

# **ebXML Registry 3.0: An Overview**



# Agenda

- ◆ What is *ebXML Registry*?
- ◆ Major Use Cases
- ◆ Key Benefits
- ◆ Key Features
- ◆ ebXML Registry in Action
- ◆ Future Directions
- ◆ Summary

# What is ebXML Registry ?

- ◆ A Service Oriented Architecture registry as well as a repository
  - Classification of any type of object
  - Taxonomy hosting, browsing and validation
  - File / folder like organization of content
- ◆ A content management system for secure, federated information
  - Provides services for sharing content and metadata between entities in a federated environment
  - Lifecycle Management (LCM) actions logged in an audit trail
  - Supports automatic versioning of objects

## ebXML Registry has breadth and depth ..

- ◆ A registry for XML objects
- ◆ A repository for ebusiness artifacts
- ◆ A catalog of web services
- ◆ A store for design specifications
- ◆ A complement to other OASIS specifications
  - ◆ SAML, XACML, WSRP, BCM, ...

# The Specifications

- ◆ ebXML Registry Information Model
  - Defines what metadata and content can be stored in the registry
- ◆ ebXML Registry Services and Protocols
  - Defines the services and service interfaces provided by the registry
  - Defines the API for accessing the registry
- ◆ ISO 15000 Standard, Part 3 and 4

# Use Cases

- ◆ Web services
- ◆ Web content management
- ◆ Controlled vocabulary
- ◆ Business process
- ◆ eForms
- ◆ Core Components
- ◆ Standards e.g. HL7
- ◆ Domain-specific use cases such as
  - Electronic Medical Records
  - Geological Information Systems

# Profiles implement Business Context

- ▶ Enable interoperability within and across domains
- ▶ Define restriction/extension requirements of usage
- ▶ Current examples of profiles include
  - Web Services Profile
  - WSRP (Remote Portlets) Profile
  - Open GIS Profile
  - HL7 Profile
  - IHE Cross Document Sharing (XDS)
  - Core Components

# Web Services Registry Use

## ♦ High-level business function

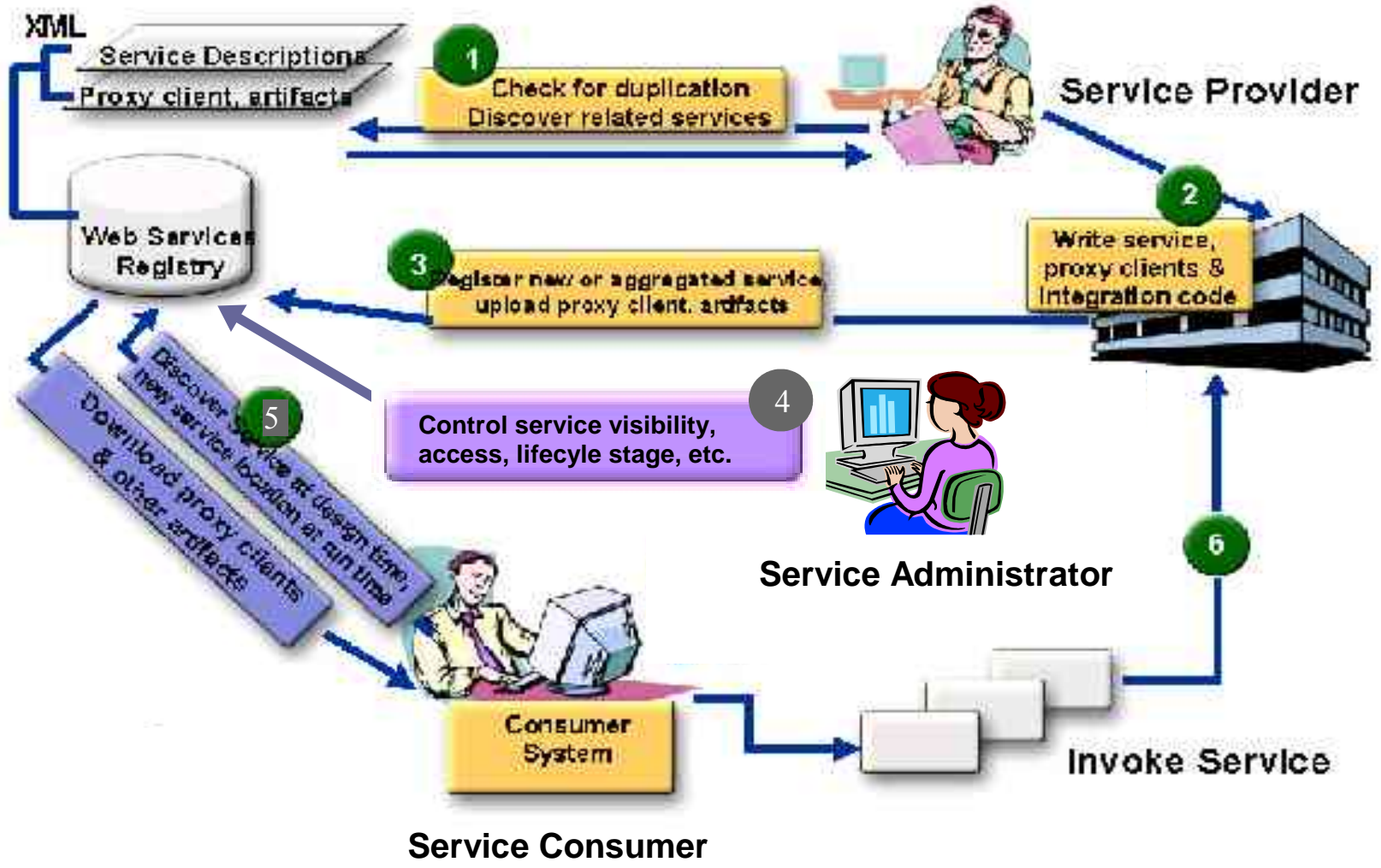
Centralized manageability and accessibility of enterprise web services metadata and artifacts for developers, deployers, administrators, and users

