

WB54  
1-Day

## WebSphere Overview

*This course provides an overview of IBM WebSphere ® Application Server. The background to Web-based application architecture is addressed before moving into J2EE, HTML, HTTP and the WebSphere architecture. Topics addressed include: JSP, EJB, JMS, JNDI, XML parsing, SOA, WebSphere and J2EE technology, MQ Series and, WSAD development. The course is aimed at presenting a coherent view of the underlying technologies supporting WebSphere and the WebSphere architecture*

### Course Objectives

- Understand the basics of distributed and Web-based applications
- Present Java runtime architecture as fundamental technology for WebSphere
- Understand J2EE technologies
- Understand how JSP and EJBs work together
- Review typical Web Service architectures
- Understand XML and how it is used within applications
- Present the packaging techniques of distributed applications
- Understand the acronyms of J2EE and WebSphere
- Understand the WebSphere architecture and its components
- Provide an understanding of WebSphere connectivity via JCA to external systems
- Understand the power of Service Oriented Applications (SOA)

### Audience

- Technicians starting to look at Web-based applications and WebSphere in particular
- Senior staff needing a fast introduction WebSphere technology

### Prerequisites

- Knowledge of commercial software applications
- Some background in distributed systems.

### Timetable

Register at 09:00 for 09:30 start.  
Finish at 17:00.

### Presentation Style

Lectures, demonstrations and group discussions.

### Dates and Venues

Refer to *Course Schedules*.

The course covers:

## Basic Web Architectures

- 📁 Example models
- 📁 Components
- 📁 Application Servers
- 📁 J2EE Application Architecture
- 📁 J2EE Standard Enterprise Services
- 📁 J2EE Technologies Summary
- 📁 Java Database Connectivity
- 📁 Java Naming & Directory Interface
- 📁 Remote Method Invocation
- 📁 Java Interface Definition Language
- 📁 Java Servlets
- 📁 Java Server Pages
- 📁 Enterprise JavaBeans
- 📁 Java Transaction Service
- 📁 Java Transaction Architecture
- 📁 JavaBeans
- 📁 Activation Framework
- 📁 Java Message Service
- 📁 J2EE Deployment Units
- 📁 J2EE Advantages

## J2EE Basics

- 📁 Component-based models
- 📁 J2EE 1.2 Architecture and Components
- 📁 HTTP server and web application servers
- 📁 Application server based architecture
- 📁 Deployment - WAR and EAR files
- 📁 Servlet definition and life cycle
- 📁 JSP definition
- 📁 JSPs and Servlets
- 📁 Struts

## EJB Introduction

- 📁 Why EJBs ?
- 📁 EJB component architecture
- 📁 EJB lifecycle
- 📁 EJB API
- 📁 Session EJBs
- 📁 Entity EJBs
- 📁 EJB programming overview
- 📁 EJB clients and client types

## JDBC

- 📁 JDBC drivers and driver types

## Java

- 📁 Java development platforms
- 📁 Java language
- 📁 Java runtime systems
- 📁 Java IDE

## XML and WebSphere

- 📁 XML basics
- 📁 XML parsers
- 📁 XSL and XSLT
- 📁 XML on the WebSphere Platform

## WebSphere Overview

- 📁 WAS IBM HTTP server, other HTTP servers
- 📁 WAS app server
- 📁 WebSphere topologies
- 📁 WebSphere Evolution to R6
- 📁 Queues and Queue Management
- 📁 Message Brokering
- 📁 IBM MQ Series
- 📁 WebSphere and JMX (Management)
- 📁 Administrative Console

- 📁 Reference Architecture
- 📁 WebSphere Cache Architecture
- 📁 J2EE components
- 📁 servlets
- 📁 JSPs
- 📁 EJBs
- 📁 WAS environment
- 📁 J2EE enterprise applications
- 📁 EAR, WAR and EJB jar files - deployment descriptors

## WSAD Basics

- 📁 Studio Workbench Architecture
- 📁 WSAD foundations - open framework, perspectives, views and roles
- 📁 Architecture- Eclipse
- 📁 Perspectives and Views
- 📁 Debug and Help perspective
- 📁 Application packaging

## WebSphere

- 📁 IBM extensions to J2EE
- 📁 Application Choreography
- 📁 Java Connector Architecture Extension (JCA)
- 📁 Intelligent Compensation Support