



IBM Software Group

IBM Business Process Management Suite V6.1.2

Business Process Management (BPM) overview



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This presentation provides an introduction to the IBM Business Process Management Suite.

Agenda

- Introduce Business Process Management (BPM)
- Introduce IBM BPM products in SOA life cycle
- BPM business and IT roles
- Highlight some of the new or enhanced functions in BPM V6.1.2 with focus on integration between BPM products



This presentation introduces business process management as handled by the IBM BPM Suite of products, and how those products interact within the SOA life cycle. Then it discusses business and IT roles and highlights some new and enhanced functionality in version 6.1.2 of these products.

Section

Business Process Management overview and BPM Product Suite

These symbols for used for new/enhanced integration functions:

★ = New integration functions in BPM V6.1.2

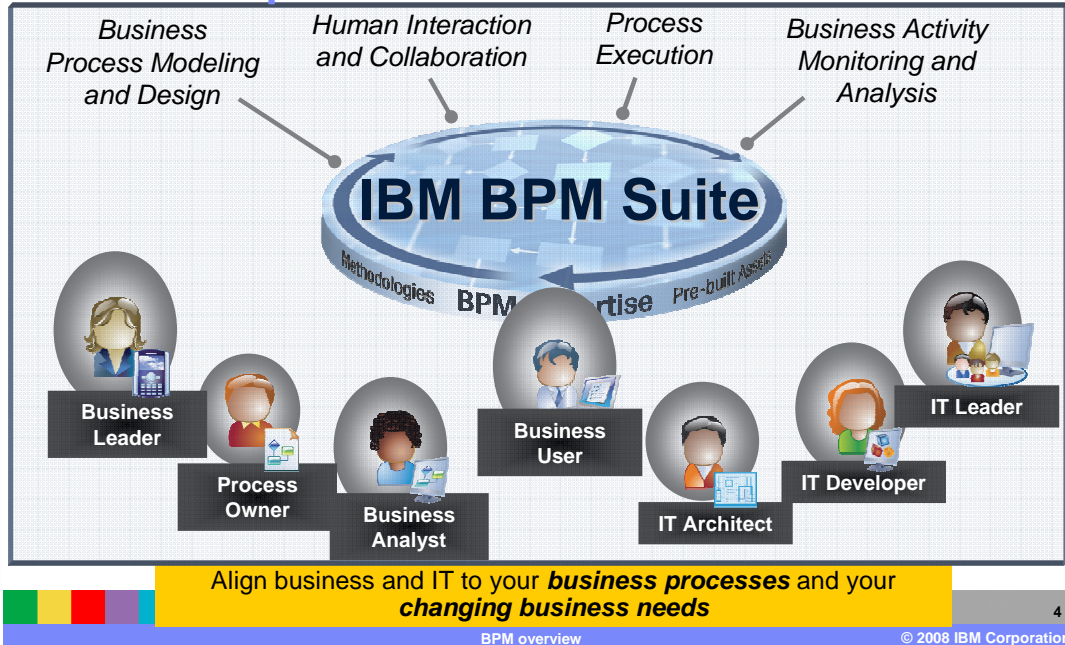
★ = Enhanced integration functions in BPM V6.1.2



This section provides an overview of business process management and the products included in the IBM BPM Suite.

There are several product integration points that are new or enhanced and are clearly marked to emphasize one of the main integration themes of this suite of products.

