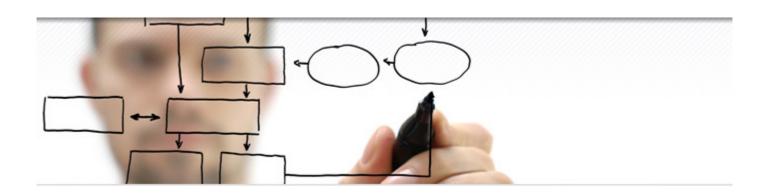


Enterprise Messaging Infrastructure and use with SIB, MQ, DataPower and WMB

WebSphere User Group Bedfont Lakes, 3rd March 2009

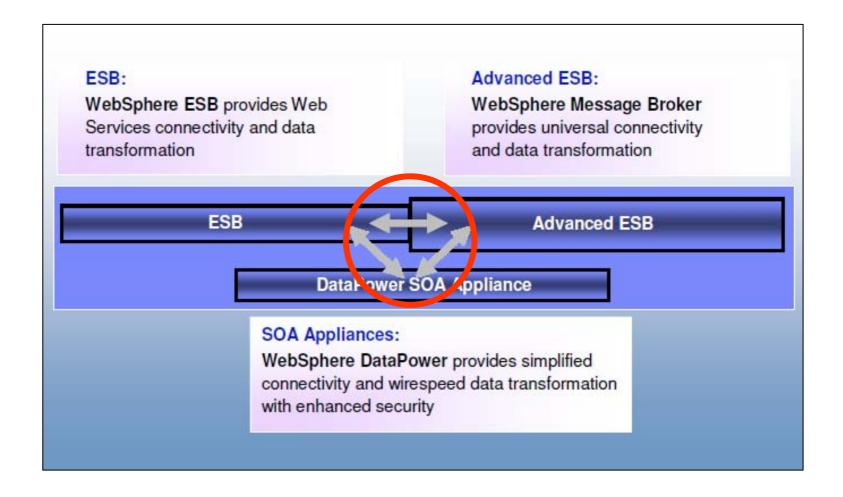
Nigel Roper







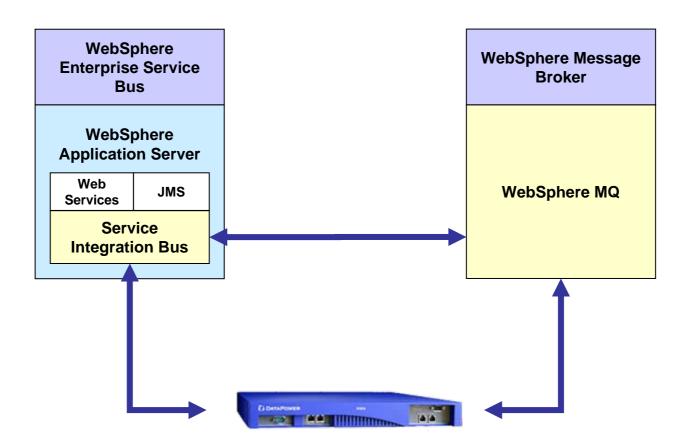
IBM's ESB Portfolio







Product Stacks







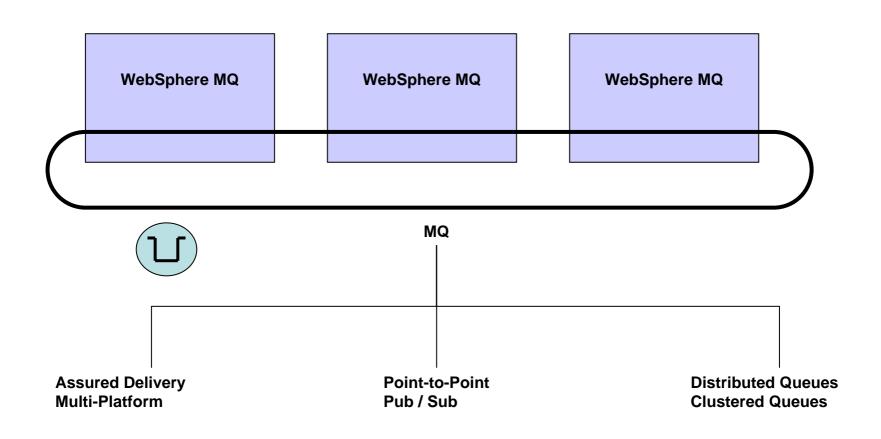
Agenda

- Messaging Architectures
- Message based Integration
 - SIBus and WebSphere MQ
 - WebSphere MQ and DataPower
 - SIBus and DataPower
- Synchronous based Integration
 - SIBus and DataPower
 - WebSphere Message Broker and DataPower





