Deliverable 6.1

INTUITEL Merger Documentation

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)	
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[1] **R**=Report, **P**=Prototype, **D**=Demonstrator, **O**=Other

[2] **PU**=Public, **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)

Change Control

Document History

Version	Date	Change History	Author(s)	Organization
0.9	2014-09-30	Final version ready to be submitted	Luis de la Fuente Valentin	TIE
1.0	2014-09-30	Document finalized and approved	Peter Henning	HSKA

1 About this document

The software component INTUITEL Merger has been produced as a Java library which is used by the INTUITEL Editor. While it may be used as a standalone command line program, the consortium discourages this use and asks to use the INTUITEL Editor with included Merger instead.

Consequently, this documentation only serves as a very brief summary. A more detailed technical documentation is included with the software library in JavaDoc format.

2 Executive Summary of the INTUITEL Merger

The deliverable 6.1 is described in the DoW as "Computer program component that merges several SLOM input sources into a common representation according to the SLOM container format, plus its manual as a written report". Therefore, this deliverable has two main parts:

- The source code of the developed computer program.

- The user manual, written as software documentation (JavaDoc).

Additionally, this document explains the provided functionality and the main decisions taken during the development.

Target user

The INTUITEL Merger provides methods to transform course material from different formats (SCORM, IMS-LD, SMW) to SLOM and from SLOM to different formats (SCORM, IMS-LD). Transformations are not free of information losses, and human intervention is required after the transformation in order to create a good quality course. Therefore, the typical use case of the INTUITEL Merger is: a user has a course in a non-SLOM format and wants to use it in INTUITEL, thus the user uses the Merger to obtain the SLOM version of the course and then completes the transformation with an editor (INTUITEL Editor, for example).

Therefore, the Merger was developed in a way that enables its integration in other software components. That is, the INTUITEL Merger is a software library to be used by developers to integrate the provided transformations in other software components.

Furthermore, the Merger can be used as a standalone tool. To this end, a command line interface is provided.

Functionality of the Software library

The software library provides two main functionalities:

- Execute the transformations. The Merger needs to be fed with a file from the local file system (a URL in the case of SMW transformations) and the software library provides

methods to obtain a file with the course packaged in the desired format and store it in the local file system.

- Build Java representation of SLOM material. The merger can read course content in different formats and build a SLOM object, which is a Java representation of the SLOM course structure. This SLOM representation provides low and high abstraction levels to access the information in the CM and CCM descriptions.

Functionality of the command line interface

The functionality of the command line interface is limited to execute the transformations. Therefore, it needs to be feed with a file in the local file system (a URL in the case of SMW transformations) and the merger will return a file with the course packaged in the desired format.

Software structure

The software is structured in two packages:

- org.intuitel.slom. Defines and implements classes and methods for the internal representation of the SLOM content.

- org.intuitel.merger. Provides classes and methods to execute the transformations.

Additionally, there are three more packages namely org.intuitel.imsld, org.intuitel.imsld.lvlA, and org.intuitel.imsld.manifest. They are helper packages used in the IMSLD transformation, their use is only internal and developers are discouraged to use them.

Documentation structure

The user manual is provided as software documentation written using the JavaDoc format. It is structured in two packages:

- org.intuitel.slom. Defines and implements classes and methods for the internal representation of the SLOM content.

- org.intuitel.merger. Provides classes and methods to execute the transformations.

As the packages org.intuitel.imsld, org.intuitel.imsld.lvlA, and org.intuitel.imsld.manifest are not supposed to be used by third party developers, they have not been documented.

License

As stated in the DoW, the Merger license should be "not open source, but usage for public license". The WP Leader decided to release the software so it is free to use, but without releasing the source code. Source code files are headed with the license terms.