



# HP 教育訓練中心課程簡介

HP Serviceguard on Linux (H4C12S\_00839922)

本課程專為經驗豐富的 **Linux** 系統和網路管理員施行 **HP Serviceguard A.12.00** 所設計。課程著重在高可用性系統的基本需求、透過 **Serviceguard** 叢集/套件配置的學習，最終使用 **NFS** 和 **Oracle 11gR2** 工具組套件。課程的授課和透過 **RHEL 6.4** 進行實作練習的時間各半。

## 適合對象

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

## 先修課程

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

## 課程目標

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

- Configure, implement, and manage an HP SG cluster and packages
- Install HP 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

## 課程效益

- 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

<b>Course title:</b>	HP Serviceguard on Linux
<b>HP product number:</b>	H4C12S_00839922
<b>Category/Subcategory:</b>	HP-UX
<b>Course length:</b>	5 days
<b>Level:</b>	Advanced
<b>To order:</b>	To review course schedules and to register for a course, visit <a href="http://www.hp.com.tw/education">www.hp.com.tw/education</a>

## 為什麼選擇HP教育訓練中心?

- Unmatched technical expertise and support for HP products and technologies
- More than 30 years of Education Consulting
- Global training with more than 90 training locations worldwide

## 課程大綱

### Introduction to High Availability

- What is high availability and reducing the risk
- Storage technologies and HA network design

### **High Availability with Serviceguard (SG)**

- SG features and benefits and SG packages
- Minimizing planned downtime
- Installing prerequisite software
- Serviceguard Manager

### **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

### **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

### **Additional Cluster Features**

- Test the local LAN failover
- Node failures and cluster reformation
- Node joining and leaving a cluster
- Basic cluster management

### **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

### **Package Policies**

- Package FAILOVER and FAILBACK policies
- Package access control
- Using package dependencies, priorities, and weights

### **Application Monitoring Scripts and Toolkits**

- Writing and using an application monitor
- The package control script
- Application integration toolkits

### **Cluster Troubleshooting**

- Test clusters and packages for problems
- Using the log files
- Using Serviceguard commands for troubleshooting
- Approaches to troubleshooting

### **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

### **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

### **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

### **Cluster and Package Maintenance**

- Rolling upgrade of Serviceguard
- Kernel parameter change using Live Application Detach
- Package partial startup

### **Generic Resources**

- Configure and use generic resources in a package

### **Cluster Simulation**

- Investigate the simulator interface and actions

### **Cluster Analytics**

- Install the Analytics utility
- Display data collected by Serviceguard Cluster Analytics

### **Serviceguard Manager**

- Discuss the components of Serviceguard Manager
- Navigate the Serviceguard Manager interface

### **更多訊息**

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