

IBM Software Group

# WebSphere Process Integration, Version 6 Technical Positioning & Overview

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# Agenda

- Integration Servers: WebSphere Process Server & WebSphere Integration Developer High Level Positioning
- SOA Integration Positioning of Portfolio
- ESB Positioning
- Business Process Positioning
- Tooling Positioning
- Monitor Positioning
- B2B Positioning

## Market Positioning

**WebSphere Process Server V6 is a single, integrated platform with the combined benefits of the industry's top application server and integration capabilities, providing business flexibility on a highly scalable, reliable platform.**

**WebSphere Process Server V6 is the first to offer robust process automation, advanced human workflow, business rules with rich A2A and B2B capabilities all on an SOA platform with full ESB connectivity.**

**WebSphere & Rational Tools are the first to offer a role-based development experience that spans from the business user to the Java & J2EE developer to the integration developer to easily implement and optimize end-to-end process integration on a single & integrated Eclipse platform.**

WebSphere.

## What Are We Announcing?

*Process Integration which changes the competitive landscape*

### WebSphere for Process Integration

- Best In Class Business Modeling and Simulation
- Simplified Integration – Easy To Learn And Use
- Revolutionizes Business Flexibility
- Broadest Reaching Integration
- Real Time Visibility into Business Performance
- Closed Loop for Continuous Improvement



#### What's new

- IBM WebSphere Business Modeler
- IBM WebSphere Integration Developer
- IBM WebSphere Process Server
- IBM WebSphere Business Monitor
- IBM WebSphere Jump Start in Process Integration

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# SOA Is The DNA Of On-demand

SOA is a flexible, cost effective way of aligning IT with the needs of the business

Componentized

Standardized services interfaces for applications and resources

Interoperable

Easy information exchange between applications and/or resources

Modular

Mix and match, add or remove, business processes and infrastructure

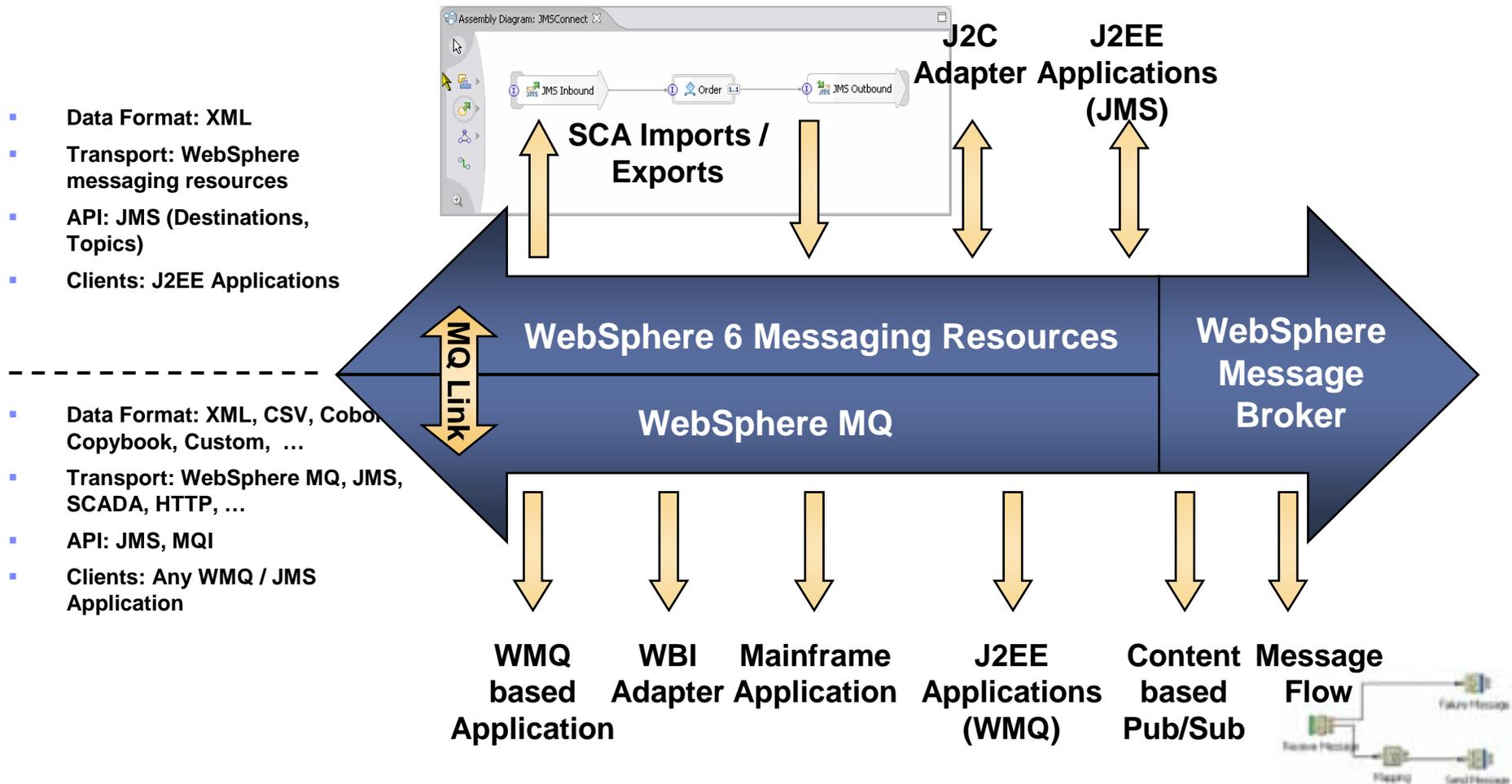
Scaleable

Start with what you have and add additional resources as needed

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# WebSphere Process Server and the ESB



