

# **Enterprise Computing Solutions - Education Services**

# **TRAINING OFFERING**

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# WebSphere for z/OS Version 8.5 Implementation

CODE: LENGTH: PRICE:

ES68G 36 Hours (4.5 days) €3,900.00

# **Description**

WebSphere Application Server (WAS) Version 8.5 (V8) for z/OS provides a Java2 Enterprise Edition (J2EE) runtime environment for Enterprise JavaBeans (EJB), along with servlets and JavaServer Pages (JSP) in web applications.

WAS V8 extends the platform established in WebSphere for z/OS V7, bringing new functionality for application management, and new flexible management and administration options.

Learn how to install and customize WebSphere V8.5 for z/OS, and how to deploy EJB applications and web applications. Reinforce the concepts you learn in lectures with extensive hands-on laboratory exercises.

**Note:** This course does not address Java application development for z/OS, and it and does not teach the use of programming tools such as IBM Rational Application Developer V8.

## **Objectives**

- Understand the basics of object-oriented applications, EJBs and the J2EE standard runtime environment
- Prepare the base z/OS environment, including all system prerequisites
- Plan for and configure the WAS V8.5 runtime environment using the supplied WebSphere Customization Tools (WCT) workstation application
- Design and implement a complete server security scheme for WAS V8.5 on your z/OS system
- Customize your WAS V8.5 runtime on z/OS
- Set up and run the Installation Verification Test (IVT)
- Deploy an EJB application and a web application into your new WAS V8.5 runtime using the systems management administrative functions
- · Configure and manage network deployment, including a deployment manager and node agents
- Configure web-based topologies for WAS V8.5 using the IBM HTTP server on z/OS together with the WebSphere plug-in
- Install and configure an the Apache-based web server on z/OS to host the WebSphere for z/OS plug-in
- · Configure and use a web server node in WebSphere to assist managing the web server plug-in file
- · Create a cluster by cloning your first application server
- · See how the plug-in can perform load balancing and achieve high availability
- Create a proxy server, and drive your applications through this proxy server
- Define a JDBC driver and data source and deploy a sample application to connect to a DB2 for z/OS subsystem through the UDB universal driver type 4
- Describe the main components and infrastructure of the WebSphere for z/OS Java messaging run time environment
- Plan for the monitoring of performance in your new WAS V8.5 runtime
- Plan for the modification of the installation security configuration necessary to support J2EE application security
- Set up and configure a Liberty profile server, then deploy an application

# Audience

This advanced course is for experienced z/OS system programmers responsible for the installation and customization of WAS V8, along with Information Technology (IT) professionals responsible for the deployment of EJB and web applications into WAS V8 on z/OS.

Teams of two or three individuals from an enterprise are recommended to attend. Teams should include the z/OS system programmer responsible for the installation of WAS V8, an application assembler responsible for deploying EJB and web applications, and possibly a WAS specialist. The range of skills needed for deploying WebSphere eBusiness applications is such that it is rare for one IT professional to have expertise in all areas of WebSphere.

## **Prerequisites**

You should have:

• Experience with the installation **and** customization of z/OS and its subsystems, including WLM, TCP/IP, UNIX Services, **and** the Security Server (Resource Access Control Facility (RACF)), **or** equivalent product.

This course, just as the WAS V8 product does, assumes that the initial z/OS infrastructure basics have already been implemented, including WLM Goal Mode, Resource Recovery Services (RRS), **and** the System Logger. The basic implementation of these z/OS subsystems **or** functions are not covered in this course. Individuals who need training in the implementation of the prerequisite subsystems **and** functions should consider completing other appropriate courses in the curriculum prior to attending this course.

# **Programme**

#### Day 1

- Welcome
- Unit 1: Introduction to WebSphere for z/OS V8
- Unit 2: Installing the WebSphere V8 stand-alone server (Part 1)

#### Day 2

- Unit 2: Installing the WebSphere V8 stand-alone server (Part 2)
- Lab 1: Installing the stand-alone server

#### Day 3

- Unit 3: Deploying applications with WebSphere V8 administration tool
- Lab 2: Administration of WebSphere V8 servers and applications Unit 4: The WebSphere V8 web container
- Lab 3: Installing the WebSphere for z/OS V8 HTTP server plug-in

#### Day 4

- Unit 5: Network deployment
- Unit 6: Assembling and deploying a J2EE application Lab 4: Installing the network deployment environment Lab 5: (Optional) WebSphere connectors: JDBC lab Lab 6: (Optional): WebSphere proxy server
- Unit 7: WebSphere V8 security (Part 1)

#### Day 5

- Unit 7: WebSphere V8 security (Part 2)
- Unit 8: Accessing data: Connectors and Java messaging on WebSphere Unit 9: Liberty Profile, zAAPs, WLM and performance
- Lab 7: (Optional): WebSphere Liberty Profile

#### **Session Dates**

On request. Please contact us

### **Additional Information**

This training is also available as onsite training. Please contact us to find out more.