CN320: Advanced Kubernetes Operations

Course Content

Course Description:

In this course, operations staff will learn many of the tools and patterns needed to run a Kubernetes cluster in production. This course is targeted at advanced Kubernetes users tasked with operational responsibilities such as logging, monitoring, alerting, continuous and progressive continuous deployments, as well as cluster bootstrapping, maintenance, backups and disaster recovery. Advanced Kubernetes Operations is a pattern driven course, exploring the powerful patterns of Kubernetes Operators and gitops which can be used across a wide variety of toolchains.

At Course Completion:

Students will be able to:
- Set up HA Kubernetes with Kubespray
- Secure the software supply chain with an image registry
- Deploy and manage Kubernetes apps with Helm
- Instrument Kubernetes apps and clusters with Prometheus, Kibana, Alertmanager, Grafana and Fluentd
- Continuous deployment with Istio and Flux
- Cluster backup, upgrade and disaster recovery with Velero and Kubespray

Target Student:

Infrastructure/Deployment Engineers and Cloud Architects seeking to deploy & manage a production grade Kubernetes cluster.