Purpose of the Exam Prep 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 successful 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 Storage Sales Specialists and Technical PreSales. Examples of job roles:

- Field System Engineers
- System Integrators and Consultants
- Presales Technical Support Engineer
- Major Account System Engineer

General areas of content include installation and configuration of the following:

- Fibre Channel to SCSI bridges
- Tape libraries
- Primary storage systems
- Backup software

Certification Requirements

The Designing and Implementing the Enterprise StorageWorks Backup Solution exam #HP0-751 is one of the core requirements of ASE-StorageWorks.
Exam Details

At the beginning of the exam, you will be asked to answer several survey questions. The survey questions are designed to assist the exam development team in accurately profiling test results and to improve future exams.

The following are details about the exam:

- **Number of items:** 58
- **Item types:** Multiple Choice, Drag and Drop, Point and Click
- **Time commitment:** 75 minutes
- **Passing Score:** 62%
- **Reference Material:** No online or hard copy reference material will be allowed at the testing site.

Comments on the Exam and Survey

After the exam has been completed, there are an additional 15 minutes allotted for the participant to make specific comments about the test or survey items (i.e., accuracy, appropriateness to audience, etc). HP welcomes these comments as part of our continuous improvement process.

Exam Registration

This exam is available at [Prometric](#).

This exam is available at [Promissor](#).

Exam Content

The following outline represents 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.

### Designing and Implementing the Enterprise StorageWorks Backup Solution (HP0-751) Exam Content

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<th>Backup and Restore Basics</th>
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<td>1.1</td>
<td>Explain the evolution of client/server network architecture.</td>
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<td>1.2</td>
<td>Identify existing backup methods and explain their evolution.</td>
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<td>1.3</td>
<td>Explain the importance of hard drive and controller feed speed on backup performance.</td>
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<td>1.4</td>
<td>Identify performance tuning issues of designing a secondary storage solution.</td>
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<td>1.5</td>
<td>Define backup and restore strategies.</td>
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<td>1.6</td>
<td>Identify backup and restore tape rotation schemes.</td>
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<td>1.7</td>
<td>Define archiving and Hierarchical Storage Management.</td>
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<th>Module 2</th>
<th>Introduction to Enterprise Backup Solutions</th>
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<tbody>
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<td>2.1</td>
<td>Define Storage Area Network.</td>
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</table>
2.2 Identify when to use HP Enterprise Backup Solutions.

2.3 Describe the purpose, features, and benefits of Enterprise Backup Solutions.

2.4 Explain the service and support for Enterprise Backup Solutions.

2.5 Describe the competitive landscape for Enterprise Backup Solutions.

Module 3 **Hardware Components of the Enterprise Backup Solutions**

3.1 Describe the purpose, features, functions, and benefits of Fibre Channel.

3.2 Explain why it is important to use Fibre Channel for HP Enterprise Backup Solutions.

3.3 Identify and describe the hardware components of Enterprise Backup Solutions.

Module 4 **Software Components of the Enterprise Backup Solutions**

4.1 Identify the required software components and describe what each does for the Enterprise Backup solution.

4.2 Identify the features of the VERITAS Backup Exec, Computer Associates ARCserve, VERITAS, NetBackup, Legato NetWorker, Tivoli Storage Manager, and CommVault Galaxy software applications.

4.3 Describe the topology of the Backup Exec, ARCserve, NetBackup, NetWorker, Tivoli Storage Manager, and CommVault Galaxy environments.

4.4 Identify the current caveats of the Enterprise Backup Solutions.

Module 5 **Designing the Multiserver Backup Solution**

5.1 Given a scenario, apply MB/s to GB/hr conversion formulas.

5.2 Given a problem situation, analyze the situation and describe how to perform a customer-needs analysis to collect information necessary for an appropriate design.

5.3 Given a scenario, identify how to design a multiserver backup solution based on a customer’s requirements.

5.4 Describe the purpose, features, and functions of the Compaq StorageWorks Backup Sizing Tool and describe how to use the tool to design an EBS.

5.5 Explain how various StorageWorks software tools (Virtual Replicator, Enterprise Volume Manager, and Data Replication Manager) are used to facilitate backups.

5.6 Explain when and how to use cluster backup and restore strategies.

Module 6 **Diagnostics and Troubleshooting**

6.1 Describe the HP management support for the Enterprise Backup Solutions.

6.2 Identify the limitations of Fibre Channel on secondary storage compared with primary storage.

6.3 Given a problem solving scenario, diagnose problems and identify how to perform repairs to the system using the troubleshooting flowchart method and tools provided by HP.

**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.
Instructor-Led Training

Use the information in this guide and the practical experience you have gained to determine your need for the instructor-led training.

