

# HPE Synergy Administration

Course code: H0LN3S

This course provides instruction on HPE Synergy configuration, administration, management, troubleshooting and maintenance. This hands-on course covers day-to-day administration skills on HPE Synergy Composer, HPE Image Streamer, storage module, compute module, frame management, fabric connectivity, multi-frame domains and server profile management. Students will also learn about HPE Global Dashboard features.

## Who is the course for

System administrators, engineers and consultants who install, manage, and monitor HPE Synergy systems. New HPE Synergy customers or HPE Blade System c-Class customers interested in HPE Synergy.

## What we teach you

- Introduce Composable Infrastructure domains (basic concepts) and HPE Synergy
- Explore the functional architecture of the HPE Synergy environment, including management infrastructure (HPE Synergy Composer, HPE Synergy Image Streamer, Frame Link Modules), compute modules, interconnect modules, local storage systems, power and cooling
- Review the HPE Synergy Portfolio and equipment capabilities
- Explain the HPE Synergy Master/Satellite interconnects topology and cabling

## Required skills

- H0LN2AAE HPE Synergy Overview WBT
- H0LN5AAE HPE Synergy Installation and Configuration WBTH0LN6AAE
- HPE Synergy Management and Use Overview WBT

HPE also recommends that students have basic networking and HPE OneView experience

- HPE OneView QuickStart (H7H10S)

## Course outline

### Module 1 HPE Synergy Overview

- HPE Synergy 12000 Frame
- HPE Synergy Gen9 compute modules
- HPE Synergy Gen10 compute modules
- HPE Synergy interconnect modules – Mellanox SH2200 Switch Module for Synergy; Master modules; Satellite modules; Other interconnect modules
- HPE Synergy Storage – HPE Synergy D3940 in-frame storage solution; StoreVirtual VSA solution design; Software-defined storage with HPE 3PAR direct-attach (flat SAN)
- HPE Synergy management appliances – HPE Synergy Composer (brief overview); HPE Synergy Frame Link Module; Internal connectivity

### Module 2 HPE Synergy Image Streamer

- Introduction – HPE Synergy Image Streamer and HPE Synergy Composer in conjunction; Operational scenarios
- User roles HPE Synergy Image Streamer system architecture
- Bringing up the HPE Synergy Image Streamer system – Discovery and import; Creating an OS deployment server; Creating a LIG, EG, and LE; Using deployment plans in server profiles; HPE Synergy Image Streamer artifacts and bundles

### Module 3: Cabling, Configuration, and Hardware Setup

- Configuring hardware – Minimum hardware requirements; Bay numbering schemes; Mezzanine card placement; Storage connectivity

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- HPE Synergy cabling Management network cabling – Interconnect Link Topology; Mixed speed satellite ICM topology; HPE Synergy Image Streamer cabling; M-LAG; Power supply cabling
- Accessing HPE Synergy Composer
- Hardware setup

## Module 4: Working with HPE OneView for Synergy and Image Streamer GUI

- Configuring connectivity in HPE OneView – Configuring SANs, networks, network sets and ID pools; Increased VLAN scale for network sets; Creating a management network; Creating a deployment network; Creating an OS deployment server
- LACP over downlinks for end-to-end aggregation
- Uplink port trunking support
- Creating LIGs
- Creating EGs
- Creating LEs
- Working with HPE Synergy Image Streamer artifacts
- Working with server profiles – Configuring storage controller; Creating a JBOD and logical drive; Erase on delete; Secure boot; Resource action menus; Security features; Storm control; Scope-based access control; Two-factor authentication; Certificate management

## Module 5: HPE Synergy Management and Troubleshooting

- Troubleshooting upon hardware setup
- Backup and restore
- Frame numbering and naming conventions
- Support dumps
- CLI connectivity and login methods – Access to components from HPE Synergy console; HPE Synergy Composer factory reset; Reimaging HPE Synergy Composer

## Module 6 HPE Synergy Scaling

- Scaling within a management ring
- Adding a remote management ring
- The procedure for scaling from one to two frame
- The procedure for scaling from two to more frames
- HPE Synergy Image Streamer scaling implications

## Module 7 HPE Synergy Firmware Update Best Practices

- Introduction to firmware update methods
- Firmware updates of HPE Synergy components – Management appliances firmware update; Shared infrastructure firmware update; Compute module firmware update
- Acquiring firmware and drivers
- Firmware and drivers best practices – Firmware support frequency; Post-support period complexities; Recommended firmware update order; Alternative firmware update options; Additional tips

## Module 8 HPE Synergy Remote Support and Monitoring

- Enabling and disabling remote support
- HPE OneView Global Dashboard – Introduction; Features; Limitations and requirements; Deploying a virtual appliance; First-time setup; Exploring the dashboard user interface; Troubleshooting Global Dashboard (basic information)

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## Module 9 HPE Synergy-Related Information Sources and Services

- Diagnostics and troubleshooting information
- Support documents – Resources, services, HPE community, helpful links

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