Configuring IBM Cloud Pak for Watson AIOps Event Manager

TN412 (Classroom)

ZN412 (Self-paced)

Course description

The Event Manager component of IBM Cloud Pak for Watson AIOps is a carrier-class service assurance system. It collects and consolidates events and alarms from a wide variety of IT environments in real time. These include servers, mainframes, Windows systems, applications, circuit switches, voice switches, IP routers, SNMP devices, network management applications, existing management systems and frameworks, among many others.

IBM Cloud Pak for Watson AIOps Event Manager also adds intelligence to your events, allowing you to cast a wide net to ingest relevant data from any source, process it in an intelligent, automated way, analyze the data, see which applications or parts of the infrastructure are impacted, share it and even suggest guided steps to mitigate or resolve issues automatically.

One key benefit of Event Manager's machine learning features is a reduction in the number of events. By detecting, correlating, grouping, and suppressing the "noise" that IT systems generate, your operators can focus their attention on key events that represent actual problems.

This 2-day course teaches you how to configure IBM Cloud Pak for Watson AIOps Event Manager for productive use. Through hands-on lab activities, you learn how to configure a new installation of Event Manager to:

* Connect to event sources and enrich incoming events
* Apply machine learning to find relationships among events
* Add topology data to identify groups of connected resources and calculate root cause
* Create automated fixes for known problems and match them to incoming problem events

You also get hands-on practice with other common configuration tasks, such as user management and database customization. This course focuses on IBM Cloud Pak for Watson AIOps Event Manager running on the Red Hat OpenShift Container Platform.

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 Watson AIOps - Event Manager 1.6.4

Audience

This course is intended for administrators of IBM Cloud Pak for Watson AIOps Event Manager.

Learning objectives

After completing this course, you should be able to:

* Describe the event management capabilities of the IBM Cloud Pak for Watson AIOps
* Connect Event Manager to incoming data sources
* Work with Temporal and seasonal event analytics
* Configure the Event Manager topology service
* Create scope-based groups
* Create runbooks and map them to incoming events
* Work with triggers
* Manage users

Prerequisites

* Experience with Linux
* Basic SQL knowledge
* Working knowledge of Kubernetes
* Experience with Red Hat OpenShift Container platform (RHOCP)
* Experience with IBM Cloud Pak for Watson AIOps Event Manager is helpful, but not required

Duration

2 days

Skill level

Advanced

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 is a new course.

Course agenda

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| Course introductionDuration: 15 minutes |

