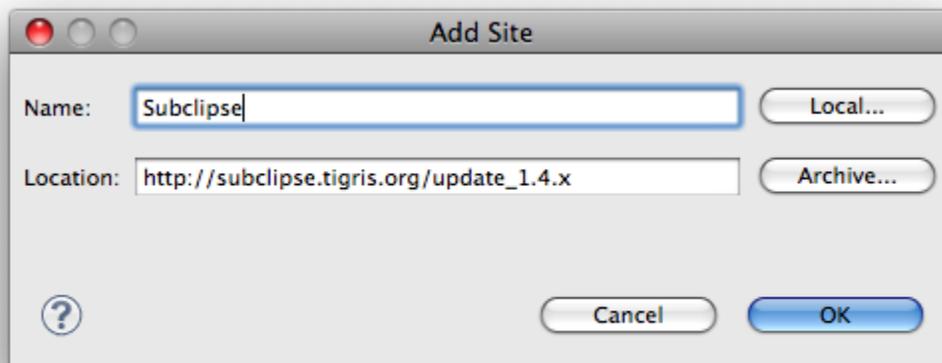
Run the Java Preferences.App in Applications > Utilities. Drag the JVM Java 1.6 to the top of both lists. Close the application when finished.

### 2. Install Eclipse 3.5 (or later) for Cocoa

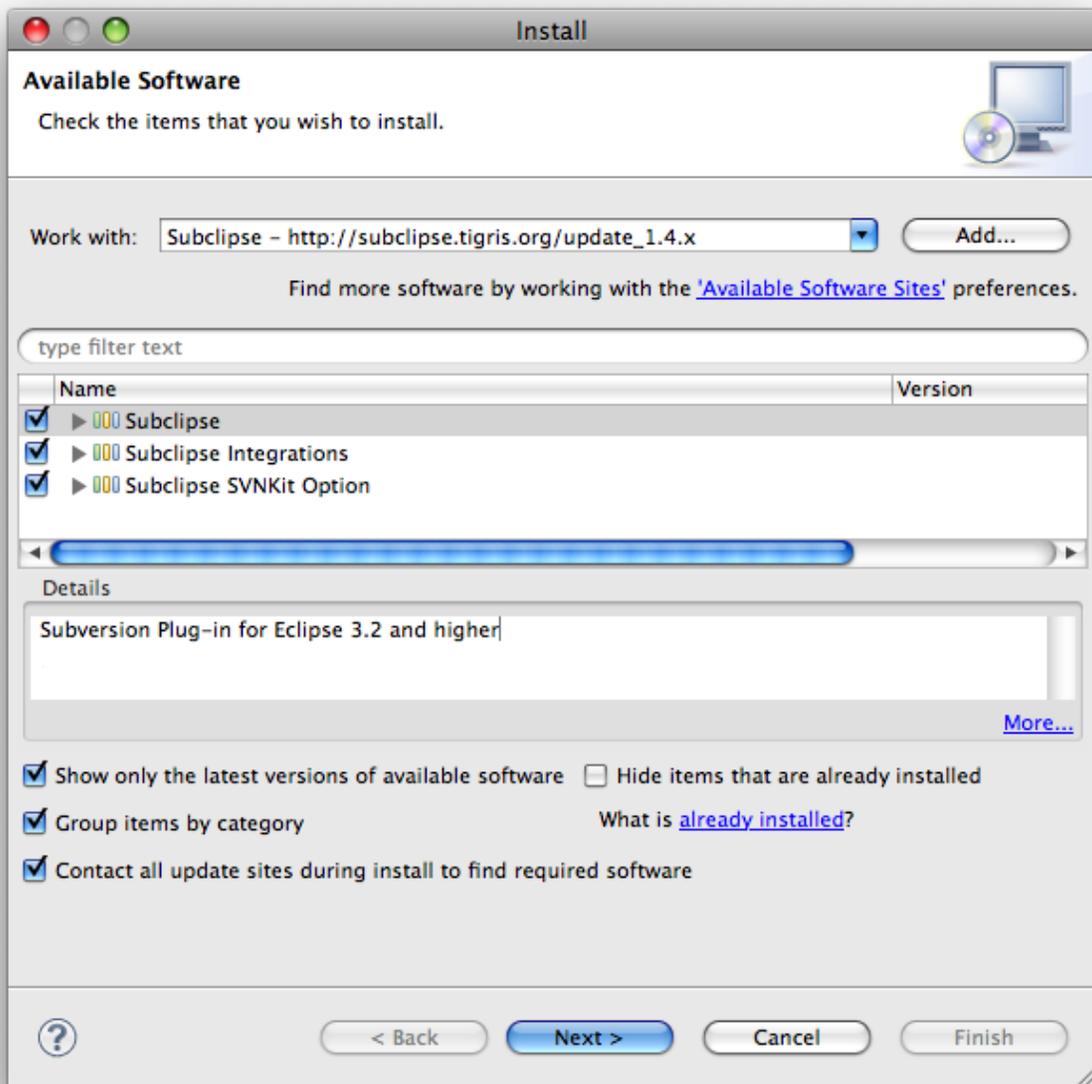
This can be found at the Eclipse download site here: <http://www.eclipse.org/downloads/>. Make sure you select the download for Eclipse Classic 3.5 (or later) for Mac OS X Cocoa (not Carbon).

### 3. Install Subclipse

In Eclipse, install Subclipse. Do this by going to Help > Install New Software... In the dialog that appears, add a new site by pressing the "Add..." button. Use "Subclipse" and "[http://subclipse.tigris.org/update\\_1.4.x](http://subclipse.tigris.org/update_1.4.x)" as the inputs into the two fields and press OK to submit.



