

## 1. GETTING STARTED

NOTE: These steps only need to be completed the first time you install Thinklab. When registering for user accounts at the resources specified below, please use the following naming convention: firstname.lastname (e.g., ferdinando.villa).

1. Register for a BitBucket account at <https://bitbucket.org/> and provide your user name to your group leader.
2. Register for an account on the integratedmodelling.org user forum at <http://www.integratedmodelling.org/forum>.
3. Register for a Thinklab user license at <http://150.241.131.4/dashboard/>. Click the **New user button** and provide the required information. Once your registration is completed, you will receive an email at the address you provided. The email will contain an attachment (im.cert) that grants you access to the required resources.

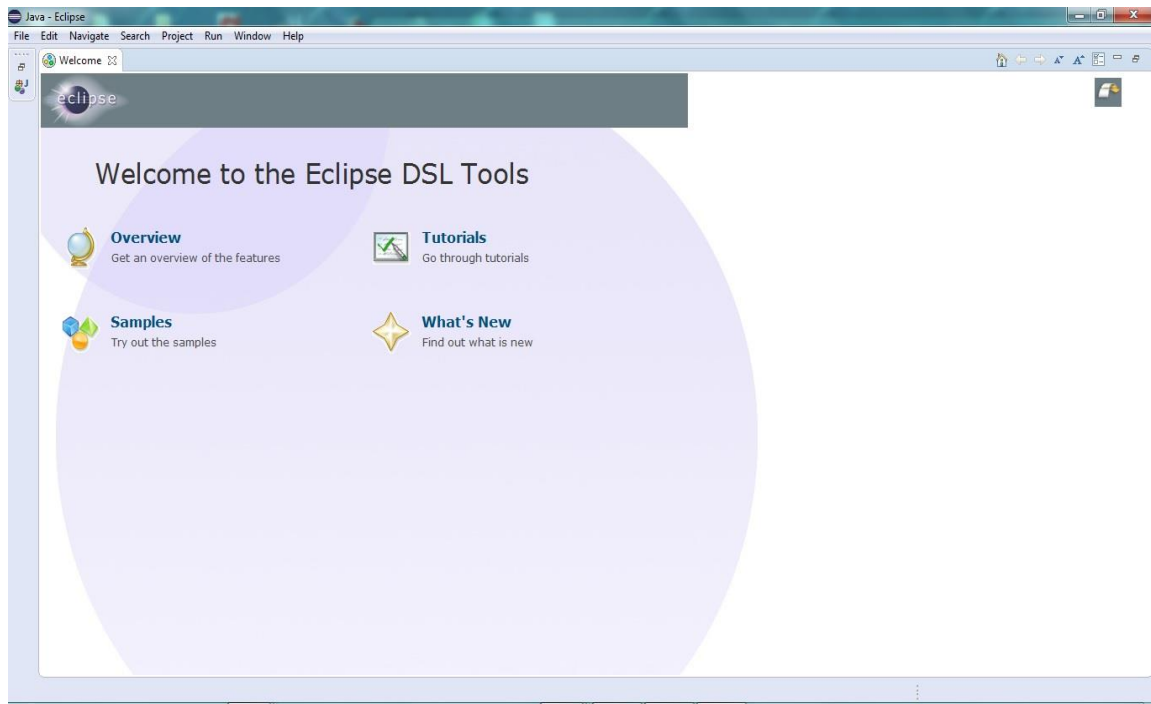
## 2. INSTALLING THINKLAB

NOTE: Thinklab requires the 64-bit versions of Java and Eclipse.

