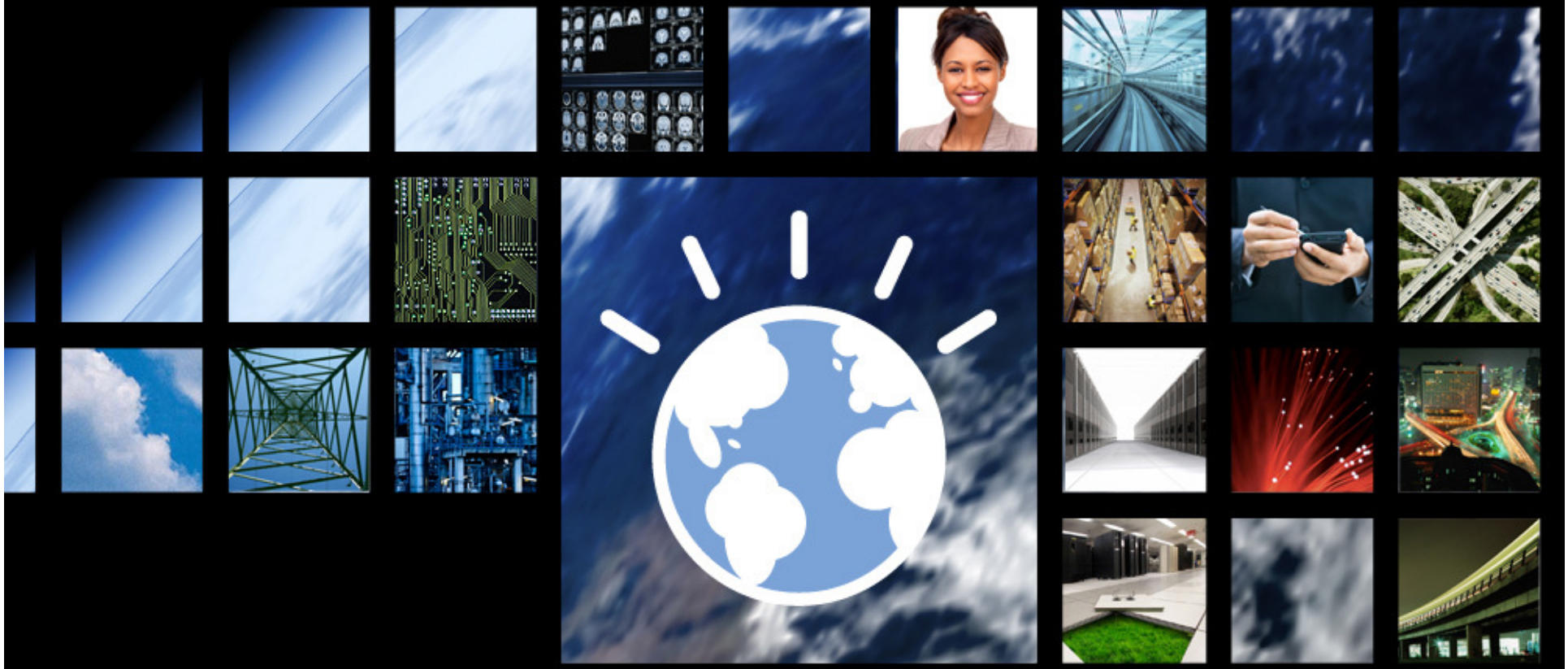
A smart conference for a smarter planet



BPM Update for System z

2009 IMPACT
SMART SOA CONFERENCE
MAY 3-8 LAS VEGAS

Agenda

- **Introduction, Strategy, Evolution, Architecture**
- BPM Product Updates 6.2
  - WebSphere Business Modeler
  - WebSphere Process Server, WebSphere Integration Developer, WebSphere Enterprise Service Bus
  - WebSphere Business Services Fabric
  - WebSphere Business Monitor
- Related: WebSphere Business Events
- Business Rules – iLOG JRules
- BPM in the Cloud – Blueworks
- BPM Portfolio Capabilities
- Futures
- Summary and Conclusion

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Complex Business Needs Driving IT Change

Business Challenges

- *Globalization*
- *Competitive Pressures*
- *Eroding Customer Loyalty*
- *Supply Chain Complexity*
- *Governance, Risk and Compliance*
- *Industry Transformations*
- *Mergers & Acquisitions*

Business Requirements

- *Innovation and Growth*
- *ove Flexibility and Agility*
- *Make Better Decisions Faster and Optimize Business Performance*
- *Improve Collaboration and Empowerment*
- *Deploy and Optimize End-to-End Business Process*
- *Reduce Cost & Complexity*

IT Infrastructure Must

- *Enable Business Flexibility*
- *Deliver Quality Service*
- *Be Secure*
- *Be Reliable and Scalable*
- *Be Easy to Enhance, Reconfigure and Maintain*
- *Establish and Leverage Trusted Information*
- *Integrate Legacy Systems and Information Silos*
- *Deploy in incremental steps*

Complexity Inhibits Business Innovation

These challenges inhibit LOB and IT from quickly driving innovation, managing risk and enabling change

Business people know which business processes and events are relevant, but aren't equipped to implement SOA

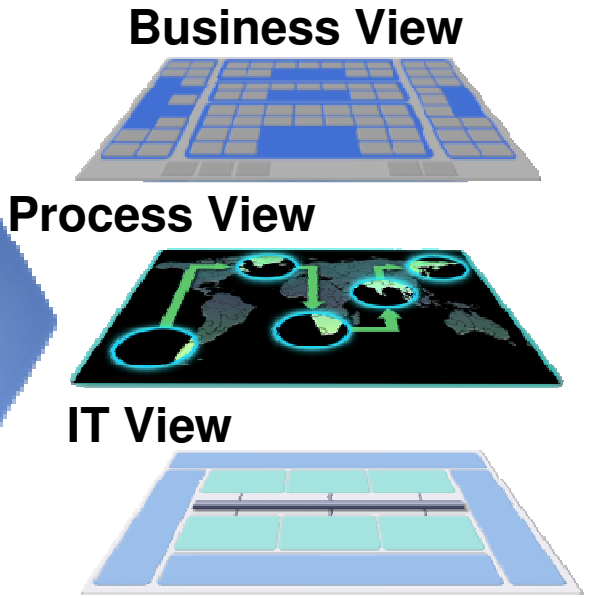
IT people often don't know which business events and transactions impact business processes

Business Process Management (BPM) bridges the gap between business and IT

BPM drives Business and IT alignment around functional and transformational Business Objectives

- **Collaborate to predict and optimize process outcomes through modeling and simulation**
- **Rapidly customize processes with business users using policies instead of code**
- **Sense and respond to business events in real-time for automated response or human decision support**
- **Rapidly deploy new solutions from reusable building blocks that can be changed on-the-fly**

BPM

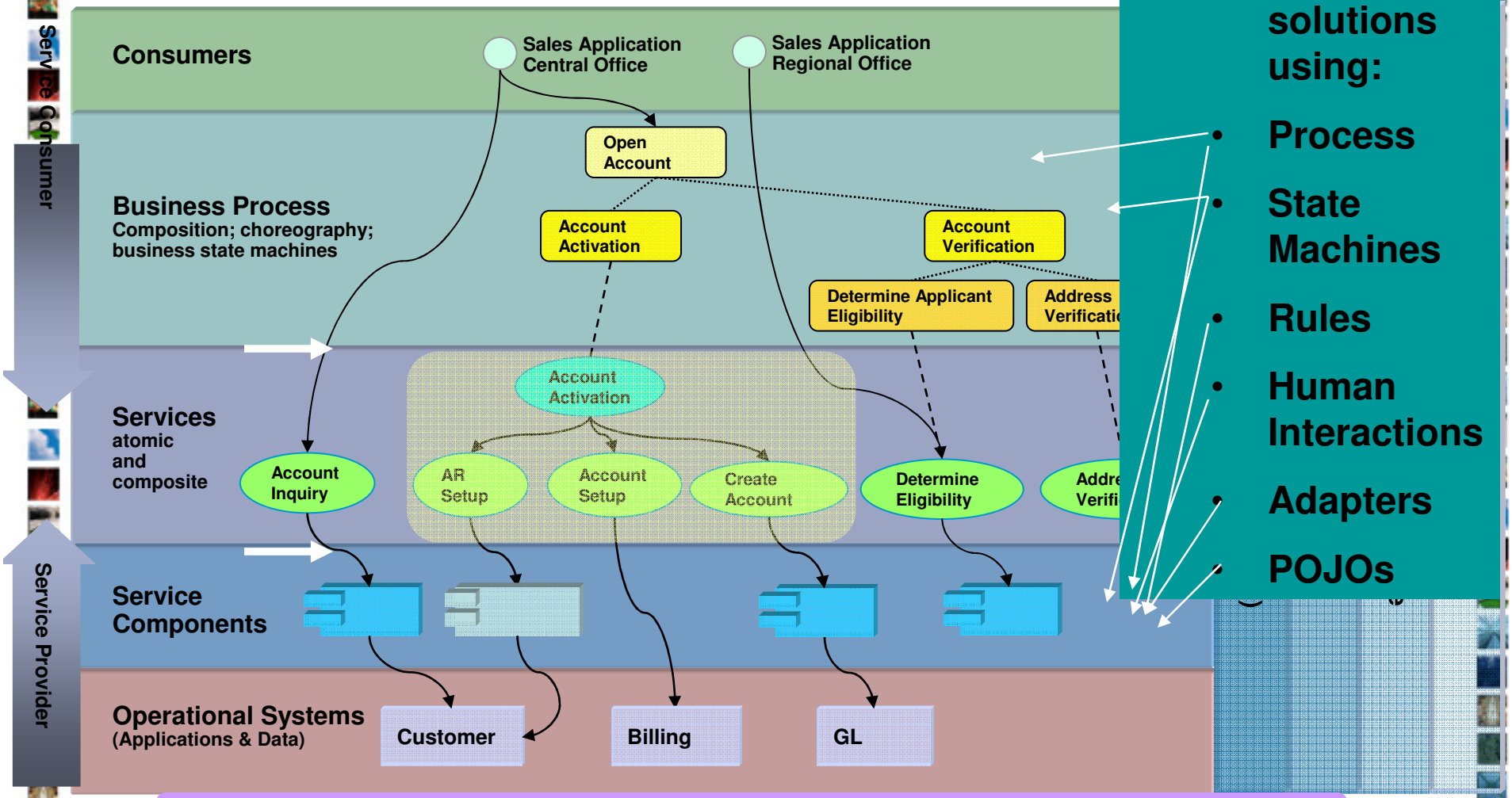


BPM enabled by SOA bridges Business and IT

BPM Key Philosophies and Architectures

1. **Consistency across products** – A real integrated Portfolio
2. **Programming Model** – open, standards based, spanning the lifecycle of model, assemble, deploy and manage
   - Service Representation and Composition
     - SCA (Service Component Architecture), WSDL
   - Data Representation – XML,
     - represented In Modeler as business items,
     - programmed through SDO/BO and X* (XPATH, XSLT,…)
   - Workflow, Orchestration and Choreography
     - BPMN, BPEL and related/emerging standards (BPEL4People, BPEL4J,, etc..)
   - Shifting from programming languages towards XML and metadata
   - Capture business logic in the most simple way possible (not via coding in very many cases) (Also capture infrastructure logic in ESBs in the most simple way possible (configure versus author, author graphically versus writing code)
3. **Build on, extend and innovate** based on key WebSphere infrastructure and underpinnings, driving in new capabilities for the whole portfolio as appropriate.

The SOA Solution Stack and BPM – Application View

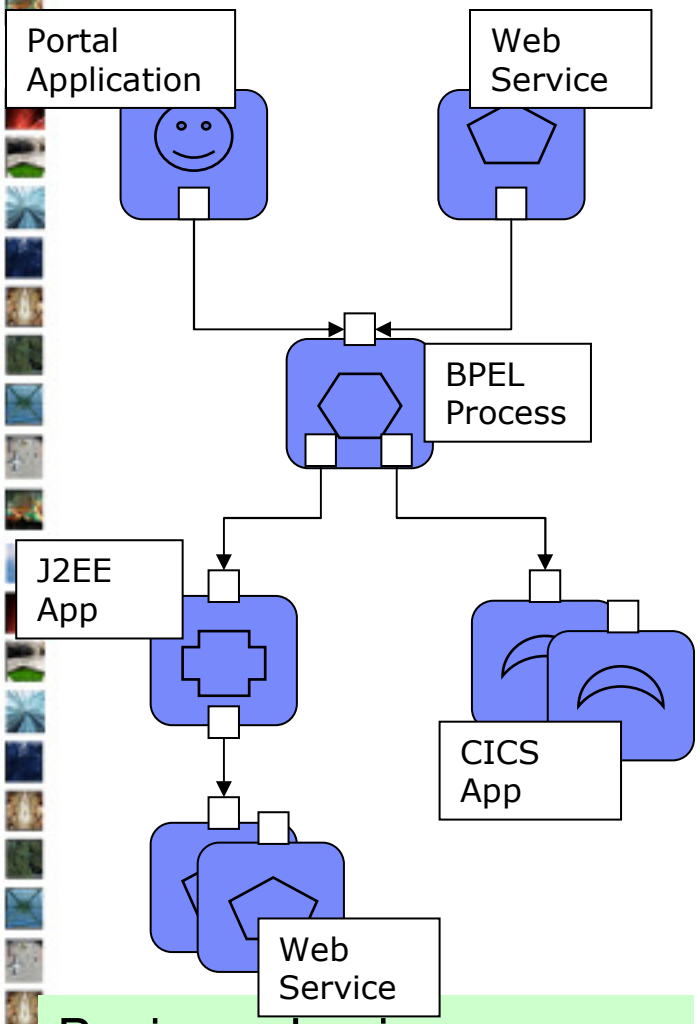


Build out solutions using:

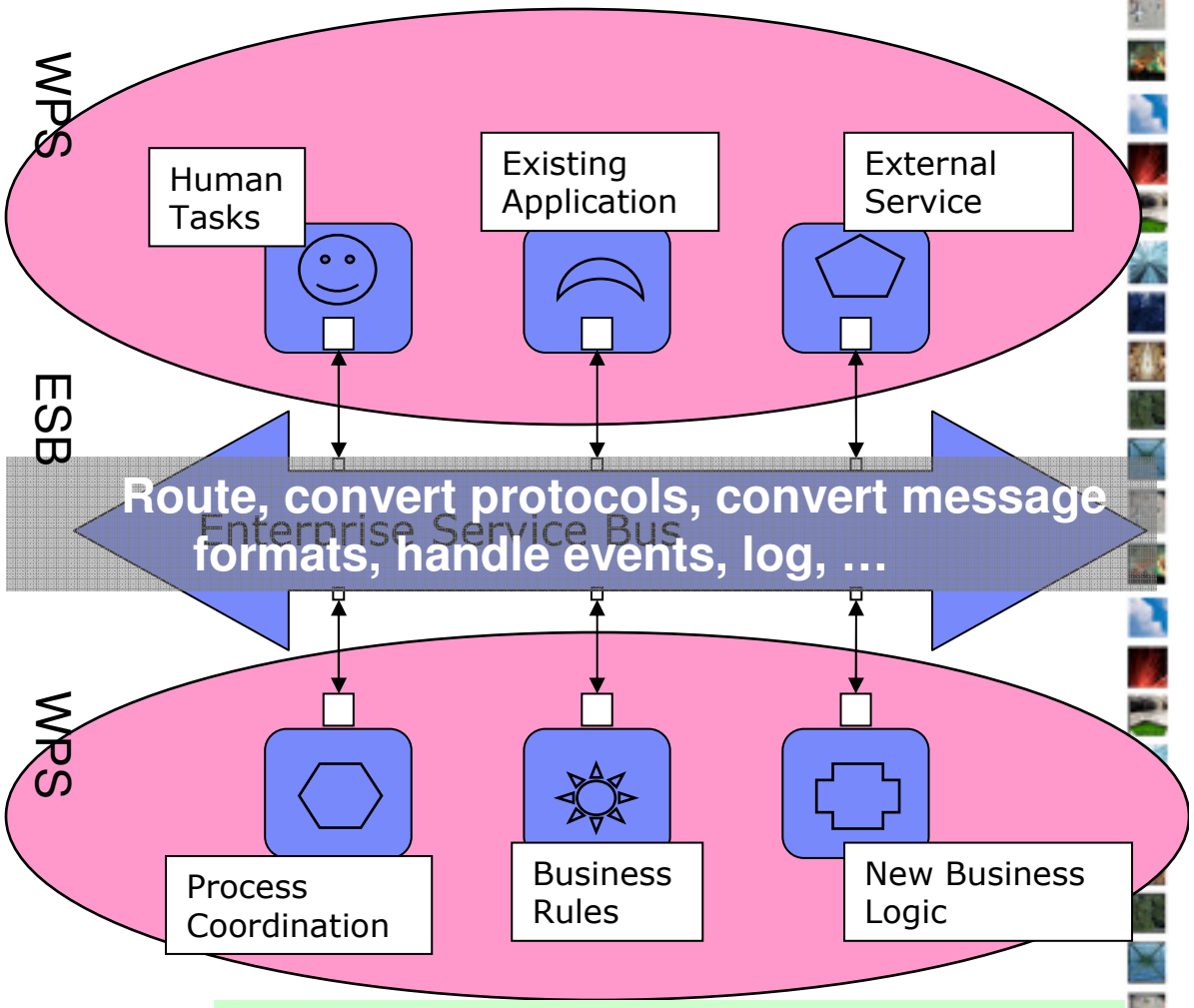
- Process
- State Machines
- Rules
- Human Interactions
- Adapters
- POJOs

Consistent Architecture, flexible, based on services

BPM and ESB in the SOA Programming Model



Business Logic Implementation View



Complete Implementation View

BPM Enabled by SOA Supports Continuous Alignment of Business Processes

Six Agility Enablers

And agility goes beyond this to include:

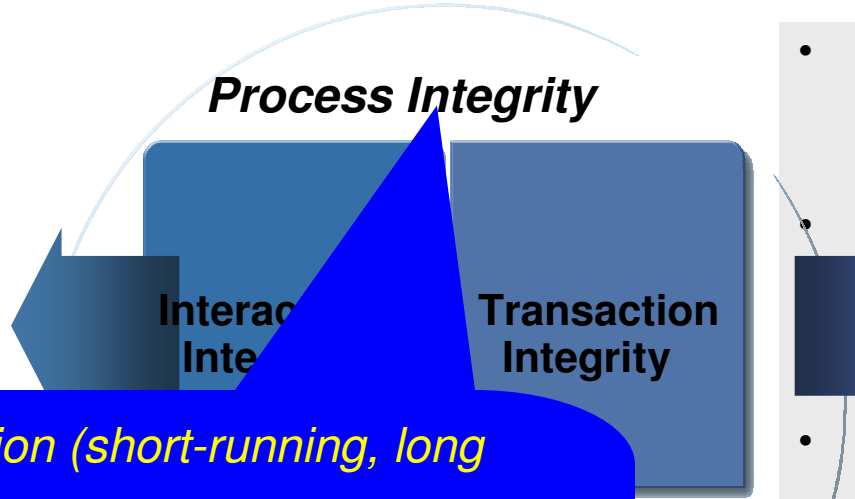
- Ad hoc tasks
- Metrics and KPI setting
- Process Instance agility
- …

Evaluate enterprise needs vs. best ways of fulfillment

Process Integrity
Built on a strong foundation.

- Processes in SOA consist of multiple interactions, transactions and data flows
- Process Integrity enables frictionless execution of distributed business activity spanning multiple platforms, applications, data sources, domains and users

BPM Builds on Transactional Integrity



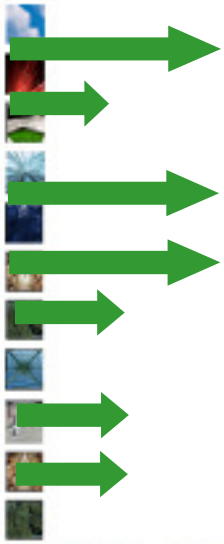
- *Compensation (short-running, long running)*
- *Retry at multiple layers*
- *Built in 'failed events management' and recovery for long running processes*
- *Event Sequencing*
- *….*

- Long-running business processes are **built from a set of fully ACID short running transactions.**
- We have **advanced programming models** to ble control over what pens in the event of siness failures
- We have advanced features that prevent the business from seeing tactical IT system failures unless absolutely necessary.
- Our programming model enables 'process level' integrity to occur with ease via powerful metaphors and authoring tools

The End Game for BPM

- Customers are ***run****ning their business* on our software - 'Customer Business' includes industry specific/customer specific instantiation of:
  1. **Business Processes** - what we see in WPS evolved
  2. **Business Policies and Rules** - what we see in WBSF/WPS evolved
  3. **Business Activity Monitoring**- what we see in Monitor evolved, combined with some of what starts in Modeler in fact become part of the 'manage' part of running the business
- The business is dynamically changed by business users, by modifying the processes, policies and rules

The above:



–can be accelerated by content tailored to industry and other common patterns

–can be accelerated and seeded by strong modeling and simulation

–have to encompass and account for evolving B2B and packaged application trends and directions

–should be running on a SOA based infrastructure, in fact need to be, in order to be manageable, dynamic and reflective of the true business

–need to be based on a strong IT foundation (eg.. WAS, WAS XD, ..)

