**INSTALL AND CONFIGURE MAVEN FOR ECLIPSE**

Apache Maven is a project dependency manager often used in Eclipse projects. It automatically downloads the packages your project depends on, and downloads the packages those packages depend on, etc.

Each project’s **pom.xml** file tells Maven what packages to download.  You can search for Maven-supported packages and their current versions at The Maven Central Repository.

**Install Maven**

1. Browse to Apache Maven Downloads
2. In the **Files** section, in the **Binary Zip Archive** row, click on **apache-maven-3.3.3-bin.zip**
3. Unzip the resulting file somewhere under your Documents folder.  Something like **C:\Users\YourLogin\Documents\apache-maven-3.3.3**  I do this instead of putting it in C: or Program Files because I’ve had permissions issues when I put unzipped archives there.
4. Add the **bin folder** of the unzipped tree to your **PATH**Environment Variable.  Be sure to include the semicolon to separate this from the rest of the PATH contents.  Your bin folder will be something like C:\Users\YourLogin\Documents\apache-maven-3.3.3\bin
   1. Note: **to edit environment variables** in WIndows 7 and 8, open Windows Explorer (file manager), right-click on Computer (Windows 7) or This PC (Windows 8) and select Properties.  In the resultant window, click on Advanced System Settings. In the resultant window (after confirming), click on Environment Variables…. From there you can Add, Edit, and Delete Environment Variables.
5. Open a Command Prompt window and type **mvn -v**
6. Maven should print its configuration information.

**Update Eclipse’s Maven Plugin**

1. Start **Eclipse**,
2. Click on **Help** / **Install New Software…**
3. In the **Work with** field type **http://download.eclipse.org/technology/m2e/releases/**
4. Click **Add**
5. In the Name field, type **M2E**
6. Click **OK**
7. Once Eclipse downloads the file, the Name field should show Maven Integration for Eclipse
8. Click the checkbox (**select**) **Maven Integration for Eclipse**
9. Click **Next**
10. Click **Next**
11. Read the terms of use, and if you agree click **I accept the terms…**
12. Click **Finish**
13. When prompted, **restart Eclipse**

**If you have a proxy, configure the Maven Proxy settings**

Each time you create a new Workspace in Eclipse, you’ll need to tell it about the file you create here.

1. Create a **new text** file in **Documents**, named **mavensettings.xml**
2. Copy and paste the following text into that file, adjusting the fields for your environment:  
     
   <settings>  
   <proxies>  
   <proxy>  
   <active>true</active>  
   <protocol>http</protocol>  
   <host>proxy.mycorp.com</host>  
   <port>911</port>  
   <nonProxyHosts>\*.mycorp.com</nonProxyHosts>  
   </proxy>  
   </proxies>  
   </settings>
3. In **Eclipse**,
4. Click on **Window** / **Preferences** / **Maven** / **User Settings**
5. For **User Settings**, click the **Browse** button
6. **Navigate** to your newly created **mavensettings.xml** file
7. Click **Open**
8. Click **Update Settings**
9. Click **OK**
10. **Restart Eclipse**

**Add the Maven Central Catalog of Archetypes**

Each time you create a new Workspace in Eclipse, you’ll need to repeat these steps for that Workspace.

Maven Archetypes are patterns for creating projects.  The default list of Archtetypes is very limited, so we add the Maven Central Catalog.

1. In **Eclipse**,
2. Click on **Window** / **Preferences** / **Maven** / **Archetypes**
3. Click **Add Remote Catalog…**
4. For **Catalog file,**type **http://repo.maven.apache.org/maven2/archetype-catalog.xml**
5. For Description, type **Maven Central**
6. Click **Verify** and wait a bit for Eclipse to load the catalog
7. Eventually a message should appear near the dialog top, saying something like “**Found 14138 archetype(s)**”
   1. If instead you see the error message “**remote catalog is empty**“, Eclipse/Maven failed to download the catalog.  I’ve seen this most often when the proxy settings are incorrect.  Check them. Try clicking the **reindex** button – that seemed to help me once.
8. Click **OK**
9. Click **OK**