Using the Eclipse Workbench Companion Tutorial Document

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Introduction & Setup

This document is designed to accompany the "Using the Eclipse Workbench" video tutorial, which is available at http://eclipsetutorial.sourceforge.net/. Before starting this tutorial, please download the following files from the website:

- Workbench-Tutorial-Companion-Document.PDF this document.
- workbench_tutorial.zip zip file for importing the Eclipse "WorkbenchTutorial" project. This is done as part of Lesson 1.
- workbench-lesson01.zip through workbench-lesson06.zip zip files for the 6 lessons in the tutorial

Playing the Lessons

- 1. Unzip each lesson's zip file into a directory on your system.
- 2. Find the file called "lessonxx.html", where xx is the lesson number 01-???.

3. Open this file with your browser (e.g., Internet Explorer or Firefox) and press the large play button on the video thumbnail. The lesson should play inside the browser. Note that you need to have the Adobe Flash player installed on your system. This can be downloaded from Adobe at http://www.adobe.com/products/flashplayer/.

Alternatively, you can just open the file "lessonxx.swf" with your browser. In Windows Internet Explorer you might get a security warning and need to click and select "Allow blocked content". If you open the lessonxx.swf file directly (as opposed to lessonxx.html), you can resize the video to any desired size, making it larger or smaller. Note that playing the video from the lessonxx.html file will provide the clearest rendition of the video but does not allow resizing.

Closed Captions and Lesson Table of Contents



The audio track of each lesson can be accompanied by closed captions (subtitles), which display in the lower portion of the video. Press the "CC" button in the lower right corner to toggle them on and off. Each lesson also contains a table of contents that allows you to jump to a specified point inside the video. To access the table of contents, click on the Table of Contents icon in the lower right corner of the video. Next to the Table of Contents control is the Volume control. The controls are shown above.

Tutorial Target Audience

Eclipse is used for many different purposes. Most of these involve using the functionality of the Eclipse workbench. For example, Java developers need to be able to arrange the workbench to fit their individual needs. RCP developers will have two reasons for understanding the workbench: first, to be able to use Eclipse in their development process; and, second, to know the capabilities of the underlying RCP platform, of which Eclipse is an example, in order to use these capabilities in their RCP applications.

This tutorial is designed for two groups of people. The first includes those who are new to Eclipse and want to understand it's basic functionality. Although we use a Java project as our example, this tutorial involves no programming and is designed so that the content is relevant to any application that uses the Eclipse workbench.

The second target group includes those who, although familiar with Eclipse, want to learn more about the workbench functionality.

No prior experience with Eclipse is required, although you will need to have Eclipse installed and operational to follow the lessons.

Tutorial Objectives

The objectives of this tutorial are to:

- Lean how to organize the Eclipse workbench to fit your needs
- Learn how to customize the Eclipse layout and to use and customize perspectives and views
- Learn how to use the Eclipse Compare editor to compare versions of files and similar files
- Learn useful keyboard shortcuts and other tips and tricks

Tutorial Approach

The tutorial is organized around the following activities. We import a simple Java project, but only to give us some files to work with. We do no programming in this tutorial! Instead, we will:

- Work with the editor area and commands for arranging and working with open files
- Work with views and perspectives and learn how to maximize screen "real estate" while keeping required information close at hand
- Learn how to customize and create perspectives to make Eclipse work just the way we want it to
- See some useful keyboard shortcuts in action and use some other tips and tricks

We do not cover any programming or programming concepts. We just focus on using the workbench.

Getting The Most From This Tutorial

This tutorial can be used as an in-depth demonstration of the features of the Eclipse workbench. However, if you want to learn how to use Eclipse, the following approach is recommended:

- Have Eclipse installed and ready to go.
- Work side-by-side with the lessons, pausing and rewinding as needed.
- Use this guide as needed.
- Consult other resources as needed to understand the topics covered in greater depth.
- Keep a positive attitude!

Finding a Topic in the Alphabetical Index

At the end of this document is an Alphabetical Index by Lesson. You can use this index to locate a specific topic and which lesson it was covered in. Also, each lesson has a table of contents that allows you to navigate directly to a lesson topic.

Downloading and Installing Eclipse

Before Installing Eclipse, you need to have the Java JRE (Java Runtime Environment) installed on

your computer. This are available at http://java.sun.com/javase/downloads/index.jsp. IMPORTANT NOTE: Java version 1.5 or later is recommended to run Eclipse. You can run this tutorial equally well with the Java JRE or the Java JDK (which includes the JRE).

Installing the JDK is reasonably simple. Detailed, step-by-step instructions, if needed, are available in the PDF Eclipse Tutorial at the https://www.arctechsoftware.com/tutorial/welcomePage.do. (Follow the link to "Beginning Eclipse".)