–must embrace a LoB orientation, enable IT departments to enable their LoB users to create processes on their own

–must be supported by role and goal oriented tailorable, powerful UI

–must be governed and managed in the context of the business and IT environment

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Goal State - Summarized

– Enable communications between business and IT
- Re-energize IT around business objectives and goals – get alignment

–Architecture
- Consistent continuity in business abstractions down into the infrastructure
- Process Integrity
- Agility built in

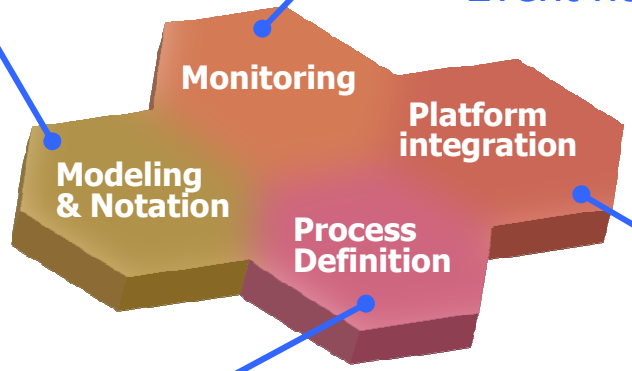
It starts with SOA,

and then BPM enabled by SOA

Open Standards for BPM

- **BPMN**
  Business Process Model & Notation

- **WS-DM Events**
  Common Base Events
- **WS-Notification**
  Event notification patterns



- **WS-BPEL 2.0**
  Automatic workflows
- **BPEL4People**
  Human workflows
- **BPEL-SPE**
  Subprocesses

- **SCA**
  Service components
- **SCA-BPEL**
  SCA/BPEL integration
- **BPELJ**
  Java/J2EE integration

High End WPS - example

- Telecomm Industry, Customer Order Entry and Order Management
- **Platform:** WPS 6.02.3 on z/OS, using 10 GP and 12 zAPP CPUs of z9 hardware for WPS
- 1 Customer Order (CO) adds up to 72 WPS / SCA Service Invokes: state machines, macro-flows, micro-flows and primitive services
- 3.3 CO BPS produced 238 SCA invocation per second or 14256 SCA invocation / min.
- Throughput of 100,000 COs per day, means around 2.8 million macro-flows per day,1.3 million micro-flows,3.1 million primitive service calls.
- Working size of 1TB of Business Process Database, or 28 million macro-flows, (1,000,000 COs)

COs calls SOs which calls APFs

• State machine - CO (8 states)
Create CO" is making the following SCA invocations:

- 4 Java
- 1 CICS
- 1 BPEL-BSM
- 1 BPEL-SR

▪ State machine - SO (7 states)
CO/Create SO" is making the following SCA invocations:

- 5 BPEL-BSM
- 2 BPEL-SR
- 2 Java

Execute APFs - is making the following SCA invocations:

• Long running BPEL – APF A
- 12 BPEL-LR
- 10 BPEL-BSM
- 6 MQ

Short running BPEL – APF B
- 10 BPEL-SR
- 12 Java
- 6 CICS

BPM is Strengthened when Customized by Role

Collaborate and act through a unified, personalized view

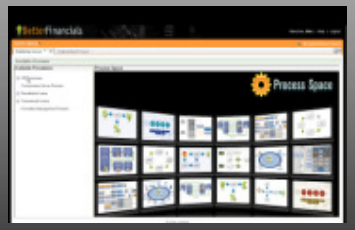
Business space capabilities of the BPM suite

Business Leader

Business Analyst

Business User

Review KPIs, manage task lists and



Process Owner

Analyze metrics, optimize proces
models and dashboards

Single source to interact with a business process hiding needless complexity

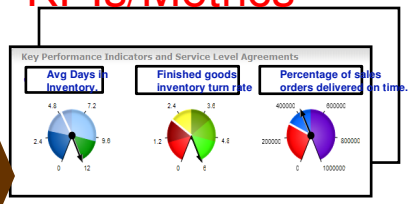
Goal State - for Business Users

Business Leader

Business User

Business Analyst

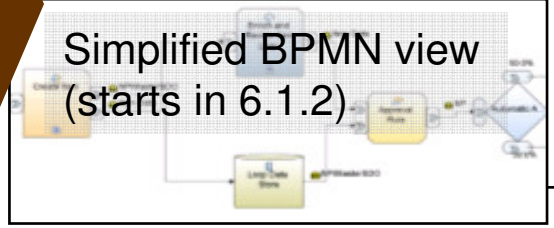
KPIs/Metrics



Business Policies,
Business Rules,
Business Services

Business Processes

Simplified BPMN view
(starts in 6.1.2)



Different Views for different roles

IT

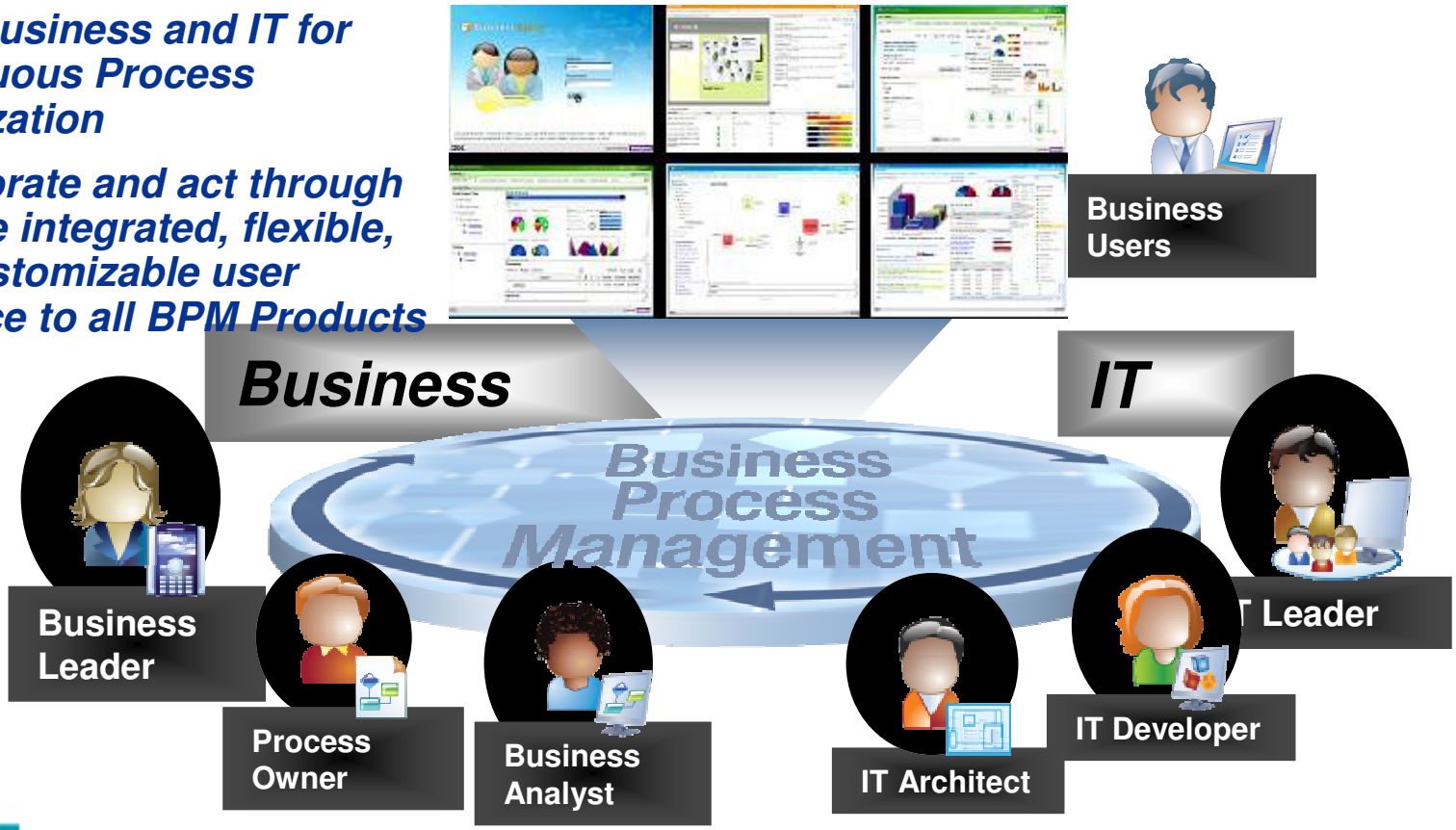
Keep IT hidden from business view, but preserve process and business integrity

Business Space - Access the Breadth of Capability Through a Single User Interface

- **One web entry point for user login, regardless of what BPM products are deployed and how they've been deployed**
- **Assemble integrated interfaces across the full breadth of BPM capability**

Align Business and IT for Continuous Process Optimization

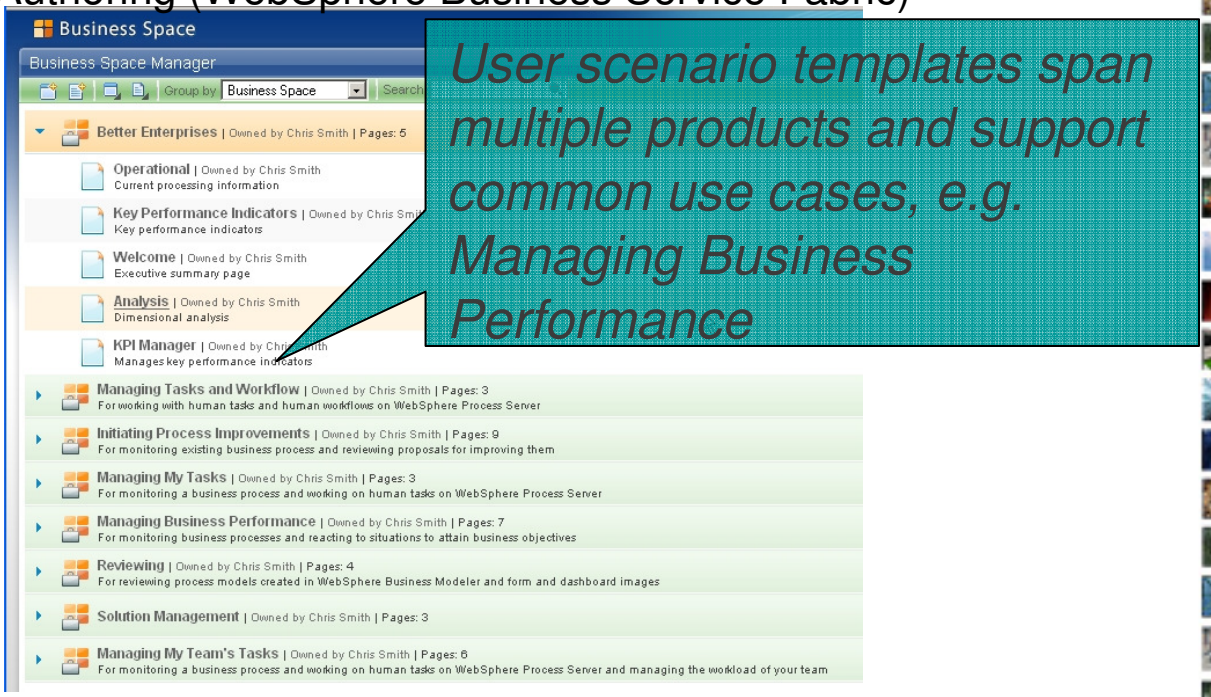
Collaborate and act through a single integrated, flexible, and customizable user interface to all BPM Products



Out-of-the-Box Templates to Accelerate Time to Value

Base Product Templates ship with individual products, for ex…

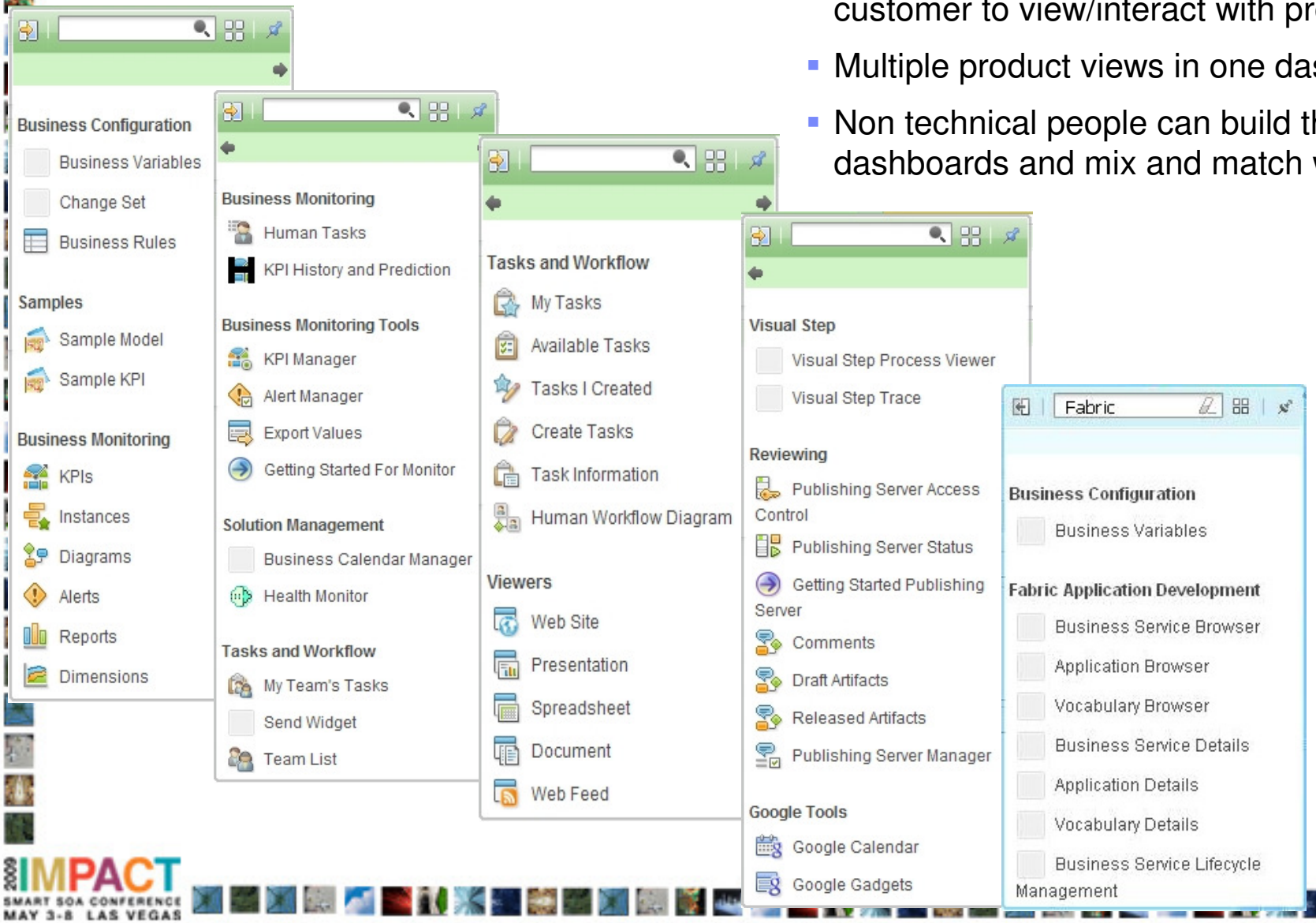
- Business Monitoring (WebSphere Business Monitor)
- Reviewing (WebSphere Business Modeler Publishing Server)
- Managing Tasks and Workflow (WebSphere Process Server)
- Solution Management (WebSphere Process Server)
- Business Service Policy Authoring (WebSphere Business Service Fabric)



User scenario templates span multiple products and support common use cases, e.g. Managing Business Performance

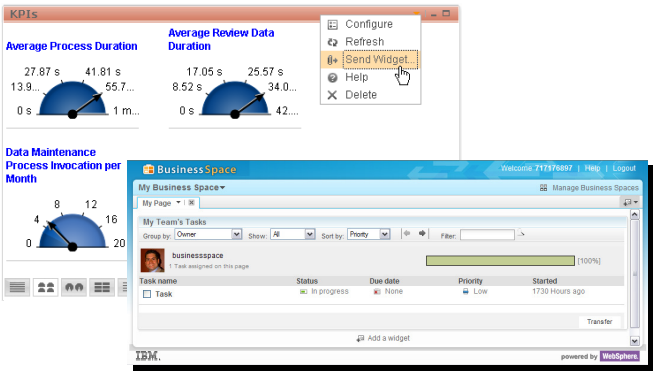
Business Space Widget Palette

- IBM offers widgets out of the box for customer to view/interact with processes
- Multiple product views in one dashboard
- Non technical people can build their own dashboards and mix and match widgets

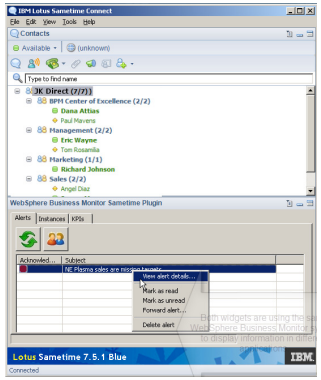


Collaborating within Business Space

Review and comment on BPM assets such as process models and dashboard designs



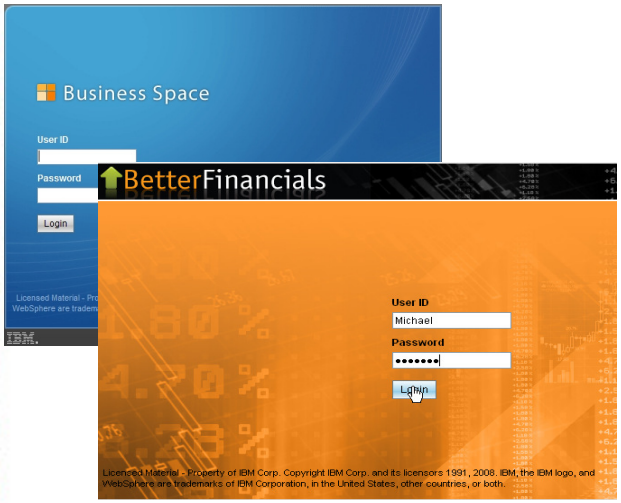
Send widgets, collaborate on tasks, share spaces

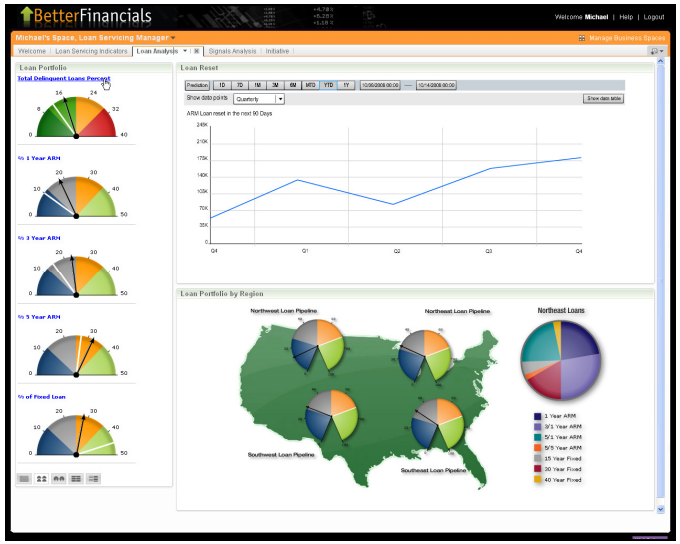


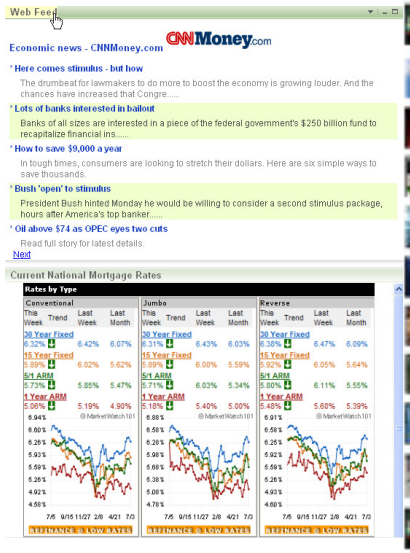
Integration with Lotus Notes & Lotus Sametime

- Spaces and pages can be shared with other users, and imported and exported, in the form of metadata files
- View documents and MS Office files in common Viewer widgets

Customizable and extensible to empower users with superior process content and information

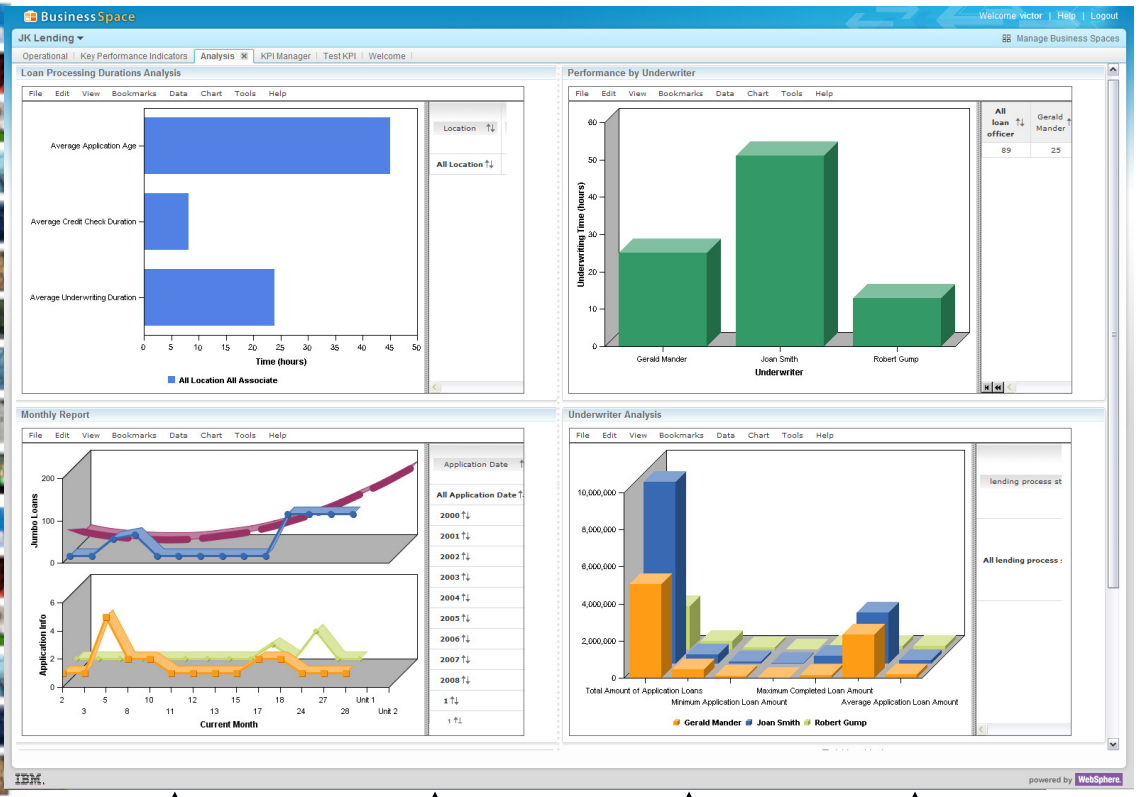






- Users can customize the skins and widget content
- Access variety of data sources through REST API's
- Build custom widgets, custom Flash applications, and combine/extend with core applications

