**LABLES:**Lables: Used for “gotos” to get to resources in this documentation  
Example Index Entry:  
**[LABDEF:ExampleLable]** This is an example lable. It is paired with: **[LAB:ExampleLable]  
The former (LABDEF) is used in our Lable’s index at top of document, the latter (LAB) is the actual label**

**located in the document.**

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| **Lable:** | **Description:** |
| [LABDEF:JPA\_MAVEN\_MYSQL] | A simple project that could help me use hibernate with an SQL database. It uses eclipse. The biggest challenge of solving this is getting driver defintions to work in eclipse. Would like to do this tutorial in IntelliJ afterwards. Maybe IntelliJ+Maven and then IntelliJ+Gradle, to see the differences in difficulty.  Hard part seems to be setting things up. Easy part is coding. |
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**SCOPES:**Because my tables are getting crazy nested.

I need to make a start-scope and end-scope identifier.  
Example:

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| [SCOPE:ExampleScope:START]  The scope tag belongs **within** the table it belongs to.  **NOT** outside of.  [SCOPE:ExampleScope:END] |

**Chronological Report of what I have been up to:**

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| **2015.08.03: AUG 3rd, 2015:** |

**Gradle and ticket Monster:**

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| Mike was having trouble with something involving gradle. I only knew Maven, so I did the gradle tutorials and built and ran a java project using gradle. I assembled a cheat sheet on gradle showing the 3 main ways you can deploy a project using gradle.  Then I spent the rest of the day learning JPA & Forge via the ticket monster tutorial. |

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| **2015.08.04: AUG 4TH, 2015** |

**TICKET MONSTER – WildFly + JPA:**

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| **http://docs.jboss.org/jbossdeveloper/2.5/ticket-monster-2.5.0.Final.pdf** I was doing what seemed to be a really in depth and promising JBoss/Wildfly tutorial that would teach me JPA. I renamed the project while on page 95 of the tutorial. The server refused to start up after that. I tried re-downloading the project template. I ran it, it worked. I added the classes to get back to where I was before the crash happened... The crash happened again. I started 3 new projects and experimented with them. No success.  All I know is: 1. Configuring data sources seems to be important.  2. **Persistance.xml** --has something to do with wiring up the base-url of the project. EX: localhost:8080/yourProjectName  **.settings**. –Also has some role in this. **yourProjectName-ds.xml** –Also has some role in how this wire up happens.  Yesterday I had reservations about QUITTING this tutorial because the end product is a very complex application. And it goes against my learning philosophy. Too much going on to isolate parts and hack with them. However, I decided to keep going because if I keep bouncing around and half-completing tutorials, I may never learn anything. Moving onto a “hello world” example today. Then will be looking for tutorials that use JPA and TomCat.  Tried: In eclipse: Maven --> Update Project mvn install No luck. WFLYCTL0184: New missing/unsatisfied dependencies: service jboss.deployment.unit."tmThree.war".WeldBootstrapService (missing) dependents: [service jboss.deployment.unit."tmThree.war".component."com.sun.faces.config.ConfigureListener".WeldInstantiator, service jboss.deployment.unit."tmThree.war".component."javax.faces.webapp.FacetTag".WeldInstantiator, service jboss.deployment.unit."tmThree.war".component."javax.servlet.jsp.jstl.tlv.PermittedTaglibsTLV".WeldInstantiator, service jboss.deployment.unit."tmThree.war".component."javax.servlet.jsp.jstl.tlv.ScriptFreeTLV".WeldInstantiator, WFLYCTL0208: ... and 5 more ]  NOTE: “tmThree” is the name of my project. The problem occurs when I add this class:   |  | | --- | | package org.jboss.jdf.example.ticketmonster.model;  import java.awt.PageAttributes.MediaType;  import javax.persistence.Entity;  import javax.persistence.EnumType;  import javax.persistence.Enumerated;  import javax.persistence.GeneratedValue;  import javax.persistence.GenerationType;  import javax.persistence.Id;  @Entity  public class MediaItem {  //page 68 of ticket monster tutorial:  @Enumerated(EnumType.ORDINAL)  private MediaType mediaType;    //Must give an ID to satisfy requirements as an entity.  @Id  @GeneratedValue(strategy = GenerationType.AUTO)  private int id;  } |   Maybe the **@Entity** needs to be registered somehow? And when it was orginally created I used jpa-new-entity in forge. And maybe forge wired it up somehow?  Ah... yes... The Member.java entity is NOT having any trouble. This is because a member table EXISTS in the project from the beginning. By pasting a class with @Entity in it into my project, I am getting errors because the table does not exist. However... It is NOT obvious according to the stack trace. I’ve been looking for solutions about .war files. But the solution is in the sql tables.  Revisiting the SQL table creation section. |

