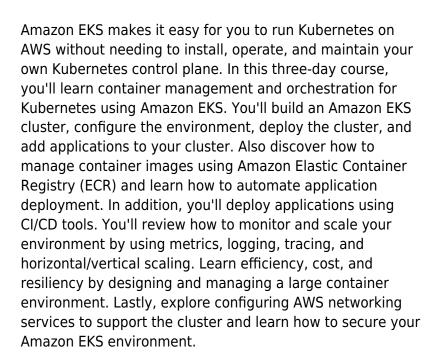
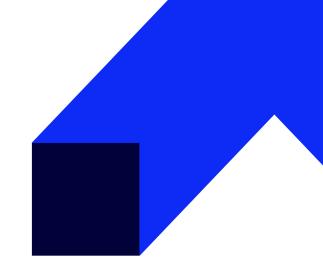


kod szkolenia: AWS-EKS / PL AA 3d

Running Containers on Amazon Elastic Kubernetes Service (Amazon EKS)







Przeznaczenie szkolenia

This course is intended for:

 Anyone who will provide container orchestration management in the AWS Cloud, including DevOps engineers and systems administrators



Korzyści wynikające z ukończenia szkolenia

In this course, you will:

• Review and examine containers, Kubernetes, and Amazon EKS fundamentals—and the impact of



containers on workflows

- Build an Amazon EKS cluster by selecting the correct compute resources to support worker nodes
- Secure your environment with AWS Identity and Access Management (IAM) authentication by creating an Amazon EKS service role for your cluster
- Deploy an application on the cluster, then publish container images to ECR and secure access via IAM policy
- And much more



Oczekiwane przygotowanie słuchaczy

We recommend that attendees of this course have:

- Completed Amazon Elastic Kubernetes Service (EKS) Primer
- Completed AWS Cloud Practitioner Essentials (or equivalent real-world experience)
- Basic Linux administration experience
- Basic network administration experience
- Basic knowledge of containers and microservices



Język szkolenia

Szkolenie: polskiMateriały: angielski



Czas trwania

3 dni / 21 godzin

Agenda szkolenia

Module 0: Course Introduction

• Course preparation activities and agenda

Module 1: Kubernetes Fundamentals

Container orchestration



- Kubernetes objects
- Kubernetes internals

Module 2: Amazon EKS Fundamentals

- Introduction to Amazon EKS
- Amazon EKS control plane
- Amazon EKS data plane
- Fundamentals of Amazon EKS security
- Amazon EKS API

Module 3: Building an Amazon EKS Cluster

- Configuring your environment
- Creating an Amazon EKS cluster
- Demo: Deploying a cluster
- Deploying worker nodes
- Demo: Completing a cluster configuration
- Preparing for Lab 1: Building an Amazon EKS Cluster

Module 4: Deploying Applications to Your Amazon EKS Cluster

- Configuring Amazon Elastic Container Registry (Amazon ECR)
- Demo: Configuring Amazon ECR
- Deploying applications with Helm
- Demo: Deploying applications with Helm
- Continuous deployment in Amazon EKS
- GitOps and Amazon EKS

Module 5: Configuring Observability in Amazon EKS

- Configuring observability in an Amazon EKS cluster
- Collecting metrics
- Using metrics for automatic scaling
- Managing logs
- Application tracing in Amazon EKS
- · Gaining and applying insight from observability
- Preparing for Lab 3: Monitoring Amazon EKS

Module 6: Balancing Efficiency, Resilience, and Cost Optimization in Amazon EKS

- The high level overview
- Designing for resilience
- Designing for cost optimization
- · Designing for efficiency

Module 7: Managing Networking in Amazon EKS

- Review: Networking in AWS
- Communicating in Amazon EKS
- Managing your IP space
- Deploying a service mesh
- Preparing for Lab 4: Exploring Amazon EKS Communication



Module 8: Managing Authentication and Authorization in Amazon EKS

- Understanding the AWS shared responsibility model
- Authentication and authorization
- Managing IAM and RBAC
- Demo: Customizing RBAC roles
- Managing pod permissions using RBAC service accounts

Module 9: Implementing Secure Workflows

- Securing cluster endpoint access
- Improving the security of your workflows
- Improving host and network security
- Managing secrets
- Preparing for Lab 5: Securing Amazon EKS

Module 10: Managing Upgrades in Amazon EKS

- Planning for an upgrade
- Upgrading your Kubernetes version
- Amazon EKS platform versions