

# Compiling DSpace in Eclipse

- General Strategy
- DSpace 5
- DSpace 5 (with test paths included)
- DSpace 6 special cases
- DSpace 6 test directories
- DSpace 7

## General Strategy

- Source directories
  - Do not add any test directories to the build path
- Maven Jar files
  - Perform a maven build
  - File all jar files in dspace-installer with windows explorer
  - Copy and paste jars to a separate dir (skip duplicates)
  - Add all of these items to the build path
- JUnit (add library)

## DSpace 5

- Add to classpath
  - <classpathentry kind="var" path="M2\_REPO/javax/servlet/jsp-api/2.0/jsp-api-2.0.jar"/>
  - <classpathentry kind="var" path="M2\_REPO/org/hamcrest/hamcrest-all/1.3/hamcrest-all-1.3.jar"/>
  - <classpathentry kind="var" path="M2\_REPO/org/databene/contiperf/2.3.4/contiperf-2.3.4.jar"/>
  - <classpathentry kind="var" path="M2\_REPO/com/hp/hpl/jena/jena/2.6.4/jena-2.6.4.jar"/>
  - <classpathentry kind="var" path="M2\_REPO/org/apache/jena/jena-core/2.13.0/jena-core-2.13.0.jar"/>
  - <classpathentry kind="var" path="M2\_REPO/org/apache/jena/jena-arq/2.13.0/jena-arq-2.13.0.jar"/>
  - <classpathentry kind="var" path="M2\_REPO/com/h2database/h2/1.4.187/h2-1.4.187.jar"/>
  - <classpathentry kind="var" path="M2\_REPO/org/jmockit/jmockit/1.21/jmockit-1.21.jar"/>
  - <classpathentry kind="var" path="M2\_REPO/axis/axis/1.3/axis-1.3.jar"/>
  - <classpathentry kind="var" path="M2\_REPO/axis/axis-ant/1.3/axis-ant-1.3.jar"/>
  - <classpathentry kind="var" path="M2\_REPO/javax/xml/jaxrpc-api/1.1/jaxrpc-api-1.1.jar"/>
- Remaining errors
  - The type DSpaceWebapp is already defined DSpaceWebapp.java /DSpace\_5x/dspace-oai/src/main/java/org/dspace/utils line 18 Java Problem
  - The type DSpaceWebapp is already defined DSpaceWebapp.java /DSpace\_5x/dspace-rdf/src/main/java/org/dspace/utils line 17 Java Problem
  - The type DSpaceWebapp is already defined DSpaceWebapp.java /DSpace\_5x/dspace-rest/src/main/java/org/dspace/utils line 18 Java Problem
  - The type DSpaceWebapp is already defined DSpaceWebapp.java /DSpace\_5x/dspace-xmui/src/main/java/org/dspace/utils line 18 Java Problem

## DSpace 5 (with test paths included)

- Add the following variables
  - <classpathentry kind="var" path="M2\_REPO/org/xmlmatchers/xml-matchers/0.10/xml-matchers-0.10.jar"/>
  - <classpathentry kind="var" path="M2\_REPO/org/mortbay/jetty/jetty/6.1.26/jetty-6.1.26.jar"/>
  - <classpathentry kind="var" path="M2\_REPO/org/mortbay/jetty/jetty-servlet-tester/6.1.26/jetty-servlet-tester-6.1.26.jar"/>

## DSpace 6 special cases

*Example pom files for special scopes to identify additional resources to be added.*

- Add the following
  - <classpathentry kind="var" path="M2\_REPO/org/atteo/evo-inflector/1.2.1/evo-inflector-1.2.1.jar"/>
  - <classpathentry kind="var" path="M2\_REPO/com/google/code/findbugs/annotations/3.0.0/annotations-3.0.0.jar"/>
- Remaining errors
  - The type DSpaceWebapp is already defined DSpaceWebapp.java /DSpace\_D6/dspace-rdf/src/main/java/org/dspace/utils line 17 Java Problem
  - The type DSpaceWebapp is already defined DSpaceWebapp.java /DSpace\_D6/dspace-rest/src/main/java/org/dspace/utils line 18 Java Problem

