

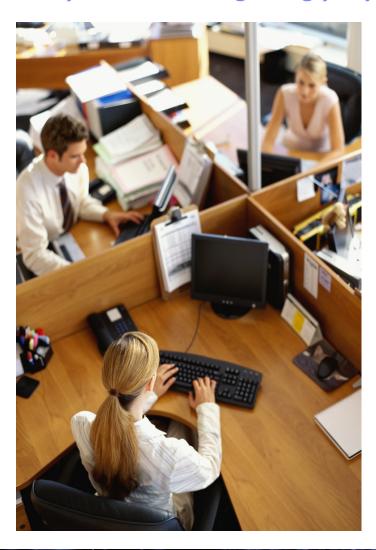
# Process Automation and Dynamic Service Selection



**IBM Software Group** 



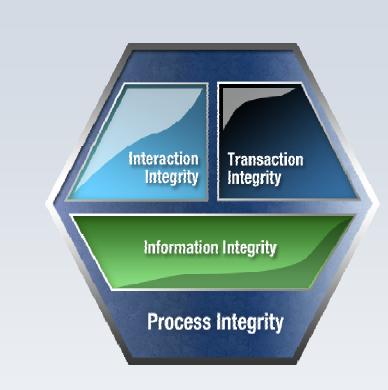
### WebSphere Process Server Creates an Agile Company Flexible processes integrating people, reusing existing services and resources



- Provides a world class single integrated runtime for all SOA based process automation
- Coordinates interactions with systems and people throughout the enterprise and beyond creating a system where costs are reduced and change is easier
- Powerful Human Workflow
  - Configurable work lists and detailed work item view
  - Graphical process view for business users for viewing and interacting with task
- Flexible Business Processes
  - Designed to provide flexibility for modifying in-flight process instances



### WebSphere Process Server ensures Process Integrity Your mission critical processes will be executed and prevent major mishaps



#### Shanxi Mobile

"Establishing an SOA based on IBM WebSphere software has allowed us to serve our customers more efficiently and effectively by enabling total integration between our multiple business systems"

- Build robust systems that support mission-critical business processes
  - Ensure that nothing gets lost nor executed twice across the end-to-end process.
  - Even in the event of catastrophic system failures WebSphere Process Server knows exactly where to resume processing.
- Deliver reliability, scalability and security end-to-end
  - Full transactional support across distributed systems
  - Automated compensation and resynchronization
  - Recovery at all levels (service bus, application, database, server...)
  - Enterprise-class scalability



### WebSphere Process Server Provides Choice You don't have to overhaul your IT systems and skills for BPM and SOA



- WebSphere Process Server is a highly scaleable, reliable and secure platform with a wide range of hardware and operating systems supported
- Complete flexibility over where to deploy your business processes or sub-processes
  - Make (and change) decisions at deploytime without affecting development
  - Deploy anywhere:
    - Windows, Unix/Linux, i5/OS, z/OS, Linux for System z
    - xSeries, pSeries, iSeries, zSeries;
       32-bit and 64-bit
- Based on the market leading WebSphere Application Server, providing clustering, scalability and security



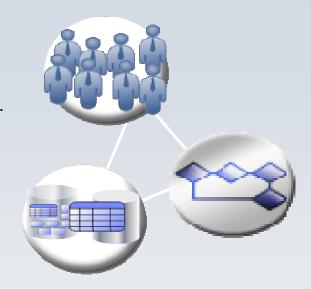
### Process Automation through WebSphere Process Server A Mature Product with a Track Record of Success

#### **IBM** is Market Leader in Process Automation and BPM

- #1 in Market BPMS market share\*
- In Leaders Quadrant in Gartner BPMS Magic Quadrant\*\*
- Over 10 years in market with core process technology
- BPM Competency Center with over 1000 engagements.

