HLM-101: Helm Intro

Course Length: 1 day

Course Description: This course deals with Helm, the Kubernetes Package Manager.

Structure: 50% theory 50% hands on lab exercises

Prerequisites: Proficiency with the Linux CLI. A broad understanding of Linux system administration.

Detailed Course Outline

Module 1: Introduction to Helm

- What is Helm?
- Helm concepts
- Helm v2 (legacy) components
- Helm v3 components
- Installing Helm
- Helm Lab: Installing Helm

Module 2: Using Helm

- Generic options and help
- Working with repositories
- Finding charts
- Installing a release
- List releases
- Upgrade/rollback releases
- Uninstalling releases
- Helm Lab: Using Helm

Module 3: Helm charts

- Introduction to charts
- The structure The Chart.yaml File
- The components of a Chart
- Chart dependencies
- Chart dependencies (cont.)
- Managing Charts with helm
- Helm Lab: Working with charts

Module 4: Chart Templates

- Writing Templates Templates and Values
- Dependencies and values Dependencies and values
- Chart lifecycle hooks Functions and pipelines
- Flow control
- Variables
- Named templates
- Helm Lab: Writing templates

Module 5: Helm plugins

- Building plugins
- Helm Lab: Helm plugins