

IBM Cloud Pak for Watson AIOps Installation and Administration

TN400 (Classroom)

Course description

IBM Cloud Pak for Watson AIOps deploys advanced, explainable AI across the IT Operations (ITOps) toolchain so that you can confidently assess, diagnose, and resolve incidents across mission-critical workloads.

IBM Cloud Pak for Watson AIOps brings the depth and breadth of IBM’s enterprise expertise to managing complex, mission-critical IT environments. IBM Cloud Pak for Watson AIOps helps you apply AI to IT operations to maximize efficiency, reduce costs, and maintain the resiliency and security you need to drive meaningful innovation.

This course is designed to teach you how to install the IBM Cloud Pak for Watson AIOps. You also learn important administration tasks such as user management, troubleshooting, and self-monitoring.

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

**ibm.com**/training

General information

Delivery method

Classroom

Course level

ERC 1.0

Product and version

IBM Cloud Pak for Watson AIOps Installation and Administration version 3.1

Audience

This course is intended for administrators and operators responsible for installing and managing containerized environments.

Learning objectives

After completing this course, you should be able to:

* Understand how machine learning applies to IT operations problems
* Describe key features of IBM Cloud Pak for Watson AIOps
* Explain IBM Cloud Pak for Watson AIOps architecture
* Understand OpenShift concepts and terminology
* Prepare your OpenShift cluster for installation
* Add the IBM Cloud Pak for Watson AIOps catalog sources
* Install the Cloud Pak for Watson AIOps operators
* Deploy the Cloud Pak for Watson AIOps
* Verify your installation
* Install the Event Manager Gateway
* Tune the Cassandra database
* Manage users and groups
* Integrate the AIOps console with an LDAP user repository
* Create custom roles
* Troubleshoot your environment
* Monitor the health of Event Manager
* Monitor your Cloud Pak deployment with the topology service
* View runbook history
* Uninstall IBM Cloud Pak for Watson AIOps

Prerequisites

* Experience with Linux
* Working knowledge of Kubernetes
* Experience with Red Hat OpenShift Container platform (RHOCP)
* Experience with Event Manager, which is sometimes called Netcool Operations Insight

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 Watson AIOps overview  Duration: 1 hour | |
| Overview | In this unit you learn about the IBM Cloud Pak for Watson AIOps, including architecture, key features, and how the Cloud Pak solves IT problems. |
| Learning objectives | After completing this unit, you should be able to:   * Understand how machine learning applies to IT operations problems * Describe key features of IBM Cloud Pak for Watson AIOps * Explain IBM Cloud Pak for Watson AIOps architecture * Understand OpenShift concepts and terminology * Become familiar with your lab environment |

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| Exercise 1. About your lab environment  Duration: 45 minutes | |
| Overview | This exercise covers how to log in to your Red Hat OpenShift cluster and verify that it is ready for the lab exercises. |
| Learning objectives | After completing this exercise, you should be able to:   * Start your cluster * Log in to your cluster with command line tools * Log in to the OpenShift web console * Verify that all cluster nodes are ready * Verify that the OpenShift Package Server is running correctly |

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| Unit 2. Preparing your cluster  Duration: 30 minutes | |
| Overview | This unit explains how to prepare an OpenShift cluster before you install the IBM Cloud Pak for Watson AIOps. |
| Learning objectives | After completing this unit, you should be able to:   * Expose the OpenShift Container Platform registry * Install OpenShift Serverless * Install Strimzi * Create a namespace for Cloud Pak for Watson AIOps * Create a docker-registry secret * Configure the default OpenShift ingress controller * Create a network policy for the Watson AIOps CatalogSource service |

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| Exercise 2. Preparing your cluster  Duration: 1 hour | |
| Overview | This exercise covers the tasks you must complete before you can install IBM Cloud Pak for Watson AIOps. |
| Learning objectives | After completing this exercise, you should be able to:   * Expose the OpenShift Container Platform registry * Install OpenShift Serverless * Install Strimzi * Create a namespace for Cloud Pak for Watson AIOps * Create a docker-registry secret * Configure the default OpenShift ingress controller * Create a network policy for the Watson AIOps CatalogSource service |

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| Unit 3. Installing IBM Cloud Pak for Watson AIOps  Duration: 45 minutes | |
| Overview | This unit teaches you how to install the IBM Cloud Pak for Watson AIOps. |
| Learning objectives | After completing this unit, you should be able to:   * Add the IBM Cloud Pak for Watson AIOps catalog sources * Install the Cloud Pak for Watson AIOps operators * Deploy the Cloud Pak for Watson AIOps * Verify your installation * Install the Event Manager Gateway * Tune the Cassandra database |

