XML Binding from the DDI Model

# Introduction

This document presents the mapping rules from the XML export of the Enterprise Architecture tool to the XML schema deliverables.

# High-Level XML Constructs

For each package in the model, we will have an XML namespace declared. The XMI of the DDI model must place the name of the UML package into the name attribute of the <packagedElement> which represents it. Configuration information will be provided [MECHANISM TO BE DETERMINED] at the time of the transformation. (This could be a parameter passed into an XSLT transformation, for example.)

# Object-Level Mappings

1. Xml:ns to the DDi namespace for the schema
2. <packagedElement xmi:type=”uml:Package”> corresponds to the declaration of the document type, using the name attribute as the element name.
3. <packagedElement xmi:type=”uml:class”> corresponds to the generation of several things:
   1. A global element with the same name as the XMI name attribute, and of the complex type declared in the next step.
   2. A complex type using a concatenation of the name attribute and the string “Type”
4. If a child <ownedAttribute xmi:type=”uml:Property” where there is an “aggregation” attribute, if there is an aggregation attribute, then resolve the ID in the association attribute, and take the value of the name attribute from the resolved XMI element. Concatenate the value of the name with the string “Reference”, and place an element declaration of type “Reference there.” The DDI referencing elements will always take their minOccurs and MaxOcciurs values from the value attribute of the <lowerValue> and <upperValue> XML elements (a value of “-1” means the maxOccurs has a value “unbounded”.

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