**A non Trivial thing:**

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| I have learned to deploy a WildFly/JBoss server over the LAN. Involves: 1. Getting IPv4 from IPConfig on command line. 2. Setting this IP address in correct section of StandAlone.xml 3. Running Standalone.bat on the command line and using it to start the server.  $ standalone.bat –b 0.0.0.0  Wrote a summary tutorial of it. This could be useful for testing the pieces of our application across the network .  Gives us a more “real world” type environment to work with. |

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| **2015.08.05: AUG 5TH, 2015** |

**Still having trouble with WildFly + Eclipse.**I don’t like giving up. But I think it has now become a waste of my time.  
Forge2 with it’s jpa-new-entity is a great convinience. But I think these  
productivity tools are harmful to my understanding of what is really going on.  
Not saying that I shouldn’t learn them, just that, I need to have a strong foundation  
in the fundamentals first.  
Switching to Intellij & TomCat. Do what I can to find JPA tutorials with that setup.  
  
Need to:  
1. Get mySQL server running via command line.  
2. Get JPA application messing with it.

**1.Starting MySQL on command line:  
$mysqld**  
will then tell you what processID mySQL is running as.

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| **TROUBLE SHOOT: Starting MYSQL Server from command line.** AKA: $mysqld not working.  **http://stackoverflow.com/questions/19391182/ [Warning] Can't create test file C:\Program Files\MySQL**  Folder "program files" in windows is usually restrict write for non-admin accounts, so you can either:   |  | | --- | | run mysql under admin account - not very good practice | | set write rights for this folder for all - not very good practice | | **move data storage into another place and change my.cnf appropriately**  **- right one** |   The same error can also happen if mysqld.exe is already running. Just kill the process. You need to grant read/write permissions for user SYSTEM  http://stackoverflow.com/questions/171264 In Windows, the my.cnf file may be called my.ini.  MySQL looks for it in the following locations (in this order):   |  |  | | --- | --- | | .ini | .cnf | | **%WINDIR%\my.ini** | **%WINDIR%\my.cnf** | | **C:\my.ini** | **C:\my.cnf** | | ***INSTALLDIR*\my.ini** | ***INSTALLDIR*\my.cnf** |   I found: **my-default.ini** C:\Program Files\MySQL\MySQL Server 5.6\  **https://blogs.oracle.com/supportingmysql/entry/mysql\_server\_5\_6\_default** There is also a template file called my-default.cnf or my-default.ini that has these lines near the start:  [**http://dba.stackexchange.com/questions/81398/where-to-put-my-ini-file-for-5-6-21-mysql-community-server-on-windows**](http://dba.stackexchange.com/questions/81398/where-to-put-my-ini-file-for-5-6-21-mysql-community-server-on-windows)This source tells me I need to copy my-default.ini and make a new file called my.ini in the same location.  JMadison Note**:@ 10:18AM** Looks like moving the MYSQL directory from program files to my DEV folder is the best option to avoid read/write complications. Also, I hate path names with spaces anyhow. Downloaded this thing called RapidEE to make editing my PATH variable a whole lot quicker: [**http://www.rapidee.com/en/download**](http://www.rapidee.com/en/download) |

**JPA:**

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| This is JETTY + INTELLIJ + OBJECTDB I want TomCat+INTELLIJ+JPA tutorial that starts me off from scratch. But rather than be a perfectionist. Gather all the pieces I need by doing multiple tutorials. [**http://www.objectdb.com/tutorial/jpa/web/maven**](http://www.objectdb.com/tutorial/jpa/web/maven) **Notes:** mvn package jetty:run //downloads the server and runs project. **Tools->Tasks And Contexts->Configure Servers** |  |

**Trouble Shoot:** (Cannot find this path in IntelliJ)  
Define the Server:  
Select **File > Settings > Application Servers**.  
HELP:  
https://www.jetbrains.com/idea/help/application-servers.html  
File | Settings | Build, Execution, Deployment | Application Servers  
JMadison Note: Don’t see it there! I have no “Application Servers” category.  
<https://www.jetbrains.com/idea/help/configuring-and-managing-application-server-integration.html>  
JMadison Note: CTRL+ALT+S gets me to File->Settings->Build,Exec,Deployment.  
But there is no option for “Application Servers”.  
http://stackoverflow.com/questions/12299427  
UPDATE: application servers are [not supported in community edition](http://www.jetbrains.com/idea/features/editions_comparison_matrix.html).  
JMadison Note: Now downloading intelliJ ULTIMATE (The enterprise edition)

FireWall Warning: Researching netsh command:

https://youtrack.jetbrains.com/issue/WI-17206

**netsh advfirewall set global StatefulFTP disable**  
  
You will have to be in command prompt as admin to do this:  
https://technet.microsoft.com/en-us/library/Cc947813%28v=WS.10%29.aspx  
 Click **Start**.  
 In the **Start Search** box, type **cmd**, and then press CTRL+SHIFT+ENTER.