## DSpace 6 test directories

- Enable the DSpace java test directories
- The following dependencies are needed in the classpath
  - <classpathentry kind="var" path="M2\_REPO/org/mockito/mockito-core/1.10.19/mockito-core-1.10.19.jar"/>
  - <classpathentry kind="var" path="M2\_REPO/org/jmockit/jmockit/1.21/jmockit-1.21.jar"/>

- <classpathentry kind="var" path="M2\_REPO/org/databene/contiperf/2.3.4/contiperf-2.3.4.jar"/>
- <classpathentry kind="var" path="M2\_REPO/org/hamcrest/hamcrest-all/1.3/hamcrest-all-1.3.jar"/>
- <classpathentry kind="var" path="M2\_REPO/org/parboiled/parboiled-java/1.1.7/parboiled-java-1.1.7.jar"/>
- <classpathentry kind="var" path="M2\_REPO/org/springframework/spring-mock/2.0.8/spring-mock-2.0.8.jar"/>
- <classpathentry kind="var" path="M2\_REPO/org/springframework/spring-test/3.2.5.RELEASE/spring-test-3.2.5.RELEASE.jar"/>
- <classpathentry kind="var" path="M2\_REPO/org/xmlmatchers/xml-matchers/0.10/xml-matchers-0.10.jar"/>
- <classpathentry kind="var" path="M2\_REPO/org/mortbay/jetty/jetty/6.1.26/jetty-6.1.26.jar"/>
- <classpathentry kind="var" path="M2\_REPO/org/mortbay/jetty/jetty-servlet-tester/6.1.26/jetty-servlet-tester-6.1.26.jar"/>

