IBM Software Group

Why IBM is a Better Choice for Business Integration

IBM Software Group

WebSphere software

ON DEMAND BUSINESS

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Why IBM Should Be Your Integration Platform

- Who has the best end-to-end process integration?
- Who has the best portal solution for your enterprise?
- Who has the best enterprise information integration?
- Who has the stronger infrastructure?

Case Study: Problems with the Order to Cash Process

Our Order to Cash process is slow and introduces a lot of errors. We need this process to be streamlined with fewer errors.

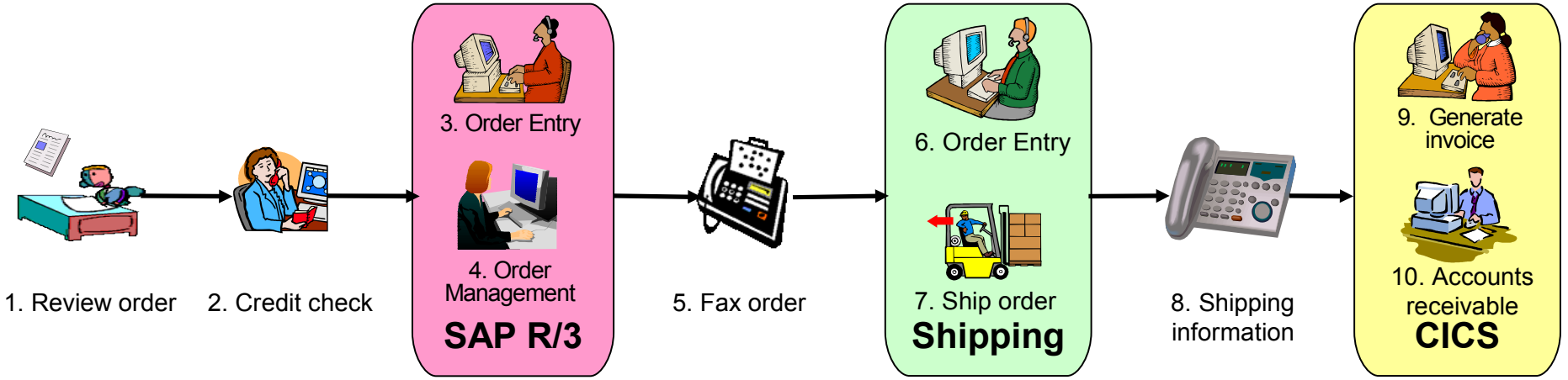
CEO

WebSphere, and its support for SOA, can help you solve this problem. Let's see how…

IBM

Current Order to Cash Process

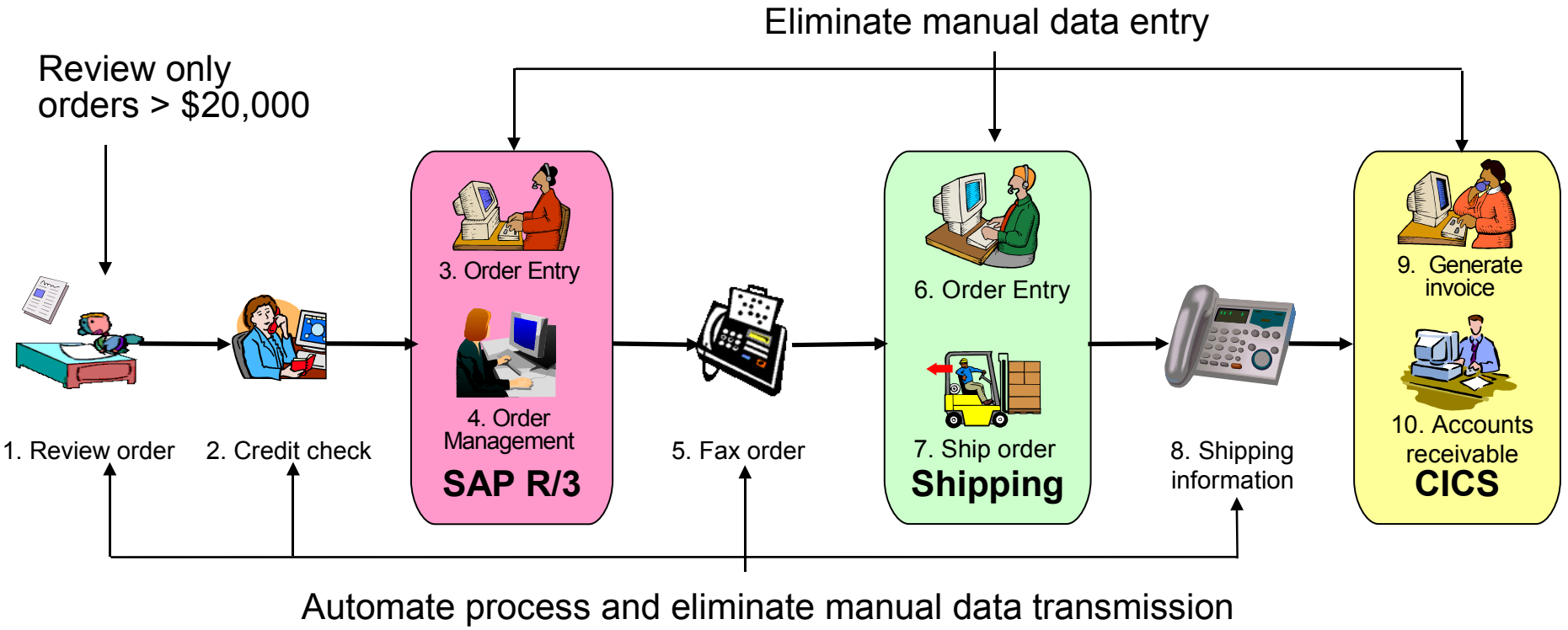
- **For business-to-business sales**
- **Process spans 3 line-of-business systems**



Problems with the current process

- Orders submitted manually
- Paper-based process
- Manual data entry results in errors
- Difficult to track order status
- Spans three systems that do not communicate
- Delays in between each system

Challenges for Process Improvement



Key Measures of Process Performance

- Average process time is 45 days
- Average cost is $30 per order
- Target process time is 28 days
- Target process cost is $12 per order