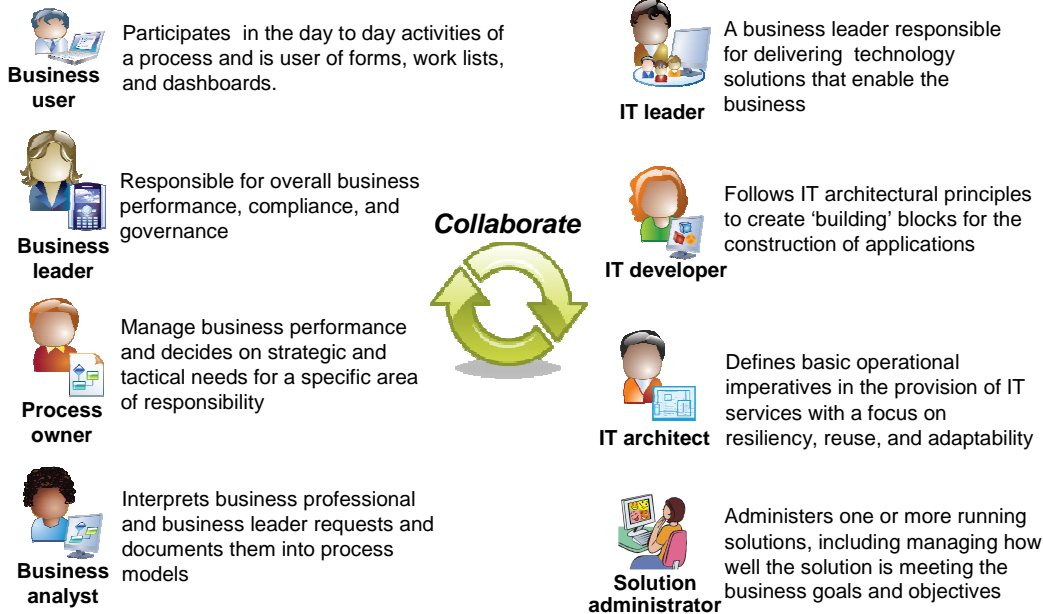
Role-based capabilities for continuous business optimization



Business Process Management combines business processes, information and IT resources to create a single integrated view of the business. This view enables the alignment of an organization's core assets, including people, information, IT resources, and processes. The optimization and automation of business processes allows a new level of flexibility and responsiveness to the changing requirements inherent in an on demand business environment. Through monitoring of the automated business processes, both IT performance and business goals can be measured, providing a rich capability for both the business executives and the IT executives to understand, evaluate and improve the organization's capability to deliver business function that satisfies business requirements.

An essential element of IBM's approach to bridging the gap between business and IT is a role-based approach to providing capabilities in the business process management space. These capabilities span Business Process Modeling and Design, Human Interaction and Collaboration, Process Execution and Business Activity Monitoring and Analysis.

Key roles in BPM



Shown here are the roles typically used within a BPM environment. These are the roles that are referred to when identifying the tasks within the BPM and the tools being used by these roles.

One of the newer roles that is being introduced is the business user, whose main function is to participate in the daily business activities related to the process.

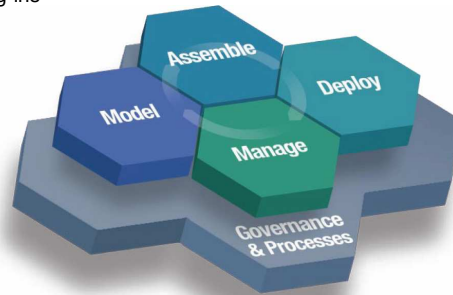
Other roles are the ones that are known in the BPM space, with focus on the business side or the IT side. In each of the activities, people in these roles will have to collaborate with each other to ensure that the business process represents the correct business goals and objectives, and for continuous improvement of the process.

Different customer environments can have overlapping roles or roles with different names, doing the typical BPM tasks within the end to end BPM, typically doing the activities shown by the roles here.

A new UI framework called Business Space is being introduced within the BPM V6.1.2 suite. Business space targets the activities used by the different business roles, from reviewing the model to using the Human task flow or modifying the business rules, within the same window.

BPM – Product alignment with SOA life cycle

- SOA life cycle stages and core BPM products
 - ▶ Model
 - WebSphere® Business Modeler
 - ▶ Assemble
 - WebSphere Integration Developer with following plug-ins
 - WebSphere Business Server Fabric Tool pack
 - WebSphere Monitor Toolkit
 - ▶ Deploy
 - WebSphere Process Server
 - WebSphere Business Service Fabric
 - ▶ Manage
 - WebSphere Business Monitor
 - Tivoli Composite Application Manager for SOA
- Governance
 - ▶ WebSphere Service Registry and Repository
 - ▶ Business Service Registry within WebSphere Business Service Fabric
 - Business Service Registry works with WebSphere Service Registry and Repository



The Service-oriented architecture or SOA life cycle consists of several stages and the SOA scenarios define the appropriate IBM products to be used to implement a scenario. The Business Process Management scenario is very closely aligned with the SOA life cycle, with specific products associated with each stage of the life cycle.

