**Administration of IBM Business Process Manager Standard V8.5**

Description: 5300_IBMpos

**WB812 (Classroom)  
ZB812 (Self-paced)**



Highlights

* Fundamental training for BPM administrators and solution architects
* Covers IBM Business Process Manager Standard V8.5
* Explains how to install, configure, manage, and troubleshoot IBM Process Server applications

Course description

In this four-day course, you learn the skills that are required to install, configure, and administer IBM Business Process Manager Standard V8.5.

The course begins with an overview of business process management (BPM) and its architecture. It continues with the installation, configuration, and administration of IBM Business Process Manager Standard. You define and manage user authentication and authorization, and learn about installing, deploying, and managing snapshots to various environments. You also use various tools to monitor process execution and system errors, and examine methods to monitor system performance and apply troubleshooting techniques.

Hands-on exercises on the Linux operating system are provided throughout the course, giving you practical experience on how to install, configure, and administer both Process Server and Process Center environments. You examine applications in Process Center and deploy applications to both an online and an offline Process Server. You also integrate the deployment manager with IBM Tivoli Directory Server and secure the environment.

This course provides lab exercises running on IBM Business Process Manager Standard V8.5. The lab environment for this course uses the Linux operating system.

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

**ibm.com**/training

General information

Delivery method

Classroom or self-paced virtual classroom (SPVC)

Course level

ERC 1.0

Product and version

IBM Business Process Manager Standard version 8.5

Audience

This course is designed for systems administrators, solutions administrators, and operators who install, configure, manage, and troubleshoot process applications.

Learning objectives

After completing this course, you should be able to:

* Configure and administer a Process Center environment
* Configure and administer a Process Server environment
* Describe the purpose and business value of the tools included in IBM Business Process Manager Standard V8.5: IBM Process Server and IBM Process Center
* Describe IBM Business Process Manager Standard architecture, concepts, and terminology
* Describe the deployment considerations for IBM Business Process Manager Standard components
* Create a Process Center clustered environment by using the Deployment Environment wizard
* Create a Process Server clustered environment by using the BPMConfig utility
* Deploy and manage process applications
* Work with the administrative console and management tools
* Deploy applications to an offline and online Process Server environment
* Implement SSL
* Integrate with Lightweight Directory Access Protocol (LDAP) to secure the environment
* Troubleshoot the environment

Prerequisites

Before taking this course, you should have a general knowledge of:

* The Linux operating system
* Java Platform, Enterprise Edition (Java EE) and Extensible Markup Language (XML)
* Administering multitier business applications
* Managing WebSphere Application Server
* Managing a database server, such as DB2, MS SQL Server, or Oracle database

You should also successfully complete one of the *IBM WebSphere Application Server V8.0 Administration* courses (course code WA180, WA380, WA580, VA180, VA380, VA580, ZA380, or ZA580) or *IBM WebSphere Application Server V8.5 Administration* courses (course code WA585, VA585, or ZA585).

Duration

4 days

Skill level

Basic

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| Classroom (ILT) setup requirements | |
| Processor | Pentium 4, 2.8 GHz or faster |
| GB RAM | 10 GB |
| GB free disk space | 120 GB |
| Network requirements | None |
| Other requirements | None |

Notes

The following unit and exercise durations are estimates, and might not reflect every class experience. If the course is customized or abbreviated, the duration of unchanged units will probably increase.

This course is an update of the following previous courses:

* WB804: *Administration of IBM Business Process Manager Standard V8*

Course agenda

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| Course introduction  Duration: 30 minutes |

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| Unit 1. Overview of IBM Business Process Manager V8.5  Duration: 45 minutes | |
| Overview | This unit introduces the principles of business process management (BPM). You also learn the capabilities of IBM Business Process Manager Standard V8.5 for deploying BPM solutions. |
| Learning objectives | After completing this unit, you should be able to:   * Describe the concepts of business processes and business process management * Describe business integration roles in BPM * Describe the IBM product editions * Describe the capabilities of IBM Business Process Manager V8.5 |

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| Unit 2. IBM Business Process Manager Standard installation  Duration: 1 hour and 20 minutes | |
| Overview | This unit describes the installation of IBM Business Process Manager Standard. You learn various methods to install the product, create profiles, and verify and troubleshoot the installation. |
| Learning objectives | After completing this unit, you should be able to:   * List and describe the hardware and software prerequisites for IBM Business Process Manager Standard * Install IBM Business Process Manager Standard by using the launchpad * Install IBM Business Process Manager Standard silently * Create profiles by using the Profile Management Tool and the manageprofiles command * Verify product installation and profile creation * Troubleshoot a failed installation and a failed profile creation * Uninstall IBM Business Process Manager Standard |

