



# Semantic Web Services Working Group

DAML PI Meeting  
November 2004



# Outline



- Conceptual space
  - Especially the relationship between OWL-S notions and OWL-P notions
- “Outreach” topics
  - Value-add demos
  - Integration opportunities



# Conceptual Space



- Fitting together the pieces
  - Towards a clearer conceptual map of the SWS space
  - Relationship between OWL-S & OWL-P *processes*?
  - Relationship between OWL-S-related OWL-P *policies*?
  - *Process vs. activity*?
  - More generally, can we get clear about *choreography, orchestration, workflow* in relation to OWL-S and OWL-P?
  - Related questions:
    - What's the most useful style of representing (multi-party) protocol? Process-centric or MEP-centric? Single spec covering all parties, or multiple coordinated specs? What space do we need to cover (as "SWS")? Should choreography/protocol specs be distinct from process/orchestration specs?



## Conceptual space (2)

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### 3-part space of “building blocks”

- Actions and their impact on the world
  - Could be viewed as OWL-S’ Process Model’s primary contribution
  - Theory for auto. composition involving effects
- Sequencing and interleaving of actions
  - Theory for auto. composition of non-atomic services
- Message exchange (choreography / protocol)
  - Theory for “decomposition” of global protocol space



# Conceptual space (3)



- Large degree of consensus on the conceptual design space
  - Munindar’s notions of process/policy/protocol can readily be mapped onto OWL-S work
- “Choreography” / protocol is a central part of our design space
  - Generally speaking, a partially specified space (enables reuse)
  - Global specs
  - Local specs
- Technology foci
  - Global protocol spec  $\Leftrightarrow$  Local protocol spec
  - Protocol spec  $\Leftrightarrow$  Activity specifications for individual parties
- Consensus on making messages 1<sup>st</sup>-class citizens
  - Flexibility in reasoning about messages & protocols



## Value-add demos (SWS over WS)

- Technology
  - Verification
    - Consistency of “global choreography” with “local choreographies” and/or processing models
  - Generation of local choreographies from global choreographies
- Domains
  - Logistics / Procurement
    - Joe: look at problems identified in Iraq operations
  - Business
    - Look at RosettaNet, ebXML



- Integration opportunities
  - OWL-S & SweetDeal
    - OWL-S could provide infrastructure for SweetDeal scenarios, and could broaden the demos in areas such as negotiation and monitoring



# OWL-S User Support Topics

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- Wishlist for v. 1.2
- Making it more accessible to beginners
  - OWL-S lite?
  - Better documentation?