

	<p style="text-align: center;">ESTRELLA IST-2004-027655</p> <p style="text-align: center;"><i>European project for Standardized Transparent Representations in order to Extend Legal Accessibility Specific Targeted Research or Innovation Project</i></p> <p>Specific Targeted Research Project Information Society Technologies</p>
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Deliverable N°: 4.2
***Refined translators to and from LKIF for each of the
knowledge formats of the participating vendors***

Version: FINAL 1.0 RULEWISE

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Project Coordinator: Universiteit van Amsterdam (NL)

Lead contractor deliverable: Corvinus University Budapest

Participating contractors: Alma Mater Studiorum - Universita di Bologna (IT), University of Liverpool (UK), Fraunhofer Gesellschaft zur foerderung der angewandten forschung e.v. (DE), RuleWise b.v. (NL), RuleBurst (EUROPE) Ltd. (UK), knowledgeTools International GmbH (DE), Interaction Design Ltd. (UK), SOGEI - Societa Generale d'Informatica S.P.A. (IT), Ministro per le Riforme e le Innivazioni nella Publica Amministrazione (IT), Hungarian Tax and Financial Control Administration (HU), Budapesti Corvinus Egyetem (HU), Ministero dell'Economia e delle Finanze (IT), Consorzio Pisa Ricerche SCARL (IT)

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Dissemination Level		
PU	Public	X
PP	Restricted to other programme participants (including the Commission Services)	
RE	Restricted to a group specified by the consortium (including the Commission Services)	
CO	Confidential, only for members of the consortium (including the Commission Services)	

0.1 Introduction

As was explained in Deliverable 1.3, two translators were build, one that translates a RuleWise model into an LKIF OWL model and one that translates an LKIF OWL model in to a RuleWise model. A mapping of this translation was listed in D1.3.

Moreover three potential scenarios to create a translator were mentioned in D1.3:

- a. Using a direct coupling between an UML modelling tool and an OWL modelling tool;
- b. Making a UML meta-model for the RuleWise language and translating that to an OWL meta-model
- c. Making an XSLT that provides a mapping between the RuleWise model and LKIF

Both options a. and b. contained some disadvantages in the context of the project, therefore we chose option c. There was no need to refine or adjust the translators, because they satisfied the needs for the Estrella project. If in the future any changes to the translators are necessary, we trust that the development of a direct coupling between UML and OWL (option a.) has proceeded so that we can use this option instead of having to update our XSLT's.

0.2 How to use the translators

Extensible Stylesheet Language Transformations (XSLT) is an XML-based language used for the transformation of XML documents into other XML or “human-readable” documents. The original document is not changed; a new document is created based on the content of an existing one. One of the most common ways of running XSLT transformations is to use standalone XSLT processors. The XSLT processor ordinarily takes two input documents: an XML source document, and an XSLT stylesheet and produces the output document. There are many XSLT processors available, for example a free tool is Saxon: <http://saxon.sourceforge.net/>. Examples of commercial tools that do the job are XML Spy <http://www.altova.com/> and Oxygen <http://www.oxygenxml.com/>.