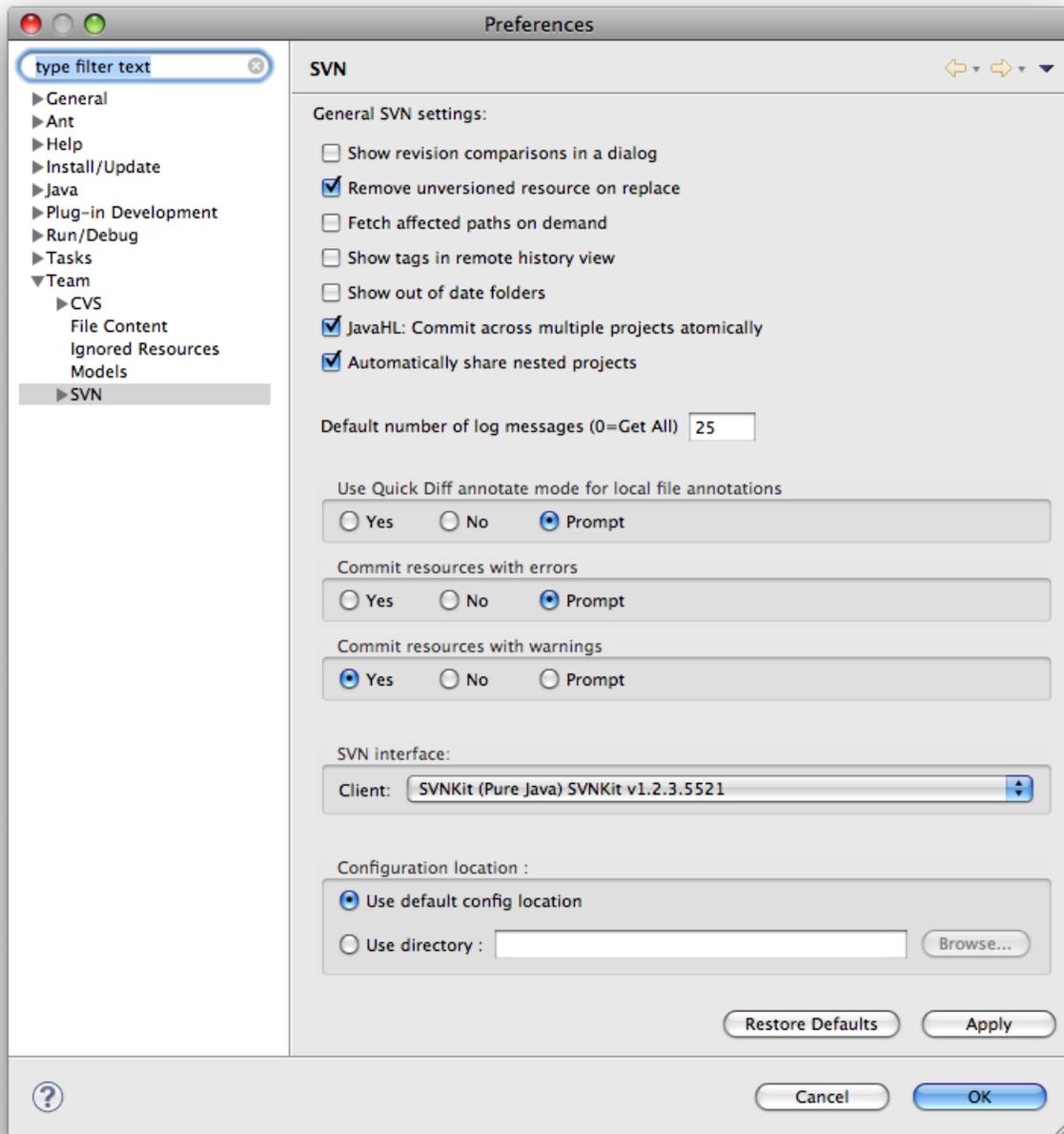
On the main window, choose to work with this new site.



Select all of the software packages to install and follow all the steps to install Subclipse. Press Next to begin.