Steps to Implement New Order to Cash Process

1. Model the new business process
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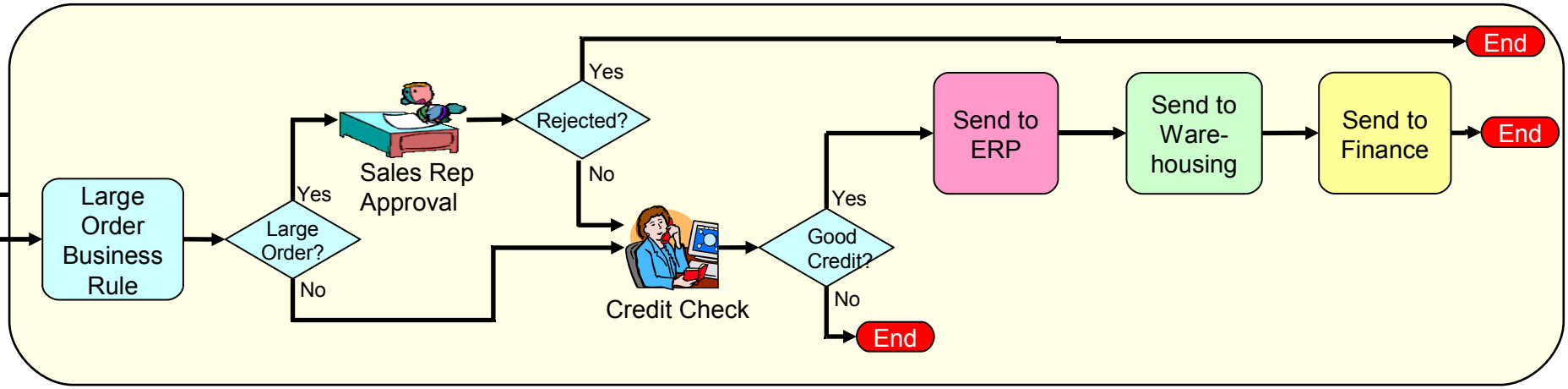
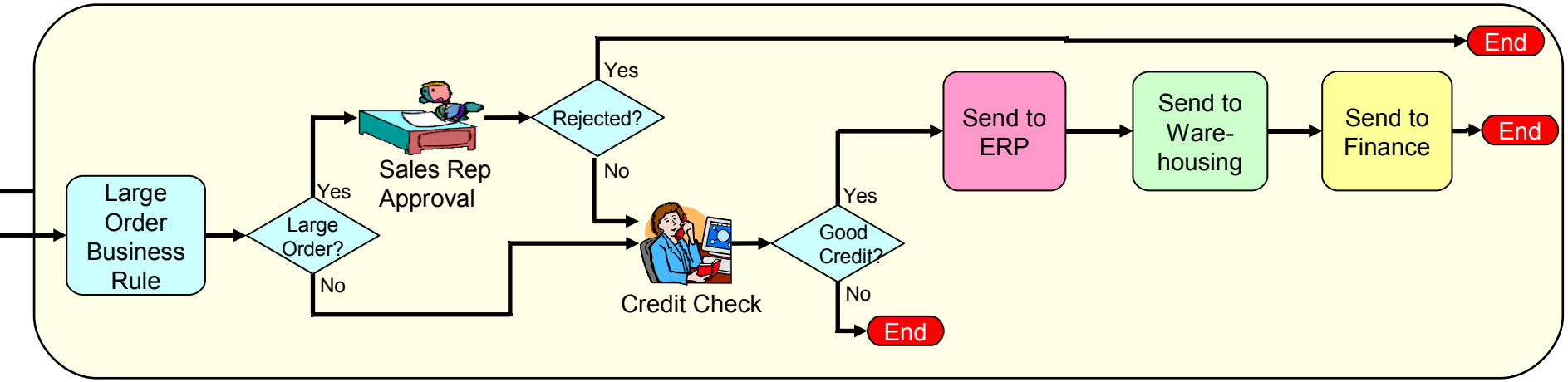
Model the New Order to Cash Process



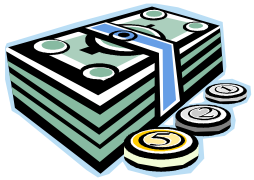
- Designed for a business analyst – no programming required
- Depicts the complete business process - includes human and system steps
- Not just a diagram – will be handed off to a developer for implementation
- Most competitive “modeling” tools are not for business modeling – really process design tools for developers

Model Attributes – More Than Just Boxes and Lines



Time

- Time required to complete the task
- Time required for a resource to work on a task
- Maximum time to wait for a resource



Costs

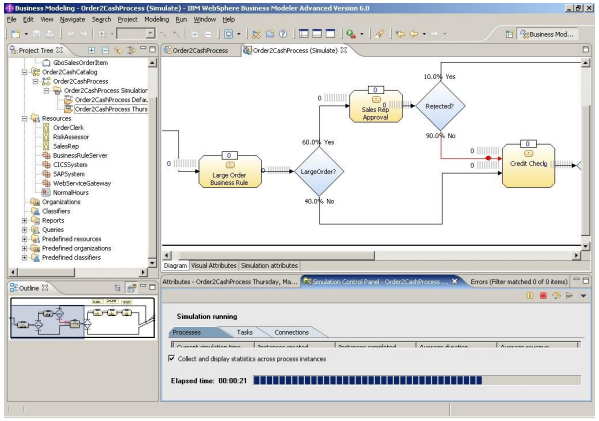
- Resource costs
- Other costs associated with tasks
- Support for 83 national currencies

Business Measures

- Key performance indicators
- Business metrics
- Triggers
- Counters

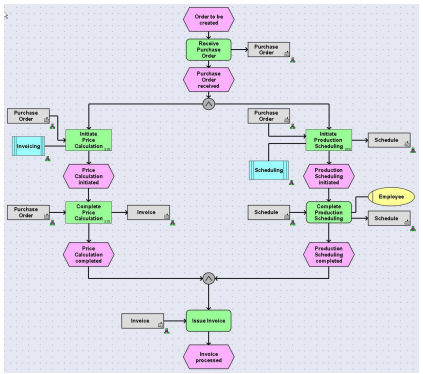
How Do You Know if the New Process Will Meet Your Business Objectives? Simulate It First

- Simulate the model before it is implemented
- Model “what if” scenarios and compare results
- Identify bottlenecks
- Quantify time and cost savings to justify project

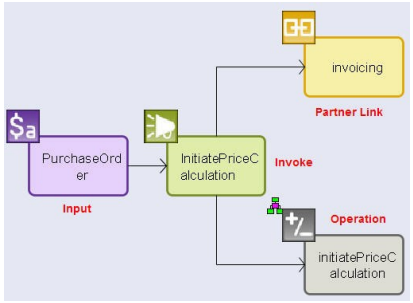


IBM Adds Value to SAP: IBM Integration with Aris Modeling

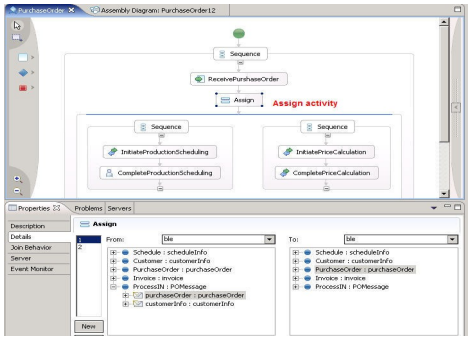
- Many SAP customers use IDS Scheer's ARIS family of tools to model SAP processes
- IBM and IDS Scheer have announced a partnership in which ARIS Event Process Chain (EPC) models may be exported as Business Process Execution Language (BPEL) to WebSphere development tools
- ARIS models can be enhanced, implemented, and deployed with IBM integration software