The Model stage is associated with WebSphere Business Modeler

The Assemble stage is associated with WebSphere Integration Developer with the optional WebSphere Business Service Fabric tool pack and WebSphere Monitor toolkit plug-in.

The Deploy stage is associated with WebSphere Process Server or the WebSphere Business Service Fabric.

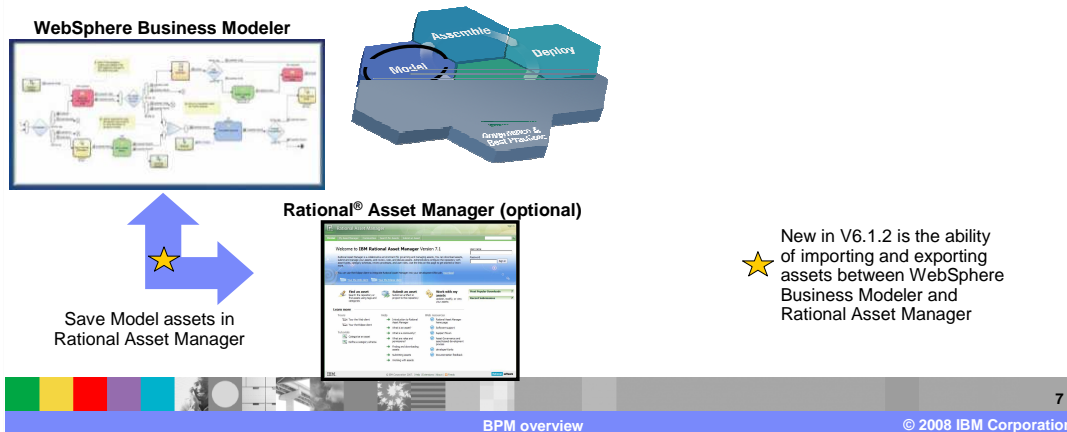
The Manage stage is associated with WebSphere Business Monitor and Tivoli Composite Application Manager for SOA

The Governance stage is associated with WebSphere Service Registry and Repository and the Business Service Registry within the WebSphere Business Service Fabric

The following slides will cover each of these stages and products in more detail.

BPM – SOA life cycle model stage

Tasks	Business roles
<ul style="list-style-type: none"> •Set the goals of the solution, define scope and requirements •Define current "AS-IS" process and validate with experts 	<p>Initiator: Business leader</p> <p>Collaborators: Business analyst, IT leader</p>
<ul style="list-style-type: none"> •Create conceptual future business "TO-BE" models including human task or business rules •Validate model for business goals, and review the results •Define KPIs and business measures for monitoring •Create UI for human task •Perform simulation and analysis 	<p>Initiators - Business analyst</p> <p>Collaborator – Business leader, process owner</p>



The model stage of the life cycle is where the business leader sets the goal for the new products and services, define scope and requirements for the business process. The Business Analyst uses the WebSphere Business Modeler to capture the current business process, also known as the "AS-IS" model. The Modeler can be used for documentation and compliance purposes, providing a visual and textual representation of processes, information, organization, resources, classifiers, and business measurements that can be shared across an organization. With the Modeler, you can define automated or human tasks and business rules that make your business model or process.

The Modeler includes a simulation tool that enables analysis of processes and testing of how well processes perform under different operating assumptions. You can use this analysis to refine and optimize business design. WebSphere Business Modeler is an Eclipse-based tool, which makes it easy to share information about your business design with other parts of your organization and tools. In particular, you can export a design into Rational Software Architect or WebSphere Integration Developer so that application developers can use it as a blueprint for designing process flows. When exporting for WebSphere Integration Developer, you can either target the WebSphere Process Server or WebSphere Business Service Fabric as the target runtime for the business process.