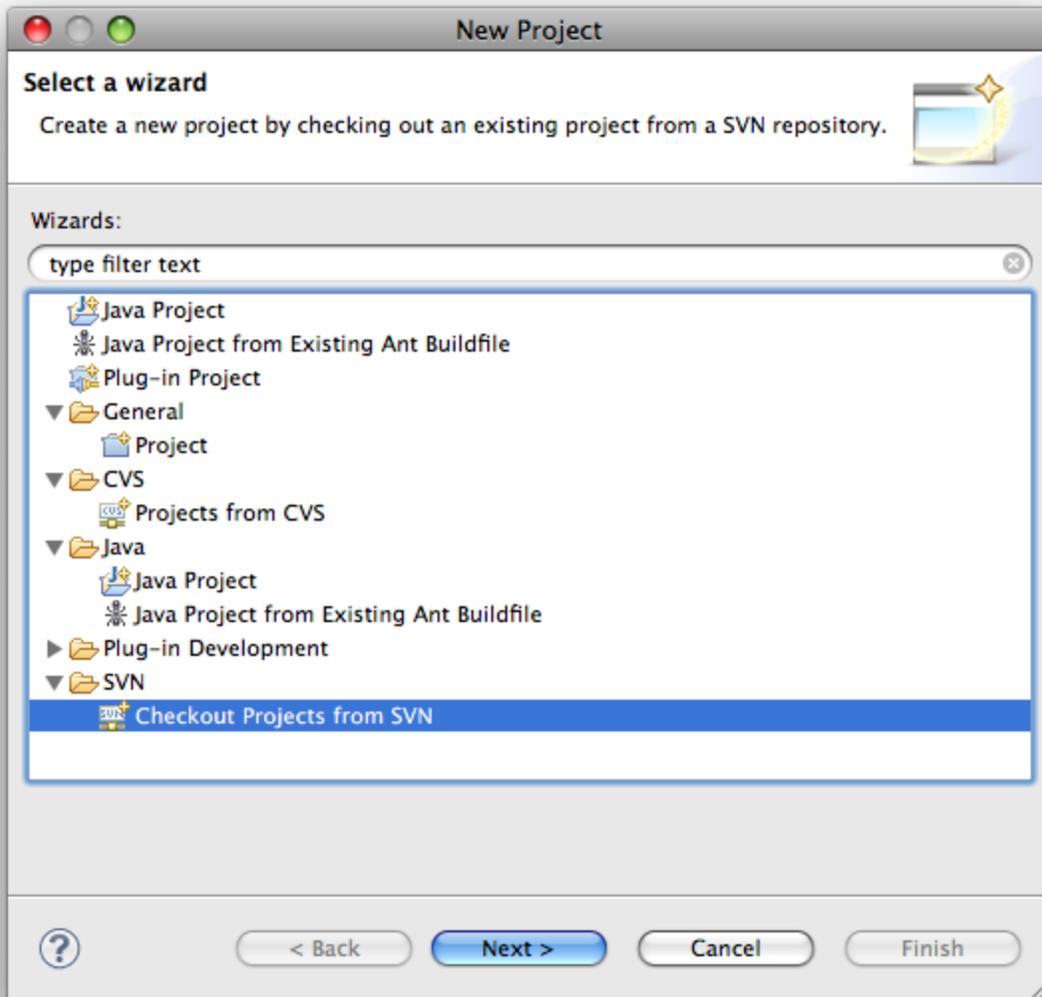
#### 4. Choose the Pure Java SVN Client

After restarting Eclipse, go to Eclipse > Preferences > Team > SYN. Change the SYN Interface to Client: SVNKit (Pure Java) SVNKit v1.2.3.5521 (or whatever the latest version number is).

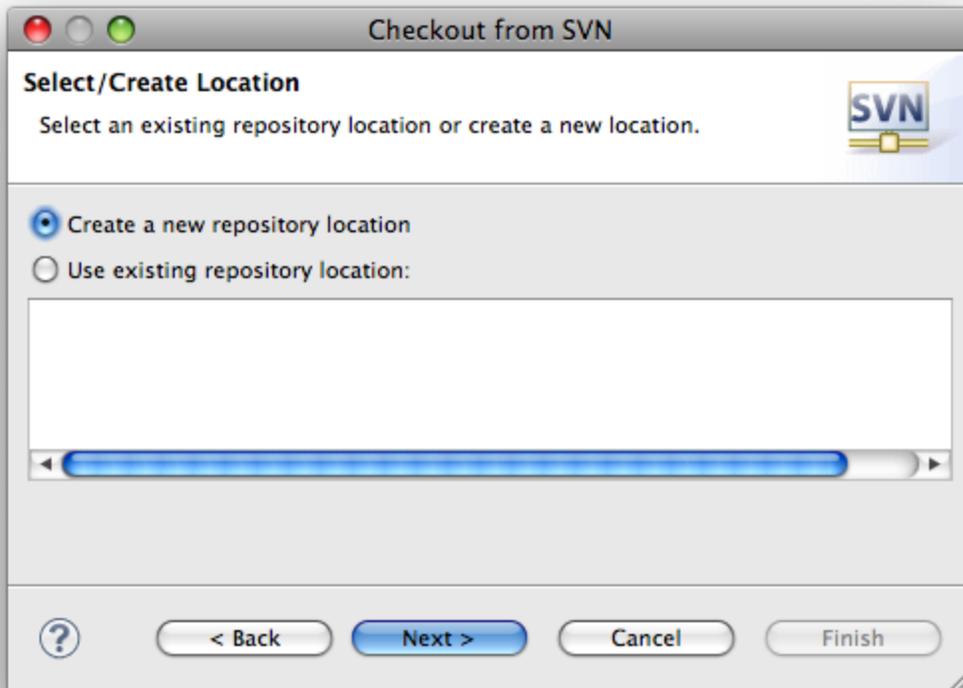


## 5. Obtain JBookTrader Source

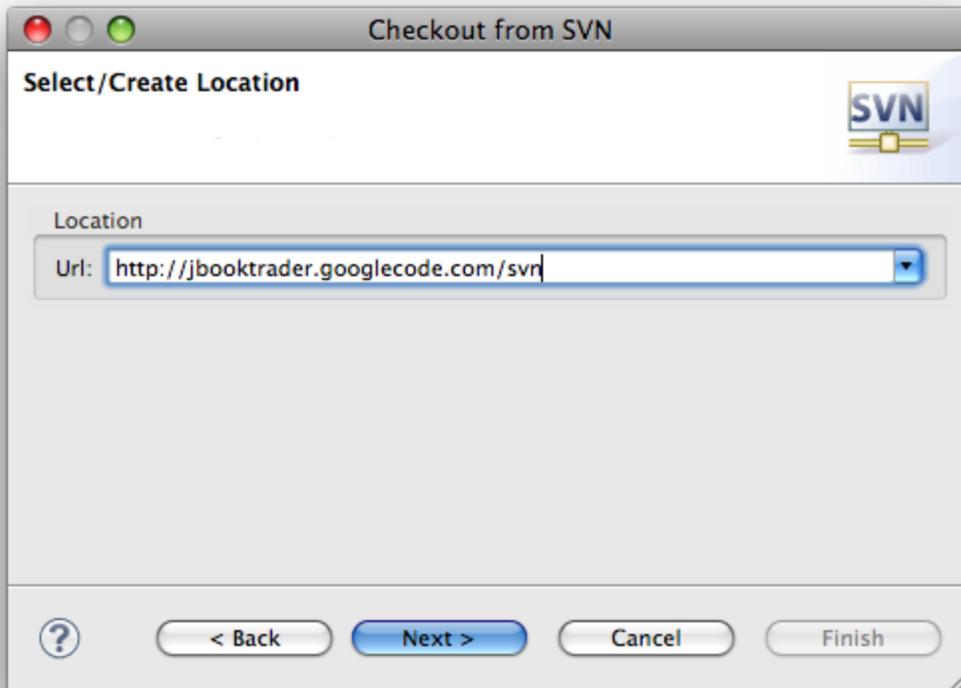
To obtain the JBookTrader source via SVN, use the menu File > New... and choose SVN > Checkout Projects from SVN.