**Back to the guestbook app + tomcat:**  
<http://www.objectdb.com/tutorial/jpa/intellij/web/maven>

**Define the Server**: File > Settings > Application Servers --> Add Tomcat Installation.  
**Define Run Configuration**: Run > Edit Configurations [X] Tomcat Server > Local.  
**DeploymentTab:** > Artifact... > Guestbook:war  
**Run:** new run configuration (Shift+F10).  
If the browser fails to open check the settings at File > Settings > Web Browsers.  
  
Trouble Shoot: mvn package on the project before you can get the .war file to be available.  
  
Next on my todo list:  
This looks useful, but has 3 sub-tutorials that must be accomplished before you can  
get to actually doing the project listed.  
<http://www.javacodegeeks.com/2013/05/spring-jpa-data-hibernate-mysql-maven.html>  
Hmm.... Don’t think I know enough to do this... Downloading some tutorials from youtube.  
Going to try that approach.

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| 2015.08.06: AUG 6H, 2015 |

# Gradle Vs Maven: Side By Side: Mike gave me a crash course on the differences between maven and gradle. Here is a maven version followed by the equivalent dependency code in gradle:

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| dependencies {  ///...OTHER STUFF HERE...  testCompile "junit:junit:4.12",  "org.springframework:spring-test:$springVersion",  "org.mockito:mockito-core:1.10.19",  "com.github.springtestdbunit:spring-test-dbunit:+" } |

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| <dependencies><dependency><groupId>junit</groupId><artifactId>junit</artifactId><version>4.12</version></dependency><dependency><groupId>org.springframework</groupId><artifactId>spring-test</artifactId><version>$springVersion</version></dependency><dependency><groupId>org.mockito</groupId><artifactId>mockito-core</artifactId><version>1.10.19</version></dependency><dependency><groupId>com.github.springtestdbunit</groupId><artifactId>spring-test-dbunit</artifactId><version>+</version></dependency></dependencies>//PLUS: Basically means: Use the latest version. //Is a wildcard that takes highest matching version. //Can also use as: 1.+, or 2.1+, 2.1.+, whatever. //Creates some issue with ambiguity. |

# Changed Root password to nothing in MYSQL: <http://www.cyberciti.biz/tips/recover-mysql-root-password.html> ----------------------------------[LAB:JPA\_MAVEN\_MYSQL]------------------------------------------------- This Tutorial: Configure JPA with Maven and MySQL <https://www.youtube.com/watch?v=D_TsRKSGqAo> By: [Sudipta Deb](https://www.youtube.com/channel/UCoWZxsufAFxsFSPXDrcIeXg) How did you create the new MySql connection which is selected at [4:10](http://www.youtube.com/watch?v=D_TsRKSGqAo&t=4m10s) min of the video , did you use the mysql-connector.jar?

# MY NOTES: (Will now do in ECLIPSE, and then in IntelliJ)

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| 1:NEW MAVEN PROJECT: @0:37: [X] SKIP ARCHTYPE SELECTION.com.sudipta.hibernate.testartifcatID: BasicJPATest2: DEPENDENCIES:POM Dependencies:NOTE: When searching, you do not need to specify GroupId, ArtifactId, Version. Those will be populated when you select search item. SEARCH: hibernate-coreV []org.hibernate hibernate-core4.3.5.Final[jar]SEARCH: hibernate-enV []org.hibernate hibernate-entitymanager4.2.5Final [jar]SEARCH: mysql-connectorV []mysql mysql-connector-java5.1.26 [jar]3: PROPERTIES:<PrjRoot> --> Properties --> Project Facets[Convert to faceted form...][X] JPA[i: Further information available...]Connection: [Add Connection] (TAKES IT BACK)Drop Down: [New MySQL] @4:06[OK] (Exits JPA Facets Menu) @4:15@4:15: Project Facets Dialog --> [OK]@4:59: src/main/javaVMETA-INFVpersistence.xml@5:00: Full Screened persistence.xml@5:01: [Connection] tab.Connection:Transaction Type: Resource Local[populate from connection]==Connection Selection==Enter connection name or pattern:[New MySQL]DataBase: (Now auto-populated)Driver: com.mysql.jdbc.DriverURL: jdbc:mysql://localhost:3306/testUser: rootPassword: \*\*\*\*\*\*@5:18: [SOURCE] tab. (of persistence.xml)STEP6: Add hibernate to classpath:<<ERROR.STEP6: Add hibernate to BUILD PATH. @6:34//JMIM NOTE: THis looks like adding MAVEN//to the build path.<prjRoot> -->Properties --> BuildPath|>Java Build Path<|[ ][ ][ ][ Order And Export ][X] Maven Dependencies @6:18[OK]STEP 7: Create the table. @7:06//JMIM NOTE: Looks like it will be up to//me to create the schema by hand to complete//this tutorial.STEP8: Create Java ClassesSTEP9: First the Entity Class:@8:43: Just copied "HelloEntity.java"from TestHibernate and put it in our MAINproject directory of:<prjRoot>/src/main/java@8:54: HelloEntity.java!X!:Class HelloEntity is mapped, but isnot included in any persistence unit.@9:40: Persistence.xmlViewing source.@10:01:Adding: <class>HelloEntity</class>@10:21: Just copied HelloWorld.javafrom ????? to src/main/java@10:34: STEP10: Ready. Run & Check.@11:34: In SQL manager:Two lines of code:////////////////////////use test;select \* from hello;////////////////////////@11:40: Glimpse of HelloWorld.java@11:58: Done?Code At:https://github.com/suddeb/PlayWithHibernate/tree/master/BasicJpaTest | 2:Dependencies: Look like this in pom.xml: <dependencies>  <dependency>  <groupId>org.hibernate</groupId>  <artifactId>hibernate-core</artifactId>  <version>5.0.0.CR3</version>  </dependency>  </dependencies>  ...    3:Properties:  <<Now says !X! Further configuration REQUIRED... |

