

# D1.6.2 Software Requirements Document (SRD)

## ModelWriter

Text & Model-Synchronized Document Engineering Platform

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Project number: ITEA 2 13028

Work Package: WP1

Task: T1.6 – Consolidated Software Requirements and Review

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Apart from the deliverables which are defined as public information in the Project Cooperation Agreement (PCA), unless otherwise specified by the consortium, this document will be treated as strictly confidential.

## Document History

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## 1. Introduction

### 1.1. Role of the deliverable

A common **Software Requirements Document** (SRD, alias D1.6.2) derived from the previous User Requirements Document will identify and prioritize the functional and non-functional requirements for the ModelWriter IDE, addressing the selected User Requirements. This SRD will also include the technical environment necessary e.g. for Task T6.7 from OBEO.

A progress meeting chaired by UNIT (but hosted by SOGETI) was organized for the technology developers (represented by WP2 to WP4 leaders) to share and explain to all participating project partners what are the ModelWriter platform features and non-functional requirements which are proposed for research and implementation

This document is the first version of the software requirements collected from technical work packages. It may be up-dated depending on the further details and requirements.

The **Software Requirements Document** (SRD) (D1.6.2) is automatically compiled from the issue list of the public “Requirements” repository of ModelWriter’s GitHub organization<sup>1</sup>. The information about confirmed requirements and the prioritization of the requirements are programmatically gathered from the public ‘waffle’ scrum board of the “Requirements” repository<sup>2</sup>.

### 1.2. The List of Technical Work Packages

UC Code	Requirements derived from
WP2	Semantic Parsing and Generation of Documents and Documents Components
WP3	Model to/from Knowledge Base (synchronization mechanism)
WP4	Knowledge Base Design and Implementation
WP6	Architecture, Integration and Evaluation

### 1.3. The List of Use Cases

UC Code	Requirements derived from
UC-FR-01	Synchronization between Models and Documentation
UC-FR-02	Enterprise Architecture

<sup>1</sup> <https://github.com/ModelWriter/Requirements/issues>

<sup>2</sup> <https://waffle.io/modelwriter/requirements>

UC Code	Requirements derived from
UC-FR-03	Synchronization of regulation documentation with a design rule repository
UC-FR-04	Production of a context specific design document
UC-TR-01	Production of a proposal in response to an IPA Invitation To Tender
UC-TR-02	Collaborative production of a proposal for an IPA project
UC-TR-03	Synchronization of ReqIF/Clafer models with requirement specifications
UC-TR-04	Requirement Engineering for System Modelling
UC-TR-05	Synchronous Business Process Design with Use Cases
UC-BE-01	Requirements IT
UC-BE-02	Automated Test Generation

## 1.4. Conventions

The requirements are prefixed by “REQ-SR-WPz-xxx”, and are written in a roman typeface, where “REQ” stands for “Requirement”, “SR” indicates “Software Requirements”, “z” stands for the number of work package where the requirement is originated and “xxx” is the positive integer identifier of the requirement. You can add this id (xxx) which is unique entire ‘requirements’ repository, at the end of <https://github.com/ModelWriter/Requirements/issues/> to access the latest version of the requirement.

## 1.5. Structure of the document

This document is organized as follows:

- Chapter 1 introduces the document.
- Chapter 2 describes each requirements.

## 1.6. Terms, abbreviations and definitions

Abbreviation	Definition
RDF	Resource Description Framework
WP	Work Package
UC	Use Case
BPMN	Business Process Monde & Notation
ReqIF	Requirements Interchange Format
RMF	Requirements Modeling Framework
SBVR	Semantics Of Business Vocabulary And Rules

## 2. Software Requirements

### 2.1. REQ-UR-WP2-115 [Mandatory]

Generator

**Description:**

Required by #109 (Reversible-Semantic-Engine)

Maps data to text using Lexicon and Grammar

**Related to:**

<https://github.com/ModelWriter/Requirements/issues/109>

**URI:** <https://github.com/ModelWriter/Requirements/issues/115>

**Created:** 16.09.2015

**Created By:** scruzlara

**Assignee:** ClaireEMG

### 2.2. REQ-UR-WP2-114 [Mandatory]

Parser

**Description:**

Required by #109 (Reversible-Semantic-Engine)

Maps text to data using Lexicon and Grammar

**Related to:**

<https://github.com/ModelWriter/Requirements/issues/109>

**URI:** <https://github.com/ModelWriter/Requirements/issues/114>

**Created:** 16.09.2015

**Created By:** scruzlara

**Assignee:** ClaireEMG

### 2.3. REQ-UR-WP2-113 [Desirable]

Grammar-Extractor

**Description:**

Required by #109 (Reversible-Semantic-Engine)

