



IBM Software Group

# WebSphere® Business Services Fabric

## *Introduction and V6.1.2 Recap*



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This presentation covers Web Sphere Business Services Fabric Introduction and V6.1.2 feature recap presentation.

## Agenda

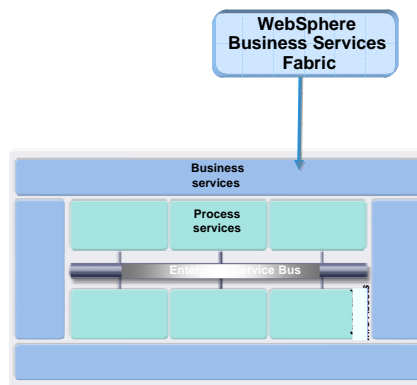
- Introduction to WebSphere Business Services Fabric
- Product packaging
- Business use case
- Highlights of v6.1.2 release



First, a brief introduction of WebSphere Business Services Fabric is provided. Next, the various assets and tools provided in WebSphere Business Services Fabric are discussed. After that, a walk through a simple business use case demonstrating the value add of this product is provided and finally the new features that were introduced in the V6.1.2 release are covered.

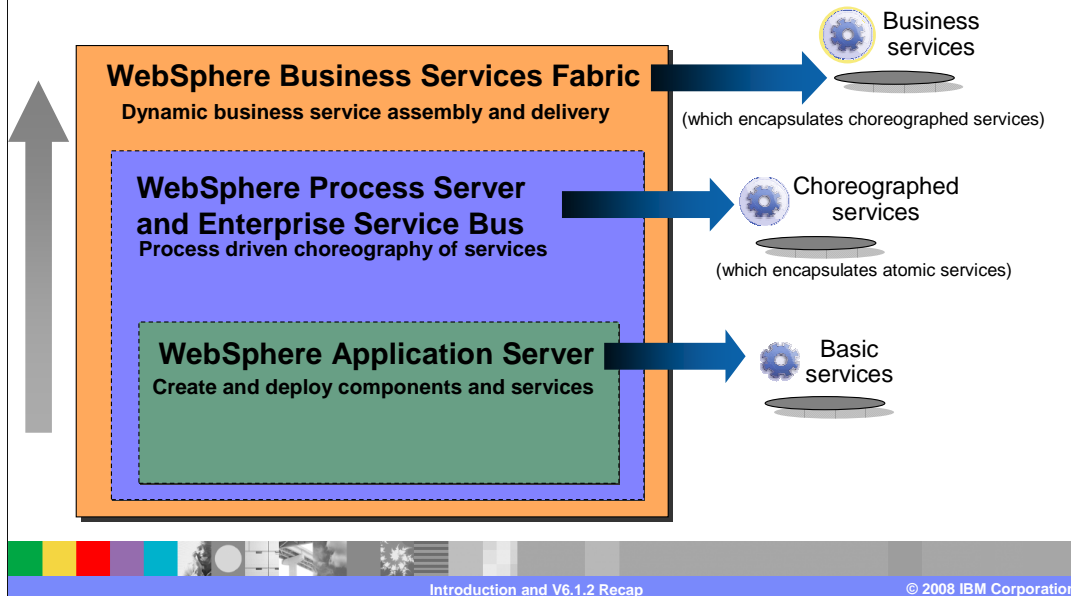
## WebSphere Business Services Fabric

- Extends the BPM platform to deliver Service Oriented Business Solutions.
- Includes the tools and run-time to model, assemble, deploy, manage, and govern reusable solution building blocks called Business Services
- Optionally includes Industry content packs with industry reference models and pre-built SOA assets
- Includes WebSphere Process Server and WebSphere Integration Developer



