HPE Synergy Administration
H0LN3S

This 3-day 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, storage module, compute modules, frame management, fabric connectivity, multi-frame domains and server profile management. Students also learn about HPE Global Dashboard features.

Audience

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

Prerequisites

- H0LN2AAE HPE Synergy Overview WBT
- H0LN5AAE HPE Synergy Installation and Configuration WBT
- H0LN6AAE HPE Synergy Management and Use Overview WBT
- Basic networking and HPE OneView experience is recommended
- HPE OneView QuickStart (H7H10S)

Course objectives

At the conclusion of this course, the student will be able to:

- Introduce Composable Infrastructure (basic concepts) and HPE Synergy domains
- Explore the functional architecture of the HPE Synergy environment, including management infrastructure (HPE Synergy Composer and 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

Why HPE Education Services?

- IDC MarketScape leader 5 years running for IT education and training*
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- Complete continuum of training delivery options—self-paced eLearning, custom education consulting, traditional classroom, video on-demand instruction, live virtual instructor-led with hands-on lab, dedicated onsite training
- Simplified purchase option with HPE Training Credits

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*Realize Technology Value with Training, IDC Infographic 2017, Sponsored by HPE, October 2017
## Detailed course outline

### Module 1: HPE Synergy Overview
- HPE Synergy 12000 Frame
- HPE Synergy Gen10 compute modules
- HPE Synergy interconnect modules
  - Master modules
  - Satellite modules
  - Fiber channel interconnect modules
  - SAS connection and pass-through module
- HPE Synergy D3940 Storage Module
- HPE Synergy management appliances
  - HPE Synergy Composer (brief overview)
  - HPE Synergy Composer2 (brief overview)
  - HPE Synergy 2-port Frame Link Module
  - HPE Synergy 4-port Frame Link Module

### Module 2: HPE Synergy Configuration and Cabling
- Configuring hardware
  - Minimum hardware requirements
  - Bay numbering schemes
  - Mezzanine card placement
  - Storage connectivity
- HPE Synergy cabling
  - Management network cabling
  - Storage connectivity
  - Power supply cabling

### Module 3: ILT Cabling and Hardware Setup
- Interconnect link topology
  - HPE VC SE 40Gb F8 master module
  - Mixed speed satellite ICM topology
  - HPE VC SE 100Gb F32 master module
  - Migration and grow use cases
- ICM master M-LAG
- Accessing HPE Synergy Composer
- Hardware setup

### Module 4: Configuring Storage
- New features
- SAN Manager and auto zoning configuration
- Storage management
  - Adding a managed storage system
  - Adding a storage pool
- Direct attached storage (FlatSAN)
- HPE OneView Nimble Storage integration
- HPE OneView and storage system ports
- Volumes and Volume Templates
- Adding and creating volumes
- Monitoring storage

### Module 5: Working with HPE OneView for Synergy
- Configuring connectivity in HPE OneView
  - Configuring SANs, networks, network sets and ID pools
  - Increased VLAN scale for network sets
- HPE Synergy specific configurations
  - Logical interconnect groups
  - Enclosure groups
  - Logical enclosures

### Module 6: Working with Server Profiles
- Server profiles
  - Server profile templates and server profiles
  - LACP over downlinks for end-to-end aggregation
  - Configuring storage controller
  - Logical JBOD
  - Logical drive
  - Erase on delete
  - Secure boot
- Resource action menus
- Security features
  - Storm control
  - VC private networks
  - Scope-based access control
  - Two-factor authentication
  - Certificate management
# Module 7: 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 the HPE Synergy console
- Other support procedures
  - HPE Synergy Composer factory reset
  - Reimaging HPE Synergy Composer

# Module 8: HPE Synergy Scaling
- Scaling frames in HPE Synergy
- Adding a remote management ring
- Frictionless scaling of a logical enclosure
  - The procedure for scaling from one to two frames
  - The procedure for scaling from two to more frames
  - Scaling with 25/50 Gb interconnect link modules

# Module 9: 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
  - Synergy VC fabric interconnect firmware updates
  - Compute module firmware update
- Firmware compliance and reporting
- Acquiring firmware and drivers
- Firmware and drivers best practices
  - Firmware update frequency
  - Recommended firmware update order
  - Alternative firmware update options
  - Additional tips and best practices

# Module 10: HPE Synergy Remote Support and Monitoring
- Introduction to Remote Support
- 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
- Features

# Module 11: HPE Synergy-Related Information Sources and Services
- Additional information on diagnostics and troubleshooting
- Support documents
  - Resources, services, HPE community, helpful links
- Additional information on diagnostics and troubleshooting

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