Induces Grammar from semantically annotated, parsed text

**Related to:**

<https://github.com/ModelWriter/Requirements/issues/109>

**URI:** <https://github.com/ModelWriter/Requirements/issues/113>

**Created:** 16.09.2015

**Created By:** scruzlara

**Assignee:** ClaireEMG

### 2.4. REQ-UR-WP2-112 [Mandatory]

Grammar



**Description:**

Required by #109 (Reversible-Semantic-Engine)

A data structure describing the syntax of natural language

**Related to:**

<https://github.com/ModelWriter/Requirements/issues/109>

**URI:** <https://github.com/ModelWriter/Requirements/issues/112>

**Created:** 16.09.2015

**Created By:** scruzlara

**Assignee:** ClaireEMG

## 2.5. REQ-UR-WP2-111 [Desirable]

Lexicon-Extractor

**Description:**

Alternative to #110 (Lexicon)

Extracts Lexicon from semantically annotated, parsed text

**Related to:**

<https://github.com/ModelWriter/Requirements/issues/110>

**URI:** <https://github.com/ModelWriter/Requirements/issues/111>

**Created:** 16.09.2015

**Created By:** scruzlara

**Assignee:** ClaireEMG

## 2.6. REQ-UR-WP2-110 [Mandatory]

Lexicon

**Description:**

Required by #109 (Reversible-Semantic-Engine)

A data structure mapping words and model elements to grammar units

**Related to:**

<https://github.com/ModelWriter/Requirements/issues/109>

**URI:** <https://github.com/ModelWriter/Requirements/issues/110>

**Created:** 16.09.2015

**Created By:** scruzlara

**Assignee:** ClaireEMG

## 2.7. REQ-UR-WP2-109 [Mandatory]

Reversible-Semantic-Engine

**Description:**

Required by #68 (Semantic Processor)

An independent system which maps text to data and data to text

**Related to:**

<https://github.com/ModelWriter/Requirements/issues/68>

**URI:** <https://github.com/ModelWriter/Requirements/issues/109>

**Created:** 16.09.2015

**Created By:** scruzlara

**Assignee:** ClaireEMG

## 2.8. REQ-UR-WP2-108 [Mandatory]

Domain-Ontology

**Description:**

Required by #103 (Semantic-Analyser)

Domain specific ontology

**Related to:**

<https://github.com/ModelWriter/Requirements/issues/103>

**URI:** <https://github.com/ModelWriter/Requirements/issues/108>

**Created:** 16.09.2015

**Created By:** scruzlara

**Assignee:** ClaireEMG

## 2.9. REQ-UR-WP2-107 [Desirable]

Rule-Identifier

**Description:**

Required by #103 (Semantic-Analyser)

Identifies natural language segments in free text which encode SIDP rules

**Related to:**

<https://github.com/ModelWriter/Requirements/issues/103>

**URI:** <https://github.com/ModelWriter/Requirements/issues/107>

**Created:** 16.09.2015

**Created By:** scruzlara

**Assignee:** ClaireEMG

## 2.10. REQ-UR-WP2-106 [Desirable]

Term-Extractor

**Description:**

Required by #103 (Semantic-Analyser)

Extracts domain specific terms from text and groups them into synonymic sets

**Related to:**

<https://github.com/ModelWriter/Requirements/issues/103>

**URI:** <https://github.com/ModelWriter/Requirements/issues/106>

**Created:** 16.09.2015

**Created By:** scruzlara

**Assignee:** ClaireEMG

## 2.11. REQ-UR-WP2-105 [Mandatory]

Relation-Extractor

**Description:**

Required by #103 (Semantic-Analyser)

Extracts (subject,relation,object) data triples from text

**Related to:**

<https://github.com/ModelWriter/Requirements/issues/103>

**URI:** <https://github.com/ModelWriter/Requirements/issues/105>

**Created:** 16.09.2015

**Created By:** scruzlara

**Assignee:** ClaireEMG

## 2.12. REQ-UR-WP2-104 [Mandatory]

Term-Detector

**Description:**

Required by #103 (Semantic-Analyser)

Identifies terms i.e., words/collocations which denote elements (concepts, relations) of the domain ontology or of the input model

**Related to:**

<https://github.com/ModelWriter/Requirements/issues/103>

**URI:** <https://github.com/ModelWriter/Requirements/issues/104>

**Created:** 16.09.2015

**Created By:** scruzlara

**Assignee:** ClaireEMG

## 2.13. REQ-UR-WP2-103 [Mandatory]

Semantic-Analyser

**Description:**

Required by #68 (Semantic Processor)

An independent system which maps text to data that can be queried and reasoned with

