

# Kubernetes Monitoring with Splunk Observability Cloud

## Course Description:

This course is for SREs and DevOps professionals.

In this course, you will learn to monitor and troubleshoot your Kubernetes clusters with the tools available in the Splunk Observability Cloud. Topics include using the Kubernetes Navigators, built-in dashboards, and AutoDetect to monitor the health of your cluster. Create custom dashboards and detectors to monitor and diagnose common Kubernetes trouble conditions.

This lab-oriented class uses discussions and hands-on activities designed to teach best practices and techniques to monitor and troubleshoot Kubernetes clusters. All hands-on labs are performed in the Observability Cloud User Interface.

## Course Duration:

1 Day

## Prerequisites:

To be successful, students must have completed these Splunk Education course(s) or have equivalent working knowledge:

- Splunk Infrastructure Monitoring Fundamentals (ILT)
- Introduction to Splunk IM (eLearning)
- Basic knowledge of Kubernetes

Additional courses and/or knowledge in these areas are also highly recommended:

- Experience managing a Kubernetes cluster and using it in a production environment

## Course Outlines:

### Module 1 – Exploring Kubernetes Clusters with Splunk Observability Cloud

- Identify common scenarios for monitoring Kubernetes
- Use Kubernetes Navigators to view cluster data
- Describe the Kubernetes resources tracked in Splunk Observability
- Use Kubernetes Dashboards to view cluster data

### Module 2 – The Kubernetes Integration

- Explain the value and purpose of the OpenTelemetry project
- Install the Splunk OpenTelemetry Collector using the install wizard
- Describe how the Observability Cloud Collects Kubernetes data
- Identify the components of the Splunk Kubernetes integration

### Module 3 – Monitoring Kubernetes with Built-in Content

- Use the Kubernetes Navigators to investigate problems with nodes, pods, and containers
- Use the Kubernetes Analyzer to pinpoint the root of some problems
- Use built-in Kubernetes Dashboards to investigate and troubleshoot
- Use AutoDetect to investigate and troubleshoot

### Module 4 – Monitoring Kubernetes with Custom Dashboards and Detectors

- Identify and research metrics used to monitor Kubernetes
- Create custom charts and dashboards to monitor Kubernetes
- Create custom detectors to monitor Kubernetes metrics

### Target Audience:

- SREs
- DevOps Engineers