

# Init1dbw8 - Support for Application Development

## Initial Analysis:

Item	Information/Response
Date:	12/29/2009
Requirement # unique id <SemConOps Initiative>.<analysts initials><requirement number> e.g. Init1dbw1 (eventually linked to Use Cases)	Init1dbw8
Originator/Customer's Name:	Patrick McConnell
Originator/Customer's Company:	Semantic Bits
Summary of requirement initial analysis, by Reviewer: (as unambiguously as possible, describe who (List of Actors) is interacting with the system, what the business goal is and how the system might support the actor's ability to achieve their goal)	Information modelers have 4 areas of need: 1. Iterative registration of semantics instead of backend loaded 2. A way to make the semantics of use cases explicit and reusable in later steps that would like the use cases with formal information modeling and eventually the systems or services that implement them. 3. Model reuse and capturing modifications: extensions and constraints 4. Ability to more easily describe enumerations
Recommended Next Step Enter one: Follow-up interview, Observe, Use Case Template (text), Use Case Model (formalized/UML diagram), Group Discussion, Prototype, Waiting Room	Develop detailed Use cases for all scenarios

## Interview

Item	Script / Question	Information/Response
1	Hello, my name is NAME. I am calling you today because NCI and caBIG are working toward a new and improved version of the semantic infrastructure to better <b>support integration scenarios</b> . Our first step was to organize requirements collected over the past year. Your organization has expressed a requirement/need for BRIEF STATEMENT OF USER REQUIREMENT. This has been identified as potentially a critical component to support application /data and service integration, and we need more information in order to enable us to meet this requirement. <b>Do you have about 30 minutes to talk about this?</b>	If yes, proceed. If no, note a good time to call back.
2	What do you do? What are your goals for the next year? Why are you doing this?	Some hands on development, analysis and management and architecture - guiding development teams to implement use cases. Business Analyst, Project Manager, some development.
3	In interacting with the caBIG infrastructure, do you have any solution integration needs? If so, what are they? Have you envisioned new ways of interacting with existing or new parts of the semantic infrastructure? (prompt to elicit changes/new ways of using the infrastructure)	<p><b>Iterative semantics registration:</b> The semantics don't come into play until the end of the project. You build the system then look at a few CDEs to get the picklists. At the end you sit down and write the definitions and go through the full registration process - takes long to export files and submit /review/interact with loading team. It should happen in the first iteration, they should be able to update the concepts and definitions and register it in the repository. Business analyst (the person working hands on with the implementation models), someone oversees the development of the model. The business analyst would hit the buttons' that would try to register it in the repository, and provide interactive feedback on things that don't work. It might not be the final version, but they would have an opportunity to see the problems and issues as they develop rather than after they have implemented something.</p> <p>may be resistance, developers just want to implement stuff. there is benefit to getting the stakeholders involved in the information model from the beginning. CDE reuse is a challenge, the name or the enumeration isn't quite right. Needs to be able to modify the CDE more easily, finding a CDE to reuse is hard.</p> <p>its hard to find models to reuse, but realize that if you reuse the same CDE you can reuse the data or services.</p> <p>Use case comes to the developer to implement it. Sit in a room and talk about what needs to be done. Talk about the data that needs to be captured in the system.</p> <p>Developer takes notes, talk about classes of information and how they need to be associated - may talk about data elements. The architect might draw some classes and associations on a white board.</p> <p>The developer sits in-front of EA and begins to create the information model. The a group reviews it and discusses names and associations, in an interactive session. multiplicities - the developer fixes the problems during the sessions/makes another draft. Ultimately comes up with something that the analyst is happy with and the bring it into the main model. May involve new classes and associations, then hook it into the main model. Then begins to hook it into the use case to implement the use cases. Uses the use cases - sometimes not modeled - just notes from a discussion - unless working with the end user where they need to review it - won't be written, but may have something in a wiki page - with a narrative and a few bullets on the functionality and types of data...its more subjective or intuitive - introspective - conceptual idea from discussion. figures out the semantics and lets you correct it in the wiki.</p> <p><b>Semantics for Use Cases:</b> A more formal use might be developed after they know the understanding is correct, may have a working prototype - show it to the stakeholders - move the narrative into the formal use case.</p> <p>the information model classes might have data elements from different 'object classes', its just an information model to support the use case. After they have developed the model and revised with user input, register the model of the application, not the domain ...should be able to produce the artifact needed at the end on a monthly basis instead of waterfall.</p> <p><b>Model reuse and capturing modifications:</b> Domain analysis models and using existing models - how should this work?: it needs to be clearer how this is done. its not programmatic. You create a spreadsheet and show how they map into BRIDG - need a better way to model that in the metadata repository. Start with classes from BRIDG - but start adding or renaming classes and adding attributes, changing names, adding associations and so forth to support the use case. Then at the end of the project there is a BRIDG Review. then map the attributes to the BRIDG attributes. Sometimes have the same name sometimes they don't. In one column their name, in the other column the BRIDG attribute. Would be good if you could derive these classes into their own model, make changes that are kept track of and registered along side the original model. and some information about the changes you have made so you can review them to be sure you haven't broken any rules, have reused stuff that exists.</p> <p><b>Attaching Enumerations to models:</b> in C3PR and other apps its difficult to use enumerated value domains. They don't put them into the information model, but they do put them into the user interfaces. They use configuration files are used for the application that can be changed by the user outside the software. attach terminology to the 'configuration file' person.gender would not have associated values. They ask what the values are when developing the software, they see what they are, but they don't put it into the information model ... hard to put EA ... not intuitive or easy to attach the enumeration ... needs to be easy and be pulled in the enumeration and modify it if it already exists ...</p>