**Related to:**

<https://github.com/ModelWriter/Requirements/issues/68>

**URI:** <https://github.com/ModelWriter/Requirements/issues/103>

**Created:** 16.09.2015

**Created By:** scruzlara

**Assignee:** ClaireEMG

## 2.14. REQ-UR-WP2-102 [Mandatory]

Model or Knowledge Base

**Description:**

Required by #69 (Semantic-Annotator)

A list of model or KB elements with which the text must be annotated

**Related to:**

<https://github.com/ModelWriter/Requirements/issues/69>

**URI:** <https://github.com/ModelWriter/Requirements/issues/102>

**Created:** 16.09.2015  
**Created By:** scruzlara  
**Assignee:** ClaireEMG

## 2.15. REQ-UR-WP2-101 [Mandatory]

Annotator

**Description:**

Required by #69 (Semantic-Annotator)  
Labels words/collocation with matching model elements

**Related to:**

<https://github.com/ModelWriter/Requirements/issues/69>

**URI:** <https://github.com/ModelWriter/Requirements/issues/101>

**Created:** 16.09.2015  
**Created By:** scruzlara  
**Assignee:** scruzlara

## 2.16. REQ-UR-WP2-100 [Mandatory]

Tokenizer

**Description:**

Required by #69 (Semantic-Annotator)  
Segment sentences into words/collocations

**Related to:**

<https://github.com/ModelWriter/Requirements/issues/69>

**URI:** <https://github.com/ModelWriter/Requirements/issues/100>

**Created:** 16.09.2015  
**Created By:** scruzlara  
**Assignee:** scruzlara

## 2.17. REQ-UR-WP2-99 [Mandatory]

Sentence-Segmenter

**Description:**

Required by #69 (Semantic-Annotator)  
Segments text into sentences

**Related to:**

<https://github.com/ModelWriter/Requirements/issues/69>

**URI:** <https://github.com/ModelWriter/Requirements/issues/99>

**Created:** 16.09.2015  
**Created By:** scruzlara  
**Assignee:** ClaireEMG

## 2.18. REQ-UR-WP2-98 [Mandatory]

Convertor

**Description:**

Required by #69 (Semantic-Annotator)

Converts document (html, xlsx, xml, etc.) to text

**Related to:**

<https://github.com/ModelWriter/Requirements/issues/69>

**URI:** <https://github.com/ModelWriter/Requirements/issues/98>

**Created:** 16.09.2015

**Created By:** scruzlara

**Assignee:** ClaireEMG

## 2.19. REQ-UR-WP3-97 [Mandatory]

Show the markers which have been filtered according to selected relation type and selected marker

**Description:**

**URI:** <https://github.com/ModelWriter/Requirements/issues/97>

**Created:** 16.09.2015

**Created By:** emrekirmizi

**Assignee:** emrekirmizi

## 2.20. REQ-UR-WP3-96 [Mandatory]

Show filtered relation types according to selected marker type

**Description:**

**URI:** <https://github.com/ModelWriter/Requirements/issues/96>

**Created:** 16.09.2015

**Created By:** emrekirmizi

**Assignee:** emrekirmizi

## 2.21. REQ-UR-WP3-95 [Mandatory]

The specification formalism must support First-order Logic constraints

**Description:**

**URI:** <https://github.com/ModelWriter/Requirements/issues/95>

**Created:** 16.09.2015

**Created By:** anilozturk

**Assignee:** anilozturk

## 2.22. REQ-UR-WP3-94 [Mandatory]

Markers and links (mappings) shall be able to specify by the user in a declarative way

**Description:****URI:** <https://github.com/ModelWriter/Requirements/issues/94>**Created:** 16.09.2015**Created By:** anilozturk**Assignee:** anilozturk**2.23. REQ-UR-WP3-93 [Mandatory]**

User shall be able to mark an element which inherits 'ENamedElement' on an Eclipse Ecore Editor

**Description:**

User shall be able to mark an EMF model element on EcoreEditor/EMF Reflective Editor.

plugin: org.eclipse.emf.ecore.editor

editor: org.eclipse.emf.ecore.presentation.EcoreEditor

User shall be able to mark a EMF model element on Generic EMF Form Editor.

plugin: org.eclipse.emf.generic.editor

editor: org.eclipse.emf.editor.EEditor

**URI:** <https://github.com/ModelWriter/Requirements/issues/93>**Created:** 16.09.2015**Created By:** serhat93**Assignee:** serhat93**2.24. REQ-UR-WP3-92 [Mandatory]**

Virtualize markers and their relations.

