

Architecting Multi-Site HPE Storage Solutions, Rev. 16.11

Course Summary

Description

This course teaches students how to plan and design HPE Backup Solutions with a focus on the concepts that define good Backup and Recovery strategies. It includes the benefits of Backup and Recovery Solutions, a more in-depth knowledge of Backup and Recovery solution components, and an understanding of how everything works together to provide a complete backup storage solution.

Objectives

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

- Describe the Fundamental Architecture and Technology of HP Enterprise Solutions.
- Architect and design complex HP Multiple site High Availability SAN Configurations.
- Architect and design complex HP Replication and Recovery Solutions.
- Architect and design HP Converged Storage Solutions for ITaaS (IT as a Service).
- Architect and design High Availability Solutions for HP SAN Deployments.
- Architect and design Converged and Virtualized HP Multisite Storage Solutions.
- Identify Opportunities to expand and extend HP Multiple site Disaster Recover and Availability Solutions.

Topics

- Designing an HPE StoreVirtual Multi-Site Architecture
- Planning and designing a HPE StoreServ multi-site Environment
- Planning and Designing an HPE StoreOnce multi-node environment
- HPE Converged Management with HPE OneView

Audience

Senior storage architects who lead a team designing storage environments and who desire to leverage HPE Converged Storage Systems in multi-site environments. The individual should have an average of 3 to 5 years of experience designing and architecting storage solutions in a multi-vendor environment. This training is important for storage IT professionals of HPE channel partners, HPE presales employees and enterprise level organizations who need to credibly design and propose tailored storage solutions to most effectively meet enterprise level, or multiple site, business needs with optimum ROI.

Prerequisites

For complete prerequisites and requirements to achieve any of the related certifications or upgrade paths, see the certification description on the HP ExpertOne website.

Duration

16 hours

Architecting Multi-Site HPE Storage Solutions Rev. 16.11

Course Outline

- I. *Designing an HPE StoreVirtual Multi-Site Architecture*
 - A. Introducing the Resource Library Adobe Portfolio
 - B. Designing and implementing a HPE P4000 StoreVirtual Multi-Site environment
 - C. Principles and multi-site SAN design considerations
 - D. Multi-tiering and adaptive optimization
 - E. Application integration
 - F. Snapshots and network RAID levels
 - G. I/O path preference based on site/subnet
 - H. VLAN design consideration
 - I. Disaster Recover for Multi-Site
 - J. Case study: Interoperability of StoreVirtual & StoreOnce multi-site designs (Alinean, ROI, TCO, NPV...)

- II. *Planning and designing a HPE StoreServ multi-site Environment*
 - A. HPE converged strategy and portfolio
 - B. All Flash strategy
 - C. Designing and planning HPE 3PAR StoreServ multi-site solutions
 - D. Multi-site SAN design considerations
 - E. Planning and Usage of HPE 3PAR StoreServ Software Suites (Enhanced Priority Optimization, Adaptive Optimization, and Dynamic Optimization; Host Persona and File Persona; SSMC, Tunesys, DAP Integration, and Enhanced Security; Deduplication)
 - F. Peer Persistence and Persistent Ports
 - G. HPE 3PAR StoreServ
 - H. Remote Copy and service processor enhancements
 - I. Peer Motion
 - J. Concept and technical prerequisites for multi-site environments
 - K. HPE 3PAR StoreServ and HPE StoreOnce – better together with RMC
 - L. Case study: Interoperability of 3PAR & StoreOnce multi-site Designs (Alinean, ROI, TCO, NPV...)

- III. *Planning and Designing an HPE StoreOnce multi-node environment*
 - A. Designing and planning HP StoreOnce multi-node environments and solution upgrade
 - B. Deduplication compared with Federated Deduplication
 - C. High availability, failover, and failback
 - D. Replication and Federated Deduplication
 - E. HPE Data Protector 9.x Infrastructure design
 - F. Technology, concept, and architecture
 - G. Integration in the virtual and physical world
 - H. Advanced restore options
 - I. Create a disaster recovery scenario
 - J. Planning & sizing a multi-site solution for a POC
 - K. Case study: Size, validate, and present a StoreOnce multi-site environment to customer

- IV. *HPE Converged Management with HPE OneView*
 - A. Designing an HPE OneView Multi-Site Architecture
 - B. Server profiles
 - C. Flex=Fabric configuration and best practices
 - D. Storage and networking integration
 - E. Monitoring and alerting
 - F. Upgrade an HPE OneView multi-site environment
 - G. Case study: size, validate, and present a Converged Management environment to a customer