



IBM Software Group

## 2005 B2B Customer Conference

*Pioneering New Horizons – Solutions that Evolve*



WebSphere. software

From here to EAI

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## Objectives

- BNSF Railways real life experience of revamping core application environment
- How we reviewed our future need for business and application integration.
- What processes we went through in choosing a product vendor and how we will be implementing these products in the near future



## From here to EAI

- What is EAI
  - Enterprise Application Integration
  - Enables data propagation and business process integration across application such as taking an order, generating an invoice, and shipping a product



## ➤ Objective

- Business Drivers
- Proof Of Concept (POC) Evaluation Process
- Where are we today



- Objective

- Evaluate and select a B2B/EAI product that would best fit BNSF's enterprise needs.



- Objective
- Business Drivers
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## ■ Business Drivers

### ➤ Strategic

- Define and deploy a scalable enterprise integration framework which will enable applications to rapidly plug-in to the information bus.
- Implement a common enterprise integration toolset (Model, Integrate and Deploy) which enables improved productivity across the enterprise
- Enable real time business process monitoring across applications



- Business Drivers (continued)

- Tactical

- Providing real-time synchronization of prices and freight rate verification with customers
    - Flexible and versatile solution which will enable customers to do real time transactions
    - Ease of use (e.g. the ability for a business analyst to map documents from any format to any format)





- Objective
- Business Drivers
- Proof Of Concept (POC) Evaluation Process
- Where are we today



- Total evaluation effort was approximately 6 months and comprised of:

- Product requirements gathering 06/03 & 07/03
- RFI questionnaire preparation 07/03
- Vendor response 08/03
- Vendor presentations 08/03 & 09/03
- Vendor evaluation & short-listing 09/03
- POC requirements gathering 10/03
- POC execution & evaluation 10/03 - 11/03

Continued



- RFI questionnaire that initiated the evaluation process consisted of 7 major categories, 31 sub categories and over 212 questions
- 18 major technical areas evaluated in the POC
- 120+ meetings conducted
- Over 70 people from 23 groups were involved



## ➤ **Technical areas analyzed**

- Evaluation approach
- Vendor demonstrations
- Scoring
- Results summary



- Technical areas analyzed
  - EDI Mapping
  - Price Sync scenarios
    - Siebel Integration
    - Price Synchronization flow
    - Dispute workflow
  - Publish / Subscribe functionality
  - Document Handling
  - Wireless messaging capabilities

Continued



## ■ Technical areas analyzed

- Alert notifications
- Teradata Integration
- Integration with Websphere Application Server (WAS)
- Trading Partner Management
- Transaction Monitoring and Reprocessing
- Error Handling
- Migration and Deployment
- Installation/Setup
- Multi-user Development
- Web Service Capabilities
- Security



- Technical areas analyzed
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- Evaluation approach

- Prepared the POC Requirement Specifications
- Worked with the vendors in preparing the POC schedule and hardware/software requirements
- Prepared a total of 150 test cases based on the POC specs and inputs from the subject experts
- Reviewed the test cases with the vendors and the subject experts, while assigning the importance levels (Weights) to each of the test cases
- Test cases demonstrated by the vendors and the results were reviewed with the subject experts
- Scoring was done by the subject experts





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- Vendor demonstrations
  - Organization of the Demos
  - Time frames
  - Ensure completeness of results
  - Q & A



## Vendor demonstrations

- Demo 1
  - Demonstrate EDI mapping features in the product.
- Demo 2
  - Price Sync Scenarios
- Demo 3
  - Pub/Sub Scenarios

Continued



## Vendor demonstrations

### ■ Demo 4a

- Document Handling
- Wireless messaging capabilities
- Alert notifications
- Teradata Integration
- Integration with WAS
- Trading Partner Management
- Transaction Monitoring and Reprocessing

Continued

## Vendor demonstrations

### ■ Demo 4b

- Error Handling
- Migration and Deployment
- Installation/Setup
- Multi-user Development

### ■ Demo 4c

- Web Service Capabilities

### ■ Demo 4d

- Security

Continued



- Technical areas analyzed
- Evaluation approach
- Requirements walk through with the vendors
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- Scoring
  - Scoring based on test cases
  - Subject experts score on individual items
  - Post scoring review



- Technical areas analyzed
- Evaluation approach
- Requirements walk through with the vendors
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- Scoring
- Results summary





- Finalize the product selection
  - POC Evaluation and scoring
  - Total Cost of Ownership (TCO) analysis
  - BNSF business and technology impacts
  - Considerations like vendor stability, longevity, strategic staying power in the B2B/EAI space, relationship compatibility, customer references etc.
- After the selection
  - Conduct “go-live” pilots consisting of B2B and EAI pieces
  - Formulate an Integration Competency Centre (ICC) which will charter, define and implement the integration requirements across the enterprise.



- Where are we today
  - Product deployment
  - Formulated an Integration Competency Centre which will charter, define and implement the integration requirements across the enterprise.
  - Service Oriented Architecture
  - Event Driven Architecture

- Product deployment
  - WBI Modeler
  - WBI Monitor
  - WBI Interchange Server
  - WBI Message Broker
  - WBI Workflow
  - WBI Connect
  - Data Handler for EDI



- Product deployment (cont)
  - Adapter Development Kit
  - Adapter for Framework
  - Adapter for EJB's
  - Adapter for Siebel
  - Adapter for Jtext
  - Adapter for JDBC
  - Adapter for Email
  - Adapter for MQ



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