

Designing HPE Software-Defined Infrastructure Solutions, Rev. 19.41

Course Summary

Description

This course is a web-based training that is approximately 20 hours of self-directed content. It includes lectures and activities in the ratio of approximately 15% activities and 85% lecture. Given a customer scenario, you will learn to design HPE Software-Defined Infrastructure Solutions. You will also learn to analyze the workload and its use case and prescribe the appropriate infrastructure platform (bare metal, containers, virtualization, etc.) including computing, storage, and networking.

Objectives

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

- Describe Software Defined Infrastructure Architecture and Technologies.
- Plan and Design Software Defined Infrastructure Solutions.
- Deploy Software Defined Infrastructure Solutions.
- Troubleshoot Software Defined Infrastructure Solutions.
- Manager, Monitor, and Maintain Software Defined Infrastructure Solutions.

Topics

- Review HPE Software-Defined Infrastructure Solutions
- Design an HPE Composable Infrastructure Solution for a Virtualized Environment
- Design an HPE SDS Solution for a Virtualized Environment
- Design an HPE SDN Solution for a Virtualized Environment
- Use Orchestration and Configuration Management to Deploy and Manage the HPE SDI Solution
- Design an HPE SDI Solution for a Mid-Sized Organization
- Design the Storage Components for a Containerized Environment

Audience

This certification is targeted to solution architects who have experience designing and implementing a complex solution and want to validate their knowledge and skills to leverage HPE solutions in multi-site environments. Candidates typically define business needs and propose and may deploy the solutions.

Prerequisites

None

Duration

Three days

Designing HPE Software-Defined Infrastructure Solutions, Rev. 19.41

Course Outline

- I. *Review HPE Software-Defined Infrastructure Solutions*
 - A. Explain the benefits of a software-defined infrastructure
 - B. Describe the HPE Composable Infrastructure Strategy
 - C. Explain the HPE value proposition for SDI, SDDC, SDS, and SDN
- II. *Design an HPE Composable Infrastructure Solution for a Virtualized Environment*
 - A. Position SDI solutions to solve the customer's requirements
 - B. Determine the appropriate software defined platform
 - C. Design for a virtualized environment to determine the appropriate software-defined compute technology
- III. *Design an HPE SDS Solution for a Virtualized Environment*
 - A. Determine the appropriate SDS technology and design an HPE SDS solution
 - B. VMware vSAN and vSAN ReadyNode
 - C. Overview of Microsoft Storage Spaces Direct
 - D. HPE SDS solutions and integrations
 - E. HPE 3PAR and Nimble and their plugins
 - F. HPE RMC-V plugin
 - G. StoreOnce Cloud Bank and Nimble Cloud Volumes (NCVs)
 - H. InfoSight analytics
- IV. *Design an HPE SDN Solution for a Virtualized Environment*
 - A. VMware NSX
 - B. Converged systems for virtualization
 - C. Composable fabric solutions
 - D. HPE Composable Fabric
 - E. HPE Composable Cloud for ProLiant DL
 - F. HPE Synergy Composable Fabric
 - G. HPE SimpliVity with Composable Fabric
 - H. HPE FlexFabric Switching (including VxLAN, OpenFlow, Security, microsegmentation)
- V. *Use Orchestration and Configuration Management to Deploy and Manage the HPE SDI Solution*
 - A. Provision and deploy an HPE SDI solution using orchestration tools
 - B. Manage and monitor an HPE SDI solution
 - C. HPE integrations with VMware vCenter, VMware vRealize Operations, and VMware vSphere
 - D. Scripting tools, in particular Redfish API
- VI. *Designing an HPE SDI Solution for a Mid-Sized Organization*
 - A. Determine the appropriate software-defined platform (such as virtualization farm, scale-out database, VDI, streaming analytics, and scale-out storage)
 - B. Determine the appropriate software-defined compute technology
 - C. HPE's container strategy
 - D. Orchestration and configuration management tools for container solutions
 - E. Container as a Service solution on HPE Synergy
- VII. *Design the Storage Components for a Containerized Environment*
 - A. Determine the appropriate SDN technology and design an HPE SDN solution
 - B. Understanding what networks are required for the solution