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| Unit 1. OverviewDuration: 45 minutes |
| Overview | This unit introduces you to key concepts and terminology about IBM Cloud Pak for Watson AIOps Event Manager. You also learn about your lab environment. |
| Learning objectives | After completing this unit, you should be able to:* Describe event management
* Understand the unique benefits of IBM Cloud Pak for Watson AIOps
* Learn about your lab environment
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| Exercise 1. OverviewDuration: 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. You also learn how to log in to each one of the Event Manager user interfaces. |
| Learning objectives | After completing this exercise, you should be able to:* Verify that your Red Hat OpenShift cluster is ready
* Verify that the IBM Cloud Pak for Watson AIOps is running correctly
* Log in to the Event Manager user interfaces
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| Unit 2. Incoming integrationsDuration: 45 minutes |
| Overview | This unit describes two ways to connect Event Manager to data sources: probes and webhooks. |
| Learning objectives | After completing this unit, you should be able to:* Understand how probes collect and process data
* Learn how to connect an on-premises probe to cloud-based Event Manager
* Describe how to use probes to enrich events
* Learn how to send events using an inbound webhook
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| Exercise 2. Incoming integrationsDuration: 1 hour |
| Overview | There are several ways you can connect event sources to Event Manager. This exercise focuses on two methods: probes and inbound webhooks. In this exercise, you learn how to connect a probe running outside of your Red Hat OpenShift cluster to Event Manager, which is running inside of your cluster. You then create a custom webhook with no predefined mapping, so you learn both how to create a webhook and how to map key fields in an incoming HTTP request. |
| Learning objectives | After completing this exercise, you should be able to:* Connect an on-premises probe to Event Manager running in Red Hat OpenShift
* Enrich events with business information with a probe
* Create a custom webhook for incoming events
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| Unit 3. Temporal and seasonal event analyticsDuration: 45 minutes |
| Overview | This unit shows you how to configure and use the event analytics features included with Event Manager to reduce the number of actionable events. |
| Learning objectives | After completing this unit, you should be able to:* Understand temporal relationships among events
* Understand event seasonality
* Learn how to configure and train temporal and seasonal event analytics
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| Exercise 3. Temporal and seasonal event analyticsDuration: 1 hour |
| Overview | This exercise shows you how to achieve event reduction and save time for your IT troubleshooters using Event Manager’s temporal and seasonal event analytics. |
| Learning objectives | After completing this exercise, you should be able to:* Manually run Event Manager event analytics training
* View events that have been grouped together based on a temporal relationship
* View seasonal events
* Archive unwanted analytics policies
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| Unit 4. TopologyDuration: 45 minutes |
| Overview | This unit teaches you how to add topology data to Event Manager. You then learn how to group different segments of a topology together to further reduce events and calculate root cause. |
| Learning objectives | After completing this unit, you should be able to:* Understand where topology data comes from
* Learn how to create topology groups
* Describe topology rules
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| Exercise 4. TopologyDuration: 1 hour |
| Overview | This exercise teaches you how to work with Event Manager’s topology service. |
| Learning objectives | After completing this exercise, you should be able to:* Use the file observer to load topology data
* Create three types of group templates: exact, tag based, and dynamic
* Add a topology right-click tool to launch a topology map from an event
* Use the topology dashboard
* Create a merge rule to combine topologies from different observers
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| Unit 5. Scope-based groupsDuration: 45 minutes |
| Overview | This unit shows you how to configure another event reduction technique: scope-based groups. You also see how groups can be combined into super groups, to achieve even greater event reduction. |
| Learning objectives | After completing this unit, you should be able to:* Learn about scope-based groups
* Understand super groups
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| Exercise 5. Scope-based groupsDuration: 1 hour |
| Overview | In this exercise, you learn how to create scope-based grouping policies. You then learn how to combine multiple groups of events into super groups. |
| Learning objectives | After completing this exercise, you should be able to:* Configure a scope-based group policy
* Combine a scope-based group with a topology group to form a super group
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| Unit 6. RunbooksDuration: 45 minutes |
| Overview | This unit shows you how to work with runbooks, which operators use to fix incoming problems. These runbooks can be automated, so that the fix can be run at the push of a button; or configured to run without any human interaction at all. |
| Learning objectives | After completing this unit, you should be able to:* Learn how to create runbooks
* Learn how to match runbooks to incoming events
* Examine runbook history
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| Exercise 6. RunbooksDuration: 1 hour |
| Overview | Runbooks are guided steps that your IT operations team uses to troubleshoot and resolve problems. This exercise teaches you how to create and use runbooks, as well as automatically match runbooks to incoming events. |
| Learning objectives | After completing this exercise, you should be able to:* Create a connection from the runbook service to a target system
* Create automations
* Create, test, and use runbooks
* Use triggers to map runbooks to incoming events
* View runbook history
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| Unit 7. TriggersDuration: 1 hour |
| Overview | Triggers are an automated way to alter data, including event data, in the central Event Manager database. This unit teaches you how to create and use triggers. |
| Learning objectives | After completing this unit, you should be able to:* Learn to interact with Event Manager using an SQL interface
* Understand how triggers change events in the Event Manager database
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| Exercise 7. TriggersDuration: 1 hour |
| Overview | Triggers are a feature of the Event Manager ObjectServer database. They can change event data and run actions automatically when certain conditions exist in the ObjectServer. Triggers, which are also called automations, are built using SQL statements. In this exercise, you practice using SQL statements to interact with your ObjectServer. You then create and test a trigger. |
| Learning objectives | After completing this exercise, you should be able to:* Interact with the Event Manager ObjectServer using an SQL interface
* Create and test a temporal trigger
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| Unit 8. User managementDuration: 45 minutes |
| Overview | This unit discusses how to manage user access to the Event Manager user interfaces. |
| Learning objectives | After completing this unit, you should be able to:* Learn how to add users and groups
* Understand roles
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| Exercise 8. User managementDuration: 45 minutes |
| Overview | This exercise shows you how to add users and groups to Event Manager. |
| Learning objectives | After completing this exercise, you should be able to:* Create users and groups in LDAP
* Add roles to LDAP groups
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| Unit 9. SummaryDuration: 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
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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