User Based Orchestration Service (UBOS)

- **Empower Users:** UBOS allows users to create or modify service orchestrations at runtime, reducing dependencies on software development resources.
- **Develop Orchestrations Faster and Cheaper:** Dynamic access to web-service orchestration capabilities allows customers to meet mission needs more quickly and at a lower cost.

WS-BPEL and BPMN Open Standards Interfaces

Dynamic Web Service Orchestration construction

Product Independent Business Process Engine

Web 2.0 and Portable JSR-168 Compliant User Interfaces

What is UBOS?

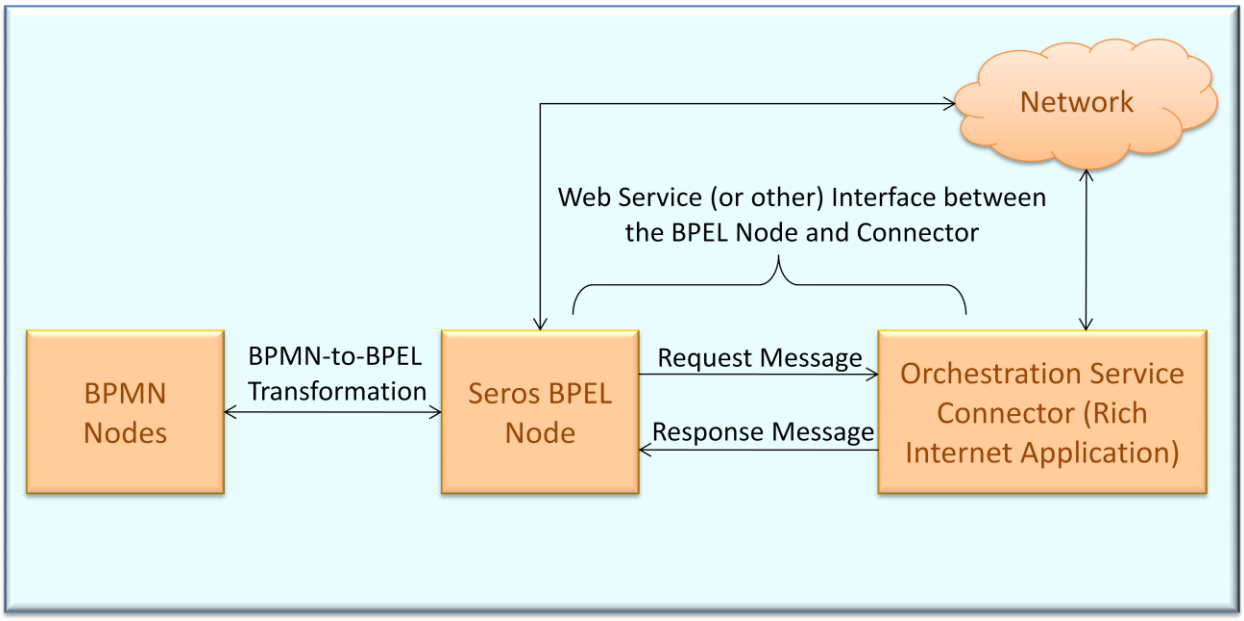
The Seros User-Based Orchestration Service (UBOS) enables users to modify business process orchestrations through an easy to use user interface without relying on the use of software development resources. Orchestrations can be easily created and modified to achieve business processes. Our customers benefit by being able to dynamically modify orchestrations to meet their mission needs at a lower cost and quicker time to market.

During the typical process of creating Web Service Orchestrations, organizations begin by representing a business process in an open standards based capability such as Business Process Modeling Notation (BPMN) and Web service – Business Process Execution Language (WS-BPEL). After the process model has been created and reviewed, organizations face a dilemma, they need to determine how they will represent variability in the model. The traditional approach is to make some assumptions about the nature of the variability and then statically encode this information into the WS-BPEL representation. The drawback to this approach is that the representation and the rules for action are statically encoded, and to change them, a developer resource is required, adding time and cost to the process.

