

**Executive overview for IBM Redbook:
*Implementing Technology to Support SOA
Governance and Management, SG24-7538***



Redbooks

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Redbook abstract

Implementing SOA governance and management requires the consideration of three pillars: people, process, and technology. This IBM Redbooks publication addresses the third pillar, technology, demonstrating how to build advanced SOA solutions.

The first part of this book introduces SOA governance and management and defines the SOA governance lifecycle of plan, define, enable, and measure. The Rational Unified Process for SOA governance and management is covered in detail. This part also addresses the IBM SOA Foundation, SOA metadata, and the service lifecycle.

The second part of the book uses a fictional telecommunications company business scenario to illustrate the use of technology in implementing SOA solutions with governance and management. This includes a detailed hands-on introduction to Rational Asset Manager, highlighting its governance capabilities. An additional chapter discusses the use of WebSphere® Business Services Fabric as a process runtime and WebSphere Service Registry and Repository as a runtime repository for service discovery.

We discuss how a layered mediation architecture supports SOA governance and how DataXtend Semantic Integrator can be used to implement service components for data mediation. Finally we discuss additional solutions for SOA management.

Target audience for this Redbook

This book includes topics for a foundation understanding of the concepts, challenges, principles and the value proposition of SOA governance and management. More particularly, the book focuses on:

- which technologies and their roles in the support SOA and SOA governance
- how those technologies support SOA and SOA governance activities
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This book is for Technology professionals, Program Managers, Business Analysts, Business Sponsors including C-level executives either directly responsible for or wanting to understand more about:

- the role of governance and management in realizing benefits of SOA
- technologies that support of SOA and SOA governance and management

Defining SOA governance

SOA governance addresses how an organization's IT governance decision rights, policies, processes and measures need to be modified and augmented for the successful adoption of SOA, thus forming an effective SOA governance model. SOA governance provides an essential framework for achieving functional and non functional (security,

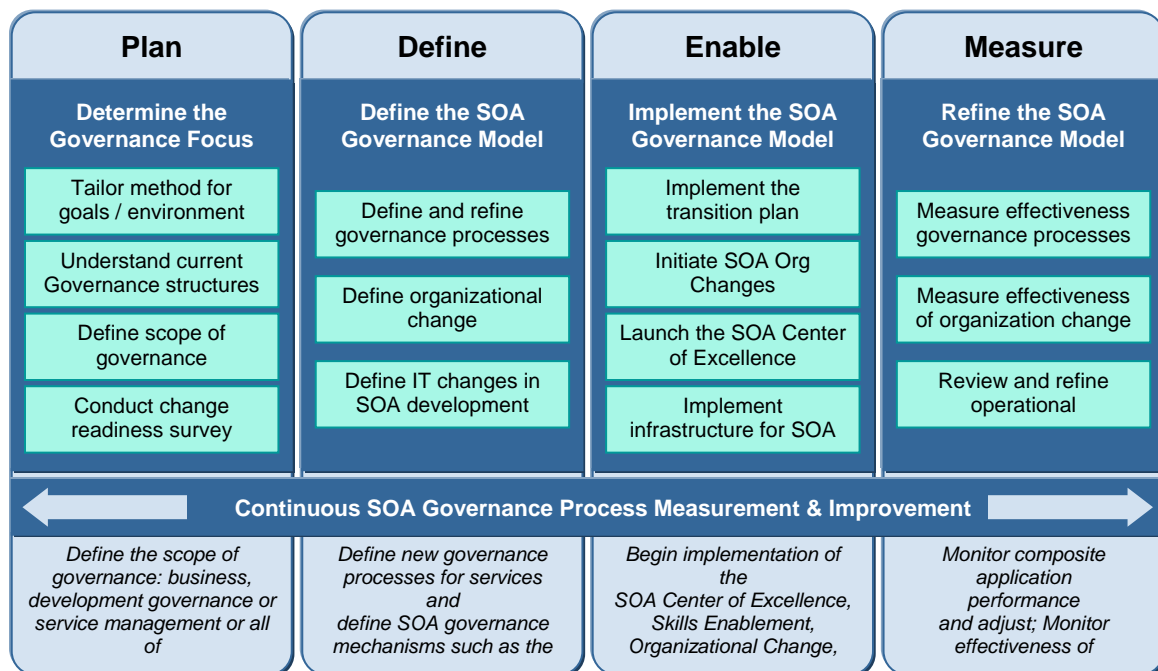
reliability and performance) interoperability of services across line of business boundaries.