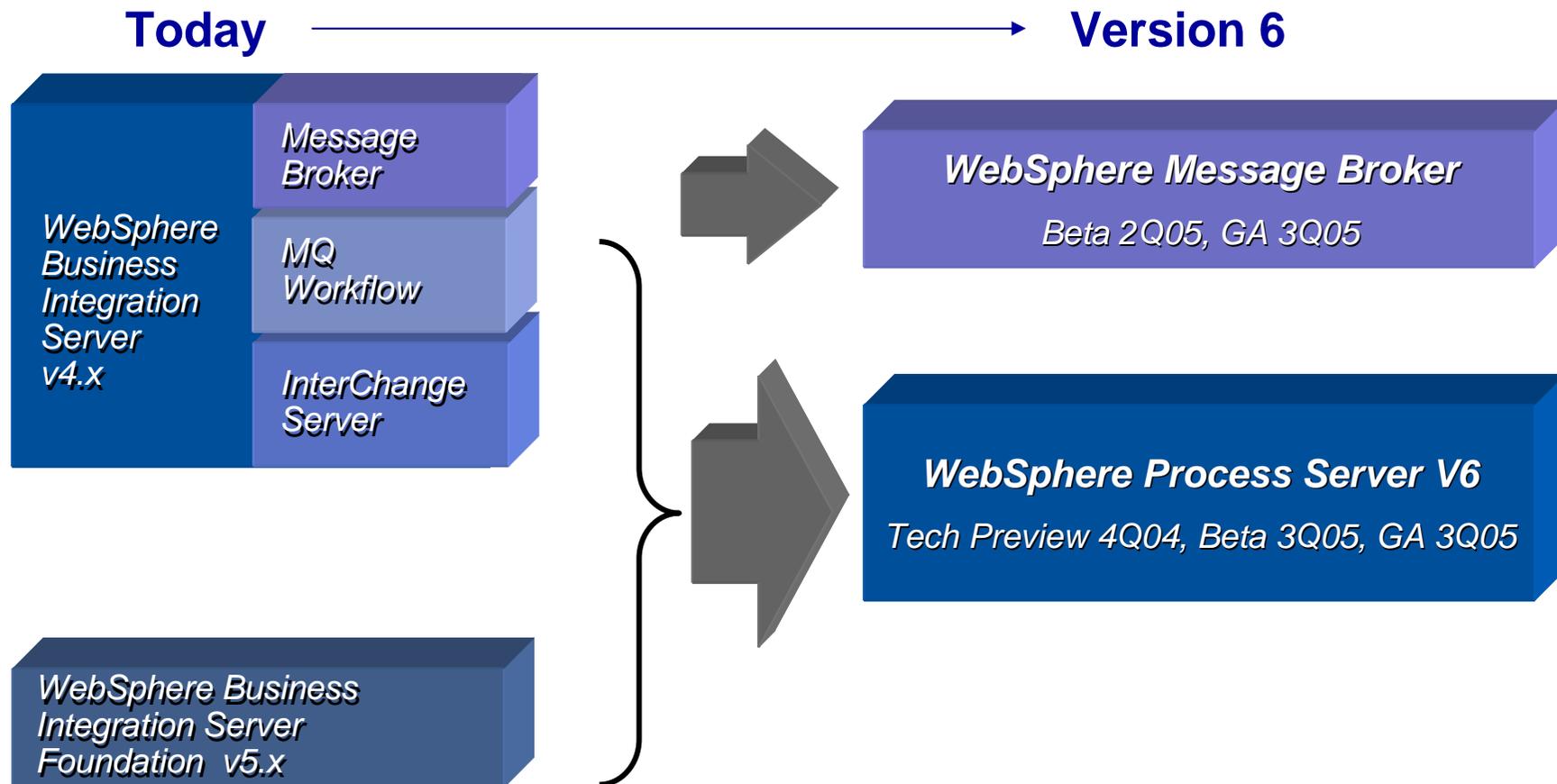
- **Data Format:** XML
- **Transport:** WebSphere messaging resources
- **API:** JMS (Destinations, Topics)
- **Clients:** J2EE Applications

- **Data Format:** XML, CSV, Cobol, Copybook, Custom, ...
- **Transport:** WebSphere MQ, JMS, SCADA, HTTP, ...
- **API:** JMS, MQI
- **Clients:** Any WMQ / JMS Application