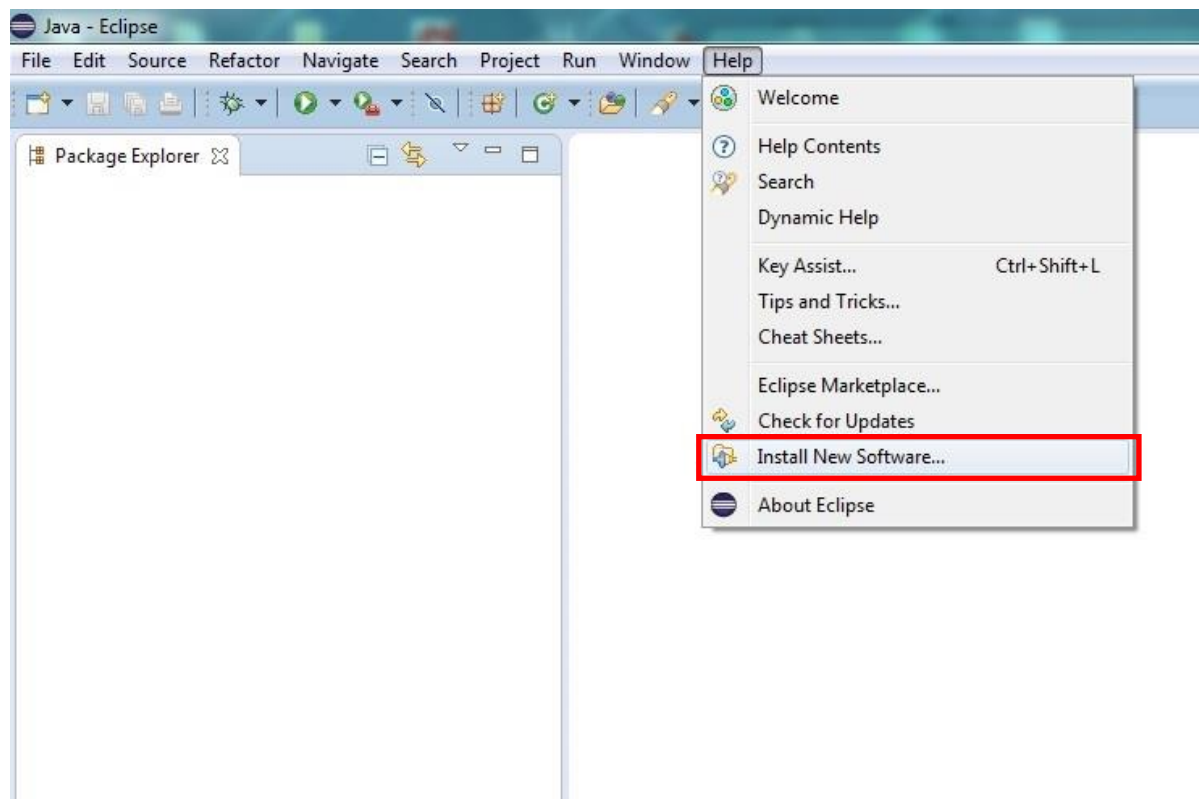
1. If Java is already installed on your computer, ensure that it is Version 7 Update 51. If you are not sure what version you are running, see the notes in Section 3. If Java is not installed on your computer, download it from <http://www.oracle.com/technetwork/java/javase/downloads/jdk7-downloads-1880260.html>. Be sure to select the file named jdk-7u51-windows-x64.exe. Once the executable has been downloaded, double-click the file and follow the prompts to complete the installation. Make sure to note the installation location on your disk. **NOTE: This file is included on the thumb drive distributed to each Thematic Group.**
2. Download the latest 64-bit version of Eclipse IDE for Java and DSL Developers from <http://eclipse.org/downloads/index-developer.php> (select Eclipse IDE for Java and DSL Developers for Windows 64-bit). **NOTE: This file is included on the thumb drive distributed to each Thematic Group.**
3. Extract Eclipse to your hard drive, and then run eclipse.exe. Depending on your system and environment variable settings, running eclipse.exe may generate the error message seen below. If this happens, ask for assistance or follow the procedure described in Section 3.



