**ARTIST Project – Model Discovery Tools – Inria**

**SHORT DEMONSTRATION (< 4mn)**

**Title:** *ARTIST – Advanced software-based service provisioning and migration of legacy Software*

**Preparation:**

Check the resolution is correct for a good display (1024\*768 on the video screen).

Install the Eclipse Juno/Kepler “Modeling Tools” bundle + download ATL and MoDisco (cf. dedicated update site or Eclipse Modeling Wizard).

Eclipse workbench open with:

* The “PetStore” project open
* All views/editors closed

**1.1 – Java project presentation**

Quickly present the Java project:

* Open the “model” package
* Open the “Product” class
  + Show the fields, constructor and methods

**1.2 – Java model discovery**

Discovery of the project:

* Right-click on the “PetStore” project
* Select the menus “Discovery/Discoverers/Discover Java project”
* Describe the most important parameters that can be set for the discovery
* Java model presentation
  + Quickly show the elements on the left panel, introduce the Java metamodel
  + Click on “Package” on the left panel
  + Enter “model” in filter on the right-panel
  + Select the “petStore.model” package
  + Select the reference “ownedElements”
  + Remove the “Package Explorer” panel
  + Put the Java model on the right part (and so the code on the left one)
  + Put in full screen (double-click) the Java model
  + Select the “Product” ClassDeclaration
  + Show “bodyDeclarations”
  + Show “productID” attribute, “Product” constructor and “getProductID” on both the code and corresponding model

**2 – UML model discovery**

Start from the previous state (end of demonstration 1), but re-open the “Package Explorer”.

Discovery of the project:

* Right-click on the “PetStore” java model
* Select the menus “Discovery/Discoverers/Java2UMLDiscoverer - Class Diagram…”
* Explain this newly implemented feature (in ARTIST) as an alternative to the Java-to-KDM-to-UML as proposed by default in MoDisco
* Unselect the checkbox “Open model in editor after discovery”
* Click on the “PetStore” project and refresh (F5) to show the newly created UML model
* Open the UML model with the MoDisco Model Browser
* Put the UML model in full screen
* UML model presentation
  + Click on “Package” in the left panel
  + Enter “model” in the filter, in the right panel
  + Select the first “model” package
  + Show its container “package”
  + Show “ownedType”
  + Select “Product”
  + Open “ownedMember”
  + Remove the “Package Explorer” panel
  + Put the UML model on the right part (and so the Java model on the left one)
  + Put in full screen (double-click) the UML model
  + Show “productID” attribute and “getProductID” on both models