#### Large install base

- Över 900 WebSphere Process Server (WPS) customers/installs
  - Currently 59 reference customers and growing quickly
  - Used in more than 20 industries
  - Installed in over 30 Countries
- WebSphere server installed base
  - 16,000+ WAS customers (distributed)
  - 10,000+ WebSphere MQ customers
  - 3,500+ Portal,...
  - 2800+ Heritage process customers (WICS, WMQWF, WBI)
- 62,000 WebSphere customers worldwide (93% of the Fortune 100 use WebSphere)



"Our efforts to bring more integration and collaboration to our production processes are critical to the future of the offshore industry. IBM has shown a strong commitment to helping us achieve this goal."



<sup>\*</sup> Gartner BPMS market share, June, 2007, Michele Cantera)

<sup>\*\*</sup> Gartner, Inc., "Magic Quadrant for Business Process Management Suites Dec, 2007, by Janelle B. Hill, Michele Cantara, Eric Deitert, Marc Kerremans



# WebSphere Process Server Component Architecture



Service Components

Supporting Services

**SOA Core** 

**Business** Business Human Business State Tasks Rules Processes Machines Dynamic **Business Mediation Flows** Interface Relation-Object Service Maps ships (ESB) Maps Selection Service Component Business Common Event Architecture **Objects** Infrastructure WebSphere Application Server ND (J2EE Runtime)

\*1Q 2007



# WebSphere Process Server Version 6.1 Accelerates SOA-based process automation & integration

### Enhances human-centric BPM capabilities

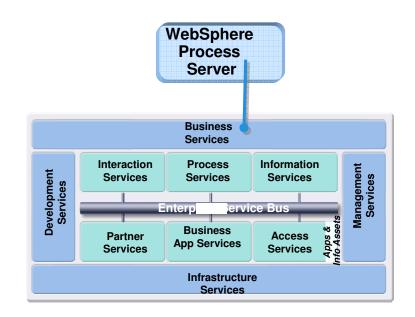
- IBM Lotus Forms integration
- Participant substitution/delegation
- Support for batch work item transfer
- New Business rule administration API
- Enhanced business process administration client

### Extends integration-centric BPM capabilities

- New SCA HTTP binding
- New JMS binding for generic workflow clients
- WebSphere TX integration
- Improved handling of WSDL/XSD
- New and enhanced WESB primitives

#### Expands platform and infrastructure currency

- WAS v6.1 based runtime, including JDK5
  - Staff repository support with Virtual Member Manager
  - MQ Shared Queues on z/OS with platform messaging
  - zFS support for installation and configuration on z/OS (in addition to the older Hierarchical File System)
  - z/OS V1.7 and higher
- 64-bit support for all server platforms
- WAS XD support across all components
- i5/OS platform coverage



New in 2008





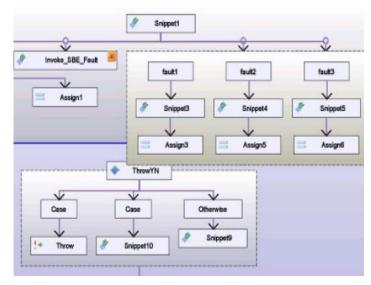
### Graphical BPM Tools in WebSphere Process Server Controlling your business process environment

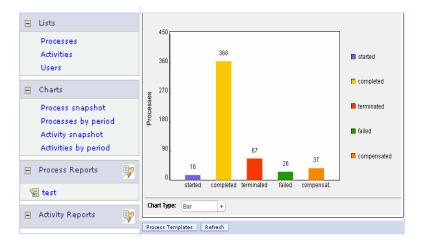
### Graphical Process Instance Viewer

- Real-time snapshot of your process
- Understand process structure
- Check status of process and its activities at runtime

## BPC Observer: Light-weight process instance monitoring

- Monitors health of business process engine
- e.g. number of active processes
- e.g. rate of finished process per day

