Pre-Work: Coding a Java Web Application

Pre-Work

The application you'll be developing in this workshop requires JDK 6 or 7 (not a JRE), the Eclipse IDE for Java EE Developers (Kepler SR1, linked below), the AWS Toolkit for Eclipse, and a local installation of Tomcat 7. Please be sure you have all of these components installed (instructions below) before the day of the workshop

- Java SE Development Kit 7 or OpenJDK 7 (JDK, not just JRE)
- Eclipse IDE for Java EE Developers
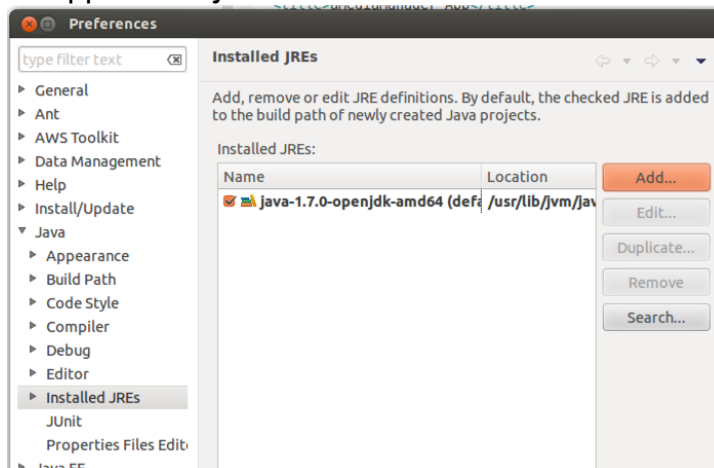- Tomcat 7
- The AWS Toolkit for Eclipse

Eclipse IDE for Java EE Developers

This application has been developed and tested on the Kepler SR1 release of Eclipse on OS X 10.8.5, Windows 7, and Ubuntu 12.04LTS.
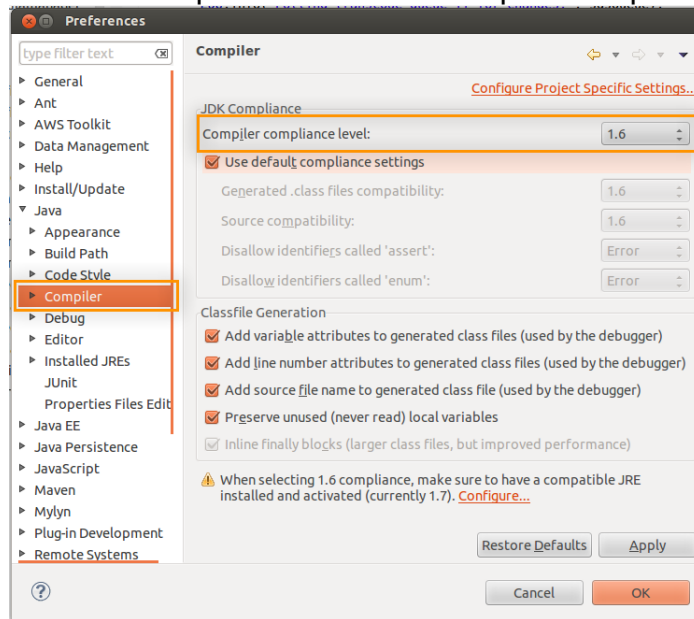
Configure Eclipse to Use a JDK

Confirm that Eclipse is using a JDK and not just a JRE:

1. Open Eclipse

2. Click the Window menu and choose Preferences

3. Expand Java, choose Installed JREs, and ensure that a JDK is selected as opposed to *just* a JRE:
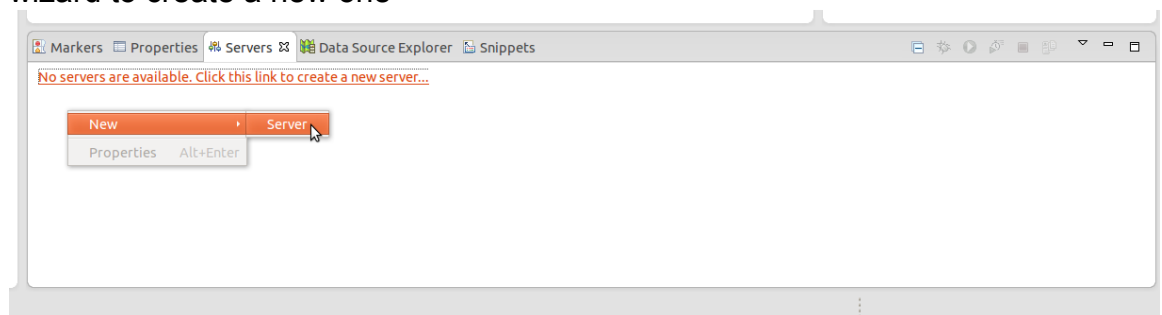
4. If a JDK is not selected, you may download and install JDK 7 from Oracle or OpenJDK 7

