



HPE Serviceguard on Linux H4C12S

HPE course number H4C12S

Course length 5 days

Delivery mode ILT

View schedule, local pricing, and register [View now](#)

View related courses [View now](#)

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.

Why HPE Education Services?

- IDC MarketScape leader 4 years running for IT education and training*
- Recognized by IDC for leading with global coverage, unmatched technical expertise, and targeted education consulting services*
- Key partnerships with industry leaders OpenStack®, VMware®, Linux, Microsoft®, ITIL, PMI, CSA, and (ISC)²
- Complete continuum of training delivery options—self-paced eLearning, custom education consulting, traditional classroom, video on-demand instruction, live virtual instructor-led with hands-on lab, dedicated onsite training
- Simplified purchase option with HPE Training Credits

Audience

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

Prerequisites

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

Course objectives

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

Benefits to you

- Protect mission critical applications against a variety of hardware and software failures through effective use of Serviceguard on Linux
- Reduce application downtime by learning how to configure Serviceguard cluster and using Serviceguard’s rolling upgrade facility
- Minimize, and in some instances eliminate, your application downtime by learning how to automate the detection of failures and restoration of application service

Detailed course outline

| | |
|--|---|
| Module 1: Introduction to High Availability | <ul style="list-style-type: none"> • What is high availability and reducing the risk • Storage technologies and HA network design |
| Module 2: High Availability with Serviceguard (SG) | <ul style="list-style-type: none"> • SG features and benefits and SG packages • Minimizing planned downtime • Installing prerequisite software • Serviceguard Manager |
| Module 3: Storage for Serviceguard | <ul style="list-style-type: none"> • 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 | <ul style="list-style-type: none"> • 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 | <ul style="list-style-type: none"> • Test the local LAN failover • Node failures and cluster reformation • Node joining and leaving a cluster • Basic cluster management |
| Module 6: Packages and Services | <ul style="list-style-type: none"> • 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 | <ul style="list-style-type: none"> • Package FAILOVER and FAILBACK policies • Package access control • Using package dependencies, priorities, and weights |
| Module 8: Application Monitoring Scripts and Toolkits | <ul style="list-style-type: none"> • Writing and using an application monitor • The package control script • Application integration toolkits |
| Module 9: Cluster Troubleshooting | <ul style="list-style-type: none"> • 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 | <ul style="list-style-type: none"> • 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 | <ul style="list-style-type: none"> • 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 |

Course data sheet

| | |
|--|---|
| Module 12: Highly Available Oracle Database | <ul style="list-style-type: none">• 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 | <ul style="list-style-type: none">• Rolling upgrade of Serviceguard• Kernel parameter change using Live Application Detach• Package partial startup |
| Module 14: Generic Resources | <ul style="list-style-type: none">• Configure and use generic resources in a package |
| Module 15: Cluster Simulation | <ul style="list-style-type: none">• Investigate the simulator interface and actions |
| Module 16: Cluster Analytics | <ul style="list-style-type: none">• Install the Analytics utility• Display data collected by Serviceguard Cluster Analytics |
| Module 17: Serviceguard Manager | <ul style="list-style-type: none">• Discuss the components of Serviceguard Manager• Navigate the Serviceguard Manager interface |

Learn more at
hpe.com/ww/learnhpuxintegrity

Follow us:



© Copyright 2015–2016 Hewlett Packard Enterprise Development LP. The information contained herein is subject to change without notice. The only warranties for Hewlett Packard Enterprise products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. Hewlett Packard Enterprise shall not be liable for technical or editorial errors or omissions contained herein.

Microsoft is either a registered trademark or trademark of Microsoft Corporation in the United States and/or other countries. Oracle is a registered trademark of Oracle and/or its affiliates. The OpenStack Word Mark is either a registered trademark/service mark or trademark/service mark of the OpenStack Foundation, in the United States and other countries and is used with the OpenStack Foundation's permission. We are not affiliated with, endorsed or sponsored by the OpenStack Foundation or the OpenStack community. Pivotal and Cloud Foundry are trademarks and/or registered trademarks of Pivotal Software, Inc. in the United States and/or other countries. Linux is the registered trademark of Linus Torvalds in the U.S. and other countries. VMware is a registered trademark or trademark of VMware, Inc. in the United States and/or other jurisdictions. All other third-party trademark(s) is/are property of their respective owner(s).

c04590655, December 2016, Rev. 1