

Creating and Configuring Production ROSA Clusters (CS220)

Duration: 3 Days **Course Code: CS220**

Overview:

Course Description

Creating and Configuring Production ROSA Clusters (CS220) 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.

Note: This course is offered as a two day in person class, a three day virtual class or is self-paced. Durations may vary based on the delivery. For full course details, scheduling, and pricing, select your location then "get started" on the right hand menu.

Course Content Summary

- Create ROSA STS PrivateLink clusters
- Connect PrivateLink ROSA clusters to existing VPCs and enable administrators and developers to access those clusters
- Configure dedicated machine pools and node/pod autoscaling
- Configure node, cluster, and audit log forwarding to Amazon CloudWatch
- Configure authentication and group sync with Amazon Cognito

Target Audience:

- Platform Engineers, Cloud Administrators, System Administrators and other infrastructure-related IT roles who are responsible for providing and supporting infrastructure for applications deployed on AWS.
- Enterprise Architects, Site Reliability Engineers, DevOps Engineers, and other application-related IT roles who are responsible for designing infrastructure for applications deployed on AWS

Objectives:

Impact on the Organization

- Red Hat OpenShift Service on AWS (ROSA) is a turnkey application platform that provides a managed Red Hat OpenShift service that runs natively on Amazon Web Services (AWS) to enable organizations to increase operational efficiency, refocus on innovation, and quickly build, deploy, and scale applications. Red Hat OpenShift is the hybrid cloud platform that brings operational consistency to on-premise and different cloud environments.
- Organizations adopting ROSA are typically existing AWS customers with skills on using AWS services for a variety of business scenarios and need to integrate managed OpenShift clusters with their pre-existing AWS environments. These organizations are usually very security-conscious and require strong access controls and network security for all of their AWS services, including their ROSA clusters.

Impact on the Individual

- After completing CS220, students can create private ROSA clusters which are integrated with AWS infrastructure services typically employed by IT operations teams and ready to start onboarding applications and developers.

Prerequisites:

DO120

DO080

Follow-on-Courses:

For students who are new to Red Hat OpenShift, it is recommended that you learn the fundamental skills of managing Red Hat OpenShift clusters from the following courses:

- Red Hat OpenShift I: Containers & Kubernetes (DO180)
- Red Hat OpenShift Administration II: Operating a Production Kubernetes Cluster (DO280)
- Red Hat OpenShift Administration III: Scaling Kubernetes Deployments in the Enterprise (DO380)

Content:

Private 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.

Monitor ROSA Clusters with Amazon CloudWatch

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.

Additional Information:

Recommended training

- 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."

Technology considerations

- AWS environments are not currently provided for hands-on labs. Students must provide their own cloud accounts with sufficient AWS quotas and also be able to enable new services from the marketplace.
- Internet access is required to access AWS services by using the AWS console and the AWS CLI. It is also required to access the Red Hat Hybrid Cloud Console and associated Red Hat cloud services.
- Students must possess an active Red Hat customer portal account or a free Red Hat Developer program membership.

Further Information:

For More information, or to book your course, please call us on Head Office 01189 123456 / Northern Office 0113 242 5931

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