**Description:****URI:** <https://github.com/ModelWriter/Requirements/issues/92>**Created:** 16.09.2015**Created By:** anilozturk**Assignee:** anilozturk**2.25. REQ-UR-WP3-91 [Mandatory]**

The System shall persist a model marker and its state. The persistency formalism must align with set theory and relational calculus

**Description:****URI:** <https://github.com/ModelWriter/Requirements/issues/91>**Created:** 16.09.2015**Created By:** anilozturk**Assignee:** anilozturk

## 2.26. REQ-UR-WP3-90 [Mandatory]

Show the filter on the project explorer view on the mapping wizard

**Description:**

**URI:** <https://github.com/ModelWriter/Requirements/issues/90>

**Created:** 16.09.2015

**Created By:** emrekirmizi

**Assignee:** emrekirmizi

## 2.27. REQ-UR-WP3-89 [Mandatory]

Show mapping between arbitrary model and text markings

**Description:**

**URI:** <https://github.com/ModelWriter/Requirements/issues/89>

**Created:** 16.09.2015

**Created By:** emrekirmizi

**Assignee:** emrekirmizi

## 2.28. REQ-UR-WP3-88 [Mandatory]

User shall be able to undo/redo markers and their states while working on Text editor

**Description:**

**URI:** <https://github.com/ModelWriter/Requirements/issues/88>

**Created:** 16.09.2015

**Created By:** serhat93

**Assignee:** serhat93

## 2.29. REQ-UR-WP3-87 [Mandatory]

Navigate and focus to markers through selected marker on Views

**Description:**

**URI:** <https://github.com/ModelWriter/Requirements/issues/87>

**Created:** 16.09.2015

**Created By:** anilozturk

**Assignee:** anilozturk

## 2.30. REQ-UR-WP3-86 [Mandatory]

User shall be able to undo/redo model markers and their states while working on Model editors

**Description:**

**URI:** <https://github.com/ModelWriter/Requirements/issues/86>

**Created:** 16.09.2015

**Created By:** emrekirmizi

**Assignee:** emrekirmizi

### 2.31. REQ-UR-WP3-85 [Mandatory]

The System shall persist a text marker and its state

**Description:**

**URI:** <https://github.com/ModelWriter/Requirements/issues/85>

**Created:** 16.09.2015

**Created By:** serhat93

**Assignee:** serhat93

### 2.32. REQ-UR-WP3-84 [Mandatory]

Show details of marker which is selected from Master View on the Properties View.

**Description:**

**URI:** <https://github.com/ModelWriter/Requirements/issues/84>

**Created:** 16.09.2015

**Created By:** anilozturk

**Assignee:** anilozturk

### 2.33. REQ-UR-WP3-83 [Mandatory]

User shall be able to delete a marker which has been already marked by the 'Mark All' command by means of the 'Delete All' command to indicate that all the related markers should be also deleted

**Description:**

**URI:** <https://github.com/ModelWriter/Requirements/issues/83>

**Created:** 16.09.2015

**Created By:** serhat93

**Assignee:** serhat93

### 2.34. REQ-UR-WP3-82 [Mandatory]

Show source markers of selected marker on Source View

**Description:**

**URI:** <https://github.com/ModelWriter/Requirements/issues/82>

**Created:** 16.09.2015

**Created By:** anilozturk

**Assignee:** anilozturk

### 2.35. REQ-UR-WP3-81 [Mandatory]

User shall be able to mark a text fragment by the 'Mark All' command to indicate that all text fragments with the same syntax should be searched and marked as well as different representations of single entity

**Description:**



Although the system should assign unique IDs to all markers, another group ID should be also assigned.

**URI:** <https://github.com/ModelWriter/Requirements/issues/81>

**Created:** 16.09.2015

**Created By:** serhat93

**Assignee:** serhat93

### 2.36. REQ-UR-WP3-80 [Mandatory]

User shall be able to delete an 'ENamedElement' on the 'EcoreEditor'

**Description:**

Once an instance of 'EClass' is deleted, Markers on its EStructuralFeatures should be deleted.

Once an instance of 'EAttribute' is deleted, its marker should also be deleted.

Once an instance of 'EReference' is deleted, its marker should also be deleted.

Once an instance of 'EPackage' is deleted, all 'Subpackages', 'EClassifiers' and 'EStructuralFeatures' of those 'EPackage' should be deleted recursively.

**URI:** <https://github.com/ModelWriter/Requirements/issues/80>

**Created:** 16.09.2015

**Created By:** emrekirmizi

**Assignee:** emrekirmizi

### 2.37. REQ-UR-WP3-79 [Mandatory]

Show target markers of selected marker on Target View

**Description:**

**URI:** <https://github.com/ModelWriter/Requirements/issues/79>

**Created:** 16.09.2015

**Created By:** anilozturk

**Assignee:** anilozturk

### 2.38. REQ-UR-WP3-78 [Mandatory]

Once an instance of EMF model is marked on the 'EcoreEditor', the offset and length of the corresponding XMI statement should be also marked

**Description:**

**URI:** <https://github.com/ModelWriter/Requirements/issues/78>

**Created:** 16.09.2015

**Created By:** emrekirmizi

**Assignee:** emrekirmizi

### 2.39. REQ-UR-WP3-77 [Mandatory]

User shall be able to delete any marker based on a valid text selection on the editor

**Description:**

Precondition: the text should be marked before deletion.