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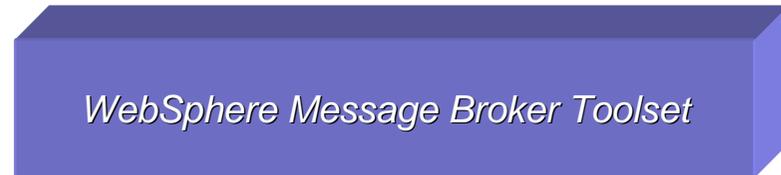
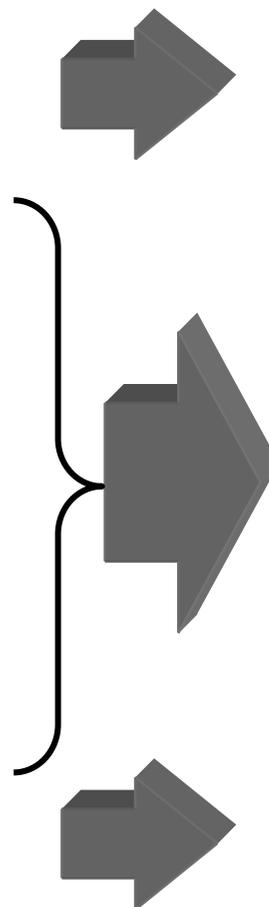
# IBM WebSphere Runtime Evolution



# IBM WebSphere Tooling Evolution

**Today**

**Version 6**



# Summary of Entitlement – Investment Protection

Clients can grow what they have, and are entitled to V6 (Lead Product)

**WMQWF: (standalone)**

```

    graph LR
      WMQWF[WMQWF] --> WPS[WPS]
      WMQWF --> WID[WID]
    
```

- Continued Support:
  - WMQWF 3.5 – 09/30/07 – EOS not yet announced
  - WMQWF 3.6 – 04/30/08 – EOS not yet announced
- Continued Availability:
  - WMQWF will stay on the price list (multiplatform and z/OS)
  - Until max EOS minus 12 months

**WICS & WBI Tools (standalone):**

```

    graph LR
      WICS[WICS] --> WPS[WPS]
      WBI[WBI Tools] --> WID[WID]
    
```

- Continued Support:
  - WICS 4.2.2 – 04/30/07 – EOS announced
  - WICS 4.3.0 – 09/30/07 – EOS not yet announced
  - WBI Tools - - EOS not yet announced
- Continued Availability:
  - WICS and WBI Tools will stay on the price list
  - Until max. EOS minus 12 months

**WBI Server v4.x (“Bundle”):**

```

    graph LR
      subgraph Bundle [WBI Server v4.x]
        WICS[WICS]
        WBI[WBI Tools]
        WMQWF[WMQWF]
        WBI_MB[WBI MB]
      end
      subgraph Entitlement [v6.x entitlement]
        WPS[WPS]
        WID[WID]
        WBI_MB[WBI MB]
      end
      Bundle --> Entitlement
    
```

- Continued Support:
  - WBIS 4.2.2 – 04/30/07 – EOS announced
  - WBIS 4.3.0 – 09/30/07 – EOS not yet announced
- Withdraw Bundle from Market, Reactivate for Growth:
  - WBI Server withdrawn 30 days after Process Server announce
  - Customers can grow what they have, using part number reactivation exception process
  - Customers can adopt MQWF 3.6 via special bid

**WBISF & WSADIE**  
(When purchased prior to Process Server announce):

```

    graph LR
      WBISF[WBISF] --> WPS[WPS]
      WSADIE[WSADIE] --> WID[WID]
      WSADIE --> RAD[RAD]
    
```

- Continued Support:
  - WBISF 5.1 – 09/30/07 – EOS not yet announced
  - WSADIE 5.1 – 09/30/07 – EOS not yet announced
- Continued Availability:
  - WBISF and WSADIE will stay on the price list (multiplatform and z/OS)
  - Until max EOS minus 12 months

## WebSphere Process Server and existing Process Integration Products

- WebSphere Process Server replaces existing products as the lead product for new Customers and new Projects
  - ▶ WebSphere Business Integration Server Foundation
  - ▶ WebSphere InterChange Server
  - ▶ WebSphere MQ Workflow
  
- WebSphere Process Server interoperates with existing products
  - ▶ Reuse and combine business process elements in SOA, to address changing business needs
  - ▶ No immediate migration required

# WebSphere Business Integration Server Foundation

- WebSphere Process Server replaces WebSphere Business Integration Server Foundation
  - ▶ Process Server contains every capability of Business Integration Server Foundation
  - ▶ Customers can migrate their development artifacts
  - ▶ Customers will be able to upgrade their servers once the binary compatibility support has been added (tentative: 1Q/06)
  
- Interoperability
  - ▶ Web Services

# WebSphere MQ Workflow

- Continue to sell WebSphere MQ Workflow when
  - ▶ Adding new workload to existing implementations
    - Current and new projects with existing clients
  - ▶ Implementing a business partner solution
    - Reusing existing skills and experience on time-critical schedule
  - ▶ Customer has standardized on competing environment for user clients
    - Workflow web clients that need to be deployed to pre-existing Web server farms
    - Workflow “fat“ clients (C, C++)
  
- Interoperability
  - ▶ Web Services (WMQWF SupportPac WA07)
  - ▶ Interoperability Support Pac WA0C (to be updated)

# WebSphere InterChange Server

- Continue to sell WebSphere InterChange Server when
  - ▶ Adding new workload to existing implementations
    - Current and new projects with existing clients
  - ▶ Implementing a business partner solution built on ICS
  - ▶ Reusing existing skills and experience on time-critical schedule
  - ▶ Customer uses competing application server and is resistant to WAS
  - ▶ Event Sequencing is needed and
    - a clustered environment is not required
    - a services engagement to implement on the front end is unacceptable
  
- Interoperability
  - ▶ Web Services (Adapter inbound, native to WICS 4.3 outbound)
  - ▶ Shared Relationship Database