## ♦ Primary use cases

- Deploy/publish and federated discovery of web services metadata and artifacts
  - Service metadata and artifacts = WSDL's, schemas, BPEL and WSRP descriptions, XSLT transforms, etc.
- Web services governance and lifecycle management
  - Approval, visibility, use, deprecation, and deletion based on maturity level, user roles, organizational policies, etc.



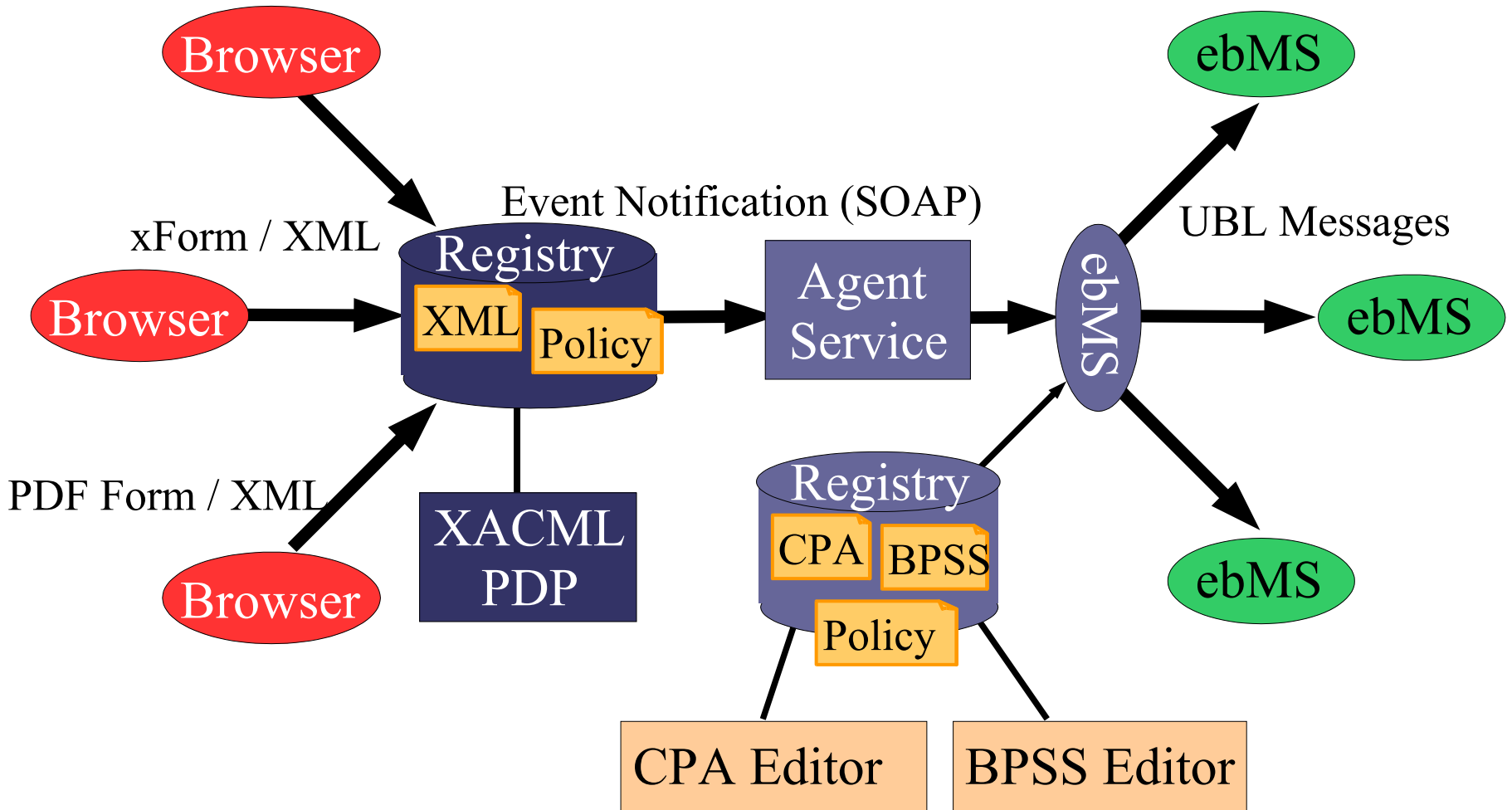
# Web Services Use Case with Governance



# Government Information Management Use

- ▶ Governmental bodies are prominent among ebXML Registry adopters for electronic information management and dissemination
  - Finland: XML Schemas and eForms
  - UN/CEFACT, EDIFrance: eBiz reference data
  - US NIST: Clinical documents
  - Taiwan: eGovernment Platform
  - Korea: Central Registry and Repository (REMCO)
  - Canada: Federated SOA Registry

