

# Running Containers on Amazon Elastic Kubernetes Service (Amazon EKS) (RCAEKS)

**ID** RCAEKS **Price** CHF 2,390.—(excl. VAT) **Duration** 3 days

## Who should attend

This course is intended for:

- Those who will provide container orchestration management in the AWS Cloud including:
- DevOps engineers
- Systems administrators

## Prerequisites

We recommend that attendees of this course have:

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

## Course Objectives

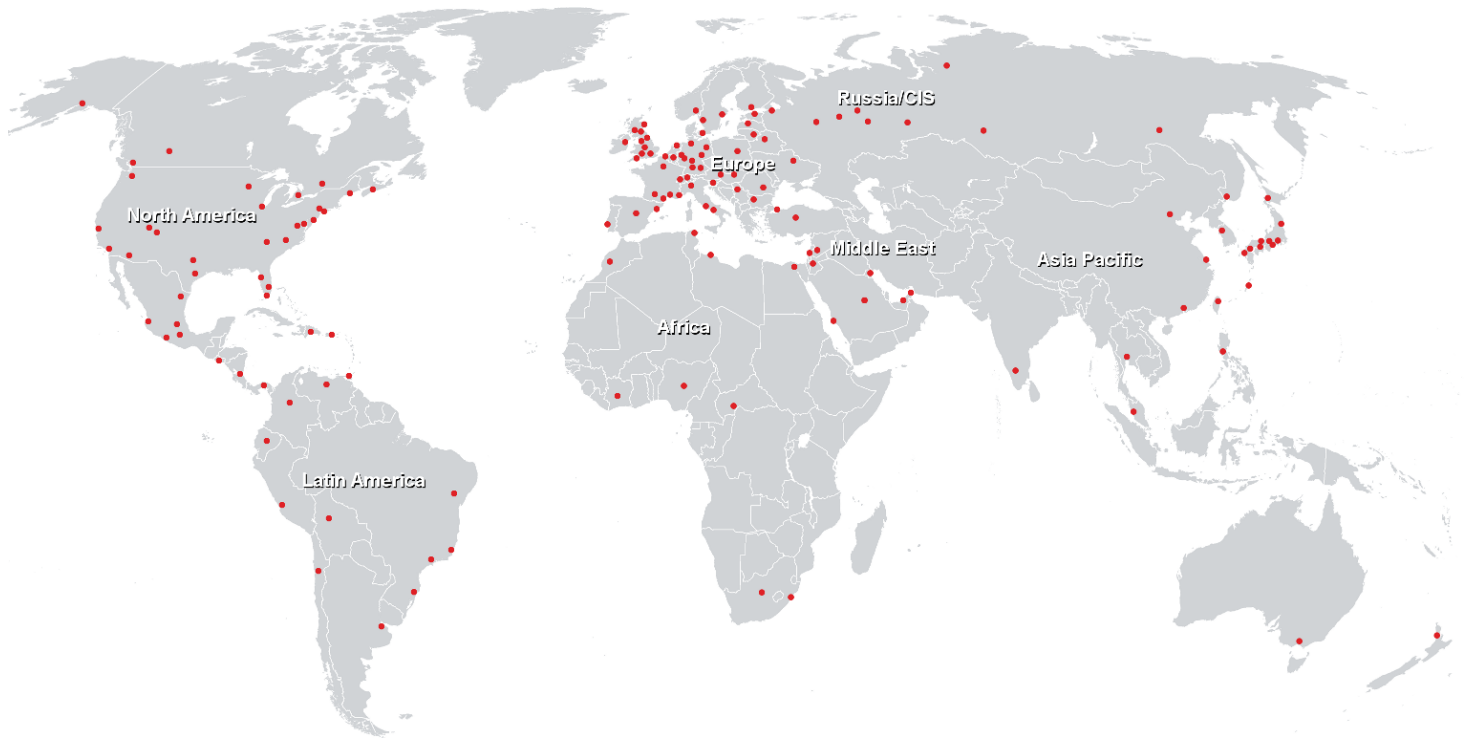
In this course, you will learn to:

- 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. Publish container images to ECR and secure access via IAM policy.
- Automate and deploy applications, examine automation tools and pipelines. Create a GitOps pipeline using WeaveFlux.
- Collect monitoring data through metrics, logs, tracing with AWS X-Ray and identify metrics for performance tuning. Review scenarios where bottlenecks require the best scaling approach using horizontal or vertical scaling.

- Assess the tradeoffs between efficiency, resiliency, and cost and impact for tuning one over the other. Describe and outline a holistic, iterative approach to optimizing your environment. Design for cost, efficiency, and resiliency.
- Configure the AWS networking services to support the cluster. Describe how EKS/Amazon Virtual Private Cloud (VPC) functions and simplifies inter-node communications. Describe the function of VPC Container Network Interface (CNI). Review the benefits of a service mesh.
- Upgrade your Kubernetes, Amazon EKS, and third party tools.

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## Training Centres worldwide



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