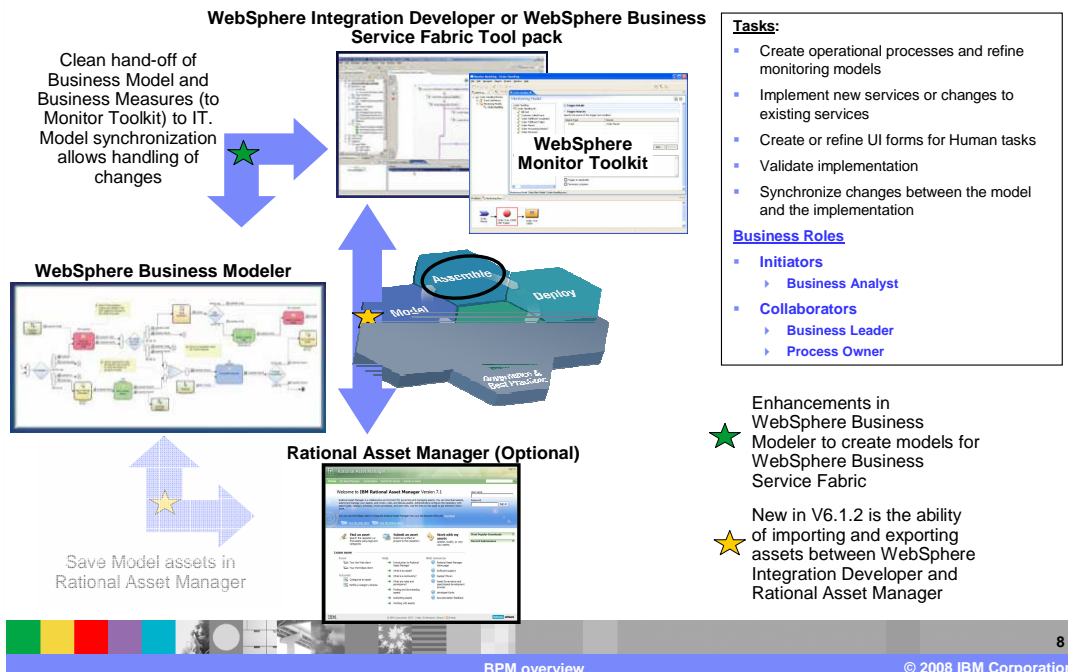
You can also create business measures that define what parts of the model you want to monitor. The business measures can then be exported to the WebSphere Monitor toolkit. In the toolkit, the IT developer can refine and create a monitor model for the business process, based on the business measures provided by the Business analyst in the Modeler.

Using the current process as the starting point, the Business Analyst can refine it to create more optimized business process, referred to as "TO-BE" process model. The "TO-BE" process model can be based on simulation results within the Modeler or using the real results from a monitored process from the WebSphere Business Monitor.

Model drafts or final copies can be shared for review with other users using the WebSphere Business Modeler Publishing server.

New in BPM V6.1.2 is the integration of WebSphere Business Modeler with the Rational Asset Manager. Assets can now be imported or exported between the WebSphere Business Modeler and the Rational Asset Manager, using a new Business Process Management profile defined in the Rational Asset Manager.

BPM – SOA life cycle assemble stage



The Assemble stage of the life cycle begins when the design is exported from WebSphere Business Modeler and imported into WebSphere Integration Developer. The Integration Developer may include the WebSphere Business Service Fabric Tool pack plug-in to support the Fabric runtime.

WebSphere Integration Developer is an Eclipse-based tool designed to help create SOA enabled composite applications. A key building block of the composite applications are business process flows defined using Business Process Execution Language (BPEL). The other key building block is Service Component Architecture, which enables the definition and invocation of services using a variety of implementation approaches and protocols. The services and business processes defined using WebSphere Integration Developer or the Fabric tool pack can then be exported and deployed either on WebSphere Process Server or the WebSphere Business Service Fabric.

If the business analyst has defined business measures for the process in the Modeler, it can be exported to the Monitor toolkit, which is a plug-in for the WebSphere Integration Developer. This will allow the IT folks to create the monitor model based on the business measures imported from the Modeler. The monitor model is then deployed on WebSphere Business Monitor to monitor the running business process.

The WebSphere Business Modeler V6.1.2 has been enhanced to support WebSphere Business Service Fabric artifacts through the use of Dynamic Assembler implementation type in the Modeler. This allows the business analyst to create models that can be consumed by WebSphere Business Service Fabric.