This tutorial is based on Eclipse 3.3. Here are the steps to install Eclipse 3.3 from www.eclipse.org:

- Navigate to <u>www.eclipse.org/downloads</u>
- Select "Eclipse IDE for Java Developers", "Eclipse IDE for Java EE Developers", or "Eclipse for RCP/Plug-in Developers". You can use this tutorial with other Eclipse downloads, such as "Eclipse Classic", although some of the specific functionality may be missing. For example, we use the Eclipse XML editor in some of the lessons, and this is not included in some of the Eclipse downloads. You should be able to follow the lessons just fine even if you are missing this editor. And, of course, it is fairly easy to add any missing Eclipse features using the Eclipse Update Manager.
- If your platform is Linux or Mac OSX, be sure to select the link to the right.
- On the <u>www.eclipse.org/downloads</u> page, follow the link "Find out more". Scroll your browser
 to display the far right-hand side of the screen to the column "Tutorials and Help". The first
 tutorial is a video tutorial that steps you through downloading and installing Eclipse on
 Windows.

The Eclipse installation is very straightforward. There is no installation program. Instead, you just create the top-level folder and the unzip the file inside this folder. In Windows XP, for example, just copy the zip file to your root directory (e.g., "C:\") and then unzip the downloaded zip file.

(Note: You need to use an unzip program. Do not use the Windows File Explorer unzip.)

When you unzip the downloaded file, this will create a folder called "C:\eclipse". The Eclipse programs will be created in several sub-folders (configuration, features, plugins, readme). The procedure for Linux is similar, except you unzip the ".tar.gz" file.

Another option is to install the EasyEclipse distribution of Eclipse (http://www.easyeclipse.org). This is a free third-party distribution that includes a Windows installation program that installs Java and Eclipse all in one step. You should install version 1.3 (based on Eclipse 3.3) or later of the Expert Java or Desktop Java distributions.

Lesson Outlines

Lesson 1

- Discuss Tutorial Target Audience
- Import WorkbenchTutorial project
- Use drag and drop to open files and arrange files

- Subdivide the Edit Area
- Create multiple instances of a single file
- Create a new workbench in a separate window

Lesson 2

- Introduce Eclipse Views
- Move Views Around the Workbench
- Create Detached Views
- Minimize and Maximize Views
- Use Trim Stacks and Fast Views
- Pop-Up Views
- View Tool Bars and Menus
- Search View
- Pin a View

Lesson 3

- Introduce Perspectives
- Switching Between Perspectives
- Reset Perspective Command
- Create a New Perspective
- Customize Perspectives
- Save a Perspective
- Close and Delete a Perspective

Lesson 4

- Context-Sensitive Help
- Help Toolbar Options
- Help Search
- Help Bookmarks
- Resource Bookmarks
- Help Cheat Sheets
- Quick Access (Ctrl+3)
- Back, Forward, Last Edit Location Navigation

Lesson 5

- Show Key Assist (Ctrl+Shift+L)
- Edit Keyboard Shortcuts
- Incremental Find (Ctrl+J)
- Quick Diff (Ctrl+Q)
- Create Custom Keyboard Shortcut

Lesson 6

- Change Keyboard Shortcut
- Change to Single-Click File Open Mode
- Export and Import Preferences
- Compare with Local History
- History Preferences
- Compare Two Files
- Restore Deleted File from History

General Resources

There are many general resources available for learning more about Eclipse and Java. These are just a few that I've found helpful.

Eclipse Websites

- www.eclipse.org/resources. This lists a number of articles, books, presentations, demonstrations and other resources on a variety of topics related to Eclipse.
- eclipse.newcomer newsgroup. This is a friendly, active newsgroup where newcomers to Eclipse can ask questions. The search feature of this and other newsgroups can be especially valuable, since there is a good chance that your question has already been asked and answered.
- Beginning Eclipse Tutorial on ArcTech Software LLC website. Written tutorial to help you install
 Eclipse and Java. Login required to download. It has a very good section on downloading and
 installing the Java JDK. Link to tutorial is
 https://www.arctechsoftware.com/tutorial/tutorial.do?subcatId=1. Link to home page is
 https://www.arctechsoftware.com/tutorial/welcomePage.do.

Eclipse Books

 The Java Developer's Guide to Eclipse, Second Edition, by Jim D'Anjou, Scott Fairbrother, Dan Kehn, John Kellerman, and Pat McCarthy. Clear, thorough reference for using Eclipse to write Java code. It covers Eclipse Version 3.0, which is still mostly applicable.

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