Implementing HPE MSA Storage Solutions eLearning, Rev. 21.21
U4226AAE

HPE course number	U4226AAE
Course length	16 hours
Delivery mode	eLearning
Access period	Unlimited access for one year from the date of purchase
View schedule, local pricing, and register	**View now**
View related courses	**View now**

Why HPE Education Services?

- Comprehensive worldwide HPE technical, IT industry and personal development training
- Training and certification preparation for ITIL®, Security, VMware®, Linux, Microsoft and more
- Innovative training options that match individual learning styles
- Anytime, anywhere remote learning via HPE Digital Learner subscriptions
- Verifiable digital badges for proof of training, skill recognition and career development
- Simplified purchase options with HPE Training Credits

HPE MSA hybrid storage solutions provide the entry-point for SAN storage supported by HPE ProLiant servers. HPE MSA storage offers a portfolio of arrays, drives, and options that deliver a common set of features enabling flash-ready hybrid storage systems designed to deliver hands-free, affordable application acceleration for demanding SMB workloads. This eLearning course provides in-depth knowledge about HPE MSA storage virtualization capabilities and is perfectly set to equip storage administrators with the tools they need to optimize management, implementation, monitoring and maintenance functions on the HPE MSA storage solution.

NOTE: Implementing HPE MSA Storage Solutions eLearning has two components:
1. Web-based training available online
2. Hands-on practice, available through HPE Virtual Labs (HPE vLabs)

With this self-paced eLearning course, you have options normally unavailable with an instructor-led course. You have a year of access to the web-based portion of the training so that you may repeat sections for reinforcement. Take this training at your own pace and on your own schedule. In addition, you have two sequential days of access to the HPE Virtual Labs to run the labs associated with this course.

*Realize Technology Value with Training, IDC Infographic 2037, sponsored by Hewlett Packard Enterprise, 2019

Audience

HPE MSA customers (current or potential)

Prerequisites

- Basic knowledge of Storage Area Networks (SAN) is recommended.
- Familiarity with Microsoft Windows Server 2012, or higher, is an added benefit.

Course objectives

After completing this course, you should be able to:

- Explain positioning, benefits, and features of the HPE MSA family of products
- Implement HPE MSA virtual storage provisioning
- Navigate and utilize the HPE MSA Storage Management Utility (SMU)
- Use HPE MSA virtualized storage features
- Execute operations via the HPE MSA command line interface (CLI)
- Perform maintenance and support tasks on MSA systems

Detailed course outline

Module 1: MSA Product Overview	• List the current HPE MSA array generations and models	• Categorize the various HPE MSA controller models and list their supported configurations
	• Explain the use cases for implementing HPE MSA storage solution	• Identify the connectivity options for various MSA controllers
	• Describe the controller architecture and features that are included with HPE MSA	

Module 2: MSA Virtual Storage	• Explain the management/monitoring capabilities built into the Storage Management Utility (SMU) version 3 and version 4	• Recall the benefits of MSA-DP+ RAID
	• Discuss MSA virtual storage terminology that is part of storage provisioning	• Describe MSA virtual storage automated tiering mechanism
	– Page	• Implement MSA virtual storage tier affinity
	– Disk group	
	– Tier	
	– Pool	
	– Read cache	

Module 3: Data Protection on MSA Storage	• Explain how MSA fault tolerance is implemented for disk or controller failures	• Explain the volume copy feature and its implementation specifics
	• Discuss the MSA snapshot feature and illustrate the Redirect on Write (RoW) mechanism	• List the capabilities that are available through the MSA Remote Snapshot Replication feature

Module 4: MSA Maintenance and Support	• Describe the maintenance tasks to be performed on disk groups and volumes	• Get the URL for the MSA Health Check tool
	• List the ways to track activities and monitor the health status of the MSA	• Discuss the options to set up notifications from MSA
	• Explain the procedure to save log files for troubleshooting complex issues	• Explain the firmware update process on MSA

Detailed lab outline

Lab 0: Accessing the Lab Environment

Lab 1: Configure MSA Virtual Storage with SMU v3	• Task 1: Verify the management IP address of the HPE MSA storage systems • Task 2: Launch HPE Storage Management Utility (SMU) v3 • Task 3: Create disk groups using SMU v3	• Task 4: Create volumes and map to hosts using SMU v3 • Task 5: Install MPIO and initialize the disks in Windows Disk Management • Task 6: Map volumes to iSCSI hosts
Lab 2: Configure MSA Virtual Storage with SMU v4	• Task 1: Initialize the MSA Gen6 via Out of Box Experience (OOBE) • Task 2: Storage Management Utility (SMU) V4	• Task 3: Configure pools and disk groups in SMU v4 • Task 4: Provision volumes and attach to hosts in SMU v4
Lab 3: Data Protection	• Task 1: Create snapshots for data protection using SMU v3 • Task 2: Use snapshots for data recovery in SMU v3 • Task 3: Create snapshots for data protection using SMU v4	• Task 4: Use snapshots for data recovery in SMU v4 • Task 5: Copy volumes or snapshots for data protection
Lab 4: MSA Maintenance and Support	• Task 1: General system health and event logs • Task 2: Set up alert notifications	• Task 3: Download system logs for troubleshooting • Task 4: Perform a firmware upgrade

Learn more at
hpe.com/ww/learnstorage

Follow us:

in 𝔞 ✉

Hewlett Packard Enterprise