**Migrating Enterprise Applications to Bluemix**

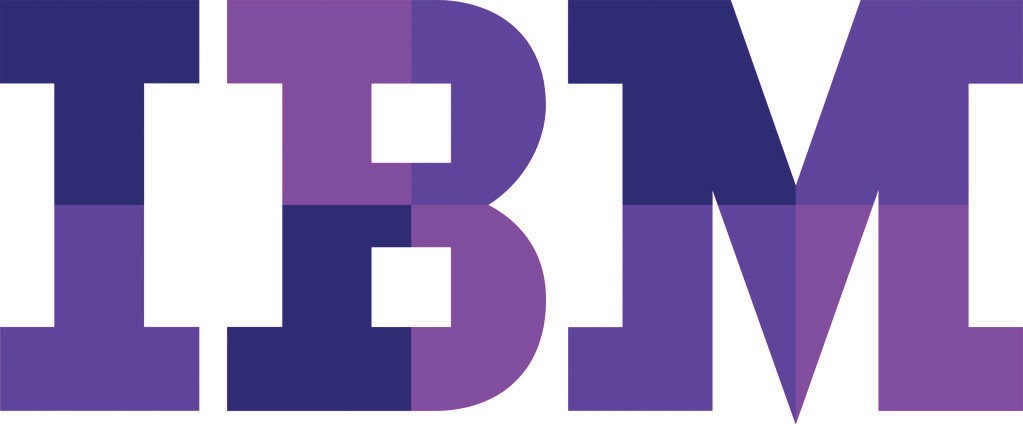


CK100 (Classroom)

# Course description

### In this 2-day class, you learn about migrating Java applications to run in the cloud, including a simple replatforming to a more complex migration to make an application cloud-ready. Considerations for using the IBM Containers capability and virtual machine capabilities are covered, as well as architecture modernization considerations.

In the lab exercises, you use the migration tools to assist in the migration of a Tomcat application to IBM Bluemix and migration from a traditional WebSphere Application Server application to IBM Bluemix.



The lab environment for this course uses the Windows platform with Internet access to Bluemix public.

For information about other related courses, visit the IBM Training website:

<http://www.ibm.com/training>

**General information**

**Delivery method**

Classroom or instructor-led online (ILO) or self-paced (SPVC) Choose those that apply.

**Course level**

ERC 2.0

**Product and version**

Bluemix

**Audience**

This course is designed for developers who want to migrate WebSphere Application Server applications to run on Bluemix Liberty.

**Learning objectives**

* Identify applications to migrate to the cloud
* Explain the run times and deployment options that are available in IBM Bluemix
* Use the IBM WebSphere migration tools
* Migrate Java applications to IBM Bluemix

**Prerequisites**

Before taking this course, you should have the following skills:

* Understanding of cloud concepts
* Java programming
* Using Eclipse.

**Duration**

2 days

**Skill level**

Intermediate / Advanced

**Classroom (ILT) setup requirements**

**Table 1 Configuration for each server.**

**Server type and**

**System label processor**

**RAM**

**Hard disk**

**Display**

**resolution**

**Operating system**

Windows 7

Intel Xeon

2.67 GHz or faster Duo Core

4096 MB 40 GB 1024 x 768

Windows 7

Enterprise 64 bit

**Table 2 Required network configurations**

**Network configuration Classroom requirement**

Specify **isolated networks** or a **single network.** single network Specify whether **Internet access** is required. must be provided Specify whether a **DHCP server** is required. not necessary Specify whether **promiscuous mode** is required. not necessary

## Table 3 Required software for class

**Software product**

**Version**

**System labels requiring**

**Operating systems software product**

Microsoft Windows 7 Enterprise

SP1 64-bit Windows-Server

Java JDK 1.8.0\_73 Windows Windows-Server

Java JRE 1.8.0\_73 Windows Windows-Server Mozilla Firefox 45.0.1 or later Windows Windows-Server Notepad ++ 6.9 or later Windows Windows-Server

Eclipse JEE Mars Windows Windows-Server Eclipse Tools for Bluemix for Eclipse Mars Windows Windows-Server WebSphere Application

Server Migration Toolkit -

Competitive Toolkit

WebSphere Application Server Migration Toolkit

WebSphere Application Server Migration Toolkit - WAS Liberty

IBM WebSphere Application Server Liberty Developer Tools

WebSphere Configuration Migration Tool

WebSphere Application Server

WebSphere Liberty Profile javaee7

for Eclipse Mars Windows Windows-Server

8.5.5 Windows Windows-Server

8.5.5 Windows Windows-Server

for Eclipse Mars Windows Windows-Server

latest Windows Windows-Server

8.5 Windows Windows-Server

javaee7 8.5.5.8 Windows Windows-Server

Apache ANT 1.9.6 Windows Windows-Server IBM DB2 9.7 Windows Windows-Server cloud foundry cli 6.16.0+334d916 Windows Windows-Server git for Windows 2.7 Windows Windows-Server

# Notes

### The following unit and exercise durations are estimates, and might not reflect every class experience.

The following durations reflect the actual length of recorded segments of the course. For most students, the total length of the course is greater than the sum of these segments.

This course is a new course.

**Course agenda**

**Unit 1 Migrating applications to Bluemix**

Lesson 1 Describing a cloud application Lesson 2 Migrating applications to Bluemix

Lesson 3 Considerations for porting to Cloud Foundry run times Number of demonstrations: 0

Number of exercises: 14 Estimated time: 6 hours

**Lesson Notes**

Lesson 1 Describing a cloud application

Lesson 2 Migrating applications to Bluemix

This lesson describes the characteristics of cloud applications as compared to enterprise applications.

This lesson describes the different options that are available for running applications in Bluemix.

**Unit 2 Migrating Java applications to Bluemix**

Lesson 1 Introduction to WebSphere Application Server Liberty profile

Lesson 2 Introduction to Eclipse and Liberty development environment and tools Lesson 3 State in cloud applications

Lesson 4 Application scaling on IBM Bluemix Lesson 5 Migration tools

Lesson 6 Handling external dependencies Number of demonstrations: 0

Number of exercises: 6

Estimated time: 8 hours

**Lesson Notes**

Lesson 1 WebSphere Application Server Liberty for Java Overview

Lesson 2 Migration Tools

Lesson 3 Handling external dependencies

The focus of this course is on migrating an application to Liberty for Java on Bluemix. This lesson describes Liberty for Java and differences between it and traditional WebSphere Application Server.

This lesson reviews the migration tools that will be used to assist with the migration

This lesson provides an overview of handling an application’s external dependencies. This topic is covered in detail in the course CK101, Integrating Cloud Applications.

**Unit 3 Additional considerations**

Lesson 1 Considerations for developing native cloud applications Number of demonstrations: 0

Number of exercises: 0 Estimated time: 1 hour

**Lesson Notes**

Lesson 1 Considerations for developing cloud native applications

This lesson describes characteristics and considerations for developing cloud native applications. This topic is covered in detail in CK102, Developing Cloud Native Applications.

# For more information

### To learn more about this course and other related offerings, and to schedule training, visit ibm.com/training.

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