Business Space at a Glance



- Common UI infrastructure shipped with BPM products
- Views built using mashup technology that integrate at the glass
- A user interface that's customizable by business users
- Widgets backed by REST access to runtimes

Reuses Lotus Mashups Enabler client-side runtime

- Ensures consistent and standard iWidget rendering environment
- Exploit semantic tagging services for page rendering

Reuses Lotus Mashups AJAX proxy for cross-domain access

REST API	REST API	REST API	REST API
WebSphere Process Server	WebSphere Business Modeler Publishing Server	WebSphere Business Monitor	WebSphere Business Fabric

BPM REST Platform

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iWidget – An Emerging Standard

Extensibility of framework to customer core applications and Partner ecosystem for third party content creation

- IBM Software group supports iWidget specification across products/components
  - Lotus Mashups, Lotus Connections, Lotus Quickr, Lotus Notes Client
  - **Business Space**

http://www.openajax.org/member/wiki/IBM_Widgets_proposal

- IBM donated the iWidget specification to the OpenAjaxAlliance.org
- Goal to standardize web widget components so widgets can interoperate in different mashup environments
- Build Partner ecosystem

BPM Widgets Enabled By Product in 6.2

BPM Product	Widgets Enabled
Common Widgets	**Editors and Viewers:** • Presentation • Document • Spreadsheet • Web Site (URLs) • Web Feed **Google Tools:** • Google Gadgets • Google Calendar
WebSphere Business Monitor	**Business Monitoring:** • Reports • Instances • Human Tasks • KPIs • Dimensions • Diagrams • Alerts • **KPI History and Prediction** **Business Monitoring Tools:** • Export Values • Alert Subscriptions • KPI Manager **Human Tasks:** *(Also Requires WPS)* • My Team's Tasks • Send Widget
WebSphere Business Modeler Publishing Server	**Reviewing:** • Review Drafts • Inspect Released • **Publishing Server Manager** • **Comments** • Publishing Server Status • Publishing Server Access Control • **Getting Started Publishing Server**
WebSphere Process Server	**Human Tasks:** • Task Information • Available Tasks • My Tasks • Task I Created • Create Tasks • Human Workflow Diagram • Team List **Real-time Business Configuration** • Business Rules **Solution Management:** • **Health Monitor** • **Security Manager** • **System Roles** • **Business Calendar Manager**
WebSphere Business Services Fabric	**Real-time Business Configuration** • Business Variables **Authoring** • **Composite Business Application** • **Governance** • **Vocabulary** • **Business Services** **Repository Browsing** • **Business Service Lifecycle Management** • **Application List** • **Business Service Browser** • **Vocabulary Browser**

New widgets in this release 6.2

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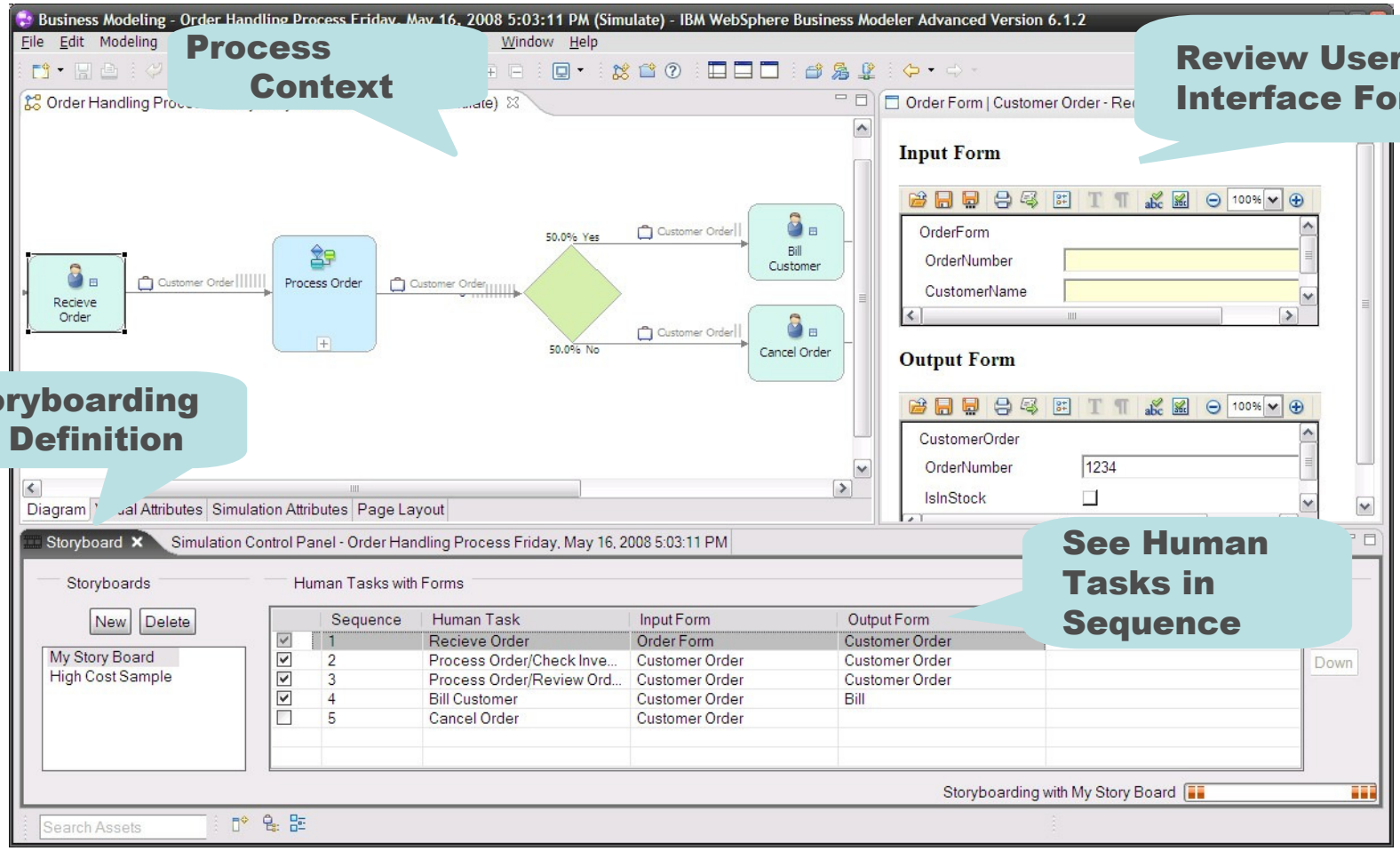
Storyboard Human Tasks & Forms Interaction

Streamline Process Flows by Identifying Issues Early On



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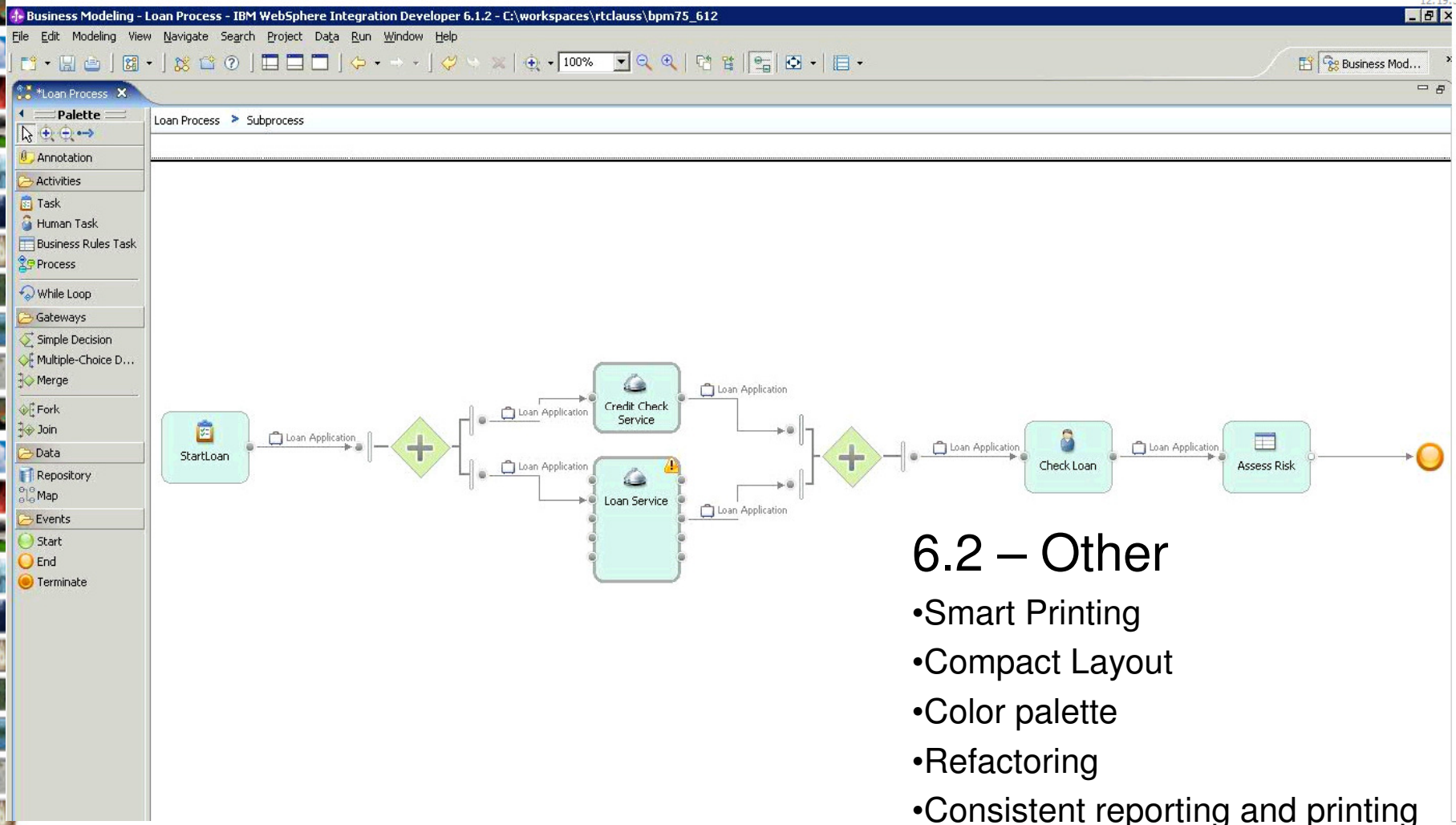
BPMN 2.0 Support – Modeler 6.2.0



6.2 – Other

- Smart Printing
- Compact Layout
- Color palette
- Refactoring
- Consistent reporting and printing
- ….

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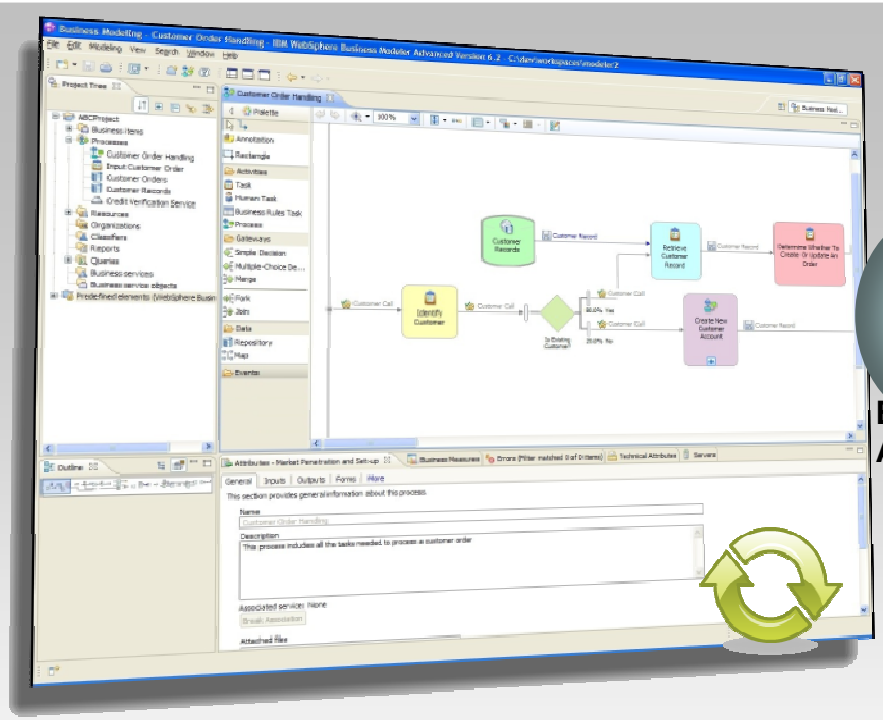
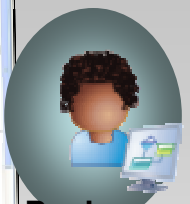
Interactive process design empowers business

Process Automation





Business Analyst

Quickly define, test, and deploy complete BPM solutions

- Minimal IT involvement
- Playback and test exactly how the process will run
- Iterate quickly on different process designs

Faster modeling to execution

New!

- ***Interact and test process designs and forms in managed sandbox using WebSphere Business Modeler and role-based business spaces***
- ***Import PowerPoint process diagrams into WebSphere Business Modeler***

BPM Lifecycle Innovations

Process Owner

WebSphere Business Modeler

Business Analyst

The traditional BPM cycle gets shortened by the ability to leverage IBM SOA infrastructure and do 'Modeling' for **'Direct to Deployment'.**

In a consumer/provider model, Direct to Deploy closes the cycle enabling the deployment of processes, their management and administration directly in to the user's Business Space without IT intervention.

WebSphere Process Server

IT Operations

IT Architect

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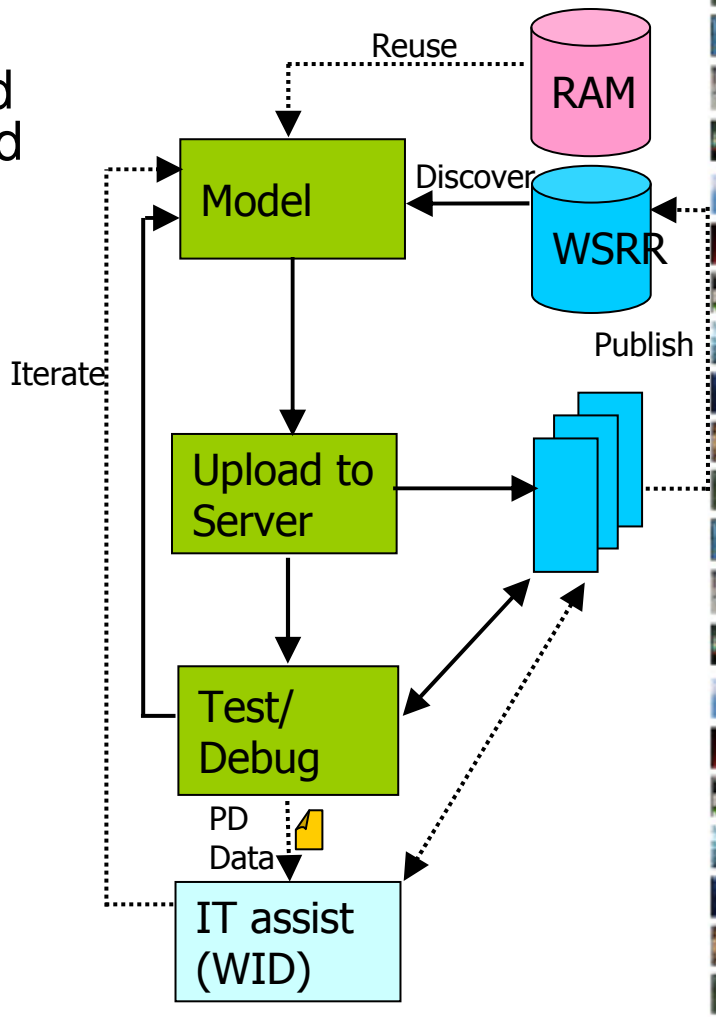
WebSphere Business Modeler : Server Support (Direct Deployment)

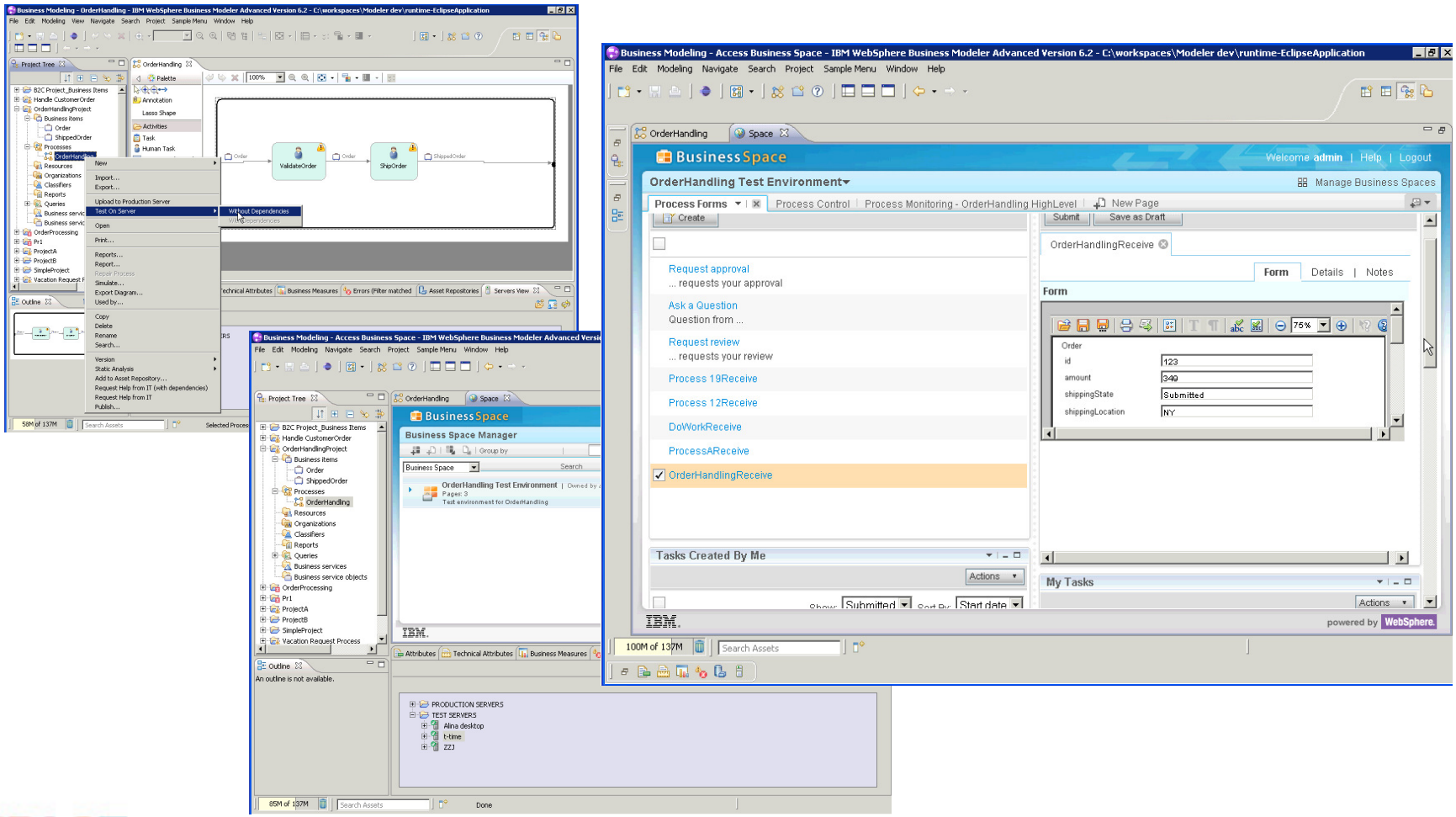
Concept: Create business processes and add enough detail so that they can be executed

- Model
  - process (enhanced loop support, exception handling)
  - built-in components (Human Tasks, business services, simple data maps, business rules)
  - callable services from the WSRR
- Upload to server
  - Runtime “components” presented as a “single server”
  - WPS: process definition and related artifacts
  - Monitor: monitoring model [optional]
  - Business Space: visual definitions
- Test/ Debug tools for business user
  - Business Space based
  - Interact, step, trace
- Problem Determination
  - IT assistance, ability to load problem data into WID



BPM Lifecycle Innovations

- Integrated Model, Test & Deploy environment



BPM Development Models

Process Owner

WebSphere Business Modeler

delta changes

IT Developer

WebSphere Integration Developer

Business Analyst

6.2 Direct to Deploy

IT Developer

6.1 Iterative Support

Uses to see and change the business,

Business Leader

Business User

WebSphere Business Monitor

WebSphere Process Server

IT Operations

IT Architect

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WPS Feature Highlights – 6.2 (and some 6.1.2)

1. System Wide Capabilities –
   - Module Versioning
   - Health Monitoring Widgets
   - Built in Web Services Feature Pack

1. BPC (Human tasks and Process) Features
   - Process Modification (Skip, Jump, Update Variables)
   - Ad-hoc task support via Business Space

1. Mediations
   - Gateway support

1. WID Value Adds
   - Visualizations of Solutions, Transactions and QOS

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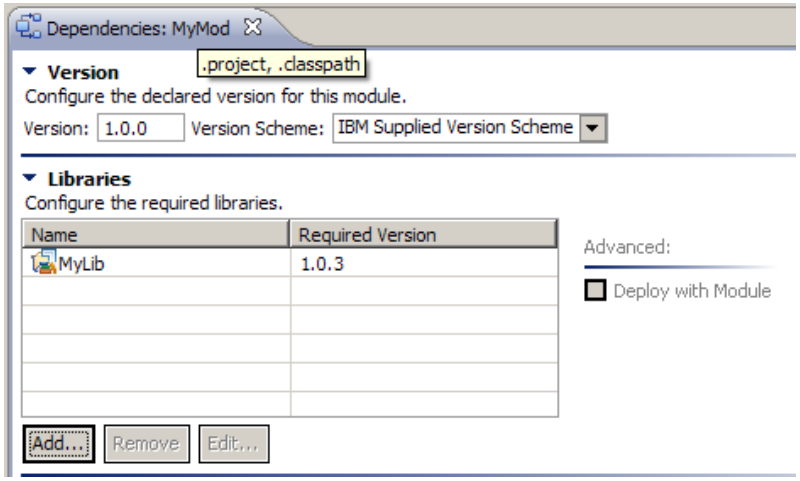
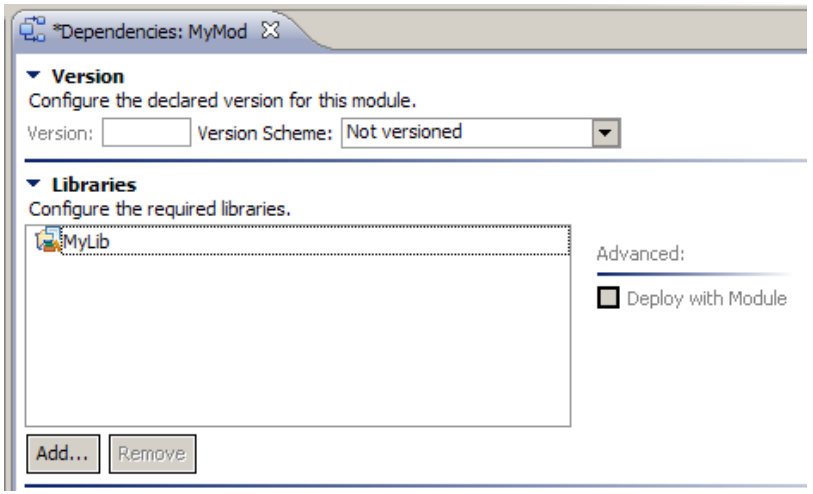
Module / Library Versioning

