Tytuł szkolenia: HPE BladeSystem Administration

Kod szkolenia: HE646S

Wprowadzenie

This course provides instruction on HPE BladeSystem administration and management. Discussion of the portfolio overview ensures an understanding of components, configurations and solutions.

Adresaci szkolenia

System administrators, engineers and consultants who install, manage, and monitor the HPE BladeSystem c-Class environment.

Prerequisites

HPE recommends that students have attained the following credentials or levels of experience before taking this course:

• Introduction to HPE ProLiant Servers (HE643S) or similar experience

Cel szkolenia

After completing this course, the student should be able to:

• Explore the functional architecture of the HPE BladeSystem c-Class environment
• Identify the management infrastructure (Insight Display, Onboard Administrator)
• Review the HPE BladeSystem c-Class portfolio and equipment capabilities
• Review the power and cooling system
• Identify high-level functionalities of HPE ProLiant Generation 10 (Gen10) servers
• Describe the HPE BladeSystem c-Class interconnect module architecture
• Introduce Virtual Connect management (Virtual Connect Manager, HPE OneView)
• Become familiar with HPE BladeSystem scripting
• Explain how to update the firmware on an HPE BladeSystem

Czas i forma szkolenia

- 21 godzin (3 dni x 7 godzin), w tym wykłady i warsztaty praktyczne.

Plan szkolenia

Module 1: HPE BladeSystem Portfolio Introduction

• Identify resources for information about the current HPE c-Class BladeSystem portfolio
• Differentiate the two types of HPE BladeSystem enclosures
• Identify HPE server blades
• Discuss enclosure connectivity
• Explain the HPE OneView management appliance
• Differentiate HPE storage blades
• Explain HPE BladeSystem update tools
• Discuss HPE infrastructure management and services

Module 2: HPE BladeSystem c-Class Enclosures

• Describe the HPE BladeSystem c-Class enclosures
• Describe the c-Class enclosure structure
• Explain c-Class enclosure signal midplane and power backplane

- Explain how to access the Onboard Administrator
- Define the enclosure numbering scheme

Module 3: HPE BladeSystem Enclosure Management

- List the initial steps involved in setting up the c7000 enclosure using the:
  - HPE Insight Display Initial Setup Wizard
  - HPE Onboard Administrator First Time Setup Wizard
- Describe the OA enclosure high availability
- Identify the OA configuration options
- Describe the OA command line interface

Module 4: HPE c-Class Power and Cooling

- Explain how to configure power for an HPE BladeSystem c-Class enclosure
- Explain how to control and view power consumption in a c-Class enclosure to configure its efficiency
- Explain HPE BladeSystem c-Class power management
- Describe HPE Intelligent Location and Power Discovery services
- Describe the structural cooling components and features of c-Class enclosures

Module 5: HPE BladeSystem c-Class BladeServers

- Describe the HPE BladeSystem I/O technologies on the system board:
  - FlexibleLOM
  - Mezzanines
  - USB and SD cards
- Describe the features and components of storage blades, tape blades, and expansion blades
- Identify c-Class Integrity servers and their requirements
- Manage certain options of your server blades from the OA GUI
- Describe the server iLO interaction with the OA

Module 6: HPE BladeSystem c-Class connectivity options

- Describe the HPE BladeSystem c-Class interconnect module architecture
- List the BladeSystem c-Class interconnect modules
  - Ethernet
  - Fiber Channel
  - InfiniBand
  - SAS
- Describe the mezzanine cards and slots available in the BladeSystem c-Class server blades
- Explain the enclosure signal pathing
- Describe the port mapping for HPE BladeSystem enclosures
  - c7000
  - c3000
- Explain the HPE Virtual Connect technology
- Explain the HPE OneView management appliance

Module 7: HPE BladeSystem OneView Management

- Explain the HPE OneView management appliance
- Explain physical and logical resources in HPE OneView
- Explain Converged Infrastructure management
- Explain how to manage HPE OneView server profiles
- Describe differences between HPE OneView or VCM/ VCEM management

Module 8: HPE BladeSystem c-Class Firmware

- Determine the firmware that is embedded in various components in the enclosure and how to update it
- Explain how to access the SPP, SUM and supporting documentation
- Define the interdependencies and update best practices for HPE enclosure components
- Describe how to update the firmware for the HPE OA
- Explain how to use SUM for enclosure-based firmware management and software updates
- Explain how to update the firmware on HPE Blade servers
- Explain how to update the firmware on Integrity servers

• Explain how to update the firmware on HPE OneView managed systems **Module 9: Configuring the Enclosure Using Scripting**

• Review the OA CLI access
• HPE iLO scripting via the Onboard Administrator (HPONCFG)
• Introduce PowerShell OA configuration commands
• Introduce PowerShell iLO configuration commands
• Introduce other iLO RESTful API libraries
• Discuss OA CLI scripting

Module 10: Course Closing

• Closing the course
• Learning objectives
  ○ Participant learning goals
• Training from HPE Education Services
• HPE Education Services
• HPE certification and learning program
• Concepts
• HE646 Course objectives review
• Energizers
  ○ Conversations
  ○ Eye on blades blog: Trends in infrastructure
  ○ HPE Discover conference
• Case studies
  ○ HPE server customer case studies