

Hands on Training for IBM Message Broker(MB)

Customizable instructor lead course with hands on exercises

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Topics include Message Broker Overview and Architecture, Introduction to Web Services, Overview of Message Queue(MQ), Scenarios which includes Configuring WBI Adapters to work with Message Broker, Working with Message Broker Nodes

Top Reasons for Attending our Training Engagement

Content

The training content is structured to match your organizations specific business objectives and needs. Based on the course you choose, our training engagement topics make the attendees to completely leverage the MB capabilities.

Structure

Our innovative and flexible learning approach consists of instructor-led learning methods, supplemented with hands-on exercises, mentoring including our World-class training material. You have the choice to customize your training plan by choosing from 50 different topics or use our full training engagement (See our complete course outline on page 3 of the brochure)

Scheduling

Dates and times are set by you.

Location

We offer flexibility of location. Training can be provided at your company site or you can choose to join us at our world class training facility in Novi, MI location.

Collaboration

Our learning environment and approach promotes team members and encourages team to have a high degree of collaboration and teaming.

Budget

We offer a great value for your money. If the training takes place at your own premises, you will eliminate travel costs and avoid time away from the office (Any training engagement work is done at your company site will be charged at \$1500-\$2000 per day + Actual Expenses (Unlimited attendee's if training engagement is hosted at your company site, prefer to have 6 – 8 max attendees per session for better hand holding)

Pre-Requisites

Understanding the areas of Business Integration is strongly preferred, Basics of J2EE.

Our Premium Services

Miracle will provide Premium Services that help customers to implement a broker-based application that distributes and transforms real-time information and establishes end-to-end communications using IBM WebSphere Message Broker V6.1

Customers Processes and applications can be integrated by providing message and data transformations in a single place, the broker. This integration helps to reduce the cost of application upgrades and modifications

Course Objective

- Understand the business advantages of Message Broker
- Explain the Message Broker Architecture
- Message Queue Overview fundamentals
- Developing Message Flows and Message Sets
- Overview of Web Services

Course Duration

A full-length engagement spans over 5 business days (1 Week). Course outline and duration can also be customized based on your time and need

Audience

This course is suitable for integration developers involved in integrating applications primarily by developing business processes, system administrators and other technical staff involved with working with a business process.

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Participants can learn about

- WebSphere MQ
- Overview of WebSphere Message Broker
- Web Services
- IBM Business Integration Adapters

Typical Course Outline

Course 1:

WebSphere MQ

- Overview of MQ
- Various Objects-Queues, channels
- Different types of queues
- Different types of channels
- Creation of Queue Manager, Queues and channels
- Communication between Queue managers
- MQ Server and client
- MQI API
- New Features of WMQ 7.0 (Capable of Handling Huge Message Sizes)
- Message Handling in MQ, Segmentation of Messages

WebSphere Message Broker Overview and Architecture

- Need for Integration (EAI)
- Types of integration
- SOA Architecture Overview
- Overview 'n' Architecture of Message Broker
- Installation Overview w/t Software pre requisites
- Components of Message Broker
 - Broker, Broker Domain, Configuration Manager, and User Name Server
- New Features of WMB 6.1.0.3
 - Universal Connectivity for SOA
 - Routes and Transforms Messages from anywhere to anywhere
 - New SAP nodes
 - PHP nodes for Dynamic Scripting
 - IMS request node for using the IMS
 - TM Resource Adapter

Message Flows and Message sets Development

Message flows

- Introduction to Message flows
- Built-in nodes and configuring their properties
 - Input and Output nodes
 - Message Manipulation and transformation nodes
 - Collating requests nodes
 - Decision making nodes
 - Sub flow identification nodes
- Design Message Flows & Sub Flows

Introduction to ESQL

- Programming Structure
- Data Types, Variables, Field references
- Operators, Statements
- Functions, Procedures & Modules
- Configuring ESQL within Nodes
- Correlation Names
- Logical Tree Structure
 - Message tree
 - Environment tree
 - Local Environment tree
 - Exception List tree

Message sets

- Introduction to Message sets
- Domains & Parsers
- Message Modeling
 - Message Set Projects
 - Message Sets
 - Message Definition Files
 - Category files
 - Physical formats in the MRM domain
 - Mapping (Overview, Types of Mapping 'n' Database with mapping)

User Defined Extensions (Plug-in Nodes)

- Creating User Defined Extensions
- Compiling User Defined Extensions
- Installing User Defined Extensions
- Distributing User Defined Extensions
- Testing User Defined Extensions
- Java plugin API

Publish/Subscribe

- Overview of Publish/Subscribe
- Publishing
- Subscribing
- Creating Topics
- JMS Pub/Sub
- MQ Pub/Sub
- User Name Server
- Security

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Web Services

- Overview of Web Services
- Developing Web Services
 - WSDL (Web Service Description Language)
 - SOAP (Simple Object Access Protocol)
 - UDDI(Universal Description Discovery Integration)
- Publishing Message Flow as Web Service
- Interacting with Web Services through Message Flow
- Testing and Validating Web Services
- Using HTTP nodes w.r.t Web Services

Database Interaction

- DB Interaction via JDBC/ODBC
- DB Interaction via DB Retrieve and DB Route Nodes
- Enabling DB lookups by DB nodes without using JDBC Adapter

IBM WebSphere Business Integration Adapters

- WebSphere Business Integration Adapter Framework
- WebSphere Business Integration Adapters
- Adapter development
- Development overview
- Business objects
- Object Discovery Agents
- Data handlers and name handlers
- Business object handlers
- Connector properties
- Jtext, jdbc,Email 'n' SAP Connectors

Course 2:

Administration of WMB/WMQ & WBI Adapters Overview

- Overview of the Administration w.r.t WMB , WMQ & WBI Adapters
- Configuring Queue Managers, Broker, Config Manager
- Administering Components of the system
- Modifying /Creating a Configuration Manager using Command line
- Introduction to MQ Clustering Mechanism
- Stop/Start of Broker, Configuration manager & WBI Adapters

Error Handling

- Error Handling Flow Design
- Error Handling Mechanism(Email , Database logging)

Debugging

- Logs
 - Event Log
 - Error Log (Event Viewer)
 - Database Log
- Trace
 - User Trace
 - Service Trace
- Dealing with Installation and Configuration Problems
- Flow Debugging

Testing

- Module Testing
- Integration Testing
- Testing performance of ESQL
- Testing Tools for Message Broker

Working on Scenarios

- Working with Message Broker nodes and ESQL
- Configure WBI Adapters to work with Message Broker

Integration of WTXV 8.1 with WMB V 6.1

- Introduction to WebSphere Transformation Extender V 8.1
- Configuring WTX Node in WMB
- Message Handling via BLOB Format of the data from WTX node
- Exception Handling
- Different types of maps that can be transformed
- Sample Scenarios
- How to use Update Keys (to update database)
- How to invoke stored procedure from Map
- Using Variables in DID.
- Best Practices and Standards
- Hands on Experience with invoking WTX maps in MB