# Tutorial trouble shoot: <http://stackoverflow.com/questions/24252256/how-to-enable-index-downloads-in-eclipse-for-maven-search> Index downloads are disabled, search result may be incomplete.

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|  | **Windows > Preferences** > |>**Maven**<| [X]"**Download repository index updates on startup**" Click **OK**, Restart Eclipse. MIGHT: have also to enable the "**Download Artifact Sources**" to get the results you want to find. |

# Tutorial Trouble Shoot #2: New Connection Profile: Define and select a driver from the drop-down list to continue: Might be useful later: How to run SQL Query In Eclipse: <https://www.youtube.com/watch?v=AT5HbRGsxBo> It uses Derby.

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| Unable To locate Jar: | Unable to locate JAR/zip in file system as specified by the driver definition: mysql-connector-java-4.0.0-bin.jar. I met this problem during I creating the sql database, and I don't know what does it mean.  [InterviewDot Job](https://plus.google.com/110291362078017194925) [9 months ago](https://www.youtube.com/watch?v=AT5HbRGsxBo&lc=z124ebnb1tjgjd1vw23fe5jriryczfohc04)  [+Splendide Mendax Z](https://plus.google.com/103134532215336435212) Hi You need to download this mysql-connector-java-4.0.0-bin.jar. file online ,this jar is used as driver to connect to mysql. So please download this jar and add it to the classpath. Thanks..happy learning  ANSWER: Download mysql-connector-java-4.0.0-bin.jar For MYSQL.  Covers where to get connector from: Adding a MySQL datasource to JBoss AS 7 https://zorq.net/b/2011/07/12/adding-a-mysql-datasource-to-jboss-as-7/ The connector can be downloaded from: <http://dev.mysql.com/downloads/connector/j/>  Put platform independent version here on my machine: C:\DEV\SDK\JAVA\_TECH\MYSQL\DRIVERS\mysql-connector-java-5.1.36  PATH and CLASSPATH are both windows things. Add the .jar connector file to the CLASSPATH.  In depth instructions:  http://dev.mysql.com/doc/connector-j/en/connector-j-installing.html |

# Tutorial Trouble Shoot 2.5: I have mysql-connector-java-4.0.0-bin.jar, but... I see message: “Unable to locate JAR/zip in file system as specified by the driver definition: mysql-connector-java-4.0.0