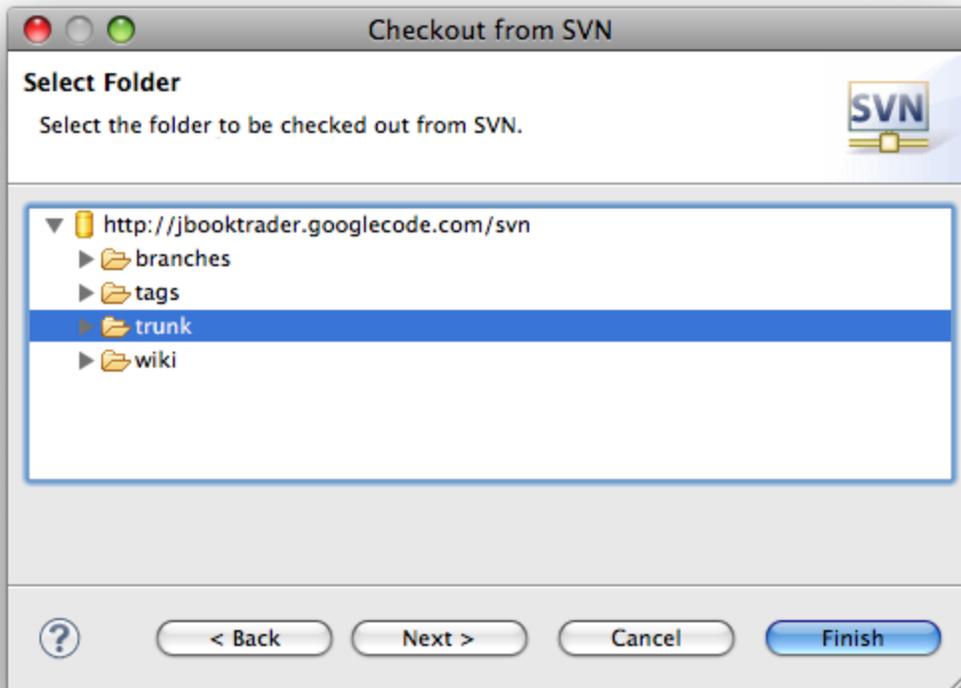
This will bring up the list of SVN repositories and allow you to create a new one.



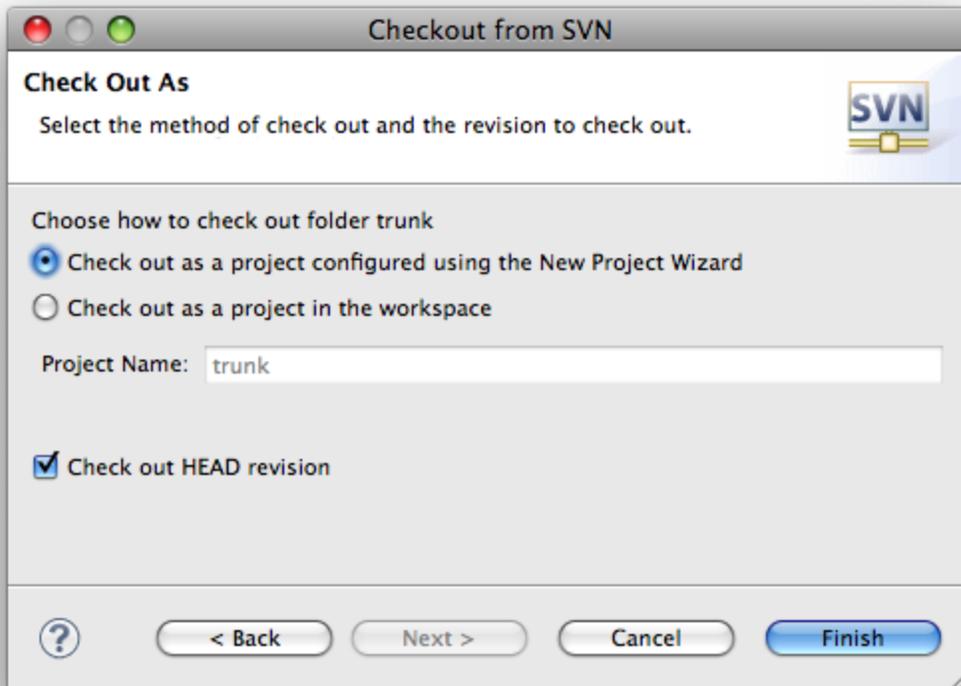
Click "Create a new repository location" and press Next to create a new one.



