

Tytuł szkolenia: HPE OneView Administration

Kod szkolenia: H4C04S

Wprowadzenie

HPE OneView is an integrated converged management platform that automates tasks and streamlines processes, delivering the entire lifecycle management for HPE Composable Infrastructure. HPE OneView provides software-defined intelligence across the entire HPE family of infrastructure solutions - from providing embedded management in HPE Synergy to delivering attributes of composability in HPE BladeSystem c7000, HPE ProLiant DL/ML/DX, HPE Superdome Flex, HPE 3PAR StoreServ and HPE StoreVirtual VSA, HPE Nimble Storage, HPE Virtual Connect, and HPE Apollo (XL). This instructor-led course is essential training for system, network, and storage administrators using HPE OneView and for system architects implementing HPE OneView.

Adresaci szkolenia

System, network, and storage administrators, and consultants who manage and monitor an HPE environment and for system architects anticipating the implementation of HPE OneView.

Prerequisites

Basic system and network administration

Cel szkolenia

This course equips students with the skills and knowledge to:

- Use HPE OneView to manage and maintain firmware
- Implement server and networking configurations
- Monitor the data center
- Respond to issues

Czas i forma szkolenia

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

Plan szkolenia

Module 1: HPE OneView Overview

- Identify the basic parts and advantages of composability
- Describe the HPE OneView purpose in HPE BladeSystem c-Class environments
- Recognize the different HPE OneView resource types
- Understand the role of the HPE OneView domain
- Locate additional training and documentation

Module 2: Configuring Networks in HPE OneView

- Understand uplink and downlink ports
- Define HPE OneView network related resources: logical interconnect groups, enclosure groups, networks
- Configure network sets and uplink sets
- Differentiate between a logical enclosure and a logical interconnect
- Explain multiple logical interconnects per enclosure
- Understand bulk network operations
- Configure the active/active and active/standby network configurations

Module 3: Working with Advanced Network Functions in HPE OneView

- Define the maximum number of networks usable in HPE OneView
- Understand LACP timer selection option
- Differentiate private vs non-private HPE OneView networks
- Explain LLDP and TLV support in HPE OneView
- Understand pause flood and flow control
- Explain Quality of Service capabilities (Appendix)

Module 4: Configuring Storage in HPE OneView

- Implement different storage configuration scenarios
- Configure storage resources in HPE OneView
 - Import SAN Managers to HPE OneView
 - Associate SAN fabrics
 - Add storage systems and already created storage pools
 - Create and add volumes and volume templates
 - Work with storage snapshots
- Troubleshoot storage issues

Module 5: Discovering Hardware to HPE OneView

- Understand HPE OneView firmware requirements for managed and monitored devices
- Add an enclosure for management
- Add an enclosure in monitored mode
- Migrate an HPE Virtual Connect domain to HPE OneView
- Revert an enclosure back to VCM
- Understand OA and iLO management
- Describe server hardware types
- Understand purpose and use of refresh
- How to remove hardware

Module 6: Upgrading Firmware in HPE OneView

- Describe new firmware features
- Utilize upgrade paths
- Utilize Update Readiness Checker
- Understand firmware repositories
- Utilize SPP options for obtaining and creating SPPs
- Examine installed firmware
- Upgrade firmware on OAs
- Manage enclosure firmware
- Manage HPE Virtual Connect firmware
- Utilize SUT and iSUT
- Manage server firmware

Module 7: Building Server Profiles in HPE OneView

- Explain new profile features
- Describe HPE OneView server profile management
- Explain the server profile templates concept
- Identify and configure the various attributes of HPE OneView server profiles
- Configure profile boot from SAN
- Understand the server and VC port configuration process
- Work with port speed controls and bursting
- Access server iLOs

