

## Description:

Learn to install, configure, and maintain IBM WebSphere Application Server (WAS) Network Deployment V6 and to deploy enterprise Java applications in a single machine or clustered configuration.

- a. **Enterprise (J2EE) Applications**
- b. **WebSphere Application Server Architecture**
- c. **WebSphere Application Server Components**
- d. **Installation Topologies**
- e. **Installing and Configuring WebSphere Application Server**
- f. **Nodes/Profiles, Configuration Files, Synchronization**
- g. **Node Federation and Consideration**
- h. **Resource Management**
- i. **Clustering WebSphere Application Server for**
  - i. High Availability
  - ii. Fail Over
  - iii. Scalability
- j. **Installing Enterprise Applications**
- k. **IBM HTTP Server Installation and Configuration**
- l. **Web Server Clustering using a load balancer**
- m. **Security Management**
- n. **Application Tracing and Troubleshooting**
- o. **Data Source Configuration and Management**
- p. **Performance Monitoring and Tuning with Tivoli Performance Viewer**
- q. **Certification preparation and tips**

**Description:**

WebSphere Process Server, which supports a service-oriented architecture (SOA), is the ideal platform for business applications that require business integration using different technologies. Built on top of WebSphere Application Server, WebSphere Process Server is the leading application server technology in the IT industry which implements the concept of Service oriented Architecture. This course provides systems administrators, solutions administrators, and developers with the skills they need to install, configure, and manage WebSphere Process Server applications and to troubleshoot common problems.

- a. Basics of SOA**
- b. Basics of Application Server**
- c. Basics of J2EE**
- d. Implementations of SOA**
- e. WebSphere Integration Developer Tooling Environment**
- f. Process Application Development Components**
  - i. Business Processes
  - ii. Business State Machines
  - iii. Human Tasks
  - iv. Business Rules
  - v. Selectors
  - vi. Java Components
  - vii. Imports/Exports
  - viii. Business Objects
  - ix. Interface Maps/Business Object Maps
  - x. Relationships
- g. Overview of WebSphere Process Server**
- h. Components of Process Server**
  - i. Web Container
  - ii. EJB Container
  - iii. Business Process Container
  - iv. Human Task Container
- i. Service Data Objects**
- j. Common Event Infrastructure**
- k. Installing and Configuring WebSphere Process Server**
- l. Clustering WebSphere Process Server**
- m. Installing Business Process Applications**
- n. Business Process Choreography**
- o. Problem Determination and Resolution**
- p. Connectivity and Transformation Options**
- q. Performance Monitoring and Tuning**
- r. Security**
- s. Business Monitoring with CEI and WebSphere Business Monitor**

**Description:**

Built on Eclipse platform, WebSphere Integration Developer is a fully equipped tooling environment used to develop business process applications that implement the concept of Service Oriented Architecture. Using the WebSphere Integration Developer tool set, business integration solutions can be created using simplified integration mechanisms such as the Service Component Architecture (SCA) programming model and the Service Data Objects (SDO) data model. SDO business objects can be defined, transformed, routed, and mediated using SCA components.

- a. Integration using service-oriented architecture**
- b. IBM WebSphere Process Server overview**
- c. Service Component Architecture overview**
- d. WebSphere Integration Developer development environment**
  - i. Creating Business objects
  - ii. Creating Interfaces
  - iii. Developing Business Processes
  - iv. Overview of Business State Machines
  - v. Developing Human Tasks
  - vi. Developing Business Rules
  - vii. Developing Selectors
  - viii. Developing Java Components
  - ix. Imports/Exports
  - x. Interface Maps
  - xi. Creating Business Object Maps
  - xii. Creating Relationships
  - xiii. Libraries and Dependencies
  - xiv. Common Event Infrastructure Options
  - xv. Adapters Overview
  - xvi. Unit Test Environment
- e. Enterprise Service Bus Overview**
- f. Enterprise Application Connectivity**
- g. Business process choreography overview**
- h. Debugging and deploying integration applications**
- i. Certification preparation and tips**