Defining SOA management

SOA management includes solutions and software for the effective management of production SOA services. SOA composite applications traverse multiple systems, platforms (Web servers, middleware and databases) and other resource components of IT infrastructure. SOA management provides the capabilities required to efficiently manage SOA-based applications. The ability to monitor, diagnose and control end-to-end implementations of SOA composite based services and applications is a key component to deriving value from SOA implementations.

IBM governance and management method

The IBM SOA Governance and Management Method (SGMM), is an approach for performing SOA governance. SGMM is supports the four phases of the SOA governance lifecycle of Plan, Define, Enable, and Measure.

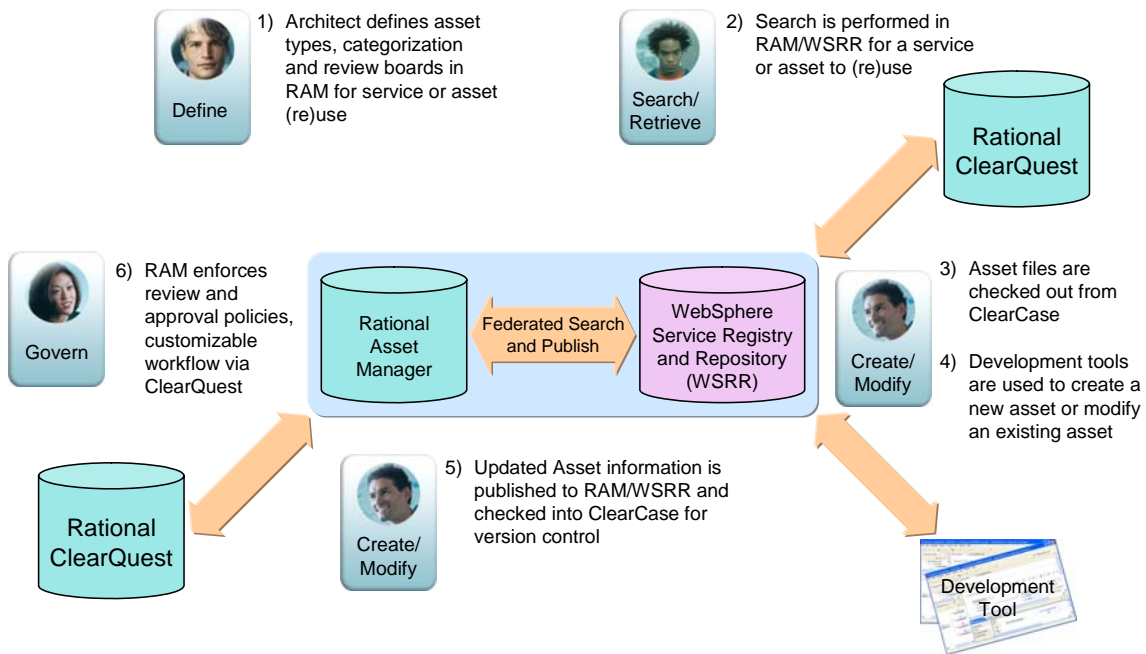


Service lifecycle management using Rational Application Developer

Rational Asset Manager is the tool used in ensuring the governance of SOA activities during the development part of the SOA lifecycle and controlling of assets to service registries and repositories. This is achieved through:

- Providing a common repository for access to assets that will include services, documents for processes and designs, as well as other artifacts.
- Integration to Rational ClearQuest for the provision of defects and changes against assets allowing traceability and control of the assets.

