Unit 2: Setting up your Java development environment

Install the JDK and Eclipse for your platform and get started with Eclipse

Unit objectives

- Download and install the JDK and the Eclipse IDE
- Set up your Eclipse development environment
- Understand the main Eclipse components and how to use them for Java development
- Create a new Java project in Eclipse

Your development environment

The JDK includes a set of command-line tools for compiling and running your Java code, including a complete copy of the JRE. Although you can use these tools to develop your applications, an IDE gives you additional functionality along with task management and a visual interface.

In this learning path you use Eclipse, a popular open source IDE. Eclipse handles basic tasks, such as code compilation and debugging, so that you can focus on writing and testing code. In addition, you can use Eclipse to organize source code files into projects, compile and test those projects, and store project files in any number of source repositories. You need an installed JDK to use Eclipse for Java development.

Install the JDK

1. Follow these steps to download and install the JDK:
2. Browse to Java SE Downloads and click the Java Platform (JDK) box to display the download page for the latest version of the JDK.
3. Agree to the license terms for the version you want to download.
4. Choose the download that matches your operating system and chip architecture.

Windows

1. Save the file to your hard drive when prompted.

2. When the download is complete, run the install program. Install the JDK to your hard drive in an easy-to-remember location such as C:\home\Java\ jdk1.8.0_92. (As in this example, it's a good idea to encode the update number in the name of the install directory that you choose.)

OS X

1. When the download is complete, double-click it to mount it.
2. Run the install program. You do not get to choose where the JDK is installed. You can run /usr/libexec/java_home -1.8 to see the location of JDK 8 on your Mac. The path that's displayed is similar toLibrary/Java/JavaVirtualMachines/jdk1.8.0_92.jdk/Contents/Home.

See [JDK 8 and JRE 8 Installation](#) for more information, including instructions for installing on **Solaris** or **Linux**.

You now have a Java environment on your computer. Next, you'll install the Eclipse IDE and create a Java project in Eclipse

Install Eclipse

Follow along with this video demo to download and install Eclipse on your system, take a quick

Eclipse tour, and create a Java project.

To view this video, Getting started with Eclipse , please access the online version of the article. If

this article is in the developerWorks archives, the video is no longer accessible.

Recap: The Eclipse development environment

The Eclipse development environment has four main components:

- Workspace
- Projects
- Perspectives
- Views

The primary unit of organization in Eclipse is the *workspace*. A workspace contains all of your *projects*. A *perspective* is a way of looking at each project (hence the name), and within a perspective are one or more *views*.