

### IBM SOA ARCHITECT SUMMIT LE 22 MAI 2008

Multiples usages of a service registry



# SOA Governance is a key requirement for overall successful SOA implementations



You only need one service to need governance. You only need one service to destroy your business.

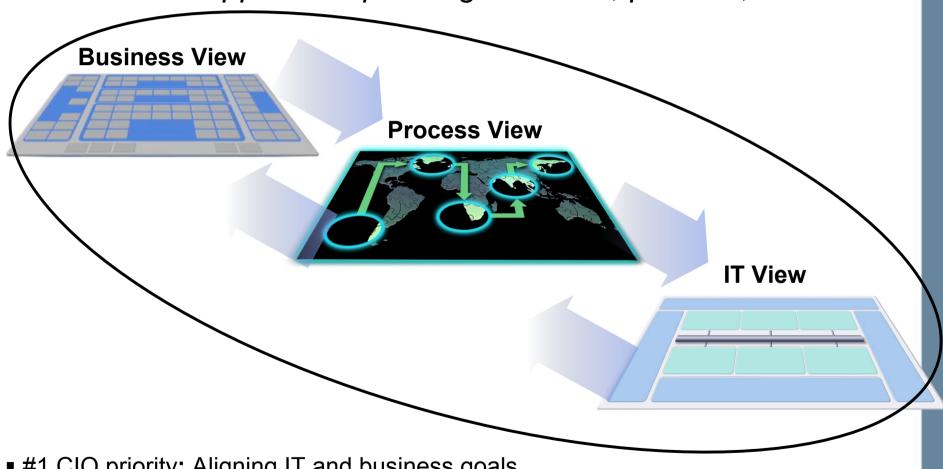
Gartner





### **SOA Governance and Service Lifecycle Management aligns** IT and business goals for Globally Integrated Enterprises

A holistic approach spanning business, process, and IT



#1 CIO priority: Aligning IT and business goals

Source: CIO Magazine; January 2007

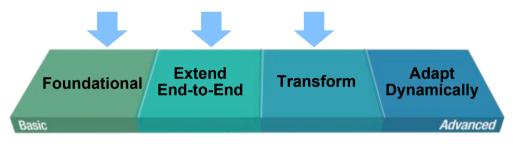


### SOA Governance is critical...

no matter...

whether you are...

...here or here or here



**Smart SOA** 

Critical for maximizing SOA success and value on the path toward becoming a Globally Integrated Enterprise

# Questions customers are asking about governing SOA

How do I eliminate "rogue services" and ensure control of my SOA?

How do I manage the services lifecycle?

How do I enable enforcement of policies across all internal and external services?

How do I govern services as part of my SOA?

How do I increase service reuse?

How can I help my ESB execute in the right context?

How do I help services interact efficiently and dynamically with each other?

How do I optimize service interactions to be better aligned with business process?

### What is a registry ... a repository?



Registry?
Contains Service
Metadata



Repository?
Stores Service Artifacts

An integrated Registry / Repository Solution is needed govern and manage SOA for maximum value



Business process vitality



New value through reuse of assets



Improved connectivity



Closer alignment of IT to business



Business Flexibility

### IBM WebSphere Service Registry and Repository















- Eliminate Redundancy
- Business and IT Alignment
- Change Management



Enhance Connectivity

Expose

- ■(Externally) Services
- ■IT Flexibility
- Version Management
- ■Policy Management



#### Enable Governance

- Service Reconciliation
- Service Lifecycle Management

# The WebSphere Service Registry and Repository provides value throughout the SOA lifecycle

**WebSphere Service Registry and Repository** 









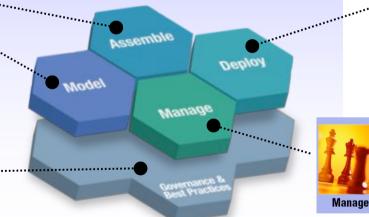




#### **Promote Reuse**

Find and reuse services for building blocks for new composite applications.







#### **Enhance Connectivity**

Enable dynamic and efficient integration of services. Enable enforcement of policies.

#### **Enable Governance**

Govern services throughout the service lifecycle. Reconcile governed services with deployed services.

