Groovy with Eclipse IDE

How to install and setup Groovy inside Eclipse

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Table of Contents

- Eclipse Installation
    - Java requirements
    - Download Eclipse
    - Install Eclipse
- Eclipse Plugin Installation
    - Groovy-Eclipse
    - m2e connector for build-helper-maven-plugin
    - Maven Integration for Eclipse
- Firefox Installation
    - Windows
    - Mac OS X
- Import project into Eclipse
- Eclipse problems
- Start web application

Eclipse Installation
Java requirements

- Eclipse requires an installed Java runtime. Eclipse 4.4 requires at least Java 7 to run.

- Java can be downloaded as a JRE (Java Runtime Environment) or a JDK (Java Development Kit) version.

- The Eclipse IDE contains its own Java compiler hence a JRE is sufficient for most tasks with Eclipse.

- The JDK version of Java is required if you compile Java source code on the command line and for advanced development scenarios, for example, if you use automatic builds or if you develop Java web applications.

- For this tutorial, you should use Java JDK in version 7 or higher.

Eclipse Installation
Download Eclipse

The Eclipse IDE consists of several components. The Eclipse.org website provides pre-packaged Eclipse distributions to provide downloads for typical use cases. The Eclipse IDE for Java EE Developers contains everything you need to build Java and Java Enterprise Edition (Java EE) applications.

Download the **Eclipse IDE for Java Developers** or **Eclipse IDE for Java EE Developers** package from the following URL. Ensure that you download the correct distribution for your Java version (e.g., 32 bit vs. 64 bit).

http://www.eclipse.org/downloads

Eclipse Installation
Download Eclipse (contd.)

The following screenshot shows the Eclipse download website for a Mac OS X system. Press on the link beside the package description (e.g, Mac OS X 64-Bit) to start the download. The download is a `.zip` file

Eclipse Luna (4.4.1) Release for [Mac OS X (Cocoa) ▼]

Mac OS X users please note: Eclipse requires Mac OS X 10.5 (Leopard) or greater.

Eclipse IDE for Java Developers, 153 MB
Downloaded 3,805,748 Times

The essential tools for any Java developer, including a Java IDE, a CVS client, Git client, XML Editor, Mylyn, Maven integration...

Mac OS X 32 Bit
Mac OS X 64 Bit

Package Solutions

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Eclipse IDE for Java EE Developers, 252 MB
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Tools for Java developers creating Java EE and Web applications, including a Java IDE, tools for Java EE, JPA, JSF, Mylyn...

Mac OS X 32 Bit
Mac OS X 64 Bit

Eclipse Installation
Install Eclipse

After you downloaded the `.zip` file with the Eclipse distribution, unzip it to a local directory.

Extract Eclipse to a directory without spaces in its path and do not use a mapped network drive (Windows). Eclipse sometimes has problems with such a setup.
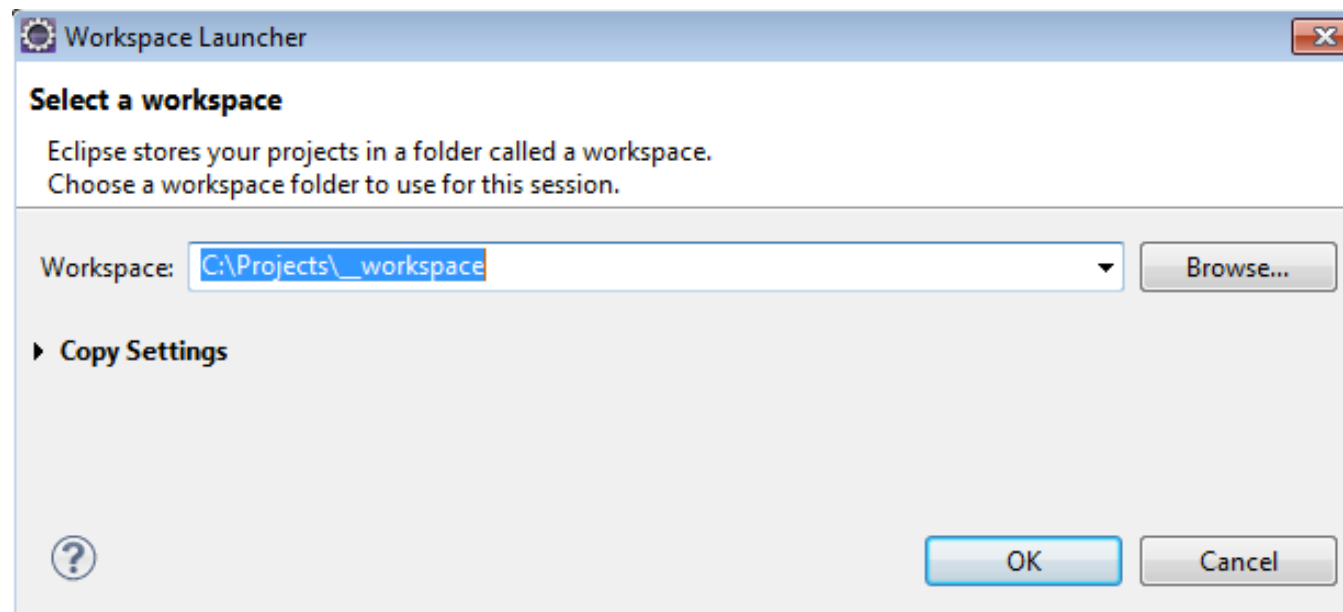
After unpacking the zip file, Eclipse is ready to be used; no additional installation procedure is required.

