



Kubernetes Monitoring with Splunk

This 1-virtual day course is targeted to Site Reliability Engineers / DevOps Engineers / Application Developers who deploy to and manage Kubernetes clusters. This course teaches the skills you need to monitor and troubleshoot your Kubernetes infrastructure with Splunk. You will learn to track and alert on the status of your installation using built-in tools focused on Kubernetes to introspect clusters from multiple perspectives and identify potential trouble indicators. Through in-person discussions and hands-on activities learn multiple ways you can view and automate the monitoring of your clusters and running jobs.

All concepts are taught through discussions and hands-on lab exercises.

Course Topics

- Splunk for Kubernetes overview & terminology
- Kubernetes tools in Splunk
- How we monitor Kubernetes
- Viewing the details of a Kubernetes installation
- Dashboard Group for Kubernetes
- Automate monitoring with Detectors & Alerts

Course Prerequisites

Required: At least one of the following:

- Infrastructure Monitoring with SignalFx
- SignalFx Fundamentals

Class Format

Instructor-led lecture with hands-on activities.
Delivered via virtual classroom.

Course Modules

Module 1: Course Overview

- Kubernetes Review & Terminology
- Monitoring & metrics review
- Splunk tools for Kubernetes

Module 2: Kubernetes Tools in Splunk

- Three ways to inspect a Kubernetes cluster:
 - Navigator
 - Infrastructure Monitoring Tools
 - Built-in Kubernetes Dashboards
- Hands-on exploration using these tools

Module 3: How we monitor Kubernetes

- How the Smart Agent collects Kubernetes metrics
- Review: About Metrics, Metric Time Series, Properties
- Metrics used to monitor Kubernetes
- Using the Metrics Catalog to explore metrics

Module 4: Viewing the details of a Kubernetes installation

- Viewing a graphical map of your Kubernetes installation
- Multiple ways to view the status of Kubernetes resources
- Viewing Kubernetes events
- Using the Cluster Analyzer to pinpoint the source of trouble
- Creating charts of outlier values and correlations

Module 5: Dashboard Group for Kubernetes

- Monitoring Kubernetes with the built-in dashboards
- Investigate a problem with dashboards
- Comparison of dashboards vs other Kubernetes tools
- Viewing cluster services
- Create a custom chart

Module 6: Automate monitoring with Detectors & Alerts

- How detectors are used to monitor a metric
- Common detectors used in monitoring Kubernetes
- Create a detector using multiple methods.
- Forwarding Kubernetes resource events into Splunk

Appendix 1: Configuring the Kubernetes Integration

- The role of the Smart Agent in monitoring Kubernetes
- Install a Smart Agent on a cluster using multiple methods
- Configure a Smart Agent
- Add monitored apps/services to a cluster

About Splunk Education

Splunk classes are designed for specific roles such as Splunk Administrator, Developer, User, Knowledge Manager, or Architect.

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To contact us, email education_AMER@splunk.com

About Splunk

Splunk is software that indexes, manages and enables you to search data from any application, server or network device in real time.

Visit our website at www.splunk.com to download your own free copy.

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