



HP Education Services Course Overview

HP OneView Administration (H4C04S)

This three day course covers how to install, manage, configure, and update the HP OneView Appliance. An architectural overview ensures a high level understanding of the associated managed equipment: c-Class enclosures, Virtual Connect Ethernet, FlexFabric, and Fibre Channel components. Participants will explore HP OneView management of ProLiant Gen 7, Gen 8 and Gen 9, as well as OneView monitoring of Gen 6 and rack-mounted ProLiant systems. Participants will configure storage connectivity through a switch and directly to a 3Par Storage Array.

Audience

- System Administrators, engineers and consultants who will plan and manage the HP OneView Converged Management for the Software Defined Infrastructure.

Prerequisites

- Completion of HP BladeSystem Administration (HE646S) and the Virtual Connect (HK758s) courses.
- A basic understanding of hypervisor environments (VMware ESXi or Microsoft Hyper-V) and familiarity with general networking terminology and basic network concepts.

Course objectives

- Install and configure HP OneView on supported hardware.
- Explain HP OneView connectivity model, networking resources and templates, and licensing.
- Add enclosures with server blades and ProLiant DL servers to the OneView appliance.
- Connect to an HP 3PAR storage system — pools, volumes and templates.
- Plan and complete firmware updates.
- Access the Rest API and configure the appliance using scripting.

Course title:	HP OneView Administration
HP product number:	H4C04S
Category/Subcategory:	ProLiant/ConvergedSystem
Course length:	3 days
Level:	Advanced
Delivery language:	English
To order:	You can register your interest for this course online at http://www.hp.com.au/education . At the site, select the course under ProLiant portfolio and you will see dates for the course. Register your interest for the date of your choice.

Benefits to you

- Gain the ability to perform successful site planning and infrastructure design needed to deploy an HP Virtual Connect solution.
- Understand the various product and firmware versions required in the solution.

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Detailed course outline

Module 1: HP OneView Overview

- Describe HP OneView and its positioning
- Describe the HP OneView resource model
- List what is new in HP OneView 1.20
- Introduce the OneView for VMware vCenter and Microsoft System Center plugins
- List HP OneView URLs for reference documentation and more information

Module 2: HP OneView Installation

- Describe HP OneView language localization
- Review the HP OneView support matrix
- List the HP OneView supported hardware
- List the HP OneView configuration limits
- Describe the HP OneView deployment on a VMware ESXi host
- Describe the HP OneView deployment on a Microsoft Hyper-V host
- Configure OneView on first access
- Discuss VMware Tools Support
- List HP OneView documentation

Module 3: Network Creation and Management

- Describe the Connectivity Resource Manager
- Describe HP OneView Networks
 - Network Sets and Uplink Sets
 - Fibre Channel connections
 - Compare HP Virtual Connect Manager to HP OneView Networks
 - Configure Active/Standby and Active/Active networking

Module 4: Storage Management

- Review OneView resource architecture and capabilities
- Describe supported storage hardware
- Describe Storage Resource Manager, storage administrator role, and associated use cases
- Add a SAN Manager and associated SAN fabrics
- Add and configure a storage system and storage pools

- Manage storage volumes and volume templates
- Describe basic storage diagnostics and alerts

Module 5: Connectivity Management

- Describe:
 - HP OneView Domains, Enclosure Groups, and Logical Interconnect Groups
 - OneView logical Interconnects and Interconnects
 - HP OneView MAC and WWN Addressing
- Import an enclosure and update the associated firmware
- Explain the firmware repository
- Explore the firmware update processes available in HP OneView

Module 6: HP OneView Server and Enclosure Management

- Describe these OneView resources:
 - Enclosure groups and Enclosures
 - Server Hardware Type and Server hardware
- Describe the process of adding enclosures and server blades to OneView
- Migrate an existing Virtual Connect Domain structure into OneView
- Describe the process of adding HP ProLiant BL and DL servers to OneView
- Describe the refresh procedures
- Explore OneView licensing
- Remove components from OneView

Module 7: HP OneView Profile Management

- Describe
 - OneView Server Profiles
 - OneView Server Profile Connections
- Control server profile and network bandwidth
- Configure OneView Server Profile Boot Order
- Explore OneView Server Profile BIOS settings
- Attach to 3PAR storage volumes
- Managing OneView server profiles

Module 8: Health and Environmental Monitoring

- Describe the server health monitoring in OneView
- Explain iLO 4 status traps and polling
- Describe enclosure and server connectivity alerts
- Describe G7 server health monitoring with OneView
- Describe the basic environment components

Module 9: HP OneView Maintenance and Troubleshooting

- Administer OneView user accounts and roles
- Configure Active directory and manage certificates
- Update/upgrade the OneView appliance
- Backup and restore OneView
- Monitoring and troubleshooting tools available in OneView
- Download support dumps

- Troubleshooting tips
- Reset the Administrator password
- List the HP Services available to support OneView installation and integration

Module 10: HP OneView REST API Overview

- Describe the basic concepts of the REST API in OneView
- Explain the OneView API design goals, resources, and operations
- Use the cURL command line utility to access the OneView REST API functions
- Programming development and debugging OneView using the REST API extensions for web browsers
- Access and use the PowerShell wrapper with the OneView REST API

Lab 1: Installing and configuring HP OneView

Installing and configuring HP OneView

Lab 2: Configuring Networks

Configuring Networks

Lab 3: Configuring Storage

Configuring Storage

Lab 4: Configuring Logical Interconnect Groups

Configuring Logical Interconnect Groups

Lab 5: Managing Enclosures

Managing Enclosures

Lab 6: Managing Server Profiles

Managing Server Profiles

Lab 7: Reconfiguring Logical Interconnect Group to Active/Active

Reconfiguring Logical Interconnect Group to Active/Active

Lab 8: Health and Environmental Monitoring

Health and Environmental Monitoring

Lab 9: Maintaining HP OneView

Maintaining HP OneView

Lab 10: Troubleshooting HP OneView

Troubleshooting HP OneView

Lab 11: Accessing HP OneView by using REST API calls

Accessing HP OneView by using REST API calls

Lab 12: Managing HP OneView with PowerShell library for REST API scripting

Managing HP OneView with PowerShell library for REST API scripting

For more information

To locate contact information and to learn more about education services, please visit our web site at <http://www.hp.com.au/education> .