4	Are there any business changes you are assuming we will be able to deal with? <i>(prompt to elicit changes/new ways of using the infrastructure)</i>	Iterative development of semantics
5	Are there any capabilities you are expecting to be available to support your needs? <i>(prompt to elicit expectations/dependencies)</i>	see above - ability to access and reuse standard metadata from the infrastructure and integrating to the modeling tools more easily
6	Do you use any of the existing software/services? If so, what do you like or dislike about it? <i>(if related to existing capability)</i>	Having a web based view into the semantic infrastructure, should be more user friendly. more services to retrieve content.
7	If this requirement is met, what would be the benefits? If you do not have it, what would be the negative impact? <i>(prompt to elicit benefits/value - will help to prioritize)</i>	Reduction in development time, semantics would be reused in the development process much more, will end up with greater interoperability between the applications.
8	If, for any reason, we were not able to create that solution, do you think there might be another way to solve this issue? Can you think of an alternative solution? <i>(prompt to elicit alternative solutions/workarounds) (to be prepared by the Requirement Analyst)</i>	OWL and RDF may be an alternative, but doesn't remove the need for tooling. It may be an alternative way to represent some of this.
9	Would you agree that we can summarize your requirement like this? <i>(Summarize one requirement in 2-3 lines and read back to interviewee for confirmation.)</i>	---
10	How important is this requirement to the interviewee? <i>Required: Customer Priority/Annotation/Requirement Analyst (Provides concrete assessment of the relative importance for the requirements specification)</i>	Select:  1. <b>Should have for applications to scale and interoperate</b>
11	On a scale from 1 to 3 with 1 being "not satisfied" to 3 "completely satisfied", how would you rate your overall satisfaction with the product if this requirement was met? <i>(Relative rating/ranking of how satisfied or dissatisfied interviewee would be if this requirement were met/not met)</i>	Select:  1. <b>Completely satisfied</b>
12	Are there other requirements that you would like to share with us? I'd be more than happy to call you back another time, or if you have another 10 minutes, please share other issues you can think of. <i>(prompt to elicit any hidden - potentially higher priority requirements if they exist)</i>	(If yes, take notes to use in on a new page with this template; if time not available now, try to make appointment for another call.)
13	Who else should we talk to in order to elicit more information about this need?	Josh Phillips - Semantic Bits may be able to provide more input
	<b>For specific service enhancement or requirement from Forum entry:</b>	
14	Can you or someone else give me a step-by-step description of how you would describe the expected performance/behavior of the software in order for you to feel that your requirement is met? <i>(Required: Fit Criterion - will help us create test cases and user acceptance criteria - to be prepared by the Requirement Analyst)</i>	See above
15	Forum Link:	VKC or other forum where this requirement is discussed
16	URLs (optional):	Links to pages or applications related to this requirement
17	References (optional):	cgMDR - this tool seems to be better integrated with modeling tools