CS230

Deploying Production AWS ROSA Clusters: Creation, Configuration, and Application Integration with Exam

Course Description

Create and configure production-grade ROSA clusters as part of a larger AWS customer's footprint and then integrate applications on ROSA with AWS services while keeping a good security posture.

Deploying Production AWS ROSA Clusters: Creation, Configuration, and Application Integration (CS229) teaches how to configure ROSA clusters as part of pre-existing AWS environments and how to integrate ROSA with AWS services commonly used by IT operations teams, such as Amazon CloudWatch. This course also teaches how to integrate applications deployed on ROSA with AWS services in a way that cluster administrators and platform engineers retain control of credentials and roles required by applications to access AWS services instead of exposing those credentials to application developers.

The [Red Hat Certified Specialist in ROSA exam (EX229)](#) is included in this offering.

Recommended training

- [Take our free assessment](#) to gauge whether this offering is the best fit for your skills
- DO120 - Introduction to Red Hat OpenShift on AWS (ROSA) or equivalent experience: "I know how to create and access a public ROSA cluster"
- AWS administration at the level of either AWS Certified SysOps Administrator - Associate or AWS Certified Solutions Architect - Associate, or equivalent experience: "I know how to manage AWS infrastructure services"
- Basic knowledge of OpenShift from DO080 Technical Overview: "I know basic concepts of OpenShift and containers"

- It is recommended that learners also enroll in the [Red Hat Certified OpenShift Administration certification courses](#) in addition to taking CS220 and CS221

Course Outline

PrivateLink Red Hat OpenShift on AWS (ROSA) Clusters
Create a PrivateLink ROSA cluster with STS and enable developers or administrators to access the API and router endpoints of the cluster.

Node and Pod Autoscaling
Configure a ROSA cluster and a workload to dynamically scale the number of cluster nodes and application pods according to load.

Integrate ROSA Clusters with Amazon Web Services
Configure ROSA clusters to forward logs to Amazon CloudWatch for long-term storage, aggregation, and analysis, and to authenticate OpenShift users by using Amazon Cognito.

Deploy Applications From External Registries
Deploy applications on Red Hat OpenShift Service on AWS (ROSA) from private container image repositories in external centralized container image registries.

Provide Amazon Storage Volumes for Applications
Configure Amazon Elastic Block Storage (EBS) or Amazon Elastic File System (EFS) volumes that meet the cost, performance, and sharing requirements of their applications.

Configure Application Access to AWS Services
Configure applications for access to shared AWS services by using Kubernetes service accounts, and provision dedicated AWS services by using Kubernetes custom resources.

OpenShift and AWS Application Observability
Configure ROSA clusters to forward application logs to Amazon CloudWatch and application metrics to Amazon Managed Service for Prometheus.

Custom Domains for ROSA Applications
Expose applications to internet users with secure URLs by using human-readable DNS domains.