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|  | Tried to hack by using [Add Jar/Zip] and locating .jar file... I have another file in my Driver Files list, but still getting error.  This tutorial kind of hints at it, but it is JBOSS: <https://zorq.net/b/2011/07/12/adding-a-mysql-datasource-to-jboss-as-7/>  CUT AND PASTE to WEB-INF/Lib: <http://dev.mysql.com/doc/connector-j/en/connector-j-installing-classpath.html> If you are developing servlets or JSPs, and your application server is J2EE-compliant, you can put the driver's .jar file in the  WEB-INF/lib subdirectory of your webapp, as this is a standard location for third party class libraries in J2EE web applications. But... I have no WEB-INF/lib folder in this project. And if I made one, how would my project know it was there???  HACK IDEA: Try and plug in a dependency into POM.XML Then mayb the project facets will work? http://iswwwup.com/t/3815946c4c00/java-jdbc-driver-cannot-be-loaded-why-spring-hibernate.html <dependency>  <groupId>mysql</groupId>  <artifactId>mysql-connector-java</artifactId>  <version>5.1.27</version>  </dependency>  OOOOH!!! I think I know why. Earlier when we did pom.xml dependencies, we specified: mysql-connector-java:**5.1.36**  I bet if I download that driver, add it to the CLASSPATH, and select it in project facets, I will not get an error.  ... Nope... The versions actually match... However... The highest driver template in eclipse  is [5.1]. This could be a problem.  Maybe: JDBC Driver != mysql-connector-java ?? Search for JDBC Driver 5.1.36  I think we already have this verbatam in pom.xml: http://mvnrepository.com/artifact/mysql/mysql-connector-java/5.1.6 <dependency>  <groupId>mysql</groupId>  <artifactId>mysql-connector-java</artifactId>  <version>5.1.6</version>  </dependency>  5.1.6 != 5.1.36... Am I making that mistake?  NO. I am not making that mistake. But a DRIVER TEMPLATE of 5.1.36 is not available to me. Also, the [Add JAR/ZIP] button makes the  5.1.36.jar show up. But after switching tabs, it vanishes.   Stack Overflow: [How to add the JDBC mysql driver to an Eclipse project?](http://stackoverflow.com/questions/15748874/how-to-add-the-jdbc-mysql-driver-to-an-eclipse-project) <http://stackoverflow.com/questions/15748874>  Options: A1.Copy and paste into WEB-INF/lib (in project) A2.TOMCAT/WEB-INF/lib (in server installation)  A3.Maybe this PDF: <http://www.ccs.neu.edu/home/kathleen/classes/cs3200/JDBCtutorial.pdf>  Before I try options: B1. Cleaning Project. B2. Restarting Eclipse. DID NOT WORK. Trying the “A” options A1,A2,A3 A1: Did not work. Even added to build path. A2: SKIP for now. A3: Reading.  A3: Says: BuildPath->Add External Archives. But I do NOT have this option in my eclipse...  **@6:05PM: 2015.08.06, AUG 6th, 2015.** I am going to quit for the day. Didn’t get much done. But at least I have documentation to prove I was trying. |

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| 2015.08.07 (Friday, Aug, 7Th, 2015): |

# Still trouble shooting the SQL Connector. Had an idea of running $mvn package and then trying the setup. Did not work... Thinking problem is NOT in missing the .Jar. But in not having a complimentary “Driver Definition” to go along with it. From Eclipse Help: This gets complicated... The end goal is to create a driver definition. I am going to experiment by NESTING tables in this document. To illustrate how what I am tackling tends to BRANCH OFF. TASK: Create Driver Definition so that you can finish [LABDEF:JPA\_MAVEN\_MYSQL] Anything within the table below belongs to this task:

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| [SCOPE:TASK\_CREATE\_DRIVER\_DEF:START]  |  | | --- | | Creating a Driver Definition Create a driver to connect to a specific database.   1. Select Window > Preferences from the main menu bar. 2. Expand Data Management > Connectivity and select Driver Definitions. 3. Click Add. 4. In the Name/Type tab, select a driver template.     1. (Optional) Select a Vendor Filter to display only those databases for a specific vendor.    2. Select a driver template.    3. (Optional) Modify the Driver Name if a driver definition with this name already exists. 5. In the JAR List tab, indicate the path to the JAR or ZIP file associated with the driver.     1. Click Add JAR/Zip.    2. Browse to the location of the JAR or ZIP file.    3. Click Open. 6. (Optional) In the Properties tab, modify the default properties for the driver definition template.   Note: Options in the Properties tab vary based on database server type. You can edit or enter a property in the Value box.   1. Click OK. |  This doesn’t help... Brings me back to where I was. HOWEVER... I think I know what I need to search for: SEARCH: “Create new driver template –Definition” (I need to create a new template, before I can create a new definition)  Someone with my same problem, but for DERBY. So not unique to the Driver type. http://www.eclipse.org/forums/index.php/t/14571/  Vocabulary: What is “DTP”:  |  | | --- | | The Eclipse Data Tools Platform (DTP) is a standard Eclipse plugin that you can use to perform most database development and query functions. The DTP plugin supports several database platforms via JDBC, including Derby, Oracle, MS SQL, Postgres, Sybase ASA, Flat Files, XML Data, and more.Jan 1, 2013 |  Vocabulary: What is “JDBC”:  |  | | --- | | JDBC is a Java database connectivity technology (Java Standard Edition platform) from Oracle Corporation. This technology is an API for the Java programming language that defines how a client may access a database. It provides methods for querying and updating data in a database. |   Reading Brian Fitzpatrick’s blog post: Anything in this table below applies to this blog post:  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | [SCOPE:Fitzpatrick\_CUSTOM\_DRIVER\_TEMPLATE:START]  <http://fitzdtp.blogspot.com/2008/06/how-do-you-add-your-own-custom-driver.html>  |  | | --- | | Overview of Database Definition: | | “The DB Definition file == XMI file (XML Meta Data File for other XML files) In this case, it maps back to an EMF model for the DB Definition.”  “I'm not going to go into the gory details here. But there's a good article on how to get started [here](http://www.eclipse.org/datatools/project_modelbase/modelbase_doc/DTP%20Modelbase%20White%20paper.htm) (be sure to look at Scenario 2). | | Gory Details: | | Covers generating a vendor document: Includes a java script that uses the database definition model: (org.eclipse.datatools.modelbase.dbdefinition) as a base. <http://www.eclipse.org/datatools/project_modelbase/modelbase_doc/DTP%20Modelbase%20White%20paper.htm> Java class link here: www.eclipse.org/datatools/project\_modelbase/modelbase\_doc/sampleZip/ExampleForVendorPrimitiveWrite.java |  STEP2: Make DB Definition .XMI file:  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | [SCOPE:MAKE\_DB\_DEF\_XMI\_FILE:START]  |  | | --- | | FILES: Chrono\02\_VendorPrimitiveWrite |  Plug-In Wrapper: "org.eclipse.datatools.enablement.sqlite.dbdefinition" How does DTP know about it: Uses Extention: “org.eclipse.datatools.connectivity.sqm.core.databaseDefinition” databaseDefinition extension point just maps the XMI file to a named vendor and a named version. That's how the underlying systems will locate it.  |  | | --- | | databaseDefinition == XMI ---> Named Vendor. |   TROUBLE SHOOT: I can’t get a simple .java project from scratch to work in eclipse. I need to get eclipse to recognize my Main.Java class...  |  |  | | --- | --- | | Stack overflow: <http://stackoverflow.com/questions/16334625/eclipse-error-could-not-find-or-load-main-class>  Possible to do it on command line with Javac: (Eclipse it trying to RUN before the class is built/compiled.) VIEWS: 92,765 <http://stackoverflow.com/questions/16334625/eclipse-error-could-not-find-or-load-main-class> TroubleShoot: Get Javac on command line:  |  | | --- | | http://stackoverflow.com/questions/1678520  set path="%path%;c:\program files\java\jdk1.6.0\_16\bin" |  SOLUTION: Forgot to make main() method STATIC. |  TROUBLE SHOOT:  |  | | --- | | ExampleForVendorPrimitiveWrite.java (www.eclipse.org/datatools/project\_modelbase/modelbase\_doc/sampleZip/ExampleForVendorPrimitiveWrite.java) Imports: The import org.eclipse cannot be resolved org.eclipse.datatools.modelbase.dbdefinition.CheckOption;  Probably need to add whatever library uses this class to my build path: http://stackoverflow.com/questions/16442294/ Search For These Libraries: org.eclipse.datatools org.eclipse.emf  EMF == “Eclipse Modelling Framework.” And can be downloade by downloading EMT “Eclipse Modelling Tools”. (Seems convoluted) https://www.eclipse.org/downloads/packages/eclipse-modeling-tools/junosr1 |   This tutorial might help me finish step2: <http://wiki.eclipse.org/index.php/Getting_Started_with_DTP>  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | [SCOPE:TUTORIAL\_GETTING\_STARTED\_WITH\_DTP:START] STEP1: Download Stuff: Eclipse Data Tools Platform (DTP) Project Downloads *Requirements:* [Eclipse 4.2.2 SDK](http://download.eclipse.org/eclipse/downloads/), [EMF 2.8.3 (EMF + XSD)](http://www.eclipse.org/modeling/emf/downloads/?project=emf), [GEF 3.8.2](http://www.eclipse.org/gef/downloads/) and JDK 1.6Downloaded: EMF\_XSD\_SDK GEF: <https://eclipse.org/gef/> (Why do I need this???) Looks like GEF is part of the Eclipse-Mars release. <http://projects.eclipse.org/projects/tools.gef/reviews/3.10.0-mars-release-review>  TroubleShoot: “Once Eclipse+DTP is running....”  