

Fakultät Informatik, Institut für Software- und Multimediatechnologie, Lehrstuhl Softwaretechnologie

Specifying Semantics for Ecore Models with

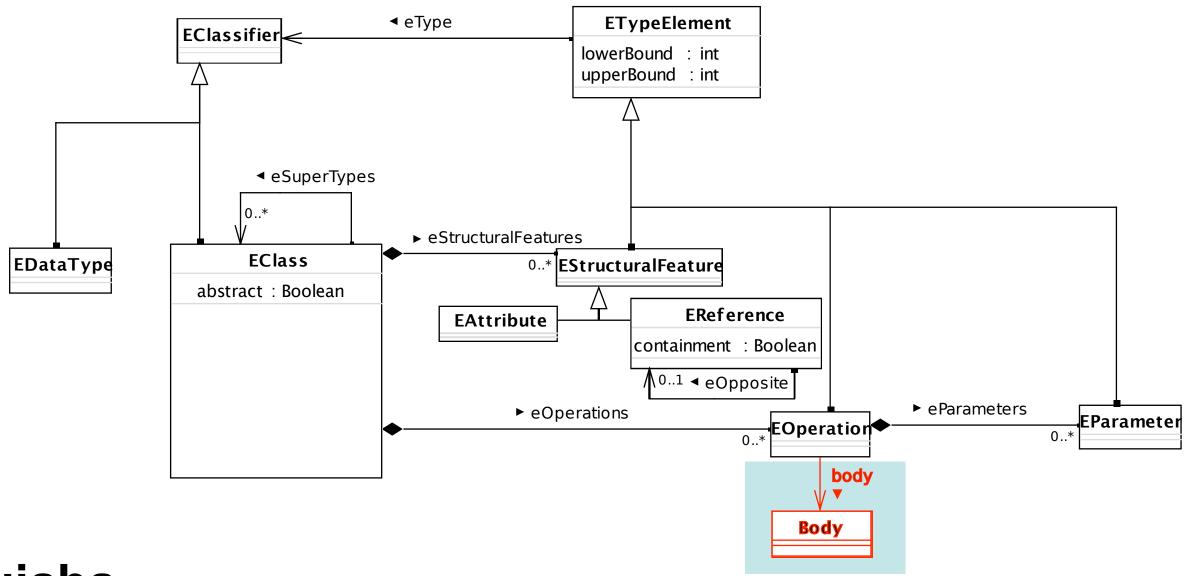
Story-Driven Modelling in Fujaba

eJava

Jendrik Johannes



Outline



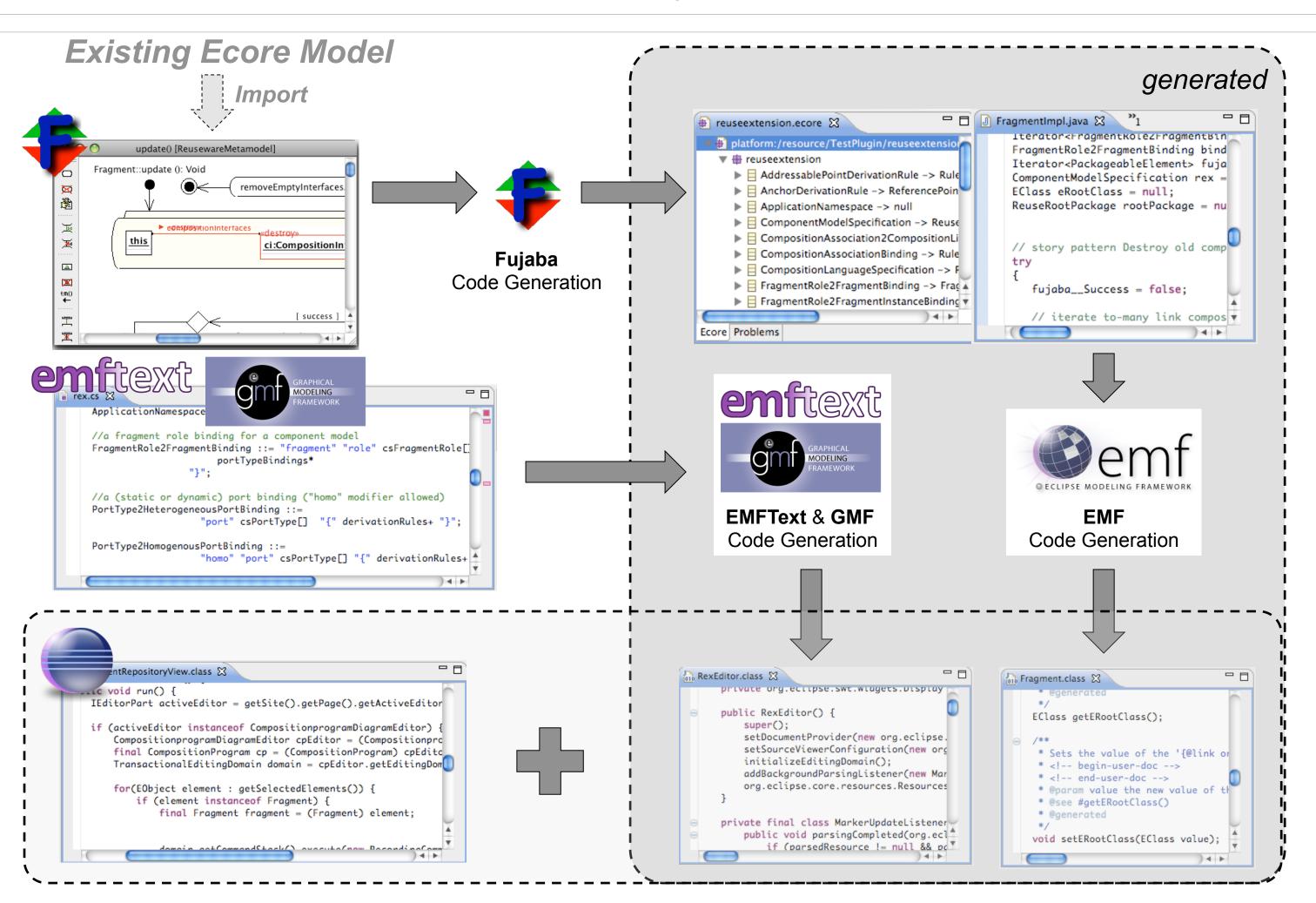
- Fujaba
 - Defining EOperations using Story-Driven Modelling (SDM)
- eJava (powered by JaMoPP)
 - Defining EOperations with a Java-like action language



