

Apache Derby Plug-ins

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Objectives

- What is a plug-in?
- What are the Derby plug-ins?
- What do they do?
- Where do you get them from?
- Why use them?
- Lab

What is a plug-in?

- Building blocks of Eclipse
- Contributes functionality to the platform
- Plug-ins are activated when functionality is needed
- Examples of plug-ins
 - Java Development Tools, Plug-in Development Environment, Derby plug-ins

What are the Derby plug-ins?

- Two main plug-ins, plus a third help plug-in
- Core plug-in
 - contains derby.jar, derbytools.jar, derbynet.jar, derbyclient.jar and plugin.xml
- UI plug-in
 - Contains ui.jar and plugin.xml
- Help plug-in
 - Contains the html help files, images, plugin.xml and toc.xml

What do the Derby plug-ins do?

- Add functionality by adding the Derby 'nature'
 - A nature adds functionality and behaviour, possibly builders
- Adds all derby jar files to the build path of the project
- Allows launching of network server, ij and sysinfo
- Integrated help with tutorial

Where do you get them from?

- Binary Version - Apache
 - db.apache.org/derby/derby_downloads.html
 - select the 10.1.1.0 release
- Source Version – Apache
 - check out via subversion
 - `svn co`
[https://svn.apache.org/repos/asf/db/derby/code/trunk/
plugins](https://svn.apache.org/repos/asf/db/derby/code/trunk/plugins)

Why use the Derby plug-ins?

- Eclipse is a great IDE, which further increases productivity of Derby application development
- No need to execute batch or shell files
- Stored procedure debugging
- Exiting Eclipse shuts down all running network servers

Lab – Using the Derby plug-ins

- Run SQL scripts to create a database and tables
 - Scripts are provided to create a jay_species and jay_attributes table
- Create stored procedures
 - Write a public class with three static methods to perform SQL queries on these tables
 - Write the SQL statements to create the stored procedure in the database
- Create a standalone Java client application which calls the stored procedures
 - Create either a standalone applicatoin which takes command line arguments or a console application that takes input

Lab – Using the Derby plug-ins

- Download the zip file derby_plugins_lab.zip
- Unzip this file to a convenient location
- If Eclipse has not been installed, install Eclipse 3.1 M6 or higher
- If the Derby plug-ins have not been installed, install them in Eclipse
- cd to the directory where the derby_plugins_lab.zip file was unzipped and follow the instructions in the derby_plugins_lab text file