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | [SCOPE:TROUBLESHOOT\_ONCE\_ECLIPSE\_DTP\_IS\_RUNNING:START] INSERT: Tried alternate solution, downloading DTP via package manager.  |  |  |  | | --- | --- | --- | | As per stack overflow’s recommendation: http://stackoverflow.com/questions/8662540/   |  |  | | --- | --- | | I tried both searching for: “Database Developement” and “DTP” And no results were returned for either. Meanwhile “ECLIPSE” gets me search results. So I know the searching is not entirely bautched. |  | |    Wait... I downloaded DTP, and now I am expected to already know how to have it running?  How to install/use DTP: https://www.eclipse.org/forums/index.php/t/6208/  CIRCULAR REFERENCE DETECTED:! (Dependency Loop): <http://wiki.eclipse.org/index.php/Getting_Started_with_DTP>  Manifest.MF file editing maybe?  Downloaded DTP 1.12.0, now looking at sources I have gathered and looking at the namespaces. SDK And the needed namespaces it provides:  The following have been downloaded to my C:\DEV\SDK\ECLIPSE\_TECH folder. Note that, it looks like the .jar files I need are in the “plugin” folders of these SDKs.  |  |  | | --- | --- | | SOURCE: | NameSpaces: | | [DTP 1.12.0](http://www.eclipse.org/downloads/download.php?file=/datatools/downloads/1.12/dtp-sdk_1.12.0.zip) (dtp-sdk\_1.12.0.zip ~27MB) | org.eclipse.dataTools | | [EMF 2.8.3 (EMF + XSD)](http://www.eclipse.org/modeling/emf/downloads/?project=emf) (EMF\_XSD\_SDK) | org.eclipse.emf | |  |  | |  |  |  Maybe search for: “using org.eclipse.dataTools SDK” ? ...More basic...  SEARCH:“How to install plugin from SDK, eclipse.” Everything in table below applies to learning how to install plugin from SDK.  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | [SCOPE:INSTALL\_PLUGIN\_FROM\_SDK\_ECLIPSE:START] New Search: “how to install an SDK in eclipse”.. Hmm... “How does eclipse know where to find plugins”? Maybe a better search?  AH! Try Search: “Manually install eclipse plugin” FOUND INFO: http://stackoverflow.com/questions/5482554/ Valid Plugins look like so:Old Plugin Zip File Structure:  |  | | --- | |  |  Newer Plugin Zip File Structure:  |  | | --- | |  |  Install methods: 1. Auto: Help -> Install New Software -> Add -> Archive 2.Manual: Copy ARCHIVE’S feature+plugins contents to ECLIPSE-INSTALLATION’S feature+plugins folder.  My plan of attack: I notice the SDKs I downloaded later, when I drill into them, I can find “features”+”plugins” folders. I will extract and zip these. Then I will auto install them.  |  |  |  | | --- | --- | --- | | DTP SDK + Required SDK(S) | Inside DTP folder: | Inside ZIP: | |  |  |  |  Problem... No .JAR file... It wants a .Jar file for the plugin: No .JAR file trouble shoot:  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | [SCOPE:SDK\_PLUGIN\_INSTALL\_ERROR\_NO\_JAR:START]Trying to auto-install SDK software plugin DTP for eclipse. Get error:  Could not find jar:file:/C:/DEV/SDK/ECLIPSE\_TECH/DTP/eclipse\_dtp-sdk\_1  Try searching for: “Generate Plugin .Jar file for eclipse” Eclipse seems to have a plugin exporting tool: <http://help.eclipse.org/mars/index.jsp?topic=%2Forg.eclipse.pde.doc.user%2Fguide%2Ftools%2Fexport_wizards%2Fexport_plugins.htm>  **File > Export... > Plug-in Development > Deployable plug-ins and fragments**   ...Export wants the files to be part of your project. There is an EXPORT > plug-in Development option. Looking into that.  Ok... The binary projects import can’t be the right way to do this. It completely polluted my work space...  I wonder how many MEGs this is using?  |  | | --- | |  |  Hmm..... The auto-import option may NOT be the way to go. Or DON’T use eclipse’s utility. As it is platform dependent knowledge. Maybe using ANT is the way to go? The documentation mentioned that this wizard is supposidly saving me the hassel of using ANT. (Yes, please save me from actually understanding my tools.) (Give me a wizard for everything.)  Quick Research: ANT & ANT SCRIPTS: Question: Is ANT a worthy route to get these plugins into eclipse?  |  | | --- | | [SCOPE:ANT\_SCRIPT\_QUICK\_RESEARCH:START]  I got to this: http://blog.jetbrains.com/idea/2010/08/quickly-create-jar-artifact/  But as far as creating: contents.jar artifacts.jarI have NO CLUE! I am thinking that knowledge probably is inthe eclipse source code maybe? It seems like very specific knowledge I am not likely to find on the internet.  ANT doesn’t look like what I need.  