WebSphere Business Services Fabric lets you rapidly assemble new business processes, make concurrent changes with governance with minimal impact to IT, while reusing and sharing current IT assets. This chart describes how the Fabric fits with the IBM SOA Reference Architecture. The WebSphere Business Services Fabric falls under the Business Services capability and extends the IBM BPM platform to deliver service-oriented business solutions in the form of composite business applications. The WebSphere Business Services Fabric platform consists of two complementary software packs: the IBM Business Services Foundation Pack and the IBM Business Services Tools Pack. These packs work together to simplify the business, technology, security, governance, and process interoperability issues associated with business services in an SOA. It is important to understand the critical relationship that WebSphere Business Services Fabric has with two key products of the IBM SOA foundation: WebSphere Process Server and WebSphere Services Registry and Repository. WebSphere Process Server includes WebSphere Enterprise Service Bus and WebSphere Application Server. WebSphere Business Services Fabric requires WebSphere Process Server, which is included in the IBM Business Services Fabric Foundation Pack, as its run-time. For design-time, the IBM Business Services Tools Pack bundles WebSphere Integration Developer and provides a plug-in for WebSphere Integration Developer called Composition Studio, providing the visual modeling and management of business services metadata models and policies. For zSeries®, the IBM Business Services Foundation Pack is licensed separately from WebSphere Process Server.

## WebSphere Business Services Fabric: Cumulative product packaging



The WebSphere Business Services Fabric runs on top of the WebSphere Process Server, which runs on top of WebSphere Application Server. Incremental capabilities are offered at each level. WebSphere Application Server provides support for basic Web services. On top of this WebSphere Process Server provides the capability to choreograph these services into business processes. Now the WebSphere Business Services Fabric provides the capability to combine these choreographed services with business metadata and business policies creating business services. Business processes modeled with these business services can dynamically adapt to different business scenarios and are much easier to manage and change.

## Product packaging

### Business Services Industry Content Packs

Industry Specific  
business models  
and common  
services

– IBM  
Healthcare  
Payer Pack

– IBM Insurance  
Pack

– IBM Banking  
Payment  
Content Pack

– IBM Telecom  
Operations  
Content Pack

### Business Services Tool Pack

**WebSphere Integration Developer** - Orchestrate processes and construct mediations

**Composition Studio** - Assembly and management of business service models and policies

### Business Services Foundation Pack

**WebSphere Process Server** – Integration and automation of enterprise business processes

**Dynamic Assembler** - Highly scalable dynamic service binding and execution engine

**Business Services Repository** - Business service model and business policy repository

**Subscriber Manager** - Controls and automates business service entitlements

**Performance Manager** - Provides visibility and monitoring of business services

**Governance Manager** – Control point for business service model changes, visibility, and collaboration

WebSphere Business Services Fabric consists of the IBM Business Services Foundation Pack and the IBM Business Services Tool Pack that simplifies business, governance and process interoperability challenges associated with business services in a SOA. The IBM Business Services Foundation Pack provides integrated runtime and management capabilities, including:

- A highly scalable, dynamic service selection and delivery engine based on business and user context.
- A centralized repository to store business services and business-level policies in conjunction with IBM WebSphere Service Registry and Repository.
- Management, control and automation of business-service entitlements for service subscribers.
- Business-services visibility and monitoring to manage performance.
- Navigation and visualization hierarchies and dependencies to allow for easier impact-analysis of change.

WebSphere Business Services Fabric requires the use of WebSphere Service Registry and Repository to help facilitate service discovery, reuse and life cycle governance.

In addition, the IBM Business Services Tool Pack provides a design-time environment and tools, including:

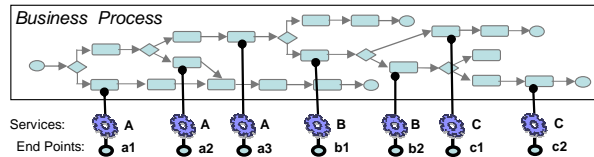
- An Integrated Eclipse-based design tool with a complete set of capabilities for defining, creating, assembling and integrating business services into composite business applications.
- Tools that enable you to model, create, publish and manage business-service metadata models and business-level policies around operational capabilities, processes, communication channels and role-based subscribers.

In addition to WebSphere Business Services Fabric, you can use the optional IBM Industry Content Packs. These Content Packs will help you get started quickly by assembling and reusing the prebuilt industry standards-based SOA assets. These assets include capability and process maps, business services templates, service interfaces, business object models, business glossary and common services. WebSphere Business Services Fabric is available in multiple languages, enabling you to use your business services across the world. Among the languages supported are English, French, Italian, German, Spanish, Brazilian Portuguese, Japanese, Korean, simplified Chinese and traditional Chinese.