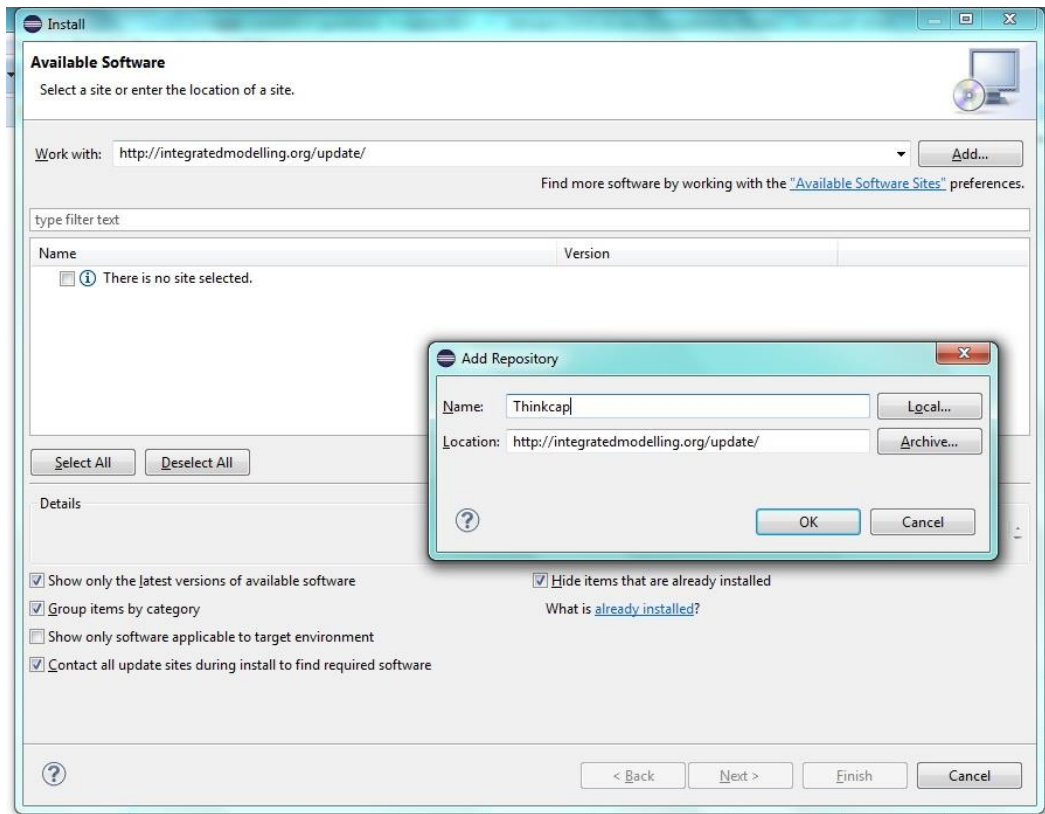
4. If eclipse launches without error, you will be prompted to select a workspace from the Workspace Launcher interface. Create a new directory that will be used to store the projects that are used in the modeling environment. **NOTE: Do not create your workspace as a sub-directory to the eclipse installation directory.**
5. Close the Welcome screen (but leave the eclipse software open).



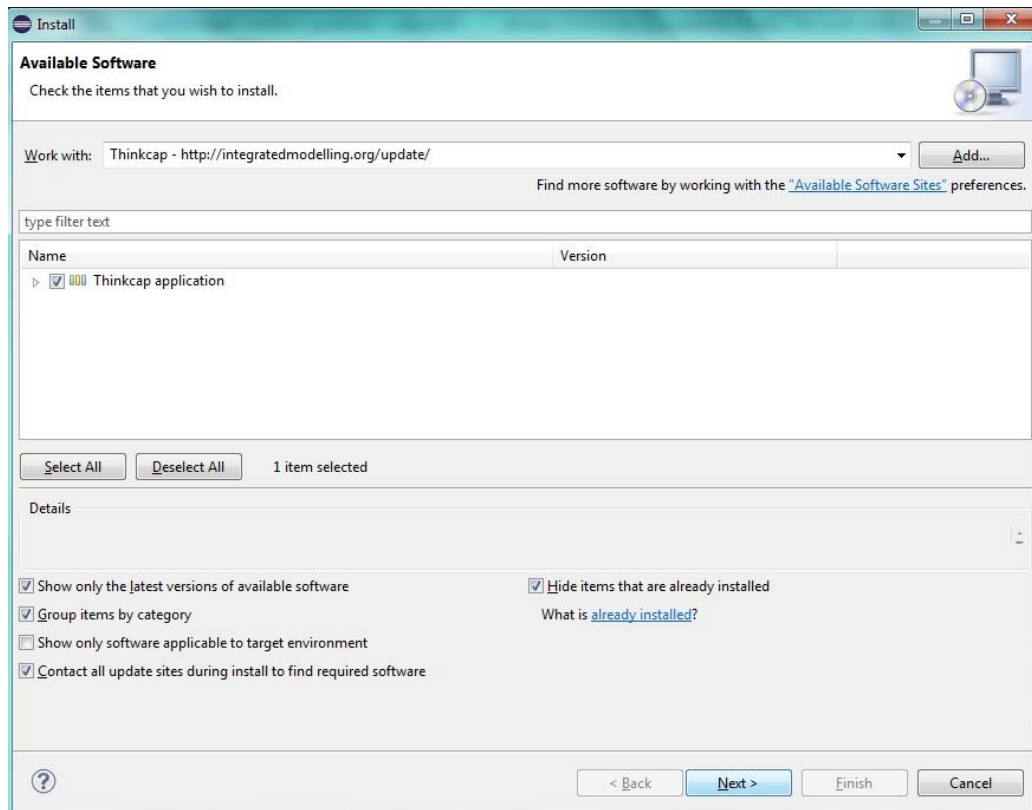
6. From the Help dropdown menu, select **Install New Software**.



