HP Certified Professional
Supporting the Enterprise Modular Library
(EML)
(HP0-205)
Exam Preparation Guide

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 it. In this guide, you will find recommended HP training courses, reference and study material 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

The Supporting the Enterprise Modular Library (EML) exam is for personnel who support HP StorageWorks EML E-Series products

Examples of job roles:

- HP Services field engineers, call center personnel, and other field personnel who provide installation and/or operational support assistance
- HP Channel Partners supporting HP storage products (e.g., engineers who perform warranty and installation services)

General areas of content include:

- Product categories, components, capacity and performance
- Installation, operation, configuration
- Troubleshooting, conversions, and FRU removal and replacement

Certification requirements

The Supporting the Enterprise Modular Library (HP0-205) exam is one of the exams that satisfies the elective component of the ASE – StorageWorks Nearline credential.

This level of certification measures competencies required for hands-on integration and support of technical solutions in complex, enterprise class environments. Given a set of customer business requirements, an individual earning this certification is expected to be able to design, support and integrate platform, operating system, nearline storage, network and option components to solve business needs.
The ideal candidate is anyone who deploys complex solutions based on HP nearline technologies. Job functions include, but are not limited to:

- Plan, design and capacity-size solutions
- Install, configure, startup and upgrade solution components
- Performance tune and optimize solutions
- Troubleshoot solutions and perform removal and replacement operations
- Perform system administration and operational tasks
- Manage using HP tools and resources.

Prerequisites

- HP Accredited Integration Specialist - StorageWorks
- Basic knowledge of:
  - Tape technologies, and standalone tape drives
  - Library and Tape Tools (L&TT)
  - Command View TL
  - SAN connectivity foundations
  - SCSI interfaces
- Knowledge of/completion of prerequisite Web-based and Instructor Led Training Courses specified in the recommended Training and Study References section of this exam preparation guide.

Exam details

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

- Number of items: 64
- Item types: Multiple choice, Drag and Drop
- Passing Score: 64% (raw score of 41)
- Time commitment: 90 minutes
- Reference Material: No on-line or hard copy reference material will be allowed at the testing site.

Comments on the exam

During the exam, participants can make specific comments about the 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.

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.

Supporting the Enterprise Modular Library (EML) (HP0-205) Exam Content

1.0 Tape, Tape Library, and Backup Technologies & Implications
Compare and contrast the various products and technologies.
- cartridge slots available in the card cage expansion module
- Fibre Channel connection speed option(s) available for host connection ports of tape library interface controllers

2.0 HP Product & Solution Set
Given a customer requirement, present relevant storage solution options to meet the customer's business needs.
- knowledge of different library features and specifications
- HP Extended Tape Library Architecture features

3.0 Solution Validation
Gather requirements.
- considerations for selecting a location for EML E-Series libraries
- EML E-Series tape library installation prerequisites and recommendations
- Minimum requirements for using the Command View TL graphical user interface
- Requirement(s) for EML E-Series libraries equipped with redundant power supplies

Review and validate design.
- verifying that Fibre Channel links are functioning correctly
- verifying interface controller configuration
- verifying device operability
- adding Fibre Channel HBA to a host
- connecting the Interface Manager when the network is down
component(s) required to connect an EML E-Series tape library to a SAN fabric

4.0 Implementation
Given the final design, implement the solution to meet the customer’s requirements.
- software products for managing, monitoring and troubleshooting EML E-Series tape libraries
- Interface Manager card standard cabling requirements
- recommended order for tape drive installation
- when to use a second power distribution unit
- information contained in “Un-managed Licenses” group in the “License Key Summary window of Command View TL
- Command View TL license information
- power-on sequences
- Interface Manager card default network configuration
- Advanced Secure Manager features
- processes using the bar code reader
- implementing WORM (Write Once Read Many) functionality
- performing firmware updates on components of an EML E-Series tape library
- activating Advanced Secure Manager with Command View TL running
- software used to create support tickets
- gaining host access to an EML E-Series tape library
- robot considerations

5.0 Maintenance, Troubleshooting & Support
Demonstrate the ability to support the solution by maintaining and providing proactive support
- supported configuration documentation
- customer site considerations
- procedures for opening the front door of an EML E-Series tape library
- EML E-Series tape library FRU features
- EML E-Series component locations and support information
- preserving original configuration information
- replacing failed tape drives
Command View TL options
Performance tune.
- file factors affecting tape device performance in a SAN environment
- backup performance documentation
- software for calculating backup data compression ratio
- measuring sequential performance
- factors affecting performance at the disk subsystem during backup
- recommended backup procedures
- R/W-head wear causes and implications
- transfer rates

6.0 Solution Administration
Given an operational environment, manage and administer the solution to meet required service level agreements and overall customer requirements.
- device identification
- license requirements
- partition requirements
- changing logical library configuration
- configuring mailslots
- event log information
- diagnosing EML E-Series tape library events
- event severity levels
- FRU component features
- Command Line Interface password
- IP addresses

Recommended training and study references
This section lists training material and documents to 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.
### 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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<th>Title</th>
<th>Course Number</th>
<th>How to Enroll</th>
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### 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.

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Sample Test Items

1. A customer requires a tape library with the ability to scale up to 400 TB and contain up to 16 tape drives. Which library best meets these needs?

   A. ESL9000
   B. MSL6000
   C. EML E-Series
   D. ESL E-Series

2. Which document provides information about physical specifications and requirements of the EML tape libraries along with installation instructions?

   A. Datasheet
   B. User Guide
   C. QuickSpecs
   D. Service Guide

3. What is recommended when moving a new EML E-Series tape library from the shipping pallet? Select TWO.

   A. protective cover
   B. forklift
   C. ramp assembly
   D. guide rail
   E. second person

4. What should you verify when adding new tape cartridges to an EML E-Series tape library?

   A. Robot is in correct park position.
   B. Bar code labels (if present) are properly attached.
   C. Tapes are correctly rewound.
   D. Hosts do not access the tape library.

5. Which document provides information about backup software products that support the EML E-Series tape libraries?

   A. EBS Design Guide
   B. EML E-Series User Guide
   C. EBS Hardware/Software Compatibility Matrix
   D. EML E-Series Hardware/Software Compatibility Matrix
6. You should consider updating the EML E-Series tape library firmware when _____.

   A. the load port configuration is changed
   B. a new Ultrium 960 tape drive is added to the library
   C. the robotics move incorrectly and require recalibration
   D. Command View TL does not detect the tape library

7. What is contained in new EML E-Series tape library firmware revisions?

   A. SCSI command set revisions
   B. functional updates and Fibre Channel connection tools
   C. performance measurement metrics and bug fixes
   D. SCSI tape enhancements and Ultrium performance upgrades

8. Before servicing an EML E-Series tape library, you must manually park the robot picker. Which tools are used to do this?

   A. Phillips screwdriver and flat blade screwdriver
   B. ratchet tool and lift flex retraction handle
   C. Torx 15 driver and ratchet tool
   D. Torx 10 driver and flat blade screwdriver

9. What is the most critical performance factor when backing up highly compressed data?

   A. distance from data to tape device
   B. I/O block size
   C. file size
   D. data feed speed

10. What describes the presentation of tape devices to hosts through the e2400-160 Fibre Channel 2 Gb interface controller in manual mode?

    A. LUN masking
    B. LUN mapping
    C. persistent binding
    D. Secure Manager
ANSWERS:

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Conclusion

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