Why HPE Education Services?

• IDC MarketScape leader 7 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 SUSE
• 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

The HPE Primera I: Management and Connectivity Self-Paced Training, Rev 21.21 course provides an overview of the HPE Primera portfolio. Using hands-on labs (HOL), students learn to perform common day-to-day management tasks, including how to create the right data efficient volumes on an all-flash HPE Primera array, and how to leverage the power of HPE InfoSight.

The course prepares learners for more in-depth follow-on training from HPE, including the HM9Q6AAE: HPE Primera II: Monitoring and Replication Self-Paced Training course.

NOTE: HPE Primera I: Management and Connectivity Self-Paced Training 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. You have one day of access to the HPE Virtual Labs to run the labs associated with this course.

*Realize Technology Value with Training IDC Infographic 2017, Sponsored by Hewlett Packard Enterprise, 2019
Audience
Customers, administrators and channel partner sales or technical sales

Prerequisites
• An understanding of general storage concepts including fibre channel technology and RAID
• Operator level functionality in a Windows environment

Course objectives
After completing this course, the student should be able to:
• Discuss Primera hardware offerings
• Describe HPE Primera family features
• List management options
• Describe the HPE Primera Storage software portfolio
• Explain provisioning terminology
• Understand the concepts of chunklets and logical disks
• Explain the HPE Primera concepts of a common provisioning group (CPG)
• Explain thin provisioned virtual volumes (VV)
• Overview Primera data reduction technologies
• Prepare a host to access an HPE Primera storage array
• Create hosts in an HPE Primera storage array
• Explain how to add fibre channel (FC) ports to a host
• Explain the advantages of HPE Smart SAN for Primera
• Export virtual volumes (VV) to a host as VLUNs
• Unexport virtual volumes (VV) from a host
• Describe the advantages of host sets and volume sets
• Create and maintain host sets and volume sets
• Use SSMC and the CLI to create and manage host sets and volume sets
• Discuss the guidelines and rules regarding host sets and volume sets
• Describe app volume sets
• Describe the use of InfoSight to monitor Primera and its surroundings
## Detailed course outline

### Module 1: Solution Overview

- **Part 1—Hardware**
  - Primera technical specifications
  - HPE Primera hardware building blocks
  - Data-in-place upgrade
  - Primera persistency and high availability features

- **Part 2—Software and features**
  - Management options overview
  - Primera and 3PAR SSMC
  - HPE Primera storage management—HPE Primera UI
  - HPE Primera command line interface (CLI)
  - HPE Primera integration portfolio overview
  - Selected data protection and security features overview
  - HPE Primera leadership—replication
  - Peer Persistence
  - HPE Cluster Extension CLX
  - VMware vSphere® disaster recovery with Site Recovery Manager
  - Sources of information

### Module 2: Storage Concepts and Terminology

- HPE Primera OS virtualization—logical view
- HPE Primera OS virtualization concepts
- HPE Primera OS virtualization advantages
- Chunklet concepts
- System wide sparing
- Logical disk concepts

- HPE Primera high availability
- CPG concepts
- Virtual volume overview
- Thin provisioning overview
- HPE Primera data reduction overview

### Module 3: Host Connectivity and Storage Allocation

- Host to HPE Primera front-end configuration—FC example
- HPE Primera block I/O connectivity
- HPE Primera persistent ports
- HPE Primera WWN format
- HPE Primera OS 4.x host OS support
- HPE Primera implementation guide
- Host HBAs and WWNs—commands/utilities

- HPE Smart SAN for Primera
- HPE Primera zoning overview
- Adding hosts in SSMC—SMART SAN enabled
- Making VLUNs visible to hosts
- HPE Host Explorer
- HPE LunInfo

### Module 4: Host, Volume, and App Volume Sets

- Host sets and virtual volume sets overview and advantage
- Virtual volume set—other use cases
- Host sets and virtual volume sets—SSMC and CLI examples

- App volume sets overview
- App volume sets—SSMC examples
- SSMC dashboard—top app vol sets

### Module 5: HPE InfoSight Introduction

- HPE InfoSight sees and predicts behind the scene
- Get the full picture with HPE Primera and InfoSight
- The AI process for HPE self-healing storage
- HPE Primera—dashboard
- HPE Primera—systems view

- HPE Primera—detailed systems view
- HPE Primera—system performance view
- HPE Primera—performance insights view
- HPE Primera—PDF report
- HPE InfoSight Cross-Stack Analytics for VMware environments
### Appendix 1: HPE Primera On-Node Management

- Discovering the HPE Primera array
- HPE Primera initial setup
- Checking hardware
- Creating users on the array and configuring the network
- Initializing the array
- Configuring date/time, Infosight and system support contact
- Infosight
- Enabling remote support data scrubbing
- First time login
- Primera UI dashboard—overview, alerts, and tasks
- On-node management performance dashboard
- Customer self-update option
- Customer self-repair option

### Appendix 2: What’s New in HPE Primera

- NVMe drives
- iSCSI
- Provisioning in the HPE Primera UI
- Customer self-install
- HPE Primera customer self-update
- Customer self-repair
- SSMC 3.7 enhancements
- Infosight update
- HPE Primera Welcome Center
- HPE Primera cabling tool
## Detailed lab outline

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Learn more at [hpe.com/ww/learnstorage](https://www.hpe.com/ww/learnstorage)