ARIS EPC Model



ARIS BPEL Model



WebSphere

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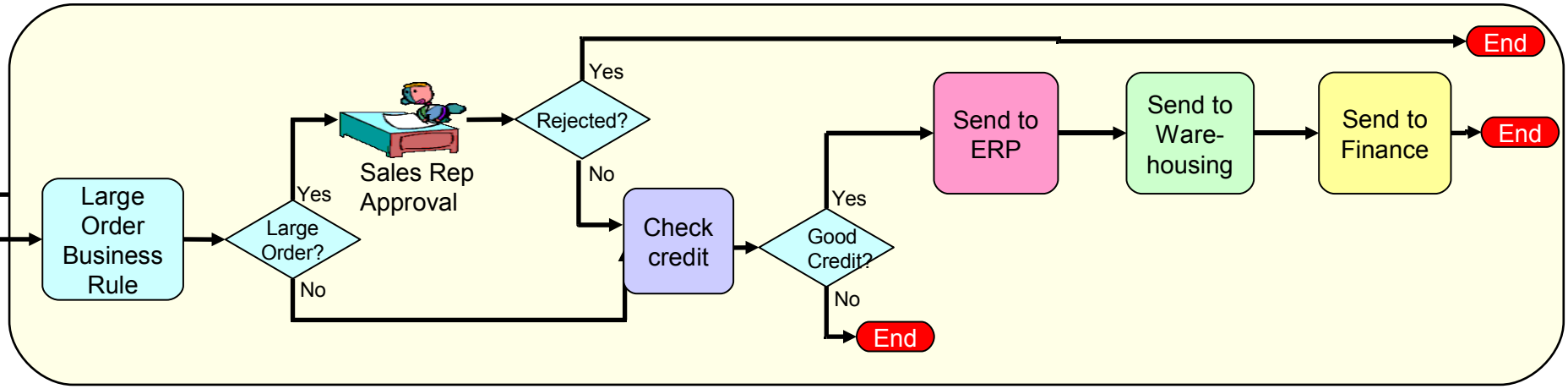
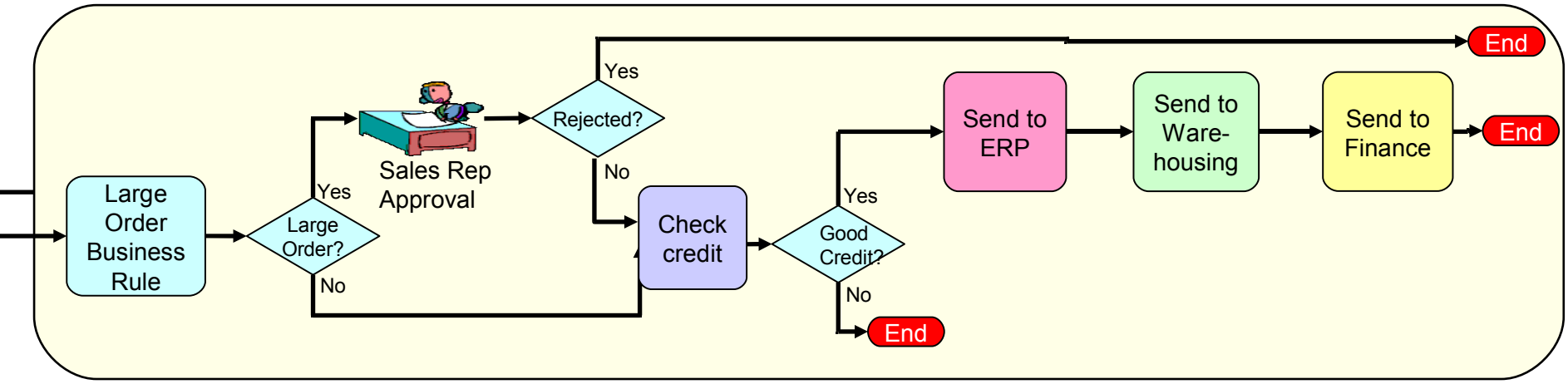
Process Needs to be Completed by a Developer

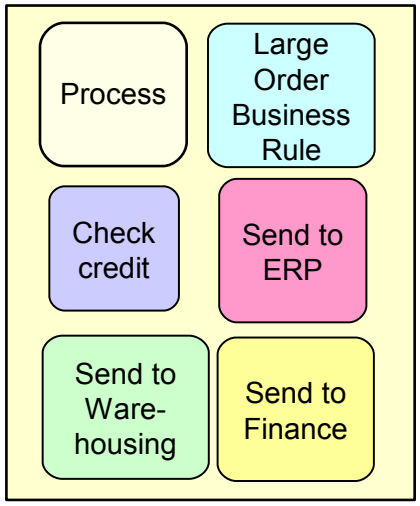


- Model is converted into a structured language (BPEL) flow
- Developer uses WebSphere Integration Developer tool
- Create business rule to review all orders > $20K
- Assign roles to human tasks
- Provide services and data maps
- Generate enterprise archive (EAR) for deployment

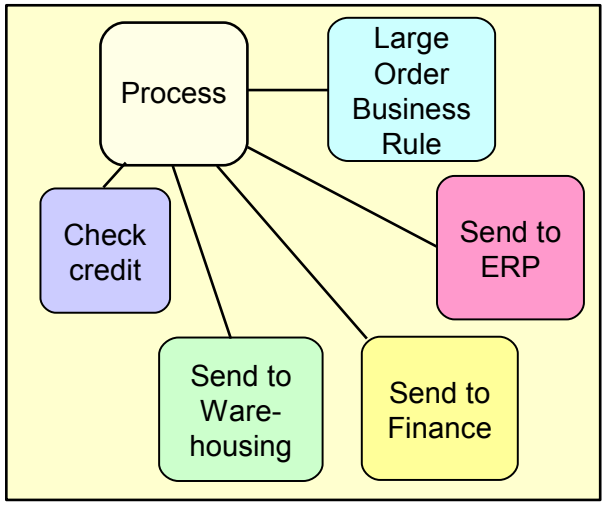
Realizing SOA with a Service Component Architecture



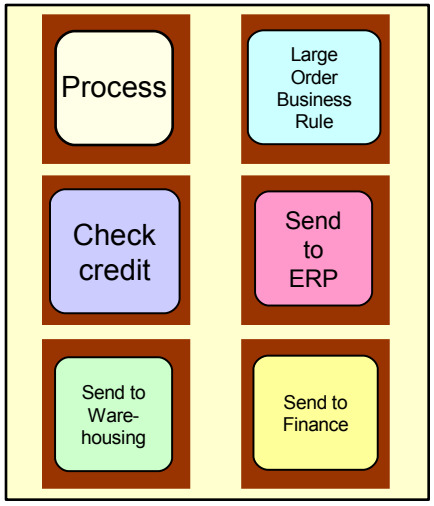
Solution will be in implemented as 6 components