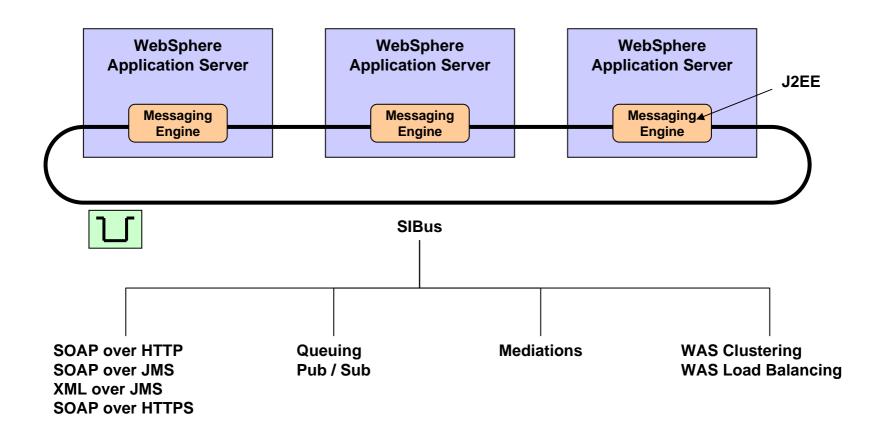
WebSphere MQ







SIBus





Integrating SIBus and WebSphere MQ







Integrating SIBus and WebSphere MQ

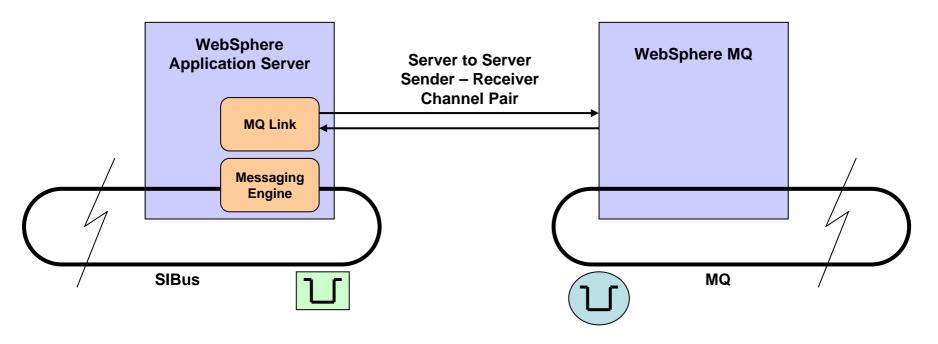
- Connect an SIBus and WMQ Network via MQ Link
 - (WAS 6 and WESB 6)
- Connect WAS to WMQ as a JMS Provider
 - (WAS 6 and WESB 6)
- Make a WMQ Queue Manager a member of an SIBus
 - (new in WAS 7 for distributed systems)







Option 1: MQLink



- 1. Create Foreign Bus
- 2. Create an MQ Link
- 3. Create a MQ Link Receiver
- 4. Create a MQ Link Sender
- 5. Create SIBus Destination
- 6. Setup JMS Resource