<table>
<thead>
<tr>
<th>Title</th>
<th>Course Number</th>
<th>How to Enroll</th>
</tr>
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<tbody>
<tr>
<td>Designing and Implementing the StorageWorks Enterprise Backup Solution</td>
<td>441</td>
<td><a href="http://www.hp.com/training/441.html">http://www.hp.com/training/441.html</a></td>
</tr>
</tbody>
</table>

Web-based Training

Self-paced training and technical documentation may provide appropriate learning alternatives to instructor-led training for more experienced candidates.

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<thead>
<tr>
<th>Title</th>
<th>Course Number</th>
<th>How to Order/Obtain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Designing and Implementing the StorageWorks Enterprise Backup Solution WBT</td>
<td></td>
<td><a href="http://www.hp.com/storage/training/technical-curriculum.html">http://www.hp.com/storage/training/technical-curriculum.html</a></td>
</tr>
</tbody>
</table>
Sample Test Items

The sample test items give you a preview of what the actual test items will look like. It is important to note that these items WILL NOT be on the exam itself. However, they are representative of the actual items, and they should help you become familiar you with the format and complexity of the test items. These sample test items are not a check for readiness.

1. A marketing research company maintains a large Oracle database using Oracle 9iRAC on Tru64 Clusters. Their current database is in excess of 2TB. In addition to the Oracle 9iRAC (Real Application Clusters) applications, the infrastructure requires support for accounting and finance using Oracle 8i on a Sun Solaris server. Both Oracle database files reside on the corporate SAN. They are considering EBS from Compaq.

Select one solution that will meet the objective to provide EBS for both Sun Solaris and Tru64 with 9iRAC. (Choose two)
A. EBS with VERITAS NetBackup
B. EBS with Legato NetWorker
C. Use UNIX TAR to backup files to local attached tape libraries
D. Backup across the the SAN using TAR
E. Backup across the LAN using TAR

2. Cato's Potatos has 5 servers running Windows 2000. The servers share three RA4100 storage subsystems. Currently, the servers are backed up at night across the LAN. Network traffic during backups is becoming a problem as storage grows. The administrator wishes to centralize backups. Which solution would allow the customer to backup the data on the servers and storage subsystems as well as reduce network traffic?
A. EBS with VERITAS Backup Exec
B. Local backup with VERITAS Backup Exec
C. EBS with Legato NetWorker
D. Local backup with Legato NetWorker

3. A customer has encountered a problem with their EBS. They are not able to mount or read from one drive in the library. After the failed attempt to mount tapes, they discover that the media appears damaged. The EBS has been installed and working successfully for 6 1/2 months. After logging a call with Compaq Services, it has been determined that there is a mechanical failure in the tape drive.

What options are available to the customer?
A. The tape is covered by a 90 day hardware warranty
B. The tape robotic mechanism is covered by a 1 year warranty
C. Because damaged by the tape drive, the media is covered under warranty
D. The tape drive is covered by hardware warranty

4. The Modular Data Router maintains which of the following maps:
A. Tape bar code to tape drive serial number
B. Tape drive serial number to SCSI Bus-Target-LUN
C. Tape drive serial number to Fibre Channel LUN
5. Backup Exec requires the following component for device sharing
   A. Tape Library Option
   B. SAN Option
   C. Shared Storage Option
   D. Multihost License Option

6. Assume the following configuration:
   Two Windows 2000 hosts each with one KGPSA, one system connected to port 6 of a SAN 16 switch (running 2.1.7 firmware) the other connected to port 5. One MDR is installed connected to port 3 the SCCmode=off. The customer executes a "setsccmode.on" command at the AMC prompt of the MDR. Both Windows 2000 systems are rebooted and the backups fail that evening why did this happen?
   A. enabling SCCmode causes the FC luns to shift
   B. Rebooting the systems caused the problem
   C. SCCmode "on" is not supported by SAN Switch 16 running version 2.1.9m firmware
   D. SCCmode is used in Arbitrated Loop environments

7. Which Compaq SANWorks product would you use to offer maximum protection from wide-area disasters?
   A. EVM
   B. Virtual Replicator
   C. DRM
   D. SRM

8. In an EBS arbitrated loop configuration using a Hub12, the following can result in fibre channel data transmission errors
   A. Loop disruptions (LIPs)
   B. Bad media
   C. Robotic arm failures
   D. API errors

9. Solaris provides device persistency through which of the following?
   A. SCSI identities for the tape device remain the same
   B. Backup jobs will restart in the case that packets are dropped
   C. Tape drive failover in the event of a time out failure
   D. Maps World Wide Name to target using the st.conf file
Answers:
1. A, B
2. A
3. D
4. D
5. C
6. A
7. C
8. A
9. D

Conclusion

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