Components will be bound during assembly

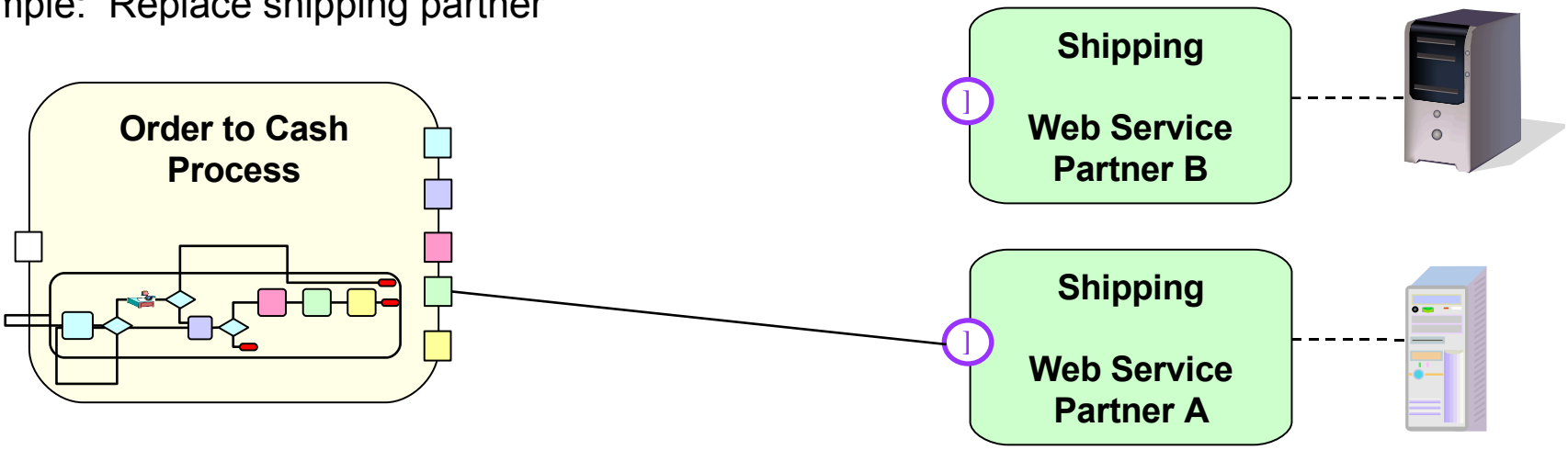


Deploy components as Enterprise Archives



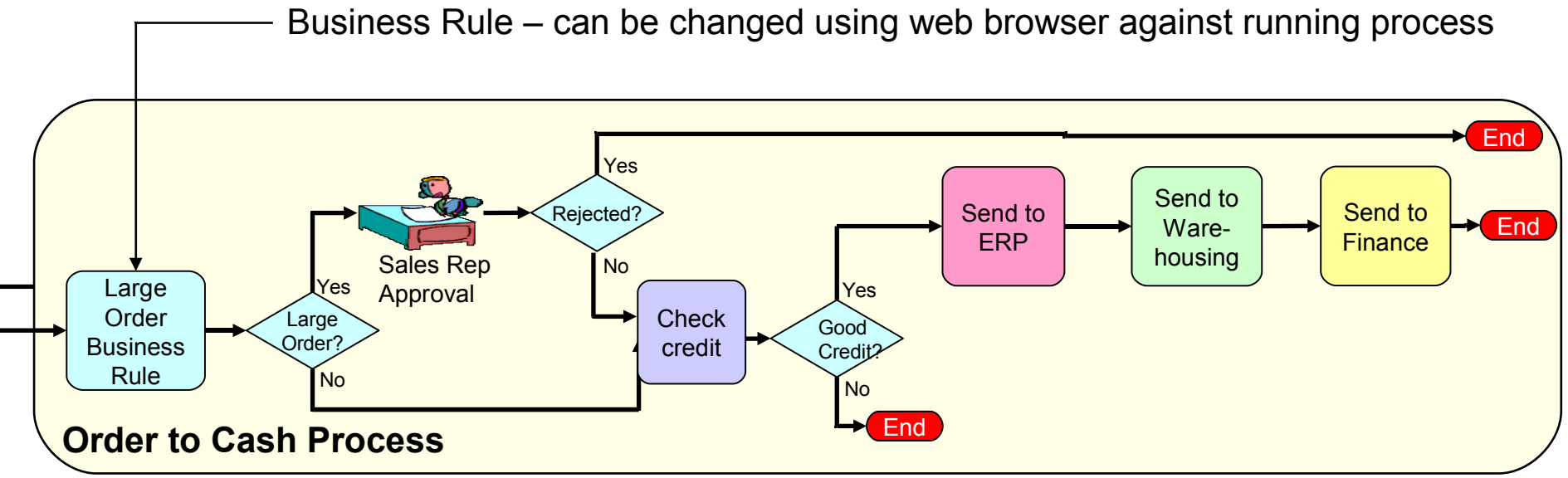
SCA Provides Flexibility to Easily Re-use and Replace Services

Example: Replace shipping partner



- New service component has same interface as existing component
- Service component is changed without changing the business process
- Shipping task now calls Partner B

Business Rules Expose Business Logic for Easy Update

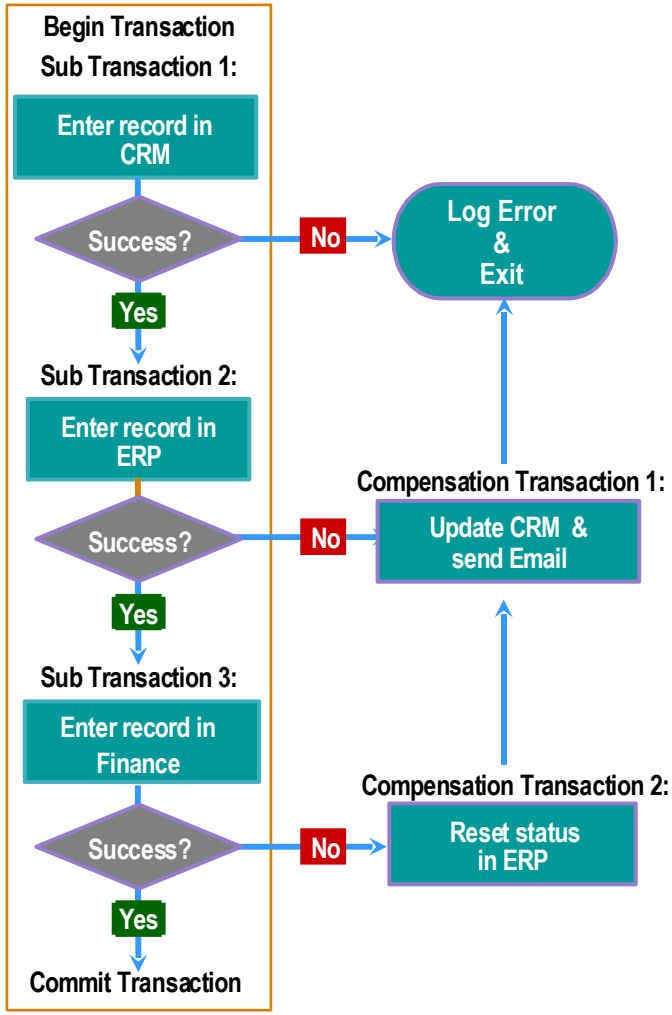


- Used to check whether order is > $20,000
- Business rule is another type of service component
- Externalizes business logic so that it can be easily changed without re-deployment
- Dynamic creation and update of business rules at runtime using web interface

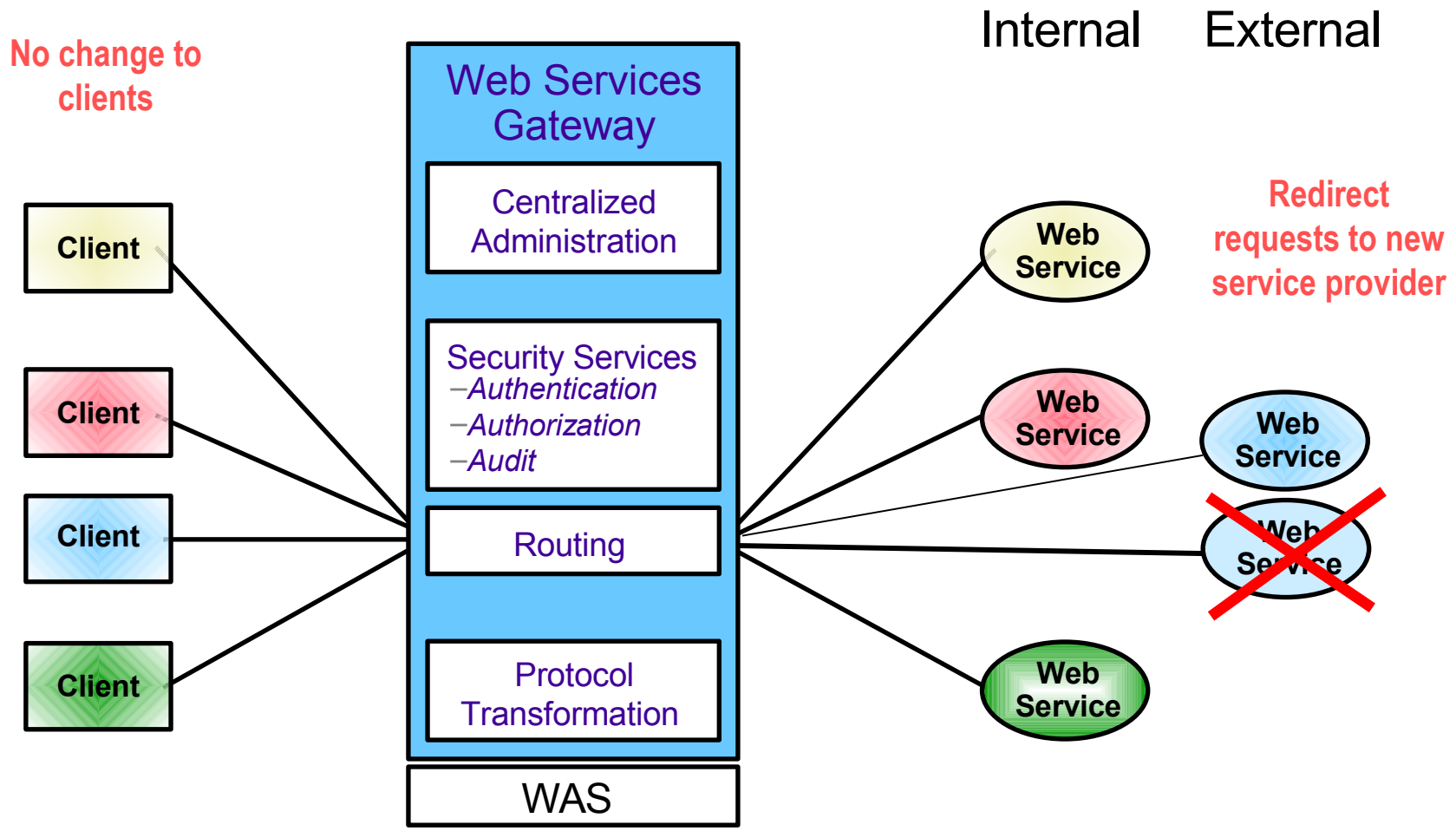
WebSphere Provides Comprehensive Transaction Support