Additionally, similar to the integration of Modeler with the Rational Asset Manager, new in V6.1.2 is the integration of WebSphere Integration Developer with the Rational Asset Manager. Assets can now be imported or exported between the WebSphere Integration Developer and the Rational Asset Manager. This provides an integrated way to pass modeling and process assets between the Modeler and WebSphere Integration Developer for synchronization between the model and the implementation of the process from the model.

BPM – SOA life cycle deploy stage

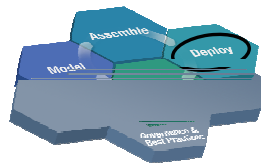
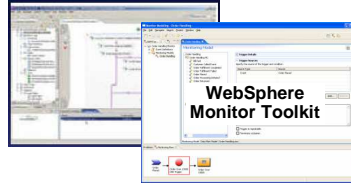
WebSphere Integration Developer or WebSphere Business Service Fabric Tool pack

Tasks:

- Determine server topology for required scalability and high availability of the business process
- Deploy business process
- Deploy monitor model used to monitor the business process
- Validate deployment
- Maintain deployment environment

Roles

- **Initiators**
 - ▶ IT Administrator
 - ▶ IT Developer
- **Collaborators**
 - ▶ Business Analyst
 - ▶ IT Leader
 - ▶ Process Owner



Deploy Monitor Models

WebSphere Business Monitor Server



Construct and deploy dynamic and adaptive Business Processes

WebSphere Process Server or WebSphere Business Service Fabric

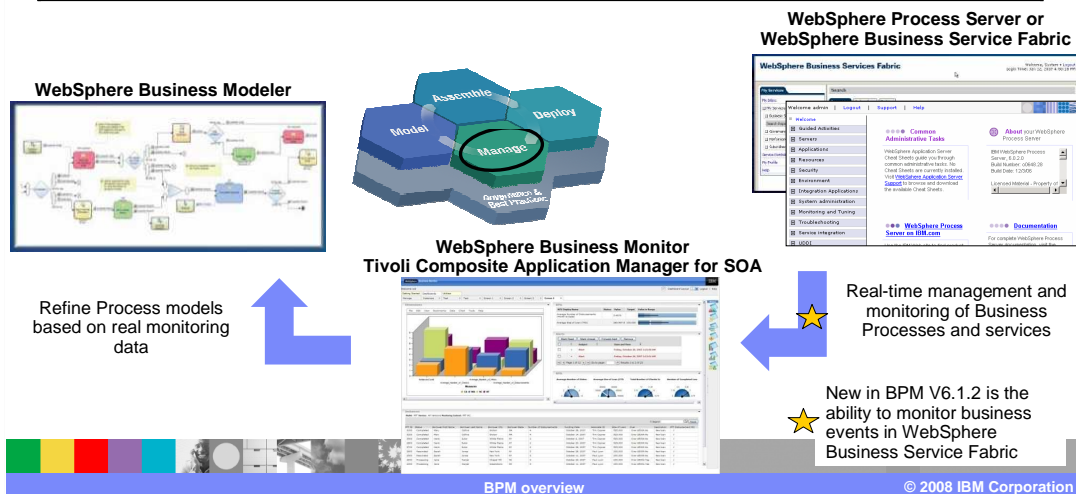


The Deploy stage of the life cycle begins when one or more modules containing the business process are exported from WebSphere Integration Developer and deployed either in the WebSphere Process Server or WebSphere Business Server Fabric runtime. These runtimes provide a variety of administrative capabilities required to configure the environment for the composite applications that are installed. It is a secure, robust and scaleable environment in which mission critical business processes can be deployed and run.

The Monitor model from the Monitor toolkit plug-in is deployed to the WebSphere Business Monitor Server. The monitor model will then allow Monitoring of the events that have been enabled in the business process and are running in the Process Server or Fabric runtime.

