HP Certified Professional Program
NonStop SQL/MX
Exam HP0-A25
Exam Preparation Guide

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 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 targeted for the following audience, with three to five years' experience on NonStop servers running the NonStop Kernel Operating System.

Examples of job roles

- Professional Services personnel who assist NonStop customers.
- Authorized Service and Support personnel (field support technicians), who perform installations, upgrades, troubleshooting and maintenance tasks.
- Global Managed Customer Support Center (GMCSC) personnel, who may have specialized technical expertise in the operating system and NonStop applications and serve as support for both field support technicians and customers.
- Analyst SEs or Pre-Sales Technical Support (PSTS) personnel, who perform pre-sales consulting and technical account support.
- NonStop Technical Consultants (both internal and external), System Integrators and Consultant Partners, Authorized Service Channel Partners and Distributors, Customers authorized to service their own equipment.

General areas of content

- NonStop SQL and Relational Database (RDB) Concepts
- Database Development
- Operations and Management
- Application Development
- Performance, and Problem Management
Certification Requirements

The NonStop SQL/MX Exam HP0-A25 is an elective for certification as an Accredited System Engineer (ASE) in the HP NonStop S-series Systems track. It is also an elective for the HP NonStop Kernel Certified Systems Engineer (CSE) in the HP Operating System certification.

Prerequisites

- Successful completion of the Accredited Integration Specialist (AIS) is required prior to achieving the Accredited System Engineer (ASE) certification.

- One mandatory exam and three elective exams, totaling four exams, are required for ASE certification. The HP NonStop SQL/MX HP0-A25 exam is one of the elective exams that may be selected as one of the elective exams.

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 test items: 78
- Item type: multiple choice
- Exam time: 90 minutes
- Passing score: 70% (55 items correct to pass)
- Reference material: No online 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 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.

Objective

1.0 NonStop SQL and relational database concepts [21%]
- Describe SQL objects
- Describe NonStop SQL Architectural Components
- Describe embedded bs. nonembedded sql
- Demonstrate knowledge of normalization
- Demonstrate knowledge of referential integrity
- Describe joins
- Describe the use of secondary indexes
- Define primary key
- Demonstrate knowledge of data access and strategies
- Describe available file organization
- Describe data types
- Describe scalability
- Describe database integrity
- Describe availability
- Demonstrate knowledge of the architecture
- Describe distributed databases

2.0 Database design and implementation [16%]
- Describe Metadata Tables
- Describe schemata
- Describe data types
- Describe columns
- Describe keys
- Describe the use of constraints
- Describe physical attributes
- Describe partitioning
- Describe ANSI views
- Describe SQL documentation usage
- Describe the use of the SQL data definition language (DDL) statements
- Describe the uses and differences in the SHOW DDL and INVOKE commands
- Describe tables
- Describe utilities and tools
3.0 Operations and management [24%]
Demonstrate knowledge of capacity management
Demonstrate knowledge needed to plan for database growth
Demonstrate knowledge of database backup and recovery
Describe the management of a physical database structure
Demonstrate knowledge of common MXCI commands
Demonstrate knowledge of migrating SQL/MP to SQL/MX
Explain issues involved in Change Management
Describe knowledge of performance management
Demonstrate knowledge of database security issues
Demonstrate the knowledge and function of Optimizer features
Demonstrate the knowledge of data mining capabilities
Configuring data sources with ODBC/MX

4.0 Application development [15%]
Demonstrate knowledge of host language interfaces
Explain programmatic error handling methods
Demonstrate knowledge of the SQL diagnostics areas
Demonstrate knowledge of dynamic SQL
Demonstrate knowledge of the effect of CONTROL statements
Demonstrate knowledge of concurrency
Demonstrate knowledge of the SQL compilation process
Describe compiler options
Describe the access to SQL/MP objects
Describe the use of SQL data manipulation language (DML) statements
Describe the use of cursors
Describe the use of STREAM clause (Publish and Subscribe)
Demonstrate knowledge of late name resolution
Describe transaction control
Show familiarity with common SQL/MX built-in functions
Describe the use of block statements (compound statements)

5.0 Performance [16%]
Describe knowledge of physical database attributes
Describe conditions affecting performance
Demonstrate knowledge of tools related to performance analysis
Describe knowledge of database reorganization affecting performance
Describe performance improvements and the benefit to OLTP
Describe the improved availability function

6.0 Problem management [8%]
Describe problem prevention
Demonstrate knowledge of problem identification
Demonstrate knowledge of the tools required to identify and isolate problems
Explain requirements for problem resolution and escalation
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 HP instructor-led training.

The HP Certified Professional Program (Level 2) includes references to a variety of materials that provide information included on this certification exam. Completion of these HP courses and review of materials is recommended, but not required, for success on this exam.

Note that soon you will be able to participate in NonStop courses in a virtual classroom environment (RAIL). Refer to the [http://www.hp.com/education/sections/nonstop.html](http://www.hp.com/education/sections/nonstop.html).

Recommended Courses

<table>
<thead>
<tr>
<th>Title</th>
<th>Course Number</th>
<th>How to Enroll</th>
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</thead>
<tbody>
<tr>
<td>NonStop SQL/MX Basics</td>
<td>U41845 [5 day, ILT]</td>
<td>Refer to your regional websites for local training information</td>
</tr>
<tr>
<td>HP NonStop SQL/MX database management</td>
<td>U86175 [5 day, ILT]</td>
<td>Refer to your regional websites for local training information</td>
</tr>
<tr>
<td>HP NonStop SQL/MX programming</td>
<td>U55125 [5 day, ILT]</td>
<td>Refer to your regional websites for local training information</td>
</tr>
<tr>
<td>HP NonStop SQL/MX query analysis and tuning</td>
<td>U85295 [5 day, ILT]</td>
<td>Refer to your regional websites for local training information</td>
</tr>
</tbody>
</table>

Candidates with significant experience with HP NonStop SQL/MP can substitute this course for the above recommended courses:

<table>
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<th>Title</th>
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</tr>
</thead>
<tbody>
<tr>
<td>NonStop SQL/MX database for SQL/MP users</td>
<td>U41855 [5 day, ILT]</td>
<td>Refer to your regional websites for local training information</td>
</tr>
</tbody>
</table>
Conclusion

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

Samples:

The following examples represent the types of items and question formats that you could see on the exam. These are generic samples and do not reflect the content being tested.

1. Which planet is closest to the Earth?
   A. Mars
   B. Pluto
   C. Venus
   D. Saturn

2. Which planets are “inner planets” — planets found within the asteroid belt? Select TWO.
   A. Pluto
   B. Earth
   C. Neptune
   D. Mercury
   E. Venus

3. Click the Exhibit button.
   What is this constellation called?
   A. Leo
   B. Aries
4. Click the Task button.

Place the planets in order of closest to farthest from the planet Earth.
5. Click the Task button.

Review the picture of the planets and click on Saturn.