Open Applications Group

Semantics Refinement Methods and Tools

Serm Kulvatunyou – NIST
Hakju Oh – NIST
Mike Rowell – Oracle
Jeff Rice – Boeing
Scott Nieman – Land O’Lakes

November 17, 2016
## Working Group Members

- Serm Kulvatunyou, NIST – Chair
- Mike Rowell, Oracle – Co-Chair
- Steffen Fohn, ADP
- Jim Wilson, OAGi & AgGateWay
- Jeff Rice, Boeing
- Kevin Himka, Boeing
- Roger Hills, Boeing
- Jerry Gersgman, Boeing
- Yunsu Lee, NIST (Left)
- Jaehun Lee, NIST (Left)
- Taehun Kim, NIST (Left)
- Hakju Oh, NIST
- David Connelly, OAGi
- Scott Nieman, Land O’ Lakes
- Ian Hedges, E2Open
- Satish Ramanathan, Oracle
- Hyunbo Cho, Thira & POSTECH
- Kurt Kanaskie, Merck
- Kim Bartkus, HR-XML
Agenda

- OAGIS Repository Release 1.0
- Query Samples
- Semantic Refinement Application Update
- Demo of the Application
What is OAGIS Repository Release 1.0?

- Syntax independent representation of OAGIS
- Based on release 10.2.2
- Based on Core Component Specification (CCS) 3.0 (formerly CCTS 3.0)
- Based on Core Data Type Catalog (CDTC) 3.1
How OAGIS Repository may be used?

• Search for components
• Analyze where-use
• Deploy as enterprise meta-data dictionary
What are included in the release?

- Oracle database schema script
- Data loading script for the Oracle DB
- Installation guide for the database scripts
- Repository overview document
- Data model files including the database schema and subviews
- Example SQL query script
- ReadMe file describing the above content
When will it be available for OAGi member?

• By the end of 2016
• Along with 10.2.2
What is the scope of OAGIS Repository Release 1.0?

- Contents in BODs, Nouns, Components, Fields, Code Lists, and Agency ID List schemas imported as CC components
- OAGIS.xsd and OAGIS-Nouns.xsd stored implicitly
- Contents imported as BLOB
  - IST (ISO 20020) schemas
  - Business Data Types schema
  - XML Schema Built-in Type schema
  - XML Schema Built-in Type Pattern schema
- OAGIS model schemas can be generated
- Documentation imported but not yet validated
- Database schema can store multiple releases in delta, but not yet validated
What is the plan for Release 1.1

• Content in every schemas imported as CCS components except IST schemas
• Documentation import validated
• Deprecation formally marked
• Profile BODs included
Beyond Release 1.1

• Store multiple releases in delta
• Generate releases from that delta representation
• Manage future releases of OAGIS developments
Demo of example Queries
Semantic Refinement Application Updates

• Performance update
• Technical Architecture update
• Functionality update
Performance Update

• Cut profile BOD creation time by nearly 10 times
• Cut profile BOD XML schema expression generation by nearly 10 times
Technical Architecture Update

• Adopted ‘Spring Framework’
• Adopted JPA ‘Hibernate’ for ease of data access and better interoperability across databases
• Decomposed the application into modules using ‘Maven’
Functionality Update

• All elements turned-off initially
• Both code list and agency ID list assignments enabled
• Multi-user
• Initial profile BOD extension capability
Demo of initial profile BOD extension
What’s Next?

• Complete the extension functionality
• Help OAGi deploy it in the cloud with multi-tenant