This is where the Seros User-Based Orchestration Service (UBOS) tool brings value to the organization. UBOS does not require the variability to be encoded as static information in the executable business model. Instead it allows the user to input information and modify the model at runtime, through what Seros calls an Orchestration Service Connector (OSC). An OSC can take many forms, but in many cases, it will take the form of a rich internet application using Web 2.0 technologies or it could exploit an existing Seros JSR-168 portlet. The OSC makes the business process execution much more dynamic and tailorable by end-users. The following image illustrates the high level design of the UBOS product:

User Based Orchestration Service (UBOS)

UBOS Architecture



BPMN Node: Node that represents a parameterized user capability such as a search for a data source, endpoint, application, etc.

Seros BPEL Node: Node that accesses a library of Seros defined functions that support dynamic web service connections such as messaging transformation, security handling, etc.

Orchestration Service Connector: A Seros provided connector that is parameterized via a user interface and supports various SOA capabilities such as a Seros Information Distribution Service (IDS) Connector, Transformation Connector, etc.

User Based Orchestration Service (UBOS)

Key Capabilities and Features

Dynamic Web Service Interfaces

The Seros User-Based Orchestration Service (UBOS) provides end-users (i.e., non-developers) with dynamic access to web-service orchestration capabilities. Specifically, it allows users to enter parameters via a user interface that allows web service bindings to change dynamically as well as providing greater flexibility in dynamically interfacing web services.

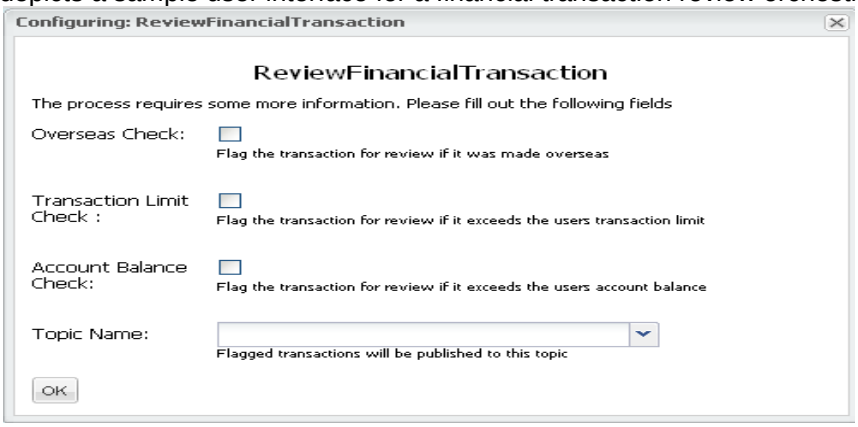
User Driven Service Orchestrations

The benefit of the Seros UBOS is that it allows the user to modify orchestrations at runtime. This is different than the traditional approach where assumptions made about orchestrations at development time are hard coded into the orchestration and then delivered to the user, eliminating flexibility and requiring software developer resources to introduce change. UBOS's user driven approach reduces IT costs and reduces mission delays due to additional development.

Lightweight Web Based User Interfaces

UBOS user interfaces are deployed inside the Seros SOA Dashboard Service (SDS) portal. The SDS Portal allows for users to create orchestrations in a lightweight web based environment. SDS can connect to any accessible network based resource that exposes functionality via WS-Management and render that information in an easy to understand graphical interface.

The following image depicts a sample user interface for a financial transaction review orchestration:



UBOS provides several different user interfaces that allow users to specify attributes, such as duration and topics. Additionally, UBOS has a display that allows a user to forward management data directly to an orchestration while monitoring their system. Finally, the UBOS Inbox allows users to subscribe and receive messages.

User Based Orchestration Service (UBOS)

Technical Specifications

Open Standards	WS-BPEL BPMN
Supported BPEL Engines	*BPEL Messaging Connectors Can Be Developed For Any WS-BPEL Compliant Engine. Existing Connectors Include:* ActiveVOS™ Apache™ ODE
Supported Server Operating System	Red Hat® Enterprise Linux®

Contact Us

For more information about the User Based Orchestration Service, or any of the other Seros products, please visit us at www.seros.com, or call 719-599-8150 ext. 168 to speak with a Seros representative.