- Pre-620 Module Versioning
  - Customers had to define their own module versioning scheme
- Capabilities introduced in v6.20
  - First class support for defining a version of an SCA Module or a library project
    - WID Support
    - WBM Direct to Deploy Support
    - Command line service deploy and *versionmodule* support
    - Administrative Console updates
  - Extensible support for other module/library versioning schemes
  - Module/Library versioning is optional
  - Optional cell unique identifier enabled to differentiate the same module/version deployed to multiple clusters in the same cell

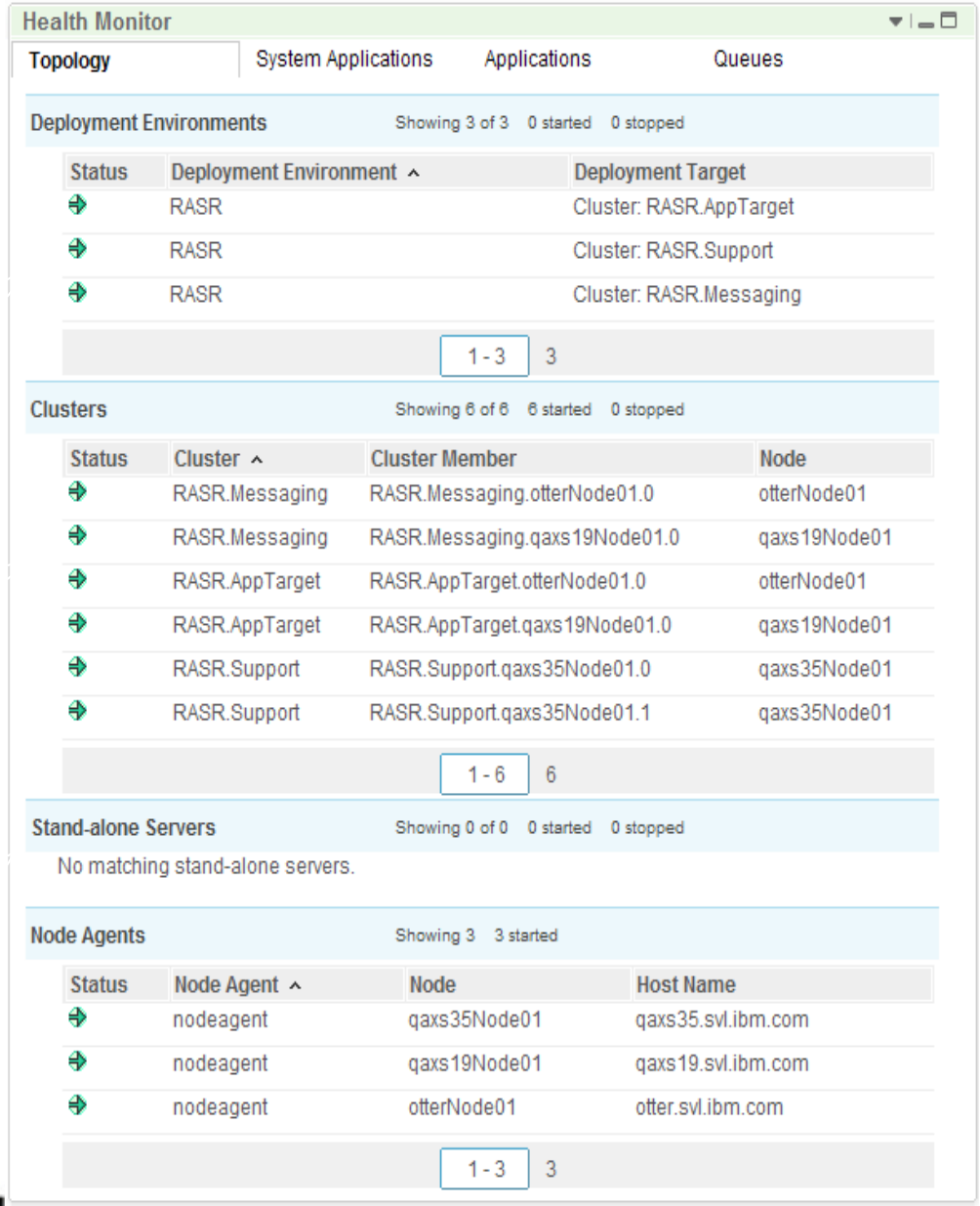




WPS/WESB Health Monitoring

Topology

- Topology health - Displays status (running/not running) of WPS in the cell

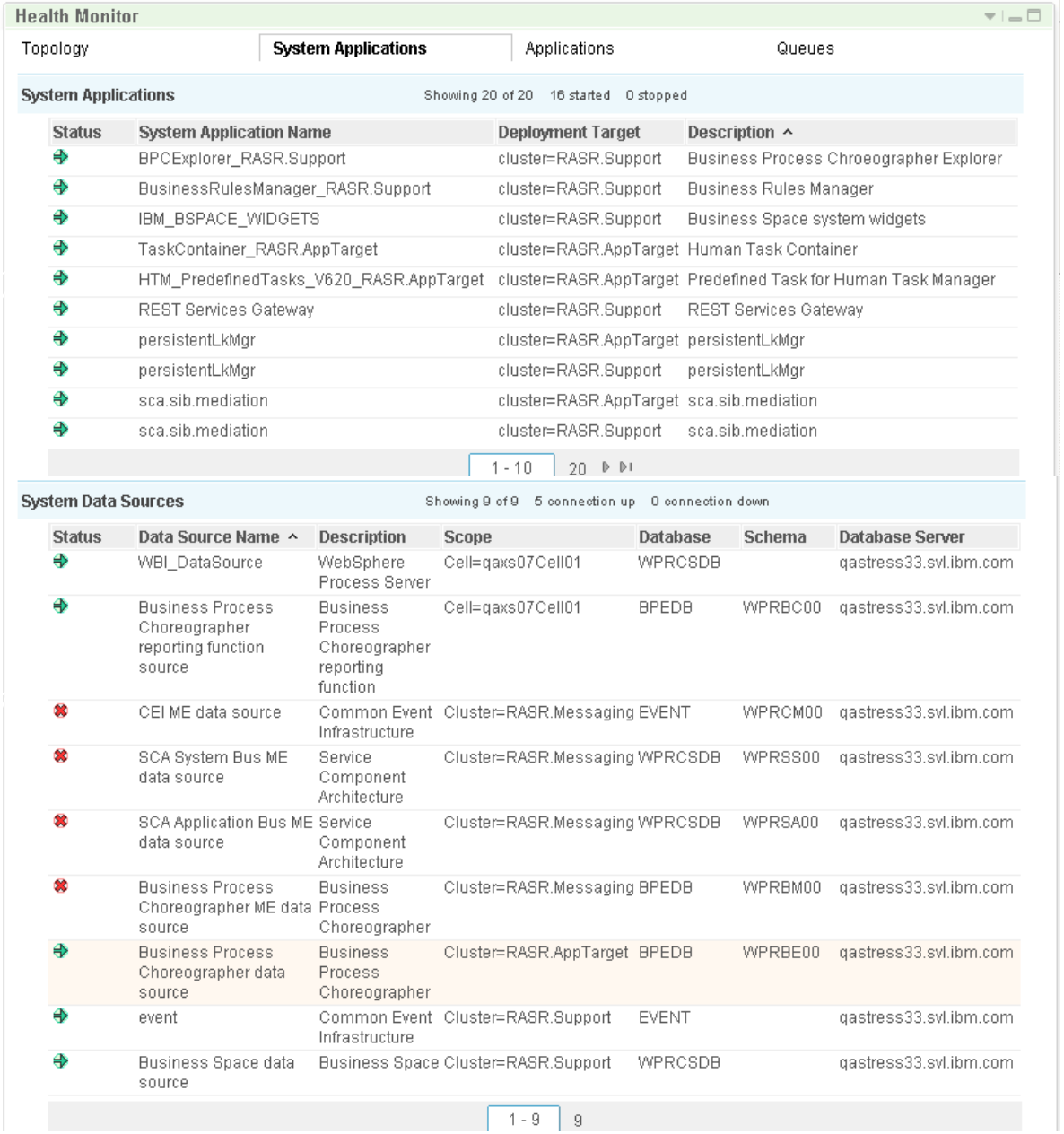


WPS/WESB Health Monitoring

System Applications

System component application health

System data source health



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Web Services Feature Pack

WPS/WESB 6.2 includes the WAS 6.1 based Web Services Feature pack

- Provision of a new Web Services binding based on
  - JAX-WS 2.0
    - "Java API for XML Web Services", a Java API for creating Web Services.
    - Supersedes JAX-RPC in JEE 5
  - JAXB 2.0
    - a specification for how to map from Java classes to XML documents
- The existing JAX-RPC Web Service binding continues to be supported
- Reliable Messaging Based on the WS-RM standard
  - Reliable delivery to a web service export
  - Reliable delivery from a web service import
- Expose SOAP 1.2 endpoint at export
  - Configured via binding configuration property, results in SOAP 1.2 WSDL binding being generated
- Invoke SOAP 1.2 service from import
  - Deduced from target WSDL SOAP binding version; overrideable via binding configuration property

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Dynamic Human Workflows a.k.a. Case Handling

Introduction

- **Case Handling** is a paradigm that provides **flexible business process support for knowledge workers**, adding support for business scenarios with the following characteristics
  - **Exceptions make the rule.**
  - Business users are **domain experts** and they **know what they are doing!**
    A case handling infrastructure has to support them to get the job done, providing guidance without being too constraining.
  - While business process navigation is based on the modeled control-flow, the business scenarios demand
    - the ability for dynamic changes including the ability to **skip** or **redo** one or many human activities
    - support for adding human activities on the fly
- **Dynamic Human Workflows** enable **Case Handling** and other advanced human workflow scenarios

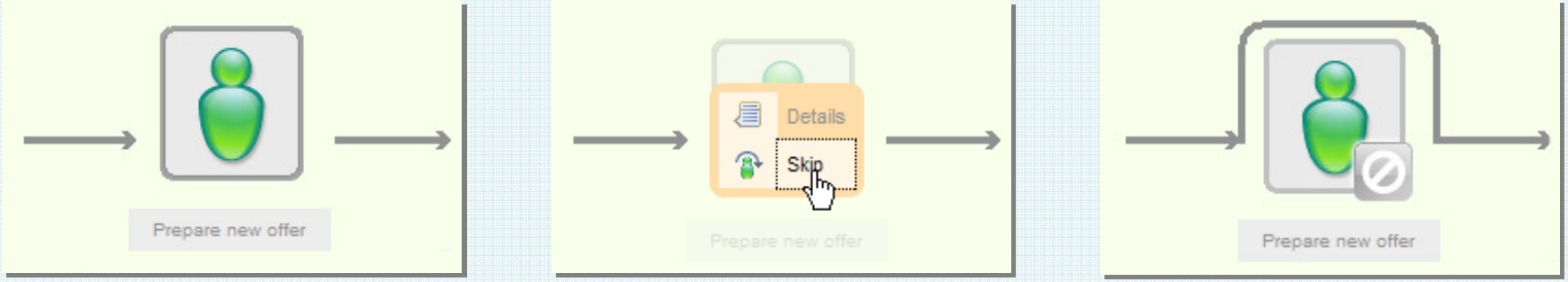
Dynamic Human Workflows a.k.a. Case Handling

Dynamicity Support for Business Users – Skip & Redo

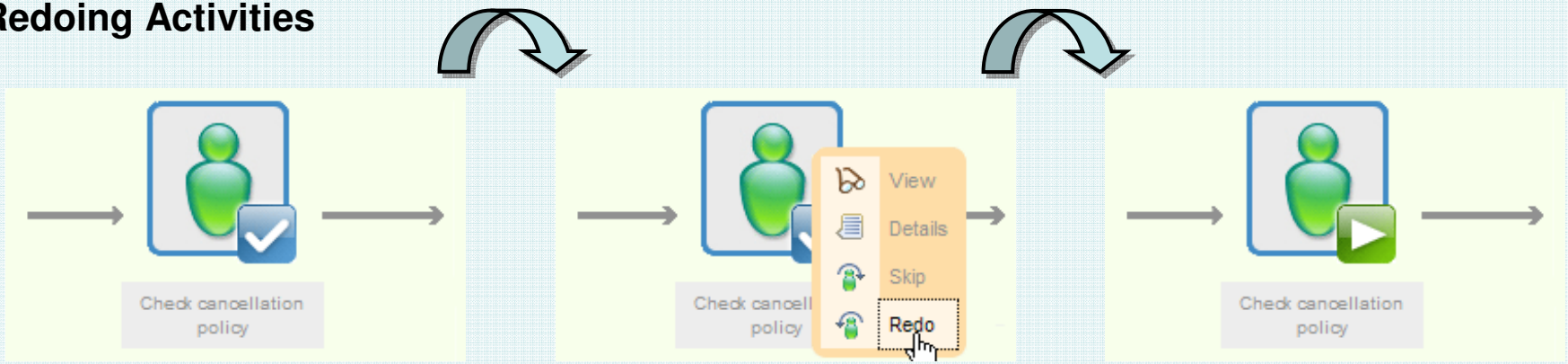
NEW in 6.2

Business User

Skipping Activities



Redoing Activities



Dynamic Human Workflows a.k.a. Case Handling

Ad-hoc Creation of Sub-tasks

NEW in 6.2

BusinessSpace

Welcome wswf | Help

MySpace

Manage Business S

My Work | Create Tasks | Viewers | New Page

My Tasks

Edit | Actions

Show All | Sort By Start date

Ask a Question
Low
Question from wswf: another question
Start date 9/12/08 9:50 AM

Ask a Question
Low
Question from wswf: yet another question
Start date 9/12/08 9:49 AM

Ask a Question
Low | Waiting
Question from wswf: I have a question
Start date 9/12/08 9:48 AM

OutOfScope
Low | Waiting
Start date 9/10/08 12:19 PM

Available Tasks

Accept

Show All | Sort By Start date

No tasks found.

Task Information

Submit | Save | Actions

Ask a Question

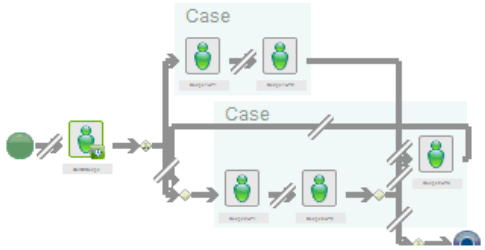
Form | Details | Notes | Related Tasks

Related Subtasks

Ask a Question
Question from wswf: yet another question
Owner wswf
Start date 9/12/08 9:49 AM
Status Accepted

Ask a Question
Question from wswf: another question
Owner wswf
Start date 9/12/08 9:50 AM
Status Accepted

Human Workflow Diagram



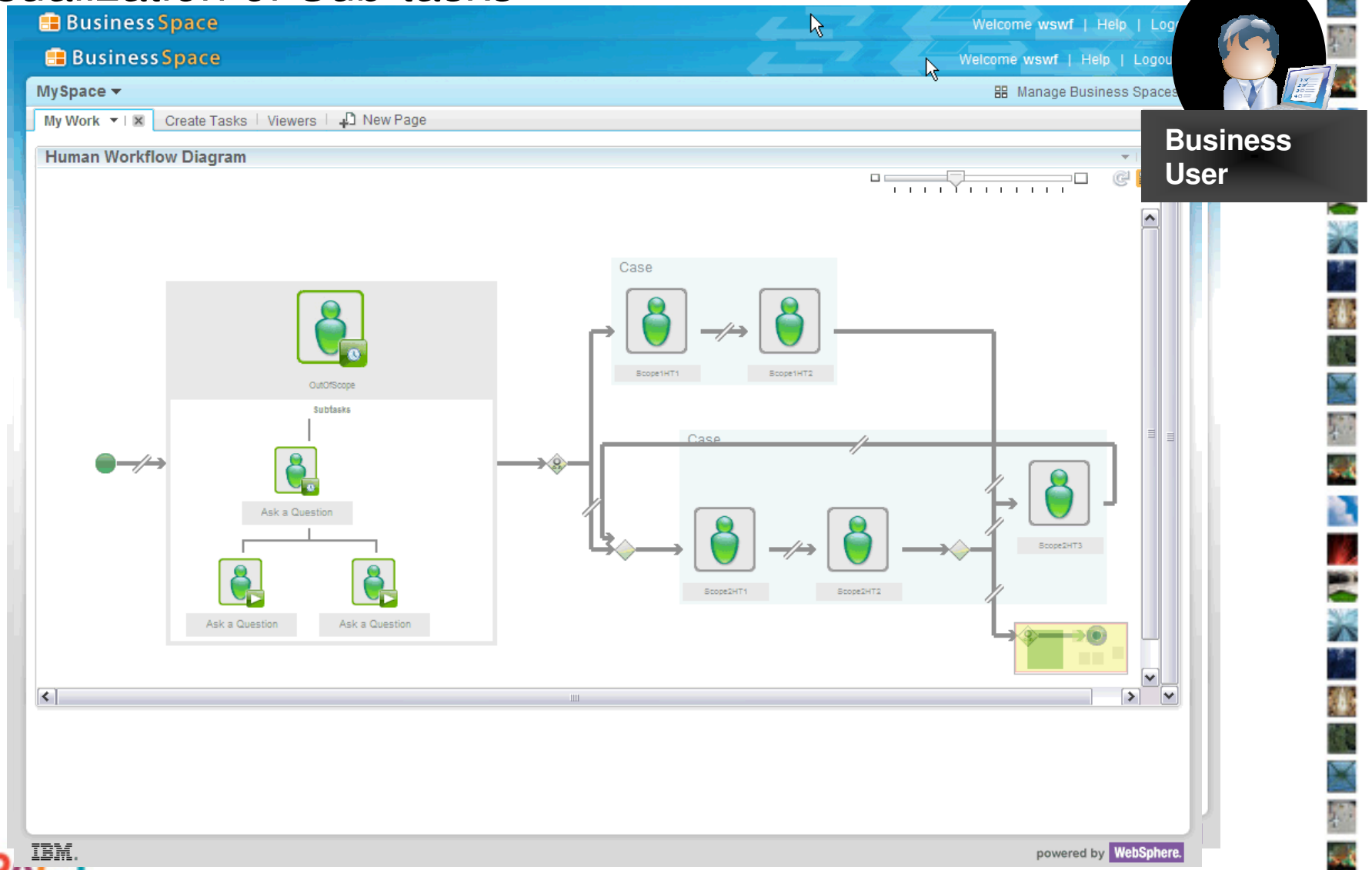
IBM.

powered by WebSphere.

