

Advanced HPE Compute Solutions, Rev. 20.11

Course Summary

Description

This course teaches you how to plan and design advanced HPE compute solutions based on industry standard advanced computing technologies and workloads as they relate to optimizing performance and/or availability. Hands-on labs and activities will guide you through complex design exercises using skills such as information gathering and analyzing customer business outcomes and technical requirements. You will learn to recommend and position HPE compute products, solutions, tools, and appropriate services for customer use cases and workloads. Finally, you will architect and design and HPE solution based on customer needs and then demonstrate and present the solution.

Objectives

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

- Describe industry-standard advanced computing technologies and workloads.
- Describe and Position the HPE advanced computing portfolio and the typical workloads for each platform.
- Size, Design, and Configure advanced computing solutions for a set of customer workloads.
- Manage implementation and startup of advanced computing solutions to ensure desired customer outcomes.
- Monitor, manage, operate, and update advanced computing solutions.
- Optimize and troubleshoot advanced computing solutions.

Topics

- Understanding customer needs and compute workloads
- HPE compute solutions portfolio
- Designing an HPE compute solution for a SAP HANA workload
- Designing an HPE compute solution for a virtualization workload
- Designing an HPE compute solution for database workload
- Designing an HPE compute solution for a container workload
- Monitoring, managing, and optimizing an HPE compute solution
- Presenting a proposal

Audience

Typical candidates for this course are those that need to learn how to describe, position, recommend, demonstrate, plan and design advanced HPE compute solutions to meet a customer's business and technology requirements.

Prerequisites

Any of the following suggested prerequisites:

- Server Solutions Architect V4
- Synergy Solutions Integrator V1
- Hybrid IT Solutions V1
- Composable Infrastructure Integrator V1

Duration

Five days

Building HPE Software-Defined Infrastructure Solutions, Rev. 19.41

Course Outline

- I. *Understanding customer needs and compute workloads*
 - A. Evaluate typical advanced computing workloads, including their characteristics and requirements
 - B. Compare and classify tools supporting the sizing process and performance management
 - C. Identify typical advanced computing workloads and their characteristics and requirements as it relates to on-premises and as-a-service infrastructure
 - D. Gather customer needs and analyze their existing environment
- II. *HPE compute solutions portfolio*
 - A. Describe the industry-standard server portfolio
 - B. Distinguish features of the HPE Composable Infrastructure portfolio, including HPE Synergy and HPE OneView
 - C. Recommend the HPE Mission Critical portfolio, including the HPE Superdome Flex Server family, to your customers
 - D. Compare the components of the HPE purpose-built portfolio for high-performance computing (HPC), Big Data, and artificial intelligence (AI)
 - E. Differentiate and explain HPE management technologies for advanced computing solutions
 - F. Recommend and describe the HPE GreenLake Hybrid Cloud model to your customers
- III. *Designing an HPE compute solution for a SAP HANA workload*
 - A. Examine and describe the SAP HANA portfolio and its requirements
 - B. Differentiate the components of the HPE Superdome Flex and explain the management and setup process
 - C. Recommend HPE Serviceguard for Linux solutions to your customer and describe use cases with SAP HANA
- IV. *Designing an HPE compute solution for a virtualization workload*
 - A. Analyze the building blocks of VMware Cloud Foundation
 - B. Analyze a solution design, based on HPE Synergy used VDF deployment
 - C. Explain underlying complimentary VMware and HPE technologies
- V. *Designing an HPE compute solution for a database workload*
 - A. Analyze the building blocks of a SQL Server solution deployed on HPE ProLiant DL380
 - B. Describe typical database workloads
 - C. Analyze and classify the building blocks of SQL Server, including those deployed on HPE ProLiant DL380
 - D. Analyze and recommend components require to deploy a SQL Server Failover Cluster with Windows Server 2019
- VI. *Designing an HPE compute solution for a container workload*
 - A. Analyze the building blocks of the HPE Ezmeral Container Platform on PE Synergy
 - B. Recommend containerization solutions to customers, including use cases and benefits
 - C. Evaluate and describe HPE Ezmerqal Container Platform technologies and components including: Control plane, Data fabric, Storage configuration options, Installation and upgrades, Management and monitoring, Security and access control, Application templates
- VII. *Monitoring, managing, and optimizing an HPE compute solution*
 - A. Explain how to monitor and manage an HPE compute solution using available tools
 - B. Verify interoperability of the solution, optimize performance, and use an appropriate troubleshooting methodology
- VIII. *Presenting a proposal*
 - A. Prepare a proposal based on customer requirements
 - B. Use appropriate tools to prepare a customer presentation