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Fundamentals of Enterprise OSGi with IBM WebSphere Application Server V8.5  
Information

<b>Length:</b>	1.0 Day
<b>Ref:</b>	WD104G-X
<b>Delivery method:</b>	ClassroomInstructor Led Online
<b>Price:</b>	EUR

Overview

This course is also available as self-paced virtual (e-learning) course*Fundamentals of Enterprise OSGi with IBM WebSphere Application Server V8.5* (ZD104G). This option does not require any travel.

This course teaches you how to build OSGi enterprise applications for IBM WebSphere Application Server V8.5.

The OSGi applications framework provides a programming model for developing, assembling, and deploying modular applications that use Java Platform Enterprise Edition (Java EE) and OSGi technologies. In this course, you explore the benefits of OSGi application development, including modular development, dynamic services, version handling, and the Blueprint programming model. You use IBM WebSphere Application Server Developer Tools for Eclipse V8.5 to develop OSGi enterprise application bundles and web application bundles, and run these OSGi applications on IBM WebSphere Application Server V8.5.

The lab environment for this course uses the Windows XP platform.

For information about other related courses, visit the IBM Training website:  
<http://www.ibm.com/training>

Public

This basic course is designed for Java EE developers who want to build OSGi applications for IBM WebSphere Application Server V8.5.

Prerequisites

Students should be able to develop Java EE applications for IBM WebSphere Application Server.

Objective

- Describe the goals of OSGi

- Identify the key features of OSGi: bundles, lifecycle, versions, and services
- Describe package visibility in bundles
- Describe the differences between Java and OSGi class loading
- Identify the properties in the bundle manifest
- Explain how OSGi bundles address the issue of modularity and version control in Java classes
- Explain how OSGi supports dynamic services
- Describe the structure of Enterprise OSGi bundles, including web application bundles and enterprise bundle archives
- Identify the differences between Enterprise Java class loading and OSGi class loading
- Describe the differences between enterprise archive (EAR) files and enterprise bundle archive (EBA) files
- Describe the sharing of components in enterprise bundle archive files
- Describe the level of OSGi application support in IBM WebSphere Application Server V8.5
- Identify the role of the Blueprint Container specification in managing OSGi services
- Explain the concept of dependency injection
- Identify the properties in the Blueprint XML file
- Explain how the Blueprint Container manages Java objects and services in a dynamic manner

## Topics

- Course introduction
- Introduction to OSGi
- Modular development with OSGi
- Exercise: Getting started with OSGi bundles
- Enterprise OSGi applications
- Exercise: Creating an OSGi service and servlet
- Developing OSGi applications with the Blueprint Container
- Exercise: Creating an OSGi bundle that uses the Blueprint Container specification
- Course summary