OWL-S Open Issues Discussion

Lead by

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DAML-S Web Services Coalition

http://www.daml.org/services/
Outstanding Issues
(as of Rel. 1.0)

• For the Profile Ontology (and discovery processes)
• For the Process Ontology (and dynamic invocation, composition, execution monitoring)
• For the Grounding Ontology (and mappings to transport protocols)
• To facilitate adoption by industry
Outstanding Issues
Profiles and Discovery

• Relationship with ontologies for classifying services and products
• N-ary relationships between profiles and processes
• Protocols and use models for query refinement, service selection based on details of process models
Outstanding Issues
Process Ontology and Intended Uses

• For the Process Ontology (and dynamic invocation, composition, execution monitoring)
  – Multi-party processes (whose (sub)process is it?)
  – Explicit relationship between processes and messages
  – Handling of data flow (and variable binding in conditions)
  – Conditional bundling of inputs (polysemy) and correlated outputs and effects
  – Transactional and asynchronous control flow
  – Exception handling
Outstanding Issues
Grounding Ontology and Data Transformation

• For the Grounding Ontology (and mappings to transport protocols)
  – Relationship with ontologies for classifying services and products
  – N-ary relationships between profiles and processes
  – Protocols and use models for query refinement, service selection based on details of process models
Adoption-related Issues
(as of Rel. 1.0)

- Where possible, prefer compatibility with emerging industry standards
- Developing mappings to enable joint use with other standards
- Provide incremental paths to adoption (promote as semantic extension of WSDL, a semantic layer for workflow/choreography languages like BPEL4WS)
- Develop tools that demonstrate the value added of OWL-S in conjunction with these standards
• Process Ontology (and dynamic invocation model)
  – Multi-party processes (whose (sub)process is it?)
  – Explicit relationship between processes and messages
  – Handling of data flow (and variable binding in conditions)
  – Conditional bundling of inputs (polysemy) and correlated outputs and effects
  – Transactional and asynchronous control flow
  – Exception handling
• Grounding Ontology
  – Mapping of OWL descriptions to/from transport representations
Mapping Language for Grounding Complex Data into WSDL Messages

Process: RequestAppointment

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