### Optimize service usage

Impact analysis. Change notification. Version management. Socialize health and performance information

### User Roles in WSRR



IT Leaders (CIOs)

**Provide:** Expertise on Governance

strategy and function

**Receive:** Flexible IT, new value through reuse of services and satisfied customers



BPM Experts
(Business Architects & Analysts)

**Provide:** Domain and process expertise in the form of business classifications and service dependencies.

**Receive:** Visibility into existing services and processes.



IT Experts
(IT Architects, Developers)

**Provide:** Service details/content and technical expertise in implementing Governance solutions.

**Receive:** Business and IT alignment and visibility into existing services and associated policies.



Service Users (Customers, Employees & Partners)

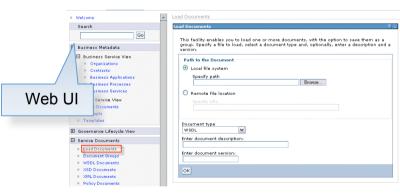
Provide: ---

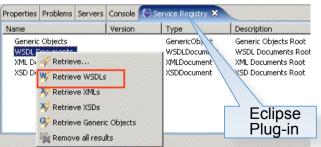
**Receive:** Up-to-date service information.

### Goal: Eliminate Redundancy

#### You want to ...

 Make sure that people are aware of all existing and planned services so that they don't create redundant services





- WSRR makes it easy to publish and discover Services
  - Multiple methods to publish and associate metadata
  - Discovery and validation of dependencies
  - Standards based customizable ontologies to classify services aligned with business domain for easy service discovery
  - Powerful query mechanism to search for best-fit services
  - Service Discovery to discover deployed services on .NET and WAS servers
  - Support for CICS and MQ based services
  - Integration points for easy publish and discovery from other products in the environment





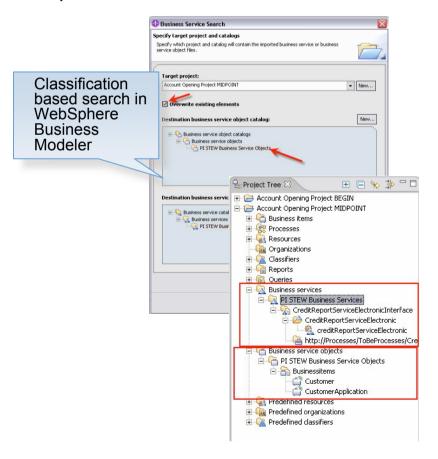
### IBM WebSphere Service Registry and Repository Makes It Easy...... To Publish using Web UI



### Goal: Business and IT Alignment

#### You want to ...

 Ensure Business and IT alignment and promote reuse at the business level



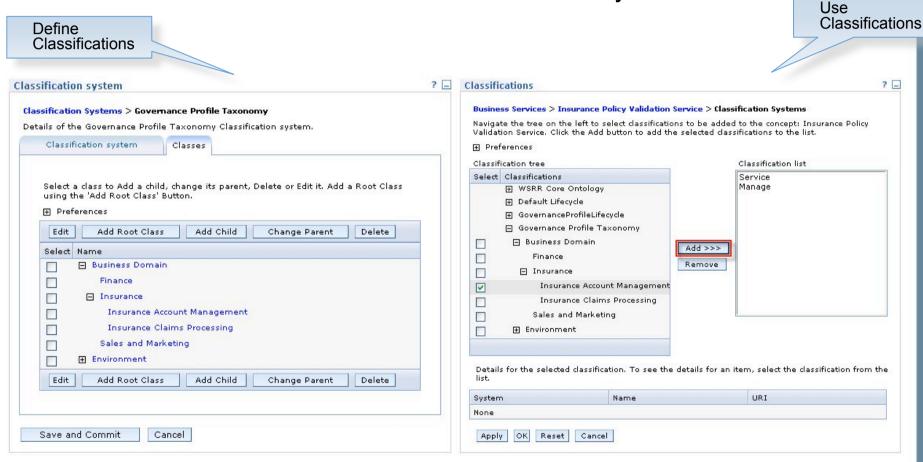
- WSRR makes it easy for the business analysts to publish and discover Services
  - Support for standards based classification systems
  - User-friendly Web UI to define and use classification systems
  - Integration with WebSphere Business Modeler





IBM WebSphere Service Registry and Repository Makes It Easy......

To Define and Use Classification Systems



### Goal: Change Management

#### You want to ...

Manage and communicate changes to services and services related entities so that impact can identified in time and the consumers can be notified in advance.