# Business services enable greater business process flexibility

## Choreography of basic services

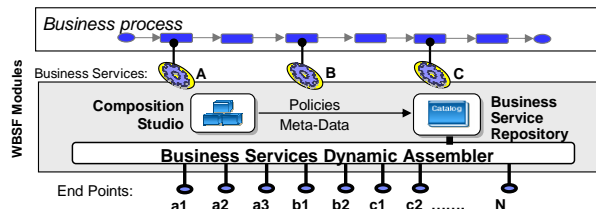
- Static service bindings
- Fragmented and embedded business logic



## BPM with business services

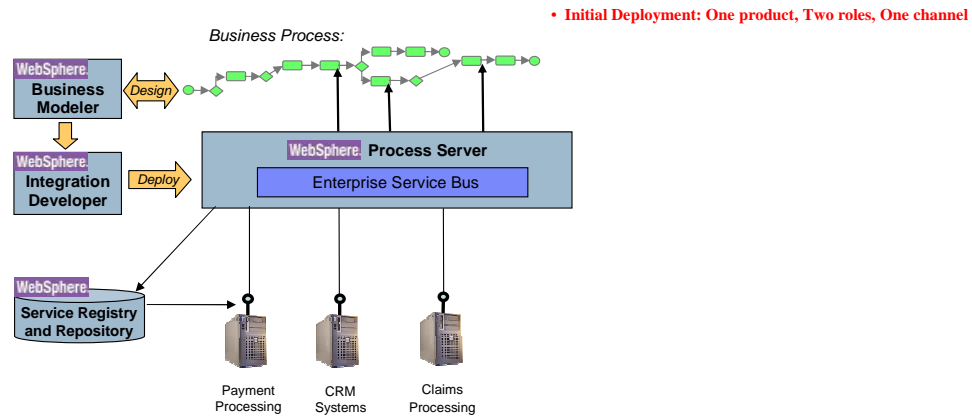
- Faster change through business service policies and metadata
- Dynamic service selection at runtime

➔ Lower time and cost of change



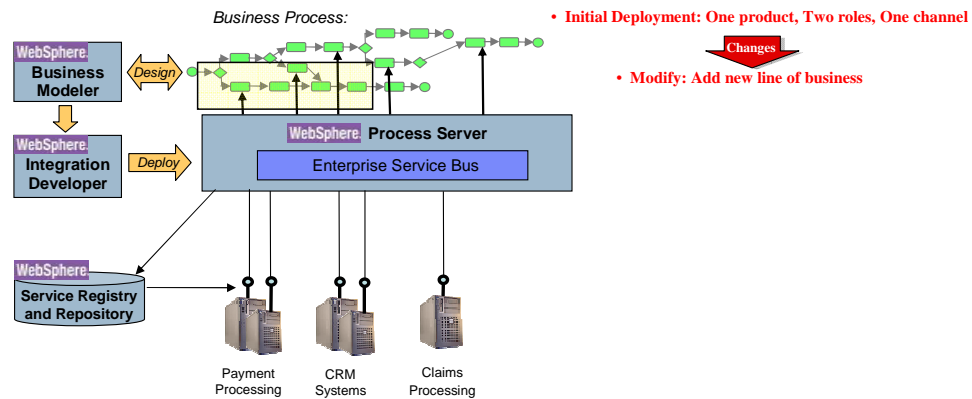
Shown at the top of this chart is a choreography of basic services that does not use business services and dynamic assembly. In such a business process flow, the service bindings to their endpoints are static and business logic is embedded in the flow, adding to the complexity of flow, which in turn makes manageability less efficient. Now consider the same flow on the bottom, which instead of using basic services, uses business services with dynamic assembly. The business services help abstract the business logic from the business process flow, thereby reducing the complexity of the flow. The business logic can be managed through business policies and business metadata. In addition, the static service bindings no longer exist as the endpoint is now determined at run time based on the business scenario, further enabling updates, and addition and deletion of end points from the business process with minimal impact to the business process. Now for a simple business use-case.