- 1. Create Sender Channel
- 2. Create Receiver Channel
- 3. Create XMIT Queue





SIBus and MQ Terms





Foreign Bus — MQ Queue Manger

SIBus ← Virtual Queue Mgr

Destination

↑ Remote Queue

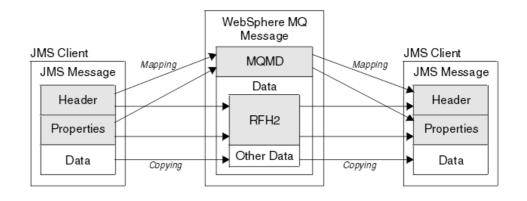
Subscribe ← Subscribe



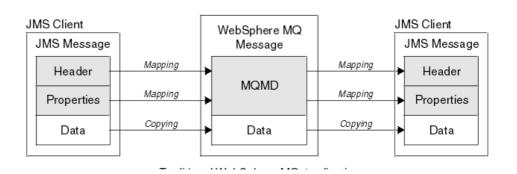


JMS to MQ Message Mapping

JMS to MQ JMS Message



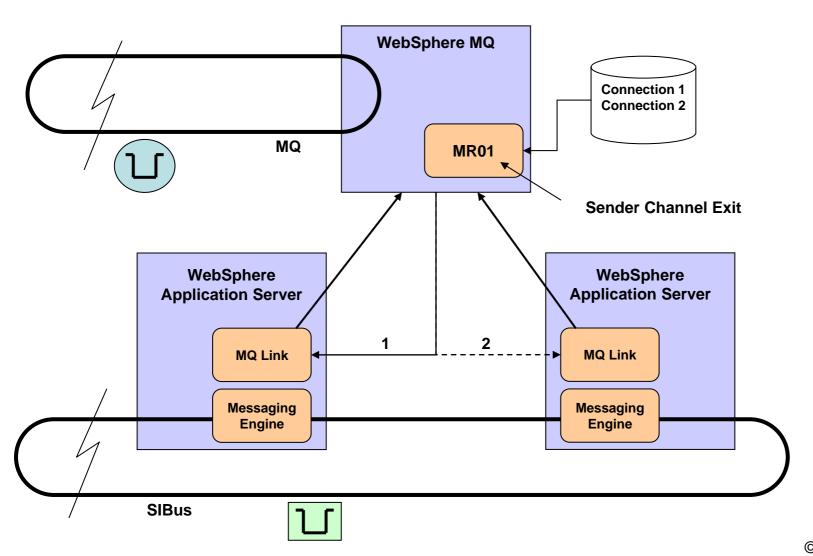
JMS to Non-JMS MQ Message







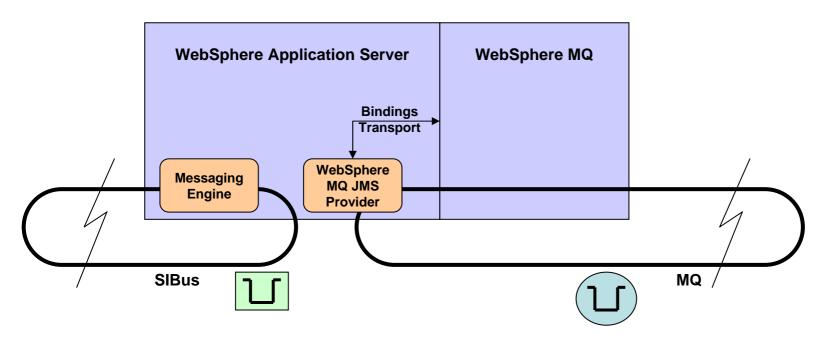
Improving Availability with Support Pac MR01







Option 2: WebSphere MQ as a JMS Provider



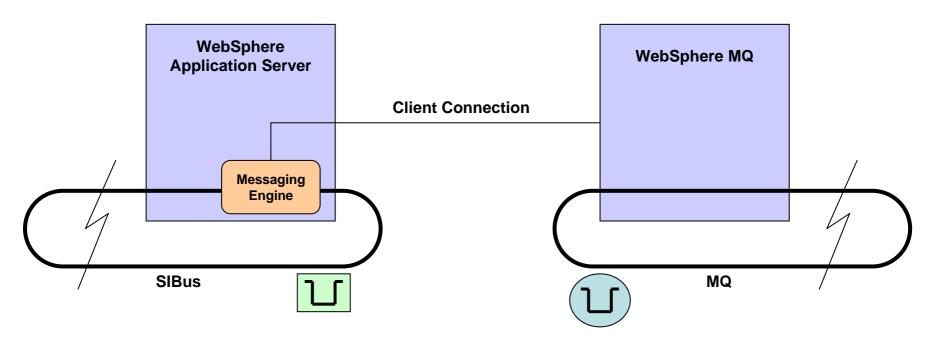
- 1. Define WebSphere MQ as a JMS Provider
- 2. Define JMS Connection Factory
- 3. Define JMS Queues
- 4. Define Lister Port