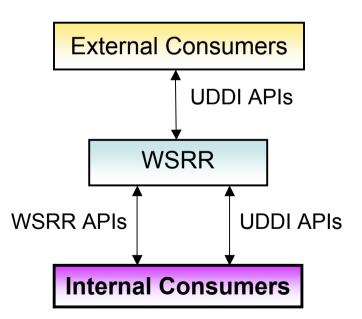
#### XSD Documents > Businessitems.xsd Details of the Businessitems.xsd XML schema definition document Details Content Impact Analysis Governance Impact Analysis for: Businessitems.xs Specify dependency relation PremiumCreditReportSe.. ☐ Include entities this en WSDL Document CreditReportServiceElec... WSDI Document Dependency depth: BasicCreditReportServic. WSDI Documen Derived entity reference WSDL or XSD documer Graphical visualization of impact Entity relationship to pr WSDI service to WSDI WSDL binding to SOAP **Display Options** Display results as a graph Display results as a table

- WSRR makes it easy to manage and communicate changes to the service metadata
  - Discovery and validation of dependencies
  - **User-defined relationships**
  - **Graphical view**
  - Impact analysis
  - **Subscription and Notification**

### Goal: Expose Services

#### You want to ...

 Enable customers/partners to discover your services using standards (e.g. UDDI) and make sure that the service information is up-to-date



- WSRR make it easy to publish services
  - Multiple methods to publish services and associate meta-data
  - Discovery and validation of dependencies
  - Standards based customizable ontologies to classify services aligned with business domain for easy service discovery
  - Service Discovery to discover deployed services on .NET and WAS servers
- WSRR enables the service consumers to discover services using standards
  - Support for UDDI APIs

### Goal: IT Flexibility

#### You want to ...

 Enhance IT flexibility so that you can avoid missed business opportunities and higher costs due to redevelopment, re-testing and re-deployment of mediation flows every time the runtime policy changes

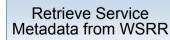
















Message

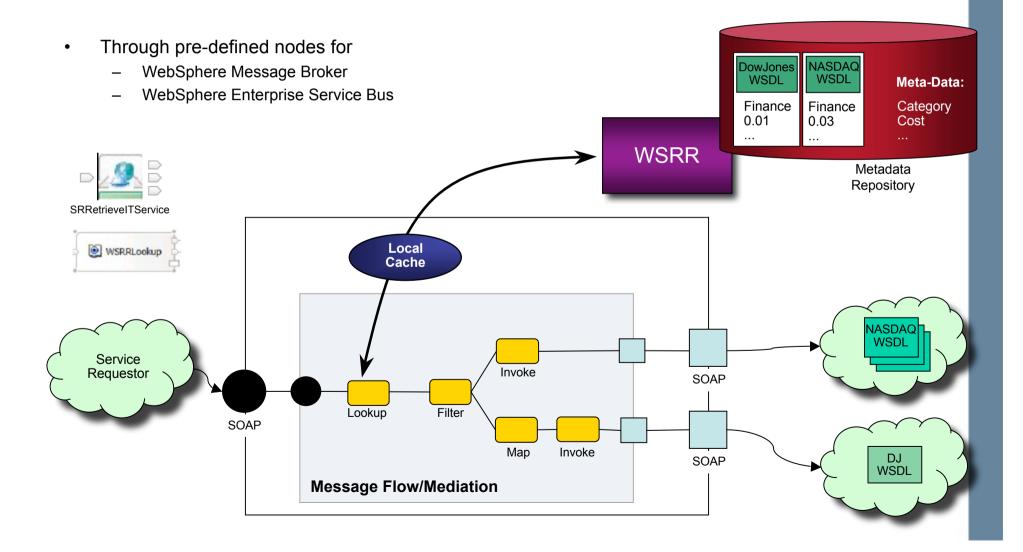






- WSRR makes it easy for the runtime products to get the service metadata
  - Pre-built integration points allow applications to query WSRR for service end-points as well as the associated metadata, during runtime
  - Standards based API support to access service content
    - Java APIs
    - SOAP APIs
    - UDDI V3 APIs
    - REST interfaces