To start Eclipse, double-click on the `eclipse.exe` (Microsoft Windows) or `eclipse` (Linux / Mac) file in the directory where you unpacked Eclipse.

Eclipse Installation
Install Eclipse (contd.)

The system will prompt you for a workspace. The workspace is the place in which you work. Select an empty directory and click the OK button.

Eclipse Plugin Installation
Groovy-Eclipse via Update Manager

- Copy the Groovy-Eclipse release URL appropriate to your Eclipse version:

  - http://dist.springsource.org/release/GRECLIPSE/e4.4/
  - http://dist.springsource.org/release/GRECLIPSE/e4.3/
  - http://dist.springsource.org/release/GRECLIPSE/e4.2/

- To install the plugin, select Help → Install New Software...

- Paste the Groovy-Eclipse release URL into the "Work with:" field and hit Enter
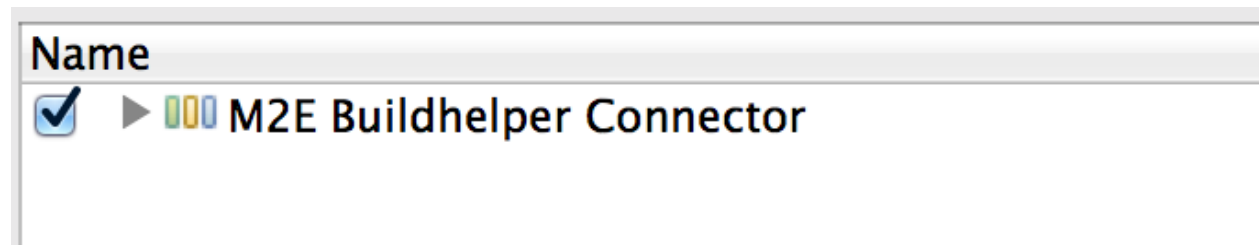
- Select the features:

Eclipse Plugin Installation
m2e connector for build-helper-maven-plugin via Update Manager

- To install the plugin, select Help → Install New Software...
- Paste the following URL into the "Work with:" field and hit Enter

http://repo1.maven.org/maven2/.m2e/connectors/m2eclipse-buildhelper/0.15.0/N/0.15.0.201405280027/

- Install feature:

Eclipse Plugin Installation
Maven Integration for Eclipse via Update Manager

This plugin is only necessary to install if you use the **Eclipse Standard** package (i.e. if you are **not** using the Java or Java EE eclipse package). The plugin provides comprehensive Maven integration for Eclipse.

- To install the plugin, select Help → Install New Software...
- Paste the following URL into the "Work with:" field and hit Enter

  http://download.eclipse.org/technology/m2e/releases

- Install feature:
  - ❑ Maven Integration for Eclispe
    - ❑ m2e - Maven Integrations for Eclipse v1.4.0
    - ❑ m2e – slf4j over logback logging (Optional) v1.4.0

Import project into Eclipse

- Download example project from

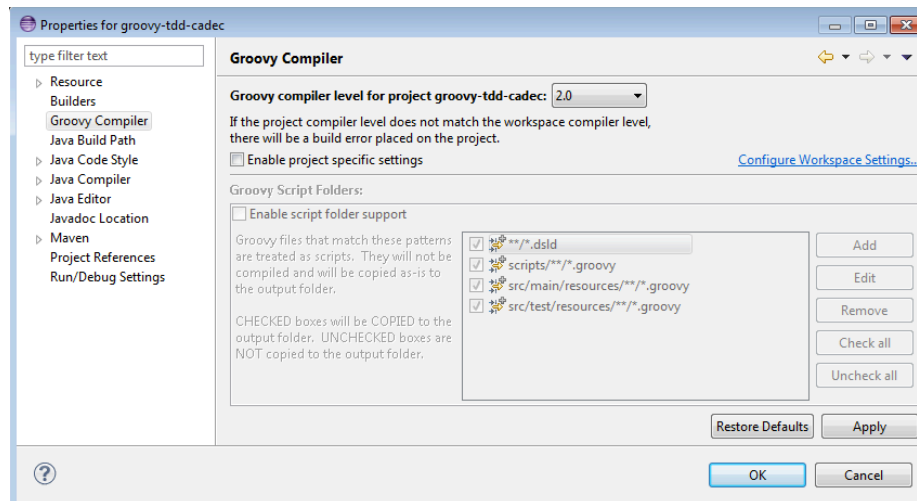 https://callistaenterprise.atlassian.net/wiki/download/attachments/12288001/groovy-tdd-cadec.zip

    – Zip file contains an Eclipse project

- Unzip to a working directory of your choice

- To import an Eclipse project:
    – Select File → Import → General → Existing Projects into Workspace
    – Browse to the directory where you have unzipped the source code
    – Choose the **groovy-tdd-cadec** project
    – Click Finish

Eclipse problems
Groovy compiler mismatch

If Eclipse reports a mismatch between the project's and workspace's Groovy compiler, you need to correct it:

1. Right click **groovy-tdd-cadec**
2. Select → Properties →Groovy Compiler
3. Make sure Groovy compiler is set to version 2.3

Start web application
From inside Eclipse

1. In Project Explorer view, right click **groovy-tdd-cadec Tomcat7.launch**

2. Select → Run As → (m2) groovy-tdd-cadec Tomcat7

3. Open a browser and goto

http://localhost:9966/petclinic/