- 1. Install MQ on Application Server (recommended)
- 2. Create local Queues





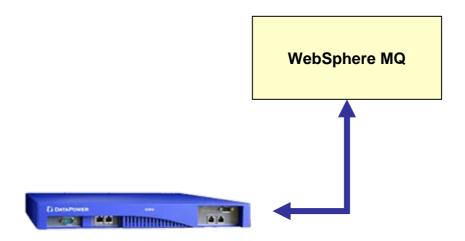
Option 3: WMQ Queue Manager as a member of an SIBus



WMQ Topic not supported



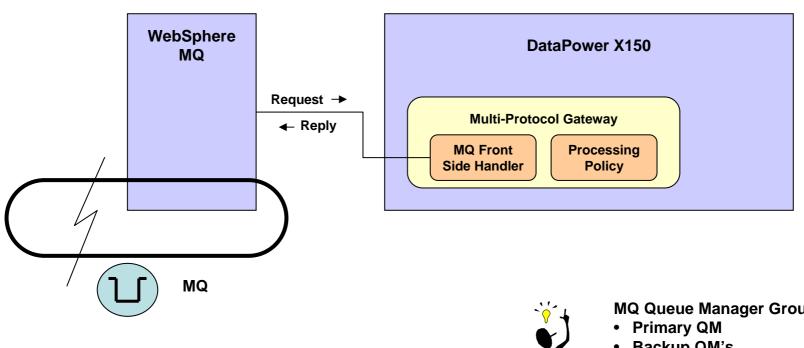
Integrating WebSphere MQ and DataPower XI50