**URI:** <https://github.com/ModelWriter/Requirements/issues/77>

**Created:** 16.09.2015

**Created By:** serhat93

**Assignee:** serhat93

#### 2.40. REQ-UR-WP3-76 [Mandatory]

User shall be able to mark OMG BPMN2.x model elements such as Gateways and Activities

**Description:**

**URI:** <https://github.com/ModelWriter/Requirements/issues/76>

**Created:** 16.09.2015

**Created By:** emrekirmizi

**Assignee:** emrekirmizi

#### 2.41. REQ-UR-WP3-75 [Mandatory]

User shall be able to mark OMG ReqIF model elements such as 'SpecObject' and 'SpecHierarchy'

**Description:**

plugin: org.eclipse.rmf.reqif10.pror.editor (RMF is still in incubation phase)

editor: org.eclipse.rmf.reqif10.pror.editor.presentation.SpecificationEditor

selection: org.eclipse.rmf.reqif10.Specification

selection: org.eclipse.rmf.reqif10.SpecObject

selection: org.eclipse.rmf.reqif10.SpecHierarchy

**URI:** <https://github.com/ModelWriter/Requirements/issues/75>

**Created:** 16.09.2015

**Created By:** emrekirmizi

**Assignee:** emrekirmizi

#### 2.42. REQ-UR-WP3-74 [Mandatory]

The system shall indicate text fragments or a model elements which are already linked by means of a kind of visual indicator

**Description:**

**URI:** <https://github.com/ModelWriter/Requirements/issues/74>

**Created:** 16.09.2015

**Created By:** serhat93

**Assignee:** serhat93

#### 2.43. REQ-UR-WP3-73 [Mandatory]

Show ModelWriter Markers which marked current document on Master View

**Description:**

**URI:** <https://github.com/ModelWriter/Requirements/issues/73>

**Created:** 16.09.2015

**Created By:** anilozturk

**Assignee:** anilozturk

#### 2.44. REQ-UR-WP3-72 [Mandatory]

User shall be able to see the start and end char positions of markers shifting while editing on the text editor

**Description:**

Offset and Length of markers should be updated while editing on the text editor.

**URI:** <https://github.com/ModelWriter/Requirements/issues/72>

**Created:** 16.09.2015

**Created By:** serhat93

**Assignee:** serhat93

#### 2.45. REQ-UR-WP3-71 [Mandatory]

User shall be able to mark an element which inherits 'NamedElement' on an Eclipse UML Editor

**Description:**

User shall be able to mark a UML model element on the tree-based UML2 editor of Eclipse

plugin: org.eclipse.uml2.uml.editor

editor: org.eclipse.uml2.uml.editor.presentation.UMLEditor

selection: org.eclipse.uml2.uml.NamedElement

User shall be able to mark a UML model element on the free-form UML editor of Eclipse.

plugin: org.eclipse.papyrus.editor

editor: org.eclipse.papyrus.editor.PapyrusMultiDiagramEditor

User shall be able to mark a UML model element on the free form Sirius editor of Eclipse.

plugin: org.eclipse.sirius.diagram.ui.ext

editor: org.eclipse.sirius.diagram.ui.tools.internal.editor.DDiagramEditorImpl

selection: org.eclipse.emf.ecoretools.design.ui.parts.DNodeListEditPartWithAlpha

selection: org.eclipse.sirius.diagram.ui.internal.edit.parts.DNodeContainerEditPart

selection:org.eclipse.sirius.diagram.ui.internal.edit.parts.DNodeListEditPart

selection:org.eclipse.sirius.diagram.ui.internal.edit.parts.DEdgeEditPart

**URI:** <https://github.com/ModelWriter/Requirements/issues/71>

**Created:** 16.09.2015

**Created By:** emrekirmizi

**Assignee:** emrekirmizi

## 2.46. REQ-UR-WP3-70 [Mandatory]

User shall be able to mark any kind of textual documents on Eclipse Editor

### **Description:**

User shall be able to mark text fragments on a Markdown, Wikitext.. file (Eclipse Wiki Editor).

plugin: org.eclipse.myllyn.wikitext.ui

editor: org.eclipse.myllyn.internal.wikitext.ui.editor.MarkupEditor

User shall be able to mark text fragments on a Java file (Eclipse JDT Java Editor).

plugin: org.eclipse.jdt.ui

editor: org.eclipse.jdt.internal.ui.javaeditor.CompilationUnitEditor

User shall be able to mark text fragments on an XML file (Eclipse XML Editor).