- WebSphere can manage all of the tasks of a process as a single transaction, so that all steps are either completed or not
- Some tasks, such as SAP BAPI's, cannot be rolled back – these require a compensating, or "un-do" step
- WebSphere allows a compensating step to be defined for each process step, and will execute the appropriate compensating steps if a process fails

Example of Compensating Transactions



IBM Web Services Gateway Simplifies Management of Web Services



WebSphere SOA Programming is Very Productive

- Service Component Architecture (SCA) increases flexibility and reuse
- Human workflow support
- Drag and drop services into process flow (automatic binding)
- Wizard-based deployment as web service, EJB, or message driven bean
- Built-in Unit Test Environment and debugger
- Business rule support
- Transaction support and compensating transaction framework
- Web services management

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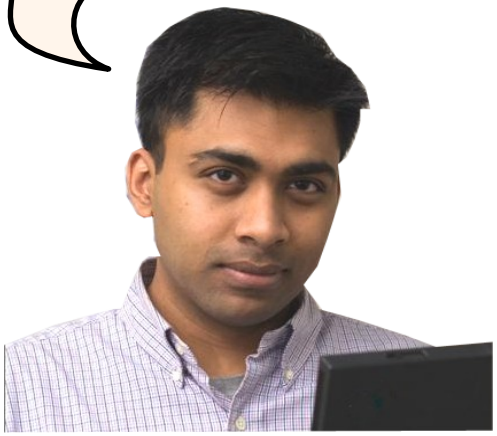
Creating The Services That Connect to Existing Systems

How do we create those services that connect to SAP and CICS?



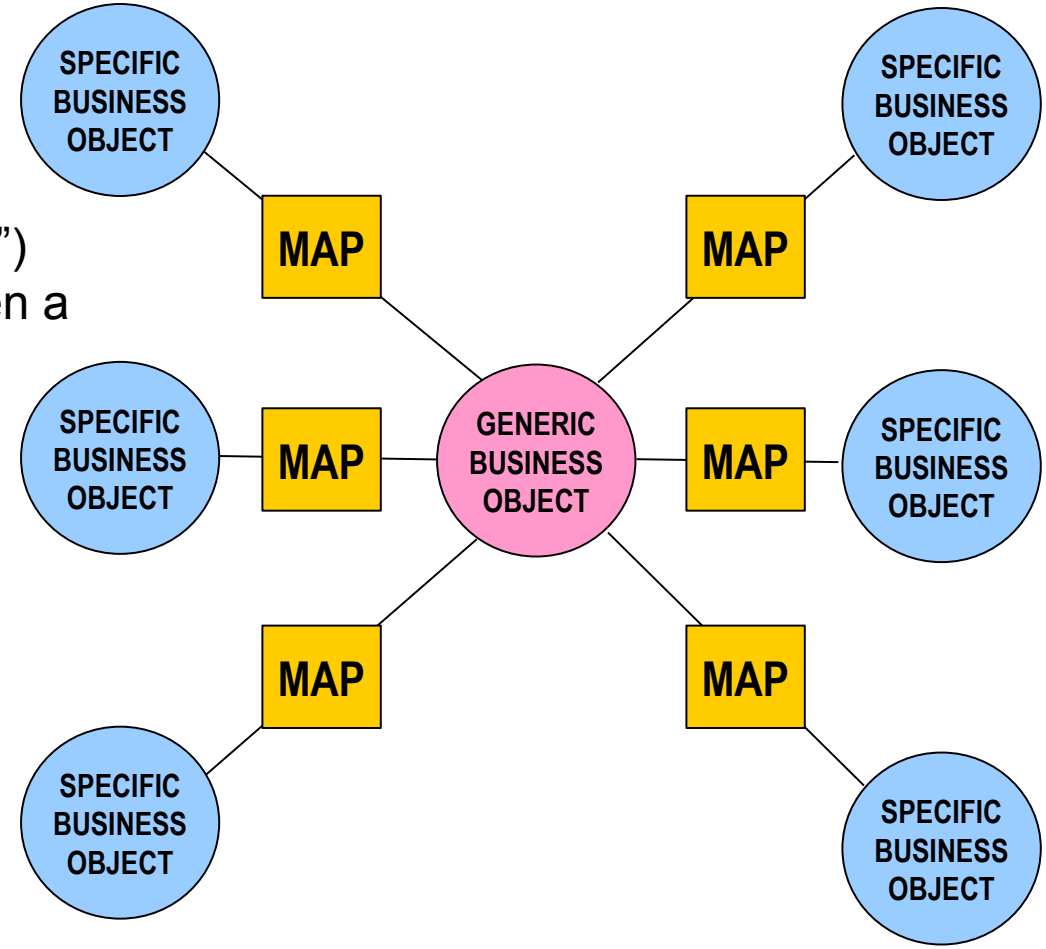
I/T Manager

WebSphere provides a comprehensive set of adapters and tools.

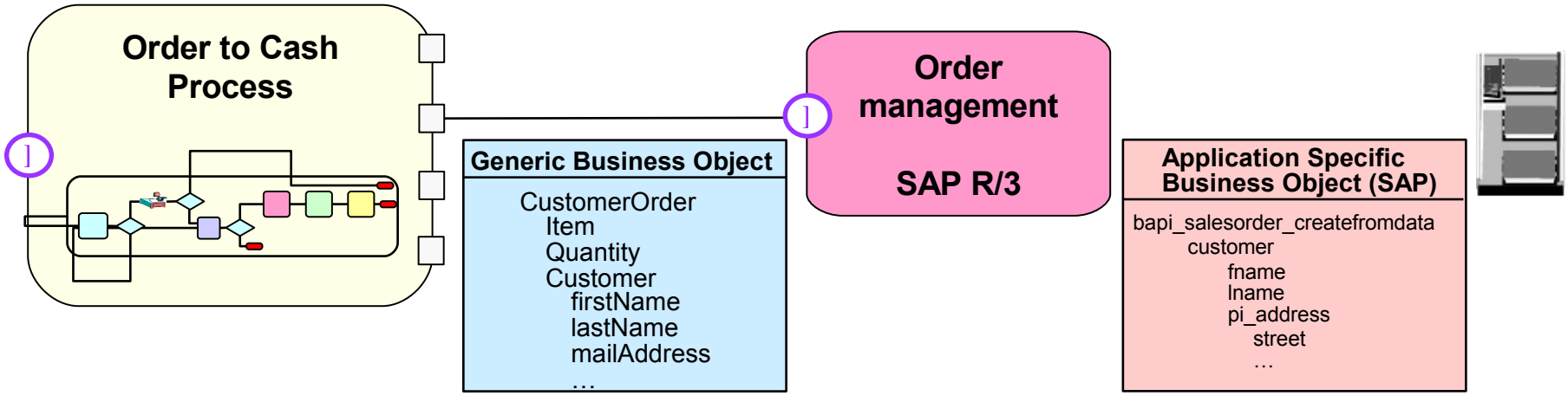
IBM

IBM's Process Integration Decreases Effort Via Common Business Objects

- "Generic" Business Object ("GBO") provides an isolation layer between a process and application-specific objects
- Number of transformations (data maps) scales with the number of endpoints (n)

