



## RAN201v2.7 Rancher Manager 2.7 for Rancher Prime Operations

- 5 days
- Lecture & Labs

### Course Overview




This three-day partner delivered course is designed for system administrators responsible for deploying and administering multiple Kubernetes cluster distributions with Rancher Server. The course begins with an introduction to Rancher Server and its architecture. Students will then learn how to access the Rancher Server's graphical user interface, including Rancher Cluster Manager as well as Rancher Cluster Explorer. In the course an existing Kubernetes cluster will be registered and a new RKE cluster will be provisioned with Rancher Server and then many Kubernetes cluster management for infrastructure and hosted Kubernetes provider's deployments in the public clouds. The course includes a presentation about the provisioning and administration capabilities of Rancher Server and extensive hands-on experience with lab exercises. This course prepares students for the SCA in SUSE Rancher 2.6 exam.











### What You'll Learn

- An introduction to Rancher Server
- Running Rancher
- Using the Rancher GUI
- Rancher manager
- Rancher cluster explorer
- Kubernetes clusters and their relation to Rancher server
- Cluster and Cluster Template Management with SUSE Rancher
- User Management
- Application Management with SUSE Rancher
- Multi-cluster Application Management with Continuous Delivery
- Logging and Monitoring
- Security Scans and Policy Constraint Configuration
- Variety of Shell Based Actions with SUSE Rancher
- Backing up and Restoring Downstream Clusters and SUSE Rancher
- Preparing for SUSE Rancher Exam
- AI LLM prompt engineering for relevant snippets and jump-starting solutions

### Outline

#### Course Introduction

-  Lecture + Lab: Start the Lab Environment
-  Lecture + Lab: Introduction to SUSE Rancher
  - Login to SUSE Rancher User Interface
  - Modify the SUSE Rancher Clusters Display Name
-  Lecture + Lab: Cluster Management with SUSE Rancher
  - Registering an Existing Kubernetes Cluster
  - Provision an RKE Cluster on an Existing Node
  - Clean-Up Cluster Node

-  Lecture + Lab: User Management with SUSE Rancher
  - Create a Local User
  - Configure External Authentication with OpenLDAP
  - Manage Roles and User Access
-  Lecture + Lab: Template Management with SUSE Rancher
  - Create an RKE Template
  - Provision a Cluster with an RKE Template
  - Inspect Node and Cluster Drivers
  - Optional – Add Cloud Credentials for AWS
  - Optional – Provision an Infrastructure Provided Cluster on EC2
  - Optional – Provision an EKS Cluster on Amazon AWS
-  Lecture + Lab: Application Management with SUSE Rancher
  - Manage Projects and Namespaces
  - Create a Workload
  - Install an App with Helm
  - Manage Quota Settings
-  Lecture + Lab: Continuous Delivery with SUSE Rancher
  - Configure Continuous Delivery
-  Lecture + Lab: Logging and Monitoring with SUSE Rancher
  - Deploy Monitoring Stack on a Downstream Cluster
  - Deploy Logging on a Downstream Cluster
  - Integrate an External Log Service with Grafana
-  Lecture + Lab: Rancher Manager Extensions
  - Configure Rancher Manager Extensions
-  Lecture + Lab: Security Tools with SUSE Rancher
  - Configure CIS Scanning
  - Configure OPA Gatekeeper
-  Lecture + Lab: SUSE Rancher Shell Access
  - Access a Container from SUSE Rancher
  - kubectl Access from SUSE Rancher GUI
  - kubectl Access from Bash Shell
  - Using the rancher CLI
-  Lecture + Lab: Backup and Restore With SUSE Rancher
  - Backup and Restore a Downstream RKE Cluster
  - Backup and Restore Rancher
-  Lecture + Lab: Study Guide