## Comparison: Current BPM and SOA approach



This is the first chart of a build sequence that contrasts the current BPM and SOA approach with the business services approach used by WebSphere Business Services Fabric. The discussion begins with a simple business process. The process is modeled in WebSphere Business Modeler, exported in BPEL format and then imported into WebSphere Integration Developer and described with its implementation characteristics. The initial deployment of the process is fairly simple, addressing a single product with two roles and a single distribution channel. The implementation moves along quickly and the process is deployed to WebSphere Process Server.

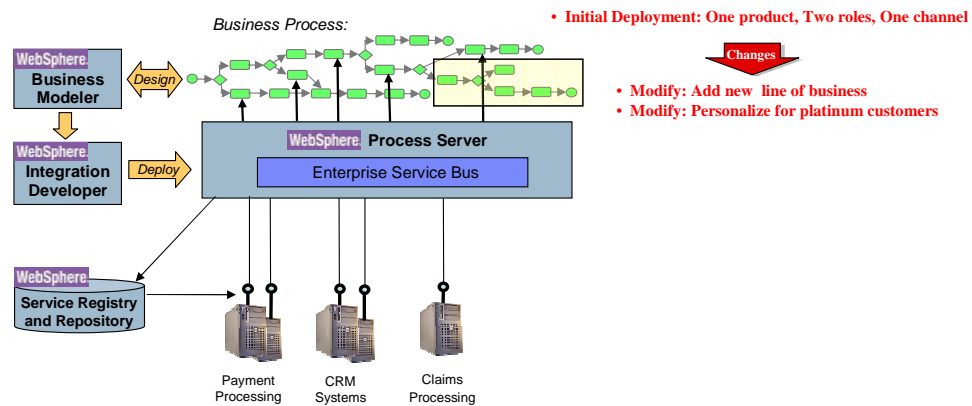
## Comparison: Current BPM and SOA approach



As business changes you can modify the existing simple business process flow and add a new line of business. This adds more complexity to your business process, requiring you to remodel, reassemble and redeploy the business process.

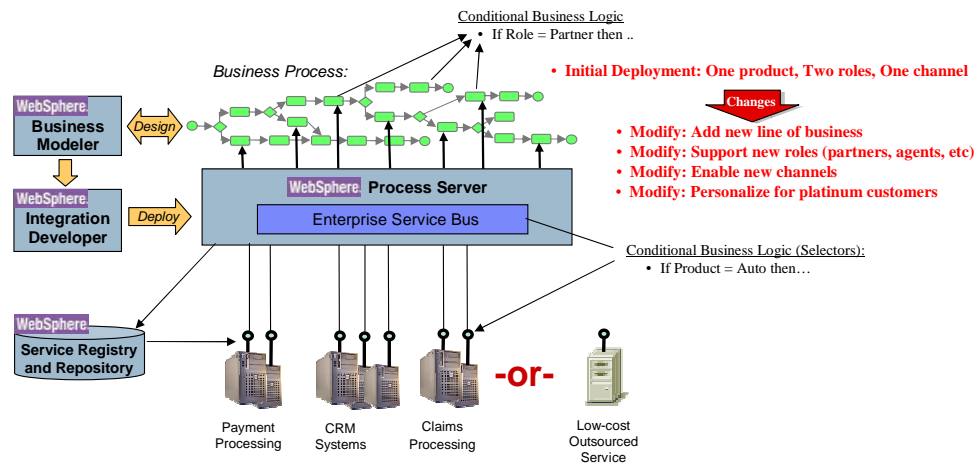


## Comparison: Current BPM and SOA approach



Next you add the ability to provide better service to the platinum customers. This means more embedded business logic in the business process flow, thereby increasing the complexity of the process flow with each change that the business introduces.

