Eclipse is an Integrated Developed Environment (**IDE**). You can use Eclipse to design, develop, test and deploy many different types of applications in many languages. We are going to use Eclipse to develop Java applications. This document describes how to install and configure Eclipse on XP. Linux, Solaris and Macintosh users should be able to use these directions as a guide.

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Installing Java

Java 1.5 SE or higher is required. Java 1.5 SE is equivalent to Java 5.0 SE. The same pattern applies to Java 1.6.

Step 1: Go to your Control Panel and click on the Java icon. If there is no Java Icon java is probably not installed. If you are using a computer that has applications requiring specific versions of Java less than 1.5, you will have to install two versions. If you don't need the existing version and it is less than 1.5, you can remove it. You remove programs by going to the Control Panel and Using the Add/Remove widget.



Step 2: Check the version number.

🍰 Java Control Panel			
General Update Java Se	curity Advanced		
About View version information a	bout Java Control Panel.	About	
Network Settings			
Network settings are used when making Internet connections. By default, Java will use the network settings in your web browser. Only advanced users should modify these settings.			
		Network Settings	
Temporary Internet Files			
Files you use in Java appli later, Only advanced use	ations are stored in a sp should delete files or m	pecial folder for quick execution modify these settings.	
	Delet	e Files	
		OK Cancel Apply	

Step 3: You should see something like this:



Step 4: If you need to install Java go to the location where the Java SDK is located.

😂 C:\DPS2010		
<u>File E</u> dit <u>V</u> iew F <u>a</u> vorites]	jools <u>H</u> elp	alia alia alia alia alia alia alia alia
🕞 Back 👻 🌖 👻 🏂	🔎 Search 🛛 🎼 Folders 🛛 🕞 🍞 🕻	╳ ᡌ ᠁·
Name 🔺	Size Type	Date Modified
🚞 subclipse-1.2.3	File Folder	8/21/2007 9:13 AM
😰 eclipse-java-europa-win32	80,586 KB Compressed (zippe	8/21/2007 7:53 AM
🗓 jdk-1_5_0-doc	45,109 KB Compressed (zippe	8/22/2007 7:44 AM
🚺 junit4.4	795 KB Compressed (zippe	8/22/2007 7:51 AM
🛃 jdk-1_5_0_12-windows-i586-p	52,560 KB Application	8/22/2007 7:53 AM
Description: Set Company: Sun M File Version: 8.3 Date Created: 8 Size: 51.3 MB	up Launcher Nicrosystems, Inc. .165.0 /22/2007 7:49 AM	

Step 5: Agree to the License terms and click next.

🔂 J2SE Development Kit 5.0 Update 12 - License
License Agreement Please read the following license agreement carefully.
Sun Microsystems, Inc. Binary Code License Agreement for the JAVA 2 PLATFORM STANDARD EDITION DEVELOPMENT KIT 5.0 SUN MICROSYSTEMS, INC. ("SUN") IS WILLING TO LICENSE THE SOFTWARE IDENTIFIED BELOW TO YOU ONLY UPON THE CONDITION THAT YOU ACCEPT ALL OF THE TERMS CONTAINED IN THIS BINARY CODE LICENSE AGREEMENT AND SUPPLEMENTAL LICENSE TERMS (COLLECTIVELY "AGREEMENT"). PLEASE READ THE AGREEMENT CAREFULLY. BY DOWNLOADING OR INSTALLING THIS SOFTWARE, YOU ACCEPT THE TERMS OF THE AGREEMENT. INDICATE ACCEPTANCE BY SELECTING THE "ACCEPT" BUTTON AT THE BOTTOM OF THE AGREEMENT. IF YOU ARE NOT WILLING TO BE BOUND BY ALL THE TERMS, SELECT THE "DECLINE" BUTTON AT THE BOTTOM OF THE AGREEMENT AND THE
I accept the terms in the license agreement I do not accept the terms in the license agreement InstallShield <u>Next > Cancel</u>

