Apache Derby Plug-ins

Susan Cline
May 2005
Updated August 2005
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
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 application 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