

Tytuł szkolenia: HPE Virtual Connect

Kod szkolenia: HK758S

Wprowadzenie

This course assists System Administrators to identify, manage, configure, and update the HPE Virtual Connect Environment including modules, networks, and profiles. An architectural overview ensures understanding of the Ethernet, FlexFabric, and Fibre Channel components and their function. Virtual Connect version 4.60 fully supports all current ProLiant c-Class servers including Gen10 systems. Hands-on labs provide Domain and Profile configuration and a variety of network scenarios.

Adresaci szkolenia

System administrators, engineers, and consultants who will plan and manage the HPE Virtual Connect environment.

Prerequisites

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

- Completion of HPE BladeSystem Administration (HE646S)

Cel szkolenia

By the end of the course, you should be able to meet the following objectives:

- Identify the HPE BladeSystem Virtual Connect Ethernet, Fibre Channel, and FlexFabric modules
- Access and manage the VC Manager through the CLI and GUI interface
- Configure a VC Domain (including profiles, networks, and storage connectivity)
- Plan and complete firmware updates

Czas i forma szkolenia

- 14 godzin (2 dni x 7 godzin), w tym wykłady i warsztaty praktyczne.

Plan szkolenia

Module 1: Virtual Connect Overview

- Review recent firmware releases
- Access Virtual Connect documents and support
- Introduce the current Virtual Connect modules
- Outline Virtual Connect default behaviors
- Review the c-Class management signal paths and stacking link requirements
- Explain fundamental Virtual Connect technologies
- Introduce Virtual Connect as a layer 2 bridge
- Introduce common Virtual Connect terms

Module 2: The Virtual Connect Manager

- List basic requirements for accessing and managing Virtual Connect functionality
- Configure Virtual Connect manager local user accounts
- Explain Virtual Connect logical flow for an initial setup
- Investigate Virtual Connect failover and configuration backup
- Review administrator password recovery

Module 3: HPE Virtual Connect Ethernet

- Investigate the current Virtual Connect Ethernet modules
- Understand and identify primary/secondary module placement
- Recognize uplink port status error conditions
- Introduce the Ethernet concepts and protocols used with Virtual Connect
- Introduce the concept of Physical Functions (Adapter FlexNICs)
- Introduce VLAN tagging and addressing
- An appendix addresses FlexFabric 20/40 F8 cabling and older hardware

Module 4: HPE Virtual Connect Fibre Channel

- Identify Virtual Connect Fibre Channel modules and functions
- Introduce the HPE Virtual Connect Fibre Channel 16Gb 24-Port module and the N_Port trunking feature
- Understand NPIV and why HPE uses this technology
- Review the Fibre Channel Logon sequence (FLOGI)
- Investigate Virtual Connect Fibre Channel login distribution and re-distribution

Module 5: The Virtual Connect FlexFabric Technology

- Detail the FlexFabric modules, adapters, and FCoE capabilities
- Describe VSAN support and configuration
- Introduce Virtual Connect to HPE 3PAR SAN connectivity

Module 6: HPE Virtual Connect vNets

- Outline the Virtual Connect ports
- Investigate Virtual Connect networking definitions and terminology
- Configure vNets and VLANs
- Investigate advanced Virtual Connect VLAN tagging
- Describe the tunneling and mapping modes
- Outline the link layer discovery role in Virtual Connect
- Introduce link aggregation control protocol
- Demonstrate basic Virtual Connect Ethernet networks
- Discuss teaming and bonding modes with Virtual Connect
- Compare active/standby and active/active network designs

Module 7: The Virtual Connect Profile

- Outline Virtual Connect Flex-port assignments
- Explore Virtual Connect bandwidth allocation
- Investigate profile inheritance, and migration
- Manage and configure profiles
- Use the CLI Pool-specified function to capture MAC and WWN addresses
- Implement the ProLiant Gen9 UEFI Boot Options

Module 8: Virtual Connect Manager - Advanced Features

- Build Multi-enclosure domains
- Investigate partially stacked domains
- Configure native VLANs
- Explain the role of SmartLink
- Monitor Virtual Connect from an external utility
- Introduce and configure the federal information processing standard 140-2
- Understand network loop detection technologies embedded in Virtual Connect

Module 9: Advanced Virtual Connect Networking for the System Administrator

- Advanced Virtual Connect networking features
- Review LACP advanced features