

# ORACLE BPEL PROCESS MANAGER

## KEY FEATURES AND BENEFITS

THE INDUSTRY'S MOST  
ADVANCED BPEL ENGINE

### FEATURES INCLUDE:

#### BPEL DESIGNER

- Native BPEL support
- Drag-and-drop process modeler
- UDDI and WSIL Service Browser
- Transformation modeler with auto-mapping features
- Integrated adapter and human workflow wizards
- Sensors to track activities and variables

#### BPEL RUNTIME

- Visual end-to-end monitoring with all SOA components
- Auditing
- In-flight administration
- Sync. And asynch. Messaging
- Automatic dehydration of state
- Advanced exception management
- Side-by-side versioning
- Large XML document support
- High performance
- Scalable

#### BUILT-IN INTEGRATION

- Email and JMS message services
- JCA 1.5 connectivity
- Adapters for packaged applications and legacy systems
- Database adapter
- XSLT transformation services
- Human workflow services
- Java embedding

*An increasing number of companies are looking at Web Services and Service-Oriented Architecture (SOA) as a blueprint and set of standards for addressing the integration requirements involved in building composite applications. BPEL (Business Process Execution Language) and Web services standards have solved this problem by addressing common application requirements in an open, portable and standard way. SOA enables business agility by maximizing existing resources while minimizing the cost of deploying new applications.*

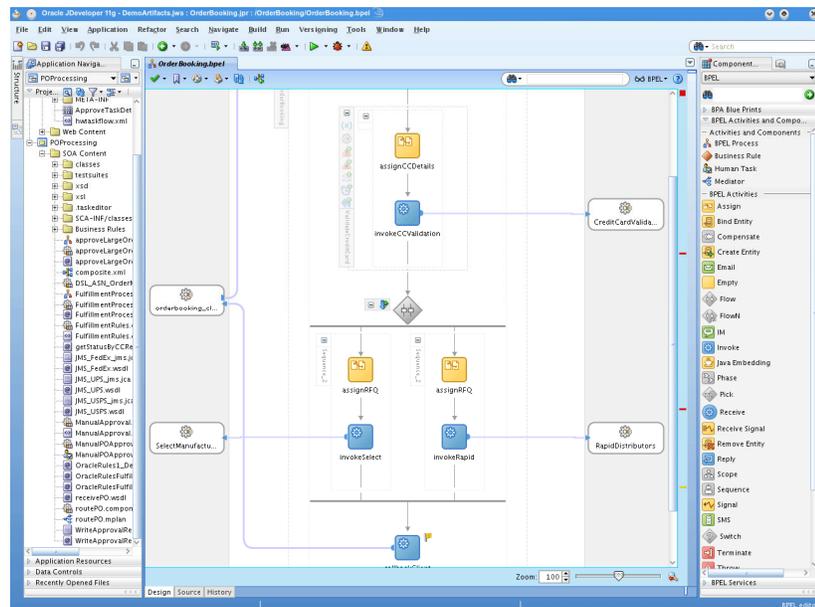


Figure 1: The BPEL process modeler in JDeveloper

## Product Overview

Oracle BPEL (Business Process Execution Language) Process Manager is a tool for designing and running business processes. This product provides a comprehensive, standards-based and easy to use solution for creating, deploying and managing cross-application business processes with both automated and human workflow steps – all in a service-oriented architecture. Oracle BPEL Process Manager is a powerful integration tool for the enterprise. Its ability to connect to external systems and process, mixed with its support for a variety of presentation technologies makes it an ideal tool for defining and implementing business process logic.

**HUMAN WORKFLOW**

- Task assignment and rule-based routing
- Multiple workflow patterns
- Identity services
- Out-of-the-box worklist application
- Notification services
- Actionable emails
- Microsoft Word/Excel integration

**KEY BENEFITS:**

- Maximize the power of an open standard
- Unified design environment for modeling complete integrated business processes
- Unparalleled visibility and administration
- Enables dramatic cost savings
- Integrate packaged applications, legacy systems, custom applications, and more
- Mature, scalable, and robust
- Based on standards
- Built for high throughput and large volumes of data
- Built-in integration with Human Workflow, Business Rules, BAM, and other SOA Suite components

Oracle BPEL Process Manager may be used for integrating applications and legacy systems, composing coarse grained services from finer grained services, building process centric composite applications, automating business processes, and workflow applications including sophisticated routing and escalation.

**Based on Standards**

Oracle BPEL Process manager is based natively on BPEL – there is no import or export of BPEL code. Moreover, its built-in support for standards such as XML, WSDL and Web Services, XSLT, XPATH, JMS, and JCA makes this an ideal solution for creating integrated business processes that are truly portable across platforms.

As well as supporting standard Web Service and JCA interfaces for interacting with your BPEL processes, an open Java API is also provided making it easy to call from existing applications and systems.

**Oracle BPEL Process Designer**

Oracle BPEL Process Designer provides a graphical and user-friendly way to build BPEL processes. Oracle BPEL Designer is unique in that it uses BPEL as its native format. This means that processes built with the Designer are 100-percent portable – no import or export of BPEL is required. Developers can also view and modify the BPEL source without decreasing the usefulness of the tool. BPEL Process Designer, like all of the SOA components, comes as a plug-in to the JDeveloper environment, providing a unified design time environment to the users that can be incorporated into any composite application. User friendly wizards to set up simple and complex human workflow steps, configure adapters, and define complex transformation maps are provided as standard services in the design time GUI.

