

Introduction to Azure Kubernetes Service

Developer Day

Focus Area: Azure Kubernetes Service

Duration: 1 day

Difficulty: 100- Beginner

Overview

Introduction to Azure Kubernetes Service is a one-day immersive course with a blend of instructor led training sessions and exercises in a lab environment.

This workshop takes the hands-on approach to cover deploying applications to Azure Kubernetes Service (AKS).

The hands-on labs will walk you through real-world examples to help you understand deploying applications to AKS, scaling deployments, scaling AKS and managing Ingress.

In addition, you will have a solid understanding using HELM package manager and Kubernetes Event Driven Architecture (KEDA)

Objectives

After completing this training, students will be able to:

- Meet today's and tomorrow's challenges by acquiring knowledge on Kubernetes and Azure Kubernetes Service.
- Deploying Application to AKS
- Understanding and managing HELM deployments
- Scaling Deployments and the AKS Cluster
- Implementing Event Driven Architecture in Kubernetes

Key Takeaways

Course Material

- Deploying applications to AKS using Yaml config files
- Manage application scaling using built-in metrics
- Understand Event Driven Architecture and manage application scale using external events like message queues
- Understanding AKS Ingress controllers and routing incoming traffic to application modules

Hands-on Labs

- Most of the concepts covered above will be supported by hands-on labs and demos.
- Attendees have access to resources and labs instructions after workshop completion.

Agenda

- Container Basics
- Intro to Kubernetes
- Intro to AKS
- Deploying Applications to AKS
- Helm
- **Lab:** Deploying an Application to AKS
- **Lab:** Application management with HELM
- Scaling in AKS
- **Lab:** Scalability on AKS using HPA
- **Lab:** Scaling AKS using KEDA
- Ingress Controllers
- **Lab:** Ingress Controllers

Plan for a full day.