Advanced Kubernetes Security (2 Days)

Advanced Kubernetes Security course focuses on developing the skills and knowledge needed for implementing security measures from code to a production Kubernetes cluster. Students will engage in topics pertaining to adding security mechanisms along the code deployment pipeline and reviewing and remediating security concerns within a Kubernetes infrastructure. Topics include declarative configuration analysis, container image scanning, CIS benchmark scanning and remediation, and identifying and mitigating attack vectors within Kubernetes. Kubernetes Operations and System Integration teams will benefit greatly as they work towards creating a security posture that aligns with security policies for their Kubernetes environments.

At the end of this course, you will have the knowledge and skills that will aid in passing the CKS: Certified Kubernetes Security exam.

Skills Gained

- Kubernetes Threat Model and Security Maturity
- System Hardening
- Overview of Cluster Security objects
- Cluster Hardening
- Minimizing Microservice Vulnerabilities
- Securing the Container Supply Chain
- Monitoring, Logging and Runtime Security

Who Can Benefit

This course is targeted at students with the following:

- Motivations: Responsibility for implementing security mechanisms along the code deployment pipeline and within the Kubernetes environment; Running and reporting on security state of the Kubernetes environment

- Roles: Infrastructure and Integration engineers tasked with implementing, running, and reporting on security posture of Kubernetes environment; Developers who are tasked with scanning and remediating security issues within application coding; IT professionals looking to expand their skills in Kubernetes security.

Prerequisites

- Familiarity with the bash shell
- Filesystem navigation and manipulation
- Command line text editors like vim or nano
- Common tooling like curl, wget and ping
- **CN220 – Kubernetes Operations** (or equivalent) experience or have earned the Certified Kubernetes Administrator (CKA) certification

Course Details

Lab Requirements

- Laptop with WiFi connectivity
- Attendees should have the latest Chrome or Firefox installed, and a free account at **strigo.io** .