plugin: org.eclipse.wst.xml.ui

editor: org.eclipse.wst.xml.ui.internal.tabletree.XMLMultiPageEditorPart

User shall be able to mark text fragments on a Plain text file (Eclipse Text Editor).

plugin: org.eclipse.ui.editors

editor: org.eclipse.ui.editors.text.TextEditor

User shall be able to should mark text fragments on a Textual DSL (Eclipse Xtext Editor).

editor: org.eclipse.xtext.xbase.ui.editor.XbaseEditor

**URI:** <https://github.com/ModelWriter/Requirements/issues/70>

**Created:** 16.09.2015

**Created By:** ferhaterata

**Assignee:** serhat93

## 2.47. REQ-UR-WP2-69 [Mandatory]

Semantic-Annotator

**Description:**

Required by #68 (Semantic-Processor)

An independent system which annotates documents with model elements

**Related to:**

<https://github.com/ModelWriter/Requirements/issues/68>

**URI:** <https://github.com/ModelWriter/Requirements/issues/69>

**Created:** 16.09.2015

**Created By:** ferhaterata

**Assignee:** ClaireEMG

## 2.48. REQ-UR-WP2-68 [Mandatory]

Semantic-Processor

**Description:**

Requires: #69(Semantic-Annotator), #103(Semantic-Analyser), #109(Reversible-Semantic-Engine)

The NLP modules developed by ModelWriter for mapping text to data or data to text.

**Related to:**

<https://github.com/ModelWriter/Requirements/issues/69>

<https://github.com/ModelWriter/Requirements/issues/103>

<https://github.com/ModelWriter/Requirements/issues/109>

**URI:** <https://github.com/ModelWriter/Requirements/issues/68>

**Created:** 16.09.2015

**Created By:** ferhaterata

**Assignee:** ClaireEMG

## 2.49. REQ-UR-WP3-67

System transforms synchronization links, models and instances to RDF triples.

**Description:**

**URI:** <https://github.com/ModelWriter/Requirements/issues/67>

**Created:** 10.07.2015

**Created By:** ferhaterata

**Assignee:** ferhaterata

## 2.50. REQ-UR-WP6-66

System provides several ways for the user to select text/model elements.

**Description:**

**URI:** <https://github.com/ModelWriter/Requirements/issues/66>

**Created:** 10.07.2015

**Created By:** ferhaterata

**Assignee:** ferhaterata

### 2.51. REQ-UR-WP6-65

System provides several ways for the user to create links between the model and text elements.

**Description:**

**URI:** <https://github.com/ModelWriter/Requirements/issues/65>

**Created:** 10.07.2015

**Created By:** ferhaterata

**Assignee:** ferhaterata

### 2.52. REQ-UR-WP2-64

Consistency Check of the synchronization links should be performed based on the Knowledge Base.

**Description:**

**URI:** <https://github.com/ModelWriter/Requirements/issues/64>

**Created:** 10.07.2015

**Created By:** ferhaterata

**Assignee:** ClaireEMG

### 2.53. REQ-UR-WP2-63

System should suggest corresponding text-model mapping.

**Description:**

Model means concepts, individuals and relations in knowledge base.

**URI:** <https://github.com/ModelWriter/Requirements/issues/63>

**Created:** 10.07.2015

**Created By:** ferhaterata

**Assignee:** ferhaterata

### 2.54. REQ-UR-WP6-62 [Mandatory]

The system shall be a standalone

**Description:**

This is related to #29

**Related to:**

<https://github.com/ModelWriter/Requirements/issues/29>

**URI:** <https://github.com/ModelWriter/Requirements/issues/62>

**Created:** 28.05.2015

**Created By:** mrostren

**Assignee:** ylussaud

### 2.55. REQ-UR-WP6-61 [Mandatory]

The notification system shall indicate the desynchronization and the reconciliation failures

**Description:**

This requirement is related to the #28

All mappings desynchronization and all reconciliation failures must be indicated by displaying markers notification in the editor.

**Related to:**

<https://github.com/ModelWriter/Requirements/issues/28>

**URI:** <https://github.com/ModelWriter/Requirements/issues/61>

**Created:** 28.05.2015

**Created By:** mrostren

**Assignee:** ferhaterata

### 2.56. REQ-UR-WP6-60 [Optional]

The system shall provide an additional glossary view

**Description:**

This software requirement is related to #40 and to #59

The glossary shall display the list of all concepts used to map text parts of a document.

The selection of one or more concept in this view must display by highlighting the related text parts.

