

# An Introduction to Metamodelling and Graph Transformations

---

*with eMoflon*



This document is free; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This document is distributed in the hope that it will be useful, but *without any warranty*; without even the implied warranty of *merchantability* or *fitness for a particular purpose*. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this document; if not, write to the Free Software Foundation, Inc., 675 Mass Ave, Cambridge, MA 02139, USA.

# Contents

<b>1</b>	<b>Introduction</b>	<b>1</b>
<b>2</b>	<b>Installation and First Steps: Double Link List</b>	<b>3</b>
2.1	Step 01: Install Enterprise Architect . . . . .	3
2.2	Step 02: Install Eclipse . . . . .	3
2.3	Step 03: Now, try out our demo . . . . .	4
2.4	Step 04: JUnit tests . . . . .	6
2.5	Step 05: [Projektstruktur EA] . . . . .	7
2.6	Step 06: [Projektstruktur Eclipse] . . . . .	7



# Chapter 1

## Introduction



## Installation and First Steps: Double Link List

► Download and install EA (Figure 2.1)



Go to <http://www.moflon.org/fileadmin/download/moflon-ide/eclipse-plugin/ea-ecore-addin/ea-ecore-addin.zip> Just unpack the ZIP-File, run setup.exe and follow the instructions.

- Install the latest version of JAVA (JDK).

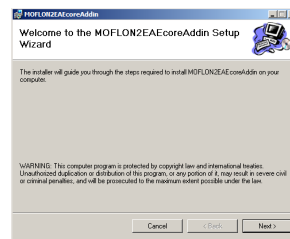


Figure 2.2: EA-Plugin Wizard

- Download the modeling Package “Eclipse Modeling Tools (includes Incubating components)” (Figure 2.3)  
<http://www.eclipse.org/downloads/packages/eclipse-modeling-tools-includes-incubating-components/heliossr2>

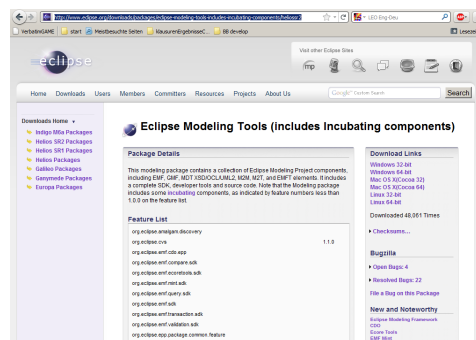


Figure 2.3: Download Modeling Package

- Start eclipse with a workspace of your choice.
- Install our Eclipse Plugin.  
<http://www.mofflon.org/fileadmin/download/mofflon-ide/eclipse-plugin/update-site2>

Please note: Calculating requirements and dependencies when installing the plugin might take quite a while depending on your internet connection! You will have to restart Eclipse after installing the plugin.

## 2.3 Step 03: Now, try out our demo

- Go to Window/Open Perspective/Other...and choose Moflon.(Figure 2.4)
- In the toolbar a new action set should have appeared...Choose “New Metamodel”. (Figure 2.5)



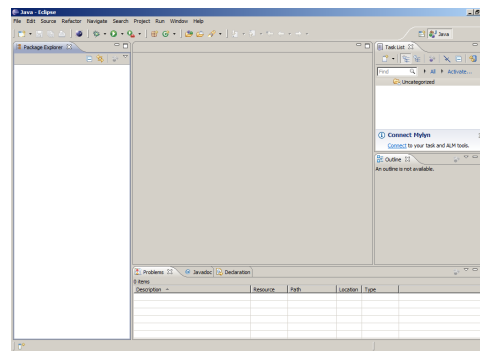


Figure 2.4: Eclipse

The button with an "L" shows you our logfile (important input for us if something doesn't work)

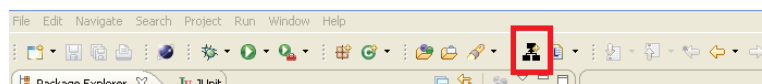


Figure 2.5: Eclipse New Metamodel

- Enter "demo" as the name of a new metamodel project and confirm. An empty EA project file "demo.eap" will be created in a new project and working set.
  - Choose working sets as your top level element in the package explorer. (Figure 2.6)
- We will work a lot with working sets.

