Training: SUSE
RAN201 Rancher Manager for Rancher Prime Operations

TRAINING GOALS:

This course is designed for system administrators responsible for deploying and administering multiple Kubernetes cluster distributions with Rancher Manager for Rancher Prime. It begins with an introduction to Rancher Manager and its architecture. Students will then learn how to access Rancher Manager using a web browser. During the course an existing RKE2 Kubernetes cluster will be registered and a new RKE cluster will be provisioned with Rancher Manager and Kubernetes cluster administrative activities will be introduced. It also covers Kubernetes cluster management and hosted Kubernetes providers' deployments in the public cloud.

This course prepares students for the SCA in Rancher Manager 2.7 and 2.8 for Rancher Prime exam.

Key Objectives

Attendees will be taught the following concepts and skills:

- An Introduction to Rancher Manager for Rancher Prime
- Cluster and Cluster Template Management with Rancher Manager
- User Management
- Application Management with Rancher Manager
- Multi-cluster Application Management with Continuous Delivery
- Logging and Monitoring
- Rancher Manager Extensions
- Security Scans and Policy Constraint Configuration
- Variety of Shell Based Actions with Rancher Manager
- Backing up and Restoring Downstream Clusters and Rancher Manager

Audience

This course is designed for system administrators and other persons responsible for provisioning and administering Kubernetes clusters with Rancher Manager for Rancher Prime.

CONSPECT:

- Section 1: Course Introduction
  - Understand the Course

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- Section 2: Introduction to Rancher Manager for Rancher Prime
  - Rancher Manager for Rancher Prime
  - What’s New in Rancher Manager v2.8
  - Rancher Manager Architecture
  - Access Rancher Manager
- Section 3: Cluster Management with Rancher Manager
  - Rancher Manager User Interface
  - Cluster and Node Agents
  - Import an Existing Kubernetes Cluster
  - Provision an RKE Cluster on Existing Nodes
  - Provision a K3s or RKE2 Cluster on Existing Nodes
- Section 4: User Management with Rancher Manager
  - User and Group Management
  - Roles
- Section 5: Cluster and Node Management with Rancher Manager
  - RKE Template Configuration
  - Node and Cluster Driver Management
  - Cloud Credentials Configuration
  - Infrastructure Provided Kubernetes Clusters
  - Hosted Kubernetes Clusters
- Section 6: Application Management with Rancher Manager
  - Projects and Namespaces
  - Workload Deployment
  - Application Repositories in Rancher Manager
  - Application Management with Helm
  - Quotas
- Section 7: Continuous Delivery with Rancher Manager
  - Project Fleet
  - Continuous Delivery
- Section 8: Logging and Monitoring with Rancher Manager
  - Deploy Monitoring Stack
  - Rancher Manager Logging
  - External Logging Services for Grafana
- Section 9: Rancher Manager Extensions
  - Introduction to Extensions
  - Manage Extensions

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- Section 10: Security Tools with Rancher Manager
  - Manage CIS Scans
  - Introduction to External Policy Engine and Container Security Products
- Section 11: CLI Access for Rancher Manager and Downstream Clusters
  - Access Cluster Nodes with ssh
  - Access a Downstream Clusters with kubectl
  - Rancher Manager API
  - Rancher Manager CLI
- Section 12: Backup and Restore with Rancher Manager
  - Backup Requirements with Rancher Manager
  - Downstream Cluster Snapshots
  - Upgrade Downstream Clusters
  - Restore Downstream Clusters
  - Backup and Restore Rancher Manager

REQUIREMENTS:

An understanding of Kubernetes objects and resources is needed for this course. This knowledge can be gained through the KUB201 Kubernetes Administration course. Linux command line experience is helpful.

Difficulty level



CERTIFICATE:

The participants will obtain certificates signed by SUSE.

TRAINER:

Certified SUSE Trainer

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