

# WebSphere Business Modeler for Business Process Management (BPM)

Duration: 5 days

## Course Description

This course gives and in depth understanding of Business Modeling along with a broad understanding of Service Oriented Analysis and Design (SOAD) for SOA. The software tool using for modeling in this class is IBM's WBM (WebSphere Business Modeler).

## You Can Learn to:

- Why would you need a Business Process Modeling Framework
- Utilization and understand the usage of IBM's WebSphere Business Modeler to create Business Models.
- Understand the basics of Service Oriented Analysis and Design (SOAD)
- Understand the relationship between SOAD and Business Process Models
- How to Model a business processes
- Analyze and Design a Business Models
- Have a comprehensive understanding of several tools of business process modeling such as querying and reporting along with other (BPM) tools
- Enhance and add Key Performance Indicators to a Business Model

## Prerequisites:

Basic understanding of WebSphere Application Server v5 administration.

## Course Labs

|       |  |
|-------|--|
| Lab1  | Using WebSphere Business Modeler           |
| Lab2  | Basic Business Process Modeling            |
| Lab3  | Capturing Process Requirement              |
| Lab4  | Model Business Items                       |
| Lab5  | Creating Business Item Instances           |
| Lab6  | Practice Process Modeling                  |
| Lab7  | Initial Process Modeling                   |
| Lab8  | Refine the Place Order Online Process      |
| Lab9  | Create Resources Items                     |
| Lab10 | Working with Organization                  |
| Lab11 | Define Organization Structure              |
| Lab12 | Using Roles and Organizations              |
| Lab13 | Specify Cost and Duration for Tasks        |
| Lab14 | Working with Classifiers                   |
| Lab15 | Working with Sub-Processes                 |
| Lab16 | Simulate the Place Order on Line Process   |
| Lab17 | Advanced Simulation                        |
| Lab18 | Optimizing the Place Order on Line Process |
| Lab19 | Understanding Resource Usage               |
| Lab20 | Reporting                                  |

## Course Content

### 1. Introduction to the WebSphere Portal Server

- What is a Portal , Benefits of Portal Sites, General Portal Architecture
- The Major Components of Horizontal Portals, WebSphere Portal Goals, WebSphere Portal Components
- WebSphere Portal Accessibility and Packaging, A Typical Network Architecture for WebSphere Portal
- WebSphere Portal Server Architecture, Portal Container , Portal Engine, Page Aggregation Modules
- Portlet, WebSphere Portal Built-in Portlets, WebSphere Portlet Content Publishing (WPCP)
- Portal Document Manager (PDM), Search Engine

### 2. IBM Tools for BPM

- WebSphere Business Modeler v6
- Key Features, WebSphere Process Server v6
- WebSphere Integration Developer (WID) v6

- SCA Basics, Wiring Example

### 3. Using WebSphere Business Modeler

- Installation Techniques, Launching WBM
- The Business Modeling Perspective
- Business Modeling Project
- Creating a Business Group
- Grouping Elements in a Business Group
- Exporting Projects , Importing Projects
- Creating a Business Process, Designing Data Structure

### 4. Service Oriented Analysis and Design

- Introduction to SOAD
- Hierarchy in SOAD, Why OOAD is not Enough
- The SOAD Methodology, Use Cases, Classifying Use Cases
- Diagramming Use Cases
- Modeling the Business Processes
- Stages of SOAD, Super Business Processes

### 5. Business Process Modeling Methodology

- Stages of SOAD, Best Practices

### 6. Case Study

- Objectives, The Case Study, The Use Cases

### 7. BPEL & FDL

- Business Process Diagram
- Challenges in Process Implementation
- BPEL4WS, Business Process, BPEL Document, FDL

### 8. Model Element Basic

- Business Item, Internal Representation of Business Items
- Data Catalog, Notification, Creating a Notification

### 9. Process Modeling Basics

- Process, Task, Service, Repository
- Creating Local and Global Process
- Creating Services
- The Start and Stop Nodes
- Connections, Working With Data
- Process Data Input and Output
- Working With Repository
- Decision Elements, Fork, Merge, Join
- Merge and Join Input Data
- Loop Elements, For Loop

### 10. Advanced Model Elements

- Resource Definition and Predefined Templates
- Create a Resource Definition Template, a Resource, Roles, Timetable
- Cost, Enter Cost, Special Time Based Cost
- Expressions, Term Types, Operators
- Creating Modeling Artifact Term
- Rules, Organization and Location, Category

### 11. Advanced Process Modeling

- Element Input Details, Input Criteria, Input Constraints
- Correlation, Modeling Correlation, Precondition
- Output Details, Output Criteria, Post Condition
- Specify Required Roles for a Task
- Color Code by Role or Resource
- Specify Duration, Specify Cost and Revenue
- Color Coding Based on Organization or Location
- Classifier ,Predefined Classifiers
- Map Element, Adding a Map, Observer Element
- Timer, Specify Timeout, Swim lanes Layout

### 12. Process Simulation

- Key Components, Tokens
- Basic Simulation Methodology
- Creating a Simulation Snapshot and Profile, Things to Remember, Profile Attributes
- Specify Input Data to the Process
- The Problem With Business Item Instance Output
- Configuring Profile Attribute Defaults and Statistics Display

### 13. Analyzing Process Modeling and Simulation

- Static Analysis of a Process Model
- Throughput Analysis, Path Cycles Analysis, Paths Unable to be Followed Analysis
- Static Analysis of the Model Elements
- Matrix Analysis, Dynamic Analysis, Activity Cost, Activity Statistics, Activity Resource Allocation
- Resource Usage, Process Case Analysis, Process Instance Summary, Comparative Analysis

## **WebSphere Business Modeler for Business Process Management (BPM)**

Duration: 5 days

### **14. Querying, Reporting and Printing**

- Querying, Using Predefined Queries
- Running Queries, Carrying out Analysis
- Reporting, Data Sources, Formatting Reports, Report Templates, Documentation Reports
- Dynamic Analysis Reports, Static Analysis Reports

### **15. Exporting Models**

- The Need for Exporting Models ,Export Formats
- Exporting to WebSphere Business Modeler Project Format

### **16. Publishing Reports**

- The need for Publishing
- WebSphere Business Modeler Publishing Server - Architecture
- WebSphere Family, Draft Portal, Released Portal
- Publishing from WBM – Model Publishing

### **17. Versioning Projects**

- The Need for Versioning
- Software Configuration Management (SCM) Tools
- Versioning WBM Projects
- Adding CVS Repository Location
- Adding Rational ClearCase Repository

### **18. Business Metrics Measurements**

- Interaction with Other Tools
- WebSphere Business Monitor
- Business Measure Model
- Key Performance Indicators (KPIs)
- Creating Business Measures Models