ANT artifacts.jar <http://ant.apache.org/ivy/history/latest-milestone/ivyfile/dependency-artifact.html>  ANT contents.jar ?? <https://ant.apache.org/manual/Tasks/jar.html> Doesn’t really answer my question.... [SCOPE:ANT\_SCRIPT\_QUICK\_RESEARCH:END] |   Idea: Research what exactly contents.jar and artifacts.jar are in eclipse plugins. Knowing that WHAT might help you with the how:  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | [SCOPE:ARTIFACTS\_JAR\_CONTENTS\_JAR\_RESEARCH:START]This looks promising: <http://www.eclipse.org/equinox/p2/repository_packaging.html>|  |  | | --- | | <site root>/      content.jar      artifacts.jar      features/          feature archives   (eg. org.eclipse.javatools\_1.0.1.jar)      plugins/          plug-in archives        binary/          binary artifact archives    (eg. org.eclipse.platform\_root\_3.5.0) |   Possible QUICK FIX: Unmanaged Plug-InsEclipse supports a concept of "unmanaged" plug-ins. These are plug-ins that were directly installed into the Eclipse *dropins* Jon Werber Also Found this for me: <http://www.vogella.com/tutorials/EclipseDataToolsPlatform/article.html> Try to install from package manager again?SUCCESS!! SOLUTION: Un Check the:  “Show Only the latest versions of available software”  We found an answer. From here we need to go back to wherever we left off before we had this problem. Wait.. But before we do that, we should probably do the tutorial on the page that gave us our answer.  <http://www.vogella.com/tutorials/EclipseDataToolsPlatform/article.html> Managing databases with Eclipse and the Database Tools - Tutorial  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | [SCOPE:VOGELLA\_DERBY\_TUTORIAL:START]  Working out of: chrono/03\_Vogella AH! The .Jar is found. Because it is in the PLUGINS folder... Will need to remember this for SQL tutorial later.  NOTE: For database: In chrono/03\_vogella/databases/vogDB01 UN:sa PW:sa (Username and Password)  Summary before I press [FINISH]:   |  | | --- | |  |   WHAT??? ARGH!!! Trouble Shoot: “Could not connect to New Derby”   |  |  |  |  |  | | --- | --- | --- | --- | --- | | [SCOPE:COULD\_NOT\_CONNECT\_TO\_NEW\_DERBY:START]   |  | | --- | | PICTURE: | |  | | STACK TRACE: | | Could not connect to New Derby.  Error creating SQL Model Connection connection to New Derby. (Error: null)  java.lang.ExceptionInInitializerError  Error creating JDBC Connection connection to New Derby. (Error: Could not initialize class org.apache.derby.jdbc.EmbeddedDriver)  Could not initialize class org.apache.derby.jdbc.EmbeddedDriver |   Searching for: **Error: Could not initialize class org.apache.derby.jdbc.EmbeddedDriver  Stack Overflow: http://stackoverflow.com/questions/5597947** “Looks like derby.jar isn't being deployed to the right location (or, possibly, at all)”  JMadison Thought: The .Jar list? Is it heirarchial? Ws derby.jar below something else so it never got deployed? Did I really just spell “heirarchial” correctly?  **Or could be a collision problem:** Sometimes these errors are because you have Derby in your classpath twice, somehow. With modern JDKs, Derby's drivers are 'auto-loaded', meaning that the JDK will look for JDBC drivers on the classpath and automatically load them. So you might check your system classpath as well as your application's libraries; perhaps you have a second copy of Derby hidden away somewhere in the path and the exception is trying to tell you that the two versions of Derby are in conflict.  JMadison Thought: OR... Do you have to add the derby.jar to the build path?  JMadison Thought: Tried marking as deployable. Got error: “There are no servers that support deploying multiple files.” There was no option for adding to the build path.  Tried deleting the Derby.jar.... Eclipse gave me an error. Now my compuer is lagging so bad I can barely type... Co-incidence?  Edited jar list to remove dependencies. Did not work... Maybe try the one that is actually in the derby folder?  My versions don’t match....  how can I fix that....??? Also.... Microsoft word is officially overloaded. This is why I need to make my program that can keep track of this type of stuff....  [SCOPE:COULD\_NOT\_CONNECT\_TO\_NEW\_DERBY:END] |   [SCOPE:VOGELLA\_DERBY\_TUTORIAL:END] |   Answer to getting DTP working has been found. Go back to where we left off before the problem: [GOTOLAB:SOLVED\_ONCE\_ECLIPSE\_DTP\_IS\_RUNNING][SCOPE:ARTIFACTS\_JAR\_CONTENTS\_JAR\_RESEARCH:END] |  [SCOPE:SDK\_PLUGIN\_INSTALL\_ERROR\_NO\_JAR:END] |  [SCOPE:INSTALL\_PLUGIN\_FROM\_SDK\_ECLIPSE:END] |    [SCOPE:TROUBLESHOOT\_ONCE\_ECLIPSE\_DTP\_IS\_RUNNING:END] |  [SCOPE:TUTORIAL\_GETTING\_STARTED\_WITH\_DTP:CONTINUED] [LAB:SOLVED\_ONCE\_ECLIPSE\_DTP\_IS\_RUNNING] http://wiki.eclipse.org/index.php/Getting\_Started\_with\_DTP[SCOPE:TUTORIAL\_GETTING\_STARTED\_WITH\_DTP:END] |  [SCOPE:MAKE\_DB\_DEF\_XMI\_FILE:END] |    DONE2.0: we have a DB Definition and a plug-in wrapper for it STEP2.5: Creating a Driver Template.   [SCOPE:Fitzpatrick\_CUSTOM\_DRIVER\_TEMPLATE:END] |  |  [SCOPE:TASK\_CREATE\_DRIVER\_DEF:END] |

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# NOTE: My asana todo is here: https://app.asana.com/0/44240996996278/44240996996280