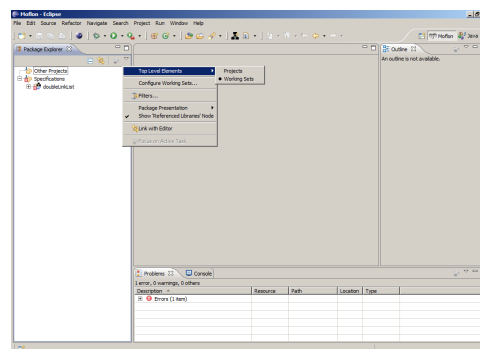


Figure 2.6: Eclipse - Working sets

- Open the newly created project and replace the "demo.eap" file with the

## 6CHAPTER 2. INSTALLATION AND FIRST STEPS: DOUBLE LINK LIST

demo.eap that you will find in the same folder as this tutorial.  
This EA file already contains our simple demo projects.

► Double click “demo.eap” to start EA. NOTE: Choose “Ultimate” when starting EA for the first time.

► Choose Add-Ins/MOFLON::Ecore Addin/Export all to Workspace.(Figure 2.7)

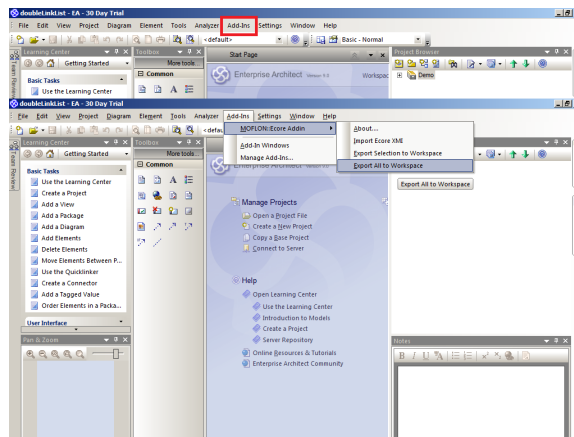


Figure 2.7: Enterprise Architect

► Switch to Eclipse, choose your Metamodel project and press F5 (refresh). All projects should be created and the code generator invoked automatically...

## 2.4 Step 04: JUnit tests

► Go to “File - Import - General - Existing Projects into Workspace” and import the TestSuite folder.(Figure 2.8)

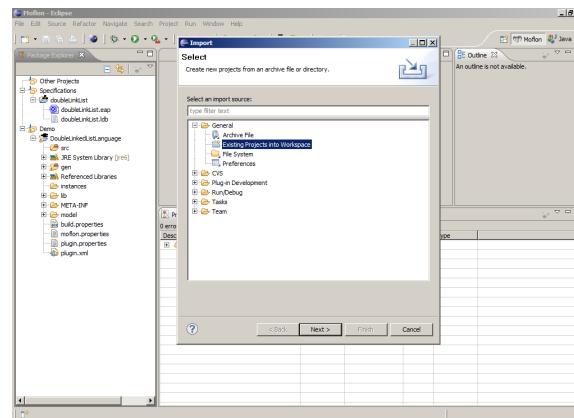


Figure 2.8: Eclipse Testsuite Import

The TestSuite should be a project of its own. (Figure 2.9)

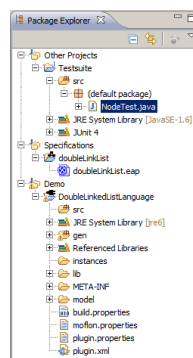


Figure 2.9: Eclipse Package Explorer

► Right-Click on the Testsuite folder - “Run as” - “JUnit Test”. (Figure 2.10)



Figure 2.10: Eclipse TestSuite Run

## 2.5 Step 05: [Projektstruktur EA]

## 2.6 Step 06: [Projektstruktur Eclipse]