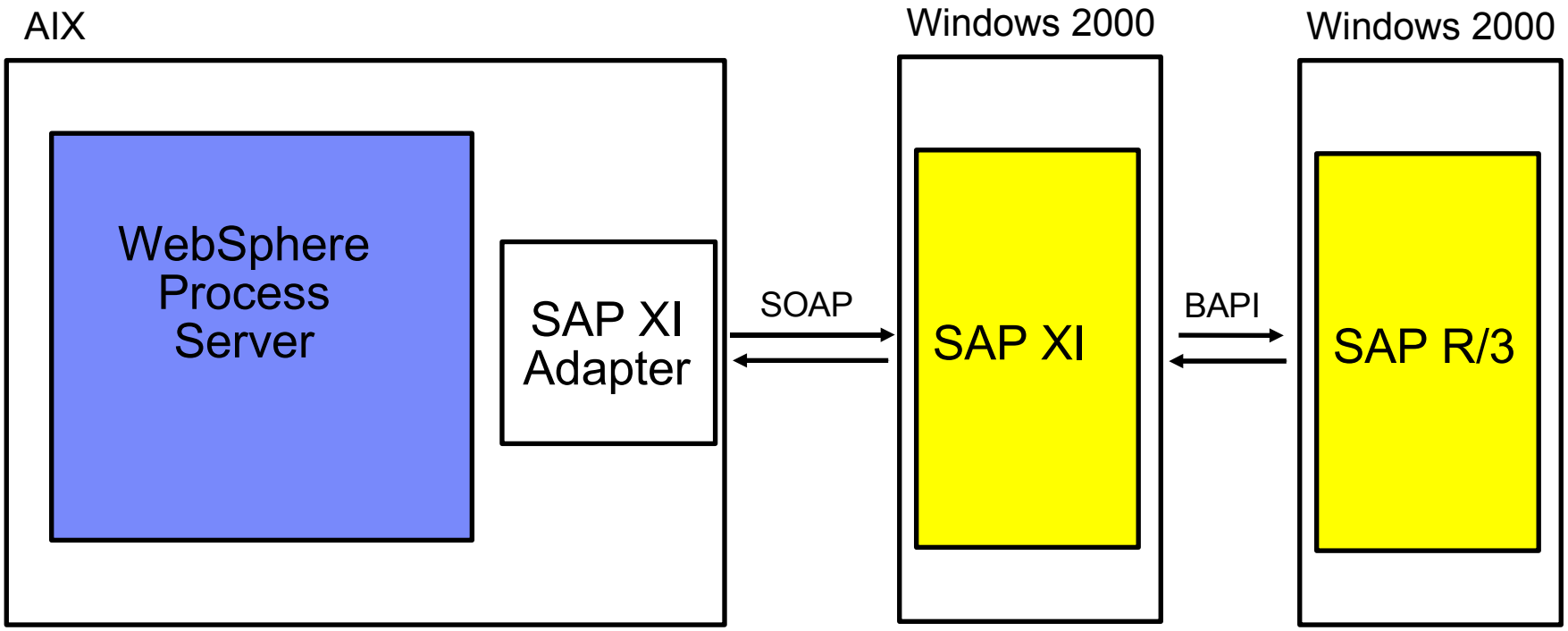


Turning Enterprise Resources into Services with WebSphere Development Tools

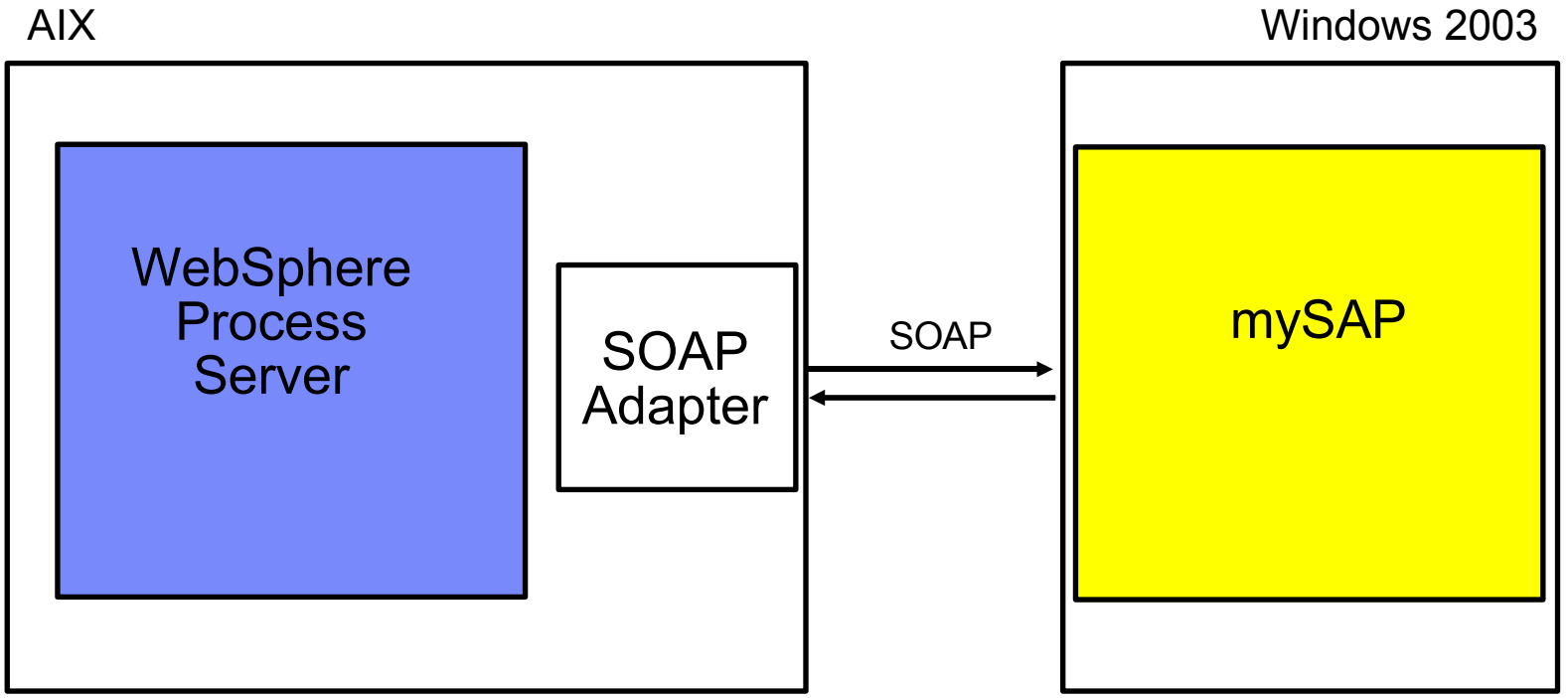


- Wizards easily create reusable services from enterprise assets, such as SAP
- Graphical tools map from the process' generic Customer Order to the SAP-specific Customer Order

