Szkolenie: SUSE

RAN201 SUSE Rancher Prime Deployment and Operations

Cel szkolenia:

This course provides a comprehensive introduction to SUSE Rancher Prime, covering its components, architecture, and deployment methods. It teaches students to perform essential Kubernetes cluster management and administration tasks using SUSE Rancher Prime, such as importing and provisioning clusters, managing users and roles, and handling application deployments. The course also covers more advanced topics like security utilities, backup and restore for both SUSE Rancher Prime and downstream clusters, and monitoring and logging.

This course helps prepare students for the SUSE Certified Administrator (SCA) in SUSE Rancher Prime certification.

Key Objectives

- Understand the components and architecture of SUSE Rancher Prime.
- Deploy and manage Kubernetes clusters across various environments.
- Perform key administrative tasks like user authentication, authorization, and role management.
- Manage applications using Helm and leverage the SUSE Application Collection.
- Implement continuous delivery pipelines with GitOps using Fleet.
- Configure monitoring, logging, and security for Kubernetes clusters.
- Perform backup, restore, and upgrade operations for both SUSE Rancher Prime and downstream clusters.

Audience

This course is aimed at administrators with responsibilities for deploying and managing SUSE Rancher Prime, importing and creating downstream clusters, managing authorization, deploying applications, and implementing security features for Kubernetes.

Plan szkolenia:

Compendium Centrum Edukacyjne Spółka z o.o.
ul. Tatarska 5, 30-103 Kraków, tel.: (12) 298 47 77
ul. Postępu 18B, 02-676 Warszawa, tel.: (22) 417 41 70
BNP Paribas Bank Polska S.A.
Oddział w Warszawie
Nr konta: PL 20 1600 1462 1853 6451 3000 0001

- Section 1: Course Introduction
- Section 2: Introduction to SUSE Rancher Prime
  - Introduction to SUSE Rancher
  - SUSE Rancher Packaging
  - Rancher Architecture
- Section 3: Deploying SUSE Rancher Prime
  - Requirements for SUSE Rancher Prime Deployment
  - SUSE Rancher Prime Deployment for Testing
  - Other SUSE Rancher Deployment Methods
- Section 4: SUSE Rancher Prime User Interface
  - Accessing the SUSE Rancher Prime User Interface
  - Navigating within the SUSE Rancher Prime User Interface
  - SUSE Rancher Prime User Interface Branding
- Section 5: Downstream Cluster Management
  - Node and Cluster Agents
  - Importing an Existing Kubernetes Cluster
  - Provisioning a Cluster on Existing Nodes
  - Node and Cluster Drivers
  - Cluster Provisioning to the Cloud
  - Cluster API
- Section 6: User Authentication and Authorization
  - User and Group Management
  - Controlling Authorization with Roles
- Section 7: Application Management
  - Projects and Namespaces
  - Workload Deployment
  - Application Management with Helm
  - SUSE Application Collection
  - Quotas
- Section 8: Continuous Delivery with SUSE Rancher Prime
  - Project Fleet
  - Continuous Delivery
- Section 9: Monitoring and Logging
  - Monitoring a Downstream Cluster
  - Logging on a Downstream Cluster
  - External Log Output

Compendium Centrum Edukacyjne Spółka z o.o.
ul. Tatarska 5, 30-103 Kraków, tel.: (12) 298 47 77
ul. Postępu 18B, 02-676 Warszawa, tel.: (22) 417 41 70
BNP Paribas Bank Polska S.A.
Oddział w Warszawie
Nr konta: PL 20 1600 1462 1853 6451 3000 0001

- Introduction to SUSE Observability
- Section 10: SUSE Rancher Prime UI Extensions
  - Introduction to Extensions
  - Managing Extensions
- Section 11: Security with SUSE Rancher Prime
  - Security Scanning
  - Securing Clusters with SUSE Admission Policy Manager
  - Container Security and Vulnerability Scanning with SUSE Security
- Section 12: Command Line Access with SUSE Rancher Prime
  - Command-Line Access to Rancher and Downstream Clusters
  - Using kubectl for Rancher-Managed Downstream Clusters
  - Rancher API
- Section 13: Backup and Restore with SUSE Rancher Prime
  - Backups in Rancher Environments
  - Downstream Cluster Snapshots
  - Upgrading Downstream Clusters
  - Restoring Downstream Clusters
  - Backing up and Restoring SUSE Rancher Prime
  - SUSE Rancher Prime Migration
- Section 14: Upgrading SUSE Rancher Prime

Wymagania:

A basic understanding of Linux terminal shell and Kubernetes is beneficial. Participants should have an intermediate understanding of Kubernetes and be familiar with YAML manifest file syntax

Poziom trudności



Certyfikaty:

The participants will obtain certificates signed by SUSE (course completion). This course helps prepare students for the SUSE Certified Administrator (SCA) in SUSE Rancher Prime certification.

Prowadzący:

Certified SUSE Trainer

Compendium Centrum Edukacyjne Spółka z o.o.
ul. Tatarska 5, 30-103 Kraków, tel.: (12) 298 47 77
ul. Postępu 18B, 02-676 Warszawa, tel.: (22) 417 41 70
BNP Paribas Bank Polska S.A.
Oddział w Warszawie
Nr konta: PL 20 1600 1462 1853 6451 3000 0001