

IBM Cloud Pak for Integration Installation

WM602G (Classroom)

ZM602G (Self-paced)

Course description

This course provides technical professionals with the needed skills to install IBM Cloud Pak for Integration. Cloud Pak for Integration consists of several different parts, including the Cloud Pak for Integration operator and the Platform UI instance, which acts as the integration console for the integration capabilities. Each integration capability consists of an operator and one or more integration instances.

The course begins with an introduction to IBM Cloud Paks, Cloud Pak for Integration, its architecture, Docker, containers, Kubernetes, and Red Hat OpenShift console. You explore the Red Hat OpenShift Container Platform environment. You learn how to install the IBM Cloud Pak for Integration operator and a Platform UI instance. You access the Platform UI dashboard and examine some features. You install other integration capability operators and deploy capabilities as operator instances. For each of the integration capabilities, you verify the associated pods, storage, and some of their features.

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 2023.4-1

Audience

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

Learning objectives

After completing this course, you should be able to:

* Describe the business value and the architecture of IBM Cloud Paks
* Describe the products included with IBM Cloud Pak for Integration
* Explain Kubernetes and Red Hat OpenShift
* Outline and review the prerequisites for IBM Cloud Pak for Integration installation
* Explain the business value of the air-gap installation technique for IBM Cloud Pak for Integration
* Install the Red Hat cert-manager operator
* Install the IBM Cloud Pak foundational services operator
* Install the IBM Cloud Pak for Integration operator, a Platform UI instance, and demonstrate some of the features
* Install the IBM API Connect (ibm-apiconnect) operator and operand and verify the successful installation using the Platform UI
* Install the IBM App Connect (ibm-appconnect) operator and operand and verify the successful installation using the Platform UI
* Install IBM Automation foundation assets (ibm-integration-asset-repository) operator and operand and verify the successful installation
* Install IBM MQ messaging (ibm-mq) operator and operand and verify the successful installation
* Install IBM Event Streams (ibm-eventstreams) operator and operand and verify the successful installation
* Install IBM DataPower Gateway (ibm-datapower-operator) operator and operand and verify the successful installation
* Install IBM Aspera HSTS (ibm-aspera-hsts-operator) operator and operand and verify the successful installation
* Install IBM Event Endpoint Management operator and operand.

Prerequisites

* Familiarity with the IBM Cloud Pak concepts
* Basic knowledge of the Linux operating system
* Understanding of containers and Kubernetes

Duration

2 days

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

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| Course introduction  Duration: 15 minutes |

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| Unit 1. IBM Cloud Pak for Integration installation  Duration: 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:   * Describe 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 |

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| Exercise 1. Exploring the environment  Duration: 30 minutes | |
| Overview | In this exercise, you verify that the cluster nodes are running and in a ready state for installing the Cloud Pak for Integration operators and capabilities. |
| Learning objectives | After completing this exercise, you should be able to:   * Use the Red Hat OpenShift environment * Verify that the cluster is ready * Verify the cp4i project * Demonstrate basic Red Hat OpenShift console features |

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| Unit 2. IBM Cloud Pak for Integration post preparation  Duration: 30 minutes | |
| Overview | This unit introduces the system requirements, installation checklist, and information on performing post-preparation tasks, such as updating the global image pull-secrets and applying the Catalog Sources. |
| Learning objectives | After completing this unit, you should be able to:   * Describe system requirements * Introduce the Installation checklist * Add global image pull-secrets * Apply Catalog sources |

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| Exercise 2. Pre-installation preparation  Duration: 20 minutes | |
| Overview | In this exercise, you perform a few of the post-mirroring steps that are needed for an on-premises environment. |
| Learning objectives | After completing this exercise, you should be able to:   * Add the bastion host and cp.icr.io to the global image pull-secrets * Add the catalog sources * Examine the OperatorHub |

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| Unit 3. Installing the Cloud Pak for Integration operator  Duration: 1 hour | |
| Overview | This unit introduces the installation options, mirroring the online repositories to a local air-gapped environment, installing some prerequisite operators, installing the Cloud Pak for Integration operator, and installing the Platform UI instance. |
| Learning objectives | After completing this unit, you should be able to:   * Describe some of the installation options * Describe a mirrored air-gap installation * Create the ibm-common-services project * Install the cert-manager for Red Hat OpenShift * Install the IBM Cloud Pak foundational services operator * Install the IBM Cloud Pak for Integration operator * Install the Platform UI instance * Log in to the Platform UI instance |