BPM – SOA life cycle manage stage

Tasks	Business roles
<ul style="list-style-type: none"> Uses business solution for day to day activities Reacts to business conditions by making changes to process flow 	Initiators - Business user
<ul style="list-style-type: none"> Monitor business state using dashboards Create new KPIs and personalize dashboard 	Initiators - Business leader Collaborator - Process owner
<ul style="list-style-type: none"> Feeds process performance data into business process models 	Initiators - Business analyst

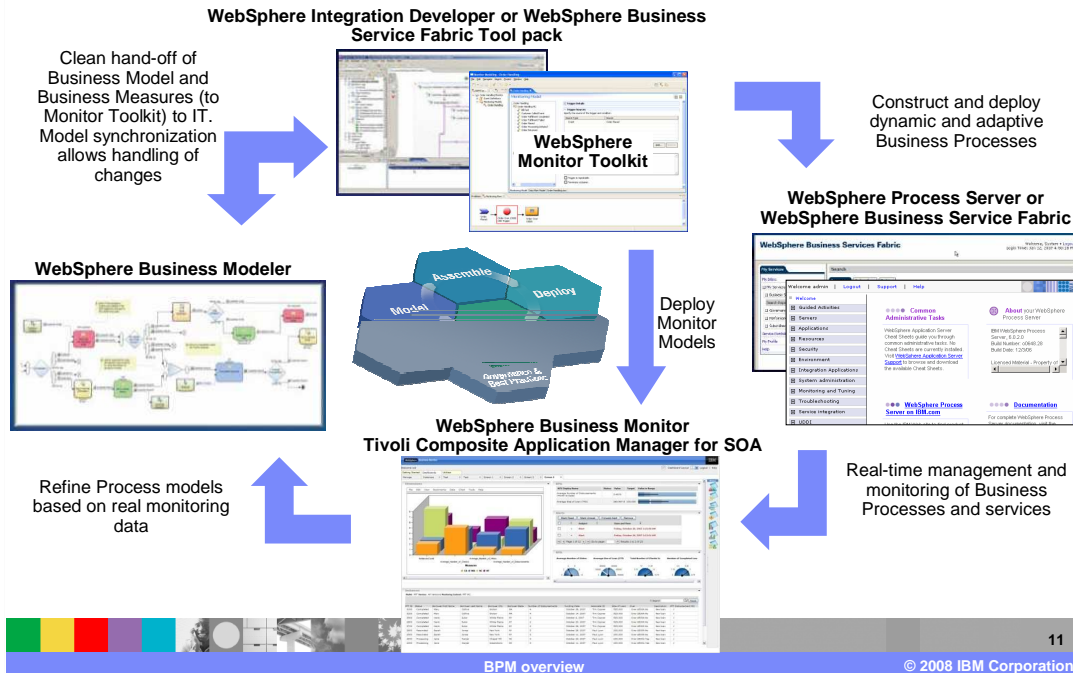


The Manage stage begins once the composite applications are running within WebSphere Process Server or WebSphere Business Service Fabric runtime. Real time information is generated in the runtime by WebSphere Process Server that can be used for monitoring both business processes and interactions between services.

WebSphere Business Monitor enables you to monitor business processes in real time based on the Monitor model deployed for the business process, providing a visual display of business process status. WebSphere Business Monitor helps in creating dashboards for visualizing the performance of a business, based on the key performance indicators that are identified in a business design. You can use this to track time, cost, and resources used in processes. WebSphere Business Monitor provides tools that enable you to set situational triggers and notifications of potential bottlenecks or workload imbalances. Ultimately WebSphere Business Monitor helps you better understand how your business design achieves your business objectives, and provides guidance about how to refine and optimize that business design if goals are not being met. Tivoli Composite Application Manager is designed specifically to enable IT service management by understanding the unique semantics and loosely coupled characteristics of SOA-based services. Tivoli Composite Application Manager has three editions that are relevant directly to the SOA Foundation, namely the IBM Tivoli Composite Application Manager for WebSphere, the IBM Tivoli Composite Application Manager for SOA, and the IBM Tivoli Composite Application Manager for Response Time Tracking. These cover a wide range of monitoring capabilities such as application server monitoring and resource consumption, the correlation of service invocations as they cascade across multiple systems, service-level response times and problem isolation.