Story-Driven Modelling (SDM) (in Fujaba)

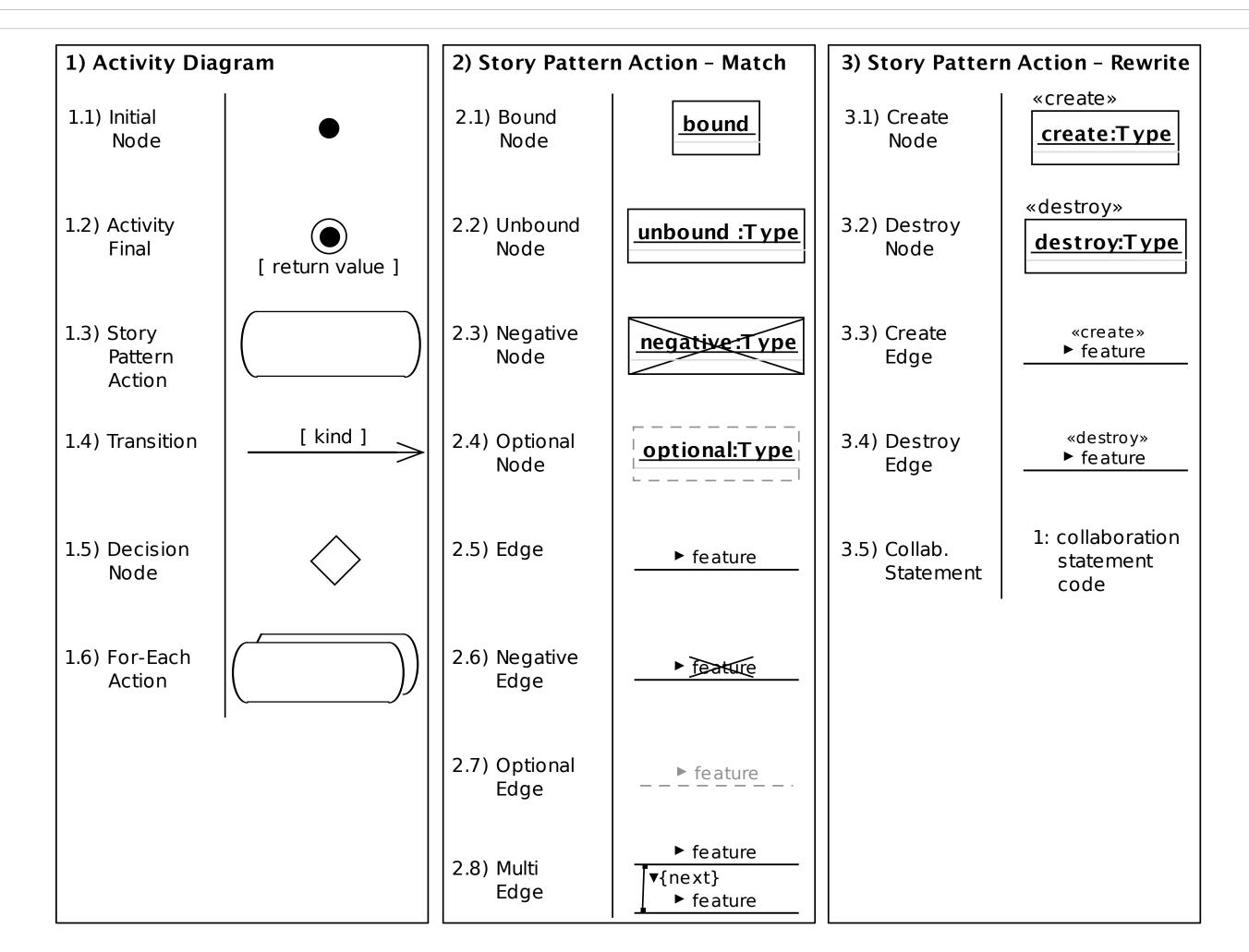


Ecore and Fujaba





Story Driven Modelling





DEMO

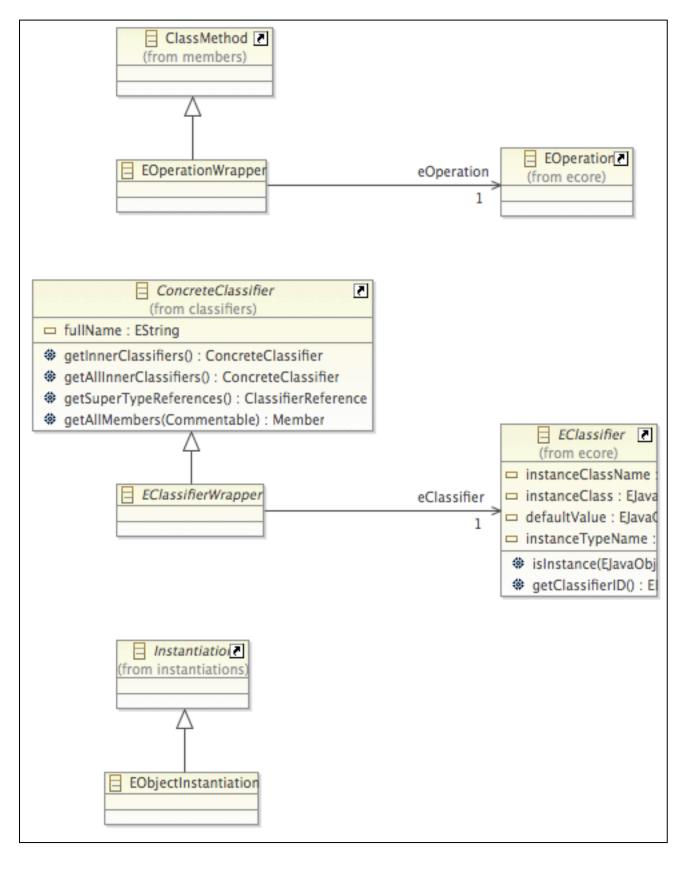


eJava – An Integration of Ecore and JaMoPP



JaMoPP

Ecore and Java Metamodel Integration

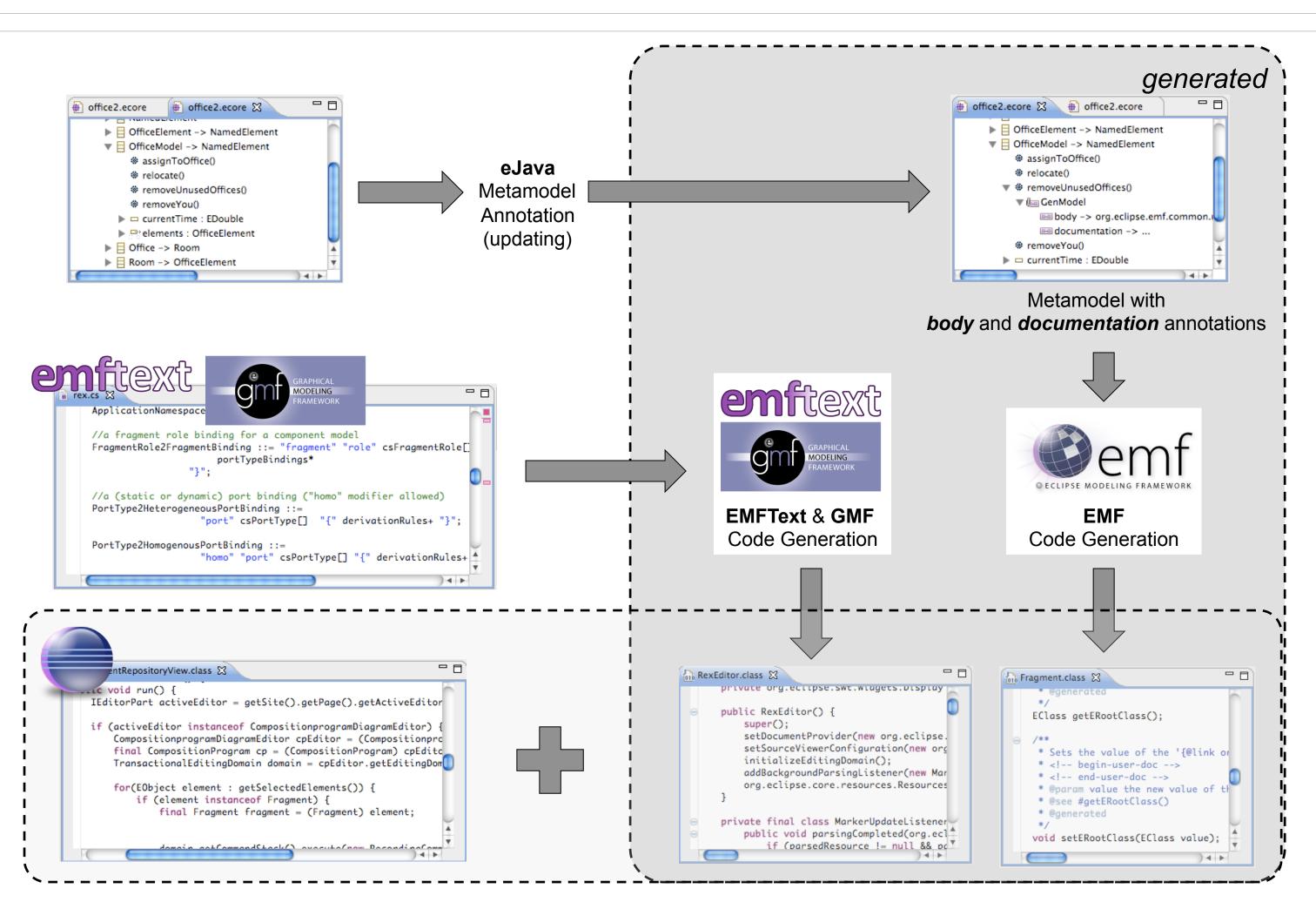


eJava syntax – extension of Java syntax

```
🖥 eJava.cs 🔀
SYNTAXDEF ejava
FOR <http://www.emftext.org/language/eJava>
START EPackageWrapper
IMPORTS {
    java : <http://www.emftext.org/java>
      WITH SYNTAX java <.../../org.emftext.language.java/metamodel/java.cs>
OPTIONS {
    licenceHeader ="platform:/resource/org.reuseware/licence.txt";
    defaultTokenName = "IDENTIFIER";