**Oracle BPEL Process Manager Runtime**

The core BPEL component engine plugs into the SOA infrastructure and is the most mature, scalable, and robust implementation of a BPEL server available today. The Oracle BPEL Process Manager executes standard BPEL processes and provides a “dehydration” capability so that the state of long-running flows is automatically maintained in a database, enabling clustering for both fail-over and scalability.

As a component engine that is part of the SOA infrastructure, BPEL Process Manager integrates transparently with SOA component engines, such as Human Workflow, Business Rules, and Mediator.

**Human Workflow**

Everyone has business processes that involve people, such as for tasks, approvals, error management, or escalations. Oracle BPEL Process Manager has built-in integration with Human Workflow so you can seamlessly blend human interaction into your business processes. Tasks can be assigned to users or groups using complex routing rules which can change dynamically based on the data. Users can receive notifications via various channels like email, SMS, or instant message, and even respond directly on some of those channels without needing to log in to the system.

## Composite Applications

In the real world, there is no one single tool that meets all of the requirements of a Service Oriented Architecture. Oracle BPEL Process Manager could be used in isolation to implement your business processes, but the real power comes when it is used in conjunction with other SOA components.

The SOA Composite Editor is a graphical editor to assemble heterogeneous composite applications. You can easily add various components to your composite applications, wire them together, and deploy and test them as a single unit.

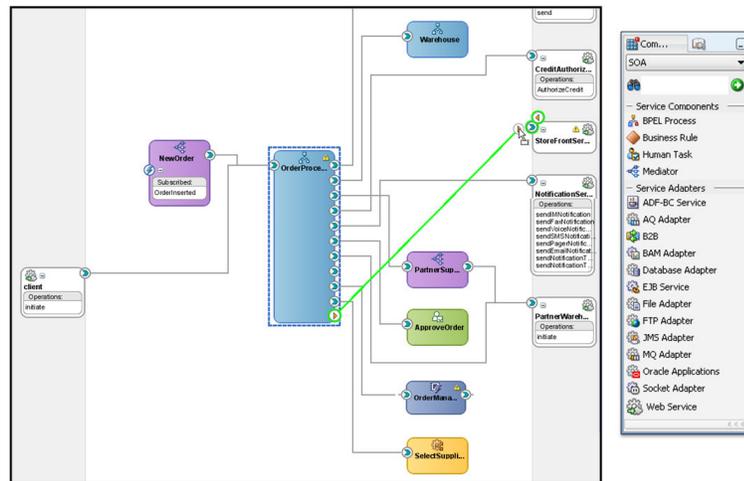


Figure 2: A composite application with BPEL and other SOA components wired together

## Business Activity Monitoring

You can instrument your BPEL processes using the Oracle BPEL Process Manager's sensor framework. Sensors can fire under specified conditions, sending any desired data to any endpoint that you choose. This makes it easy to monitor your processes when you have hundreds or thousands running in parallel.

Oracle Business Activity Monitoring (BAM) is integrated with Oracle BPEL Process Manager for easy data collection. As the BAM sensors will fire, their data can be rendered in rich real time dashboards for end-to-end monitoring of your business processes. Oracle BAM can also proactively raise alerts, or even feed back into your BPEL processes for corrective actions.

## Oracle Business Rules

Oracle BPEL Process Manager can consult the Oracle Business Rules engine for dynamic decision making at runtime. Business users can make changes to the business logic at any time, and these changes take effect immediately. This gives your business processes agility without having make changes your code, test, redeploy, and go through the usual IT lifecycle.

## Oracle Adapter Framework

Oracle Adapters can unlock the information assets that have evolved in most IT environments, but which are not natively SOA-enabled. Using Oracle Adapters, you

**ORACLE**  
**BPEL PROCESS MANAGER**

RELATED PRODUCTS

- Oracle SOA Suite
- Oracle BPM Suite
- Oracle Imaging and Process Management
- Oracle Enterprise Content Management
- Oracle Identity Management

can put a service interface in front of your packaged applications, legacy applications, custom applications, or other technologies and incorporate them into your business processes. Oracle BPEL Process Manager can be the glue that binds the various applications and systems in your environment together to implement your business processes.

**Governance and Security**

You can submit your BPEL artifacts to Oracle Repository directory from the JDeveloper development environment. Oracle Repository understands these artifacts and you lets you do all of your lifecycle management. For example, if you make a change to one of your services, which BPEL processes will that affect?

You can manage your security policies using Oracle SOA Suite's policy management or Oracle Web Services Manager (OWSM). If you want to password protect your BPEL processes, or have one of your BPEL processes communicate with a service using encryption, your administrators can manage that independently of your BPEL processes. Your developers only need to focus on building BPEL processes, and not extraneous IT concerns.

**For More Information**

To learn more about Oracle BPEL Process Manager, visit:

<http://otn.oracle.com/bpel>



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