



IBM Software Group

# 2004 WDI / WBIC Customer Conference

*Global Business Transformation*

## WebServices Transforms BNSF

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**WebSphere.** software



 e-business software

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# Objectives

- Review BNSF WebService application
- Identify business impacts
- Identify technology issues



## BNSF



- Operates one of the largest railroad networks in North America
- 33,000 Route Miles
- Covering 28 States and two Canadian Provinces
- Network covers the western two thirds of the United States
- Moves more Intermodal equipment then any other Railroad in the world
- America's largest grain-hauling railroad
- Hauls enough coal to generate more than 10 percent of the electricity produced in the United States
- Employs approximately 38,000 people.
- Exchange approximately 1.5 million transactions every day



# BNSF Service Territory

## Business Issue



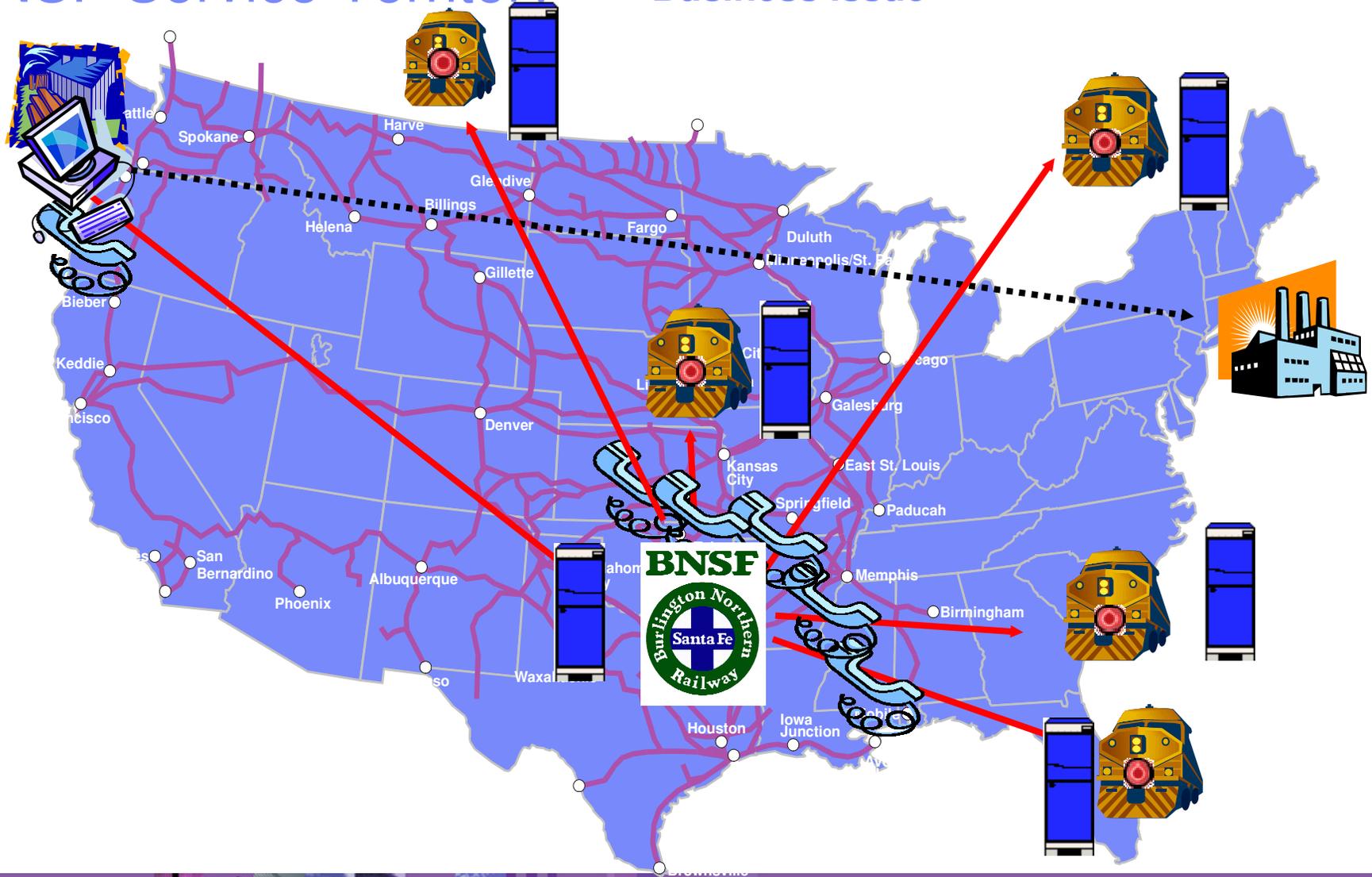
# WebServices Transforms BNSF

- Opportunities
  - Ease of doing Business
  - Productivity

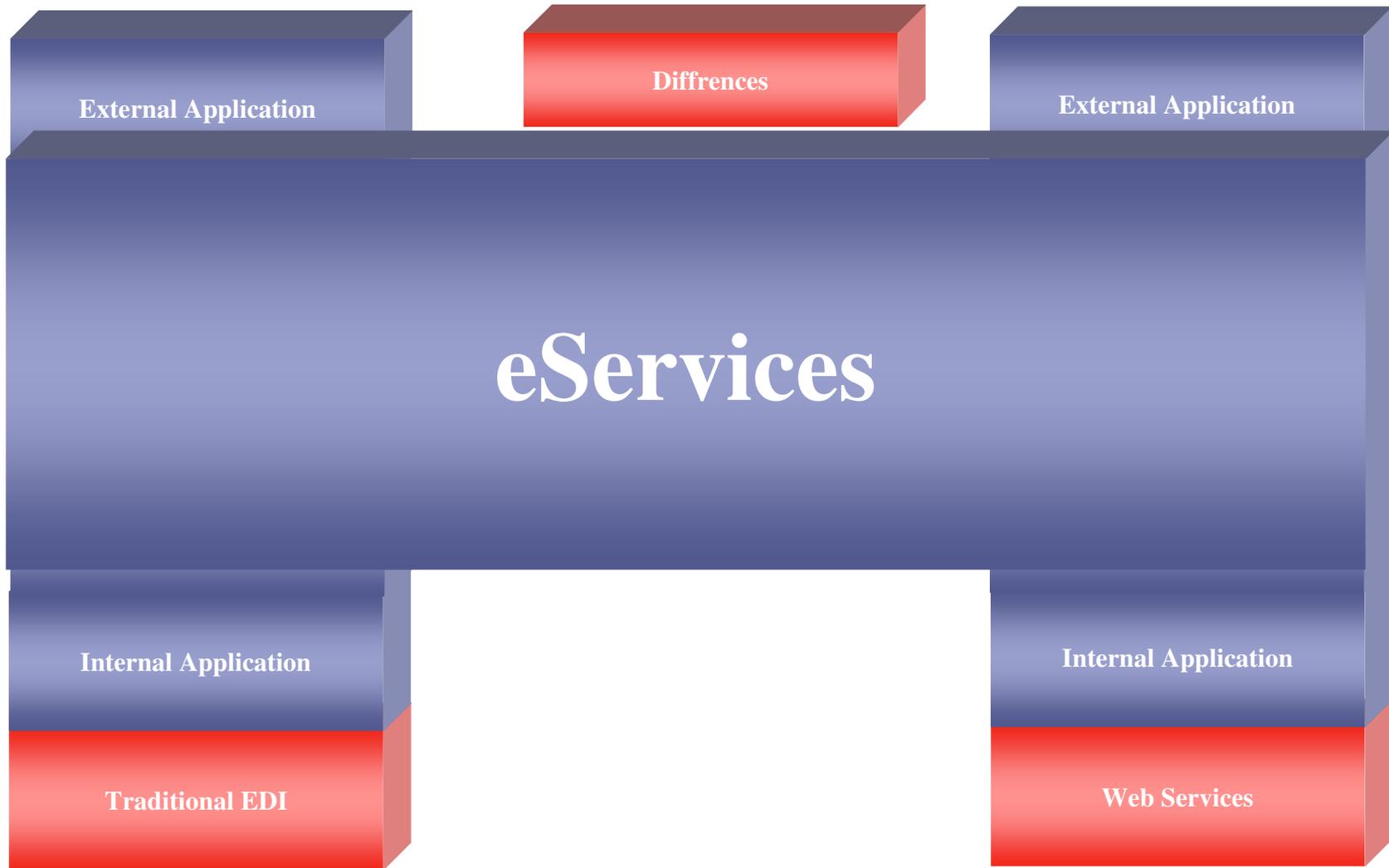


# BNSF Service Territory

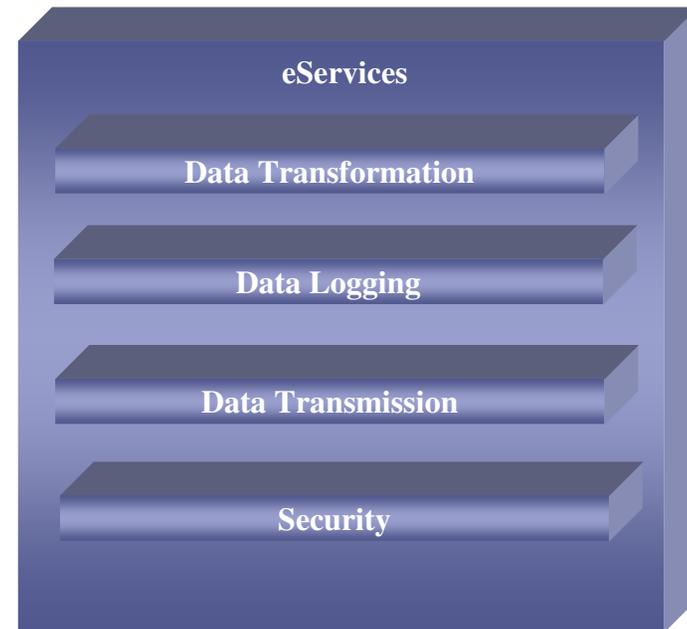
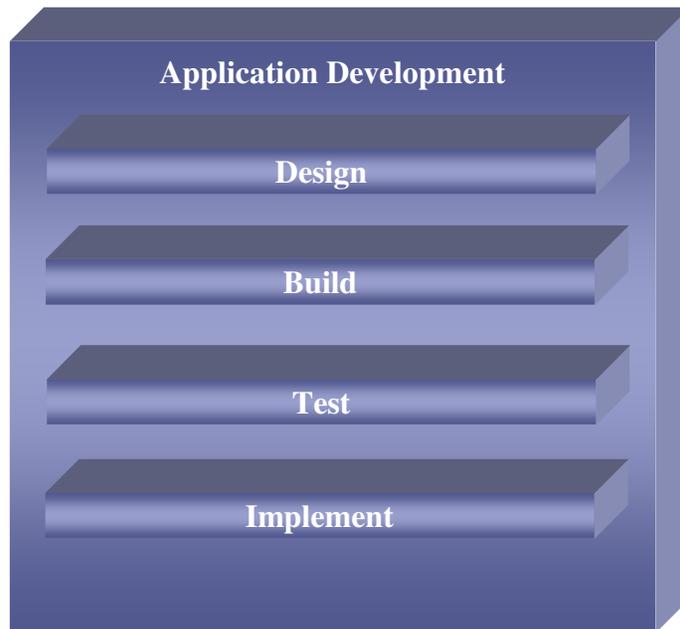
# Business Issue