Dynamic Human Workflows a.k.a. Case Handling

Visualization of Sub-tasks

NEW in 6.2



Business User

Dynamic Human Workflows a.k.a. Case Handling

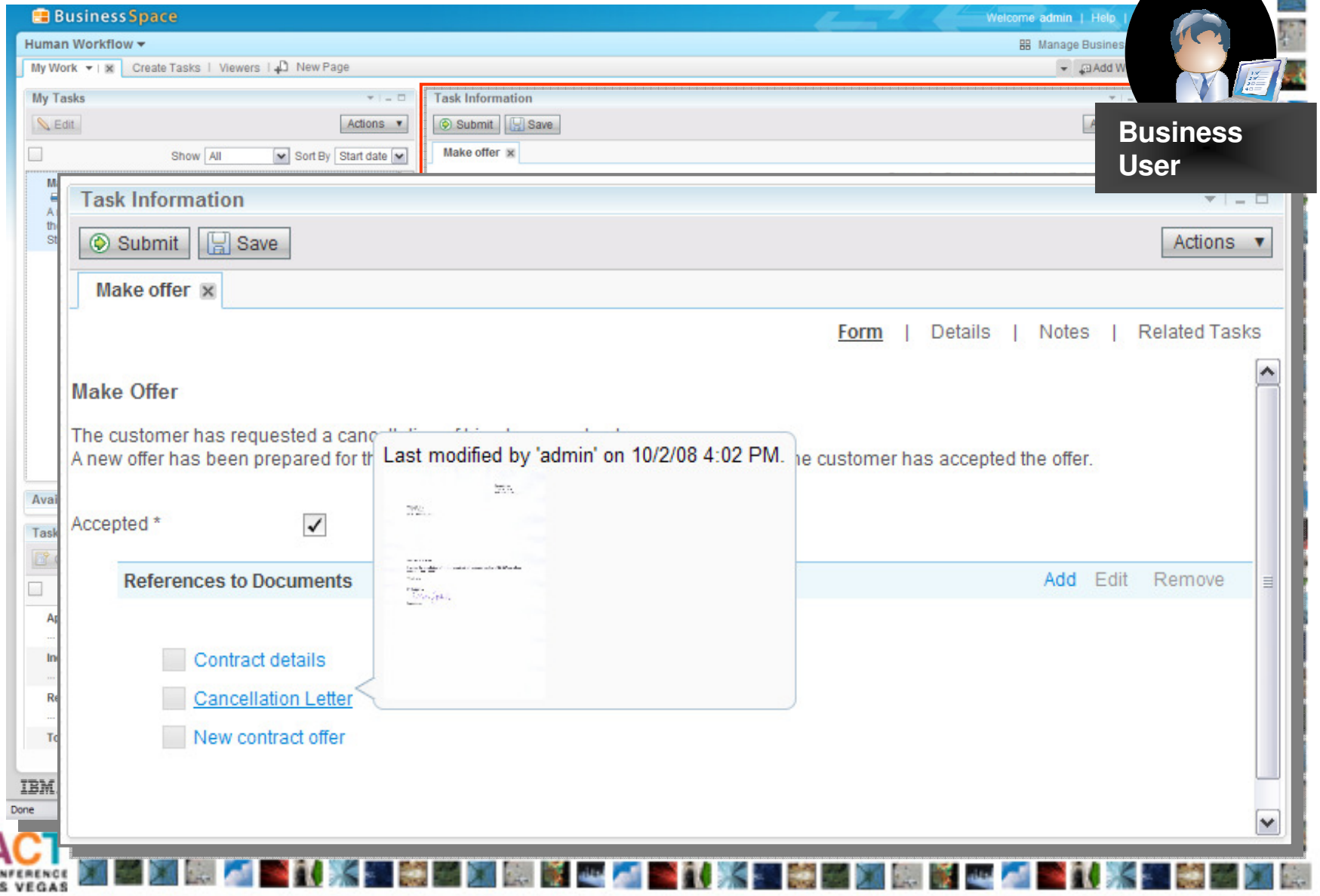
Folder and Attachments

- In Case Handling scenarios people are often dealing with one or several data folders that contain the data of the case
- The folder acts as a data container where an arbitrary set of data items (“attachments”) can be added / removed.
- These attachments can be actual data, or references
- With 6.2 a pre-defined **folder** data type is provided that can contain a set of named *references*
- In addition to the folder a **widget** for the Business Space is offered that allows to render the folder and its contents
- Folder contents are presented in the form of URLs – when clicked an application is launched that is suitable for rendering the respective type
- The folder widget also allows adding, editing or removing of references

Dynamic Human Workflows a.k.a. Case Handling

Folder and Attachments

NEW in 6.2



Human Task History

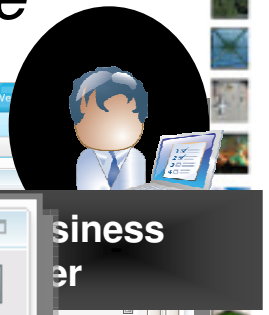
Overview

- The Human Task History provides the following information
  - Who has worked on a human task
  - What did the person do
  - When did it occur
- This information gives people working on the task additional context
- The Human Task History data belongs to a human task instance, consequently its life-cycle is tied to that human task
- For auditing purposes please use CEI or the HTM audit log

Human Task History

Example – Task Information Widget in Business Space

NEW in 6.2



BusinessSpace

Space of Business Space Admin

Human Workflow

My Tasks

Edit

ImageTypeSub
Low
Start date 9/30/08 6:41 PM

SimpleType
Low
This is the SimpleType task. The input varia
Start date 9/30/08 6:40 PM

Approval
Low
bman1 requests your approval
Start date 9/30/08 6:38 PM

Available Tasks

Accept

No tasks found.

Task Information

Task Creation

siness
er

Task Information

Submit | Save | Actions

ImageTypeSub | Approval

Form | Details | Notes | Related Tasks

Additional Information

bman1 requests your approval
Owner bman1
Start date 9/30/08 6:38 PM
Status Accepted
Priority 5

History

State	Name	Timestamp
Task created	bdaniel	9/30/08 5:58 PM
Task started	bdaniel	9/30/08 5:58 PM
Task accepted	dedwards	9/30/08 5:58 PM
Task returned	dedwards	9/30/08 6:38 PM
Task accepted	gpfau	9/30/08 6:38 PM
Task result modified	gpfau	9/30/08 6:39 PM

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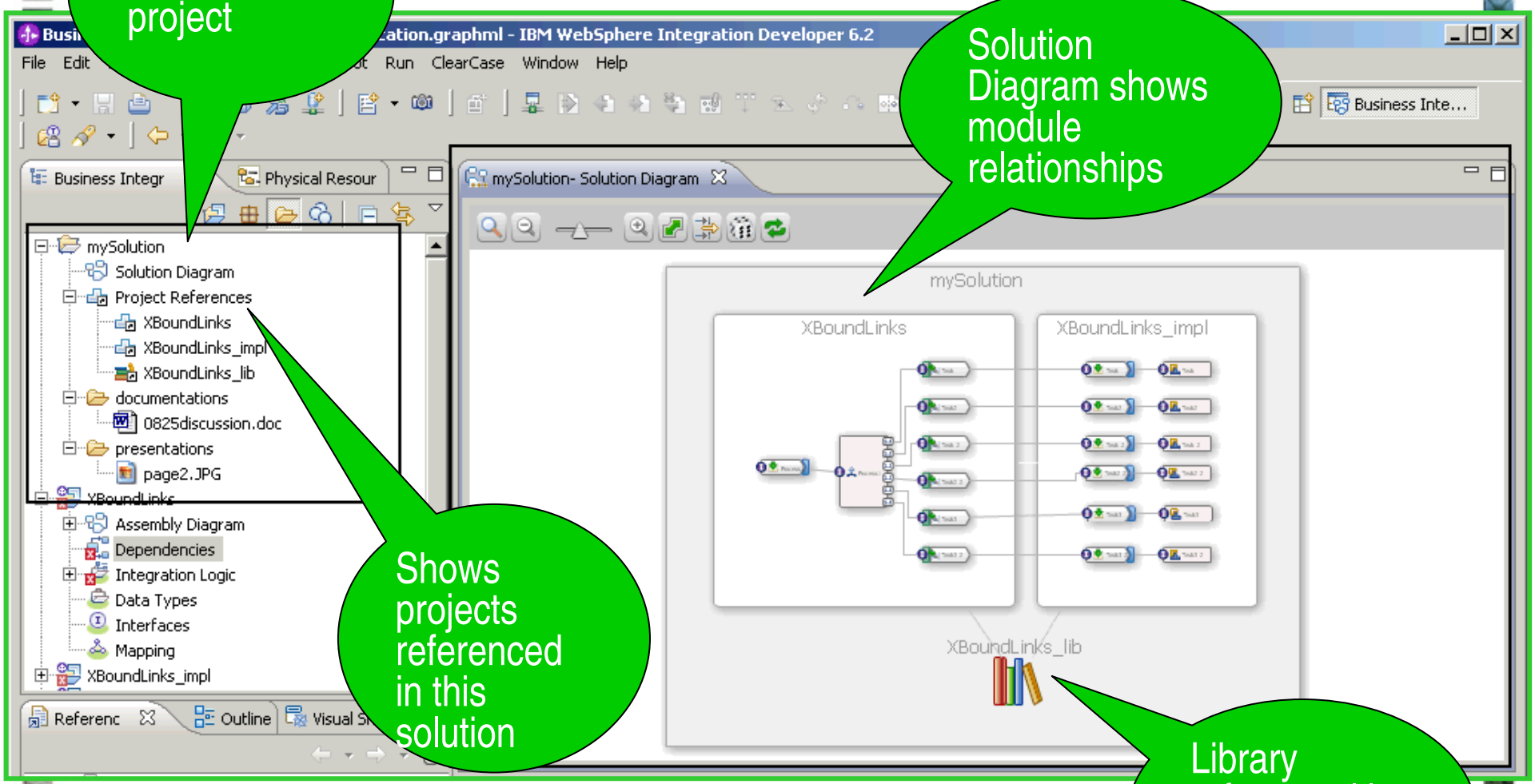
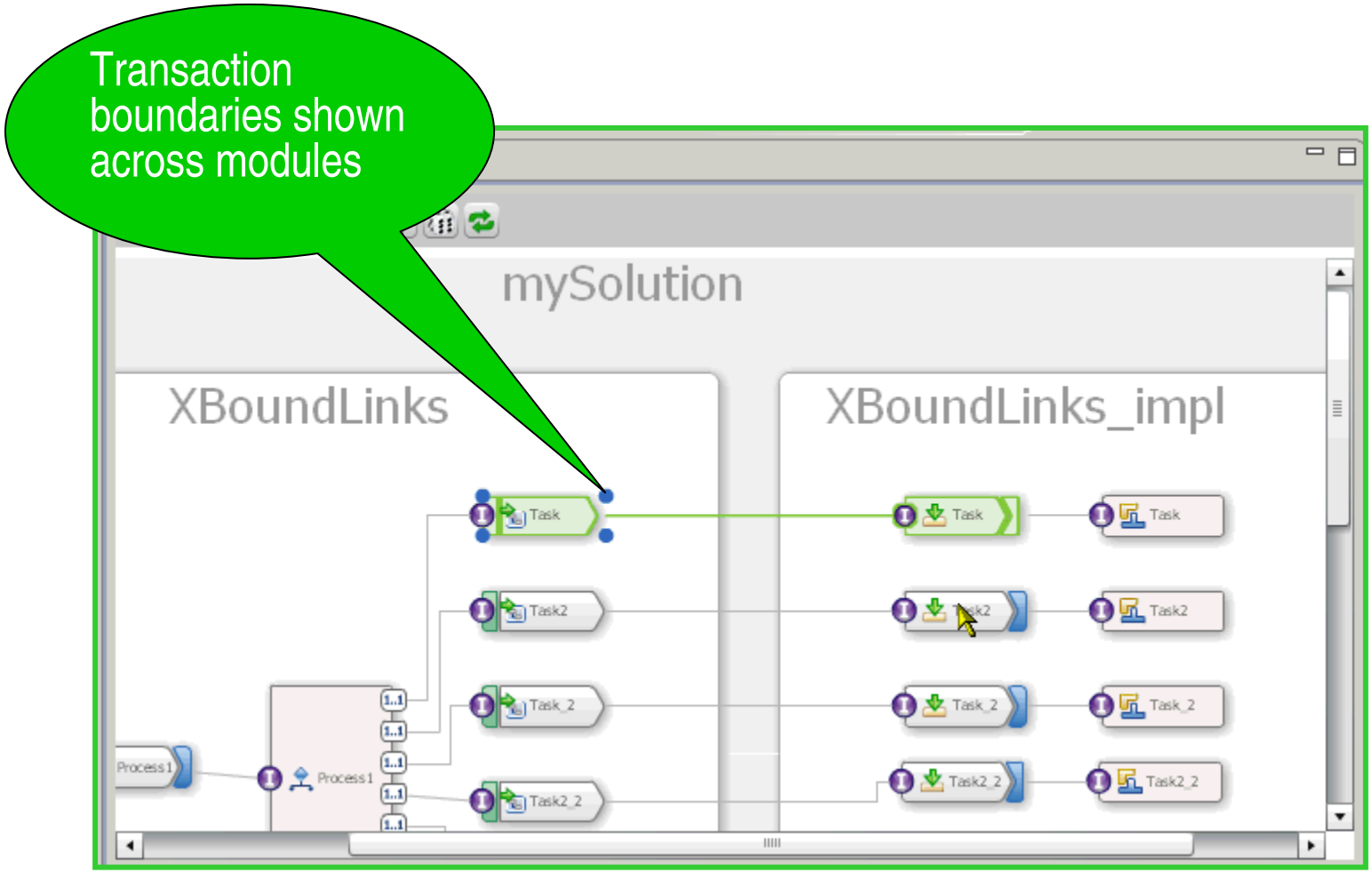
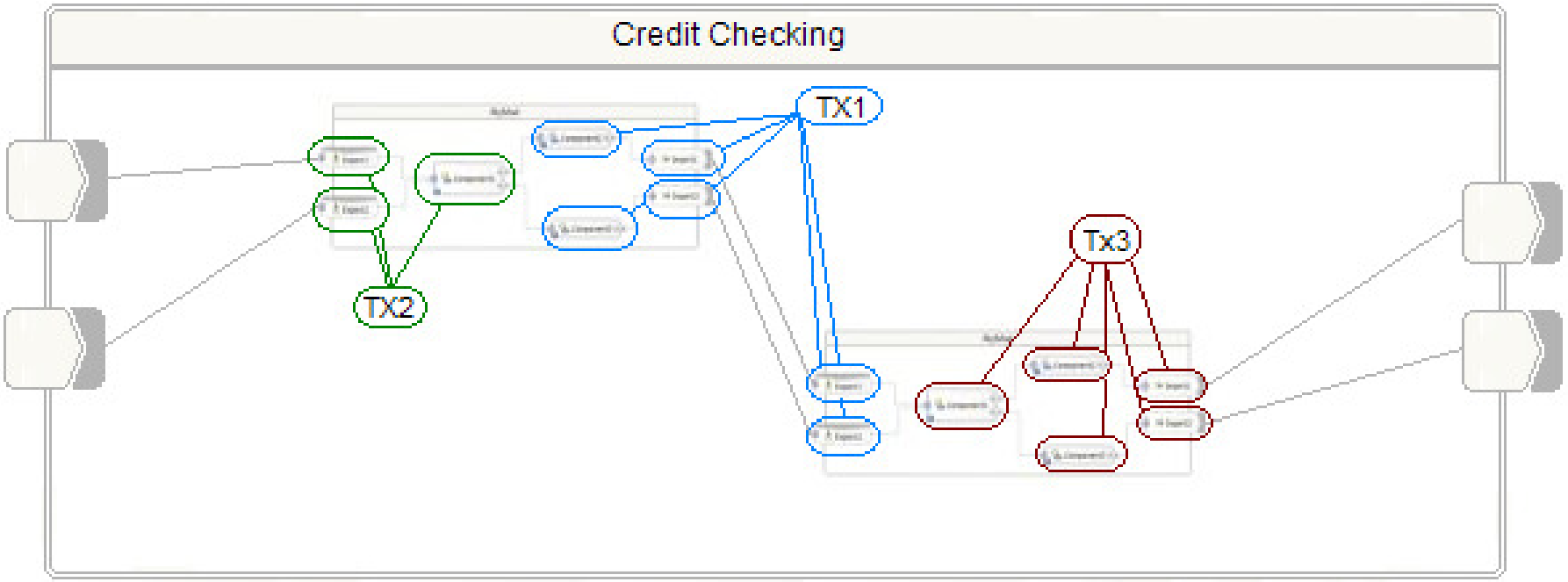
Solutions and Solution View



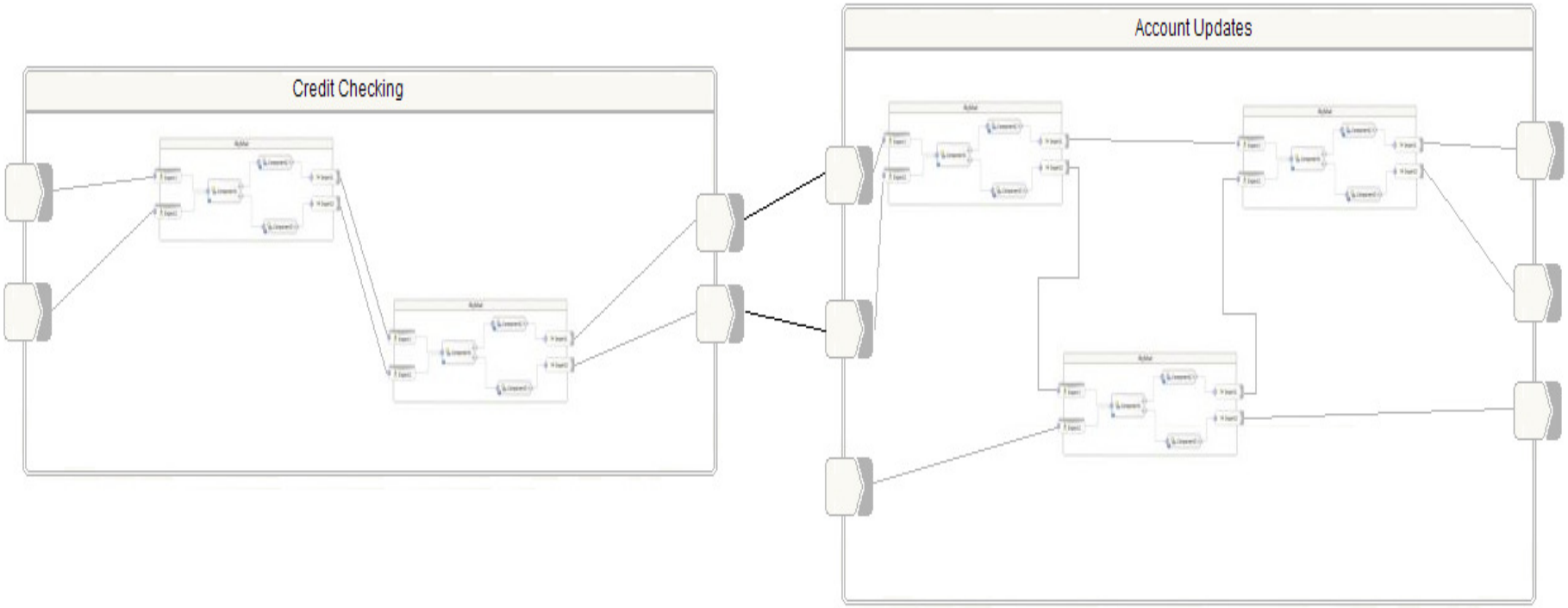
Solutions and Solution View



WID – Solution View transactions



WID – Solution View (6.2)



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  - WebSphere Business Modeler
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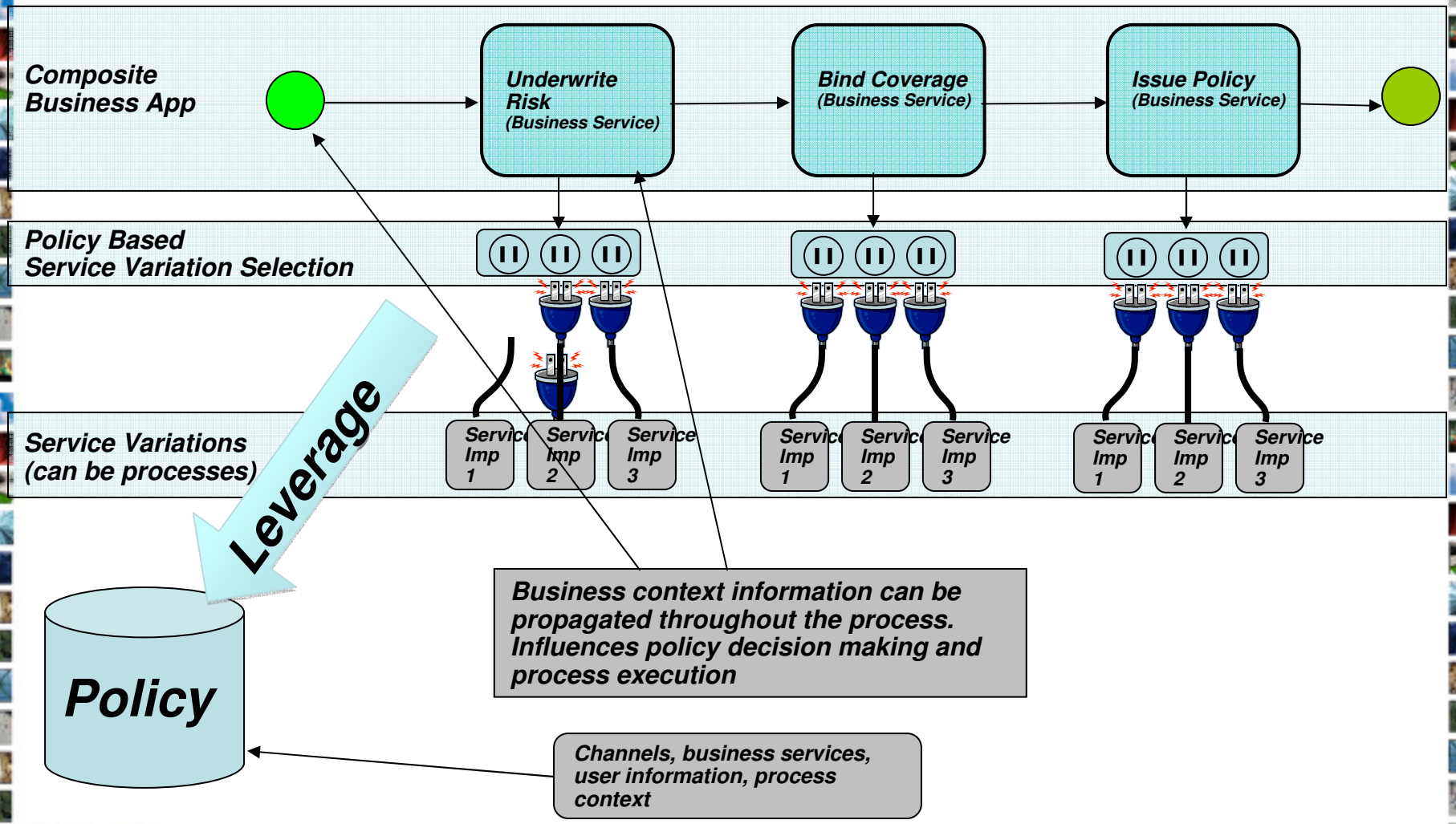
Composite Applications Methodology with the Business Services Fabric



52

Context – Why is it useful?

- We can have all the metadata and policies we want, but if we want to use it at runtime, we need to have some context.

On the *Submit Quote* **Business Service**
When **Application** is *Home Policy Quote* AND
When **Channel** is *Agent Portal* AND
When **Role** is *Platinum Preferred Agent* AND
When **Organization** is *Favorite Agent Partners*
Then
Level of Service = **Platinum**

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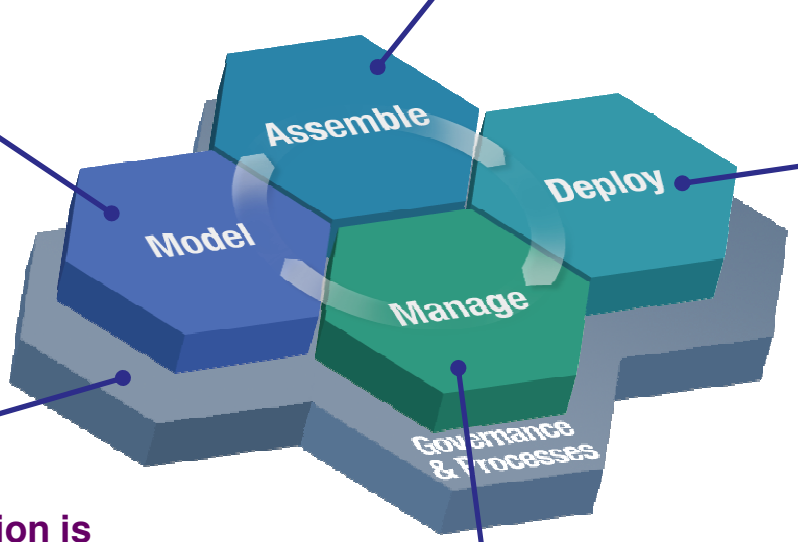
Business Service Lifecycle Management with WBSF 6.2

Business Analyst specifies Business Services, authors policies, runs simulations

IT Developer uses WID/Fabric to assemble the Business Service. This includes service development, process implementation, and policy configuration.



