# HPE ASE – Composable Infrastructure Integrator V1 OFFICIAL CERTIFICATION STUDY GUIDE (EXAM HPE0-S58)

**First Edition** 

**Tomasz Lach** 

# HPE ASE – Composable Infrastructure Integrator V1 Official Certification Study Guide (Exam HPE0-S58)

Tomasz Lach

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#### Introduction

This study guide is designed to help you prepare for the HPE ASE – Composable Infrastructure Integrator V1 certification exam (HPE0-S58). Organized along the lines of exam topics and objectives, chapters can be studied independently when preparing for the certification. The guide provides a solid foundation for implementing HPE composable infrastructure components. It covers functions, features, configuration, and troubleshooting of HPE products and solutions across HPE Servers, HPE Synergy, HPE 3PAR StoreServ, and HPE OneView together with related topics such as virtualization and management.

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#### **Audience**

This book is designed for systems integrators involved in implementing HPE Composable Infrastructure solutions.

It is assumed that you have an understanding of servers, storage, networking, and management technologies and an interest in learning about composable infrastructure to help you address customers' business issues and implement appropriate solutions.

# **Assumed Knowledge**

HPE ASE – Composable Infrastructure Integrator Study Guide is an expert level book covering implementation, management and troubleshooting of HPE Servers and HPE Synergy solutions and related technologies. It is assumed that you have previous knowledge from prerequisite trainings, covering areas such as servers, storage, networking and management tools.

#### Minimum Qualifications

The prerequisites for the HPE ASE – Composable Infrastructure Integrator V1 certification are the HPE ATP - Hybrid IT Solutions certification and HPE Product Certified – OneView product certification.

#### **Relevant Certifications**

After you pass the HPE0-S58 exam, your achievement may be applicable toward more than one certification. To determine which certifications can be credited with this achievement, log in to The Learning Center and view the certifications listed on the exam's More Details tab. You might be on your way to achieving additional certifications.

## **Preparing for Exam HPE0-S58**

This self-study guide does not guarantee that you will have all the knowledge you need to pass the exam. It is expected that you will also draw on real-world experience and would benefit from completing the hands-on lab activities provided in the instructor-led training.

# **Recommended HPE Training**

Recommended training to prepare for each exam is accessible from the exam's page in The Learning Center. See the exam attachment, "Supporting courses," to view and register for the courses.

# **Obtain Hands-on Experience**

You are not required to take the recommended, supported courses, and completion of training does not guarantee that you will pass the exams. Hewlett Packard Enterprise strongly recommends a combination of training, thorough review of courseware and additional study references, and sufficient on-the-job experience prior to taking an exam.

# **Exam Registration**

To register for an exam, go to https://certification-learning.hpe.com/tr/learn\_more\_about\_exams.html

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# 1 HPE Server Portfolio Introduction

#### LEARNING OBJECTIVES

After completing this chapter, you should be able to describe mainstream HPE compute products, including:

- ✓ HPE ProLiant ML/DL systems
- ✓ HPE Superdome Flex
- ✓ HPE SimpliVity
- ✓ HPE Apollo
- ✓ HPE Synergy

# Digital enterprise accelerated through innovation

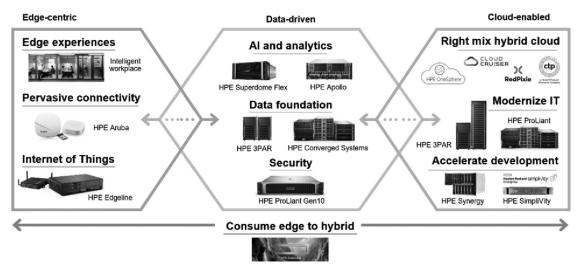


Figure 1-1 Innovation amplified by HPE products and services

#### **HPE Server Portfolio Introduction**

Figure 1-1 brings together the services model and the HPE corresponding key technologies, enabling our team to deliver on the goals for customer transformation. Underpinning all these solutions is HPE GreenLake, our solution for enabling IT consumption.

HPE Pointnext experts help you see through the hype, uncover opportunities, test business use cases, and get grounded with realistic approaches in collaboration with HPE Labs. HPE product teams and innovative partners can help to design, manage, and start-up an ecosystem.

We integrate our Aruba technologies into our edge solutions, intelligent flash storage innovations into our data-driven solutions, and the depth and breadth of leading server infrastructure and architectures into our cloud enable solutions.

The HPE GreenLake solution for IT consumption spans the entire portfolio, giving your customers a choice of how they want to consume their future IT systems.

# **HPE ProLiant ML/DL portfolio**

HPE ProLiant servers feature user-inspired innovations to make IT simpler, including:

#### Agility

- Optimize performance with Intelligent System Tuning (IST) that includes jitter smoothing, core boosting, and workload matching.
- The latest processor technologies including Intel® Xeon® Scalable processors and AMD EPYC 7000 Series processors.
- Enhance server performance with HPE SmartMemory at 2666 MT/s speed and HPE Fast Fault Tolerance (for Intel® processors only).
- Easily select, deploy, manage, and maintain HPE server infrastructure over the server lifecycle with HPE OneView, HPE Integrated Lights-Out Advanced (iLO) 5, and iLO Amplifier Pack.

#### Security

- Protect from attacks with the HPE exclusive, Silicon Root of Trust.
- Detect compromised code or malware with Runtime Firmware Verification.
- AMD Secure Processor technology enables Secure Memory Encryption (SME) and Secure Encrypted Virtualization (SEV) for added security.
- Intel® SGX protects selected code and data from disclosure or modification. By cryptographically isolating application data in runtime memory, Intel® SGX provides granular data protection with a tight trust boundary. Intel® SGX is supported on HPE ProLiant DL20 and ML30 Gen10 servers.
- Recover firmware to last good known state or factory settings with Secure Recovery.

- Enhanced security enabled with iLO 5 Advanced Premium Security Edition.
- Security hardware options including Trusted Platform Module (TPM), Chassis Intrusion Detection Kit, and Secure NICs.

#### Economic control

- HPE GreenLake Flex Capacity provides the simplicity and flexibility of the public cloud with the security and control of your customer's own environment.
- IT investment solutions from HPE Financial Services help your customers unlock value from their existing IT to fund innovation making them a more agile business.

## **ProLiant ML portfolio**

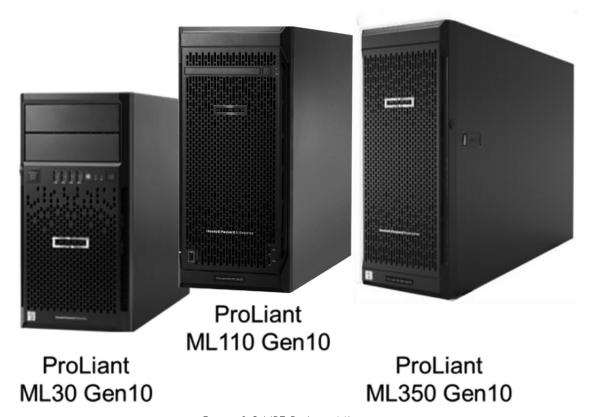


Figure 1-2 HPE ProLiant ML servers

The ML family of servers delivers simple, efficient business value and is the ideal choice for remote or branch offices and growing businesses. Industry-leading compute innovations include simple