**Related to:**

<https://github.com/ModelWriter/Requirements/issues/40>

<https://github.com/ModelWriter/Requirements/issues/59>

**URI:** <https://github.com/ModelWriter/Requirements/issues/60>

**Created:** 28.05.2015

**Created By:** mrostren

**Assignee:** ferhaterata

### 2.57. REQ-UR-WP6-59 [Mandatory]

The system shall provide an optional highlighting action to show mapped text parts in the editor

**Description:**

This software requirement is related to #40 and to #47

This requirement is mandatory to indicate all the text parts already mapped in the document.

**Related to:**

<https://github.com/ModelWriter/Requirements/issues/40>

<https://github.com/ModelWriter/Requirements/issues/47>

**URI:** <https://github.com/ModelWriter/Requirements/issues/59>

**Created:** 28.05.2015

**Created By:** mrostren

**Assignee:** ferhaterata

## 2.58. REQ-UR-WP6-57 [Mandatory]

The system shall store the mapping (text - concept) in the knowledge base

**Description:**

This software requirement is related to #47

The mapping must be resilient enough to localize correctly the text part and/or the concerned concept even after change. The changes will be defined later.

**Related to:**

<https://github.com/ModelWriter/Requirements/issues/47>

**URI:** <https://github.com/ModelWriter/Requirements/issues/57>

**Created:** 28.05.2015

**Created By:** mrostren

**Assignee:** ferhaterata

## 2.59. REQ-UR-WP6-56 [Mandatory]

The system shall provide a new keyboard shortcut to weave concepts and make mappings

**Description:**

This Software Requirement is related to the #48

It is also related to the mapping processing: #20

**Related to:**

<https://github.com/ModelWriter/Requirements/issues/48>

<https://github.com/ModelWriter/Requirements/issues/20>

**URI:** <https://github.com/ModelWriter/Requirements/issues/56>

**Created:** 28.05.2015

**Created By:** mrostren

**Assignee:** ferhaterata

## 2.60. REQ-UR-WP6-55 [Desirable]

The concepts proposal shall be provided in acceptable time for human being

**Description:**

This Software Requirement is related to the #48

This requirement is related to the Editor and to the Knowledge base response time as well.

**Related to:**

<https://github.com/ModelWriter/Requirements/issues/48>

**URI:** <https://github.com/ModelWriter/Requirements/issues/55>

**Created:** 28.05.2015

**Created By:** mrostren

**Assignee:** ferhaterata



### 2.61. REQ-UR-WP6-54 [Mandatory]

The Editor shall be able to display choices to facilitate the selection of concepts

**Description:**

This Software Requirement is related to the #48

**Related to:**

<https://github.com/ModelWriter/Requirements/issues/48>

**URI:** <https://github.com/ModelWriter/Requirements/issues/54>

**Created:** 28.05.2015

**Created By:** mrostren

**Assignee:** ferhaterata

### 2.62. REQ-UR-WP6-44

Text Connector should support Textile (textile) and/or Markdown (mw) standards.

**Description:**

**URI:** <https://github.com/ModelWriter/Requirements/issues/44>

**Created:** 07.04.2015

**Created By:** ferhaterata

**Assignee:** ferhaterata

### 2.63. REQ-UR-WP6-43

Text Connector should support Office Open XML (docx) standard.

**Description:**

Traces ModelWriter/WP6#10.

**Related to:**

<https://github.com/ModelWriter/WP6/issues/10>

**URI:** <https://github.com/ModelWriter/Requirements/issues/43>

**Created:** 07.04.2015

**Created By:** ferhaterata

**Assignee:** ferhaterata

### 2.64. REQ-UR-24 [Mandatory]

The Documentation Editor shall not display explicitly links to the model

**Description:**

This software requirement is related to #47.

Since the explicit links in documents make the documentation unreadable, Modelwriter editor MUST NOT display explicit links to the model(s) in the documentation(s).

**Related to:**

<https://github.com/ModelWriter/Requirements/issues/47>

**URI:** <https://github.com/ModelWriter/Requirements/issues/24>

**Created:** 20.01.2015

**Created By:** mrostren

**Assignee:** ferhaterata

### 2.65. REQ-UR-WP3-14

The TRAM will be able to compose transformations.

**Description:**

The TRAM will be able to compose transformations. For this purpose, a transformations chain is defined and the output of a transformation is the input for the subsequent ones in the transformation chain. This mechanism not only improves the extension of the ModelWriter transformation catalogue but it also facilitates the execution of complex batch transformation processes.

**URI:** <https://github.com/ModelWriter/Requirements/issues/14>

**Created:** 20.11.2014

**Created By:** ferhaterata

**Assignee:** ferhaterata

### 2.66. REQ-UR-WP3-13

The TRAM validates such parameters and also the input models before a transformation takes place.

**Description:**

The TRAM validates such parameters and also the input models before a transformation takes place. Also, the TRAM informs the users (persons or processes) about the progress of the transformation and which has been the result of it (e.g. degree of success, errors, warnings).