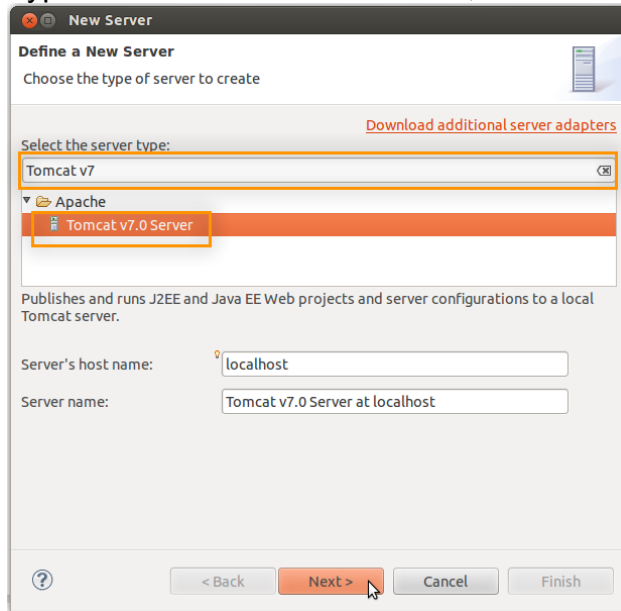5. Choose Compiler and set the Compiler compliance level to 1.6:

Create a Local Tomcat 7 Server

Follow these steps if you do not already have Tomcat 7 installed and configured in Eclipse. The local Tomcat 7 server will be used for rapid dev/test on your workstation between deploys to your Elastic Beanstalk environment.
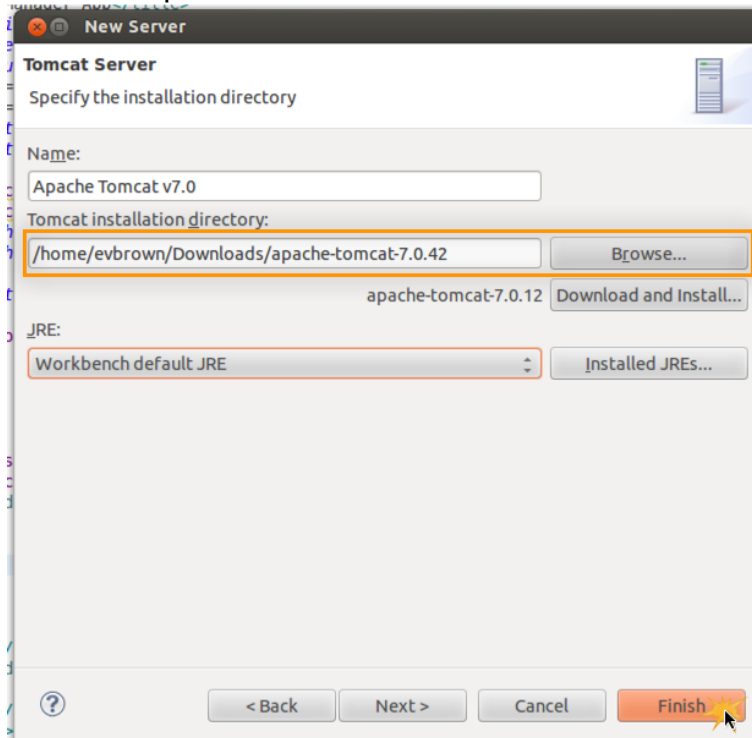
6. Open Eclipse

7. Right-click in the *Servers* pane, choose *New > Server* and complete the wizard to create a new one

8. Type 'Tomcat v7' in the filter box, choose the item and click Next:

9. Click Browse and locate the directory where you installed Tomcat 7. The 'Workbench default JRE' value for JRE presumes you correctly selected a JDK in the previous section

10. Click Finish

The AWS Toolkit for Eclipse

The AWS Toolkit for Eclipse allows you to integrate your IDE with Elastic Beanstalk, making it easy to deploy your application a remote environment on AWS. Follow the instructions at http://aws.amazon.com/eclipse/ to install the toolkit.