Purpose of the exam preparation guide

The intent of this guide is to set expectations about the content and the context of the exam and to help candidates prepare for the exam. In this guide, you will find recommended HP training courses, reference and study material, and sample test items to help you achieve a passing score.

Studies conducted by HP and Prometric show that a combination of course attendance and self-study maximizes the likelihood of passing the exam on the first attempt.

Audience

This exam is for system engineers or technicians who require an in-depth understanding of the technologies deployed in HP Integrity servers and computer professionals pursuing an HP Accredited Systems Engineer (ASE) certification.

Certification requirements

This exam, Planning and Design of HP Integrity Mid-Range Server Solutions (HP0-255) is one of the core requirements to be certified as an Accredited Systems Engineer (ASE).

This level of certification measures the competencies required for hands-on planning and design of mid-range server solutions, and for the integration and support of technical solutions in enterprise class, networked environments. Given a set of customer business requirements, this individual is expected to be able to design solutions that integrate platform, operating system, storage, network and option components to solve business needs. The ideal candidate is anyone who deploys enterprise class solutions based on HP technologies.

Prerequisites

ASE candidates are required to have attained at least one of the following credentials before taking the HP0-255 exam:

- SAIR LCE
- Red Hat RHCE Certification
- Novell Certified Linux Engineer
- HP CSE – HP-UXv11
In addition, AIS candidates are expected to have taken the following exam before taking the HP0-380 exam:

- Configuration and Management of HP Integrity Mid-Range Servers (HP0-381)

**Exam details**

- Number of items: 70
- Item types: Multiple choice, drag and drop, exhibits
- Time commitment: 90 minutes
- Passing Score: 70% (49 items to pass)
- Reference material: No online or hardcopy reference material will be allowed at the testing site.

**Comments on the exam**

During the exam, participants can enter comments about specific exam items (for example, accuracy or appropriateness to audience). HP welcomes these comments as part of our continuous improvement process. More information about entering comments will be provided during the exam tutorial.

**Exam content**

The following testing objectives represent the specific areas of content covered in the exam. Use this outline to guide your study and to check your readiness for the exam. The exam measures your understanding of these areas.

**Configuration and Management of HP Integrity Mid-range Servers (HP0-255)**

**Exam Content**

1.0 Recognize, describe, and competitively position HP Integrity servers, server configurations, and solution components.

1.1 Describe and apply knowledge of HP integrated technologies and processes.

1.1.1 Explain Adaptive Enterprise strategy
1.1.2 Review HP Integrity servers portfolio
1.1.3 Describe the benefits of HP crossbar technology
1.1.4 Describe, explain and differentiate HP chipsets
1.1.5 Describe dual-processor Itanium technology of mx2
1.1.6 Identify HP value-add to Itanium architecture
1.1.7 Describe HP virtualization strategy
1.1.8 Describe utility pricing

1.2 Describe and apply knowledge of HP Integrity solutions.
   1.2.1 Describe the purpose, feature and functions of partitioning on HP Integrity server solutions
   1.2.2 Provide information for available upgrade paths
   1.2.3 Define the requirements and benefits of high availability
   1.2.4 Describe the differences between industry-standard architecture and HP architecture
   1.2.5 Describe the main features of HP high-availability solutions

1.3 Locate, describe and use tools and resources.

1.4 Competitively position Integrity server solutions and components.
   1.4.1 Compare chipset to available competitive products
   1.4.2 Compare Integrity platforms to available competitive platforms
   1.4.3 Explain HP Multi-OS features
   1.4.4 Describe the HP Platform Roadmap

2.0 Plan, design and validate the deployability of HP Integrity server solutions.
   2.1 Gather customer requirements.
   2.2 Analyze customer requirements.
   2.3 Define the initial design solution.
   2.4 Validate the solution design.
   2.5 Finalize the solution design.

3.0 Install, configure, integrate and upgrade HP Integrity server systems and options.
   3.1 Develop or modify and review implementation plans.
   3.2 Interconnect SAN / IO.
   3.3 Install applications (middleware and software).
Recommended Training and Study References

This section lists training courses and documents that can help you acquire a majority of the knowledge and skills needed to pass the exam. You must also gain the practical experience outlined in this guide.

You are not required to take the courses listed in this section. However, HP strongly recommends that you attend the classes, participate in class labs, and thoroughly review all course material and documents before taking the exam, even if you believe you have sufficient on-the-job experience.

