



Governance Registry

The WSO2 Governance Registry is an open source SOA governance tool for securely managing and monitoring SOA resources, including people, processes and policies.

Highlights

The Complete SOA Platform

Governing Services

WSO2 Governance Registry in Action

Product Architecture

User-Friendly Interfaces

Technical Features

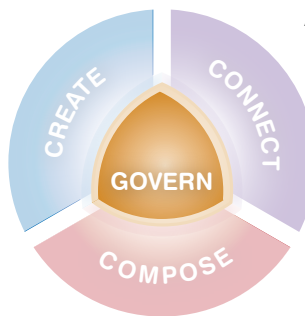
Better SOA Governance

WSO2, the open source SOA company, provides training, consulting and support for WSO2 Governance Registry and all the products in the WSO2 SOA platform. For more information, visit <http://wso2.com>.

The Complete SOA Platform

The WSO2 SOA platform addresses the core functions of SOA: service creation, connection, composition and governance. It is the only suite of SOA middleware products available today that is optimized for Web services, and is completely interoperable with your existing infrastructure. All WSO2 products are openly developed and released under the Apache open source license.

Governing Services with WSO2



As SOA adoption grows in an enterprise, SOA resources such as processes and policies must be securely managed. WSO2 Governance Registry addresses both design-time and runtime governance scenarios, to ensure compliance with corporate standards. It allows enterprise architects and developers to always keep track of the services being created and used within an SOA.

The SOA resource repository built into WSO2 Governance Registry is a powerful tool for defining and managing service lifecycles. System administrators can associate lifecycles to certain types of resources, for improved management and monitoring of users and services within an SOA.

Successful SOA Governance is however more than just security and resource management; enterprise SOA adoption grows if more users can participate and use the services created for them. WSO2 Governance Registry uses a community model, to allow service consumers to comment, rate and tag available services – helping IT obtain the feedback they need to support business requirements more effectively.

WSO2 Governance Registry in Action

Keep track of SOA resources with metadata

Services and many types of resources associated with an SOA need to be cataloged so they are easy to find and use. WSO2 Governance Registry makes it easy to attach descriptive metadata to SOA resources so they can be indexed and managed.

Manage the lifecycle of services and other resources

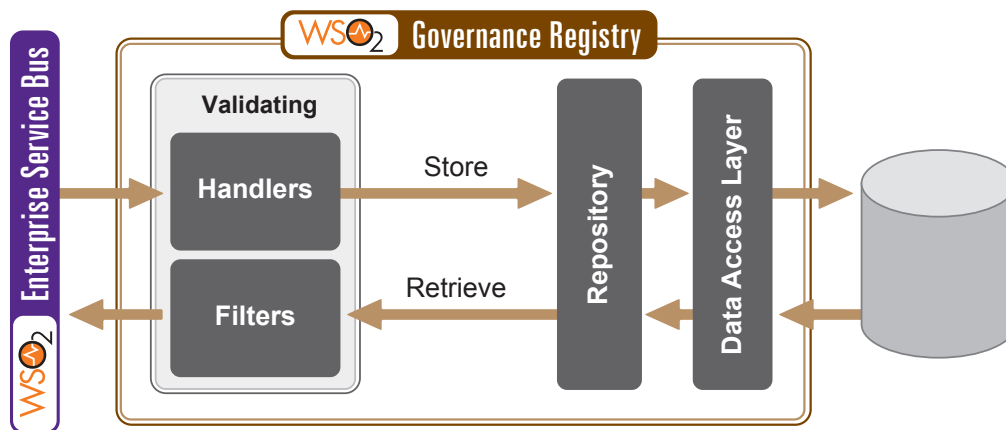
The SOA resource repository within WSO2 Governance Registry allows users to associate lifecycles with specific services. Groups of similar services or resources can be promoted or demoted to different phases within the lifecycle in batches.

Control access to resources with user permissions

WSO2 Governance Registry provides a customizable enterprise security model. Organizations can define what different levels of access, users and resources have and easily set permissions and monitor usage.