### IBM WebSphere Service Registry and Repository Makes It Easy...... To Enhance Connectivity

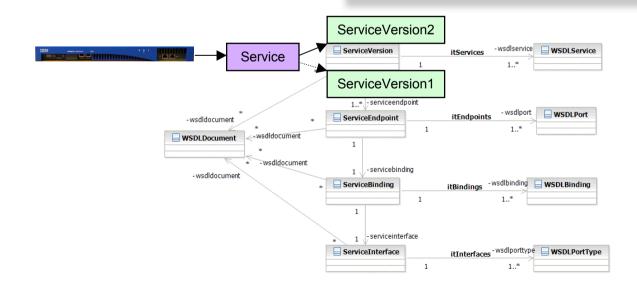


### Goal: Version Management

#### You want to ...

 Move the customers to the latest version of the service as seamlessly as possible but can't because of static binding between the service consumer and the service provider

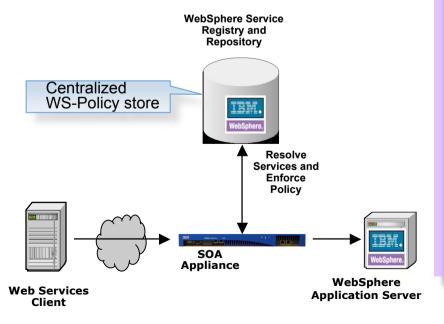
- WSRR makes it easy to do Service Versioning
  - Well-defined metadata model that supports versioning
  - Integration with DataPower
  - Support for dynamic relationships



### Goal: Policy Management

#### You want to ...

 Be able to reuse, change and govern the IT policies so that you can increase the visibility of existing policies and their impact, avoid conflicts, control policies and have flexible IT.

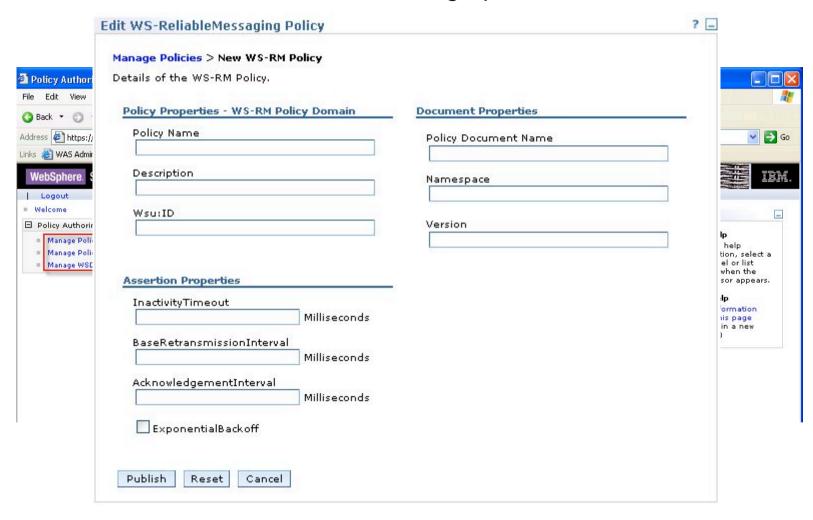


- WSRR makes it easy to do policy management
  - Policies are treated as first-class citizen
  - Support for standards WS-Policy and WS-PolicyAttachment
  - Standards based API support to access service content
    - Java APIs
    - SOAP APIs
    - UDDI V3 APIs
    - REST interfaces
  - Integration with DataPower





### IBM WebSphere Service Registry and Repository Makes It Easy...... To Create and Manage policies

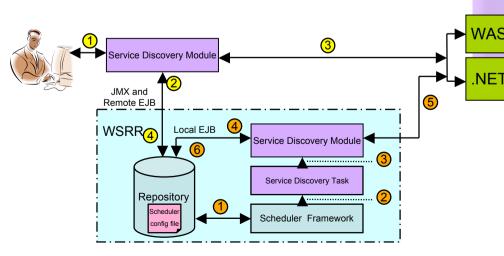


### Goal: Service Reconciliation

#### You want to ...

 Discover rouge services, i.e. services that have not been deployed in a controlled manner and therefore can pose business risk, and make sure that the registered services are in-sync with the deployed services.

