

Designing HPE Nimble Solutions, Rev. 18.12

Course Summary

Description

This course teaches students how to identify, recommend, and explain HPE Nimble storage solutions. It covers the HPE Nimble hardware and software, initial configuration, Nimble Storage Volumes, snapshots and replication.

Objectives

At the end of this course, students will be able to:

- Describe the AF and HF-Series hardware.
- Explain Scale-to-Fit with the Nimble Solutions.
- Describe the AF-Series Write Operations.
- Explain how to access and navigate the NimbleOS WebUI.
- Navigate the InfoSight customer portal.
- List port and firewall considerations.
- Analyze the NimbleOS event log.
- Create protection templates.
- Configure access control and initiator groups.
- Describe the need to add RPO, RTO, and Change Rate definitions.
- Explain how replication works.
- Discuss the replication considerations.

Topics

- Course Overview
- Hardware
- Scaling with HPE Nimble Storage
- Nimble OS Architecture
- NimbleOS WebUI Introduction
- Introduction to customer support and HPE InfoSight
- Array Initialization and Setup
- Working with HPE Nimble Storage volumes
- Introduction to HPE Nimble Storage Snapshots
- Introduction to HPE Nimble Storage Replication

Audience

Typical candidates for this course are IT, facilities, or data center professionals who work in and around the data center and who have the responsibility to achieve and improve the availability and manageability of the data center. Typical candidate job roles include, but are not limited to, Pre-sales Architects, Pre-sales Engineers, Enterprise Architects, Solutions Engineers, and Technology Architects.

Prerequisites

None.

Duration

Two days

Designing HPE Nimble Solutions, Rev. 18.21

Course Outline

I. *Course Overview*

- A. Describe the content of this training
- B. Locate Nimble documentation
- C. Describe usage of capacity units
- D. Introduce Nimble technology

II. *Hardware*

Describe the AF- and HF-Series hardware

III. *Scaling with HPE Nimble Storage*

Explain Scale-to-Fit with the AF- and HF-Series.

IV. *Nimble OS Architecture*

- A. Describe the AF-Series read and write operations
- B. Describe the HF-Series read and write operations
- C. Explain Deduplication
- D. Explain Compression
- E. Describe Sequential stripe writes
- F. Describe Triple+ parity and Triple+ parity with integrated spare
- G. Describe Integrated spare rebuild
- H. Describe Quick RAID rebuild
- I. Describe SmartSecure encryption
- J. Describe changed block operations

V. *Nimble OS WebUI Introduction*

- A. Explain how to access and navigate the NimbleOS WebUI
- B. Explain user administration
- C. Describe how to use Microsoft's Active Directory (AD) with user administration
- D. Explain how to monitor the array with the WebUI
- E. Explain how to update NimbleOS

VI. *Introduction to customer support and HPE InfoSight*

- A. Explain HPE Nimble Support's mission statement
- B. Discuss the InfoSight Customer Portal
- C. Describe support coverage and logistics

VII. *Array Initialization and Setup*

- A. Explain an array initialization process
- B. Explain an array configuration process
- C. Describe port and firewall considerations
- D. Articulate Simple Network Management Protocol (SNMP) setup
- E. Discuss SYSLOG use
- F. Analyze the NimbleOS's event log

VIII. *Working with HPE Nimble Storage volumes*

- A. Describe basic volume concepts
- B. Explain performance policies and how to create one
- C. Discuss access control and initiator groups and how to create them
- D. Explain protection templates and how to create one
- E. Explain volume collections and how to create them
- F. Discuss volume pinning
- G. Show how to create a volume using the WebUI

IX. *Introduction to HPE Nimble Storage Snapshots*

- A. Describe how Nimble snapshots work
- B. Explain snapshot scheduling
- C. Describe need to add Recovery Point Objective (RPO), Recovery Time Objective (RTO), and change rate definitions
- D. Explain recovering from a snapshot by using zero-copy clones

X. *Nimble OS Architecture*

- A. Describe basic replication concepts
- B. List SmartReplicate components
- C. Explain how replication works
- D. Describe replication process
- E. Discuss the replication considerations
- F. Explain SmartReplicate Disaster Recovery