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| Exercise 3. Installing IBM Cloud Pak for Watson AIOps  Duration: 4 hours | |
| Overview | This exercise covers the tasks you must complete to install the IBM Cloud Pak for Watson AIOps. |
| Learning objectives | After completing this exercise, you should be able to:   * Add the IBM Cloud Pak for Watson AIOps catalog sources * Install the Cloud Pak for Watson AIOps operators * Deploy the Cloud Pak for Watson AIOps * Verify your installation * Install the Event Manager Gateway * Tune the Cassandra database |

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| Unit 4. Integrating with LDAP  Duration: 30 minutes | |
| Overview | This unit teaches you how to you how to integrate the AIOps console with an LDAP user repository. |
| Learning objectives | After completing this unit, you should be able to:   * Add LDAP users and groups * View the details of your LDAP server configuration * Integrate the AIOps console with the Event Manager LDAP server * Create custom roles in the AIOps console |

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| Exercise 4. Integrating with LDAP  Duration: 1 hour | |
| Overview | This exercise covers the tasks you must complete to integrate the AIOps console with an LDAP user repository. |
| Learning objectives | After completing this exercise, you should be able to:   * Add LDAP users and groups * View the details of your LDAP server configuration * Integrate the AIOps console with the Event Manager LDAP server * Create custom roles in the AIOps console |

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| Unit 5. Troubleshooting  Duration: 45 minutes | |
| Overview | This unit describes general troubleshooting techniques for applications running in Red Hat OpenShift Container Platform. |
| Learning objectives | After completing this unit, you should be able to:   * Find container logs * Connect directly to a running container * Read resource events * View node logs * Find node resource utilization * Use a debug pod to connect to a node * Find the OpenShift cluster version * Gather data for support |

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| Exercise 5. Troubleshooting  Duration: 45 minutes | |
| Overview | This exercise covers general troubleshooting techniques applications running in Red Hat OpenShift Container Platform. |
| Learning objectives | After completing this exercise, you should be able to:   * Find container logs * Connect directly to a running container * Read resource events * View node logs * Find node resource utilization * Use a debug pod to connect to a node * Find the OpenShift cluster version * Gather data for support |

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| Unit 6. Self-monitoring  Duration: 45 minutes | |
| Overview | This unit teaches you how to use the self-monitoring features in the IBM Cloud Pak for Watson AIOps. |
| Learning objectives | After completing this unit, you should be able to:   * Understand the self-monitoring features of the Event ObjectServer * Configure the Event Manager event list to show self-monitoring events * Describe the self-monitoring capabilities of Impact * Configure and run the Impact self-monitoring service * Discover the resources in your IBM Cloud Pak for Watson AIOps environment with the topology service * Display runbook history and results |

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| Exercise 6. Self-monitoring  Duration: 1 hour | |
| Overview | This exercise shows you how to configure the self-monitoring features of the IBM Cloud Pak for Watson AIOps Event Manager component. |
| Learning objectives | After completing this exercise, you should be able to:   * Understand the self-monitoring features of the Event Manager ObjectServer * Configure the Event Manager event list to show self-monitoring events * Describe the self-monitoring capabilities of Impact * Configure and run the Impact self-monitoring service * Discover the resources in your IBM Cloud Pak for Watson AIOps environment with the topology service * Display runbook history and results |

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| Unit 7. Uninstalling IBM Cloud Pak for Watson AIOps  Duration: 30 minutes | |
| Overview | This unit describes how to completely remove the IBM Cloud Pak for Watson AIOps from your OpenShift cluster. |
| Learning objectives | After completing this unit, you should be able to:   * Delete the Event Manager Gateway * Use a script to Uninstall IBM Cloud Pak for Watson AIOps * Remove all prerequisite software |

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| Exercise 7. Uninstalling IBM Cloud Pak for Watson AIOps  Duration: 45 minutes | |
| Overview | This exercise covers the tasks required to completely remove the IBM Cloud Pak for Watson AIOps from your OpenShift cluster. |
| Learning objectives | After completing this exercise, you should be able to:   * Delete the Event Manager Gateway * Use a script to Uninstall IBM Cloud Pak for Watson AIOps * Remove all prerequisite software |

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| Unit 8. Summary  Duration: 10 minutes | |
| Overview | This unit summarizes what you have learned, and directs you to other resources to help you continue learning. |
| Learning objectives | After completing this unit, you should be able to:   * Explain how the course met its learning objectives * Identify IBM credentials that are related to this course * Locate resources for further study and skill development |

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

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