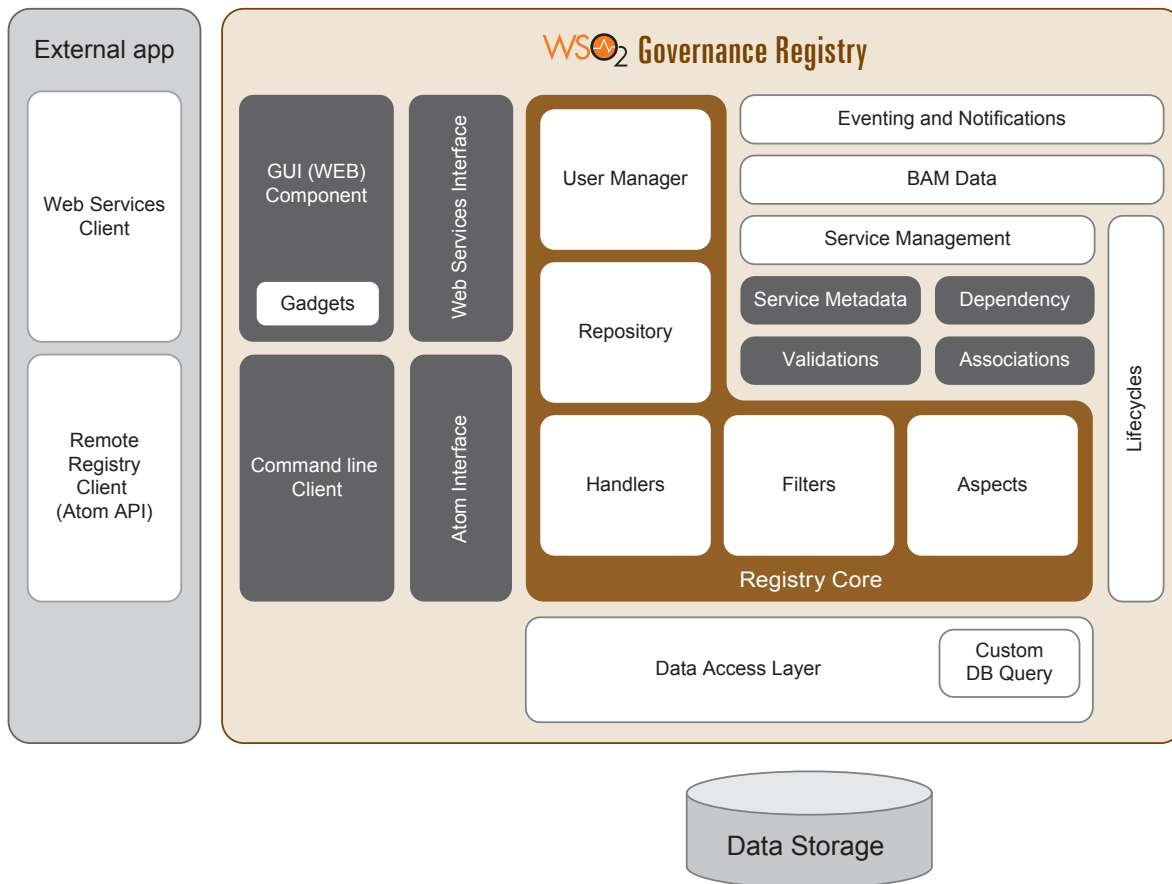
Complete visibility into SOAs using Monitoring

With configurable views provided in the WSO2 Governance Registry dashboard, users can see real-time information on the health and usage of their SOAs. WSO2 Governance Registry users can subscribe for events and receive notifications as well. Events will be generated on many design time and runtime governance activities and the users will be alerted based on the subscriptions and profile configuration. Event triggering activities include SLA violations and metadata changes.



Product Architecture

WSO2 Governance Registry is available as a standalone product. It can be deployed as a Java EE WAR on top of popular application servers as well. By default, the content is stored in a built-in H2 database. The functionality of WSO2 Governance Registry can be extended using its handler and filter concepts. Registry operations are accessible via the Remote Registry API as well.



WSO2 Governance Registry enables the storage of many common media types and service metadata formats in a structured repository, including:

- XML Schema
- Web Services Description Language (WSDL)
- Web Services Policy
- Web Services Addressing (Endpoint References)
- XSLT, Xquery

Additionally, arbitrary data such as MS Office documents, images, media files and text formats can also be stored and cataloged.

The User-Friendly WSO2 Governance Registry Graphical User Interface

The image displays three overlapping screenshots of the WSO2 Governance Registry Management Console, illustrating its user-friendly interface.

Top Screenshot: Browse View

- Header:** WSO2 Governance Registry, Management Console, Signed-in as: admin@10.100.1.108:9443 | Sign-out | Docs | About
- Left Navigation Panel:** Home, Dashboard, Main Dashboard, Configure (User Management, Key Stores, Logging), Manage (Shutdown/Restart, Server Monitoring, Monitored Servers), Metadata (Add: Service, Policy, WSDL, Schema; List: Services, Policies, WSDLs, Schemas).
- Breadcrumb:** Home > Resources > Browse
- Content Area:** Root /, root /, Created: By carbon 21 h ago, Last Updated: By carbon 14 Jul 12:07:37, Media Type: Unknown, Permalink: Create Checkpoint, Versions: View versions, Description: Edit.
- Right Panel:** Search, Rating (My Rating: ★★★★★, Rating: ★★★★★ (0.0)), Comments, Tags.

