Hewlett Packard Enterprise

Architecting Advanced HPE Server Solutions

Exam description

This exams tests candidates' knowledge and skills on advanced architecting HPE server products and solutions. Topics covered in this exam include advanced server architectures and associated technologies, as well as their functions, features, and benefits. Additional topics include analyzing the server market, positioning HPE server solutions to customers, demonstrating server-related business acumen, and how the HPE Transformation Areas related to HPE server products and solutions.

Exam ID	HPE0-S22
Exam type	Proctored
Exam duration	1 hour 30 minutes
Exam length	60 questions
Passing score	70%
Delivery languages	Japanese, English

Register for this Exam
You need an HPE Learner ID and a Pearson VUE login and password.

No online or hard copy reference material will be allowed at the testing site. This exam may contain beta test items for experimental purposes. During the exam, you can make specific comments about the items (i.e. accuracy, appropriateness to audience, etc.). We welcome these comments as part of our continuous improvement process.

Ideal candidate for this exam

Candidates who want to acquire the HPE Master ASE – Server Solutions Architect certification and have already acquired the HPE ASE – Server Solutions certification. Although anyone may take the exam, it is highly recommended that candidates have a minimum of six years experience with architecting HPE server solutions. Candidates are expected to have advanced level industry-standard technology knowledge and business acumen from training and hands-on experience.

Exam contents

This exam has 60 questions. Here are types of questions to expect:

- Matching
- Multiple choice (multiple responses)
- Multiple choice (single response)

Advice to help you take this exam

- Complete the training and review all course materials and documents before you take the exam.
- Use HPE Press study guides and additional reference materials; study guides, practice tests, and HPE books.
- Exam items are based on expected knowledge acquired from job experience, an expected level of industry standard knowledge, or other prerequisites (events, supplemental materials, etc.).
- Successful completion of the course or study materials alone, does not ensure you will pass the exam.

Additional study materials

- HPE Master ASE – Advanced Server Solutions Architect V3 eBook

Objectives

This exam validates that you can successfully perform the following:

Percentage of Exam	Sections/Objectives
15%	**Foundational server architectures and technologies** • Determine optimal processors for specific use cases and operational workloads. • Determine interconnect (networking, storage) technologies based on customer/solution requirements. • Explain the benefits of APIs.
25%	**Functions, features, and benefits of HPE server products and solutions** • Differentiate and position the HPE server product offerings, architectures, and options. • Explain the functions and benefits of HPE health and fault technologies. • Compare and contrast management tools. • Given a customer environment scenario, recommend and substantiate which HPE management tools optimize administrative operations.
20%	**Analyzing the server market and positioning HPE server solutions to customers** • Determine an approach to address customers' business requirements (TCO, ROI, IRR, NPV, TCA, CapEx, OpEx, HPE financial services, etc.) • Explain how the four HPE Transformation Areas relate to a given server solutions.
40%	**Planning and designing HPE server solutions** • Given a scenario with changed customer requirements, recommend modifications to the implementation plan. • Given a customer's storage infrastructure (e.g., iSCSI, Fibre, NAS, DAS), determine an appropriate configuration for server deployment. • Given a customer's networking infrastructure determine an appropriate configuration for server deployment. • Determine customer' s internal/external storage capacity and performance requirements. • Given a scenario, determine the customer's IT maturity and recommend next steps. • Given an anticipated performance bottleneck, determine an appropriate design solution.

Sample questions

Sample questions are provided only as examples of question style, format and complexity/difficulty. They do not represent all question types and do not reflect all topic areas. These sample questions do not represent a practice test.

1. An architect is proposing an HPE Moonshot solution for a customer. The customer application requires high-speed connections between cartridge nodes.
   The architect needs to recommend a solution that will support the 3x15 2D torus connection with the HPE Moonshot 1500 chassis.

   Which cartridge type should the architect recommend?
   a. m350
   b. m700
   c. m710p
   d. m800

2. A customer manages multiple HPE c7000 enclosures by using HPE OneView. The customer needs to automate HPE OneView backup creation and download procedures.

   Which HPE OneView feature should the architect recommend?
   a. HPE OneView for vCenter
   b. RESTful API
   c. HPE SmartStart Scripting Toolkit
   d. RIBCL scripts

3. A customer needs three servers with 196 GB RAM and memory protection for the two-socket application server.

   Which solution should the architect recommend?
   a. HPE DL120 Gen9
   b. HPE Moonshot with M700
   c. HPE DL380 Gen9
   d. HPE Apollo with XL220a

4. Which HPE server solution can be justified by using the HPE Client Virtualization ROI Calculator?
   a. one for a hosted desktop infrastructure (HDI)
   b. one that uses nPartitioning or hard partitioning
   c. one for a web infrastructure built on virtualized servers
   d. one that integrates with an HPE Helion CloudSystem 9.x solution

5. A customer is operating a data center with HPE Fibre Channel based 3PAR storage. The architect intends to add an HPE Moonshot system to the data center to provide cost-effective Dynamic Content Delivery, front-end web and online analytics, accessing the data on the 3PAR storage.