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| Unit 3. IBM Business Process Manager Standard architecture overview  Duration: 45 minutes | |
| Overview | This unit is a technical overview of IBM Business Process Manager Standard architecture. |
| Learning objectives | After completing this unit, you should be able to:   * Define network deployment concepts and terminology * Define clusters and cluster members * Define administrative flow |

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| Exercise 1. Installing IBM Business Process Manager Standard  Duration: 1 hour | |
| Overview | This exercise covers the installation of IBM Business Process Manager Standard. |
| Learning objectives | After completing this exercise, you should be able to:   * Install IBM Installation Manager * View the installation log file * Confirm the installation of Installation Manager * Use IBM Installation Manager to install IBM Business Process Manager Standard * Verify the installation * Apply interim fixes by using the Installation Manager |

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| Exercise 2. Installing IBM HTTP Server  Duration: 45 minutes | |
| Overview | This exercise shows how to install and configure the IBM HTTP Server to interact with the IBM Business Process Manager environment. |
| Learning objectives | After completing this exercise, you should be able to:   * Install and configure the IBM HTTP Server * Install and configure the Web Server Plug-ins * Install the WebSphere Customization Toolbox * Verify the installation |

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| Unit 4. IBM Business Process Manager deployment topologies  Duration: 1 hour | |
| Overview | This unit is an overview of the IBM Business Process Manager Advanced deployment topologies and deployment environment creation. |
| Learning objectives | After completing this unit, you should be able to:   * Explain the purpose of a deployment environment * Identify and explain the clustered topologies for IBM Business Process Manager Standard:   + Single cluster   + Application, Remote Messaging, and Remote Support * Explain how to create a deployment environment with multiple tools * Explain how to create a deployment environment with the BPMConfig command |

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| Exercise 3. Configuring the Process Center environment  Duration: 1 hour and 30 minutes | |
| Overview | This exercise covers the creation of a Process Center cell, a Process Center deployment manager, and custom profiles. |
| Learning objectives | After completing this exercise, you should be able to:   * Create the Process Center deployment manager and a custom profile * Federate the custom profile * Edit the soap.client.props file * Verify the database configuration * Create the three required databases * Create a Process Center deployment environment * Verify the configuration of the database tables |

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| Unit 5. Introduction to Process Center  Duration: 1 hour and 20 minutes | |
| Overview | This unit describes how to deploy, test, and manage process applications with Process Center. |
| Learning objectives | After completing this unit, you should be able to:   * Describe the purpose and business value of Process Center * Define the components of Process Center * Describe how to manage the Process Center repository * Describe how to deploy, test, and manage process applications with the Process Center Console * Manage access to Process Center * Configure Process Center sharing |

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| Exercise 4. Administering Process Center  Duration: 1 hour and 30 minutes | |
| Overview | This exercise examines a Process Center topology configuration and uses the Process Center Console to examine and deploy process applications. |
| Learning objectives | After completing this exercise, you should be able to:   * Administer the Process Center environment * Administer the Process Center repository * Explore the Process Center Console to examine process applications |

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| Unit 6. Managing users and groups  Duration: 30 minutes | |
| Overview | This unit describes access to the Process Center and Process Server. |
| Learning objectives | After completing this unit, you should be able to:   * Describe access to the Process Center and Process Server * Customize user access to administration consoles * Describe team and team manager groups |

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| Exercise 5. Adding users and groups  Duration: 1 hour | |
| Overview | This exercise shows how to create groups and then add users to the groups. |
| Learning objectives | After completing this exercise, you should be able to:   * Create groups * Add users to groups * Grant access to users and groups on specific projects * Explore the Process Admin Console and examine its components |

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| Unit 7. Overview of Process Portal  Duration: 45 minutes | |
| Overview | This unit is an overview of Process Portal. |
| Learning objectives | After completing this unit, you should be able to:   * Explain the capabilities of Process Portal * Set preferences for Process Portal * Work with assigned tasks * Use the Team Performance dashboard * Use the Process Performance dashboard |

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| Exercise 6. Administering Process Portal  Duration: 1 hour and 30 minutes | |
| Overview | This exercise examines the features of Process Portal. |
| Learning objectives | After completing this exercise, you should be able to:   * Explore Process Portal capabilities * Modify Process Portal preferences * Work with tasks * Collaborate on a task * Explore the Team Performance dashboard |

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| Unit 8. Overview of deployment scenarios  Duration: 1 hour | |
| Overview | This unit covers deployment concepts in IBM Business Process Manager Standard, and explains the configuration files that are needed to manage the environment. |
| Learning objectives | After completing this unit, you should be able to:   * Explain online and offline Process Server environments * Work with an offline Process Server * Deploy a process application to an offline Process Server * Explain the XML configuration files * Deploy a process application to an online Process Server |

