Introduction

Lint4j ("Lint for Java") is a static Java source and byte code analyzer that detects locking and threading issues, performance and scalability problems, and checks complex contracts such as Java serialization by performing type, data flow, and lock graph analysis.

Lint4j was created to help software developers detect defects and security vulnerabilities before writing the first test case. Lint4j saves time during code reviews as well, so developers can focus on getting business logic right.

Requirements

Lint4j requires Eclipse version 3.1 or later. It will not work with earlier version because it supports the new Java Language features from Java 5, which are exposed with different APIs in Eclipse.

Installation

Installing the Lint4j Eclipse plugin is easy. Simply follow the following steps. After launching Eclipse, select Help->Software Updates-Find and Install (Figure 1).

	Help		
	🔙 Welcome	ni - /User	s/reich/Software/workspace – Ecl
	Help Contents	2 -	
l	🔗 Search		
	Dynamic Help		
	Key Assist		
l	Tips and Tricks		
	Cheat Sheets		
	Software Updates	: >	🔗 Find and Install
	About Eclipse SD	к	Manage Configuration
t	Armenuellingerere heb	And menu	nenever a sava projece, package,

Figure 1

The Installation Wizard shown in Figure 2 will appear. Create a new remote site.

00	Install	
Jpdate sites to visit Select update sites to visit	while looking for new features.	
Sites to include in search:		New Remote Site
Clipse.org upd Eclipse 3.1.1 up ECLipse 3.1.1 up EMF/SDO/XSD	ate site idates Secondary Update Site	New Local Site
JDT UI Site	ugin	Edit
Pollinate update Sourceforge Me Subclipse upda Plant Subclipse upda Plant Subclipse update Site	e site etrics te site e	Remove
UML2 Update S	te idate site	Export sites
4))
Ignore features not ap	plicable to this environment	
	< Back Next >	Finish Cancel

Figure 2

Enter the following information into the dialog shown in Figure 3: "Lint4j Eclipse Plugin" as the name, and <u>http://www.jutils.com/eclipse-update</u> as the URL.

0	0	Edit Remote Site	
Name:	Lint4j Eclipse	Plugin)
URL:	http://www.j	utils.com/eclipse-update]
		Cancel OK	

Figure 3

After clicking on the OK button, select the Lint4j site and click Finish, as shown in Figure 4.

odate sites to visit elect update sites to visit while looking for new fea	atures.
iites to include in search:	
 ADJT Eclipse.org update site Eclipse 3.1.1 updates EMF/SDO/XSD Secondary Update Site Java Spider JDT UI Site JDT UI Site Lint4j Eclipse Plugin MavenStuff ObjectWeb Pollinate update site Sourceforge Metrics Subclipse update site TPTP Update Site UML2 Update Site Visual Editor update site 	New Remote Site New Local Site New Archived Site Edit Remove Import sites
 Ignore features not applicable to this environme 	ent

Figure 4

Then select the check box in the first line, titled "Lint4j Eclipse Plugin" (Figure 5).



Figure 5

Carefully read the License agreement, accept or decline it and click the "Next" button (Figure 6).

$\Theta \odot \odot$	Install
Feature License Some of the features have lice the installation.	nse agreements that you need to accept before proceeding with
Lint4j Feature 0.9.8	CAREFULLY READ THE FOLLOWING TERMS AND CONDITIONS OF THIA AGREEMENT. BY CLICKING ON THE "ACCEPT" BUTTON ACCOMPANY LICENSE AGREEMENT OR BY DOWNLOADING OR USING THE LINT4J S YOU INDICATE THE ACCEPTANCE OF THE FOLLOWING TERMS AND C AND YOU AGREE TO BE BOUND BY THEM. IF YOU DO NOT AGREE TO BOUND BY THESE TERMS AND CONDITIONS, YOU MAY NOT DOWNLOAD OR LINT4J SOFTWARE. THIS LICENSE AGREEMENT CONSTITUTES THE COMPLETE AND EXCLI STATEMENT OF THE AGREEMENT BETWEEN YOU AND JUIIS.com WIT TO THE LINT4J SOFTWARE AND SUPERSEDES ANY PROPOSAL OR PRIO ORAL OR WRITTEN, AND ANY OTHER COMMUNICATIONS RELATING SUBJECT MATTER OF THIS AGREEMENT. 1. Grant of License and License Fee. By clicking on the "Accept" button accompanying this License
 I accept the terms in the lie 	iense agreement
I do not accept the terms i	n the license agreements

Figure 6

Click "Finish" in the dialog shown in Figure 7 and hang on, we are almost finished.

$\Theta \circ \circ$	Install)
Installation The following feate where the feature	res will be installed. You can select a feature and change will be installed.	the location	
Features to install:			
🖗 Lint4j Feature	0.9.8		
Install Location Required space: 10 Free space: U	/Users/reich/Desktop/eclipse 3.1 D26KB nknown	Change Loo	cation
	< Back Next >	Finis	Cancel

Figure 7

The Lint4j Plugin is not digitally signed, which triggers the warning shown in Figure 8. Unless you don't trust content from jutils.com, click the "Install All" button.

Feature Verifica	tion		
A Warning: You You may choo	are about to install an unsigned se to install the feature or cance	d feature. el its installation.	
This feature has n	ot been digitally signed.		
The provider of th	is feature cannot be verified.		
Feature name:	Lint4j Feature		
Feature Identifier:	com.jutils.lint4j.core_0.9.8		
Provider:	jutils.com		
File Identifier:	com.jutils.lint4j.core_0.9.8		
			Court
		Install	Cancel
			11.

Figure 8

At last, Eclipse will ask if you want to restart the IDE, which you should do. This concludes the installation of the plugin.