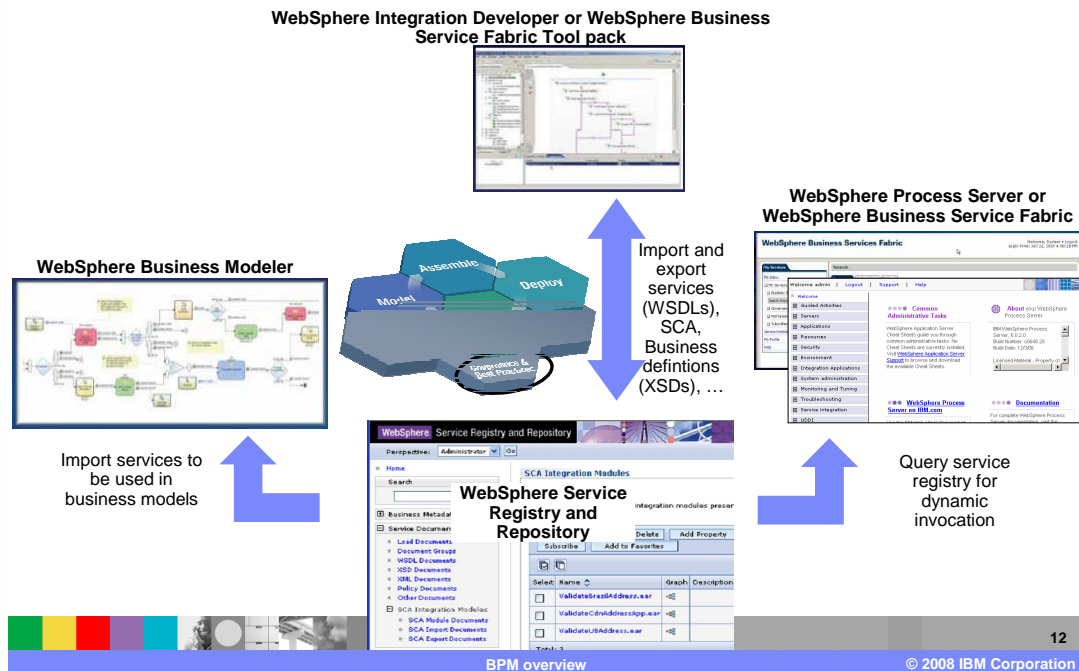
The real time monitoring data can then be imported in the WebSphere Business Modeler to further refine the business based on real data.

BPM – SOA life cycle – Putting it together



This slide puts all the different pieces discussed in the last few slides together and see the entire BPM, SOA life cycle with the different BPM products, and hand-offs between the different life cycles.

BPM – SOA life cycle Governance



The last piece of the puzzle is the Governance of the business process and assets.

SOA governance is an extension of IT governance that focuses on the life cycle of services and composite applications in an organization's SOA environment.

The function of SOA governance is to define the decision rights for the development, deployment and management of new services, and the monitoring and reporting processes for capturing and communicating governance results. Because SOA applications are intrinsically fragmented, they introduce new governance challenges. But with the proper policies, principles, standards, procedures and processes in place, businesses can realize the full benefit of service orientation. An effective SOA governance platform not only helps business and IT teams better identify which projects contribute most to business goals, but it also empowers employees to work and collaborate more efficiently by clearly defining their roles and responsibilities

Once the SOA governance framework is implemented, it is used in the model, assemble, deploy and manage phases within the SOA life cycle.

WebSphere Service Registry and Repository provides a repository for SOA governance for SOA assets like WSDLs, business definitions like XSDs and services based on SCA. From WebSphere Integration Developer, you can import or export SCA services, WSDLs and XSDs used or defined within the business process. In addition, you can import WSDL defined services from WebSphere Service Registry and Repository into the Modeler.

The WebSphere Process Server can query services defined with

The WebSphere Business Service Fabric contains its own Business Service Registry for its governance, which works in conjunction with WebSphere Service Registry and

Section

Summary

Next section is the summary of the presentation.

Summary

- In this presentation, these topics were discussed:
 - ▶ Introduced Business Process Management (BPM)
 - ▶ Introduced BPM Business and IT roles
 - ▶ Introduced IBM BPM products in SOA life cycle
 - ▶ Showed the new and enhanced points of integration in the BPM V6.1.2 portfolio



This presentation introduced a basic definition of BPM and the different roles involved in the BPM tasks.

It also discussed the SOA life cycle within BPM, and provided a quick overview of the BPM products of the life cycle with an emphasis on the new and enhanced integration points within the BPM V6.1.2 product suite.

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