## DSpace 7

- I ran a maven build and assembled artifacts
- Separately, I copied Spring Boot and Spring jars into a directory
- Then, I reviewed the list of jar files and attempted to manually remove duplicate versions
- Then I added the following overrides
  - <classpathentry kind="var" path="M2\_REPO/com/jayway/jsonpath/json-path/2.2.0/json-path-2.2.0.jar"/>
  - <classpathentry kind="var" path="M2\_REPO/org/springframework/spring-mock/2.0.8/spring-mock-2.0.8.jar"/>
  - <classpathentry kind="var" path="M2\_REPO/org/springframework/spring-test/3.2.5.RELEASE/spring-test-3.2.5.RELEASE.jar"/>
  - <classpathentry kind="var" path="M2\_REPO/org/xmlmatchers/xml-matchers/0.10/xml-matchers-0.10.jar"/>
  - <classpathentry kind="var" path="M2\_REPO/org/mortbay/jetty/jetty/6.1.26/jetty-6.1.26.jar"/>
  - <classpathentry kind="var" path="M2\_REPO/org/mortbay/jetty/jetty-servlet-tester/6.1.26/jetty-servlet-tester-6.1.26.jar"/>
  - <classpathentry kind="var" path="M2\_REPO/org/flywaydb/flyway-core/4.0.3/flyway-core-4.0.3.jar"/>
  - <classpathentry kind="var" path="M2\_REPO/com/jayway/jsonpath/json-path-assert/2.2.0/json-path-assert-2.2.0.jar"/>
- Many errors are unresolved
  - ClientAbortException cannot be resolved to a type BitstreamContentRestController.java /DSpace/dspace-spring-rest/src/main/java/org/dspace/app/rest line 130 Java Problem
  - on cannot be resolved to a variable AuthorityEntryLinkRepository.java /DSpace/dspace-spring-rest/src/main/java/org/dspace/app/rest/repository line 62 Java Problem
  - on cannot be resolved to a variable AuthorityEntryLinkRepository.java /DSpace/dspace-spring-rest/src/main/java/org/dspace/app/rest/repository line 64 Java Problem
  - on cannot be resolved to a variable AuthorityEntryLinkRepository.java /DSpace/dspace-spring-rest/src/main/java/org/dspace/app/rest/repository line 66 Java Problem
  - Syntax error on token "Invalid Character", ; expected AuthorityEntryLinkRepository.java /DSpace/dspace-spring-rest/src/main/java/org/dspace/app/rest/repository line 62 Java Problem
  - Syntax error on token "Invalid Character", invalid AssignmentOperator AuthorityEntryLinkRepository.java /DSpace/dspace-spring-rest/src/main/java/org/dspace/app/rest/repository line 64 Java Problem
  - Syntax error on token "Invalid Character", invalid AssignmentOperator AuthorityEntryLinkRepository.java /DSpace/dspace-spring-rest/src/main/java/org/dspace/app/rest/repository line 66 Java Problem
  - The import org.apache.catalina cannot be resolved BitstreamContentRestController.java /DSpace/dspace-spring-rest/src/main/java/org/dspace/app/rest line 18 Java Problem
  - The method clearStatistics() is undefined for the type Ehcache EhcacheCache.java /DSpace/dspace-services/src/main/java/org/dspace/services/caching/model line 67 Java Problem
  - The method getArgumentAt(int, Class<UUID>) is undefined for the type InvocationOnMock SpecialGroupClaimProviderTest.java /DSpace/dspace-spring-rest/src/test/java/org/dspace/app/rest/security/jwt line 58 Java Problem
  - The method getLeader(String) is undefined for the type ContentCachingResponseWrapper MultipartFileSenderTest.java /DSpace/dspace-spring-rest/src/test/java/org/dspace/app/rest/utils line 157 Java Problem
  - The method getHeader(String) is undefined for the type ContentCachingResponseWrapper MultipartFileSenderTest.java /DSpace/dspace-spring-rest/src/test/java/org/dspace/app/rest/utils line 269 Java Problem
  - The method getHeader(String) is undefined for the type ContentCachingResponseWrapper MultipartFileSenderTest.java /DSpace/dspace-spring-rest/src/test/java/org/dspace/app/rest/utils line 293 Java Problem
  - The method getHeader(String) is undefined for the type ContentCachingResponseWrapper MultipartFileSenderTest.java /DSpace/dspace-spring-rest/src/test/java/org/dspace/app/rest/utils line 294 Java Problem
  - The method getStatus() is undefined for the type HttpServlet Response BitstreamContentRestController.java /DSpace/dspace-spring-rest/src/main/java/org/dspace/app/rest line 185 Java Problem
  - The method setInitParameter(String, String) is undefined for the type ServletContext Application.java /DSpace/dspace-spring-rest/src/main/java/org/dspace/app/rest line 90 Java Problem
  - The method setStatisticsAccuracy(int) is undefined for the type Ehcache CachingServiceImpl.java /DSpace/dspace-services/src/main/java/org/dspace/services/caching line 620 Java Problem
  - The type DSpaceWebapp is already defined DSpaceWebapp.java /DSpace/dspace-oai/src/main/java/org/dspace/utils line 18 Java Problem
  - The type MockDOIConnector is already defined MockDOIConnector.java /DSpace/dspace-api/src/test/java/org/dspace/identifier line 24 Java Problem
  - The type MockLookupService is already defined MockLookupService.java /DSpace/dspace-api/src/test/java/org/dspace/statistics line 20 Java Problem
  - The type MockSolrLoggerServiceImpl is already defined MockSolrLoggerServiceImpl.java /DSpace/dspace-api/src/test/java/org/dspace/statistics line 17 Java Problem
  - The type MockSolrServiceImpl is already defined MockSolrServiceImpl.java /DSpace/dspace-api/src/test/java/org/dspace/discovery line 17 Java Problem
  - Type mismatch: cannot convert from StatisticsGateway to Statistics CachingServiceImpl.java /DSpace/dspace-services/src/main/java/org/dspace/services/caching line 621 Java Problem