Web Services Syndication

Alok Srivastava

Director, Oracle Corporation
Agenda

- Web Services Syndication – A Business Need
- A Practical Web Services Syndication Model
- Technical Architecture to support Web Services Syndication
- ICE 2 capabilities to meet the needs
- Managing Web Services Syndication process

Conclusion
Web Services Syndication - A business need

- Tracking
- Billing and Metering requirement
- Guaranteed Delivery
- Enabling/Disabling access with subscription
- Creating a connected value chain that is ready for billing and tracking
- Web Services Management
A Practical Web Services Syndication Model

- Subscription Handling
  - Implicit Subscription Handling
  - Explicit Subscription Handling

- Service Delivery
  - Pull Subscription
  - Push Subscription

- Allowing Syndication to appear as web services themselves
  - WSDL interfaces for Syndication activities (ICE2.0)
  - Service delivery based upon Web Services transports (SOAP)
Architecture

Web Service Consumer and Provider use the ICE protocol to establish a Web Service Subscription. Provider manages Web Service Subscription.

The published web services specifies the pre-requisite ICE conversation to establish a subscription before web service can be invoked.

Web Service Consumer and Provider use the ICE protocol to establish a Web Service Subscription. Consumer receives Web Services access point to be used.

Provider handles SOAP requests and returns appropriate SOAP responses.

Consumer makes standard Web Service invocations.

UDDI interaction are handled through standard UDDI APIs.

Web Service Provider

publish to UDDI

ws subscription

ws invocation

Web Service Consumer

discover ws in UDDI

publish to UDDI

Provider handles SOAP requests and returns appropriate SOAP responses.

Consumer makes standard Web Service invocations.

UDDI interaction are handled through standard UDDI APIs.

Web Service Provider

ws subscription

ws invocation

Web Service Consumer

discover ws in UDDI
Order of Invocation - Client

- Establish Subscriber
- Review Offers
- Create Subscription – Acquire Subscription ID
- Normal Web Services Invocation with Valid Subscription ID
Order of Invocation - Server

- Identify Service for Offer
- Transform to subscription-enabled service
- Re-deploy the modified service and issue an offer for it
- Upon request
  - Get subscription Id
  - Validate
  - Authorize
  - Transfer the call to application for service
ICE2 capabilities

- Syndicator/Subscriber Interfaces As WSDL
- XML Schema Based Messages
- SOAP as Supported Transport
- Modular Architecture To Use What You Need
  - Allows for simplified subscription models to be placed for Web services subscription
- Extensibility to handle evolving Web services requirements
ICE2 capabilities

- Syndicator/Subscriber Interfaces As WSDL
- XML Schema Based Messages
- SOAP as Supported Transport
- Modular Architecture To Use What You Need
  - Allows for simplified subscription models to be placed for Web services subscription
- Extensibility to handle evolving Web services requirements
ICE2 capabilities

- Syndicator/Subscriber Interfaces As WSDL
- XML Schema Based Messages
- SOAP as Supported Transport
- Modular Architecture To Use What You Need
  - Allows for simplified subscription models to be placed for Web services subscription
- Extensibility to handle evolving Web services requirements