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| Exercise 3. Installing Platform UI  Duration: 1 hour | |
| Overview | In this exercise, you learn how to install an instance of IBM Cloud Pak for Integration Platform UI and explore the Platform UI dashboard. |
| Learning objectives | After completing this exercise, you should be able to:   * Create the ibm-common-services project * Install the cert-manager for Red Hat OpenShift * Install the IBM Cloud Pak foundational services operator * Install the Cloud Pak for Integration operator * Install the Platform UI instance * Log in to the Platform UI |

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| Unit 4. Deploying Integration capabilities  Duration: 1 hour and 30 minutes | |
| Overview | This unit describes a pattern for how to deploy Integration capabilities. |
| Learning objectives | After completing this unit, you should be able to:   * Pattern for deploying Integration capabilities * Deploying IBM API Connect * Deploying IBM App Connect * Deploying IBM Automation Foundation assets * Deploying IBM DataPower Gateway * Deploying IBM MQ * Deploying IBM Event Streams * Deploying IBM Aspera HSTS * Deploying IBM Event Endpoint Management |

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| Exercise 4. Deploying the IBM API Connect operator  Duration: 1 hour | |
| Overview | This exercise shows you how to deploy the IBM API Connect capability. |
| Learning objectives | After completing this exercise, you should be able to:   * Demonstrate Integration instances pages before installing any. * Install the operator for IBM API Connect * Verify the pods and installed operators * Create an instance for API Management * Verify the progress of pod creation * Verify the API management capability installation |

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| Exercise 5. Deploying the IBM App Connect capability  Duration: 40 minutes | |
| Overview | This exercise shows you how to deploy the IBM App Connect capability. |
| Learning objectives | After completing this exercise, you should be able to:   * Install the operator for IBM App Connect * Create an instance for the Integration dashboard * Verify the storage and pods in the Red Hat OpenShift Console * Verify the integration dashboard capability * Create an Integration design capability * Verify the storage and pods in the Red Hat OpenShift cosole * Verify the App Connect Integration design capability |

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| Exercise 6. Deploying the IBM Automation Foundation assets capability  Duration: 15 minutes | |
| Overview | This exercise shows you how to deploy the IBM Automation Foundation assets capability. |
| Learning objectives | After completing this exercise, you should be able to:   * Install the operator for IBM Automation Foundation assets * Create an instance for the Automation assets * Verify the storage and pods in the Red Hat OpenShift Console * Verify the Automation assets capability |

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| Exercise 7. Deploying the IBM DataPower Gateway capability  Duration: 30 minutes | |
| Overview | This exercise shows you how to deploy the IBM DataPower Gateway capability. |
| Learning objectives | After completing this exercise, you should be able to:   * Install the operator for IBM DataPower Gateway * Create an instance for the Enterprise gateway * Verify the storage and pods in the Red Hat OpenShift Console * Verify that the DataPower Gateway is working |

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| Exercise 8. Deploying the IBM MQ capability  Duration: 25 minutes | |
| Overview | This exercise shows you how to deploy the IBM MQ capability. |
| Learning objectives | After completing this exercise, you should be able to:   * Install the operator for IBM MQ * Create a Queue Manager instance * Verify the storage and pods in the Red Hat OpenShift Console * Verify the Queue Manager capability |

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| Exercise 9. Deploying the IBM Event Streams capability  Duration: 35 minutes | |
| Overview | This exercise shows you how to deploy the IBM Event Streams capability. |
| Learning objectives | After completing this exercise, you should be able to:   * Install the operator for IBM Event Streams * Create a Kafka cluster instance * Verify the storage and pods in the Red Hat OpenShift Console * Verify the IBM Event Streams capability |

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| Exercise 10. Deploying the IBM Aspera HSTS capability  Duration: 20 minutes | |
| Overview | This exercise shows you how to deploy the IBM Aspera HSTS capability. |
| Learning objectives | After completing this exercise, you should be able to:   * Install the operator for IBM Aspera HSTS * Create a High speed transfer server instance * Verify the storage and pods in the Red Hat OpenShift Console * Verify the IBM Aspera HSTS capability |

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| Exercise 11. Deploying the IBM Event Endpoint Management capability  Duration: 20 minutes | |
| Overview | This exercise shows you how to deploy the IBM Event Endpoint Management capability. |
| Learning objectives | After completing this exercise, you should be able to:   * Install the operator for IBM Event Endpoint Management * Create an Event endpoint management instance * Verify the storage and pods in the Red Hat OpenShift Console * Verify the IBM Event Endpoint Management capability |

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| Unit 5. Course summary, badge, and other learning resources  Duration: 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: https://www.youtube.com/IBMSupportTV

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