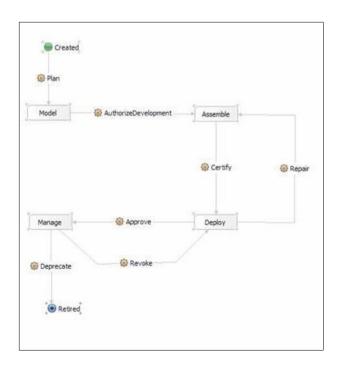
- WSRR make it easy to discover and reconcile deployed services
  - Service Discovery to discover deployed services on .NET and WAS servers
- WSRR can easily integrate with service monitoring products
  - Integration with ITCAM for SOA



### Goal: Service Lifecycle Management

#### You want to ...

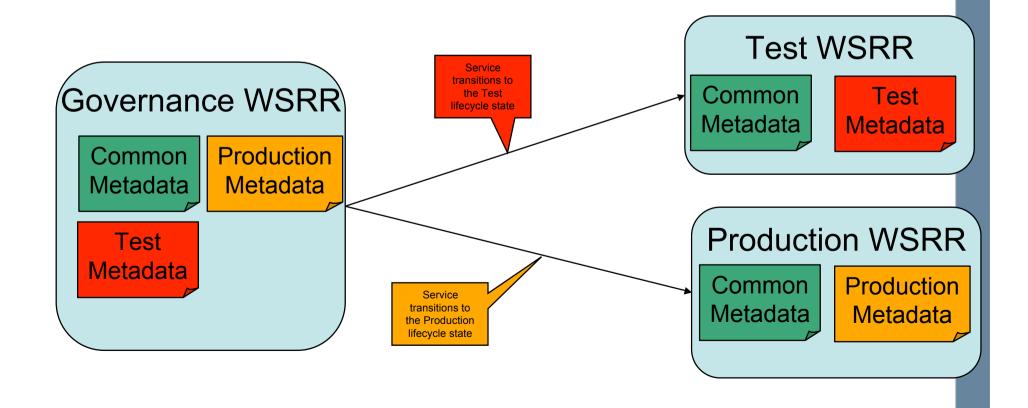
 Reduce business risk and increase reuse by improving the quality/consistency of the service metadata.



- WSRR make it easy to control service metadata
  - OWL based Metadata Modeling
  - End-to-end service life cycle management
  - Controlled lifecycle state transitions
    - Customizable validators
    - Subscriber notifications
  - Support for service promotion from one environment to another (e.g. staging to production)
  - Role based access to services for sharing and reuse
    - Easy to use access-control editor
  - Governance profile that includes templates, lifecycles, generic validator, classifications and roles to help you get started quickly

### IBM WebSphere Service Registry and Repository Makes It Easy...... to manager multiple environment

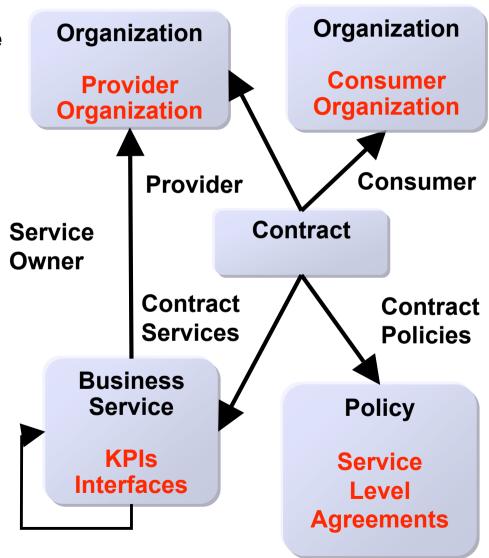
- Helps clients extend the governance to multiple environment topology
- Promotion allows metadata relating to multiple deployment environments to be managed in a central WSRR instance while allowing the appropriate subset of the information to be copied to an environment-specific WSRR instance in response to lifecycle transitions



IBM WebSphere Service Registry and Repository Makes It Easy......

To get started quickly

- Out-of-the-box Governance Profile to get you started quickly
  - Templates
  - Associated lifecycles
  - Governance policies
  - (generic) Validator for governance policies
  - Classification systems
  - Roles and perspectives
  - Access Control



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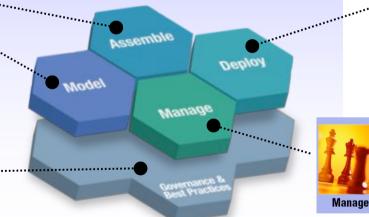




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German



ありがとうございました

Korean

감사합니다

Japanese