Step 6: Take the defaults and click next, make a note of the install to directory. Windows likes to put things in "Program Files". In this case **C:\Program Files\Java\jdk1.5.0_12**

🔀 J2SE Development Kit 5.0 Update 12 - Custom	Setup 🔀
Custom Setup Select the program features you want installed.	Sun.
Select optional features to install from the list below. You car installation by using the Add/Remove Programs utility in the C Development Tools Demos Source Code	n change your choice of features after Control Panel J2SE Development Kit 5.0, including private JRE 5.0. This will require 264 MB on your hard
	drive.
Install to: C:\Program Files\Java\jdk1.5.0_12\ Install5hield	hange
< <u>B</u> ack	Next > Cancel

Step 7: Click Finish, if you installed this as the only version of Java, you should be able to find it by using the Control Panel Java Wizard, like you did in Step 1:

🛃 J2SE Development Kit 5.0 Update 12 - Complete				
	Installation Completed			
The Install Wizard has successfully installed J2SE Development Kit 5.0 Update 12. Click Finish to exit the wizard.				
Sun. Java				
	< Back Finish Cancel			

Installing Eclipse

Step 1: Navigate to the directory with the eclipse zip file. Right click on the file name below and then select Extract All. The zip file can be found on the CD/DVD/USB device or hard disk, for online download see Appendix A

C:\DPS2010		×
File Edit View Favorites	Tools Help	1
🕞 Back 🔹 🌍 🍷 🏂	Search 🔂 Folders	
Name 🔺	Size Type Date Modified	
eclipse-java-europa-win32	80,586 KB Compressed (zippe 8/21/2007 7:53 AM	

Step 2: You should see the following.



Step 3: Extract the files into C:\eclipse

Extraction Wizard		
Select a Destination Files inside the ZIP archive will be extracted to the location you choose.		
	Select a folder to extract files to. Files will be extracted to this <u>directory</u> : C:\eclipse <u>Browse</u> <u>Password</u>	
	< <u>B</u> ack <u>N</u> ext > Cancel	

Step 4: When the extraction completes click finish and navigate to the directory where the files were extracted. Verify that you have the following version of JUnit. 4.3.1. You should see something like the screen below. JUnit will not be highlighted.

C:\eclipse\eclipse\plugins				
<u>File Edit View Favorites Tools</u>	<u>H</u> elp			-
🕞 Back 👻 🕥 👻 🏂 🔎 S	iearch 🔀 F	olders 📴 🏂	× 9 💷	
Name 🔺	Size	Туре	Date Modified	<u>^</u>
🛅 org.apache.ant_1.7.0.v2007		File Folder	8/21/2007 8:01 AM	=
Construction or the second sec		File Folder	8/21/2007 8:01 AM	_
🛅 org.eclipse.equinox.launcher		File Folder	8/21/2007 8:01 AM	
🛅 org.eclipse.jdt.debug_3.3.0		File Folder	8/21/2007 8:02 AM	
🛅 org.eclipse.platform_3.3.0.v2		File Folder	8/21/2007 8:02 AM	
🛅 org.eclipse.tomcat_4.1.230.v		File Folder	8/21/2007 8:02 AM	
🛅 org.eclipse.ui.intro.universal		File Folder	8/21/2007 8:02 AM	
🛅 org.eclipse.ui.workbench.com		File Folder	8/21/2007 8:02 AM	
in org.eclipse.wst.command.env		File Folder	8/21/2007 8:02 AM	
🛅 org.junit4_4.3.1		File Folder	8/21/2007 8:02 AM	
🛅 org.junit_3.8.2.v200706111738		File Folder	8/21/2007 8:02 AM	
📓 com.ibm.icu_3.6.1.v20070417	3,977 KB	Executable Jar File	6/28/2007 9:14 PM	
📓 com.jcraft.jsch_0.1.31	177 KB	Executable Jar File	6/28/2007 9:14 PM	
📓 javax.servlet.jsp_2.0.0.v200	62 KB	Executable Jar File	6/28/2007 9:14 PM	
📓 javax.servlet_2.4.0.v200706	106 KB	Executable Jar File	6/28/2007 9:14 PM	
📓 org.apache.commons.el_1.0	125 KB	Executable Jar File	6/28/2007 9:14 PM	
📓 org.apache.commons.logging	43 KB	Executable Jar File	6/28/2007 9:14 PM	
📓 org.apache.jasper_5.5.17.v2	1,681 KB	Executable Jar File	6/28/2007 9:14 PM	
📓 org.apache.lucene.analysis_1	69 KB	Executable Jar File	6/28/2007 9:14 PM	~