## Comparison: Current BPM and SOA approach

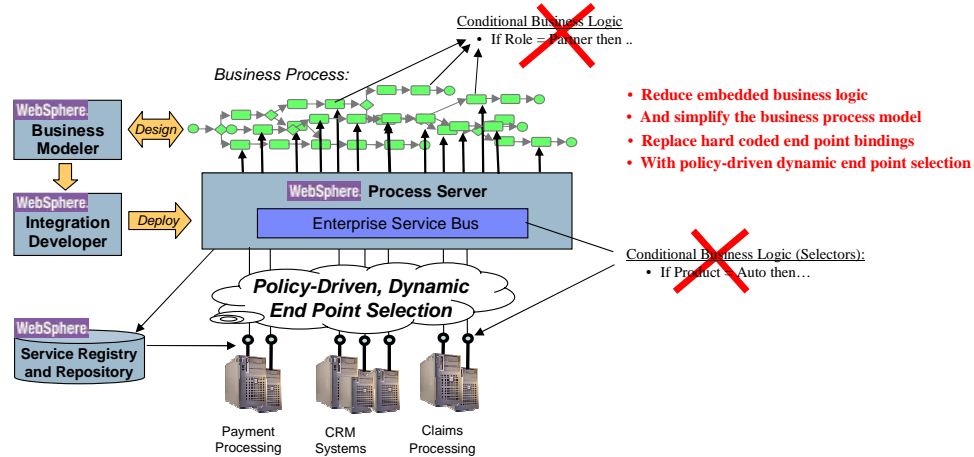


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As you continue to make updates like adding new roles, new channels, new business partners the complexity of the business process keeps increasing, making change management and problem diagnosis even harder. There is a need to abstract the business logic from the business process flow and break the static links to service endpoints.

