OSLC PLM Workgroup

Oct 5th 2010

open-services.net

V0.3a

Organisers today

- Workgroup lead: Rainer Ersch, Siemens
- Coordinator: Gray Bachelor, IBM

Today's agenda

- Roll call and brief introductions - welcome new members
- Objective for today's meeting
  - Discuss progress and outlook of the current work on SE Scenario #1
- Recap of the approach
- Walkthrough of PLM Reference model
  - SysML and STEP representations of the OMG Hybrid SUV example
- Update on OSLC SPEC analysis and alignment
- Discuss next steps
- Dates of next meetings – Oct 19th & Nov 1st proposed
- AOB
- Summary and close

Today’s objectives

1. To pursue the PLM Reference model for the scenario context and implementation
2. To confirm plans for OSLC SPEC alignment

Summary of the approach

- Our scenario #1 provides the basis for exploring the coverage of the existing OSLC Specs
  - http://open-services.net/bin/view/Main/PlmSystemsEngineeringScenarioSystemsEngineerReactstoChangedRequirements
- We identified two actions as typical of the need to trace product and system context and implementation
  - a4 Locate requirements in change request context
  - a7 Locate Reusable Implementation to Satisfy Change ?
- These actions require that we identify means to represent
  - Requirements as configured text, documents and models
  - Context and implementation as configured structures, meta-data and models
  - Relationships between Requirements, Context and Implementations
- We propose initially to define a reference or boundary representation of product and/or system to use to evaluate the existing Specs (resources and services)
- There is not a single dominant representation of product and system structure to use as a reference
- We agreed to explore the Standard for the Exchange of Product model data (STEP)
  - Based upon ISO 10303 and is meant for product data exchange between tools
  - has a modular construction applied in multiple Application Protocols with significant industry support
  - has a proven and flexible core construct of Product, Product_version, Product_view_definition
- We agreed to explore and apply the SysML HSUV example to support our investigation

Progress made

Progress made – the basics

- Identification of relevant assets and information in the public domain
  - Current assessment is that sufficient have been found for the need identified
- Identify and select core STEP representations
  - AP233 and AP239
- Production of sample data from the HSUV SysML example
  - STEP representation (.stp file)
  - XML representation (.owl file)
- Exploration of HSUV Requirements representation in OWL
  - STEP file
  - ontoSTEP
  - Protege

Model build out

SysML Model build out	Purpose	Reference model	Status	Outlook / plan
Requirements version annotation	SysML model not include.	Must	Done	
Block versioning	SysML model not include.	Should	Done for existing blocks	Build out e.g SW
Design variant annotation	SysML model not include.	Should	Sufficient versioning	Variant expression could be done later
Product identity annotation	SysML has identity example but no versioning.	Must	“Name” used as identifier	Real part # as attributes later option
ECU SW Component content	Builds a credible example.	Should	ECU block contains 2 SW comps + calibration	Need to validate if sufficient
Design variant content	Builds a credible example.	Should	SW component versions included in PCU	Variant expression could be done later
Engineering BOM	Builds a credible example.	Must	Available in the model	Need to visualise as a list or table

Walkthrough

- Today we will view the models in topcased on the web conference
- Alternatively you can down load the materials and view the jpg files

OSLC SPEC analysis

- Analysis of existing specs
  - Propose to focus on Core and RM
- Traceability scenarios from RM team
  - Link
- Identify “same as” or “equivalent” using OWL
  - Capture gaps and issues
- Investigate possibility to make a basic transformation
- CM, AM next iteration

Next meeting

- Propose
  - Next working meetings
    - Oct 19th 11am Eastern proposed
      - Continue working on SPEC alignment
    - Nov 1st 11am Eastern proposed
      - Receive results of the time box to end of October
      - Plan and confirm next time box

Any other business ?

Summary

Thank you

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