Hewlett Packard Enterprise

Course Datasheet

Cloud computing foundation

Education Services course product number – HL973S
Course length – 2 days
Delivery mode – Instructor Led Training (ILT)
virtual Instructor Led Training (vILT)
Register – <u>Click here to go to HPE Learning Portal</u>

This course prepares you for a transformational journey on which many businesses and enterprises embark, to become more efficient and competitive. This journey is from traditional, siloed IT to a service-enabled, agile, and elastic environment called the cloud. This course covers foundational topics such as the disruptive waves and opportunities in today's economy, how the cloud is defined and what benefits it brings, along with the steps to plan and to transform your enterprise into an on-demand infrastructure. Our experienced instructors also share HPE's expert opinion on cloud opportunities, and what technologies, solutions, and services cloud models provide to help organizations along this journey.

Audience

This course is intended for anyone who has a limited knowledge of cloud technologies and wants to learn more about cloud fundamentals, vendor-neutral technologies such as OpenStack®, and HPE cloud solutions.

Course Objectives

After completing this course, students will be able to:

- Describe the major trends in today's economy that are changing the business and IT and what it takes to enable your enterprise for the idea economy
- Explain the problems with traditional IT infrastructures and contract them with the benefits the cloud brings
- List and describe both benefits and concerns associated with cloud computing
- Define major terms and concepts used with the cloud
- Define and position the functional cloud reference architecture
- Introduce OpenStack® technology
- Explain how to form a successful cloud strategy

- Describe the HPE approach to the cloud

Detailed Course Outline

- **Module 0: Course Introduction**
  - Health, safety, and class logistics
  - Course overview
  - Course objectives
  - Agenda
  - Learner materials
  - Introductions

- **Module 1: Enabling Enterprises for the Idea Economy**
  - Describe the major trends that are changing the business and IT industry today
  - Name the four transformation areas customers are undertaking and explain their challenges and objectives

- **Module 2: Moving to Cloud Computing**
  - Explain how IT is becoming a utility and what cloud computing is at a high level
  - List and describe the advantages of cloud computing
  - List and describe the challenges and concerns with cloud computing
  - Explain when not to move to a public cloud
  - Describe the cloud economics

- **Module 3: Defining Cloud Computing**
  - Describe cloud, using your own understanding and definitions from Gartner, NIST, and Forrester
  - List, describe, and distinguish between cloud service models and cloud deployment models
  - List and define the key terms used in cloud computing

- **Module 4: Understanding the Functional Cloud Reference Architecture**
  - Describe the purpose and components of the functional cloud reference architecture, including the cloud operations plane and the governance and management plane
  - Explain what infrastructure convergence is and its relationship to the cloud
  - Explain the business value of a converged infrastructure
  - List and describe the characteristics and requirements of a converged infrastructure
  - Explain how converged infrastructure building blocks drive simplicity across a modern data center

- **Module 5: Introducing OpenStack® Technology**
  - Explain how open source software is becoming the new standard for infrastructure, operating systems, and applications
  - Describe and position OpenStack® technology, and explain how OpenStack® cloud software meets today's requirements
  - Describe the high-level OpenStack® architecture and list and describe the OpenStack® projects
  - Demonstrate navigating through the public OpenStack® resources
  - Explain HPE's involvement with the OpenStack® organization and how HPE contributes to the OpenStack® community

- **Module 6: Forming a Cloud Strategy**
  - List and describe the general considerations for developing your cloud strategy
  - As a case study, describe and position the U.S. government's decision framework for cloud migration
  - Explain how to deal with the management of change

- **Module 7: Executing Your Cloud Strategy**
  - Describe how to choose the right cloud solution
  - Discuss the different on-ramps to the cloud
  - Explain the purpose of maturity models and assessment services
  - Address cloud security
  - List and describe the best practices for managing cloud services

- **Module 8: Understanding the HPE Approach to the Cloud**
  - Using typical transformation scenarios, explain what typical organizations go through when moving toward hybrid infrastructure and on-demand IT
  - Use real-life testimonials to describe how enterprises are moving forward to a hybrid infrastructure using HPE technologies
  - Explain the HPE Helion portfolio and its products, solutions, and services

- **Optional materials**
  - Appendix—Practice Test