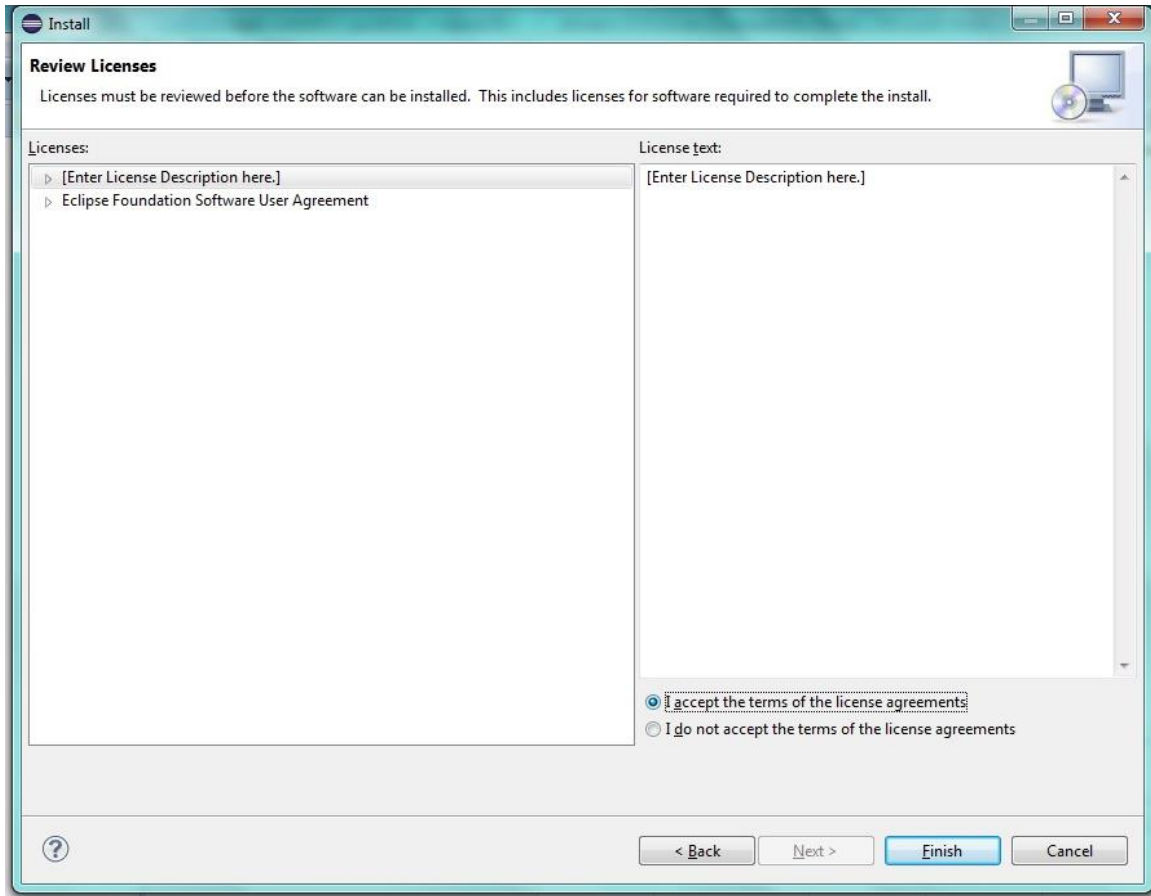
7. In the Install window, enter <http://integratedmodelling.org/update/> in the **Work with** input box, and then click the **Add** button. In the Add Repository dialog box name the repository "Thinkcap" and then click OK.