WebSphere Can Integrate with SAP Via XI



WebSphere Can Integrate with SAP Via ESA-Enabled Web Services

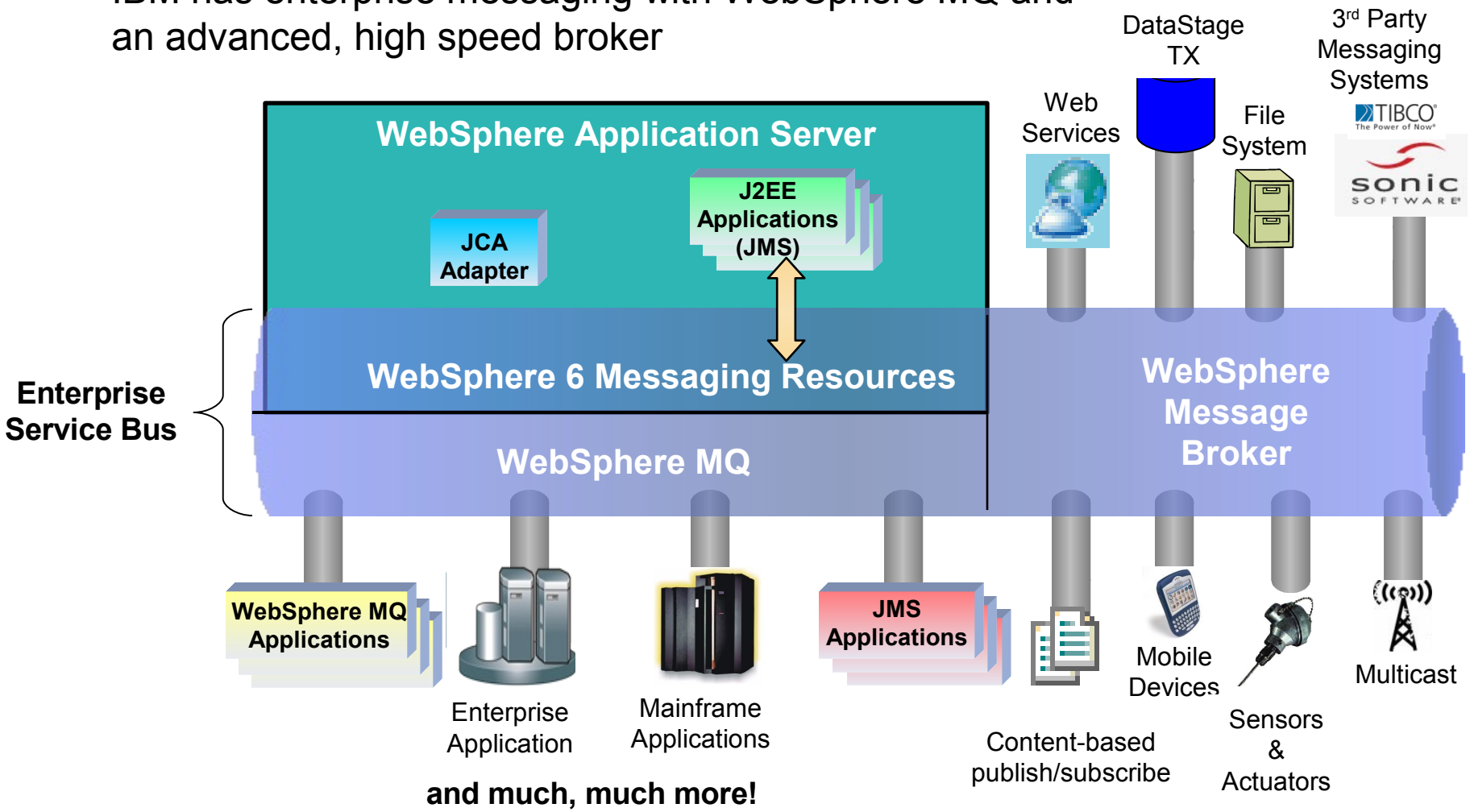


IBM Adapters and Tools Allow You To Access Application Components as Reusable Services

WebSphere Adapters	
SAP (IDOC and RFC)	SAP Exchange Infrastructure
Oracle Applications	PeopleSoft Enterprise
JD Edwards OneWorld	Siebel Business Applications
Ariba Buyer	MetaSolv Applications
i2	SunGard FRONT ARENA
CICS	eMatrix
Clarify CRM	Lotus Domino
Exchange	WebSphere MQ
WebSphere MQ Workflow	WebSphere Message Broker
	Portal Infranet
Flat Files	Enterprise JavaBean (EJB)
HTTP	COM
Web Services	CORBA
JMS	SWIFT
JDBC	Healthcare Data Protocols
e-mail	FIX Protocol
Complex Data	DTS Protocol
EDI	TCP/IP sockets
iSeries	XML

IBM's Enterprise Service Bus Connects to Everything

- IBM has enterprise messaging with WebSphere MQ and an advanced, high speed broker



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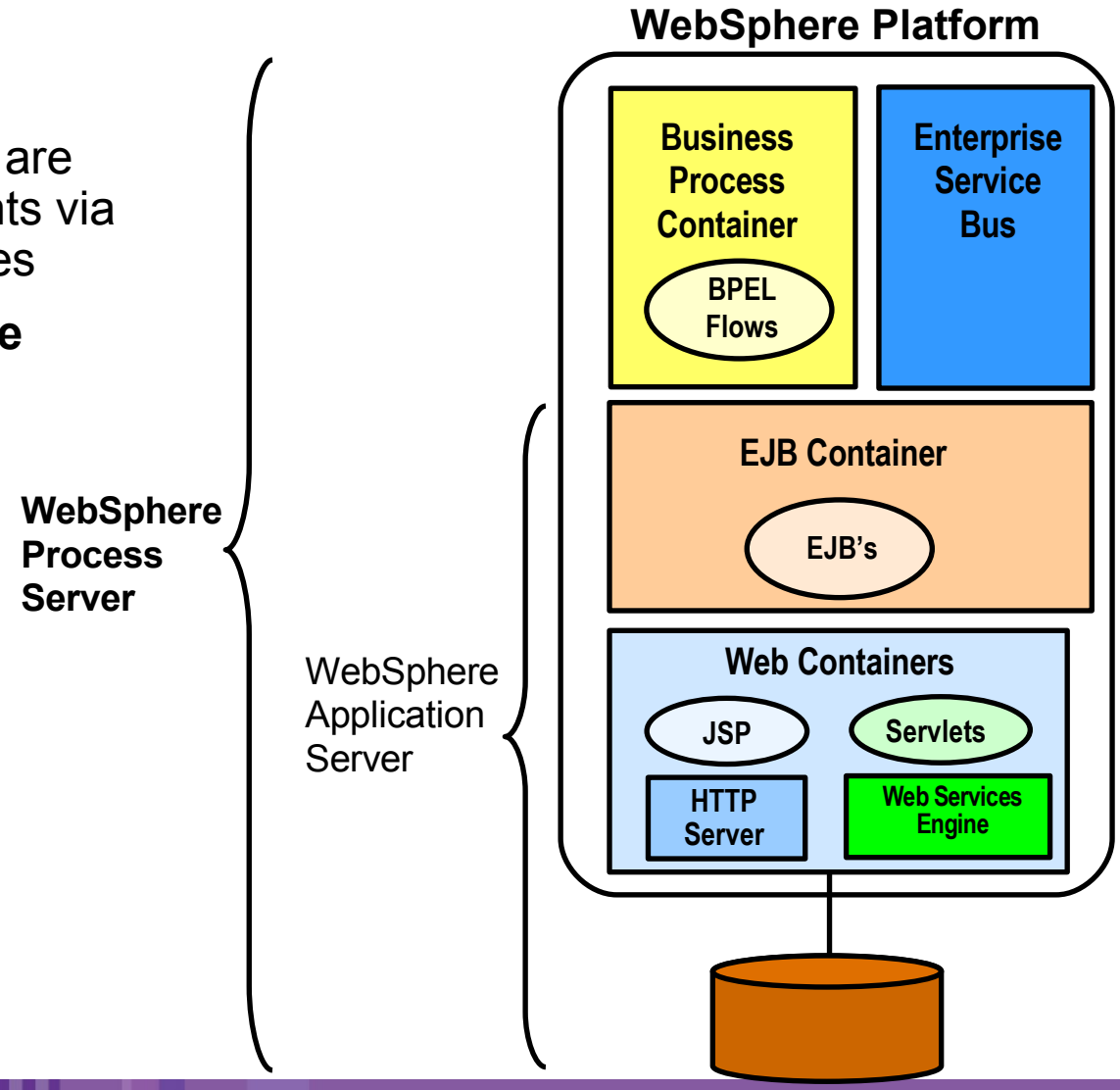
Deploy the Process to the WebSphere Platform