## Comparison: BPM and SOA using WebSphere Business Services Fabric

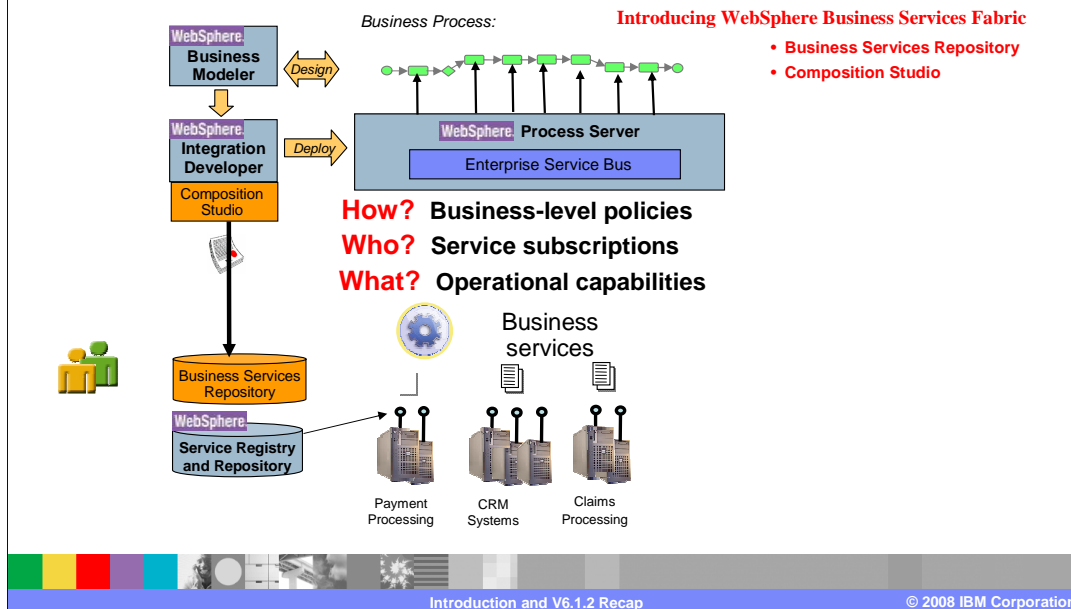


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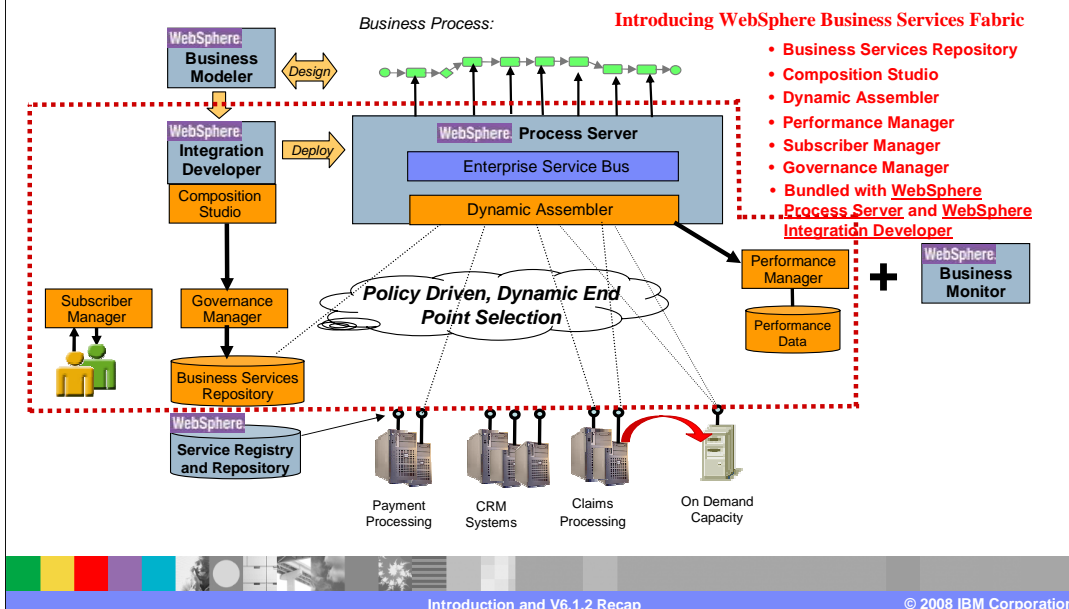
This capability is provided by the WebSphere Business Services Fabric. When the same business process is built in the Fabric you replace embedded business logic and simplify the business process model. You also replace hard-coded endpoint bindings with policy-driven endpoint selection.

## How does it work: BPM and SOA using WebSphere Business Services Fabric



With WebSphere Business Services Fabric you build on the technical service metadata captured in WebSphere Service Registry and Repository by capturing business service meta-data in the Business Services Repository. Using this business service metadata you can build business policies that determine how it is appropriate to use one service or another. These policies can use information about who has access to what and special considerations like “Platinum” level designations. Information about the operational capabilities and the constraints that they operate under is also available to these policies. You will use the Business Services Composition Studio to enter this information into the Business Services Repository.

## How does it work: BPM and SOA using WebSphere Business Services Fabric



Next, you use the Business Services Dynamic Assembler to act on this information and perform policy-driven, dynamic endpoint selection at runtime. As the Dynamic Assembler performs endpoint selection, summary performance information is published as a common base event, which is read by the WebSphere Business Monitor to track and display the performance information. The Business Services Subscriber Manager is used to enroll new organizations and users and provision business services to them. All of the business meta-data entries to the Business Services Repository are policed by the Business Services Governance Manager, which enforces an approval micro-flow before any information can be published to the repository. The assets in the orange boxes make up the WebSphere Business Services Fabric. Together this allows for a simplified business process with more visibility and easier management of the business logic in the process flow. This also allows you to more quickly adapt your business process to new business opportunities and partners.

## V6.1.2 release

- Integration with BPM tools
  - ▶ Modeler integration
  - ▶ Monitor integration
  - ▶ Business variables
  - ▶ Business Space integration
  - ▶ WebSphere Registry and Repository integration
- Enhancements to security and Web tools
  - ▶ Supported security configuration
  - ▶ Subscriber manager
  - ▶ Dynamic assembler execution trace
- Human centric BPM behavior
  - ▶ Asynchronous running processes and long running processes
- Operating systems and databases
  - ▶ AIX® version 6.1
  - ▶ z/OS® 1.9
  - ▶ Windows Server® 2008
  - ▶ SLES ver. 9 and ver. 10 on Intel®
  - ▶ zLinux – RHEL and SLES
  - ▶ DB2® version 9.5

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This chart recaps the features delivered in the V6.1.2. This release provided better integration and alignment with the WebSphere stack with focus around Business Modeler, Business Monitor, Business Variables, Business Space and WebSphere Registry and Repository.

There were enhancements made to security to synch with WebSphere Process Server security. Increased logging provided better insight into Dynamic Assembler processing. Support for human task endpoints and asynchronous processes was added. Finally, the WebSphere business service fabric now can be deployed on the listed operating systems and environments.

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