8. Click the check box for Thinkcap application, and click Next and then Next again.

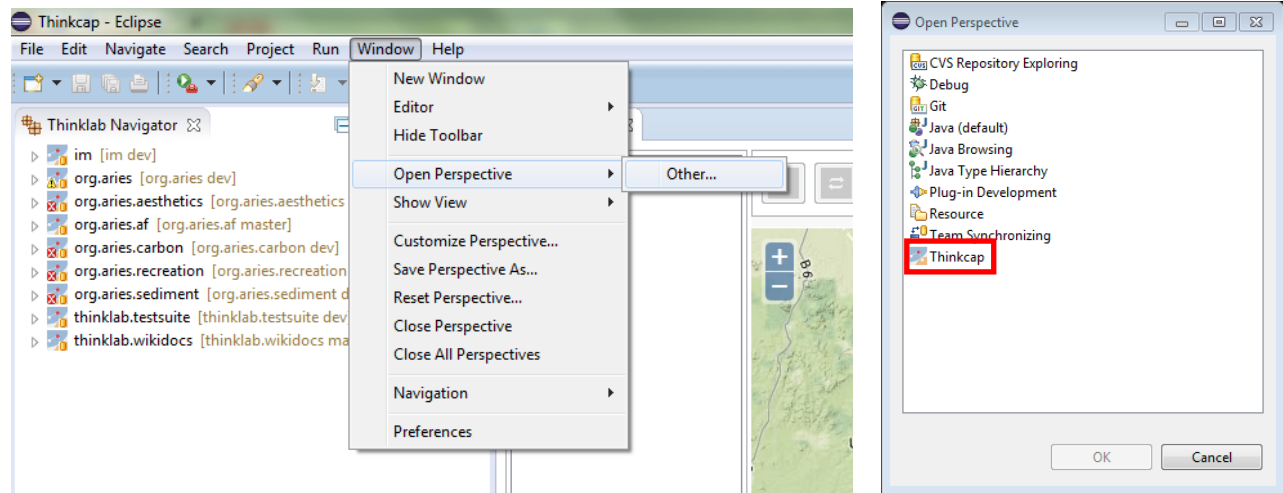


9. Click the radio box to accept the terms of the license agreement and press **Finish**. If you encounter a read timeout after clicking Finish, restart this step. If a Security Warning appears, click OK to complete the installation.



10. When the install finishes, Eclipse will ask you to restart; select Yes.

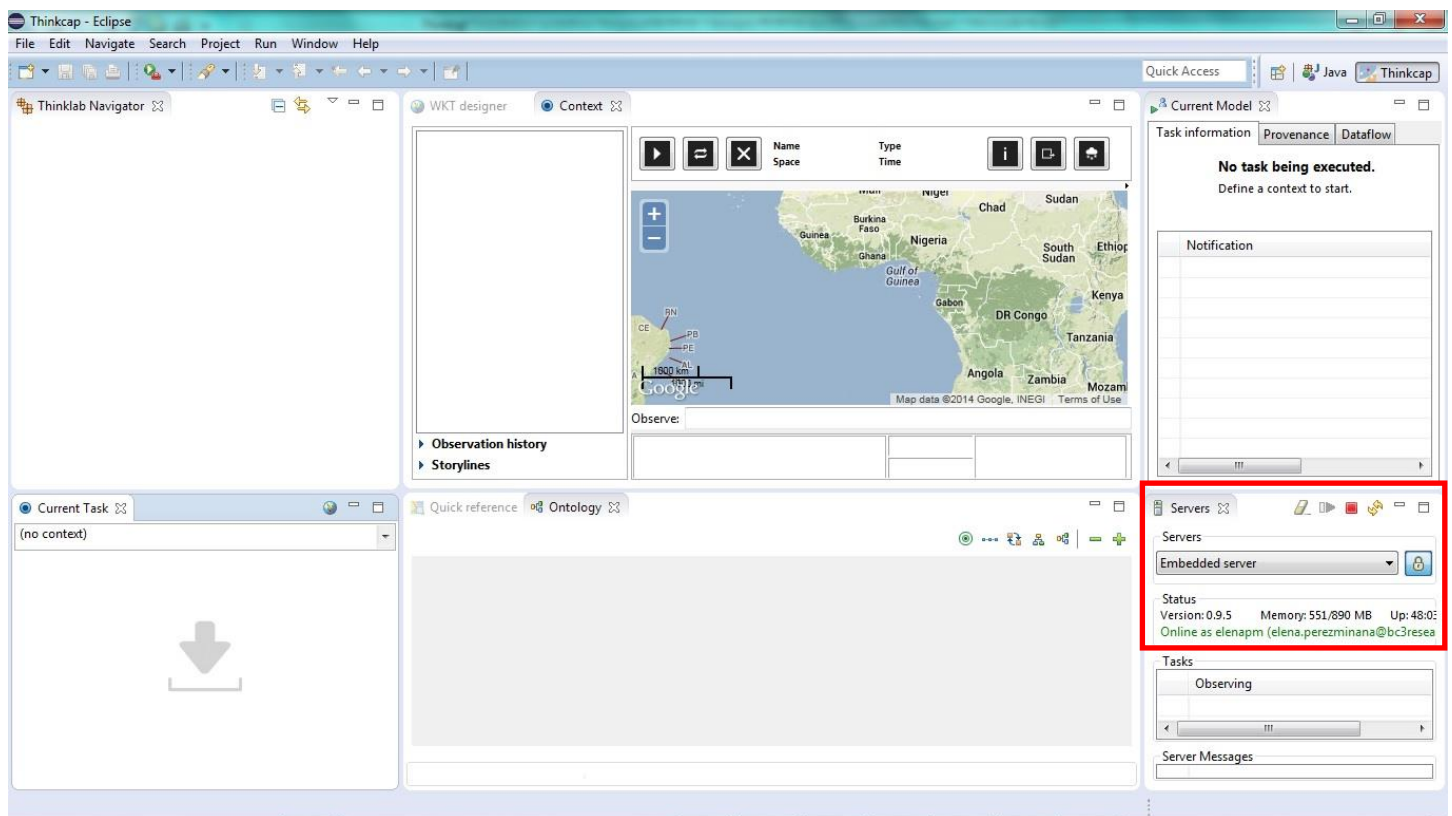
11. Once Eclipse restarts, click Window >>> Open Perspective >>> Other. Select the Thinkcap perspective from the list of options and press OK. This will trigger the final steps in the installation process.



