UDDI Overview

Web Services Registry
SOA Enabler

OASIS UDDI

What Is UDDI?

- Universal Description, Discovery, and Integration

- Protocols for web services registry

- Public implementation of standard

- Part of web services stack, with SOAP, WSDL, etc.

Service-Oriented Architecture

- Model of enterprise software design and integration

- IT systems as flexible services, not static boxes

- Network-based, loosely coupled, business-focused components

- Implemented with web services standards

OASIS **UDDI**

Why a Registry?

- Structure for otherwise ad hoc process of component interactions

- Location and invocation metadata for run-time binding

- Flexibility for business rules: security, transport, quality of service, etc.

Typical Registry Applications

- Publishing or finding web services (within an organization or across organizational boundaries) that meet arbitrary criteria

- Determining the security and transport protocols supported by a given web service

- Insulating applications (and providing fail-over) from failures or changes in invoked services

The UDDI Standard

- UDDI specifies protocols for:

  - Publishing and searching services registry

  - Controlling access to registry

  - Distributing and delegatating to other registries

- Managed by OASIS standards body

OASIS UDDI

The Public Registry

- ## The UDDI Business Registry (UBR):

  - Public reference implementation of standard

  - Directory of publicly available services

Key Functional Concepts

- UDDI data model

  - businessService, businessEntity, bindingTemplate, tModels (metadata)

- Hierarchy of registry instances

  - Nodes, registries, affiliated registries

- Key programmatic interfaces

  - Publish, search, replicate, subscribe, key management, authentication

- Multiple, flexible service taxonomies

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Advancing Web Services
Discovery Standard

UDDI v3 History

VERSION	YEAR	GOALS
1.0	2000	Public registry foundation
2.0	2003	Web services alignment and extensible taxonomies
3.0	2004	Flexible and secure registry interaction models

OASIS UDDI

Advancing Web Services
Discovery Standard

www.uddi.org

- Specification

- Technical notes

- Best practices

- Case studies

- Committee membership

OASIS

- Member-led, international, non-profit standards consortium

- Focuses on structured information and e-business standards

- Members include users, vendors, academics, and governments

- ebXML, SAML, WS-Security, BPEL, etc.