## The IBM WebSphere Integration Reference Architecture: *Process Services - Choreography, Human Tasks & Transactions*



**Choreography** of multiple services into a business process.

**Human Tasks** allowing people to originate and participate in automated business processes.

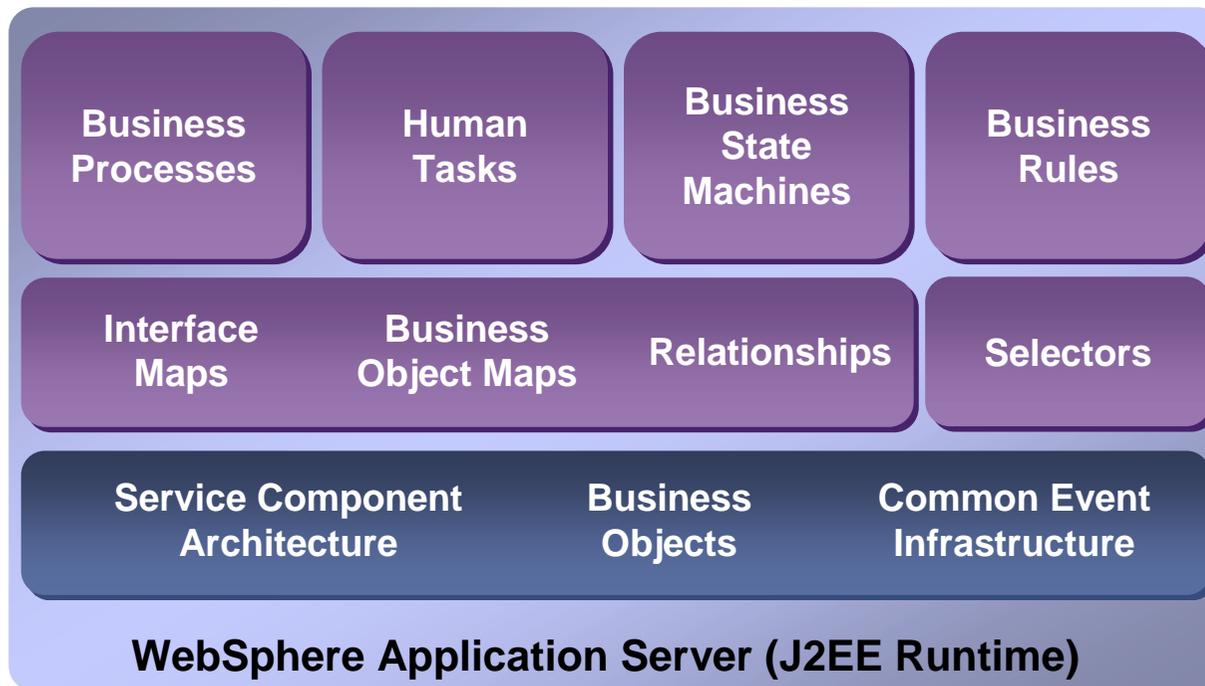
**Transactions** and compensation to support complex interactions of services.

# WebSphere Process Server V6 - Highlights

- 
- **WebSphere Application Server Foundation**
    - ▶ Clustering, failover, high availability and robust platform
    - ▶ Single administration environment
    - ▶ Common Event Infrastructure – Process Management
  - **Service Oriented Architecture platform**
    - ▶ A uniform invocation programming model (SCA)
    - ▶ A uniform data representation model (Business Objects)
    - ▶ Powerful tools to build and reuse standard components
  - **Powerful Staff Components**
    - ▶ Participating / Originating / Ad-Hoc Tasks
    - ▶ Multi-level escalation
    - ▶ Client components out-of-the box (JSF)
  - **Business Processes**
    - ▶ WS-BPEL standard
  - **Business State Machines, Business Rules & Transformations**
    - ▶ Advanced services to build integration solutions
  - **A single Process Integration platform**
    - ▶ Reduces complexity and administration cost



# WebSphere Process Server Version 6 *Components*



**Service Components**  
are the added-value components

**Supporting Services**  
simplify common integration tasks

**SOA Core** is the foundation technology

**WebSphere Application Server V6** foundation

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# WebSphere Software Platform – Development Roles

Role	Description	Benefits & Skill Requirements
Business Analyst	Modeling business processes for optimization or to reengineer existing business processes or define new business processes	<ul style="list-style-type: none"> <li>▪ <b>No programming experience required</b></li> <li>▪ Can focus on business performance &amp; process</li> </ul>
Integration Developer / Specialist	Visual tools to configure integration logic with existing and new applications and humans in the network	<ul style="list-style-type: none"> <li>▪ Some basic programming experience (loops, conditions, string manipulation)</li> <li>▪ <b>No J2EE skill required</b></li> <li>▪ Expect tools to simplify and abstract advanced IT implementation details</li> </ul>
Software Architect	Model-driven development environment that automates the translation from design to implementation. Includes requirements and business modeling integrations with RequisitePro and WBI Modeler	<ul style="list-style-type: none"> <li>▪ <b>Focused specifically on UML modeling and J2EE implementation</b></li> </ul>
J2EE / Java Application Developer	Comprehensive integrated development environment, for Web, Java, Web services, Portal, and EJB development with visual tools that accelerate application development.	<ul style="list-style-type: none"> <li>▪ <b>Focused specifically on J2EE implementation</b></li> </ul>
Enterprise Developer	Tools for maintaining legacy assets and extending them to new users to enable those assets to be used in Service Oriented Architectures (SOA) and as Web services	<ul style="list-style-type: none"> <li>▪ <b>Focused on mixed workload of J2EE and COBOL/PL1/RPG environments</b></li> </ul>