This URL was obtained from the <http://code.google.com/p/jbooktrader/source/checkout>, but you need to be careful to use the url only up to the ".../svn" and without including a trailing "/". Press Next to continue.

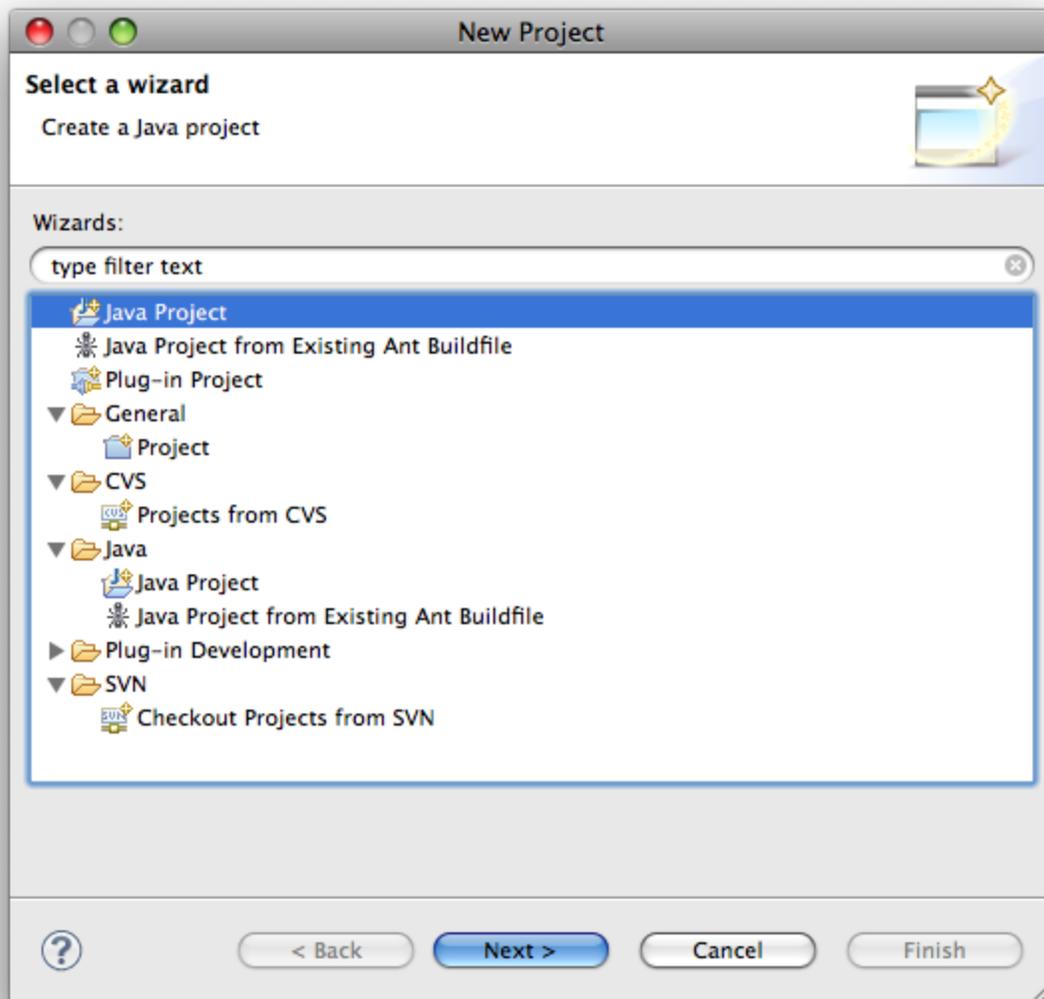


If SVN connects properly to the JBookTrader repository, then it will retrieve the contents of the repository. Choose "trunk" and press Next to continue.



At this point, you will be asked how to check out folder "trunk" into Eclipse. Choose the first option, "Check out as a project configured using the New Project Wizard". Leave "Check out HEAD revision" checked.