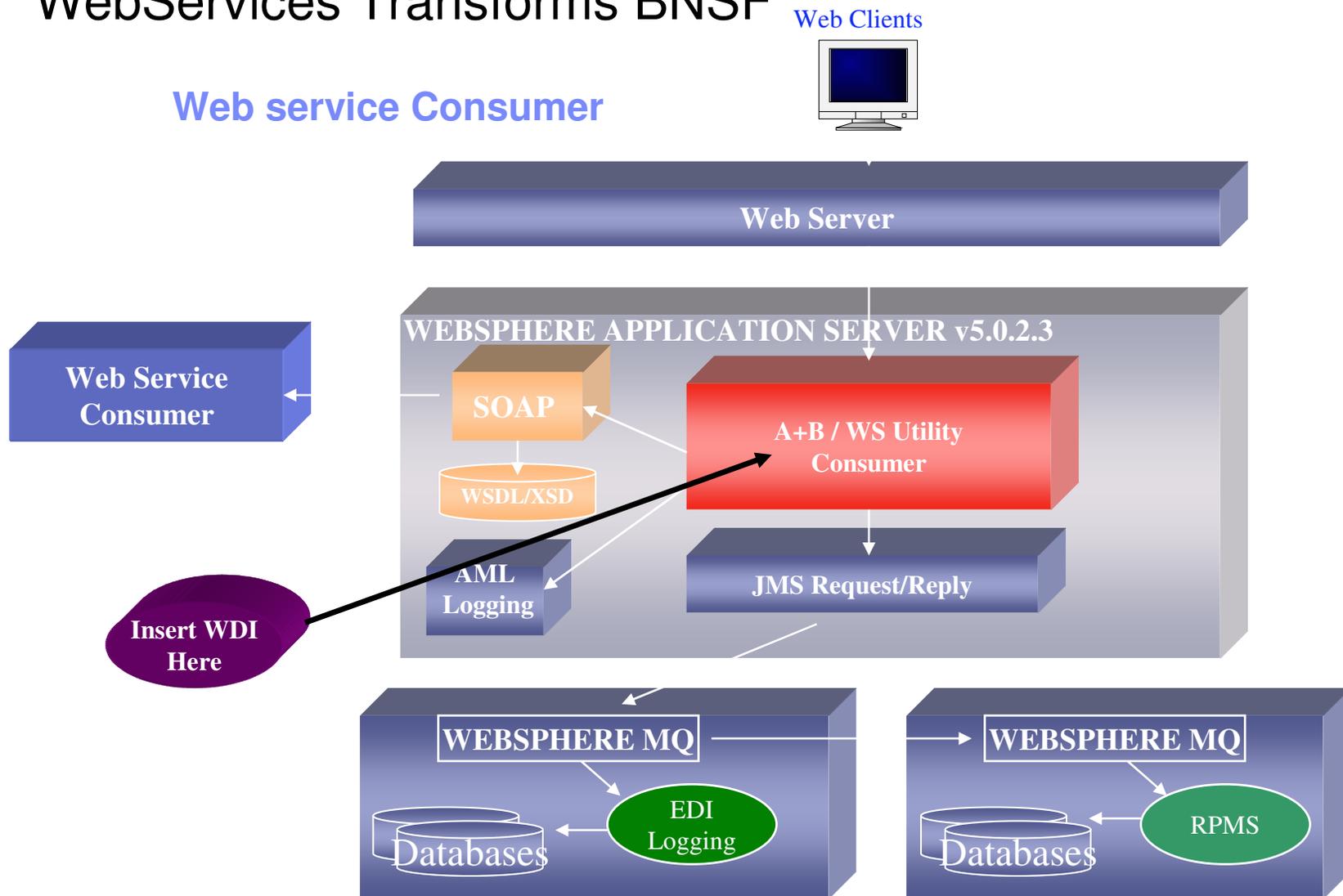
# WebServices Transforms BNSF



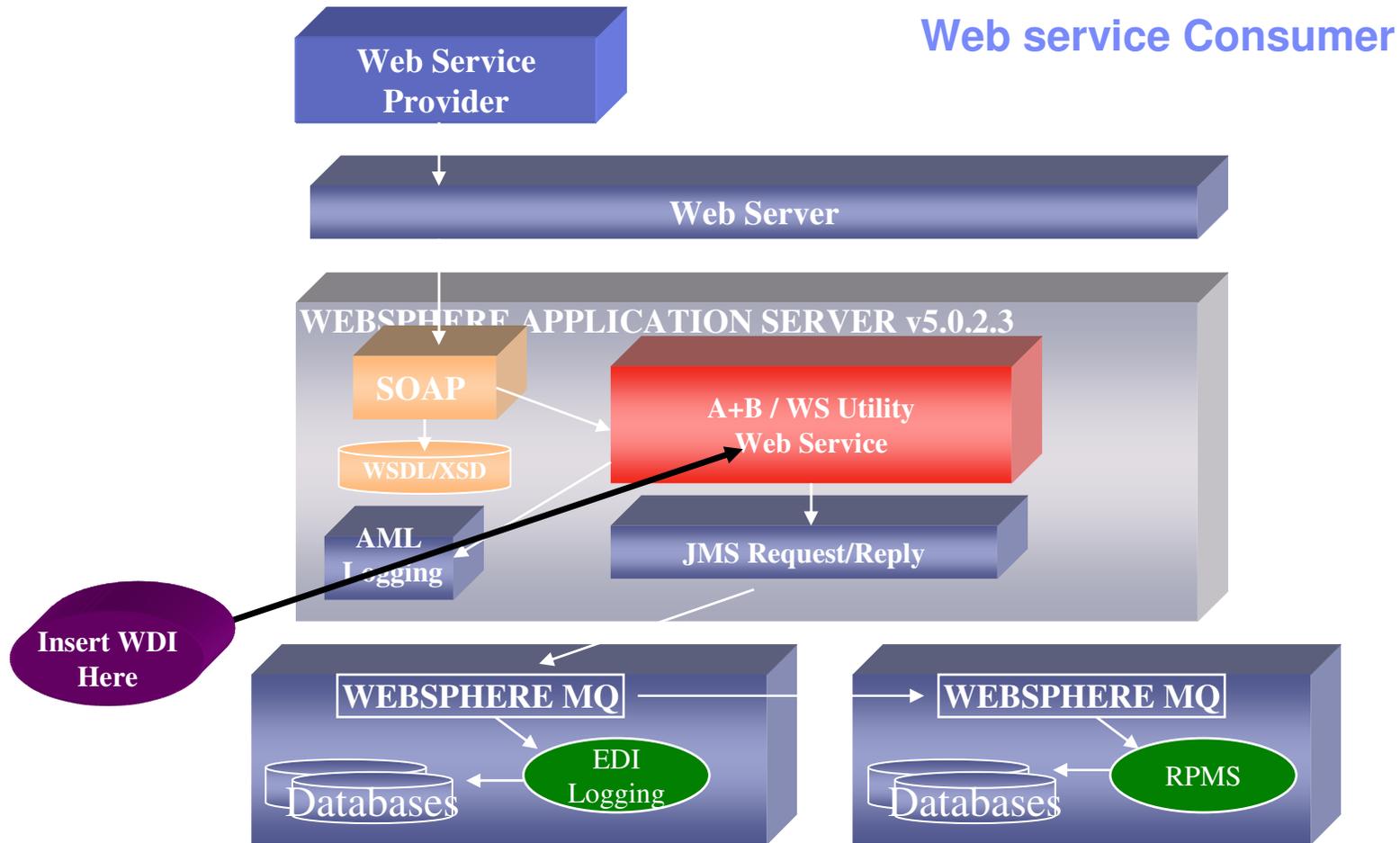
# WebServices Transforms BNSF



# WebServices Transforms BNSF



# WebServices Transforms BNSF



# WebServices Transforms BNSF

## The Future

- Loose coupling with Customers
- Customer Driven
- B2B enhancement
- Lower Cost



# WebServices Transforms BNSF

## Issues

- Security
- Logging
- XML
- Testing



# WebServices Transforms BNSF

- Security
  - Pieces missing
  - Knowledge Gap
  - Denial of Service



# WebServices Transforms BNSF

- Logging
  - Historical data
  - Performance reporting



# WebServices Transforms BNSF

- XML

- It may not be the silver bullet
- Central Repository
- Managed changes
- Coordinated Implementation



# WebServices Transforms BNSF

- Testing
  - Coordination
  - Length
  - On going



## Summary

- Begin electronic communication/security early
- Don't under estimate time required for coordination
- On going support and development cost
- Setup upfront XML controls
- Technology is still leading edge
- Webservice is complementary to "EDI"