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| Exercise 7. Configuring the Process Server environment  Duration: 1 hour and 30 minutes | |
| Overview | This exercise covers the creation of a Process Server cell. You create a Process Server production three cluster topology by using the BPMConfig utility. |
| Learning objectives | After completing this exercise, you should be able to:   * Customize a sample deployment environment properties file * Generate a deployment environment by using the BPMConfig utility * Verify the deployment environment creation * Start the deployment environment by using the BPMConfig utility * Explore the deployment environment |

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| Exercise 8. Managing offline and online process servers  Duration: 1 hour and 20 minutes | |
| Overview | This exercise examines the differences between an offline Process Server and an online Process Server and how to deploy process applications to each of these environments. |
| Learning objectives | After completing this exercise, you should be able to:   * Create an offline server by using the Process Center Console * Deploy a snapshot to an offline Process Server * Change the configuration of an offline Process Server to an online Process Server * Manage an online Process Server * Deploy a snapshot to an online Process Server * Deploy an installation package to Process Server |

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| Unit 9. Managing snapshots  Duration: 1 hour | |
| Overview | This unit covers creating and managing snapshots. |
| Learning objectives | After completing this unit, you should be able to:   * Create a snapshot * Install a snapshot on a Process Server * Explain how to install a snapshot to an ​offline​ server * Describe options for data migration |

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| Exercise 9. Creating and managing snapshots  Duration: 45 minutes | |
| Overview | This exercise covers managing a snapshot on Process Server. |
| Learning objectives | After completing this exercise, you should be able to:   * Create a snapshot of a process application * Manage the snapshot on a Process Server * Migrate process instances between snapshot versions |

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| Unit 10. Advanced administration concepts  Duration: 1 hour | |
| Overview | This unit describes various options to add more processing capabilities. You learn about the high availability manager, how to create messaging engine policies, and log file high availability. |
| Learning objectives | After completing this unit, you should be able to:   * Explain the reasons for extending a topology * List options for increasing cluster member capacity in a cell * Expand a topology * Explain the purpose of the high availability manager and the concept of core groups * Explain the structure and purpose of the default messaging and transaction manager policies * Explain how policies are applied at run time * Define the transaction manager high availability policy type and identify how transaction policies are applied |

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| Unit 11. Problem determination  Duration: 1 hour | |
| Overview | This unit is an overview of problem determination methods and tools. |
| Learning objectives | After completing this unit, you should be able to:   * Describe problem determination * Identify resources for problem determination * Describe tools for troubleshooting * Describe how to configure logs and trace * Explain how to use tracing to determine problems * Describe common troubleshooting facilities * Identify common database configuration pitfalls |

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| Exercise 10. Performance and troubleshooting  Duration: 1 hour and 30 minutes | |
| Overview | This exercise covers aspects of performance tuning and troubleshooting the IBM Business Process Manager V8.5 Standard environment. |
| Learning objectives | After completing this exercise, you should be able to:   * View performance metrics with the Tivoli Performance Viewer * Read an instrumentation file * Modify the 100Custom.xml file to configure the Business Process Definition queue size * Gather logs, heap dumps, and other resources for troubleshooting |

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| Unit 12. Security  Duration: 1 hour | |
| Overview | This unit explains key security concepts and how they relate to an IBM Business Process Manager server environment. |
| Learning objectives | After completing this unit, you should be able to:   * Describe the key WebSphere Application Server security concepts * Describe the user registries that are available in IBM Business Process Manager * Explain how to interact securely with IBM Business Process Manager Server * Describe some common security holes and how to fix them |

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| Exercise 11. Configuring SSL  Duration: 1 hour | |
| Overview | This exercise explores some of the features and configurations within the WebSphere SSL environment. |
| Learning objectives | After completing this exercise, you should be able to:   * Create a keystore for a web server * Generate a self-signed key * Configure IBM HTTP Server to load and use HTTPS * Define the certificate life span of a profile * Use the administrative console to find and view certificates within a cell * Configure and run the certificate expiration service |

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| Exercise 12. Implementing security with LDAP  Duration: 1 hour and 30 minutes | |
| Overview | This exercise shows how to configure the Process Server cell to use a Lightweight Directory Access Protocol (LDAP) server as the user registry. You also learn how to configure virtual member manager and administrative console security for authorized access to the administrative console. |
| Learning objectives | After completing this exercise, you should be able to:   * Start and stop the IBM Tivoli Directory Server * Install and configure the Web Administration Tool application * Create users and groups in LDAP * Federate a repository with LDAP * Access the deployment manager administrative console by using an LDAP user and group * Configure the virtual member manager |

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| Unit 13. Course summary  Duration: 20 minutes | |
| Overview | This unit summarizes the course and provides information for future study. |
| Learning objectives | After completing this unit, you should be able to:   * Explain how the course met its learning objectives * Access the IBM Training website * Identify other IBM Training courses that are related to this topic * Locate appropriate resources for further study |

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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