Step 5: Navigate to the following directory and launce eclipse. Optionally pin Eclipse to your start menu. You can do this by right clicking when you have the mouse over the eclipse executable.

🗁 C: \eclipse \eclipse		
File Edit View Favorites Too	ols Help	A
🕞 Back 👻 🕥 👻 🏂	Search 🎼 Folders 🎼 🏂 🗙 🍤 💷	
Name 🔺	Size Type Date Modified	
	File Folder 8/21/2007 8:01 AM	
	File Folder 8/21/2007 8:01 AM	
	File Folder 8/21/2007 8:02 AM	
	1 KB ECLIPSEPRODUCT File 6/28/2007 9:14 PM	
	52 KB Application 6/28/2007 9:14 PM	
eclipse	1 KB Configuration Settings 7/2/2007 10:09 AM	
n eclipsec	28 KB Application 6/28/2007 9:14 PM	
🔁 epl-v10	17 KB Firefox Document 6/28/2007 9:14 PM	
Inotice	7 KB Firefox Document 6/28/2007 9:14 PM	

Step 6: Launch eclipse, advanced users can change the location for your workspaces.

🖶 Workspace Launcher 🛛 🗙		
Select a workspace		
Eclipse Platform stores your projects in a folder called a workspace. Choose a workspace folder to use for this session.		
Workspace: C:\Documents and Settings\Rinaldo\workspace V Browse		
Use this as the default and do not ask again		
OK Cancel		

Step 7: You should see something like the following



Step 8: Click the Workbench icon above and verify that you see the following.



This completes the installation of the Eclipse IDE. Eclipse is enhanced by the use of plugins. We are going to install and or enable several additional plugins.

Adding Subversion Support

We are going to use the subclipse plug-in from <u>http://subclipse.tigris.org/</u> to install the plug-in follow the directions here:

http://subclipse.tigris.org/install.html

Step 1: Go to the Help menu item in the Eclipse IDE, you installed above

11

Window	Help	_
ỷ - ∫ 2	 Welcome Help Contents Tips and Tricks Cheat Sheets Software Updates 	Coutine Dutline Coutine Coutine
	About Eclipse Platform	Wanage Configuration

Step 2: Select Search for new, click next.

🔚 Install/Update	
Feature Updates Choose the way you want to search for features to install	
C Search for updates of the currently installed features	
 Search for new features to install 	
<back next=""> Finish</back>	Cancel

Step 3: Press "New Local Site"

🖨 Install	
Update sites to visit Select update sites to visit while looking for new features.	
Sites to include in search: Clipse Modeling Framework (EMF) Updates Clipse Modeling Framework Technologies (EMFT) Updates Clipse Project Vite Model Developement Tools (MDT) Updates The Eclipse Project Updates Web Tools Platform (WTP) Updates	New Remote Site New Local Site New Archived Site Edit Remove
✓ Ignore features not applicable to this environment Automatically select mirrors	
⑦ < <u>Back</u> Next > []	Einish Cancel

Step 4: Navigate to the location of the following file in the CD or hard disk if you copied it over.