Module 8: Remote Monitoring and Support

- Describe the benefits of HPE OneView Remote Support
- Explain how to enable and disable HPE OneView Remote Support
- Find more info on HPE OneView Remote Support
- Describe maintenance mode • Describe InfoSight tech preview
- Describe HPE OneView Global Dashboard and where to find more info

Module 9: HPE OneView Appliance Management

- Describe the relationship between iLO and HPE OneView, and how it can be used to troubleshoot
- Reset a lost administrator password
- Multi-home an appliance
- Access and review the activity feed
- Utilize Smart Search
- Pin the main menu
- Customize the HPE OneView dashboard
- Backup and restore the HPE OneView appliance
- Capture HPE OneView support dumps
- Access HPE OneView dashboard and understand customization capabilities
- Review HPE OneView health and utilization data for devices
- Utilize facilities management
- Access and review Ethernet and SAN statistics
- Access HPE OneView reports and firmware compliance report

Module 10: Licensing HPE OneView

- Follow best practice licensing in standalone VM-based HPE OneView
- Follow best practice licensing in HPE Synergybased HPE OneView

Module 11: HPE OneView Security and Maintenance

- Review the HPE OneView security features and functions
- Administer HPE OneView user accounts and roles (RBAC)
- Implement scope based access control (SBAC)
- Introduce labels
- Enable or disable services access
- Configure Active Directory/LDAP integration
- Understand HPE OneView certificate management
- Implement and configure two-factor authentication using CAC/PIV
- Understand SNMP and SNMP v3 support and alert forwarding
- Use an audit log

Module 12: Accessing HPE OneView by Using the REST API

- Understand the basic Representational State Transfer (REST) API concepts and programming style
- Use the REST application programming interface (API) for basic HPE OneView operations
- List basic operations you can perform with the REST API
- Access useful scripting tools and resources
- Use a browser with REST plugins to handle REST API requests and responses
- Appendix: HPE OneView REST API use case examples

Lab 01: Configuring HPE OneView

- Review the HPE OneView guided setup feature
- Generate and download a backup file
- Add a user
- Add a firmware bundle (Service Pack for ProLiant - SPP) to the appliance's firmware
- Explore address ranges

Lab 02: Configuring HPE OneView Networks

- SAN Manager
- Ethernet networks
- Fiber channel networks
- Storage area networks
- Network sets

Lab 03: Configuring HPE OneView Storage

- Connect HPE OneView to a HPE 3PAR storage system
- Associate fiber channel networks with the managed SAN networks
- Create volume templates and new volumes

- Connect HPE OneView to an HPE Nimble Storage system

Lab 04: Configuring Logical Interconnect Groups

- Create a logical interconnect group
- Configure logical interconnect group settings
- Create shared uplink sets

Lab 05: HPE OneView Enclosure Management

- Add enclosures to HPE OneView management
- Add HPE ProLiant DL servers to HPE OneView management
- Examine added enclosure resources
- Use reports
- Make LIG template changes

Lab 06: HPE OneView Server Profile Management

- Create server profile templates
- Create server profiles based on a server profile template
- Assign server profiles to supported servers
- Move and copy server profiles between servers
- Create an additional server profile and add a HPE Nimble Storage system volume

Lab 07: Accessing Controls and Alerts in HPE OneView

- Configure scopes • Understand alerts and monitoring
- View activity, alerts and tasks
- Configure the email notifications of alert messages
- Enable maintenance mode for server hardware

Lab 08: Maintaining the HPE OneView Appliance

- Add and remove a dashboard panel
- Manage support dumps
- Manage security options
- Backup the appliance

Lab 09: Exploring the HPE OneView Global Dashboard

- Setup the HPE OneView Global Dashboard
- Add an HPE OneView appliance for monitoring
- Explore the HPE OneView Global Dashboard user interface and customization
- Monitor the appliances' health and obtain various reports

Lab 10: Accessing the HPE OneView REST API

- Understand the basic REST API concepts and programming style
- Use a browser development extensions or Postman app to handle REST API requests and responses