IT Developer uses WPS/Fabric to deploy the Business Service including SCA modules, process flows, repository metadata, and configuration data.

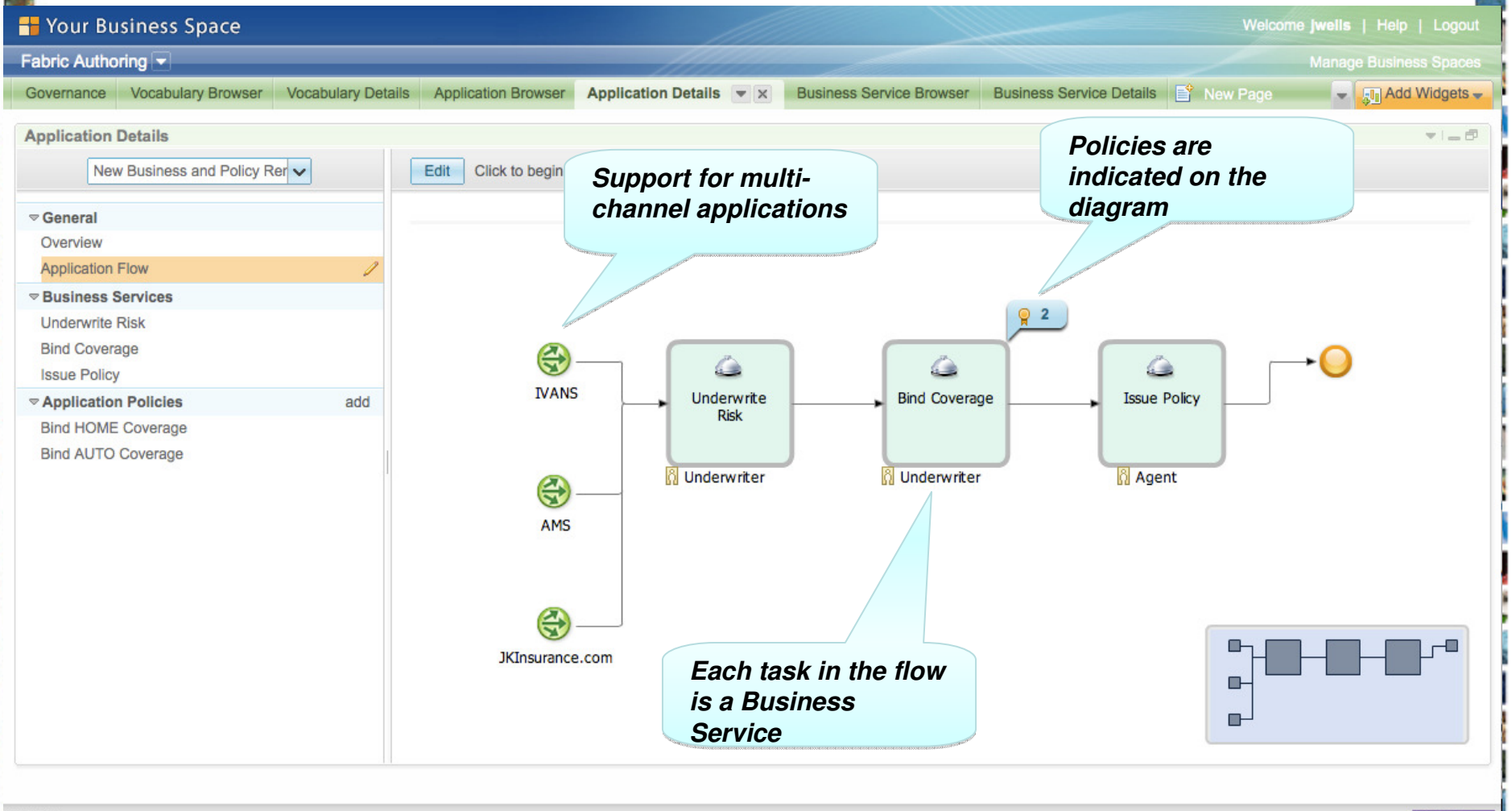
IT and Business collaboration is core to BSLM; the governance processes are tailored to help automate and monitor the health of the lifecycle

For any Business Service in the "Manage" state, the Business Analyst can add/modify policies that can be deployed w/o IT involvement. In some cases, new or modified policies require IT support and the Business Service transitions to Model and/or Assemble phases

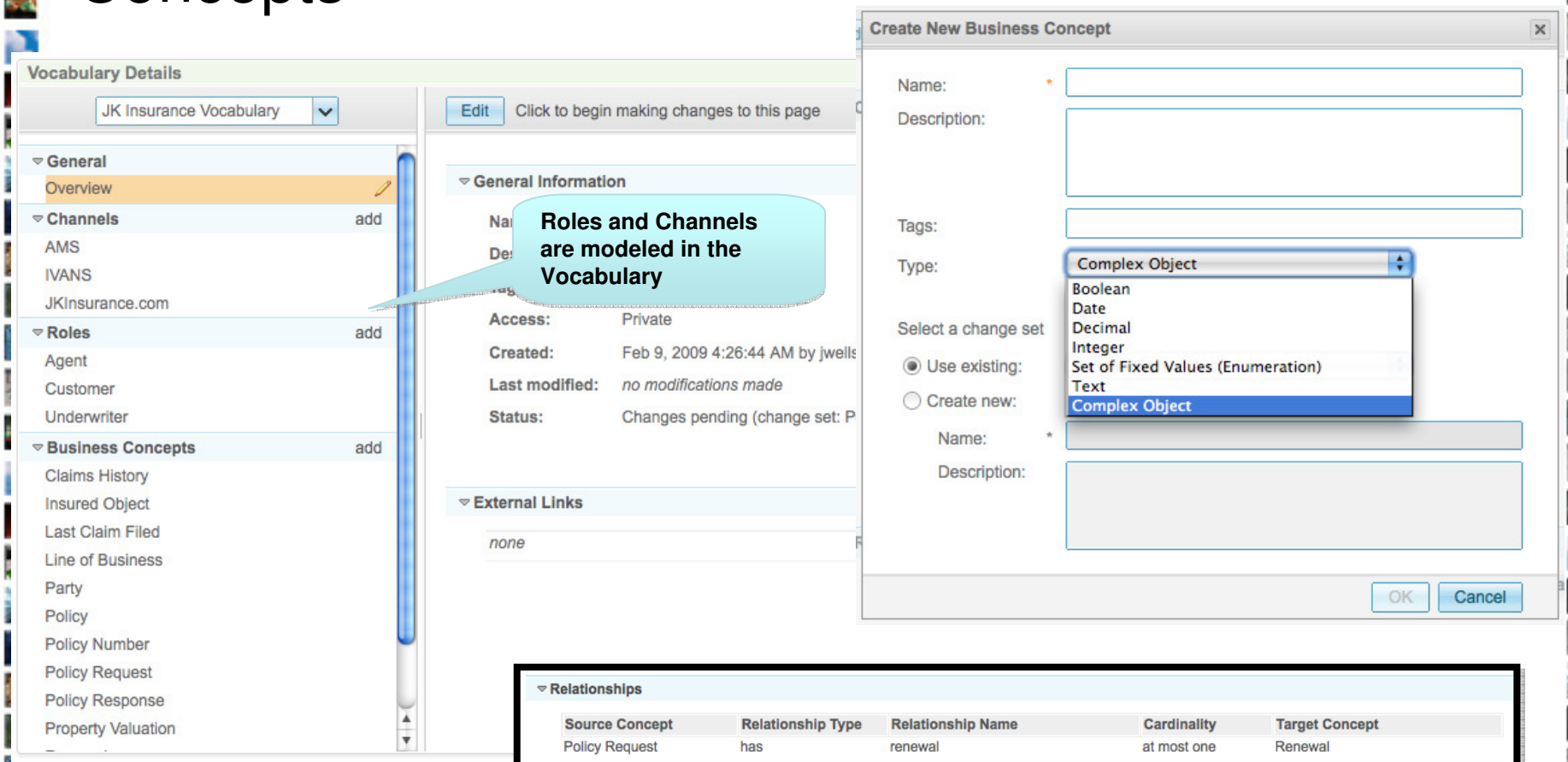
WBSF 6.2 Highlights

- Business User Tooling for Composite Business Applications
  - Author composite business applications, business services, and business policies
  - Define business vocabulary
  - Govern changes
- Prescriptive Guidance for Industry Content Pack Development
  - Best practices, guidelines, work breakdown
  - Customizable and extensible using Rational Method Composer
- Product Lifecycle Management Content Pack
  - Supporting Automotive, Aerospace & Defense, Electronics
- Enhanced Product Installation
  - Leveraging IBM Installation Manager machinery
  - Silent install of runtime and tooling dependencies

Composite Business Application Authoring



Capturing Business Semantics – Vocabulary and Concepts



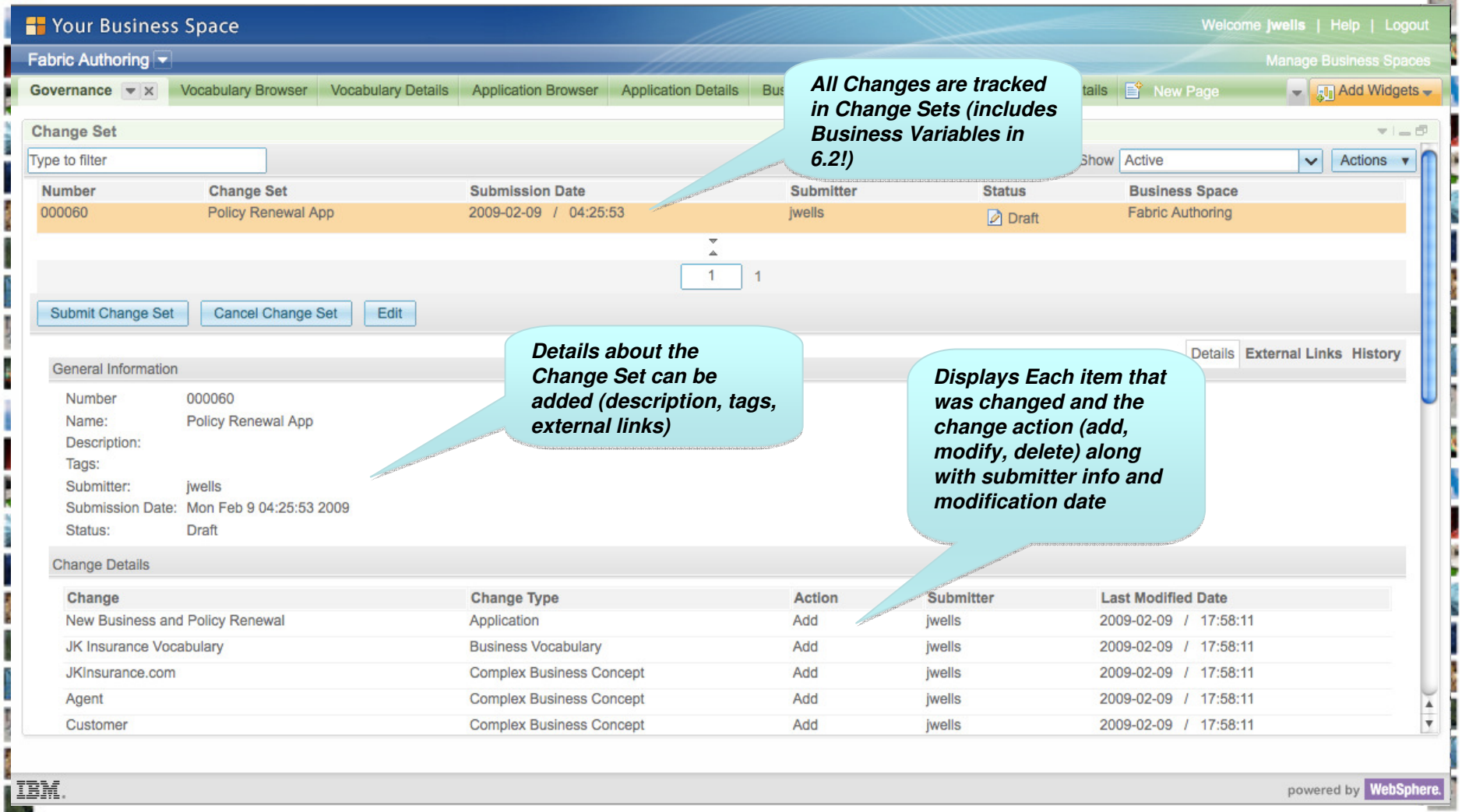
Relationships

Source Concept	Relationship Type	Relationship Name	Cardinality	Target Concept
Policy Request	has	renewal	at most one	Renewal
Policy Request	has	insuredObject	exactly one	Insured Object
Policy Request	has	lob	at least one	Line of Business
Policy Request	has	party	exactly one	Party

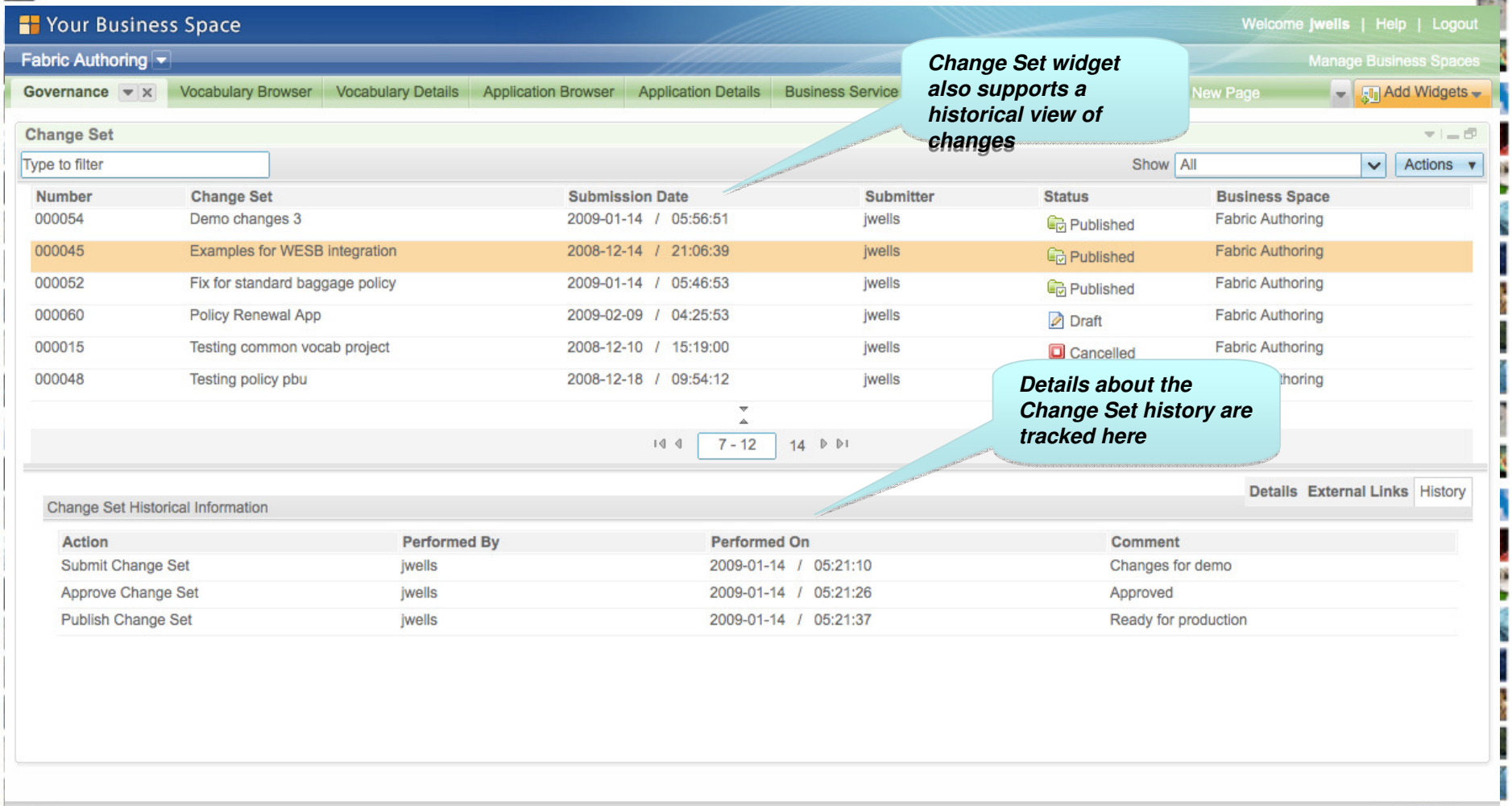
Complex object structure is indicated through 'has' relationships

57

Governance – Introducing the Change Set Widget



Governance – Change Set History for Audit



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WebSphere Business Monitor at a glance

Understand, monitor, and explore the state of business operations

Know the state of your business via

Scorecards

Key Performance Indicators for business units

Take action via

Collaboration

Work with teams to resolve situations

Take more action via

Business Alerts

Notification of situations that require response

Evaluate data via

Reports & Analyses

Understanding trends by combining real-time performance and historical information

Have any available information via

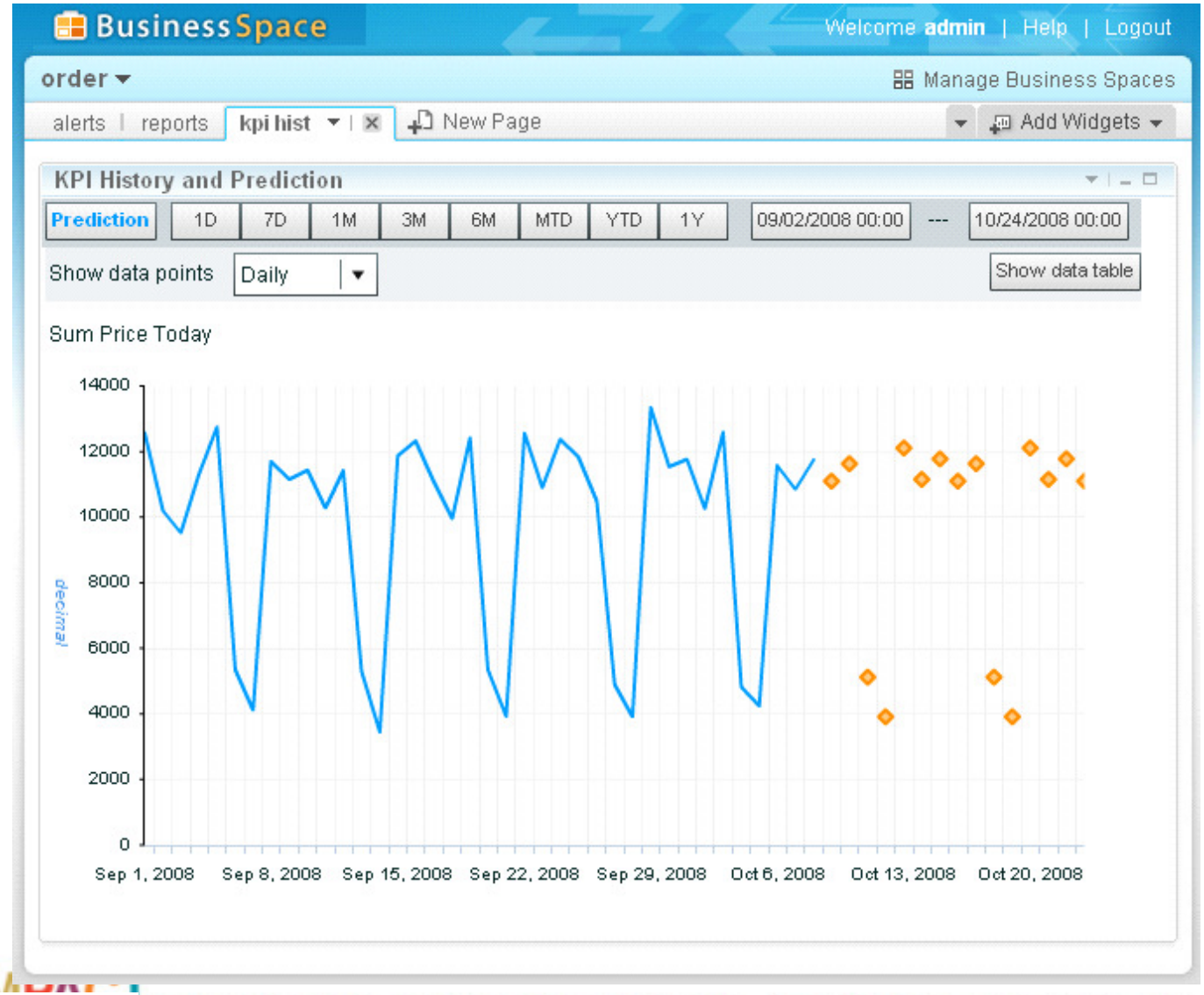
External Information

Monitor can access external information affecting performance

KPI Enhancements

- KPI History and Prediction
  - Graphs showing KPI trending, plus predicted values into the future
- Dashboard-defined KPI alerts
  - Define alerts in Business Space, based on current or predicted values
- New KPI aggregation type: Standard Deviation
  - Insight into variance of instance values comprising the KPI
- Drill-through from KPI widget to Instances widget
  - See instances, matching KPI's filters, causing KPI to be out of range
- Toolkit enhancements for KPIs
  - Use APQC libraries; specify KPI formatting; inspect in debugger
- Visualize KPIs in environments beyond dashboards
  - New Excel ribbon, SameTime/Notes plugin, and on iPhone/iPod Touch