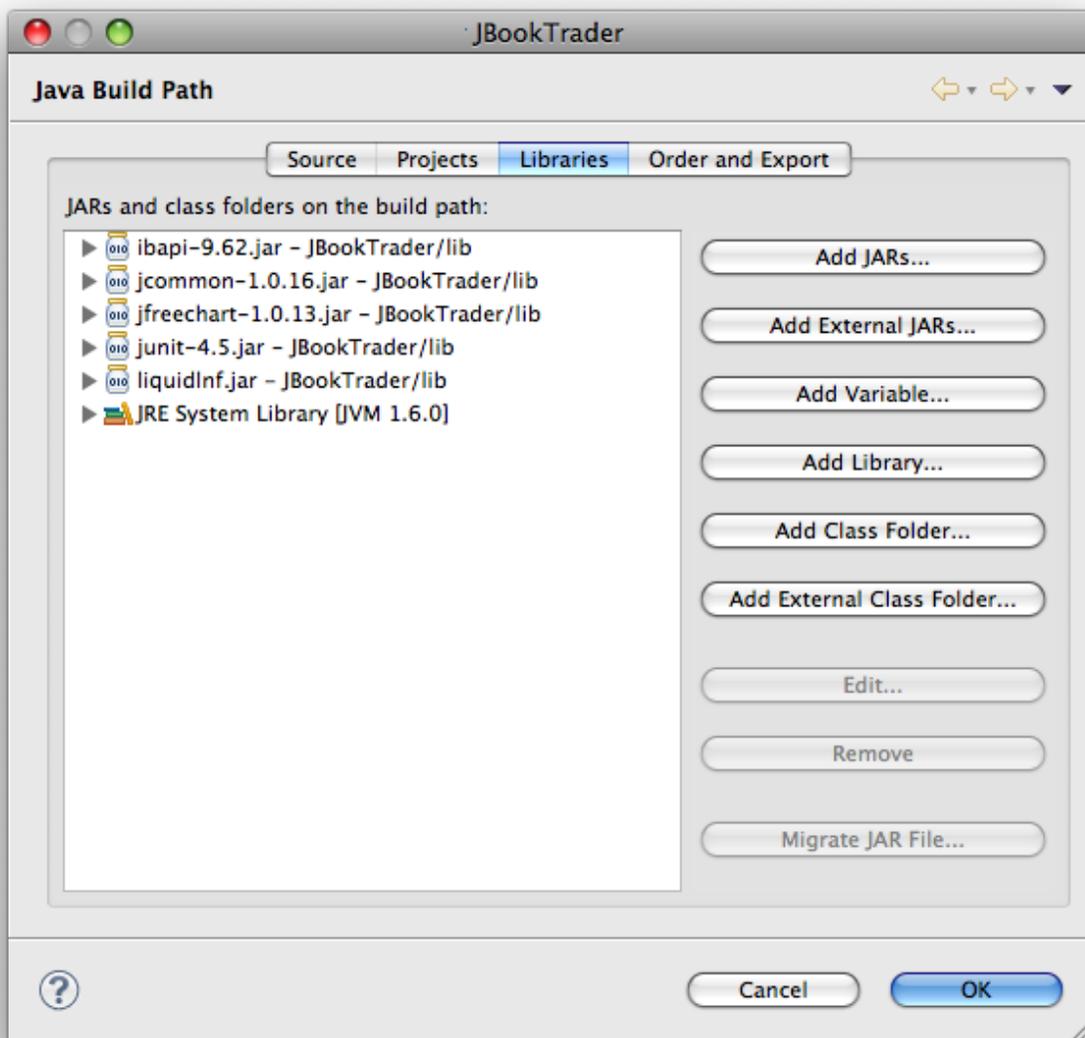
At this point, the New Project Wizard will appear again. This time, select "Java Project".



Press Next to continue.

In the next window presented, select the folder "JBookTrader/source" as the source folder. Change the output folder to "JBookTrader/classes".

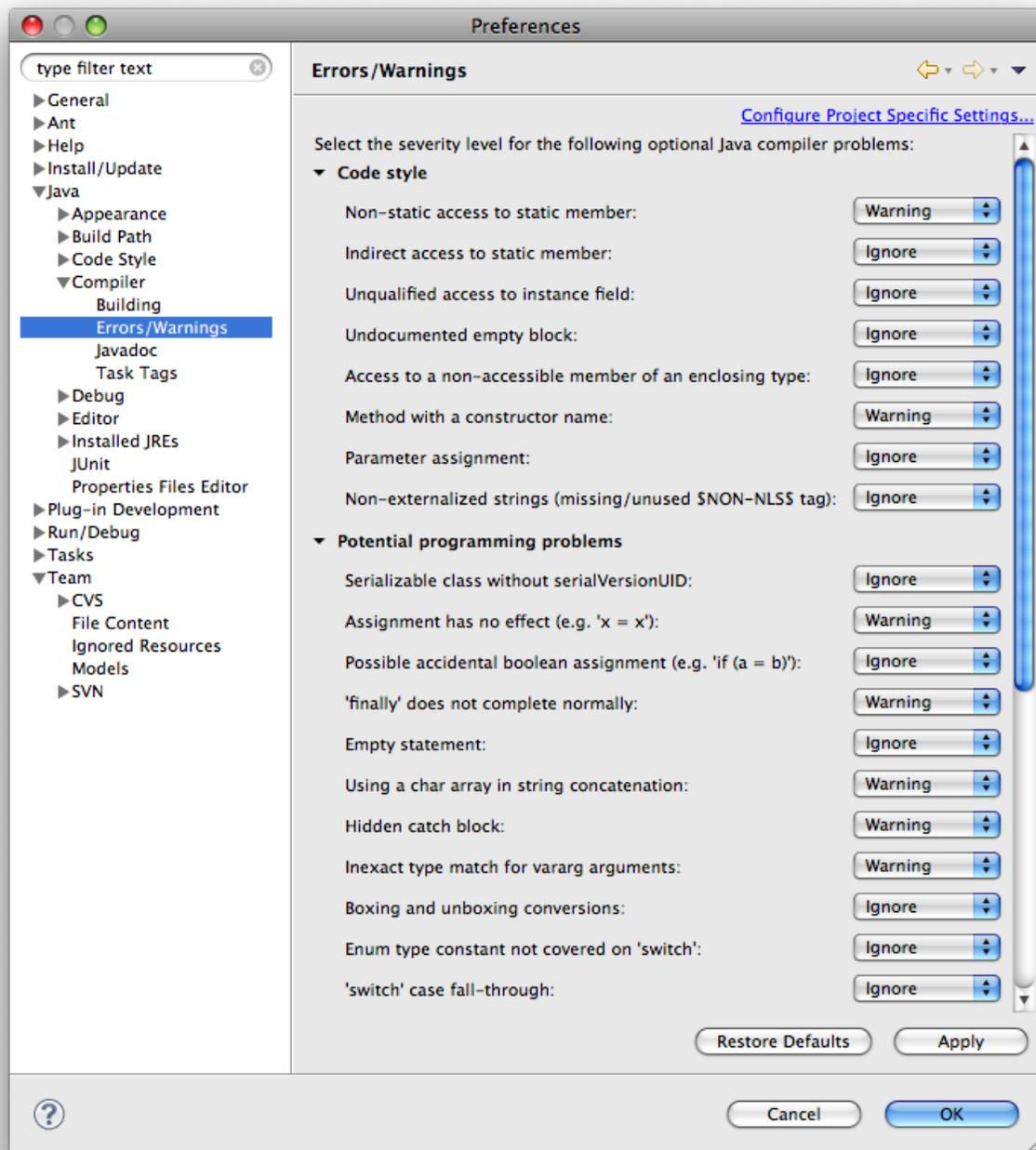
Click the Libraries tab. Ensure that all of the libraries in JBookTrader/lib are listed in the window using the Add Jars... button if necessary.