Br	owse For Folder	? 🗙
2	5elect a local update site.	
	🛅 20gb 2005 backups	~
	🗉 🚞 Cakewalk Projects	
	🛅 Config.Msi	
	🗄 🚞 cygwin	=
	🗄 🚞 DELL	-
	🗉 🚞 Documents and Settings	_
	🖃 🧰 DPS2010	
	🖃 🧰 subclipse-1.2.3	
	🚞 features	
	🚞 plugins	
	🗄 🚞 eclipse	~
		_
F	Folder: subclipse-1.2.3	
(Make New Folder OK Cano	:el

Step 5: You should see the following, click ok.

🛢 Edi	t Local Site 🛛 🔀
Name:	>PS2010/subclipse-1.2.3
URL:	file:/C:/DP52010/subclipse-1.2.3/
?	OK Cancel

Step 6: Click "Finish" On this Screen.

🖨 Install	
Update sites to visit Select update sites to visit while looking for new features.	
Sites to include in search: DPS2010/subclipse-1.2.3 Eclipse Modeling Framework (EMF) Updates Eclipse Modeling Framework Technologies (EMFT) Updates Europa Discovery Site Model Developement Tools (MDT) Updates Model Developement Tools (MDT) Updates Multiple Source States Web Tools Platform (WTP) Updates	New Remote Site New Local Site New Archived Site Edit Edit Remove Import sites Export sites
✓ Ignore features not applicable to this environment Automatically select mirrors	
Image: Section 2014 Image: Sectio	inish Cancel

Step 7: Unselect Integrations (Optional) and click Next

🖨 Updates	
Search Results Select features to install from the search result list.	
Select the features to install:	
 DPS2010/subclipse-1.2.3 <l< td=""><td>Deselect All More Info Properties Select Required Error Details</td></l<>	Deselect All More Info Properties Select Required Error Details
Eclipse Install/Update site for Subclipse 1 of 2 selected. ✓ Show the latest version of a feature only ☐ Filver features included in other features on the list	
(?) < Back	Cancel

Step 8: Accept the Apache License terms.

🖨 Install		
Feature License Some of the features have license agre installation.	eements that you need to accept before proceeding with the	
Subclipse 1.2.3	Subclipse Software User Agreement 11th April, 2006 Subclipse is licensed under the terms of the Eclipse Public License v1.0. http://www.eclipse.org/legal/epl-v10.html Applicable Licenses Subclipse is built upon a number of other open source technologies and products. Here is a list of those products with links to their licenses. svnClientAdapter: Part of the overall Subclipse project, svnClientAdapter presents a pluggable high-level interface to the Subversion repository. svnClientAdapter is licensed under the Apache2 License. http://www.apache.org/licenses/LICENSE-2.0 Depending on the adapter you choose in your preferences, the reement	
0	< <u>B</u> ack <u>N</u> ext > Einish Ca	ancel

Step 9: Click Finish

🖨 Install					
Installation The following features will be installed. You can select a feature and change the location where the feature will be installed.					
Features to install:					
Feature Name	Feature Version	Feature Size	Installation Directory		
Subclipse	1.2.3	Unknown	/C:/eclipse/eclipse/		
Install Location: C:\eclips	Install Location: C:\eclipse\eclipse Change Location				
Required space: Unknown Free space: 3.51 GB					
0		< Back	Next > Einish	Cancel	

Step 10: Click Install All

Verification	
Feature Verification Warning: You are about to install an unsigned feature. You may choose to install the feature or cancel its installation.	
This feature has not been digitally signed. The provider of this feature cannot be verified.Feature name:SubclipseFeature Identifier:org.tigris.subversion.subclipse_1.2.3Provider:tigris.orgFile Identifier:org.tigris.subversion.subclipse_1.2.3	
0	Install Install <u>A</u> ll

Step 11: Select Yes, Eclipse will restart.



Configure JUnit

Step 1: In the Package Explorer view, select your project and right click go to properties, the last item in the Menu. Your Project Name will be different.



