



## IBM® WebSphere® Application Server v6.1 Administration Network Deployment (NDE) Edition for Windows

**Duration:** Five days

**Course Description:** IBM WebSphere Application Server v6.1 (WAS6.1) Administration (NDE Edition for Windows) is a hands-on, lab-intensive, application server administrator training course geared for webmasters, systems administrators and others who need to install, configure and maintain systems using WAS 6.1. Students will leave this course armed with the skills needed for the installation, configuration and administration of WAS 6.1 (Network Deployment Edition), and for the deployment of applications in the WAS environment.

**Audience:** Webmasters and System Administrators who need to install, configure and maintain systems using WAS6.1.

**Prerequisites:** This is an intermediate level administrator training course. Webmasters and System Administrators who need to install, configure and maintain systems using WebSphere Application Server V 6.1 Network Deployment Edition.

### OUTLINE

#### SESSION: REVIEW OF J2EE

- J2EE Overview
- Enterprise Application Archive (EAR) & WAR
- J2EE Component Review
- J2EE Containers
- J2EE Architecture
- The J2EE 1.3 & 1.4 Specification

#### SESSION: INTRODUCTION TO THE IBM® WEBSHERE® FAMILY

- WebSphere Application Server: Express; Base; Network Deployment; Enterprise
- WebSphere Installation Packaging
- WebSphere Studio Development Tools

#### SESSION: WEBSHERE® APPLICATION SERVER ARCHITECTURE

- System Architecture
- System Architecture - Multiple Servers
- Managed Processes
- Cells, Nodes, and Profiles
- J2EE Services: JNDI; JDBC; JTA; JMS; Security; JMS; JMX & more
- Enterprise Integration

#### SESSION: INSTALLING WEBSHERE® APPLICATION SERVER

- Planning and Designing Tasks
- Install and Configure the Web Server
- Tips for Installing and Migration
- Tips for Installing Embedded Messaging
- Silent Installation
- Migration Tips & Troubleshooting

#### SESSION: ADMINISTRATIVE TASKS

- Using the Admin Console
- Securing the Admin Console
- Servers, Applications, and Resources
- Security
- Managing Virtual Hosts
- The Web Server Plug-in
- Managing WebSphere Variables
- Shared Libraries
- Troubleshooting
- Scripting Utility
- Administrative Commands
- JACL and Commands

#### SESSION: APPLICATION ASSEMBLY

- Application Assembly
- Application Server Toolkit (AST)



## IBM® WebSphere® Application Server v6.1 Administration Network Deployment (NDE) Edition for Windows

- Module Directory Structure
- Deployment Descriptors
- Assembling EJB; Web and Enterprise Applications
- Server Configuration
- Writing a MDB
- Creating a MDB and JMS Client

### SESSION: APPLICATION INSTALLATION AND MANAGEMENT

- Installing Applications
- Creating Servers
- Managing Server Resources
- Specifying the Default Bindings
- Special Considerations
- Class Loading in WebSphere
- Managing Applications

### SESSION: WEBSHERE TROUBLESHOOTING

- Tools for Troubleshooting
- JVM Logs, Process & Service Logs
- Using the Log Analyzer
- Configuring Diagnostic Trace
- Diagnostic Trace Settings
- JNDI Name Space Dump Output
- Collector Tool
- FFDC

### SESSION: WEBSHERE® APPLICATION SERVER SECURITY

- Identity, Authentication, and Authorization
- Delegation (Run As)
- WebSphere Security Services
- JAAS: Java Authentication and Authorization
- Configuring SSL
- Assembling Secured Applications

### SESSION: WORKING WITH WAS AND JMS

- Introduction to JMS & Messaging Architecture
- Administering JMS Servers / Services
- JMS Administration
- Service Integration Bus Overview
- Bus Members and Messaging Engines
- MDB Architecture Within WAS 6.1

### SESSION: ADVANCED ADMINISTRATION

- Distributed Administration
- Administrative Agents
- Command Line Administration
- WebSphere Administrative Scripting
- WSAAdmin Scripting Utility
- Managing Nodes
- Managing Application Servers and Clusters
- and files

### SESSION: RAPID DEPLOYMENT/FINE GRAINED UPDATE

- Working with Rapid Deployment
- Fine-Grained Update Overview
- Working with Fine-Grained Update

### SESSION: WEBSHERE NETWORK DEPLOYMENT ARCHITECTURE

- Network Deployment Runtime Architecture
- Network Deployment Administrative Architecture
- Managing Multi-server Environments
- Cell planning
- Installing WAS Network Deployment

### SESSION: CELL AND HTTP SERVER MANAGEMENT

- Configuring Cells
- Working with Nodes in a Cell
- Working with Profiles
- Managing HTTP Servers
- WebSphere Clustering
- Replication of Session Data
- Database Session Replication
- Internal WebSphere Replication

### SESSION: WORKLOAD MANAGEMENT

- Configuration for WLM



## IBM® WebSphere® Application Server v6.1 Administration Network Deployment (NDE) Edition for Windows

- Session Affinity
- Process Affinity
- WLM Structure
- Transaction Affinity in WLM

### SESSION: BUILD MANAGEMENT

- Overview of Build Management and Continuous Integration Concepts
- Why Build Management and why Ant?
- Demo: Ant From the Command Line

### SESSION: ORIGINS AND PHILOSOPHY AND BASICS

- Origins and Philosophy of Ant
- Exercise: Install and Configure Ant
- Buildfiles
- Projects
- Targets and Tasks
- Exercise: Create a Ant Project
- Working with Properties
- Working with Directory Structures
- Organizing Ant Files
- Exercise: Compile the Project

### SESSION: USING ANT

- Using Ant for JEE
- Package, Install and Deploy goals
- Exercise: Package the Project
- Exercise: Install the Project
- Adding Specialized Targets

### SESSION: ANT TOOLING

- RAD Tooling