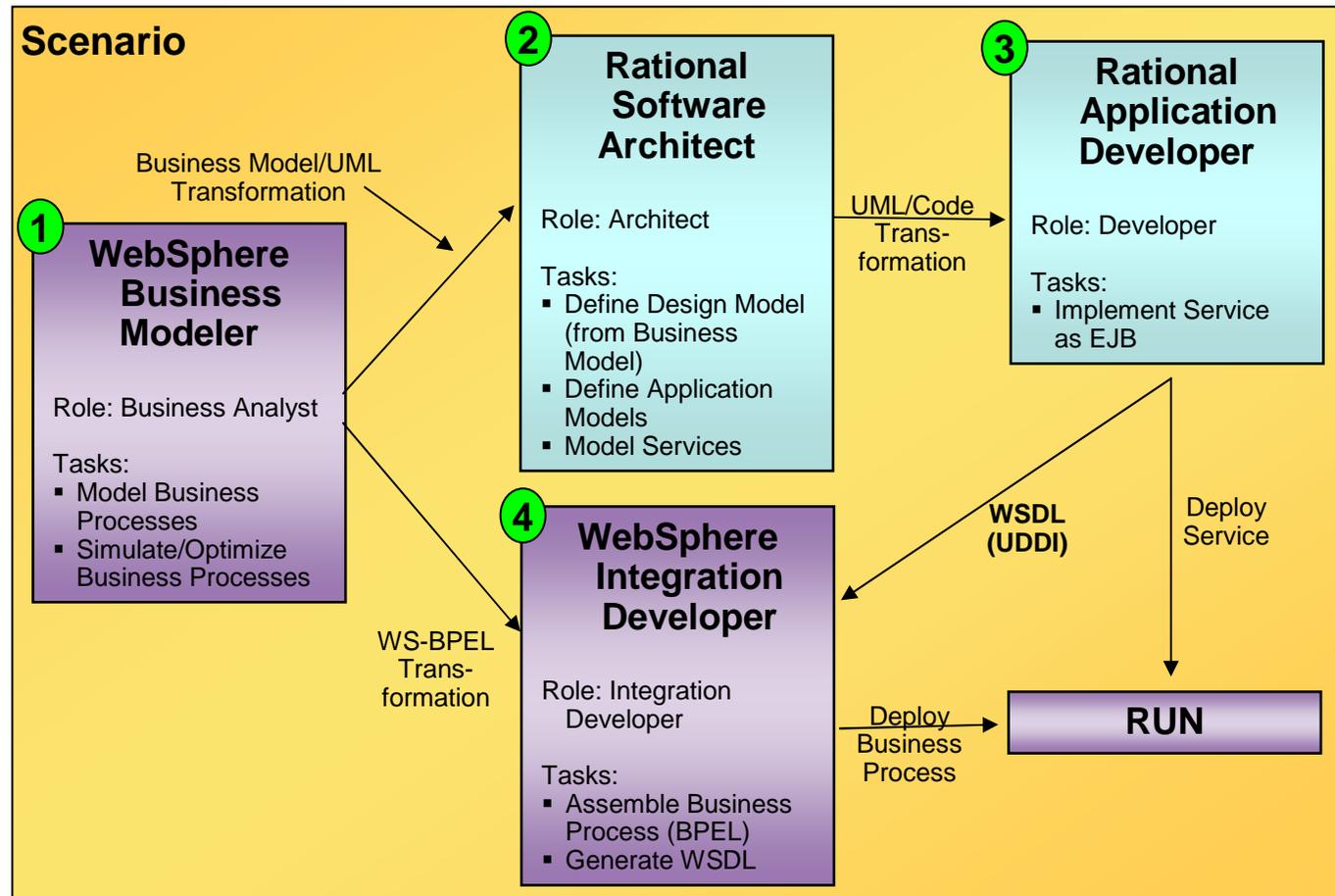
# WebSphere Software Platform – Development Tools

Role	Description	Tool
Business Analyst	Modeling business processes for optimization or to reengineer existing business processes or define new business processes	WebSphere Business Modeler
Integration Developer / Specialist	Visual tools to configure integration logic with existing and new applications and humans in the network	WebSphere Integration Developer
Software Architect	Model-driven development environment that automates the translation from design to implementation. Includes requirements and business modeling integrations with RequisitePro and WBI Modeler	Rational Software Architect
J2EE / Java Application Developer	Comprehensive integrated development environment, for Web, Java, Web services, Portal, and EJB development with visual tools that accelerate application development.	Rational Application Developer
Enterprise Developer	Tools for maintaining legacy assets and extending them to new users to enable those assets to be used in Service Oriented Architectures (SOA) and as Web services	WebSphere Enterprise Developer

# Relationship of Development Tools

- User Roles**
1. Business Analyst
  2. Architect
  3. Developer
  4. Integration Developer

- Tools Used**
1. WebSphere Business Modeler
  2. Rational Software Architect
  3. Rational Application Developer
  4. WebSphere Integration Developer



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# Monitor Positioning

- WBI Monitor
  - ▶ Business Monitoring
- BPC Observer
  - ▶ Tech Preview, Process Instance Monitoring
- Tivoli
  - ▶ System Monitoring

# Common Event Infrastructure

Service Component Architecture    Business Objects    Common Event Infrastructure

An event occurs when something significant happens in the IT system.