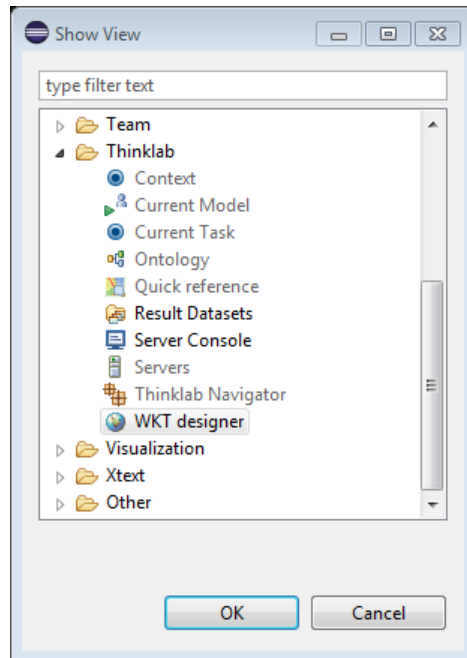
12. Once your installation is complete, exit Eclipse (File >>> Exit).

13. Save the im.cert file you received via email in the .thinklab directory. The .thinklab directory is located in your root user folder (e.g., C:\Users\brian\.thinklab).

14. Restart Eclipse. Once Eclipse is finished loading, look for the Server tab in the lower right corner of the interface. You should see that the Embedded server has started with a message below it indicating that you are online (see the green text in the Status section of the Server tab).



15. Additional windows can be added to the interface by selecting Window >>> Show View >>> Other. Highlight the desired window names (be sure to include the WKT designer) in the Show View interface and click OK. Eclipse will remember the arrangement of the Thinkcap interface as long as you shut down the software properly (File >>> Exit). Your user environment is now ready to begin importing Thinklab projects.



16. Importing Thinklab projects: Right-click in the **Thinklab Navigator** window and select **Import**. Expand the **Git** option by clicking the triangle next to the **Git** directory (or double-clicking the directory icon). Select **Projects from Git** and click Next, then select **Clone URI** and click Next. In the URI dialog box enter the following URI: <https://bitbucket.org/ariesteam/im.git>. Enter your BitBucket user name and password, click the **Store in Secure Store** checkbox and click Next to reach the Branch Selection interface. Uncheck all of the branches except dev from the list of possible branches to import. Click Next to reach the Local Destination interface. Set the **Directory** parameter to the workspace you created in Step 4 and make sure the **Initial Branch** is set to dev from the dropdown box. Click Next, and then click Next to reach the Import Projects interface. Then click Finish. You should now see the im project listed in the Thinklab Navigator pane. Repeat this step for the following project URIs paying careful attention to the branch listed in parentheses following each URI:

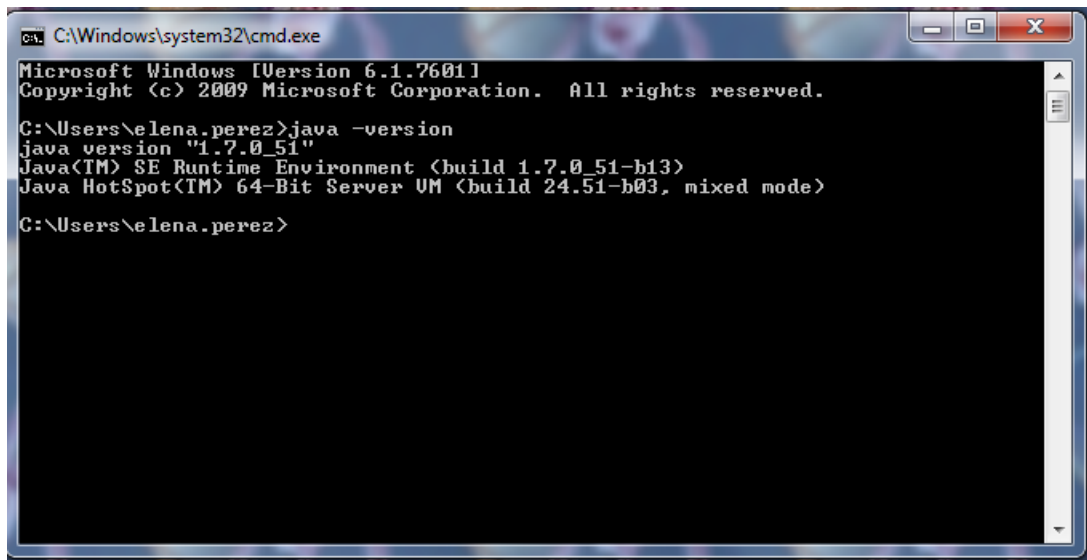
- a. <https://bitbucket.org/ariesteam/org.aries.git> (dev branch)
- b. <https://bitbucket.org/ariesteam/org.aries.af.git> (master branch)
- c. <https://bitbucket.org/ariesteam/thinklab.testsuite.git> (dev branch)

17. After importing all the projects restart Eclipse (File >>> Restart). NOTE: If you exit Eclipse by clicking the red "x" in the upper right hand corner of the interface, the software will not store the changes you've made to the interface.

### 3. TROUBLE-SHOOTING JAVA

#### 1. How to determine which Java version is installed on a Windows operating system

Click on the **Start** button, type "cmd" and click Enter to open a Command Prompt. At the command prompt type "java -version" and click Enter. The screenshot below indicates that java 1.7.0\_51 is installed.



```
cs: C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\elena.perez>java -version
java version "1.7.0_51"
Java(TM) SE Runtime Environment (build 1.7.0_51-b13)
Java HotSpot(TM) 64-Bit Server VM (build 24.51-b03, mixed mode)

C:\Users\elena.perez>
```

## 2. Resolving the “javaw.exe error message” on launch of eclipse.exe

In this section we assume that Java has already been installed on your computer. If you have not installed Java see Section 2 Step 1. Eclipse requires a Java Virtual Machine, which can either be a Java Run Time Environment (JRE) or a Java Development Kit (JDK). If you’ve confirmed that Java is installed on your computer but receive an error message when trying to run eclipse indicating that a Java virtual machine cannot be found, try the following:

- a) Identify the path to your **javaw.exe** (e.g. C:\Program Files\Java\jre7\bin\javaw.exe).
- b) Open the eclipse.ini file (found in the directory where eclipse was installed) in a text editor.
- c) Add a new parameter to the eclipse.ini file that defines the location of the Java Virtual Machine. Insert the path name to the Java executable at the top of the eclipse.ini file, by inserting the text shown in blue at the top of the file, remembering to use a separate line for each setting:

`-vm`

`C:\Program Files\Java\jre7\bin\javaw.exe`

Close the text editor, and start Eclipse again. See <http://wiki.eclipse.org/eclipse.ini> for additional information and trouble-shooting tips.