

Szkozenie: HPE
HPE Serviceguard on Linux



Cel szkolenia:

This course is designed for experienced Linux® system and network administrators implementing HPE Serviceguard A.12.00. Topics include the basic requirements of a highly available system and progress through to the configuration of a Serviceguard cluster/packages, culminating in using both NFS and Oracle 11gR2 toolkit packages along with using the cluster simulator and analytics utilities. The course is 50 percent lecture and 50 percent hands-on labs using RHEL 6.4.

At the conclusion of this course, you should be able to:

- Configure, implement, and manage an HPE SG cluster and packages
- Install HPE Serviceguard A.12.00 and Serviceguard Manager
- Use “cmeasyinstall”
- Utilize basic troubleshooting techniques
- Install and configure NFS and Oracle packages using the toolkits
- Use Live Application Detach and “rolling upgrade”
- Configure generic resources
- Use the SG simulator and SG cluster analytics

Audience:

Linux system and network administrators who currently, or soon will, develop, design, implement, and monitor Serviceguard (SG) clusters on Linux.

Plan szkolenia:

- Module 1: Introduction to High Availability
 - What is high availability and reducing the risk
 - Storage technologies and HA network design
- Module 2: High Availability with Serviceguard (SG)
 - SG features and benefits and SG packages
 - Minimizing planned downtime
 - Installing prerequisite software
 - Serviceguard Manager

- Module 3: Storage for Serviceguard
 - Volume management
 - Persistent reservation overview
 - Review of LVM and VxVM concepts
 - Configure a shared LVM volume and VxVM data group
 - Using hosttags
- Module 4: Cluster Concepts and Configuration
 - Describe the difference between heartbeat, stationary, and standby LAN interfaces
 - Configure active/standby LAN interfaces using channel bonding
 - Cluster arbitration using a LockLUN and Quorum server
 - Steps to configure a Serviceguard cluster
 - View the status of the cluster and log file
- Module 5: Additional Cluster Features
 - Test the local LAN failover
 - Node failures and cluster reformation
 - Node joining and leaving a cluster
 - Basic cluster management
- Module 6: Packages and Services
 - Configure a basic Serviceguard package
 - The package configuration file
 - Package and node switching management
 - Interpret package status from cmviewcl
 - Package log file
- Module 7: Package Policies
 - Package FAILOVER and FAILBACK policies
 - Package access control
 - Using package dependencies, priorities, and weights
- Module 8: Application Monitoring Scripts and Toolkits
 - Writing and using an application monitor
 - The package control script
 - Application integration toolkits
- Module 9: Cluster Troubleshooting
 - Test clusters and packages for problems
 - Using the log files
 - Using Serviceguard commands for troubleshooting
 - Approaches to troubleshooting

- Module 10: Cluster and Package Online Reconfiguration
 - Cluster modifications online and online package modifications
 - Storage reconfiguration
 - Add and remove a node or package while the cluster is running
- Module 11: Highly Available NFS
 - Install the NFS server toolkit
 - Configure an NFS server package using the NFS toolkit
 - Configure an NFS client package
 - Test the NFS server package for various failures
- Module 12: Highly Available Oracle Database
 - Install the Oracle database toolkit
 - Configure an Oracle 11gR2 database package using the Oracle toolkit
 - Check the operation of the Oracle database and failover
- Module 13: Cluster and Package Maintenance
 - Rolling upgrade of Serviceguard
 - Kernel parameter change using Live Application Detach
 - Package partial startup
- Module 14: Generic Resources
 - Configure and use generic resources in a package
- Module 15: Cluster Simulation
 - Investigate the simulator interface and actions
- Module 16: Cluster Analytics
 - Install the Analytics utility
 - Display data collected by Serviceguard Cluster Analytics
- Module 17: Serviceguard Manager
 - Discuss the components of Serviceguard Manager
 - Navigate the Serviceguard Manager interface

Wymagania:

Background in Linux system and network administration including Logical Volume Manager (LVM) and/or Veritas Volume Manager (VxVM).

Poziom trudności



Certyfikaty:

After completing the course, participants receive a certificate of completion of an authorized Veem course.

Prowadzący:

Authorized Veem Trainer.