- The process and its services are deployed as J2EE components via EAR (Enterprise ARchive) files
- WebSphere provides a **single** platform for all application components
  - EJB's
  - Web services
  - Business processes
  - Enterprise Service Bus
  - Portal



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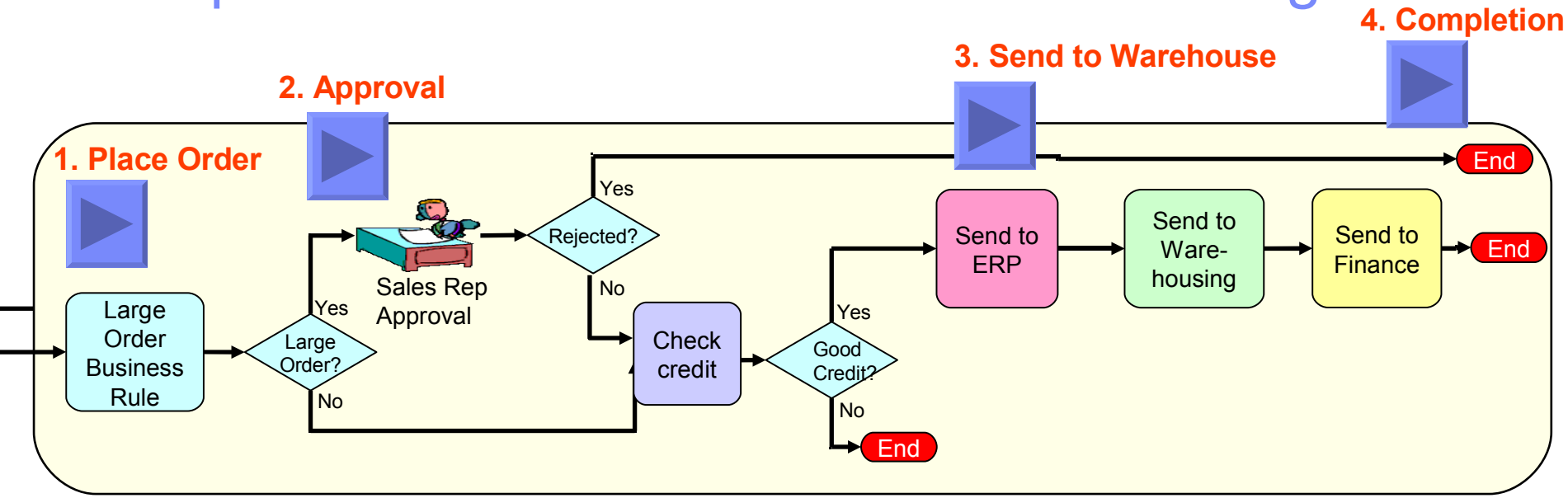
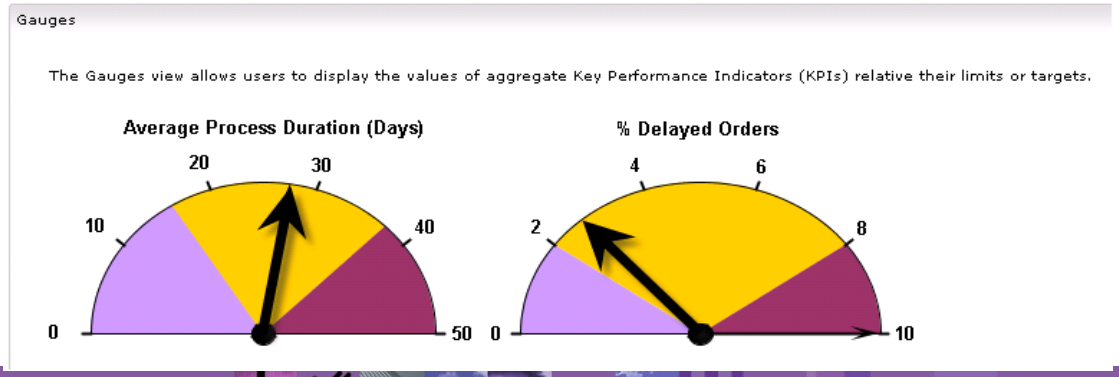
WebSphere Process Execution and Monitoring



- View all running process instances
- Monitor individual process instances
- Transfer tasks to other users
- Save completed process instances for further analysis

Business-Level Monitoring with WebSphere Business Monitor

- Report on business performance measured against targets (scorecard)
- Monitor business process metrics
- Business Analysis through aggregation and multidimensional reporting
- Detect and alert of anomalous situations
- Create role-based dashboards with WebSphere Portal Server



Key Performance Indicators

- average process duration
- % delayed orders

Closed Loop For Continuous Improvement

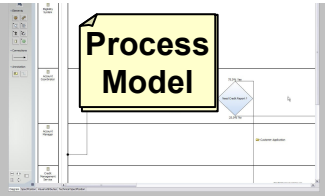
Import Process Model

WebSphere Integration Developer

Integration and Deployment

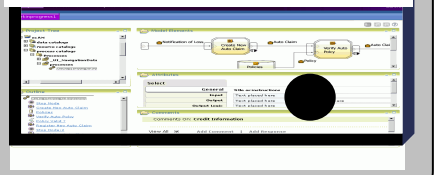
Deployment Wizard

WebSphere Business Modeler



Modeling and Simulation

WebSphere Process Server

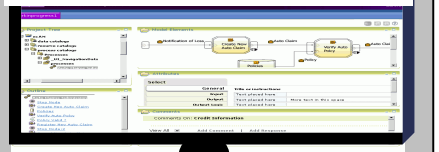


Execution

Import runtime statistics back into process model

- Actual durations and percentages

WebSphere Business Monitor



Monitor

Run Time Data

Monitoring Data

WebSphere Solved the Problem

WebSphere made it easy to improve the Order to Cash process. We are now meeting our objectives.

Business Process Manager

Using WebSphere we implemented a flexible process

- The business process is now a set of services
- Creating services from existing assets was easy
- Simple deployment to the runtime server
- The process can now be modified quickly if needed

I/T Manager

WebSphere made it easy for business and I/T to work together to solve the business problem

IBM is the Best Choice for Business Integration

- Modeling with simulation
- Integrated tools and runtime for both system and human tasks
- Business Activity Monitoring
- Developer productivity
- Performance
- Comprehensive set of adapters
- Superior adapters for SAP content
- Common business objects and cross-referencing
- Transaction support, compensating transaction, last participant support
- Web Services Gateway
- Enterprise messaging
- Integrated Enterprise Service Bus to connect to everything

Thank You