Middle Screenshot: Lifecycle Source View

- Header:** WSO2 Governance Registry, Management Console, Signed-in as: admin@10.100.1.108:9443 | Sign-out | Docs | About
- Left Navigation Panel:** Same as the top screenshot.
- Breadcrumb:** Home > Govern > Lifecycles > Lifecycle Source
- Content Area:** Lifecycle Source, Lifecycle, <aspect name="ProjectChecklistDLCM" class="org.wso2.carbon.governance.samples.lsm.DistributedLSM"> <!-- Checklist can either be provided as a resource(type=resource) or as xml content(type=literal, default) as provided below. --> <!-- <configuration type="resource"/>workspace/checklist/</configuration> --> <!-- OR --> <configuration type="literal"> </configuration> </aspect>

Bottom Screenshot: Dashboard View

- Header:** WSO2 Governance Registry, Management Console, Signed-in as: admin@10.100.1.108:9443 | Sign-out | Docs | About
- Left Navigation Panel:** Same as the top screenshot.
- Breadcrumb:** Home > Dashboard > Main Dashboard
- Content Area:** Dashboard, Add Gadgets, Add New Tab, Remove Active Tab, Home, Security, Avg Processing Time/Trans (ms), Min Max Average Response Times, Messages Received In Last Minute, Calls for the last 24hrs.
- Visuals:** Gauge chart for Avg Processing Time (ms), Line chart for Min Max Average Response Times, Line chart for Messages Received In Last Minute, Line chart for Calls for the last 24hrs.

WSO2 Governance Registry Technical Features

Features	Description
Built on WSO2 Carbon	<ul style="list-style-type: none">• Built on the OSGi-based WSO2 Carbon architecture. This adds the ability to add and remove features based on user requirements
Resource Repository	<ul style="list-style-type: none">• Storing and managing arbitrary resources and collections• Tagging, commenting and rating• Resource / collection versioning and rollback• Advanced search capabilities - tags, users, etc.• Built-in media type support for common types (WSDL, XSD)• Atom Publishing Protocol (APP) support for reading/writing the data store remotely• Import/export resources and collections
SOA Governance	<ul style="list-style-type: none">• Validation policies. e.g. WSDL Validation, WS-I Validation and Schema Validation• Supports remote links, symbolic links for resources• Advanced Lifecycle management with checklists.• Dependency management - maintain relationships between dependent resources for impact analysis• Attach remote WSO2 Governance Registry instances, providing one interface for many WSO2 Governance Registry instances
Service View	<ul style="list-style-type: none">• Advanced service governance through, discovery, impact analysis, versioning and automatically extraction of service meta data• Comprehensive service Metadata capturing
Extensibility	<ul style="list-style-type: none">• Support for processing custom URL patterns via pluggable URL handlers• Support for custom query languages via pluggable query processors• Java client for remote access via APP• Pluggable media type handlers for handling custom media types
Security	<ul style="list-style-type: none">• Managing users and roles• Authentication and authorization on all resources and actions
Monitoring	<ul style="list-style-type: none">• Activity log and monitoring with filtering support for the activity logs• Dashboard support with gadgets with design-time and run-time governance information
Eventing	<ul style="list-style-type: none">• Subscribe to resources, collections, comments, tags. with any standard feed reader (Bloglines, Google Reader, etc)• Eventing and notifications
Administration UI	<ul style="list-style-type: none">• Intuitive User Interface with an Ajax-based Web 2.0 interface

Better SOA Governance

Professional Open Source

WSO2 offers development and production support, consulting and training packages to suit any customer scenario.

Easy Integration with Existing Systems with Configurable API

WSO2 Governance Registry provides a highly configurable and lightweight client API, to enable easy integration of services that do not already use HTTP to obtain metadata. Once services use this API, the behavior can be easily monitored and controlled with no development time changes.

Increased Internal Adoption of SOA with Stakeholder Participation

WSO2 Governance Registry builds bridges between stakeholders by increasing participation at different levels within an organization. Business domain owners can use the system to define their domains using the Web, while the technical team can define and manage the technical content throughout the resource lifecycle.

Community Models Improves Service Functions and Usage

Building an internal community of service users is critical to making improvements in an SOA. By using community-based models such as tags, comments and ratings, WSO2 Governance Registry helps improve communications within the development team as well as across the enterprise.

Simple Business-Friendly Repository

WSO2 Governance Registry lets users catalog any kind of structured information into a searchable, indexable form. Similar to a structured WIKI, it lets users manage SOA metadata in a simple and easy-to-use system.

Extensible SOA Governance

The open interfaces and model of WSO2 Governance Registry make it simple to link to workflow systems or other applications in your SOA, providing easy extensions into existing management processes.

Single Point of Management for SOA Resources

With a customizable dashboard, WSO2 Governance Registry provides a federated view into the usage of all SOA resources. In addition, defining user permissions and resource access from within the console ensures compliance with enterprise security models.

Interoperable and Flexible

WSO2 Governance Registry has been successfully tested to interoperate with major Web services stacks.