Integration: MQ to DataPower



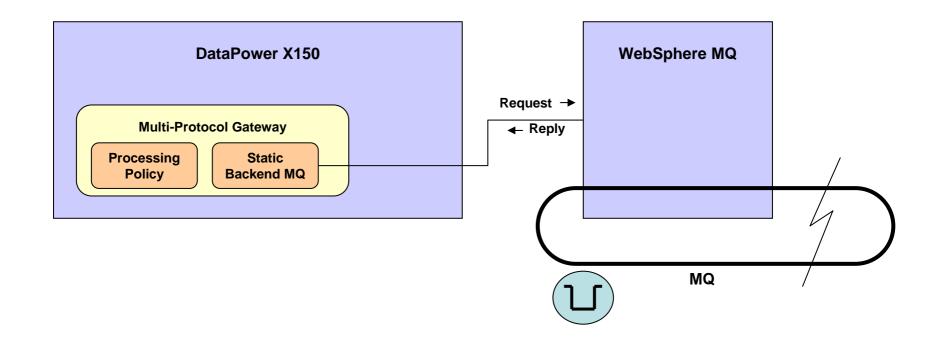
MQ Queue Manager Group

Backup QM's



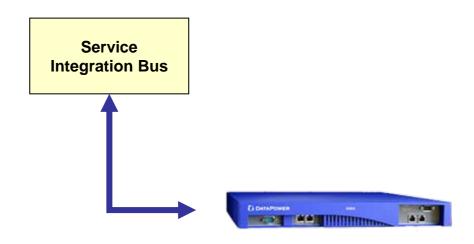


Integration: DataPower to MQ





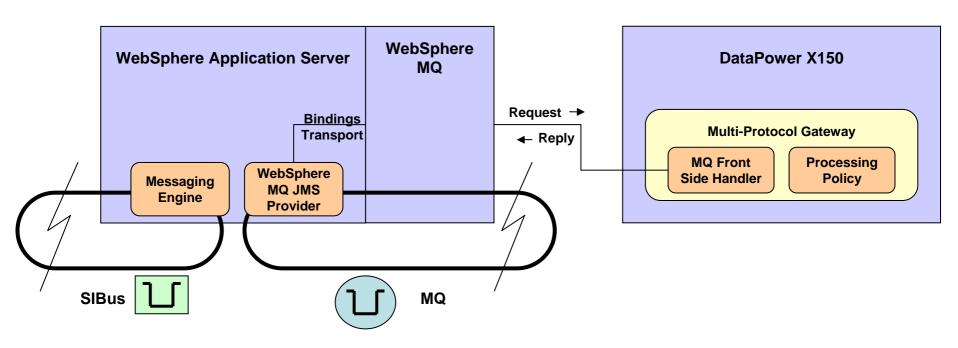
Integrating SIBus and DataPower







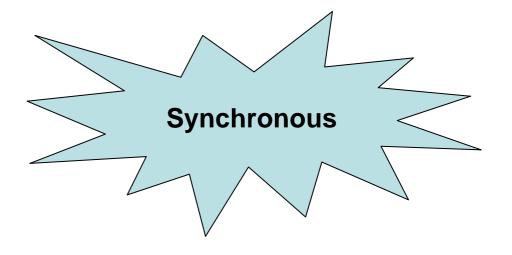
Integration: SIBus to DataPower



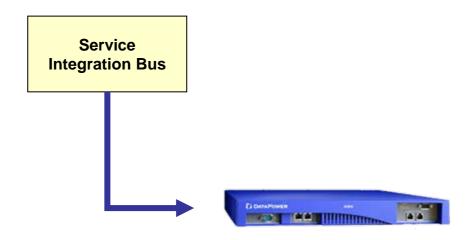


Synchronous Based Integration





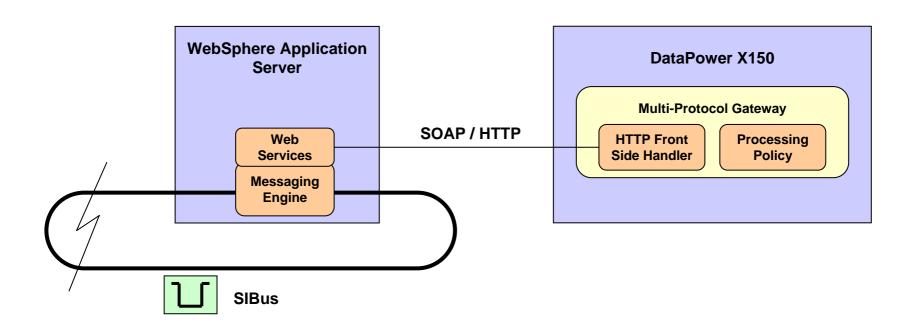
Integrating SIBus and DataPower



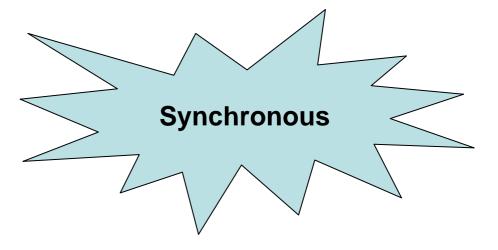




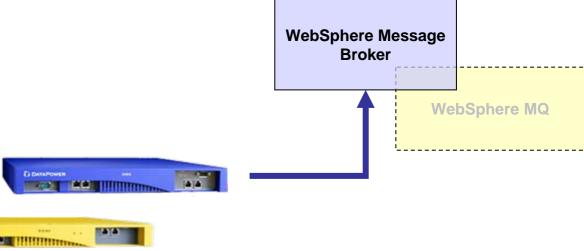
Integration: SIBus to DataPower







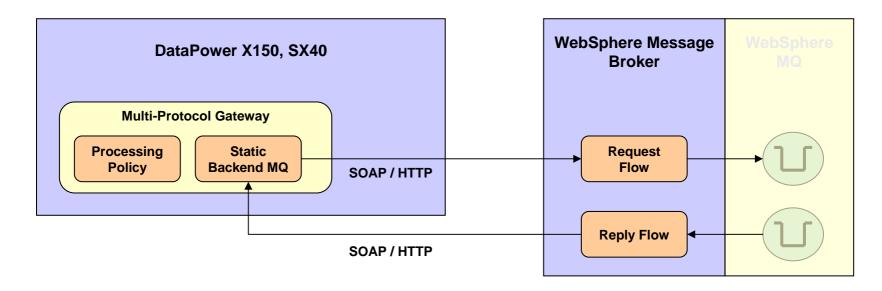
Integrating WebSphere Message Broker and DataPower XI50, XS40







Integration: DataPower to WebSphere Message Broker



Request Flow



Reply Flow





Thank You