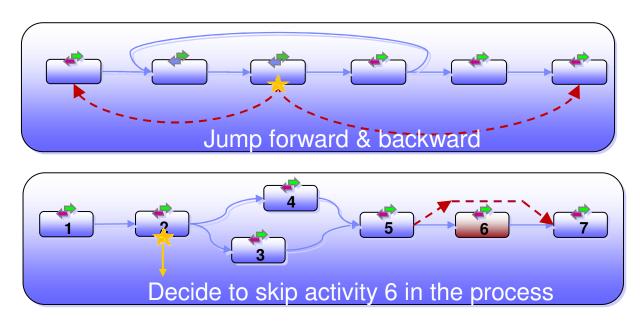






# Navigate Within Business Processes In-Flight Respond to changing business needs with greater flexibility

- Jump forward and backward between activities within a running process
- Skip activities within a process
- Incorporate process relevant data changes in-flight



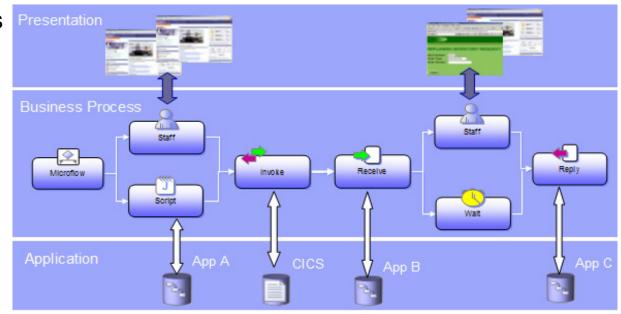


WebSphere Process Server In-flight Process Changes



# Human workflow for BPM Key factor for business success

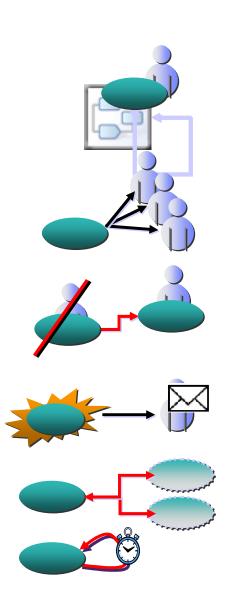
- Human workflow is about assigning the right work to the right people at the right time, with the information they need, presented for immediate action
- Human Workflow is required for important business scenarios
  - Exception handling for automated process steps
  - Manual review and approvals
  - Legal regulations, compliance and policy fulfillment (Sarbanes-Oxley, HIPAA, ISO 9000....)
  - ...and many more





## Human Task Manager Supporting all aspects of human interaction

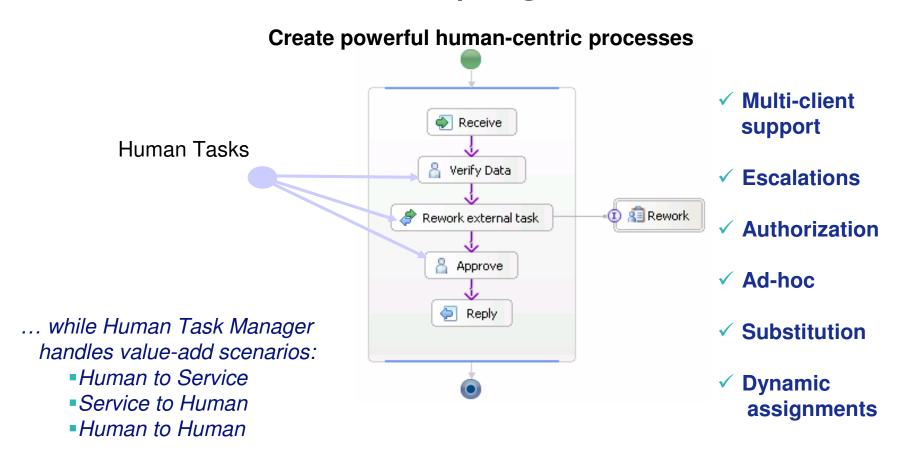
- Full integration of human workflow into SOA
- Rich task assignment capabilities
  - → assign work using flexible staff queries
  - → federate multiple staff/organization directories, e.g. LDAP
  - → Ability for dynamic task assignment
  - → Re-direct work to substitutes in case of absence
- Multi-level escalation mechanisms
  - → Notification through e-mail and notification tasks
- Support for ad-hoc human collaboration
  - → Create human tasks on-the-fly, extend pre-defined process models dynamically
  - → Follow-up of manual Tasks