    usePredefinedTokens = "false";
    overrideBuilder = "false";
RULES {
    EPackageWrapper
       ::= ("epackage" namespaces[] (#0 "." #0 namespaces[])* #0 ";" )?
            10 10
            (imports !0 )*
            (";" !0)*
            (classifiers:EClassifierClassWrapper (";")* !0 !0)+
            ("\\u001a")?
    EClassifierClassWrapper
            "eclass" name[]
                (!1 members:EOperationWrapper)* !0
    EOperationWrapper
             name[] "(" ")" "{" (!2 statements)* !1 "}"
    EObjectInstantiation ::= "#" typeReference;
}
```



Ecore and eJava





DEMO

Successful Usages

- Fujaba SDM (http://www.fujaba.de)
 - Reuseware:http://reuseware.org/index.php/Reuseware Metamodel

- eJava (http://www.emftext.org/index.php/EMFText_Concrete_Syntax_Zoo_eJava)
 - JaMoPP:
 http://www.emftext.org/index.php/EMFText Concrete Syntax Zoo Java 5
 - EMFText CS Language:
 http://www.emftext.org/index.php/EMFText Concrete Syntax Zoo CS



Thank You! Questions?

Fujaba SDM

http://reuseware.org/index.php/Metamodel (howto.txt)

http://www.se.eecs.uni-kassel.de/fileadmin/se/projects/Fujaba/Fujaba HEAD RT-5.3.1-20090909.zip

(Fujaba version I am working with)

http://svn-st.inf.tu-dresden.de/svn/reuseware/trunk/CoCoNut/org.reuseware.coconut/metamodel/FujabaPlugins/

(extended code generation templates & Ecore import plugin)

eJava

http://www.emftext.org/update (category: JaMoPP Applications)