# Disease Management Example: Technology



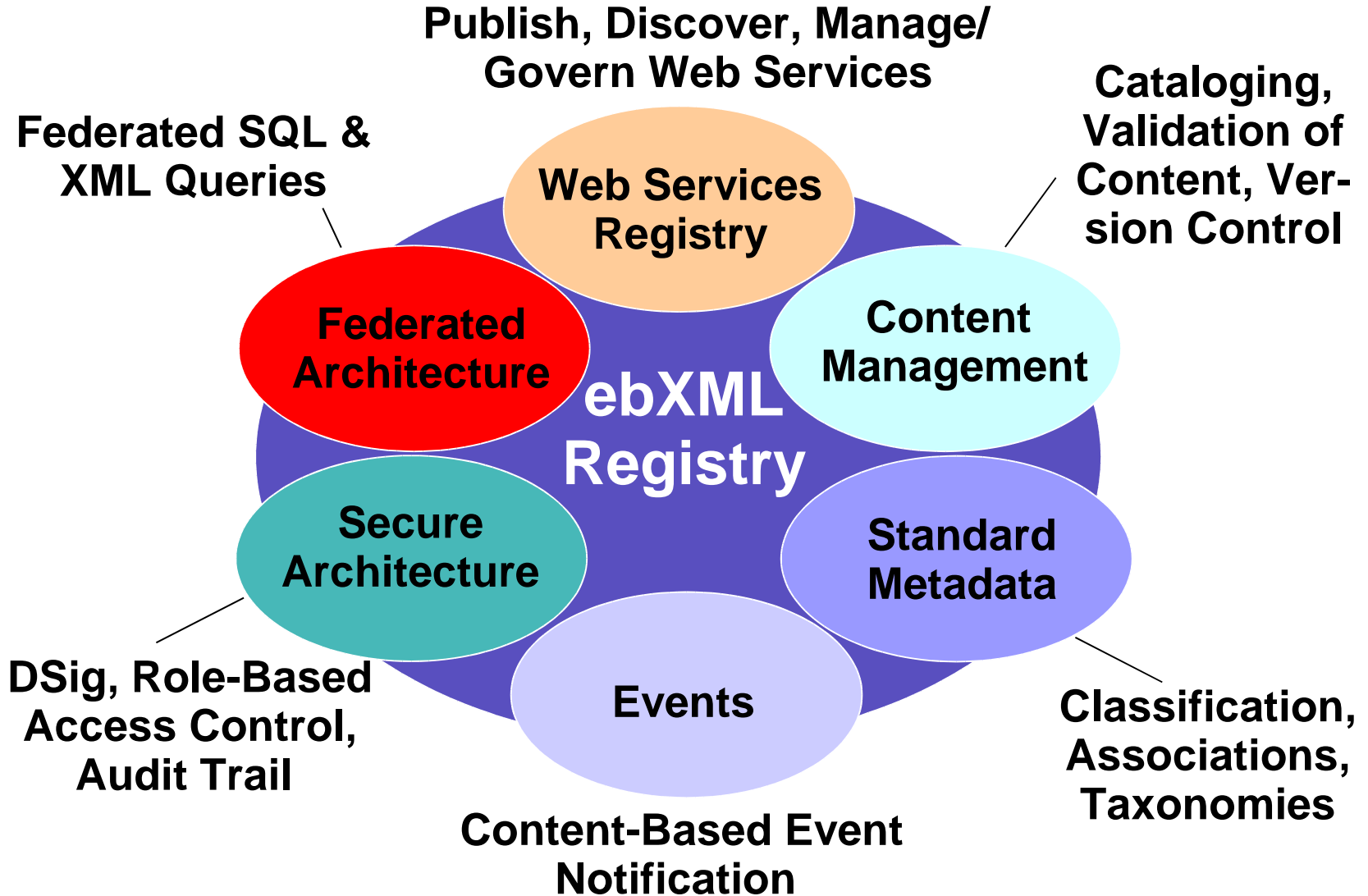
# Key Benefits of ebXML Registry

- ◆ Provides standard way to manage information assets
- ◆ Manages user-defined organization of and relationships among content and metadata
- ◆ Enforces user-defined standards for content
- ◆ Includes capabilities for managing and governance of information asset lifecycles

## Key Benefits (2)

- ◆ Provides flexible mechanisms for content discovery
- ◆ Manages secure access to information assets
- ◆ Facilitates event-based delivery of information to appropriate personnel or systems
- ◆ Enables integration of information assets across organizational boundaries

# Key ebXML Registry Features at a Glance



# New Features in ebXML Registry 3.0

<i>Feature</i>	<i>Description</i>
<b>HTTP Protocol Binding</b>	<ul style="list-style-type: none"> <li>▶ Web Browser client to access to registry using HTTP 1.1 protocol</li> <li>▶ Simple content retrieval</li> </ul>
<b>Registry Managed Version Control</b>	<ul style="list-style-type: none"> <li>▶ Robust version control mechanisms based on the DeltaV/WebDAV protocol</li> </ul>
<b>Query Enhancements</b>	<ul style="list-style-type: none"> <li>▶ Iterative query support</li> <li>▶ Parameterized stored queries</li> <li>▶ Improved Filter Query syntax</li> </ul>
<b>Content Management Services</b>	<ul style="list-style-type: none"> <li>▶ Content validation</li> <li>▶ Content cataloging</li> <li>▶ Content-based discovery</li> </ul>
<b>Cooperating Registries Support</b>	<ul style="list-style-type: none"> <li>▶ Distributed content/metadata</li> <li>▶ Federated queries</li> <li>▶ Replicated content/metadata</li> <li>▶ Object relocation</li> </ul>
<b>Event Notification</b>	<ul style="list-style-type: none"> <li>▶ Publish/subscribe capabilities</li> </ul>

# New Features in ebXML Registry 3.0 (2)

<i>Feature</i>	<i>Description</i>
