

Institut für Software- und Multimediatechnik, Lehrstuhl für Softwaretechnologie



## Component support for your language of choice!

Integrated with Eclipse and EMF For all Ecore-based languages

## For Language Developers (Metamodellers)

```
compositionsystem ClassWeaving {
  fragment role Core {
    dynamic port JoinPoint;
  }
  fragment role Aspect {
    dynamic port Advice;
  }
  contributing association weave {
    Aspect.Advice --> Core.Class
  }
}
```

Define your own component types

(e.g, Core and Aspect)

Identify component types in your language

(e.g, Class metaclass and ownedAttribute reference in UML)

```
compositionlanguage myWeave
  implements ClassWeaving
epackages <myWeave.ecore>
rootclass WModel {
fragment role Core { WModel {
  fragment = $'CORE'$
             = $self.coreID$
  target ufi = $self.coreID.
            concat('composed')$
association weave { Weaving {
  fragment = $self.aspectID$
           = $self.adviceID$ -->
  port
  fragment = $'CORE'$
           = $self.joinPointID$
  port
```

Define your own composition language

(e.g, myWeave defined with Ecore and EMFText)

## For Language Users (Modellers)

Use model composition in your Resource - Eclipse SDK model-driven development package FileSystemPackage [2] package adviceObserverPattern [B] Subject [E] FSFile [8] FSFolder [5] FileSystem [3] Observer [C] observers [D] attach [G] (observer [J] : Observer [C]) content [11] : String + detach [H] (observer [K] : Observer [C]) - update [F]() Use your existing model editors in-+ notifyObservers [I] () Eclipse to create model components FileSystem ObserverAdvice.uml (1) core <FileSystem.uml> {
 weave <ObserverAdvice.uml> {
 Subject into FSFolder
 Observer into FileSystem Core.FSFolde Aspect.Subject Use Reuseware's graphical Aspect.Observer composition editor or... Core.FileSystem weave <0bserverAdvice.uml> { ObserverAdvice.uml (2) Observer into FileSystem Aspect.Observer Subject into FSFile Use your own composition language Core.FSFil Aspect.Subject Use your existing model editors to package FileSystemPackage [2] observers [D] inspect the composed models observers [D] (layout composition support) FSFile [8] FSFolder [5] + name [10] : String FileSystem [3] + name [9] : String files [7] folders [4] + content [11] : String - attach [G] (observer [J] : FileSystem [3]) + update [F]() + attach [G] (observer [J] : FileSystem [3]) + detach [H] (observer [K] : FileSystem [3]) Browse your components with + update [F]() + detach [H] (observer [K] : FileSystem [3]) + notifyObservers [I] () Reuseware's component browser subFolders [6] 

## http://www.reuseware.org

Contact:

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