Click Finish.

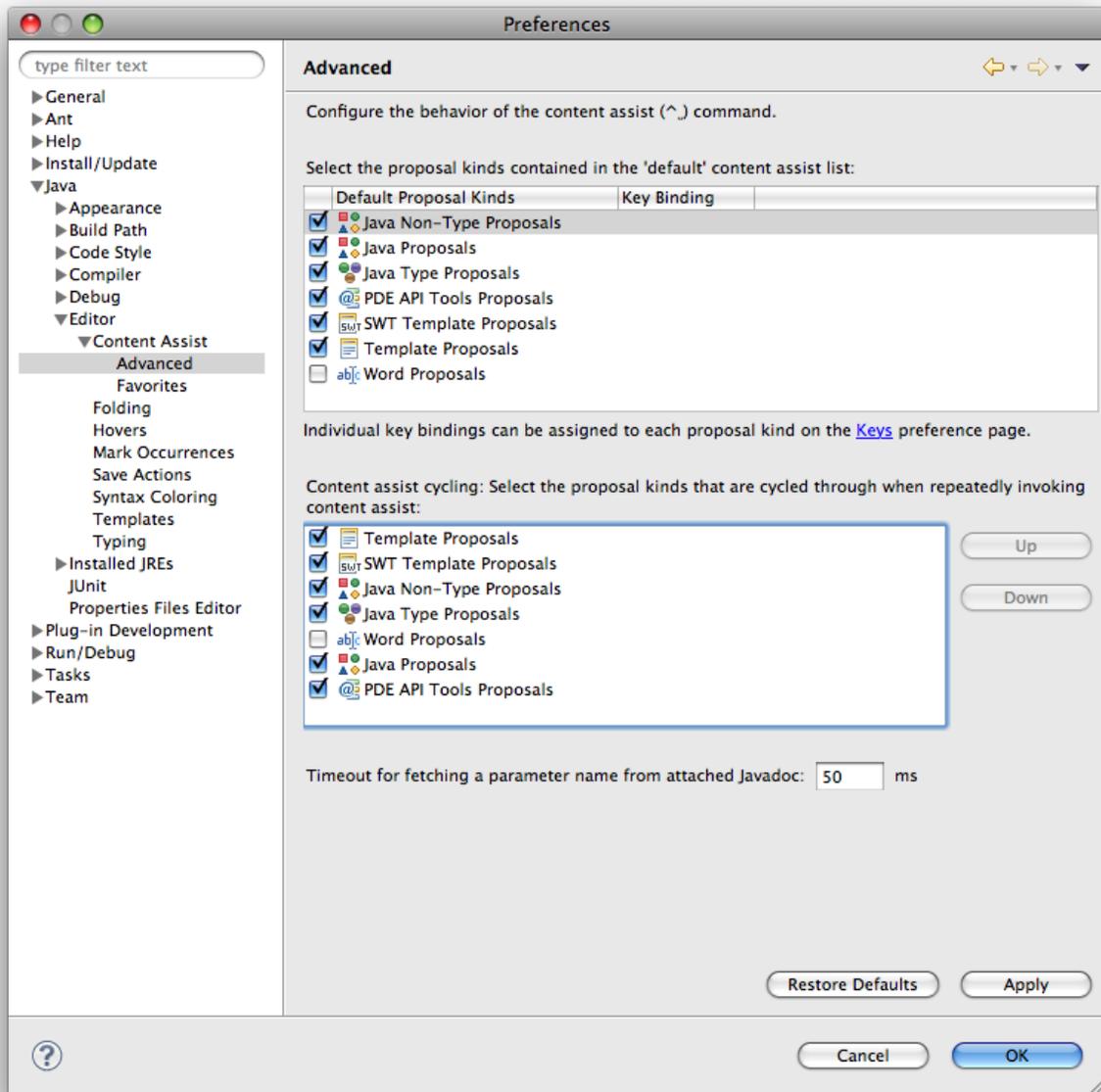
## 6. Configure compiler options

Use the menu Eclipse > Preferences... and in the window that appears, click Java > Compiler > Errors and Warnings.