Security Enhancements	<ul style="list-style-type: none"><li>▶ XACML-Based Access Control Model</li><li>▶ SAML-Based Federated Identity Management</li></ul>
Improved Extensibility	<ul style="list-style-type: none"><li>▶ Easier to define new types of requests and responses</li></ul>
Improved Identifiers	<ul style="list-style-type: none"><li>▶ Human-Friendly URN-based Identifiers</li></ul>



## Summary: Key Features and Services

- ◆ **Standards:** Provides standards-based way to manage information assets
- ◆ **Classification and affiliation:** Manages user-defined organization of and relationships among content and metadata
- ◆ **Validation:** Enforces conformance of content to user-defined standards
- ◆ **Lifecycles:** Governance capabilities for managing information asset lifecycles

## Summary: Key Features and Services (2)

- ▶ **Query:** Provides flexible mechanisms for content discovery
- ▶ **Security:** Manages secure access to information assets
- ▶ **Event notificaton:** Facilitates event-based delivery of information to appropriate personnel or systems
- ▶ **Federation:** Enables integration of information assets across organizational boundaries

# Future Directions

- ◆ Interop testing
- ◆ Conformance specification
- ◆ Semantic content management
- ◆ More profiles- e.g. Dublin Core
- ◆ More protocol bindings – SMTP, RM, ebMS
- ◆ ...

# Summary

- ▶ ebXML Registry is a standard for secure, federated information management
- ▶ One registry supporting both SOA and eBusiness use cases
- ▶ Extensibility enables domain-specific profiling of Registry capabilities
- ▶ It is being deployed in diverse applications by organizations worldwide

## Related Links

- ◆ Cover Pages Article:  
<http://xml.coverpages.org/ni2005-02-14-a.html>
- ◆ ebXML Registry Meta Links page:  
<http://ebxmlrr.sourceforge.net/tmp/ebXMLRegistryLinks.html>

**ebXML Registry 3.0:  
An Overview  
Finish**