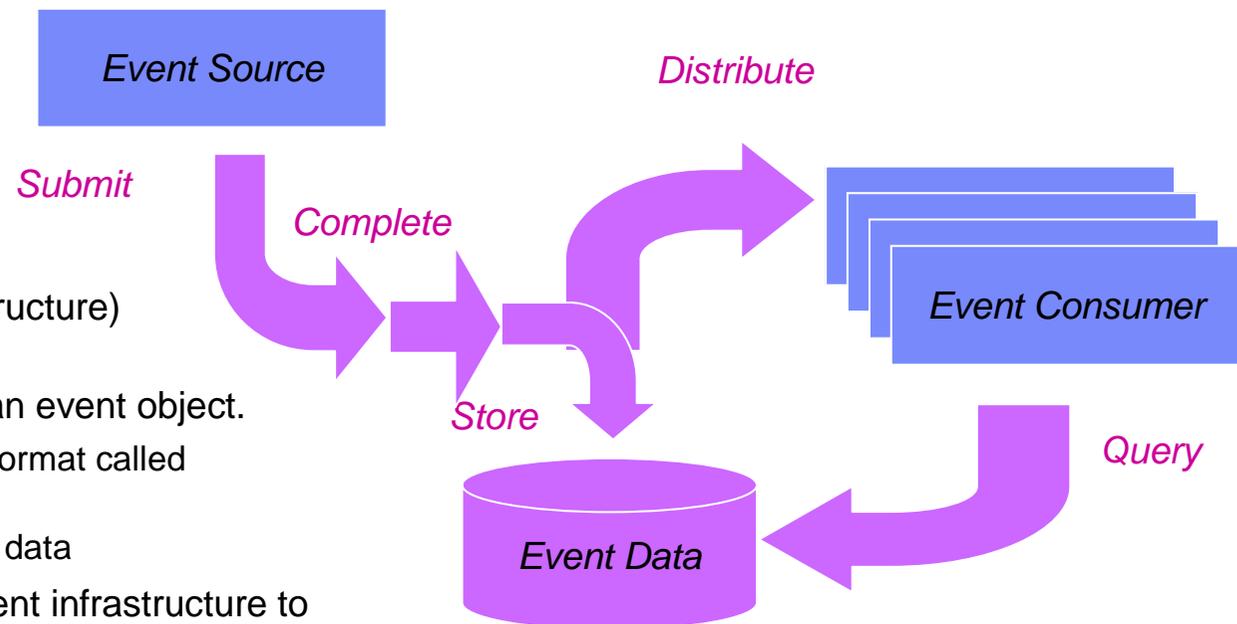
Based on CEI (**C**ommon **E**vent Infrastructure)

Data about the event are captured in an event object.

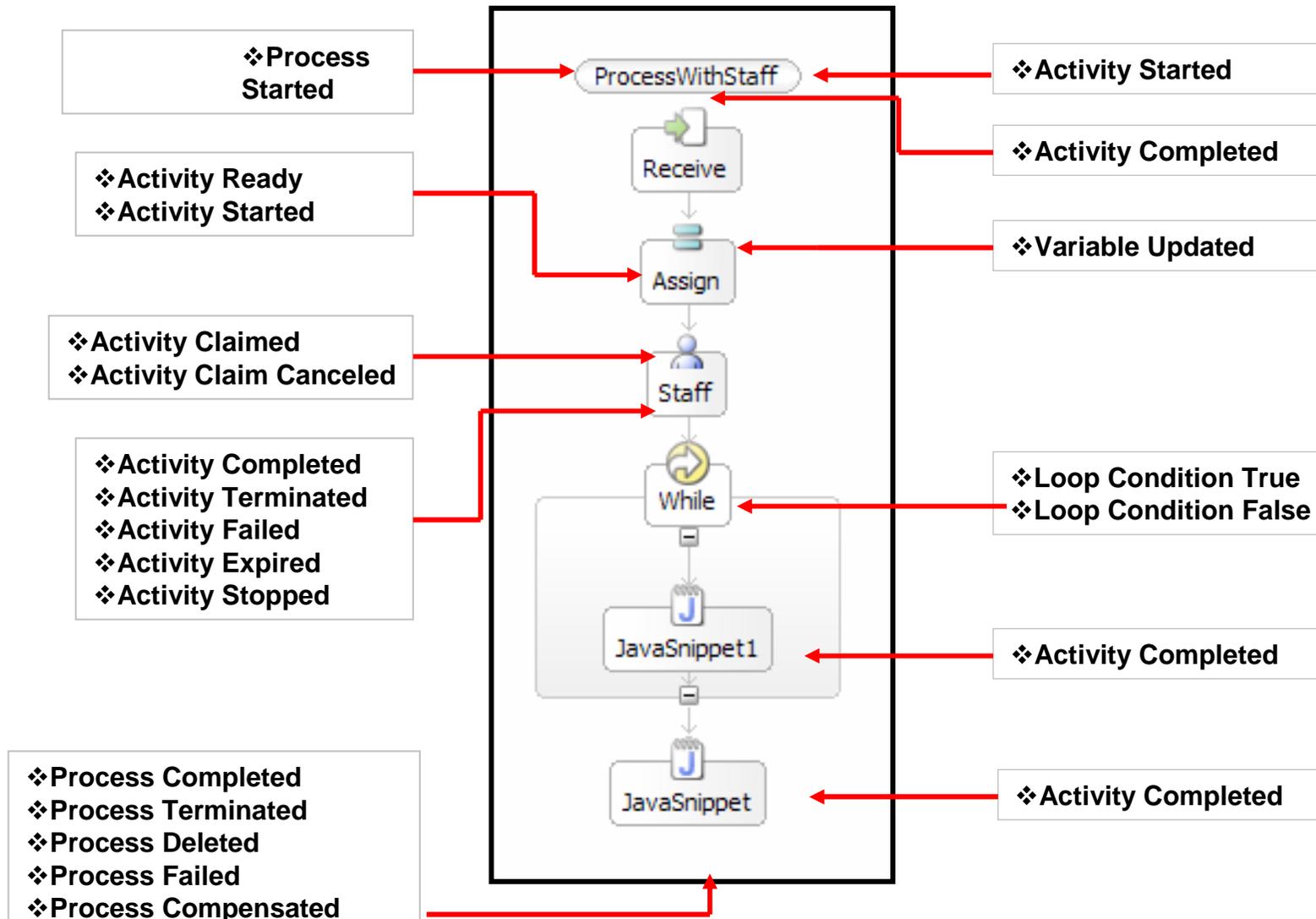
- ▶ The event object has a standardized format called the **Common Base Event (CBE)**
- ▶ The application supplies the business data