KPI Enhancements - example



- ***Note weekly seasonality***
- ***Prediction takes that into account***

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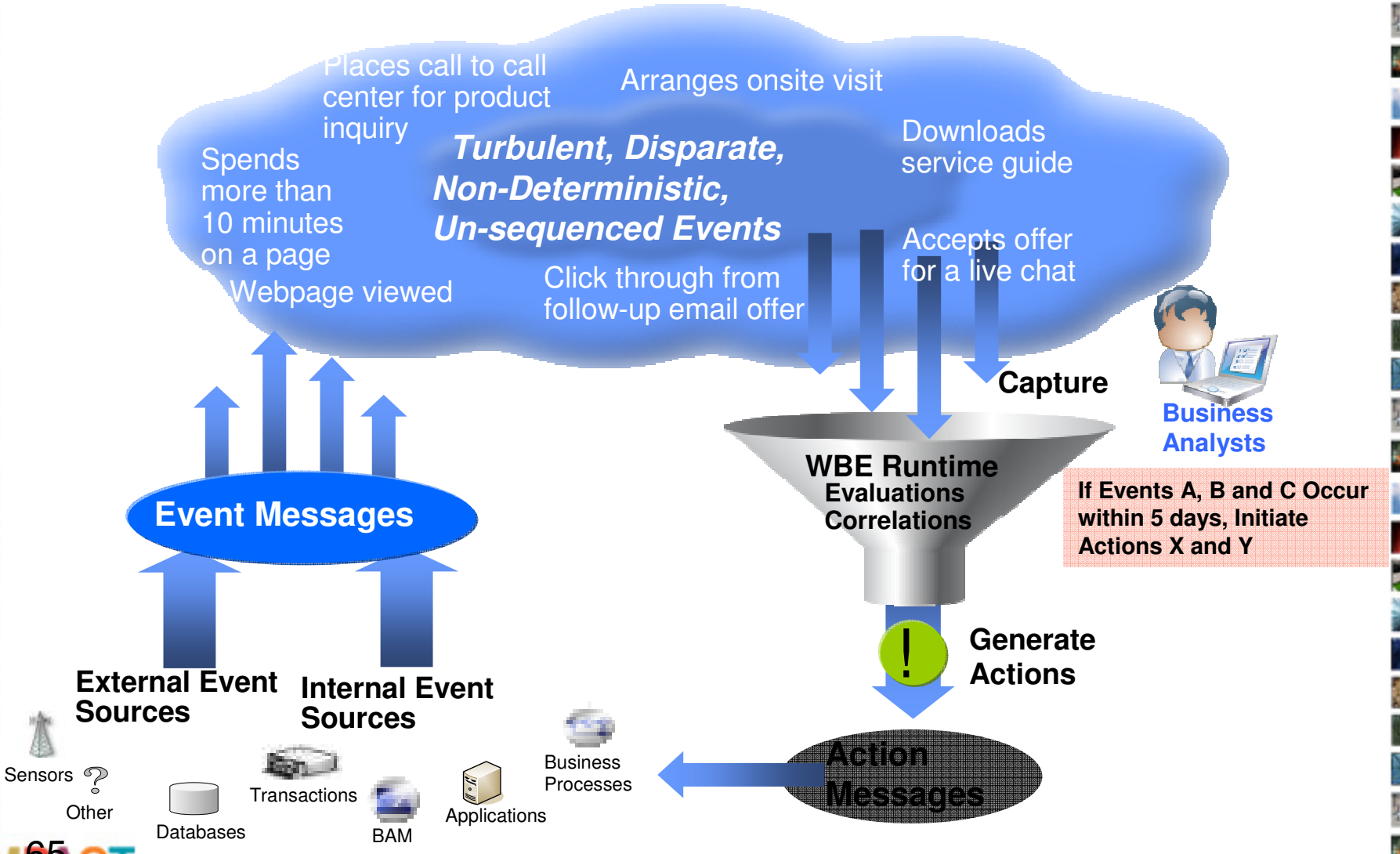
WebSphere Business Events



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WebSphere Business Events and Process Server

Sales Lead Conversion

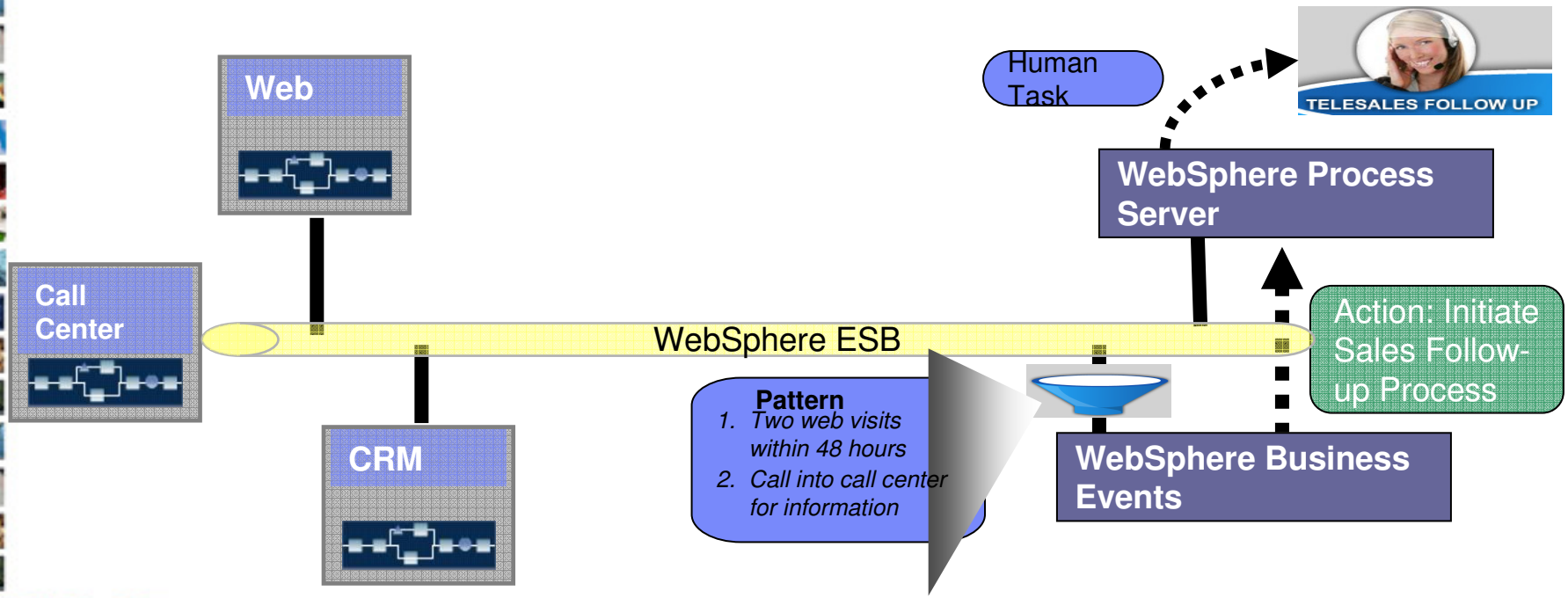
Business Problem: Capitalize on the recent introduction of several hot new products by automatically following up with registered customers who demonstrate interest.

Solution:

- WebSphere Business Events
- WebSphere Process Server
- WebSphere ESB

Benefits:

- Engage sales activity on only highly qualified, new product situations



WebSphere Business Events and Business Monitor

Supply Chain Management

Business Problem: Performance of supply chain can impact build-to-order process, and ultimately customer satisfaction. Build-to-Order depends on:

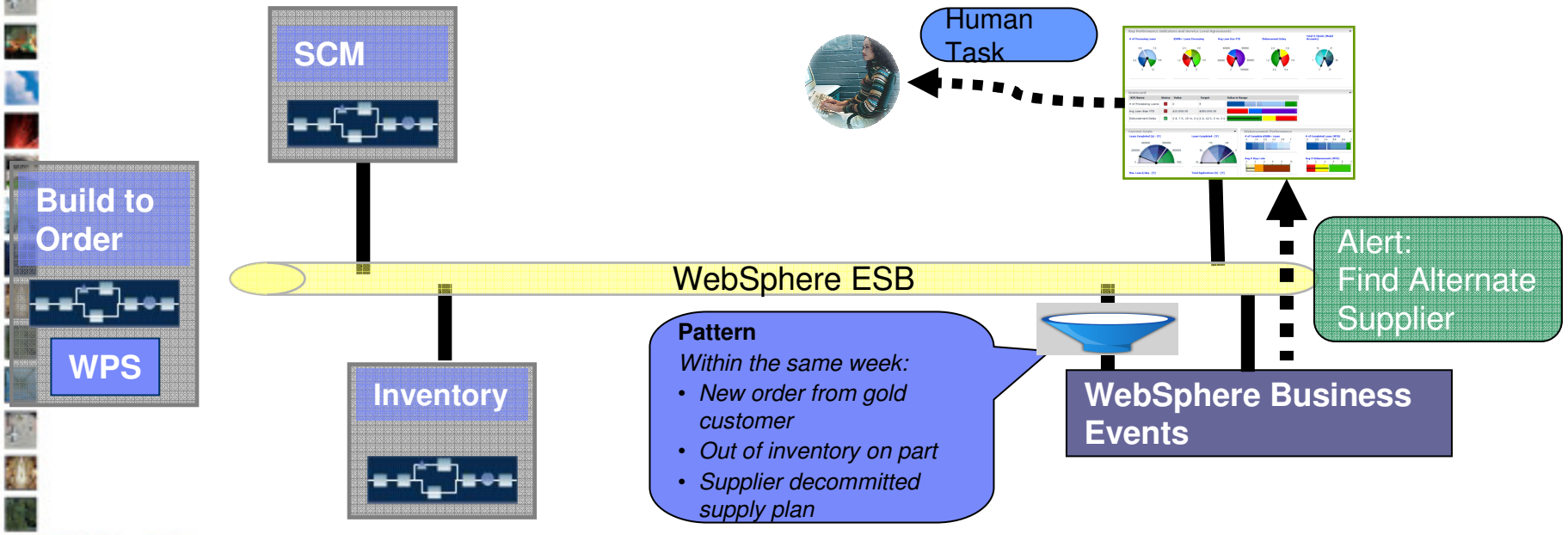
- Customer orders
- Changes in inventories of required parts
- Supply plan commitments

Solution:

- WebSphere Business Events
- WebSphere Business Monitor
- WebSphere ESB (optional)

Benefits:

- Improve customer satisfaction and reduce cost-per-order



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What are the benefits of a BRMS?

Customer	Application	Results
TRAVELERS	BRMS based Underwriting & pricing system to support personal lines	• Improved pass through rate from 17% to 76% • Increased new business volume by 50%
Hotwire.com	BRMS based pricing & promotions management system	• Improved Time to Market for new pricing from 3 months to 2 days • 25% over achievement on Revenue Business Target
	BRMS based system for eligibility and benefits calculation	• 7 minutes turn around time vs. 6 weeks, no backlog • New Regulation implemented in days vs. months
BANK OF THE WEST	BPM / ECM / BRMS based commercial loan origination system	• 93% improvement for application approval (15 days to 1) • 1,000+ days annual savings in compliance audit

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BRMS Usage Across Industries

Banking

- Loan Origination
- Credit Decisioning
- Sales Advisory
- Payments
- Accounting

Insurance

- Claims Processing
- Underwriting
- Quoting
- Rating
- Commissioning

Capital Markets

- Automated Trading
- Trade Order Management
- Accounting
- Compliance KYC / AML
- On Boarding

Public Sector

- Claims Processing
- Entitlement and Benefit calculation
- Fraud Detection and Management
- Screening and Targeting

Telecom

- Offer Configuration
- Order Management
- Fraud Detection and Management
- Loyalty Programs
- Network Monitoring

Transportation & Travel

- Promotions Management
- Loyalty Programs
- Customer Service
- Billing
- Contract Management

Retail

- Online recommendation
- Campaign Management
- Order Management
- Pricing

Manufacturing

- Production quality control
- Order Management
- Billing
- Contract Management

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Business Rules define the logic of decisions

The statements derived from business policies, regulations, and procedures that are embedded into an enterprise system to automate decisions

Rating

Underwriting

Risk Classification

Fraud assessment

Billing

Cross-selling

Configuration

Eligibility

Pricing

Benefit calculation

- *Each driver authorized to drive a car of group K must be over 21*
- *If the transaction is a cash-out refinance*
  Then the loan-to-value ratio must be less than or equal to 85%
- *If customer is member of night's plan and call time is after 5 p.m.*
  Then the billing rate is .05 per minute.
- *No security should be purchased from the Tobacco sector.*

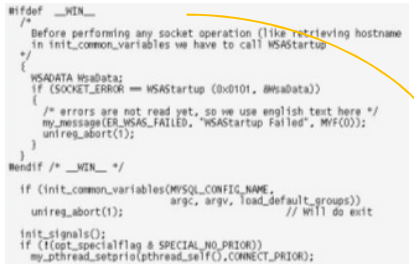
The need for managing business rules

- Assigning a claim:
  - Privacy protection and dynamic security (HIPAA, Patriot Act)
  - Claim location, risk type, severity, staff availability and skills
  - **800 business rules**
- Underwriting an insurance policy
  - Personal auto (800), commercial (200), homeowners (800)
  - **1800 business rules**
- Cross-selling banking products
  - Offer targeting, program qualification, risk based pricing
  - **6000 business rules**

- Change more often than process flows
- Changes expected to be implemented in day(s) not months

Business Rule Management System

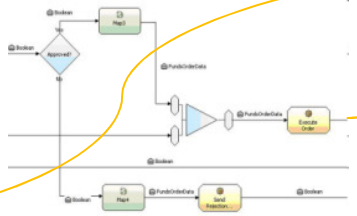
Where Business Rules Typically Exist



Applications

Documents

People



Processes

Business Rule Management System

User Tools

Rules are Defined, Analyzed and Maintained

Rules + Metadata

Rule Repository

Rules are Stored and Shared

Rule Server

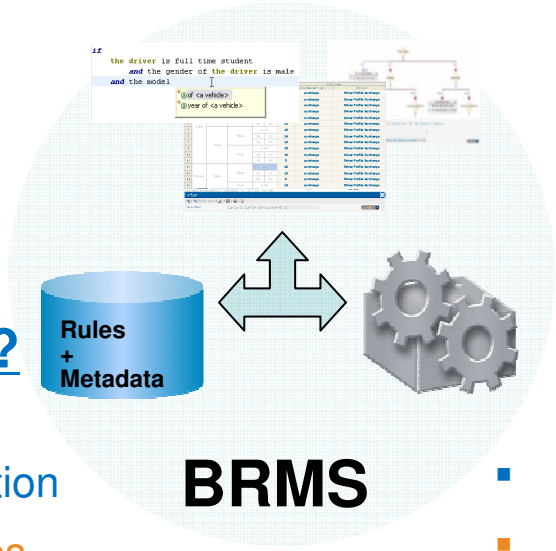
Rules are Deployed, Executed and Monitored

COBOL

SOA

J2EE/J2SE .Net

Overall Benefits of ILOG BRMS



What does it enable?

- Increase decision automation
- Reduce time and resources required to deploy changes
- Centralize and categorize rules and associated metadata
- Express decision logic with increased precision
- Author and maintain rules using business level rule abstractions
- Make decisions based on specific context

What is the value?

- Improve process efficiency
- Lower maintenance costs; respond quickly to change
- Ensure compliance; enable sharing/re-use of decision logic
- Increase profitability of product, pricing and promotional offerings
- Business experts can manage decision logic
- Customize decisions when possible, standardize if needed

Agenda

- Introduction, Strategy, Evolution, Architecture
- BPM Product Updates 6.2
  - WebSphere Business Modeler
  - WebSphere Process Server, WebSphere Integration Developer, WebSphere Enterprise Service Bus
  - WebSphere Business Services Fabric
  - WebSphere Business Monitor
- WebSphere Business Events
- Business Rules – iLOG JRules
- **BPM in the Cloud - Blueworks**
- BPM Portfolio Capabilities
- Futures
- Summary and Conclusion

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BPM BlueWorks is:

A set of cloud-based BPM tools and content enabling Business Leaders, Business Analysts, and Business Professionals to experience the value of BPM by creating BPM Business Designs in the cloud, leveraging pre-built content, and collaborating through community tools.

With BlueWorks, users can:

Learn about BPM

Learn strategies, trends, and best practices for making smart process decisions

Collaborate with the Community

Leverage community insight and access shared content

Experience BPM

Capture business intent, understand capabilities, sketch processes

Optimize Processes

Extend strategy to drive processes improvement, and deploy with the IBM BPM Suite

The BPM BlueWorks Experience

Acquire Expertise, Map Strategy, Execute Processes

1. Access business & industry-specific content to understand the value of BPM

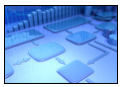
Demos / Videos

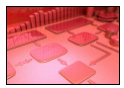
Best Practices

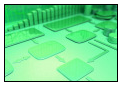
Web casts / Pod casts

Papers / Case Studies

2. Collaborate with the community and leverage pre-built strategies, processes, and measures

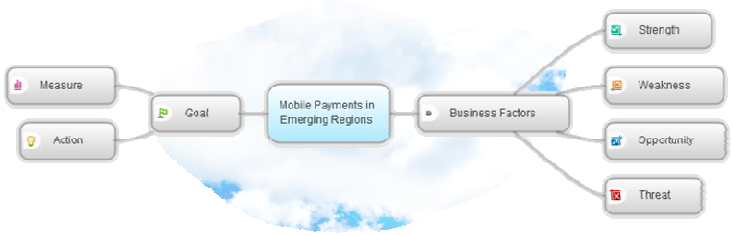

Process Maps


Capability Maps

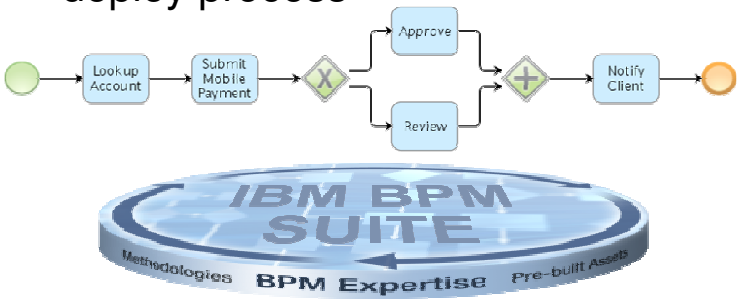

Strategy Maps

Business Measures

3. Capture business intent, capabilities, & process in the cloud



4. Easy on-ramp to BPM suite to test & deploy process



Seamlessly Link Business Strategy to Process Execution

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BPM BlueWorks Targets Users

BPM BlueWorks is designed and targeted towards business users. In the same way that DeveloperWorks provides content and expertise to developers, architects, and other technical professionals, BPM BlueWorks provides business and industry tailored content around business process management.

Business Leaders

Business Professionals

- find tailored, industry-specific content to learn the business value of BPM.
- leverage new strategy tools to capture business intent and find process improvement opportunities

Business Analysts

- Leverage pre-built, industry-specific process maps & business measures to accelerate BPM projects
- Directly import BPMN process maps from BlueWorks to WebSphere Business Modeler

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New BPM Business Design Tools

Translate Strategy into Business Process Improvement

Strategic Intent & Motivation

Capture business strategy understanding that guides the operations and actions of the business

Operational Capabilities

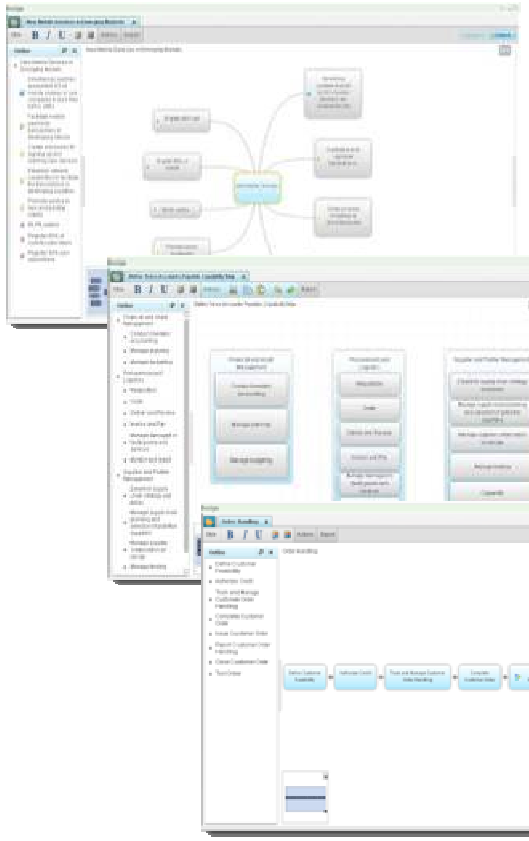
Refine strategic intent into operational capabilities to identify transformation opportunities

High-Level Processes

Link operational capabilities to business processes to jump start automation

Drive Process Improvements

Capture business intent to understand, transform, automate and measure business processes



Strategy Maps

Capability Maps

Process Maps

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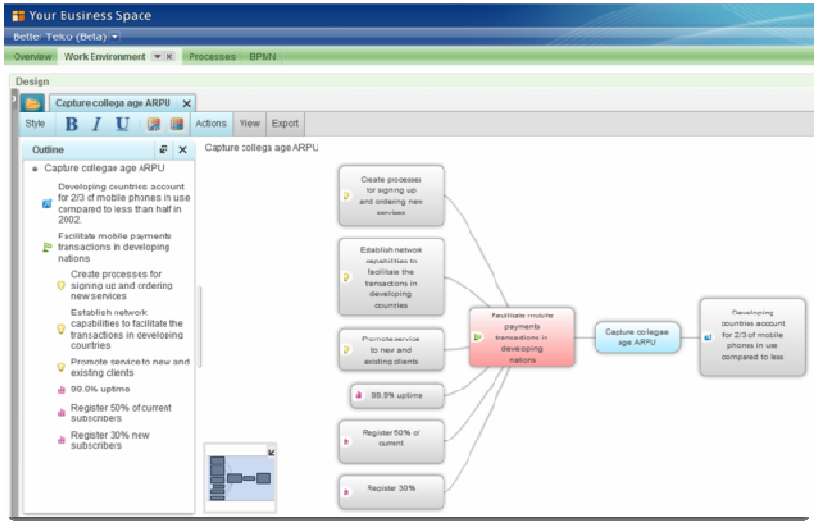
Capture Business Intent
With Strategy Maps

