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 a minimum of three to five years’ experience on the NonStop S-Series platforms running the G-Series NonStop Kernel Operating System. Examples of job roles:

- Professional Services personnel who assist NonStop customers.
- Global Customer Support Center (GCSC) 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.


Certification Requirements

The NonStop Security Exam HP0-766 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.
For further information on HP NonStop Systems track requirements, visit the website at
http://www.hp.com/go/certification

**Prerequisites**

None, but it is highly recommended that you have three to five years’ experience working in an HP NonStop Security environment.

**Exam Details**

The NonStop Security is a live exam. You will receive a score report with your results after testing is complete. You can use the report to identify areas of strength and learn about areas to improve, if necessary.

If you do not pass this exam, refer to your percentages for each core competency shown on your score sheet. Use these results to guide you in areas where you need to study or review more than other competencies.

**Test Information**

- **Number of test items:** 76
- **Item type:** multiple choice
- **Time commitment:** 105 minutes
- **Passing Score:** 63%
- **Reference material:** No online or hard copy reference material will be allowed at the testing site.
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. The approximate percentage of exam questions dedicated to each major content area is included in parenthesis. Typically, the higher the percentage, the more questions will be on the exam.

<table>
<thead>
<tr>
<th>766</th>
<th>NonStop Security</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>766.1</td>
<td>Security best practices for NonStop servers</td>
<td>13%</td>
</tr>
<tr>
<td></td>
<td>Explain security policies</td>
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<td></td>
<td>Identify threats and prevention techniques</td>
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<tr>
<td></td>
<td>Identify the limitations when implementing security on NonStop servers</td>
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<tr>
<td></td>
<td>Describe best practices for HP NonStop security products</td>
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<td></td>
<td>Describe business considerations for implementing security</td>
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<td></td>
<td>Describe administrative procedures for implementing security for NonStop servers</td>
<td></td>
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<tr>
<td></td>
<td>Describe the network security considerations for NonStop servers</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>766.2</th>
<th>NonStop server security concepts</th>
<th>20%</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Identify the security threats implicit within utilities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Explain architectural requirements for application security</td>
<td></td>
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<tr>
<td></td>
<td>Describe OSS security</td>
<td></td>
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<tr>
<td></td>
<td>Describe the security mechanisms available for Guardian</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Describe Safeguard configuration settings</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Describe security mechanisms available for SQL</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>766.3</th>
<th>Auditing configuration and monitoring for NonStop servers</th>
<th>12%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Describe how to configure a Nonstop server for security auditing</td>
<td></td>
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<td></td>
<td>Describe how to report on the auditing logs on a NonStop server</td>
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<tr>
<td></td>
<td>Describe significant security events and appropriate actions</td>
<td></td>
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<tr>
<td></td>
<td>Discuss networking-related auditing possibilities</td>
<td></td>
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</tbody>
</table>
### NonStop access control principles

- Describe considerations for user access control
- Describe considerations for network access tools (FTP/TELSERV)
- Describe access issues for TSM and OSM console operations
- Demonstrate understanding of TCP/IP security needs

### NonStop authorization principles

- Describe authorization of users to access data on the NonStop server
- Describe the authorization interaction between Guardian, Safeguard and OSS
- Describe the authorization considerations for special users

### NonStop authentication principles

- Compare and contrast the methods to authenticate a user on a NonStop system (password, hardware device, certificate)
- Explain the difference between a system user and an application user
- Manage users and passwords
- Explain the inter-relationship of authentication and authorization

### Confidentiality and integrity concepts

- Ensure integrity of the operating system
- Ensure integrity of application data and applications
- Ensure confidentiality and integrity of data at rest and in transit

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**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.

**Recommended Minimum Courses**

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Part Number</th>
<th>Type</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>Securing NonStop servers using Safeguard</td>
<td>U4196S</td>
<td>ILT/OST</td>
<td>4 Days</td>
</tr>
</tbody>
</table>

**Additional Highly Recommended Courses**

- College courses pertaining to computer architecture, data structures and algorithms

**Other Level 2 Recommended Resources**

For all Level 2 NonStop ASE exams, it is highly recommended that the certification candidates be familiar with the contents of these two books (not available on NTL):

- **Performance Analysis of Transaction Processing Systems** by Dr. Wilbur Highleyman. This book can be downloaded from the NonStop website under the heading Current Exams and Preparation. Refer to the download link under the NonStop Performance Analysis and Tuning Exam Preparation Guide link. Note that this book is can be ordered from HP Publishing.


**Courses Descriptions**

Check web site course descriptions for prerequisites at: [http://www.hp.com/education/sections/nonstop.html](http://www.hp.com/education/sections/nonstop.html)

To register in HP NonStop courses, go to: [http://www.hp.com/cgi-bin/education/regform.cgi](http://www.hp.com/cgi-bin/education/regform.cgi)
You can also call 1 (800) 472-5277 in North America, to speak with an education consultant or register for courses. If you are in Canada, call 1 (800) 563-5089 or contact your local education and training resource. For other locations, refer to the HP certification web page for your geography and your regional or local contacts.

http://www.hp.com/go/certification

Or, you can send an email to nonstop.training@hp.com

Additional Recommended Reference Materials for This Exam

References for exam questions are found in the web-based HP NonStop Technical Library (NTL). The NTL can be accessed from these URLs:

Internal: http://techlibrary.cac.cpqcorp.net/ntl/

External: www.hp.com/go/ntl

Note that this exam preparation guide typically references the latest documentation release available at the time the exam was written.

Documentation

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
C. Orion
D. Taurus
E. Gemini
F. Pleiades
G. Ursa Minor
H. Ursa Major
I. Andromeda
4. Click the Task button.

Place the planets in order of closest to farthest from the planet Earth.

![Diagram of planets]

1. Closest: [place here]  
   - Neptune

2. [place here]  
   - Uranus

3. [place here]  
   - Pluto

4. Farthest: [place here]  
   - Saturn

5. Click the Task button.

Review the picture of the planets and click on Saturn.

![Planets image]