**URI:** <https://github.com/ModelWriter/Requirements/issues/13>

**Created:** 20.11.2014

**Created By:** ferhaterata

**Assignee:** ferhaterata

### 2.67. REQ-UR-WP3-12

A mechanism is needed to register the available transformations in ModelWriter

**Description:**

The Transformations Manager (TRAM) will be responsible for providing the infrastructure to launch each transformation included in its transformation registry. Thus a unique and homogeneous interface is provided for all them. The TRAM intends to facilitate the extension of ModelWriter because it will allow including new transformations or new versions of the existing ones in a simple way. The registry for each transformation contains the type of the transformation (model-to-model, model-to-text) and its parameters (which are the input models, the name of the output model, etc.).

**URI:** <https://github.com/ModelWriter/Requirements/issues/12>

**Created:** 20.11.2014

**Created By:** ferhaterata

**Assignee:** ferhaterata

### 2.68. REQ-UR-WP3-11

M2M Transformation Framework must synchronize the output models after its input models or configurations have been modified.

**Description:**

**URI:** <https://github.com/ModelWriter/Requirements/issues/11>

**Created:** 20.11.2014

**Created By:** ferhaterata

**Assignee:** ferhaterata

### 2.69. REQ-UR-WP3-10

M2M Transformation Framework must keep traces between transformed models and its source models.

**Description:**

**URI:** <https://github.com/ModelWriter/Requirements/issues/10>

**Created:** 20.11.2014

**Created By:** ferhaterata

**Assignee:** ferhaterata

### 2.70. REQ-UR-WP3-9

M2M Transformation Framework should compose simple transformations to obtain more complex ones.

**Description:**

**URI:** <https://github.com/ModelWriter/Requirements/issues/9>

**Created:** 20.11.2014

**Created By:** ferhaterata

**Assignee:** ferhaterata

### 2.71. REQ-UR-WP3-8

M2M Transformation Framework should configure the transformations to be able to produce different outputs using the same inputs.

**Description:**

**URI:** <https://github.com/ModelWriter/Requirements/issues/8>

**Created:** 20.11.2014

**Created By:** ferhaterata

**Assignee:** ferhaterata

### 2.72. REQ-UR-WP3-7

Transformation Manager shall obtain one or several output models from one or several input models.

**Description:****URI:** <https://github.com/ModelWriter/Requirements/issues/7>**Created:** 20.11.2014**Created By:** ferhaterata**Assignee:** ferhaterata**2.73. REQ-UR-WP3-6**

The Transformation Framework must be built on top of the Eclipse Modelling Framework (EMF)

**Description:**

The framework will be built on top of the Eclipse Modelling Framework (EMF) ecosystem in order to provide a standard technological infrastructure.

**URI:** <https://github.com/ModelWriter/Requirements/issues/6>**Created:** 20.11.2014**Created By:** ferhaterata**Assignee:** ferhaterata**2.74. REQ-UR-WP3-5**

Synchronization Manager Plug-in must be a component in the M2M Transformation Framework

**Description:**

Synchronization Manager Plug-in should trigger transformations when synchronization is needed.

**URI:** <https://github.com/ModelWriter/Requirements/issues/5>**Created:** 20.11.2014**Created By:** ferhaterata**Assignee:** ferhaterata**2.75. REQ-UR-WP3-4**

Traceability Manager (TRAM) Plug-in must be a component in the M2M Transformation Framework

**Description:**

Traceability Manager plug-in keeps links between elements of user-visible models and elements of the KB.

This task defines a mapping mechanism to link the elements of the input and output models. These links will allow the processes (transformations and synchronizations) to navigate among the related models. The proposed technologies for this task are the following: EMF for DSL definition, FEFEM for form-based editors, Epsilon.

**URI:** <https://github.com/ModelWriter/Requirements/issues/4>**Created:** 20.11.2014**Created By:** ferhaterata**Assignee:** ferhaterata

### 2.76. REQ-UR-WP3-3

Configuration Manager Plug-in must be a component in the M2M Transformation Framework

**Description:**

Configuration Manager plug-in should personalize the behaviour of the framework to meet the needs of a specific standard / organization / project / individual

**URI:** <https://github.com/ModelWriter/Requirements/issues/3>

**Created:** 20.11.2014

**Created By:** ferhaterata

**Assignee:** ferhaterata

### 2.77. REQ-UR-WP3-2

Transformation Manager Plug-in must be a component in the M2M Transformation Framework

**Description:**

Transformation Manager Plug-in provides the infrastructure to register and launch transformations

**URI:** <https://github.com/ModelWriter/Requirements/issues/2>

**Created:** 20.11.2014

**Created By:** ferhaterata

**Assignee:** ferhaterata

## References

N/A

## Appendixes

N/A