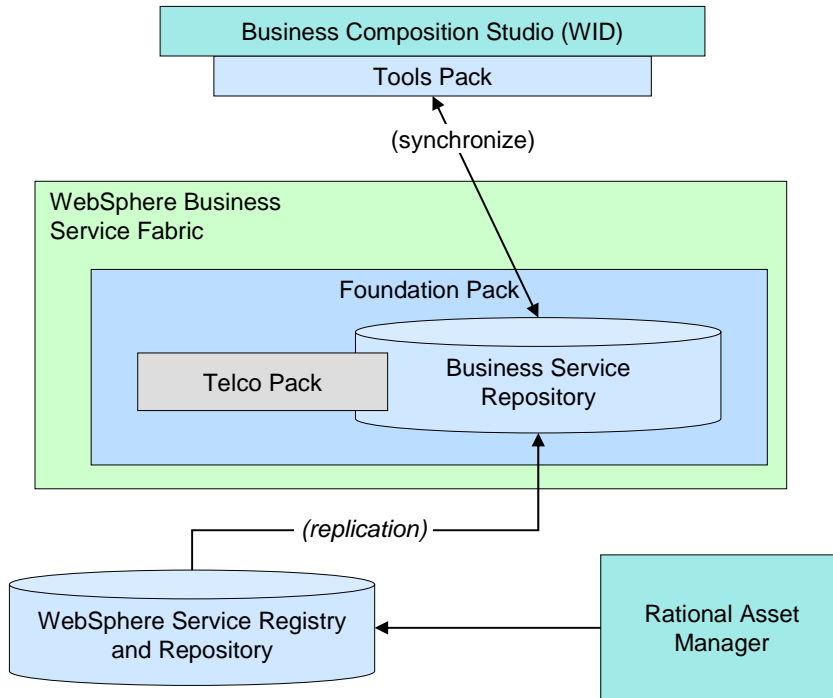
- Provision of a review process to ensure that assets are released for use only after key stakeholders have identified that they are of sufficient quality, satisfy requirements and meet standards prior to public use in the organization.
- Control of access to assets via access privileges and based on the role of the user accessing the resource.
- Integration to WebSphere Services Registry and Repository to ensure the deployment of services is performed in a controlled manner based on the roles of the user.



Dynamic assembly and runtime with WebSphere Business Services Fabric and WebSphere Service Registry and Repository

WebSphere Business Services Fabric can act as the process execution platform, and WebSphere Service Registry and Repository can act as the repository for all corporate services which will be replicated into the WebSphere Business Services Fabric Business Service repository.

WebSphere Integration Developer can be used with the Business Composition Studio to submit changes to WebSphere Business Services Fabric that will impact runtime execution.



In our scenario, we follow these steps:

- Rational Asset Manager publishes some files for the Workforce Management service (WSDL and XSD) into WebSphere Service Registry and Repository.
- We create a project in WebSphere Business Services Fabric that connects to WebSphere Service Registry and Repository in order to retrieve all its services
- From WebSphere Integration Developer, synchronization occurs with WebSphere Business Services Fabric in order to retrieve the up-to-date WebSphere Business Services Fabric project image.
- We add some composite service, applications and applications suites to the project.
- Finally we submit these changes into WebSphere Business Services Fabric, and deploy the processes to run.

Data mediation with Progress DataXtend Semantic Integrator

Progress DataXtend Semantic Integrator is a solution for solving the challenges of the business integrity of data. The product focuses on the use of an common model for data for use at the enterprise level and the ability to map between a data source and data target. A number of industry or enterprise models and other sources are supported through an import process provided in Progress DataXtend Semantic Integrator.

In this Redbook we discuss how a layered mediation architecture supports SOA governance and how DataXtend Semantic Integrator can be used to implement service components for data mediation.