All event objects are passed to the event infrastructure to enable:

- ▶ Tracking the progress of a business process
- ▶ Audit trails
- ▶ Coordinating work between independent business processes
- ▶ Monitoring for exceptions in a business process



# Events Across a WS-BPEL Flow



# Common Base Event Selection



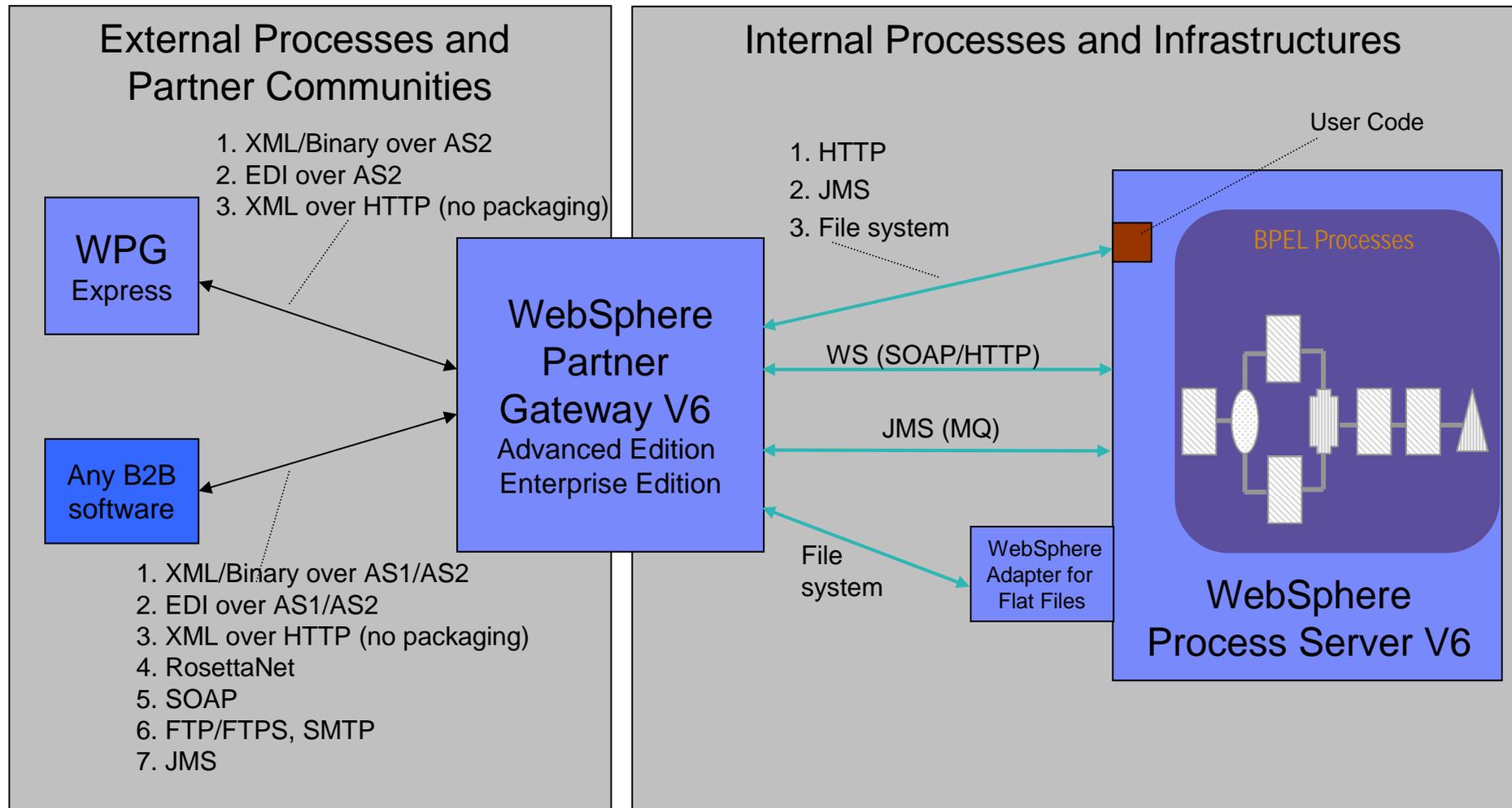
- Fine-grained monitoring specifications for
  - ▶ Human Tasks
  - ▶ Business Processes
    - Process events
    - Activity events
    - Variable events
  - ▶ Business State Machines
  
