

Websphere Message Broker Training Course Syllabus

Introduction to Integration Bus Concepts

- Need for business integration and transformation
- SOA Architecture Overview
- Functions of the primary components of IIB
- Scope and Future of IIB

Design and Setup Considerations

- Installation of IIB & its dependencies
- Post Installation Checks
- Setting up IIB Runtime Environment
- IIB Architecture

Integration Bus Development - Initial Steps

- The Integration Toolkit
- Components of Toolkit
- Steps to create/test message flow using the Toolkit
- Introduction to Flow Debugger
- Logical Message Tree: Message, Local Environment, Environment, Exception List
- Introduction to Domains / Parsers
- Introduction to ESQL transformation

Working with Integration Bus Nodes Part 1

- Using supplied nodes and use of most common ones
- Configuring Nodes & Connecting Terminals
- Sub flows and their uses
- Working with Databases
- Manipulating a message using ESQL

Working with Integration Bus Nodes Part 2

- Request/Reply using Aggregation nodes
- Obtaining information from different sources using Integration Bus Nodes
- Use of MQ nodes like MQGET node to support MQ Protocol
- Mapping Node: Using Graphical Data Maps

- **Error Handling: Error Handling Mechanism; Error Handling Flow Design (File / Database logging)**

Transaction Management

- **Debugging: Logs (Event Log, Local Error Log); Trace (User Trace, Service Trace)**
- **Using the Collector node to process messages from different sources**

Message Modeling and Mapping

- **Deep dive into Domains & Parsers**
- **Message Parsing & Parser Options**
- **XML, XSL, XSLT, XPATH**
- **Import/use of C, XML and COBOL structures in the Toolkit**
- **Creating and Testing with a message model using DFDL**
- **Working with MRM models (Wire Formats, Industry Standard Message Modeling)**

Developing with Performance in Mind

- **Reference variables to process Message Trees**
- **Parsing in XML or other messages in efficient way**
- **Caching, Using the Environment Tree, Shared Variables**
- **Using Opaque Parsing**
- **Perform basic performance analysis on Message Flows**

- **Variables: Shared, User Defined Properties, Local**

Routing data through Message Flows

- **Content Based Routing using Route, Route To Label, Label and Database Route nodes**
- **Routing techniques using ESQL: Compute, Filter nodes**
- **Control Flow of Messages: Flow Order, Sequence, Resequence Nodes**

Additional input and output options

- **Job Scheduling: Timer nodes**
- **Email nodes**
- **Working with files in a message flow: File Input, File Output, File Read nodes**

Using SOAP and HTTP nodes

- **Web Service support in Integration Bus: HTTP nodes, SOAP nodes**
- **Implementing a SOAP Webservice Provider & Consumer flow**
- **WSDL creation**
- **Implementing a Restful Webservice Provider & Consumer flow**

Real time Project Explanation

