MAX Phase One Project Scope

The purpose of this document is to define a scope of work for Phase One of the MAX project. This specification is a suppliment to the MAX Requirements Specification (dated 9/13/2011). The goal of the MAX project is to enable the import, export, and round-tripping of a user defined subset of model elements specified in a UML modeling tool. XMI is the default definitive means by which models and model packages are imported and exported by UML modeling tools. MAX is intended to support capabilities not easily supported by XMI alone. Specifically MAX addresses the desire to limit a model import/export to a subset of model elements and element features that possibly span model package boundaries and the ability to import/export using a user defined data structure.

This scope is large and will take several iterations of development to be realized in its entirety. Phase one of the MAX project will focus on a subset of the project scope. In phase one the only UML modeling tool being addressed will be v9.3 of Enterprise Architect from Sparx System and the only import/export dataset definition will be CSV (suitable for use within MS Excel). Within this constrained scope of work MAX phase one will measure its success by the ability to fulfill the following use case senarios:

MAX Phase One Use Case Senarios:

- **Cross-Reference model elements to reference documents**
  Model elements are often cross-referenced to externally maintained reference documents as a means of providing requirements tracability or supporting evidence for modeling rationale. The most comon means of accomplishing this is to create a spreadsheet. The use case to be satisfied by MAX is to enable the cross-references to be imported, exported, and round-tripped. It needs to support the ability to modify existing mappings during import (add or remove), support the ability to distribute mapping responsibilities to multiple members of the project team, and support a many to many mapping between model elements and reference items.

- **Maintain model element descriptive Text**
  Model elements such as classes, attributes, and activities often have descriptive text that is best authored by subject matter experts. The goal of this use case is to support the ability to distribute the responsibility for authoring descriptive text among multiple parties and then import their work into the model and support the exporting of model descriptive text for review, comment, and publication. The use case to be satisfied by MAX is to enable element definitions to be imported, exported, and round-tripped. It needs to support the ability to modify existing definitions during import (add or remove) and support the ability to distribute authoring of definitions to multiple members of the project team.

MAX Phase Functional Capabilities:

1. Allow user to declare model elements and element features to be exported
2. Allow user to declare inclusion/exclusion criteria for model elements to be exported

3. Retreive declared model elements from an EA model
4. Allow user to declare the order in which model elements and features exported from EA will appear in the target CSV
5. Create a CSV export popuated with data exported in accordance with declared export formating instructions
6. Allow user to declare the order in which model elements and element features to be imported into EA appear within the source CSV
7. Create, update, or delete model elements in the EA model in accordance with the content of the source CSV

High-Level Development Plan

1. **Activity for each functional area**
   - Document requirements and prepare conceptual level model
   - Document design and prepare logical level model
   - Construct and test the solution

2. **Schedule of deliverables**
   - WGM May 2012: Project Kickoff Meeting and resource recruitment
   - June 2012: Requirements Specification and conceptual Model
   - July 2012: Model export capability (Functions 1 – 3)
   - WGM Sep 2012: Export formatting capability (Functions 4 – 5)
   - Dec 2012: Model import capability (Functions 6 – 7)
   - WGM Jan 2013: Beta release

3. **Resource requirements**

Resource	Hours	Time period	*Average Utilization*
Project Manager	56 hrs	May 2012 – Jan 2013	*[4 hrs/month]*
Requirements Documenter	20 hrs	May 2012 – Jun 2012	*[10 hrs/month]*
Solution Architect	60 hrs	Jun 2012 – Nov 2012	*[10 hrs/month]*
Software Developer	120 hrs	Jun 2012 – Jan 2013	*[15 hrs/month]*
Test Case Developer	24 hrs	Jun 2012 – Nov 2012	*[4 hrs/month]*
Tester	14 hrs	Jul 2012 – Jan 2013	*[2 hrs/month]*