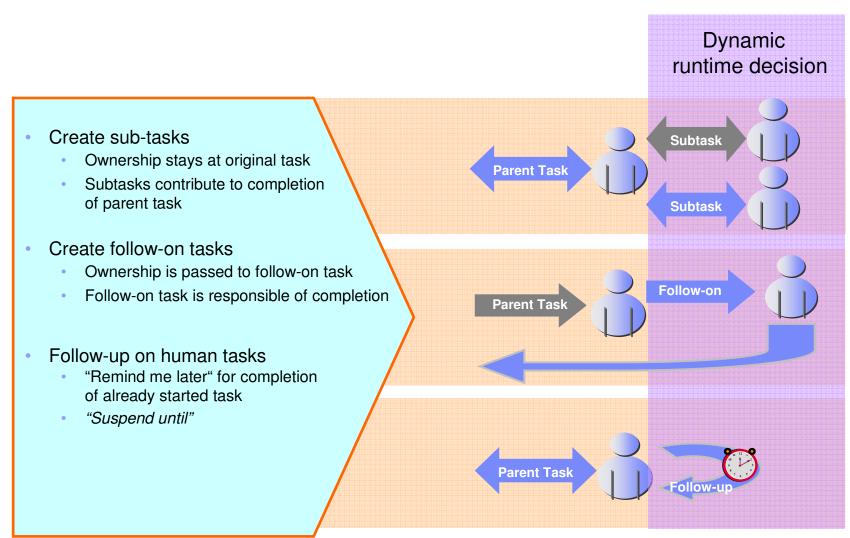
### The Construct of a Human Task

### Accessible capabilities to fine-tune business processes to address business scenarios requiring human intervention





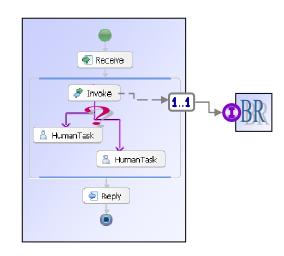
### Ad-Hoc support in WebSphere Process Server Allowing for dynamic changes in human workflow scenarios

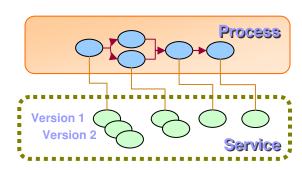




# Business value through dynamicity Business Rules and Service selection for flexibility

- Building dynamic solutions requires answers to some initial questions
  - How do you deal with change?
  - How can you change implementations dynamically?
  - How can you limit the need for process change?
- Dynamicity options in WebSphere Process Server
  - maintain your process conditions externally
  - make dynamic service selection and invocation
  - change conditions on the fly without affecting the application







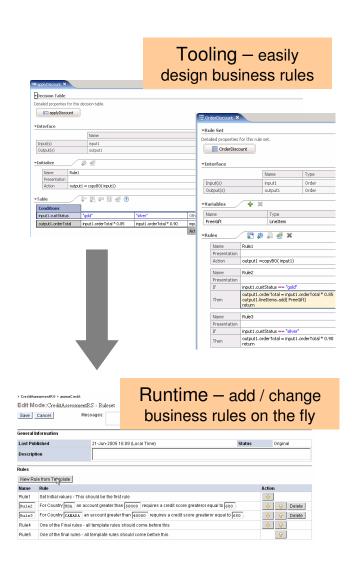
# Dynamicity: Business Rules Externalize Business Logic for Flexibility

### Business Rules add value to your business

- Expose process decision points as dynamic business parameters
- consistency across the business e.g. all application access same business rule

#### Ease of Use

- Real-time business change Adjust business rules on the fly through web interface
- Audit & staging concept
- 3<sup>rd</sup> party rules engine plug-in
  - ILOG (IBM SOA Specialty Program)





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