Step 2: Select the Java Build Path and the Libraries tab. The window should look like this.

🖨 Properties for VerifyJunit		
type filter text	Java Build Path	⇔ - ⇔ -
 Resource Builders Java Build Path Java Code Style Java Compiler Java Editor Java Editor Javadoc Location Project References Run/Debug Settings Task Repository Task Tags Validation 	Source Projects Libraries Order and E JARs and class folders on the build path: Image: The second seco	Add JARs Add External JARs Add Variable Add Library Add Class Folder Edit Edit Remove
0		OK Cancel

Step 3: Select Add Library and select JUnit

🖨 Add Library	
Add Library Select the library type to add.	5
JRE System Library JUnit User Library	
? < Back	Cancel

Step 4: Select JUnit 4, then Finish.

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DPS2010 Eclipse IDE install Revision 0.2

🖨 Add Library	
JUnit Library Select the JUnit version to use in this project.	
JUnit library version: JUnit 4	t.jar
⑦ < Back Next > Finish	Cancel

Step 5: Your Window should look like this.

🖨 Properties for VerifyJunit		
type filter text	Java Build Path	$\Leftrightarrow * \Leftrightarrow *$
 Resource Builders Java Build Path Java Code Style Java Compiler Java Editor Java Editor Javadoc Location Project References Run/Debug Settings Task Repository Task Tags Validation 	Source Projects Libraries Order and E JARs and class folders on the build path:	Add JARs Add External JARs Add Variable Add Library Add Class Folder Edit Edit Migrate JAR File
0		OK Cancel

JUnit 4 has been enabled for the project you selected.

Adding Coverlipse support

The eclipse update site is located at http://coverlipse.sf.net/update. When using the update site mechanism you don't need to remove older Coverlipse versions. Eclipse will disable them and only use the newest one.

Step-by-step instructions:

- In Eclipse, click Help -> Software Updates -> Find and Install.
- In the dialog, select Search for new features to install, then Next.
- In the next step, add a New Remote Site. Name it "Coverlipse update site", the URL is "http://coverlipse.sf.net/update/".

• Press Finish. Eclipse now searches for the Coverlipse feature to install and shows that to you.

In the future, you can use Help -> Software Updates -> Manage Configuration to scan specifically for Coverlipse updates.

Appendix A

or downloaded from the eclipse website. <u>http://www.eclipse.org/downloads/</u>. We are using the Eclipse IDE for Java developers. Download the version for your Operating System.



Appendix B

The Eclipse IDE tries to help you by suggesting completion while you type. This facility requires that there are java docs for the classes you are using. Eclipse often points to a network location. If you would like to replace the reference with something local on your hard disk so you can work off the network. You have two options for using the files locally:

- 1. Copy the directories jdk-1_5_0-doc and junit4.4-doc to your hard disk and point to them where needed, see directions below.
- 2. Unzip the Java Docs for Java and for JUnit into a directory of your choosing and change the reference to point to the root of the directory of the documentation. You will have to do some searching in the directory tree.

The CD/DVD/USB device contains the docs in zipped format. To get to the configuration screen, right click on JUnit4 and then select Build Path -> Configure Build Path



The Java doc for JUnit below is external; change that to point to the internal location.

Properties for VerifyJunit		
type filter text	Java Build Path	<-> → → →
rype ritter text 	Java Build Path Source Projects Libraries Order and Export JARs and class folders on the build path: JARs and class folders on the build path: Access rules: No rules defined Access rules: No rules defined Native library location: (None) Junit.jar - C:\eclipse\eclipse\plugins\org.junit4_4.3.1 Source attachment: (None) - non modifiable Javadoc location: http://www.junit.org/junit/javadoc/4.3	Add JARs Add External JARs Add Yariable Add Library Add Class Folder Edit Edit Migrate JAR File
0		OK Cancel

The Java Doc locations for Java require that you repeat the change of the location several times once for each jar listed below.