- *Strengths*
- *Weaknesses*
- *Opportunities*
- *Threats*



- *Goals*
- *Actions*
- *Measures*

Build Comprehensive Strategies

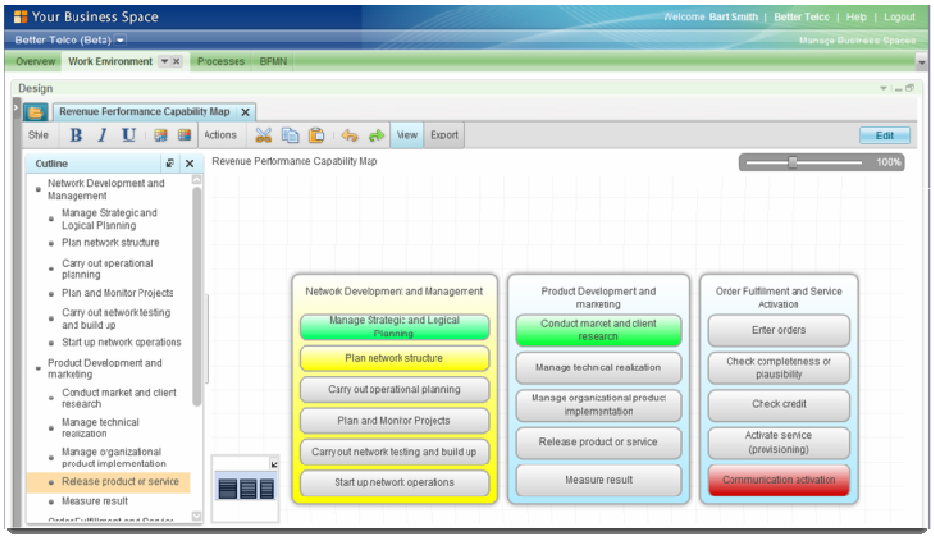
- Capture key business factors
- Develop a measurable plan
- Associate strategy with core competencies
- Easily share strategies

Leverage Powerful Mapping Tools

- Copy and paste into outline view
- Export to PowerPoint
- Link to capability maps
- Add attachments
- Color code for visual enhancement

Document Business Activities & Competencies

With Capability Maps



Capture Core Competencies

- Define business activities
- Highlight competencies and capabilities
- Associate capabilities with processes
- Easily share definitions

Leverage Powerful Mapping Tools

- Export to PowerPoint
- Link to process maps
- Add attachments
- Color code for visual enhancement

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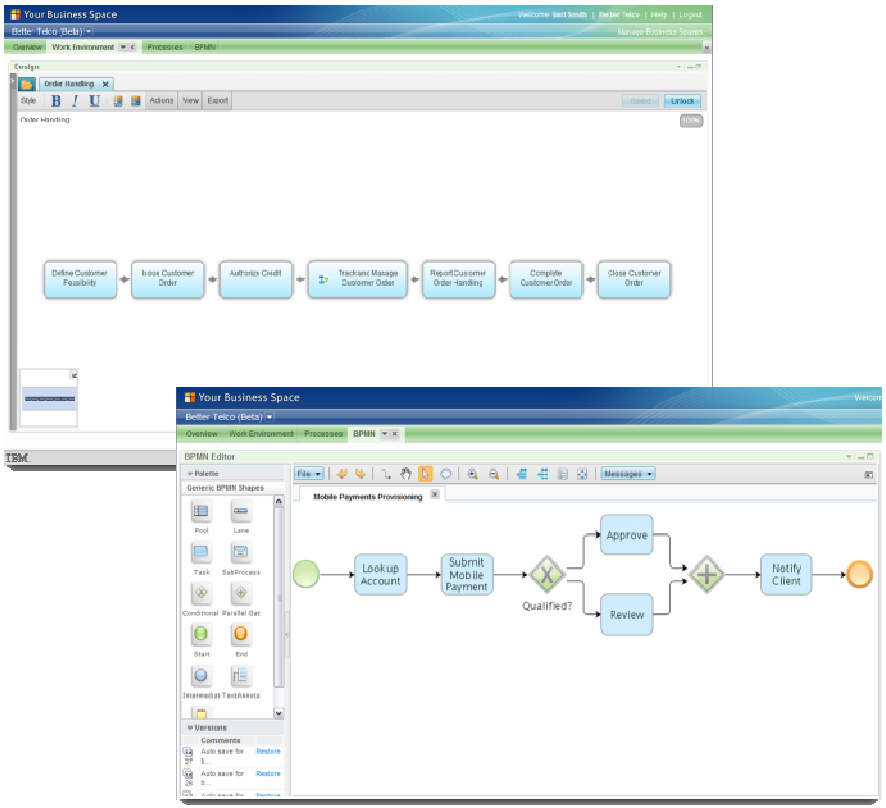
Define Core Business Execution
With Process Maps

Map High-Level Business Processes

- Capture business activities, owners, and associated information
- Define BPMN sub-processes
- Create critical decision branches
- Easily share process maps



Leverage Powerful Mapping Tools

- Export BPMN sub-processes
  - Rational Asset Manager
  - File System
- Import BPMN sub-processes to WebSphere Business Modeler
- Print and convert processes to PDF

Cloud vs. Private Business Design Tools

When should clients use the public or private version of the new strategy, capability, and high-level process mapping capabilities

The “Business Leader” features provided in BlueWorks and the v6.2 feature pack are the same. BPM BlueWorks will also have a preview of BPMN Editor which enables export of process models to WebSphere Business Modeler.

Clients may prefer to use the tools in-house when:

- Corporate or government policies that prohibit business to be conducted on the web
- Capabilities are on site with custom security and access
- Capabilities are linked with additional widgets in their business space (Monitor, WPS, etc)
- Existing, detailed process maps in WebSphere Business Modeler will be linked to strategy and capability maps

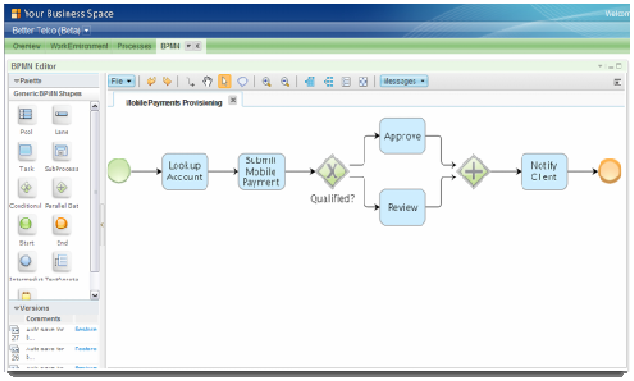
If clients choose to use the design tools in-house they can still leverage the content and community features in BPM BlueWorks.

BPM BlueWorks

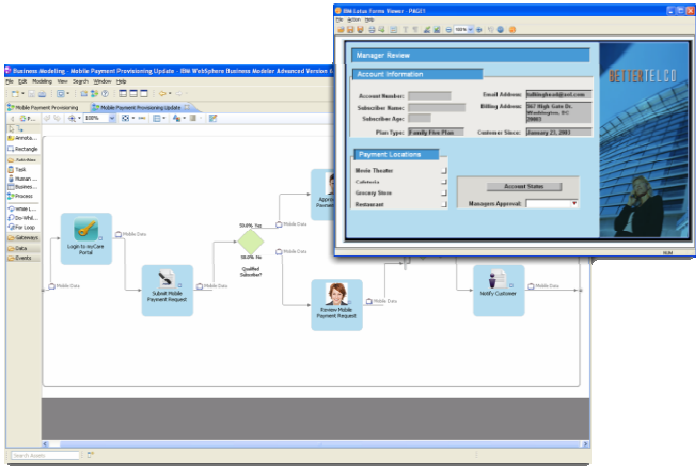
Role-based business spaces

Moving from High-Level Process Mapping to Robust Modeling and Simulation

BPM BlueWorks



WebSphere Business Modeler



Both BPM BlueWorks and WebSphere Business Modeler provide the capability to model and extend high-level BPMN processes. WebSphere Business Modeler provides advanced modeling capabilities and other features including:

- Process simulation and analysis
- Forms design and storyboarding
- Interactive process design to directly deploy process models to a managed test environment

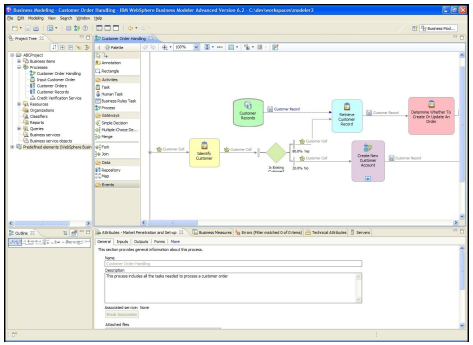
Clients can export process models from BlueWorks into Business Modeler to extend and test them using these additional capabilities.

On Ramp to IBM BPM Suite

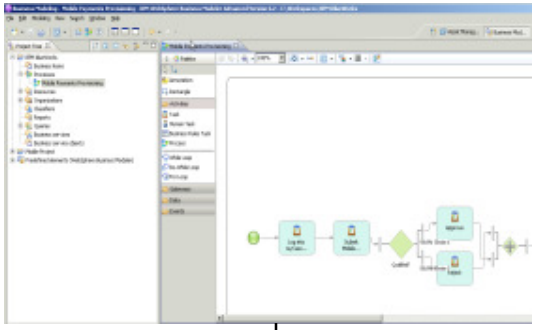
BPM BlueWorks provides an easy on-ramp to the IBM BPM Suite allowing a seamless move from business strategy to process execution. ***Users cannot deploy and run processes in the cloud.***

1. Export Modeler artifact to RAM or local file system

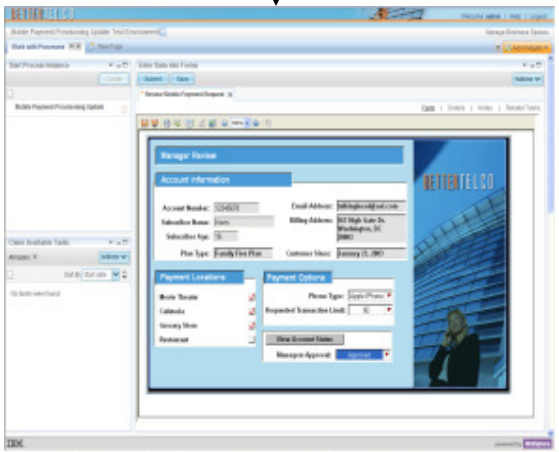
2a. Start WebSphere Business Modeler



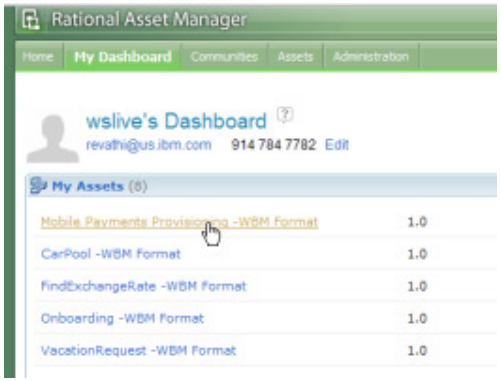
3. Import artifacts into WebSphere Business Modeler



4. Test the process using interactive process design capabilities



RAM Dashboard



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BPM BlueWorks and the IBM BPM Suite

Improve BPM success with process discovery driven from business intent, and a robust platform to continuously optimize business processes

Capture business intent

Collaborate around business design

Prove value quickly

Access tools and process assets

Deploy, Execute, and Change

Model and Simulate

Monitor, Analyze, Predict and Act

Governance and Compliance

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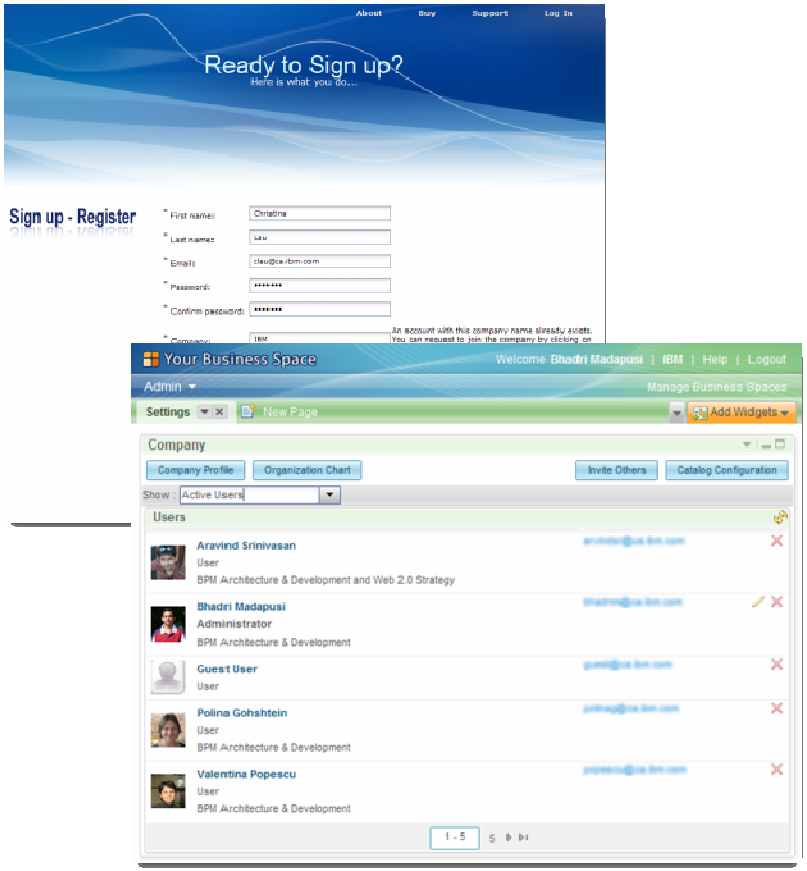
Get Started with BPM BlueWorks

Register Your Company

- The first registered user for a company / group becomes the BlueWorks administrator for the company
- Subsequent registrations for the company / group are approved by the administrator



Learn More

To learn more about BPM BlueWorks, please visit:

www.ibm.com/software/solutions/smartwork/blueworks

or contact your IBM representative

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V.6.2 Portfolio Commonality and Consistency

Product	WAS Fix Pack >= 6.1.0.21	WAS Clustering/HA	Distributed 64 bit app	z/OS	z/OS 64 bit app	z/Linux	Derby (for UTE)	DB2 V8.2/V9.1/V 9.5	DB2 for z/OS V8/V9.1
WAS				≥ 1.6					
WPS/WESB				≥ 1.8					
Monitor									
WSRR				≥ 1.8					
WBSF				≥ 1.8					
Adapters*				≥ 1.8					
Broker	NA	NA		≥ 1.7					

** Support may vary by Adapter type*

- New columns include common 64-bit versions of, Redhat, SUSE, Solaris as well as Oracle 10g/11g
- Efforts to get consistency on install, update, profile management, install factory
- Common Problem Determination: FFDC, ISA, Trace, message standards

89

V.6.2 Portfolio Commonality and Consistency

Product	WAS Fix Pack >= 6.1.0.21	WAS Clustering/HA	Profile Augmentation	Distributed 64 bit app	z/OS	z/OS 64 bit app	z/Linux
WAS	■	■	■	■	≥ 1.6	■	■
WPS/WESB	■	■	■	■	≥ 1.8	■	■
Monitor	■	■	■	■	■	■	■
WSRR	■	■	■	■	≥ 1.8	■	■
WBSF	■	■	■	■	≥ 1.8	■	■
Adapters*	■	■	NA	■	≥ 1.8	■	■
Broker	NA	NA	NA	■	≥ 1.7	■	■

**** Support may vary by Adapter type***

- New columns include common 64-bit versions of AIX, Redhat, SUSE, z/Linux, z/OS, Solaris, Windows
- Efforts to get consistency on install, update, profile management, install factory
- Common Problem Determination: FFDC, ISA, Trace, message standards

90

V.6.2 Portfolio Commonality and Consistency

Database		DB2 for Distributed			DB2 for z/OS		Oracle	
Product	**Derby (for UTE)**	**V8.2**	**V9.1**	**V9.5**	**V8**	**V9.1**	**10g**	**11g**
WAS	■	■	■	■	■	■	■	■
WPS/WESB	■	■	■	■	■	■	■	■
Monitor	■	■	■	■	■	■	■	■
WSRR	■	■	■	■	■	■	■	■
WBSF	■	■	■	■	■	■	■	■
Adapters*	■	■	■	■	■	■	■	■
Broker	■	■	■	■	■	■	■	■

**** Support may vary by Adapter type***

- New columns include DB2 V9.5 as well as Oracle 10g/11g

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Future Directions Summary – Portfolio View

1. Empower the business users to do more
   - Requires support for dynamicity in a consistent fashion
   - Requires governance process that spans authoring, execution and management
   - Requires tighter linkages between various roles
2. Enable IT to
   - More easily grow and broaden usage of the BPM portfolio
   - Create consistent application componentry
3. Provide infrastructure that
   - Thrives on change
   - Enforces consistency
   - Leverages new and emerging standards
   - Provides optimizations consistent with the Programming Model

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Where Next?

- You've seen signs of the future in 6.1.2 and 6.2
  - Enabling business roles to actively participate and materially affect how the BPM solution behaves, responding to changing business conditions
  - Business Space
- More is coming to deliver business value
  - Governance and governance processes
    - at a SOA and BPM level
    - at development time and at runtime
  - More Versioning
  - More Dynamicity
  - More Direct Deployment
  - Topology refactoring for growth and evolution
  - iLog integration
- Platform evolution under the covers
  - Metadata, XML, WAS V7, Open SCA

All under a consistent BPM and Connectivity architecture that places integrity first, builds on a SOA Foundation principles and is delivered in consumable forms

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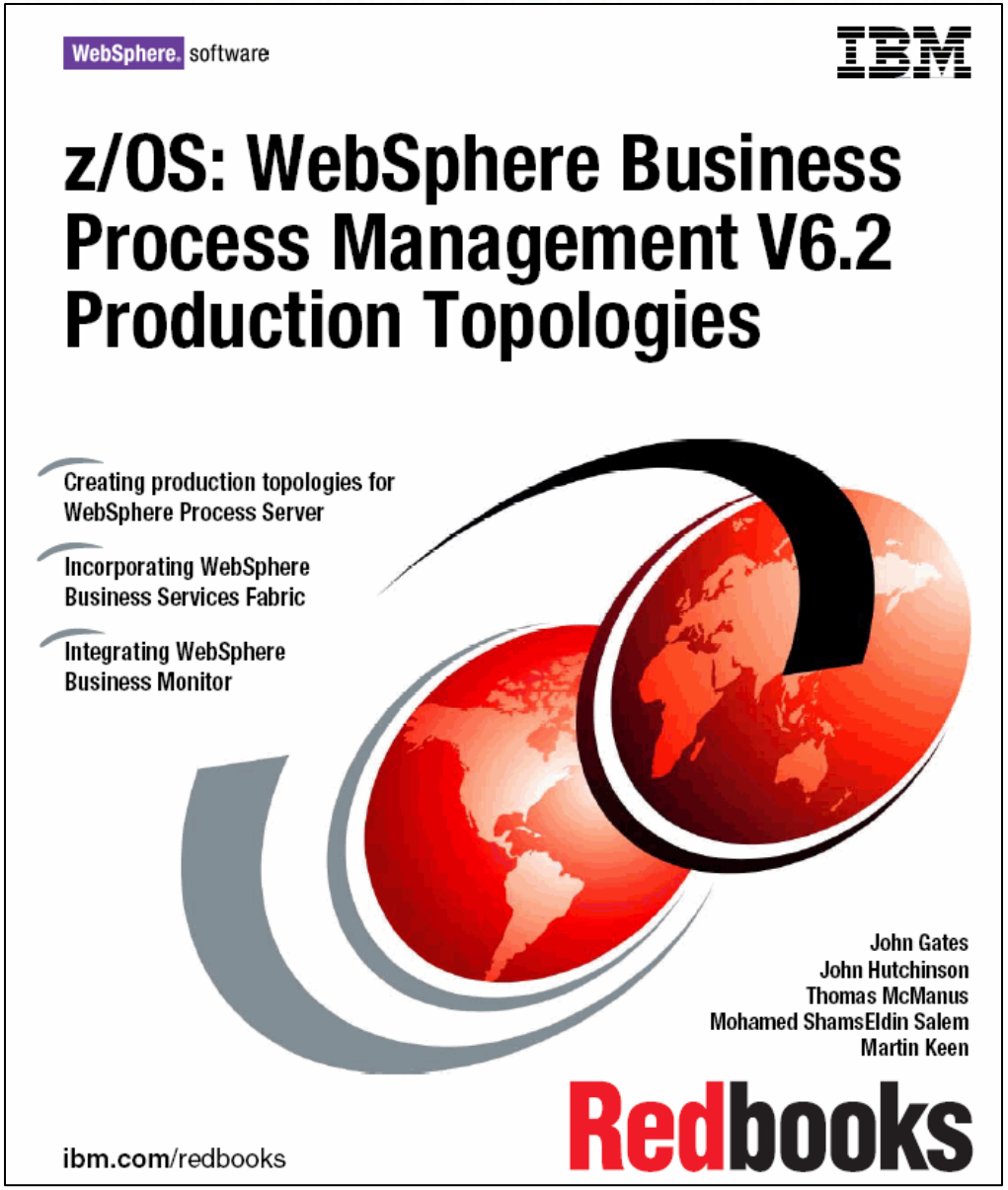
Summary

BPM is here and delivering value to the business

- WebSphere BPM 6.2 Offers a complete BPM portfolio
  - Leveraging our SOA and ESB infrastructure
  - Empowering the business to push ahead
- The opportunity to leverage this portfolio is now
- IBM will continue to invest in this portfolio and provide additional capabilities over time; we have many things we will do to evolve this platform.
- Please consider that we need to think about things differently
  - Business Value
  - Flexibility (Points of Agility)
  - Shifting of Responsibility

These are opportunities and challenges



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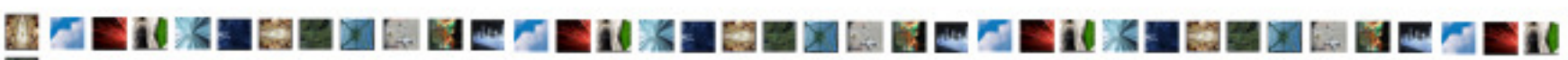

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