Course Code: ZN202GS

Course Title: Advanced Administering Environments with IBM Instana Observability

Description:

In this course, you learn more about the basic architecture of IBM Instana and how to install various kinds of host agents in different modes. In addition, you learn how to optionally pin an agent to a specific version in case that is ever needed. You learn how to install agents on various platforms, such as a Docker, directly to the host, YAML, Operator, and Helm chart. This course also describes how to configure and instrument a website for End User Monitoring (EUM) along with a discussion about how to review website monitoring page metrics. You learn how to use the Web REST API to perform IBM Instana functions programmatically. And, since Instana is only capable of producing dashboards for a single Instana instance at a time, this course shows you how to integrate Grafana with one or more Instana instances to produce federated dashboards.

Objectives:

- Review IBM Observability by Instana and basic architecture
- Describe various host agent configuration and installation options and platforms
- Describe version pinning
- Install and configure Infrastructure-only mode host agents as Docker containers
- Install and configure direct-to-host Infrastructure-only mode host agent
- Add custom availability zone label
- Install and configure a direct-to-host agent for a Linux-based Db2 server
- Perform post-installation configuration, such as availability zone, full monitoring, and custom tags
- Configure and deploy various kinds of Kubernetes based agents, including YAML, Operator, and Helm chart
- Describe how to remove any of the types of agents installed
- Describe the architecture of Instana Website Monitoring and instrument your websites with the Tracking Script
- View website page metrics and dashboards and analyze page metrics
- Use the Web REST API to perform Instana functions programmatically
- Create API Tokens and set token permissions
- Use the Instana OpenAPI documentation to locate API endpoints
- Configure Instana for compatibility with Grafana and configure Grafana to be able to fetch metrics from Instana as a data source
- Create Grafana dashboards of Instana metrics

Exercises

- Exercise 1. Lab environment overview
- Exercise 2. Installing a Docker Infrastructure agent on the Instana host
- Exercise 3. Installing an Infrastructure agent directly on the Instana host
- Exercise 4. Instana Db2 Agent Installation
- Exercise 5. Installing host Agents in Kubernetes
- Exercise 6. Website Monitoring
- Exercise 7. Web REST API
- Exercise 8. Grafana dashboards

Prerequisites:

- Attended the *TN201 Administering Environments with IBM Instana* course or knowledge or experience with basic Instana architecture, using the Infrastructure view and Instana dashboards, an understanding of services and endpoints along with tracing and analytics features. Users, groups, dashboards, and alert channels are used in the Web REST API lab, so it is good to have a basic understanding of those topics.
- Fundamental understanding of distributed applications.
- Knowledge of Linux a plus

Duration:

16 Hrs

Topics:

- Course introduction
- Unit 1. Review: IBM Instana Observability
- Exercise 1. Lab environment overview
- Unit 2. Installing host agents
- Exercise 2. Installing a Docker Infrastructure agent on the Instana host
- Unit 3. Installing an Infrastructure agent directly on the Instana host
- Exercise 3. Installing an Infrastructure agent directly on the Instana host
- Unit 4. Instana Db2 agent installation
- Exercise 4. Instana Db2 Agent Installation
- Unit 5. Installing host agents in Kubernetes
- Exercise 5. Installing host Agents in Kubernetes
- Unit 6. Website monitoring
- Exercise 6. Website Monitoring
- Unit 7. Web REST API
- Exercise 7. Web REST API
- Unit 8. Grafana integrations
- Exercise 8. Grafana dashboards
- Course summary

Audience:

This course is designed for those who need to know how to install agents, configure website monitoring, integrating with IBM Instana programmatically, and how to use Grafana to create federated dashboards of Instana data.