Draft ebXML Technical Architecture Specification v2.0 Outline

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1 - Introduction -- -- <assignment> Drecun & Webber </assignment>

- Bigger picture approach to bridge between the technical modeling community and the business analysts, along with mapping directly to the ebXML and SOA related OASIS specs.
- Define Problem Statements.
- Understanding the layers in the solution stack
- B2B messaging growth and the need for Service Oriented Architecture Frameworks
- The Internet as global SOA
- Future Scenario - Consumers participating in B2B as Agents and a semantically aligned, always-on, any-to-any transactional world.
- Interoperability and Convergence

2 - Overview <assignment>Hamid ? </assignment>

2.1 Summary of Contents of Document
2.2 Audience and Scope
2.3 Related Documents
2.4 Normative References
2.5 Usage of Patterns to Describe Interactions

3 - Definition of a Service Oriented Architecture

3.1 Multi-purpose, Re-usable, Reliable, Always-On

3.1.1 Distributed, Specialized Components as a Framework
3.1.2 Problem Statement and Goals for a Service Oriented Architecture
3.2 On Demand Messaging
3.3 Security and Identity
3.4 An Architecture Creates a Framework
3.5 A Stable Framework is an Always-On Application Fabric
3.6 A Fractal Network: The Smallest Looks Like the Largest
3.6.1 Enterprise
3.6.2 Regional
3.6.3 National
3.6.4 Global
3.7 Business Processes as Modeled Artifacts
3.8 Business Processes as Runtime Code
3.9 Patterns for Common Interactions
3.10 Semantic Interoperability

4 - Status of Standards <assignment> Pattyn ? </assignment>

4.1Status of each standard referenced in Technical Architecture v2.0
4.1.1. ebXML Message Service v3.0
4.1.2. ebXML Registry Services Specification v3.0
4.1.3. ebXML CPPA v2.0
4.1.4. SAML v2.0
4.1.5. XACML v1.0
4.1.6. WS-Security
4.1.7. WS-Reliability v1.1
4.1.8. UDDI v2
4.1.9. SPML v1.0
4.1.10. DSML v2.0
4.1.11. WSDM v1.0
4.1.12. WS-I Basic Profile
4.1.13. WS-I Basic Security Profile

5. Run-time SOA
5.1 Prinicples
5.2 FERA Reference Architecture
5.3 SOA Run-time
5.3.1 Federations
5.3.2 Interfaces
5.3.2.1 Portal
5.3.2.2 Gateway
5.3.3 SOA Federation
5.3.1 Federation Server
5.3.1.1 Federation Manager
5.3.1.2 Agent Interface Manager
5.3.1.3 Federation Registry
5.3.1.4 Security Provider
5.3.2 Agent Framework
5.3.3 Collaborative Process Flow Controller

5.3.4 Event Manager
5.3.5 Activity Manager
5.3.6 Decision Manager
5.3.7 Built-in Services
5.4 SOA Standards Convergence
5.5 SOA Design and Deployment

6 - ebXML System Overview
6.1 ebXML Components in a Service Oriented Architecture
6.2 ebXML Message Service v3.0
6.3 ebXML Registry Services Specification v3.0
6.4 ebXML CPPA v2.0

7 – OASIS SOA related specifications
7.1 SAML v2.0
7.2 XACML v1.0
7.3 WS-Security
7.4 WS-Reliability v1.1
7.5 UDDI v2
7.6 SPML v1.0
7.7 DSML v2.0
7.8 WSDM v1.0

8 - WS-I related specifications and interoperability with OASIS specs
8.8 WS-I Basic Profile
8.9 WS-I Security Basic Profile

9 – Design Time: Modeling Methodologies and Processes
9.1 UML, BPMN and UMM Overview – summarize and reference UN/CEFACT / BPMN docs
9.2 ebXML Business Operational View
9.3 ebXML Functional Service View
9.4 Round-trip Engineering

10 – SOA Functional Phases
10.1 Implementation Phase
10.2 Discovery and Retrieval Phase
10.3 Run Time Phase

11 - SOA Information Model
11.1 Entities
11.1.1 Action
11.1.2 Activity
11.1.3 Agent
11.1.4 AgentModelReference
11.1.5 Application
11.1.6 Argument
11.1.7 Association
11.1.8 Choice

11.1.9 ChoiceReference
11.1.10 Cluster
11.1.11 CollaborativeProcess
11.1.12 CollaborativeProcessFlow
11.1.3 CPRole
11.1.14 Criteria
11.1.5 Decision
11.1.6 Device
11.1.17 EmailAddress
11.1.18 Event
11.1.19 InformationReference
11.1.20 InputOutput
11.1.21 Matrix
11.1.22 Message
11.1.23 MessageContent
11.1.24 MessageRequest
11.1.25 Metric
11.1.26 Organization
11.1.27 PostalAddress
11.1.28 Protocol
11.1.29 Rule
11.1.30 RuleContent
11.1.31 Sequence
11.1.32 Stage
11.1.33 System
11.1.34 TelephoneNumber
11.1.35 Trigger
11.1.36 User
11.2 Collaborative Process Information Document
11.2.1 SOA IM Hierarchy
11.2.2 OASIS ebXML Registry Format for CPID
11.2.2.1 SOA IM RIM Format
11.2.2.2 CPID Creation

12 – SOA Collaboration Semantics

Table of Contents to be determined later

13 - Service Oriented Architecture Features and Functions

13.1 Nodes and Service Binding Ports
13.2 Transport (ebXML Message Service v3 0 - SOAP w/ Attachments, etc)
13.3 Message Reliability and Error Management (ebMS, WS-Reliability)
13.4 Document Engineering (UBL, SOA Information Model, SOA Collaboration Semantics,…)
13.5 Registry / Repository, Interface Management and Discovery (ebXML Registry / Repository v3 0)
13.6 Party Agreements (ebXML CPPA v2 0)
13.7 Multi-party Business Process Specification, Execution or Choreography ebXML BPSS v2 0, BPML & BPEL
13.8 Integration Interface Metadata (WSDL and other metadata held in ebXML reg/rep)

13.9 Security and Identity Architecture (Dig Sig, SAML, XACML, XML Encryption
13.10 Message Format and Metadata (XML, Schema, CCTS)
13.11 Service Management (WSDM)
13.12 Service Provider (SOA RM detail)
13.13 Service Consumer (SOA RM detail)
13.14 Cross-Domain Semantic Interoperability and Equivalency
13.15 Ontologies, Taxonomies, Dictionaries and XML Libraries
13.16 Content Assembly Mechanism (CAM Detail)

14 - Future Plans

14.1 Overview
14.2 Feature Set (overview)
14.2.1 Federation of Registries
14.2.2 Discovery and Negotiation
14.2.3 Agent Framework
14.2.4 Event Architecture and Messaging
14.3 Relationship to other specifications and standards

15 - Business scenario examples

15.1 Healthcare – Electronic Health Record
15.2 Automotive – Transportation based KANBAN for Inventory Visibility
15.3 Aerospace -
15.4 Electronics -

16 - References and materials