- CEI and Audit Trail can be configured independently
  
- Generation of additional monitoring events for new BPC 6.0 features
  
- Enablement of end-to-end monitoring for all WBI components based on CEI. As such, it provides the foundation for *WebSphere Business Monitor* and *IT-level monitoring*

Property	Event Content	On?	Transaction	Event Name
<input checked="" type="checkbox"/> CEI				
Nature				
<input checked="" type="radio"/> None				
<input type="radio"/> All	<input type="text" value="Digest"/>	<input type="checkbox"/>	<input type="text" value="SAME"/>	<input type="text"/>
<input type="radio"/> Individual				
<input type="checkbox"/> Entry	<input type="text" value="Digest"/>	<input type="checkbox"/>	<input type="text" value="SAME"/>	<input type="text"/>
<input type="checkbox"/> Exit	<input type="text" value="Digest"/>	<input type="checkbox"/>	<input type="text" value="SAME"/>	<input type="text"/>
<input type="checkbox"/> Expired	<input type="text" value="Digest"/>	<input type="checkbox"/>	<input type="text" value="SAME"/>	<input type="text"/>
<input type="checkbox"/> Failure	<input type="text" value="Digest"/>	<input type="checkbox"/>	<input type="text" value="SAME"/>	<input type="text"/>
<input type="checkbox"/> FComplete	<input type="text" value="Digest"/>	<input type="checkbox"/>	<input type="text" value="SAME"/>	<input type="text"/>
<input type="checkbox"/> FRetry	<input type="text" value="Digest"/>	<input type="checkbox"/>	<input type="text" value="SAME"/>	<input type="text"/>
<input type="checkbox"/> InputSet	<input type="text" value="Digest"/>	<input type="checkbox"/>	<input type="text" value="SAME"/>	<input type="text"/>
<input type="checkbox"/> Retry	<input type="text" value="Digest"/>	<input type="checkbox"/>	<input type="text" value="SAME"/>	<input type="text"/>
<input type="checkbox"/> Skip	<input type="text" value="Digest"/>	<input type="checkbox"/>	<input type="text" value="SAME"/>	<input type="text"/>
<input type="checkbox"/> Stop	<input type="text" value="Digest"/>	<input type="checkbox"/>	<input type="text" value="SAME"/>	<input type="text"/>
<input type="checkbox"/> Terminate	<input type="text" value="Digest"/>	<input type="checkbox"/>	<input type="text" value="SAME"/>	<input type="text"/>
<input type="checkbox"/> Terminating	<input type="text" value="Digest"/>	<input type="checkbox"/>	<input type="text" value="SAME"/>	<input type="text"/>
<input type="checkbox"/> UndoEntry	<input type="text" value="Digest"/>	<input type="checkbox"/>	<input type="text" value="SAME"/>	<input type="text"/>
<input type="checkbox"/> UndoExit	<input type="text" value="Digest"/>	<input type="checkbox"/>	<input type="text" value="SAME"/>	<input type="text"/>
<input type="checkbox"/> UndoSkip	<input type="text" value="Digest"/>	<input type="checkbox"/>	<input type="text" value="SAME"/>	<input type="text"/>

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# WPG Integration with Internal Business Processes

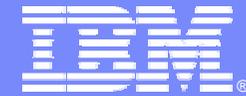


## SOA Launch and eGA Dates

- | <u>Product Name</u>             | <u>Launch Date</u> | <u>eGA</u> | <u>NLV</u> |
|---------------------------------|--------------------|------------|------------|
| WebSphere Process Server        | 9/13/2005          | 9/29/05    | Q106       |
| WebSphere Integration Developer | 9/13/2005          | 9/29/05    | Q106       |
| WebSphere Business Modeler      | 9/13/2005          | 11/30/05   | Q106       |
| WebSphere Business Monitor      | 9/13/2005          | 01/31/06   | Q206       |
| WebSphere Message Broker        | 9/13/2005          | 09/30/05   | 09/30/05   |
- The current target for WebSphere Process Server and WebSphere ESB on Linux for zSeries will be in 12/05. WebSphere Process Server for z/OS is targeted for availability in the early part of 2006. WebSphere ESB will support the z/OS platform with an availability date to be announced later. The enhanced version of WebSphere Message Broker will available on z/OS in 10/28/2005. Additional product details will be in the RFAs.*

## WebSphere Process Server – Summary

- New Integration Server from IBM
- Built from Scratch for SOA
  - ▶ Service Component Architecture (SCA)
  - ▶ Business Objects
- Variety of Components
  - ▶ Full function
  - ▶ Support the most complex integration scenarios
- Built on top of WebSphere Application Server



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# *Thank You*



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