WSBPEL Technical Committee Update
“BPEL4WS in a Nutshell”

- A Turing complete language that can be used to specify behavior of business processes
  - Between Web services...
  - ...and as Web services

- **Same** language used to define executable processes and business protocols
  - Executable processes
    - Can be performed at all compliant environments
  - Abstract processes
    - Specify constraints of message exchange
    - Exposes only information required by partner
BPEL4WS

- Extends and subsumes previous specifications in this area published individually by Microsoft XLANG (05/01) and IBM WSFL (05/01)

- A mechanism for addressing business semantics within a Web Services environment

- An XML-based workflow definition language that allows businesses to describe rich business processes that can both consume and provide Web services in a reliable and dependable manner

- Enables portability and interoperability by defining a set of constructs to implement executable business processes and to implement message exchange protocols

- Defines operational semantics to allow the execution of business processes in a well-defined manner for business processes and business partners in heterogeneous environments
BPEL4WS – Basic Concepts

- Peer-to-peer interaction between Web Services described in WSDL
- Process and partners are modeled as WSDL services
- BPEL4WS provides the process definition
- Supports **Abstract** and **Executable** processes
What is an Abstract Process?

- *Description* of public behavior
  - Public face of private processes
- Independent of implementation
- Scenarios:
  - *BigCo* dictates *trading partner requirements*
  - *Industry consortia* provides guidelines for working together
BPEL4WS 1.1

Modular Structure makes core concepts and extensibility model clearer

- Core concept extensions
  - Event handlers (unscheduled alerts and queries)
  - Local data and correlation (refined scoping of lifetime)
About the WSBPEL TC

• Technical Committee launched 5/15/2003
  – BEA, IBM, Microsoft, SAP and Siebel submitted BPEL4WS V1.1 with royalty free terms

• Subcommittees:
  – Issues
  – Specification Editing
  – Use Cases
  – Liaisons
  – Implementation

• Publicly available:
  – Archives
  – Spec, Issues List, Resources
  – Comment “web form” (alas, no publicly available comments list 🙁)
Quick Update

• **Issues Subcommittee:**
  – Reviewing/consolidating outstanding spec issues

• **Specification Editing**
  – Clarification of spec, implementing recommendations of Issues Subcommittee

• **Use Cases**
  – Clarification of issues in spec
  – Identify, model/illustrate BPEL usage in vertical industries

• **Liaisons**
  – W3C Choreography WG
  – Working on mappings to UN/CEFACT BCF
  – Discussions with OASIS BCM

• **Implementation**
  – Vendor demonstrations/interop planned
Quick Update

• Current Issues List, spec and use cases:

• Expected release of spec: early Summer 2004

• More info:
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Recommended Reading
(www.oasis-open.org/committees/documents.php?wg_abbrev=wsbpel)

- BPEL 1.1 specification
- Goals of the BPEL4WS Specification
- Abstract Processes in BPEL4WS
- BPEL4WS Issues Tracking
- BPEL4WS Use Cases