## 7. Ensure that Code Completion is working

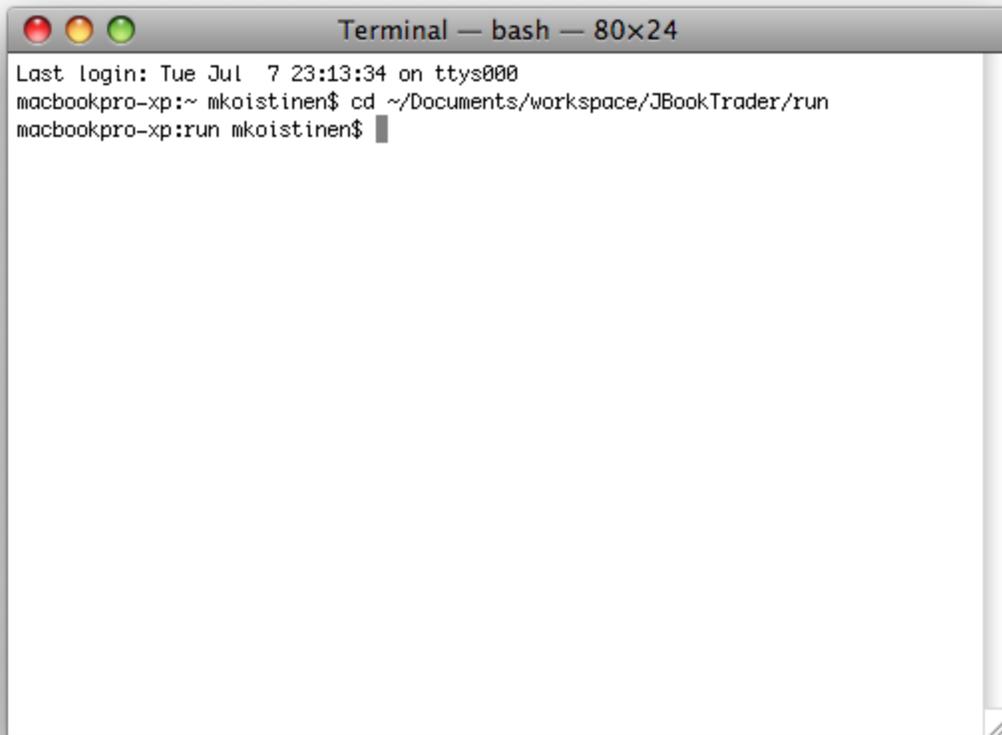
For some reason, in my installation, Eclipse didn't "recognise" the code and provide autocompletion functionality for JBookTrader. You may have better luck, but if you also experience problems here, go to Eclipse > Preferences..., then select Java > Editor > Content Assist > Advanced and that your settings resemble these:



## 8. Build and run JBookTrader

Now, remember that you will not be able to run JBookTrader from Eclipse via the normal "Run" menu item. However, JBookTrader already includes a shell script to run it from Terminal.app.

On your Mac, run Terminal.app. This is normally found in Macintosh HD > Applications > Utilities > Terminal.app. Opening the Terminal.app program will launch a terminal session automatically.

A screenshot of a macOS Terminal window. The title bar reads "Terminal — bash — 80x24". The terminal content shows a login message: "Last login: Tue Jul 7 23:13:34 on ttys000". Below that, the prompt "macbookpro-xp:~ mkoistinen\$" is followed by the command "cd ~/Documents/workspace/JBookTrader/run". The prompt then changes to "macbookpro-xp:run mkoistinen\$" with a cursor at the end.

```
Terminal — bash — 80x24
Last login: Tue Jul 7 23:13:34 on ttys000
macbookpro-xp:~ mkoistinen$ cd ~/Documents/workspace/JBookTrader/run
macbookpro-xp:run mkoistinen$
```

First, you must change your current directory to JbookTrader/run. This will be located in your Eclipse workspace directory. In my case, my Eclipse workspace directory is in my Documents folder, so I can use the following command to get to the right place:

```
cd ~/Documents/workspace/JBookTrader/run
```

At the new prompt, type:

```
./JBookTrader.sh
```

The "./" is important. It will not work without it.

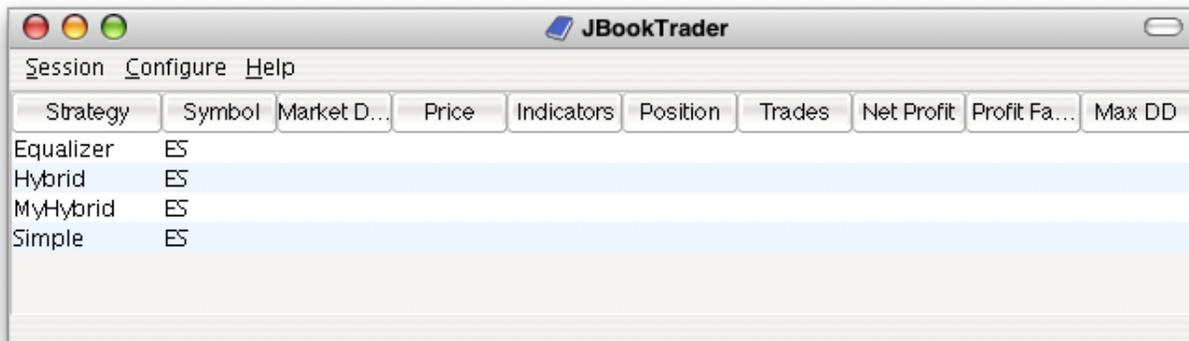
When you press enter, the script will clean compile the JBookTrader source code and then run JBookTrader

HOWEVER, since Eclipse cannot run Java 1.6.x yet, you will get errors if you try to run JBookTrader from Eclipse. Instead, I use Terminal.app, and cd to [Workspace]/JBookTrader/run, then type "./JBookTrader.sh" (no quotes, obviously). Works like a champ and Eclipse seems to do everything else just fine.

```
Terminal — java — 80x24
Last login: Tue Jul 7 23:13:34 on ttys000
macbookpro-xp:~ mkoistinen$ cd ~/Documents/workspace/JBookTrader/run
macbookpro-xp:run mkoistinen$ ./JBookTrader.sh
Java HotSpot(TM) 64-Bit Server VM warning: Large page sizes are not supported by
this Mac OS X version
█
```

Note that at this time, Mac OS X does not support large page sizes. I expect this will be resolved in Snow Leopard (10.6).

Regardless, JBookTrader should present its main window.



Congratulations. You should now be able to develop JBookTrader on your own system as you normally would with Eclipse and run the program despite its requirement for Java 1.6.x which Eclipse doesn't yet support on a Mac.

■