Setting Up Eclipse

# Getting Started

* Download the latest version of Eclipse for JavaEE Developers
* Unzip it to C:/eclipse/<version> (major version like luna or keplar or mars)
* Create a shortcut to it - make sure the shortcut is set to run as admin
* Check for and install any updates

# Update the eclipse.ini File

* Found in C:/eclipse/<version>/eclipse
* Should look similar to this:



# Set Up JDK Version

* Install whatever version is desired (7u75 right now)
* Go to Windows--> Preferences --> Java --> Installed JREs, and select Add... Add the new jdk

# Add Plugins

Add plugins in this order, restarting after each:

* Lombok
* EclEmma
* MoreUnit
* FindBugs
* JBoss Tools

# Import Project From Openshift

* Right-click in packages explorer and choose Import - choose Existing OpenShift Aplication
* Fill out all the stuff and choose a new git clone destination
* Set up SSH key on the page that allows it -
  + Go to the General --> Preferences --> Network Connections --> SSH2
  + SSH2 home: C:\Users\Chris\ssh
  + Private keys: id\_dsa,id\_rsa,C:\Users\Chris\.ssh\id\_rsa
* Once the project is imported, check the pom to make sure it references the correct lombok version, and any other version

# Setup Maven Builds

There should be 3:

1. 1 - Unit Tests (clean install - no JPA tests)
   1. clean install -DskipITs
   2. jenkins-tests
2. 2 - Integration Tests (clean install with JPA testing)
   1. clean install
   2. embedded-wildfly-tests
3. 3 - Deploy (clean install deploy local)
   1. clean install -DskipITs
   2. deploy-local

Run Build 1, then clean the workspace

# Setup VM Configuration

* Go to Preferences --> Java --> Installed JREs, and Edit the selected jdk
* Default VM arguments: -Djava.util.logging.manager=org.jboss.logmanager.LogManager -XX:MaxPermSize=1024m

# Setup Source Folders

* Right click on the src/integration-test/java folder and select Build Path --> Use as Source Folder
* Right click on the src/main/webapp folder and select Build Path --> Use as Source Folder

# Setup Servers

* Openshift server should already be setup
* Right click in servers and select New --> Server, then choose JBoss Community --> WildFly 8.x
* Use localhost for both server location and name
* Double click the server... change the Runtime Environment to use configuration file: standalone-full.xml
* Change publishing to never publish automatically
* Check to activate Listen on all interfaces to allow remote web connections
* Add the project to the server
* Start the server and run a build/deploy (#3 maven) - test to make sure it is working

# Annotation Processing Setup

* Select the project, right click and go to Properties --> Java Compiler --> Annotation Processing
* Enable project specific settings, and then go to the Factory Path (under Annotation Processing)
* Enable project specific settings there, and add an external jar: C:\Users\Chris\.m2\repository\org\hibernate\hibernate-jpamodelgen\4.3.6.Final\hibernate-jpamodelgen-4.3.6.Final.jar

# Setup Other Preferences

* Goto Window --> Preferences --> Java --> Editor --> Save Actions
  + Select Perform the selected actions on save
  + Make sure Format source code is checked, and Organize imports
  + Enable Additional actions
  + TODO consider these settings

Add 'this' qualifier to unqualified field accesses

Add final modifier to private fields

Add final modifier to method parameters

Add final modifier to local variables

Remove unused imports

Add missing '@Override' annotations

Add missing '@Override' annotations to implementations of interface methods

Add missing '@Deprecated' annotations

Remove unnecessary casts

Remove trailing white spaces on all lines

* Goto Window --> Preferences --> Java --> Code Style --> Formatter, and import these settings



* Goto Window --> Preferences --> Java --> Code Style --> Code Templates, and import these settings



* Goto Window --> Preferences --> Java --> Editor --> Content Assist --> Favorites, and add in this order (use New Type):
  + com.poorknight.testing.matchers.CustomMatchers.\*
  + com.hamcrest.MatcherAssert.\*
  + org.hamcrest.Matchers.\*
  + org.mockito.Mockito.\*

# Setup Save Actions

* Goto Window --> Preferences --> Java --> Editor --> Save Actions:
  + Under Code Organizing:
    - Select 'Correct indentation'
  + Under Code Style:
    - Select 'Use modifier 'final' where possible' for all 3 options
  + Under Member Accesses
    - Select 'Use 'this' qualifier for field accesses', as 'Always'