- HP Web-based training (WBT) course, “PA-RISC to Integrity Evolution Technical Resource Kit (TRK)” – Catalog code: 20847
- HP instructor-led training (ILT) course, “Configuration and Management of HP Integrity Mid-range Servers” – Catalog code: 25522
- HP instructor-led training (ILT) course, “Planning and Design of HP Integrity Mid-Range Server Solutions” – Catalog code: 27522

After completing this course, you should be able to do the following:

1. List the steps used to identify Integrity solution requirements
2. Describe the HP Adaptive Enterprise strategy and how it is implemented in mid-range HP Integrity solutions
3. Explain how the mid-range Integrity servers are differentiated in the HP Integrity product portfolio
4. List the technologies supported in the mid-range HP Integrity solutions
5. Identify the tools used to design a mid-range Integrity solution
6. Discuss the design guidelines and configuration rules used to design a mid-range Integrity server solution
7. Explain how business continuity practices can be implemented in a mid-range HP Integrity solution

- CompTIA Server+ certification study guide

More recommended study references:

- HP Integrity rx7620-16 and rx8620-32 server technical white paper
- HP Integrity rx7620-16 server data sheet
- HP Integrity rx8620-32 server data sheet
- HP Integrity rx7620-16 and rx8620-32 server QuickSpecs
- HP System Partitions Guide
- Site Preparation Guides for the rx7620-16 and rx8620-32 server
Sample test items

For answers please refer to the Answer Key at the end of this document.

1. Which utility pricing model is used only for leased servers, as opposed to purchased servers?
   A. Pay-Per-Use (PPU)
   B. Instant Capacity (iCAP)
   C. Temporary Instant Capacity (TiCAP)
   D. Instant Capacity on Demand (iCOD)

2. The crossbar backplane is the basis of the rx8620 server. What is the benefit of the crossbar backplane?
   A. It uses snooping cache coherency protocol.
   B. It is programmable to enable electrically isolated partitions.
   C. It detects and corrects double-bit errors.
   D. It is highly available, with full redundancy.

3. You can reconfigure nPar definitions for a server without physically modifying the server hardware configuration by using which HP software-based partition management tools? Select TWO.
   A. Genesis
   B. nPar Creator
   C. HP Partition Manager
   D. Command View for nPar
   E. Partition Command Line Interface (ParCLI)

4. What is the benefit of cell-local memory (CLM)?
   A. It can be used from other hardware partitions.
   B. It can be used as virtual memory within a cell board.
   C. It provides memory protection within a cell board (Chip Memory Sparing).
   D. It provides exclusive low latency CPU to memory access on the same cell board.
5. The CEO of Global Incorp is interested in an HP Adaptive Enterprise Solution on HP Integrity server. You are preparing a high-level presentation to the Global Incorp CEO. You need to gather information from which area to support the sales presentation?
   A. Financial department about their company performance
   B. IT department about their current IT infrastructure
   C. Manufacturing department on their IT uptime
   D. Network users about their IT Infrastructure capabilities

   A. FC SAN link speed
   B. FC SAN Name Server information
   C. Server FCA connection port on FC Switch
   D. FC SAN Switch firmware version
   E. Inter-Switch Link performance

7. A customer is looking for an HP Integrity server that has equal or better performance than a specific IBM server. Which HP tool can be used to compare and match TPM performance metrics?
   A. TPC Benchmark Toolkit (TBT)
   B. Performance Advisor
   C. Performance Quick Reference Tool (PQRT)
   D. SalesBuilder for Windows (SBW)

8. Your customer needs to size an HP Integrity server for Microsoft SQL Server 2000 (64-bit/Itanium). Which tool is available to complete this process?
   A. SalesBuilder for Windows (SBW)
   B. Configuration Guide
   C. HP Integrity server transaction processing sizer
   D. Performance Quick Reference Tool (PQRT)
9. You are validating the memory configuration of an HP Integrity rx7620-16. Which statement is true?
   A. DIMMs must have the same size within a rank (four DIMMs).
   B. DIMMs must have the same size within an echelon (two DIMMs).
   C. DIMMs must be loaded in sets of four at specified locations on the cell board.
   D. DIMMs must have the same size within a partition.

10. You are designing a heterogeneous server environment that includes HP-UX 11i v2, Microsoft Windows Server 2003 (64-bit), Linux and OpenVMS 8.2. This environment connects six HP StorageWorks EVA8000s and two HP StorageWorks XP1024s. What do you need to secure the SAN infrastructure?
   A. Selective Storage Presentation
   B. Fabric zoning
   C. Firmware WWN Locking
   D. Secured Fabric OS

Conclusion
HP wishes you success in the HP Certified Professional Program and in passing the exam for which you are preparing.

Answer Key
1. Which utility pricing model is used only for leased servers, as opposed to purchased servers?
   A. Pay-Per-Use (PPU)*
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A. Financial department about their company performance
B. IT department about their current IT infrastructure*
C. Manufacturing department on their IT uptime
D. network users about their IT Infrastructure capabilities

6. Your customer’s current environment consists of a single-fabric SAN architecture using cascade topology. You must capture their existing SAN performance and design a new high-availability SAN environment for HP ServiceGuard Cluster on HP-UX 11i v2. What information do you need? Select TWO.
A. FC SAN link speed
B. FC SAN Name Server information
C. Server FCA connection port on FC Switch*
D. FC SAN Switch firmware version
E. Inter-Switch Link performance*
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