   What is the most suitable interconnect option to use that allows access to the 3PAR data?
   a. an HPE Dark Fiber Multiplexer
   b. a Fibre Channel Virtual Connect module to connect directly to the SAN
   c. an HPE Multifunction Router to convert Fibre Channel to iSCSI
   d. native iSCSI initiator connecting to the storage over LAN

6. A customer operates a data center with a SAS-attached HPE MSA 2040 storage system. The architect plans to design a cost-effective, front-end web server that employs HPE Moonshot servers.

   How should the architect design the solution to allow the HPE Moonshot servers to access the data on the MSA 2040 storage in the most cost-efficient way?
   a. Connect the HPE Moonshot servers to the MSA2040 SAS controller using an HPE Multifunction router.
   b. Replace the SAS Controller in the MSA2040 with a SAN controller and connect the HPE Moonshot servers to the MSA storage using the iSCSI protocol.
   c. Replace the SAS Controller in the MSA2040 with a SAN controller and connect the HPE Moonshot servers to the MSA storage using the Fibre Channel protocol.
   d. Connect the HPE Moonshot servers directly to the MSA2040 SAS controller using a standard SAS cable.

7. A customer has a data center with HPE BladeSystems with HPE ProLiant BL servers. The customer has automated processes such as image backups and firmware and software updates. However, the customer still has trouble aligning services with changing line of business demands.

   Which solution should the architect recommend to permit line of business users to consume services on demand?
   a. HPE OneView 2.x
   b. HPE RESTful API tool
   c. HPE Helion CloudSystem 9.x
   d. HPE Insight Cluster Management Utility (CMU)

Answers

This section provides answers to and references for the sample questions.

1. An architect is proposing an HPE Moonshot solution for a customer. The customer application requires high-speed connections between cartridge nodes.
   The architect needs to recommend a solution that will support the 3x15 2D torus connection with the HPE Moonshot 1500 chassis.

   Which cartridge type should the architect recommend?

   a. m350
   b. m700
   c. m710p
   d. m800

References

HPE Advanced Server Solutions, Module 6: HPE Moonshot Solutions, "2D torus-Cartridge-to-cartridge connections"

2. A customer manages multiple HPE c7000 enclosures by using HPE OneView. The customer needs to automate HPE OneView backup creation and download procedures.

   Which HPE OneView feature should the architect recommend?

   a. HPE OneView for vCenter

   b. RESTful API

   c. HPE SmartStart Scripting Toolkit

   d. RIBCL scripts

3. A customer needs three servers with 196 GB RAM and memory protection for the two-socket application server.

   Which solution should the architect recommend?

   a. HPE DL120 Gen9

   b. HPE Moonshot with M700

   c. HPE DL380 Gen9

   d. HPE Apollo with XL220a

References

ASE-Architecting HPE Server Ssolutions Learning Guide 2015 M1-20

4. Which HPE server solution can be justified by using the HPE Client Virtualization ROI Calculator?

   a. one for a hosted desktop infrastructure (HDI)

   b. one that uses nPartitioning or hard partitioning

   c. one for a web infrastructure built on virtualized servers

   d. one that integrates with an HPE Helion CloudSystem 9.x solution

References

HPE Advanced Server Solutions Module 10: Working with Customer Business Financials, "HPE Client Virtualization ROI Calculator"

5. A customer is operating a data center with HPE Fibre Channel based 3PAR storage. The architect intends to add an HPE Moonshot system to the data center to provide cost-effective Dynamic Content Delivery, front-end web and online analytics, accessing the data on the 3PAR storage.

   What is the most suitable interconnect option to use that allows access to the 3PAR data?

   a. an HPE Dark Fiber Multiplexer

   b. a Fibre Channel Virtual Connect module to connect directly to the SAN

   c. an HPE Multifunction Router to convert Fibre Channel to iSCSI

   d. native iSCSI initiator connecting to the storage over LAN

6. A customer operates a data center with a SAS-attached HPE MSA 2040 storage system. The architect plans to design a cost-effective, front-end web server that employs HPE Moonshot servers.

   How should the architect design the solution to allow the HPE Moonshot servers to access the data on the MSA 2040 storage in the most cost-efficient way?

   a. Connect the HPE Moonshot servers to the MSA2040 SAS controller using an HPE Multifunction router.

   b. Replace the SAS Controller in the MSA2040 with a SAN controller and connect the HPE Moonshot servers to the MSA storage using the iSCSI protocol.

   c. Replace the SAS Controller in the MSA2040 with a SAN controller and connect the HPE Moonshot servers to the MSA storage using the Fibre Channel protocol.

   d. Connect the HPE Moonshot servers directly to the MSA2040 SAS controller using a standard SAS cable.

7. A customer has a data center with HPE BladeSystems with HPE ProLiant BL servers. The customer has automated processes such as image backups and firmware and software updates. However, the customer still has trouble aligning services with changing line of business demands.

Which solution should the architect recommend to permit line of business users to consume services on demand?

a. HPE OneView 2.x

b. HPE RESTful API tool

c. HPE Helion CloudSystem 9.x

d. HPE Insight Cluster Management Utility (CMU)

References

HPE Advanced Server Solutions, Module 9: Managing and Monitoring HPE Solutions, "Adding HPE ProLiant servers and Moonshot to a cloud" and "Capabilities of HPE Helion cloud solutions"

For more information

Contact our program

Information is as of March 2022, Revision 8