

WebSphere Training

Introduction:

- The WebSphere family
- Various WAS editions
- The J2EE Platform
- What is new in WAS 7.0

Architecture, Component, Installation & Configuration:

- Understanding of Server profiles
- Base Server architecture and components
- WAS ND architecture and components
- Installation of WAS ND – GUI & Silent
- Manage Profiles
- Cells, Nodes, Clusters
- Topologies for best practices

Administrative Console:

- Where the console resides
- Navigating the GUI Configure
- Application server
- Install & Configure Web Server
- Web server plug-in
- Single cell configurations

Server Environments:

- Single cell configurations
- Multiple cell configurations
- Multiple cell configurations
- Mixed node versions in a cell

Deploying and configuring Enterprise applications:

- Overview of Enterprise application
- Deploying and configuring Enterprise applications
- Setting up resources
- Application server properties
- Web container properties
- EJB container properties

Distributed Servers and Repositories:

- Network deployment(WAS-ND)
- Creating cells
- Federating nodes
- Configuration repositories
- Repository: Cell, Nodes, Servers
- Repository: deployment manager
- Job manager
- Administrative agent
- Managing remote Web servers

Clusters and Topologies:

- Creating clusters
- Replication
- Adding servers to clusters
- Cluster management
- Network dispatcher
- Vertical scaling
- Horizontal scaling
- Multi clustering

Administering Security:

- Global Security overview
- Administrative security
- Configuring User registries and repositories
- Custom registry security
- Local OS Level security
- File-based Federated Repository
- Mapping roles to users and groups
- Application security
- SSL administration

Troubleshooting and Monitoring:

- Performance Monitoring Infrastructure
- Tivoli Performance Viewer (TPV)
- Performance monitoring Servlet
- Console messages
- Trace facility
- Log analyzer

Scripting Tools:

- wsadmin
- Jacl scripting
- Configuring wsadmin
- wsadmin objects
- Mbeans

Websphere Liberty Profile:

- Introduction of Liberty profile in Websphere
- Why Liberty profile came in existence
- Liberty profile features
- Liberty profile comparison with Websphere application server

Advanced Websphere Training

Websphere Liberty Profile:

- Liberty Profile Installation
- Installation of Admin Center in Liberty profile
- Securing Admin Center of Liberty profile
- Deploying application in Liberty profile: In Cluster, stand-alone server, and using Jython scripting
- Clustering concept in Liberty profile
- Managing Controller in Liberty profile
- Creating Replica in Liberty
- Jython scripting in Liberty server
- Security in Liberty Profile:
 - Using Quick security feature
 - File based security
 - Using LDAP
- SSL implementation in Liberty profile
- Configuring SSO in Liberty profile
- Configuring LTPA in Liberty
- TAI concept in Liberty profile
- Configuring TAI in Liberty
- Liberty Authorization concept
- Customizing the Liberty environment
- Liberty threading concept
- Troubleshooting in Liberty profile.

IHS (IBM HTTP Server - Web Server):

- IHS concepts in detail
- Installation of IHS server
- Configuring IHS server
- Httpd.conf concept and how to configure it?
- Plugin concept and how to configure it?
- How to generate a plugin for IHS in Websphere
- Integrating IHS and WAS
- Complete request flow in IHS
- Troubleshooting IHS

JVM Management:

- Java Heap concept
- Tuning Java heap: 32-bit and 64-bit OS
- Additional properties in Java Heap
- Enabling GC and troubleshooting GC Logs

Session Management:

- Session management concept in Websphere
- How to maintain a Session in Websphere application server.
- Session Affinity
- Memory-to-Memory Session replication

Integration with Websphere MQ:

- Websphere MQ Installation
- Creation of Queue manager
- Queue creation
- Creating listeners
- Integration of MQ with Websphere application server
- Managing and troubleshooting MQ

Integration with Websphere LDAP:

- LDAP Installation
- LDAP Basic concepts
- Configuration of schema in LDAP
- Managing database in LDAP
- Managing LDAP using LDAP Browser
- LDAP Replication
- Integration of LDAP with Websphere application server
- Troubleshooting LDAP problems.

Data Sources in Websphere:

- Managing data sources in Websphere
- Creating a data source
- Advanced settings of Data source
- JNDI concepts
- Managing JDBC drivers in data source

Advanced Security:

- Advanced security overview in Websphere application server
- SSO concept in detail
- Enabling SSO in Websphere application server
- LTPA Concept in detail
- Generating LTPA token
- Managing LTPA tokens