IBM Cloud Pak for Integration - Administration

WM601 (Classroom)

ZM601 (Self-paced)

Course description

This course provides technical professionals with the needed skills to do the IBM Cloud Pak for Integration administration and troubleshooting tasks.

The course begins with an introduction to IBM Cloud Pak for Integration. You explore the Red Hat OpenShift Container Platform environment. You manage dashboard security for Cloud Pak Integration. You configure an external LDAP server (OpenLDAP) and add LDAP users to the Cloud Pak environment. You explore the Red Hat OpenShift Container Platform (RHOCP) web console for container management such as Roles, Topology, Cluster Inventory, Alerts, Events, CPU, and Memory. You perform basic administration tasks in the RHOCP web console. You examine the available open-source monitoring options such as Metrics, Alerts, and Dashboards. You also scale the application deployment by using OpenLDAP as an example.

You examine the logs for pods by running commands and in the RHOCP console. To troubleshoot common Cloud Pak cluster problems, you get information and logs for nodes, cluster, and pods. You learn how to troubleshoot the Container Engine and the pods that fail to start. You set different log levels for Red Hat OpenShift, check the routes, and understand troubleshooting for installation. You learn how to collect MustGather files for submitting it to IBM Support team for troubleshooting.

You upgrade the Integration capabilities and runtimes and Platform Navigator. You also learn also how to remove the Integration capabilities and runtimes.

For information about other related courses, see 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 Cloud Pak for Integration 2021.2

Audience

This course is intended for administrators of IBM Cloud Pak for Integration.

Learning objectives

After completing this course, you should be able to:

* Understand the business value and architecture of IBM Cloud Paks
* Describe the products in the Cloud Pak for Integration
* Explain Kubernetes and Red Hat OpenShift
* Explore the Red Hat OpenShift environment
* Perform basic administration tasks in the Red Hat OpenShift Container Platform web console and in the Cloud Pak web client
* Scale the application deployment
* Manage dashboard security for Cloud Pak Integration
* Change the default password for the Platform Navigator UI
* Configure an external LDAP provider (OpenLDAP)
* Troubleshoot common Cloud Pak cluster problems
* Monitoring your IBM Cloud Pak for Integration system
* Examine the logs for pods by running a command and in the Cloud Pak environment
* Troubleshoot Container Engine and the pods that fail to start
* Collect MustGather files and examine logs
* Upgrade the version for Platform Navigator and the Integration capabilities and runtimes
* Safely remove the Integration capabilities and runtimes

Prerequisites

* Familiarity with the IBM Cloud Pak for Integration concepts
* Basic knowledge of Linux operating system
* Understanding of Containers and Kubernetes
* Recommended course: IBM Cloud Pak for Integration - Installation (Course code: WM600 / ZM600)

Duration

1 day

Skill level

Intermediate

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.

Course agenda

|  |
| --- |
| Course introductionDuration: 15 minutes |

|  |
| --- |
| Unit 1. Introduction to IBM Cloud Pak for IntegrationDuration: 1 hour |
| Overview | This unit is an overview of IBM Cloud Pak for Integration, its key capabilities, high-level architecture, and its primary components. |
| Learning objectives | After completing this unit, you should be able to:* Understand the business value of IBM Cloud Paks
* Explain the architecture of IBM Cloud Pak for Integration
* Describe the products in IBM Cloud Pak for Integration
 |

|  |
| --- |
| Unit 2. IBM Cloud Pak key infrastructure terminologiesDuration: 30 minutes |
| Overview | This unit introduces the Dockers, Containers, and Kubernetes concepts. It provides a list of terminologies that are used in this course. |
| Learning objectives | After completing this unit, you should be able to:* Understand the Dockers, Containers, and Kubernetes concepts
* Describe the Docker and Red Hat OpenShift terminologies that are used in this course
 |

|  |
| --- |
| Unit 3. Administering IBM Cloud Pak for IntegrationDuration: 45 minutes |
| Overview | This unit describes how to manage dashboard security and perform basic administration tasks in the Red Hat OpenShift Container Platform. |
| Learning objectives | After completing this unit, you should be able to:* Describe how to manage dashboard security for Cloud Pak Integration
* Explain how to integrate an external LDAP server with cp4i
* Explore the Red Hat OpenShift Container Platform console for container management
* Understand how to perform basic administration tasks in the Red Hat OpenShift Container Platform console
* Examine the open-source monitoring options
* Learn how to scale the application deployment
* Describe IBM Cloud Pak foundational services License Service
 |

