

# HP Education Services

U3726S Managing Complex HP OpenVMS Systems (U3726Sc.00)



This course presents the system manager who has been running an existing OpenVMS system with advanced information and skills needed to manage complex areas such as OpenVMS nPars, cluster configuration and management, storage options, and troubleshooting techniques. Performance, availability, and scalability are common topics throughout the course.

## Audience

- System managers who need the skills to understand and be responsible for cluster and storage management tasks

## Prerequisites

- An understanding of general OpenVMS system management activities and tools
- Completion of HP OpenVMS System Management I: Essentials for Established Systems (U3724S) and HP OpenVMS System Management II: Installation, Configuration, and Customization (U3725S) is recommended.

## Course Objective

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

- Configure and maintain RAID and Storage Area Networks (SAN) to work with OpenVMS
- Choose, configure, and maintain OpenVMS cluster systems
- Use troubleshooting methodology and tools to resolve OpenVMS SAN and cluster problems
- Set up and use nPars (hard partitions) on OpenVMS
- Use gWLM to manage workloads within or across containers
- Understand virtualization concepts and existing tools

## Benefits to You

This course presents configuration and design concepts and configuration options that can be implemented by the system manager. Students are involved in relevant exercises, reinforcing the lectures and providing the knowledge and skills to be able to manage complex components of OpenVMS systems.

## Why education services from HP?

- Focus on job-specific skills
- Hands-on practice
- Experienced and best-in-the-field HP instructors
- Comprehensive student materials
- Customized on-site delivery
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**Course Title:** U3726S Managing Complex HP OpenVMS Systems

**HP Product Number:** U3726Sc.00

**Category/Subcategory:** OpenVMS

**Course Length:** 5 days

**Level:** Advanced

**Delivery Language:** English

**To Order:** You can order this course online at <http://www.hp.com/learn>. At the site, select a country, then choose "registration" or "Book a course" and fill out the online registration form.

**Next Steps:** HP OpenVMS System Performance Management (U3727S)

## Detailed Course Outline

### Storage Overview

- Introduction to storage options with OpenVMS systems
- Storage area network concepts
- SAN layered architecture
- Fibre channel configurations
- RAID concepts
- Implementing storage with an EVA
- Fibre channel switch overview
- Data replication manager (DRM) and continuous access (CA)
- Command view management utility

### Volume Shadowing for OpenVMS

- Volume shadowing for OpenVMS concepts
- Creating a shadow set
- Managing shadow sets
- Volume shadowing bitmap and mini-copy
- Booting from a shadow set

### Cluster Concepts

- OpenVMS cluster overview
- Interconnects
- Cluster connection manager
- Distributed lock manager
- Shared storage
- System disk structure

### OpenVMS Cluster Design and Configuration

- Business requirements for an OpenVMS cluster
- Design goals based on established business requirements

- OpenVMS cluster design and configuration steps
- OpenVMS cluster system configuration issues

### OpenVMS Cluster Troubleshooting

- Cluster state transitions
- Cluster membership
- Losing quorum
- CLUEXIT bugchecks
- Using SCACP and LANCP

### Distributed Locking

- Distributed locking concepts
- Resource mastership and LOCKRMWT
- PE1 processing

### Troubleshooting Basics and Tools

- Troubleshooting methodology
- Troubleshooting tools
- DECamds and availability manager
- DECEvent

### nPartitions

- Cell-based Integrity hardware overview
- Partitions
- Cell communication
- Creating hard partitions

### OpenVMS Virtualization

- Virtualization overview
- gWLM
- iCAP
- TiCAP
- PPU

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