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DAML Integration Contract

GFY – 04 Overview

Presented at the
DARPA DAML PI Conference
25 May 04
By
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Troy Self

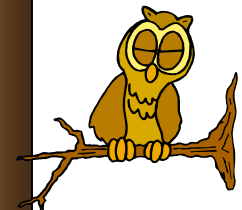Mark Burstein

Cola Atkinson

Mike Dean

Jeremy Lerner

Ryan Owens
(InfoEther)

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Overview Agenda

- Overview of the goals and deliverables of your 2004 project

- Current functionality and IP status with respect to your deliverables

- Will your software deliverables be on SemWebCentral? When?

- What are your plans to wrap up and finish (projected status at end of 2004)?

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- OWL Support
  - Support through to Full Recommendation
- Services
  - Develop approach
  - Tools, demonstrations & documentation
  - Support development of specification
- Rules
  - Derive Rules specification
  - Support W3C standardization efforts
  - Open Source authoring tools & documentation
- Tools
  - Professional quality Open Source web site
  - Easy to use straight forward collection of tools
  - Useful ontology registry

- Participated in W3C Web Ontology WG

- Co-editor of OWL Reference (Mike Dean)

- Our role essentially complete with W3C Recommendation milestone

W3C Recommendation 10 February 2004

- Participate in DAML Services Coalition
  - OWL-S version 1.0 released
  - Version 1.1 due by 01 June
- Co-chair SWSI Architecture Committee (Dr. Mark Burstein)
  - Draft requirements document now available
  - SWSA Note by September 30

Rules

- Chair Joint Committee (Mike Dean)
  - SWRL 0.5
  - SWRL 0.6
  - W3C Member Submission
- RuleML Steering Committee
- XML Schema for SWRL 0.6 XML Concrete Syntax
- SWRL -> CLIPS translator
  - Will be moved to SemWebCentral
- Use of SWRL for ontology translation (CODE Project)

- ## DAML Tools Assessment
  - Delivered Tools Assessment document
  - On-line/interactive OWL version available at SemWebCentral

- ## Open Source site for SW Developers
  - Designed, developed & built SemWebCentral
  - Launched on 30 January 2004
  - Currently hosting 23 projects

- ## Packaged several BBN developed tools as Open Source projects and moved SemWebCentral
  - Dumpont
  - Hyperdaml
  - owl-emacs
  - owl-vim
  - ObjectViewer
  - OWL Validator
  - Kazuki

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- ## SWeDE
  - Custom perspective in Eclipse for managing and sharing Semantic Web resources between plug-ins
  - OWL Development toolkit to support
    - generation, editing & validation of ontologies & instance data
    - automatic generation of Java API classes
    - extension points for integration of tools for completing more Semantic Web workflows

- ## Other Semantic Web sites maintained
  - daml.org
  - infospherics.org

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Transition
(the 5th objective)

- JBI (Joint Battlespace Infosphere)
  - OWL-based subscription matching using JESS into the JBOSS-based JBI 1.0.1 Platform
  - Demonstrated result for the Air Force Scientific Advisory Board review

- Combine
  - IC Customer
  - WWW data retrieval, analysis & management
  - Combination of structured & unstructured
  - Co-reference resolution

- CODE (Common Ontological Data Environment)
  - IC Customer
  - Exploit SW technology for operational use across analysis domains
  - Proof of concept demonstrations last month (April 04)
    - Integrated into COTS GIS system
    - 5 data sources (including MIDB)
    - Dramatic reduction in data preparation time (data matching and deconfliction)
    - Initial implementations of rule-based analysis using SWRL
  - Transition program in planning

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- Services
  - SWSI Notes
  - SWSI Example
  - Wrap up by end of September
- Rules
  - Test Cases
  - SWRL Editor
  - SWRL to Jena 2 translator
  - SWRL Validator
- Tools
  - SemWebCentral.org
  - Expanded SWeDE functionality
- Transition
  - Transition IC efforts to new contract vehicles
  - Follow-up with potential new DoD transition opportunities

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- All Open Source
- All on SemWebCentral

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