|  |
| --- |
| Exercise 1. Administering IBM Cloud Pak for IntegrationDuration: 1 hour and 30 minutes |
| Overview | This exercise covers the IBM Cloud Pak for Integration administration tasks such as password change, LDAP configuration, container, pod, and deployment management, and monitoring operations. |
| Learning objectives | After completing this exercise, you should be able to:* Manage dashboard security for Cloud Pak Integration
* Change the default password for the Platform Navigator
* Configure an external LDAP server and add LDAP users to the Cloud Pak environment: OpenLDAP
* Explore the Red Hat OpenShift container (RHOCP) web console for container management: Roles, Topology, Cluster Inventory, Alerts, Events, CPU, and Memory
* Perform basic administration tasks in the RHOCP web console: Pods, Deployments, Routes, Storage, Compute, User Management
* Examine the available open source monitoring options: Metrics, Alerts, and Dashboards
* Scale the application deployment by using Red Hat OpenShift
 |

|  |
| --- |
| Unit 4. Troubleshooting and monitoring the IBM Cloud Pak for Integration systemDuration: 45 minutes |
| Overview | This unit shows you various commands to examine the logs and troubleshooting tips for the issues that you might encounter for the IBM Cloud Pak for Integration components. It also shows you how to collect MustGather files for submitting it to IBM Support team for troubleshooting. |
| Learning objectives | After completing this unit, you should be able to:* Explain how to troubleshoot common Cloud Pak cluster problems
* Monitoring your IBM Cloud Pak for Integration system
* Examine the logs for pods by running commands and in the Red Hat OpenShift console
* Describe how to troubleshoot the pods that fail to start
* Learn how to troubleshoot the Container Engine
* Describe how to set the log levels for Red Hat OpenShift
* Explain how to check the routes
* Learn how to collect MustGather files
 |

|  |
| --- |
| Exercise 2. Troubleshooting and monitoring the IBM Cloud Pak for Integration systemDuration: 1 hour |
| Overview | This exercise covers various commands to examine the logs and troubleshooting tips for the issues that you might encounter during the installation of the IBM Cloud Pak for Integration components. This exercise also covers how to collect MustGather files for submitting it to IBM Support team for troubleshooting. |
| Learning objectives | After completing this exercise, you should be able to:* Examine the logs for pods by running commands and in the Red Hat OpenShift console
* Troubleshoot common Cloud Pak cluster problems
* Get information for cluster, nodes, pods, and containers
* Troubleshoot the Container Engine and the pods that fail to start
* Set the log levels for Red Hat OpenShift Container Platform
* Check the routes
* Collect MustGather files
 |

|  |
| --- |
| Unit 5. Upgrading Platform Navigator, Integration Capabilities, and RuntimesDuration: 30 minutes |
| Overview | This unit teaches you how to upgrade an instance of IBM Cloud Pak for Integration Platform Navigator, an integration capability, and an integration runtime. |
| Learning objectives | After completing this unit, you should be able to:* Explain the IBM Cloud Pak for Integration components upgrade
* Describe the Integration runtime upgrade
* Understand the Integration capability upgrade
* Learn about upgrading IBM Cloud Pak for Integration Platform Navigator
 |

|  |
| --- |
| Exercise 3. Upgrading Platform Navigator, capabilities, and runtimesDuration: 1 hour |
| Overview | This exercise covers the upgrade of the IBM Cloud Pak for Integration Platform Navigator, an integration capability, and an integration runtime. |
| Learning objectives | After completing this exercise, you should be able to:* Upgrade the Aspera runtime
* Upgrade the Automation Assets capability
* Upgrade IBM Cloud Pak for Integration Platform Navigator
 |

|  |
| --- |
| Unit 6. Removing Integration capabilities and RuntimesDuration: 30 minutes |
| Overview | This unit teaches you how to remove the integration runtimes and capabilities. |
| Learning objectives | After completing this unit, you should be able to:* Learn about removing the IBM Cloud Pak for Integration components
* Describe the removal of an Integration runtime
* Describe the removal of an Integration capability
* Understand the dependencies between runtime and capability
 |

|  |
| --- |
| Exercise 4. Removing Integration capabilities and runtimesDuration: 1 hour |
| Overview | The exercise shows you how to remove the integration runtimes and capabilities |
| Learning objectives | After completing this exercise, you should be able to:* Remove the following Integration runtimes: High-Speed Transfer Server (HSTS - Aspera), Messaging (IBM MQ), and Gateway (DataPower)
* Remove the following Integration capabilities: IBM API Connect, IBM App Connect, Automation assets, and Operational Dashboard (integration-tracing)
* Understand the dependencies between the components
 |

|  |
| --- |
| Unit 7. Course summary, badge, and other learning resourcesDuration: 30 minutes |
| Overview | This unit summarizes the course and provides badges and other information for future study. |
| Learning objectives | After completing this unit, you should be able to:* Describe the course objectives and what you learned
* Earn a badge for this course
* Identify and describe product certifications that are related to this course
* Identify resources that can help you learn more
 |

For more information

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

To learn more about validating your technical skills with IBM certification, see **ibm.com**/certify

To stay informed about IBM training, see the following sites:

IBM Training News: https://www.ibm.com/blogs/ibm-training

YouTube: youtube.com/IBMSupportTV

Facebook: facebook.com/groups/IBMTrainingandSkills

Twitter: twitter.com/ibm