



# HPE Extended Distance Clusters for HP-UX and Linux HB507S

<b>HPE course number</b>	HB507S
<b>Course length</b>	3 days
<b>Delivery mode</b>	ILT
<b>View schedule, local pricing, and register</b>	<a href="#">View now</a>
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This advanced course teaches system administrators about disaster tolerant clusters design and infrastructure. Topics include disaster tolerance concepts, overview of the architectures involved, installation and configuration of a Metrocluster and Continentalclusters, configuring a package in a Metrocluster, theory of product operation, basic Metrocluster maintenance and troubleshooting, maintenance mode, and disaster recovery dress rehearsal. The course is 60 percent lecture and 40 percent hands-on labs using HPE Integrity and ProLiant servers and HPE 3PAR storage systems.

## Why HPE Education Services?

- IDC MarketScape leader 4 years running for IT education and training\*
- Recognized by IDC for leading with global coverage, unmatched technical expertise, and targeted education consulting services\*
- Key partnerships with industry leaders OpenStack®, VMware®, Linux®, Microsoft®, ITIL, PMI, CSA, and (ISC)²
- 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

## Audience

- Senior systems administrators involved in planning, design, implementation, and support of a Serviceguard Metrocluster or Continentalcluster

## Prerequisites

- HP-UX System and Network Administration I (H3064S) and HP-UX System and Network Administration II (H3065S) or
- HP-UX System and Network Administration for Experienced UNIX® System Administrators (H5875S) and
- HPE Serviceguard I (H6487S) or equivalent experience and
- HPE 3PAR storage technology experience recommended

## Course objectives

At the conclusion of this course, you should be able to:

- Understand the concepts of HPE Serviceguard Extended Distance Clusters
- Install and configure HPE Metrocluster
- Configure an HPE Metrocluster package
- Manage and maintain HPE Metrocluster
- Perform basic Metrocluster troubleshooting
- Configure Continentalclusters
- Perform a Continentalclusters recovery dress rehearsal

\* Realize Technology Value with Training, IDC Infographic 2037, Sponsored by HPE, January 2016

## Benefits to you

- Reduce time required to design and implement an HPE Metrocluster or Continentalcluster solution while configuring your own equipment
- Learn how to provide a higher level of data currency and application availability without significant impact to application performance
- Increase your Data Center's level of protection and system availability during planned and unplanned downtime so users experience smooth functioning IT operations

## Detailed course outline

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### Module 1: Disaster Recovery Concepts

- Levels of availability
- Disaster tolerance architectures, requirements, and rules
- Disaster tolerant design guidelines and tradeoffs
- Choosing the right solution
- Physical and logical replication advantages and disadvantages
- Rolling disasters

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### Module 2: Disaster Recovery Cluster Architectures

- Range of architectures
- Local cluster: Serviceguard
- Serviceguard comparative features
- Extended distance clusters: Serviceguard
- Extended cluster rules and configuration requirements
- Two and three data center extended cluster architecture
- Arbitrator systems and quorum server
- Extended distance cluster comparative features
- Metrocluster and rules
- Two data centers and a third location Metrocluster architecture
- Metrocluster disk architecture
- Extended distance cluster and Metrocluster network architecture
- Metrocluster connectivity and comparative features
- Continentalclusters and configurations
- Continentalclusters comparative features
- Criteria for choosing a cluster architecture

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### Module 3: Metrocluster with 3PAR Remote Copy

- Product description and dependencies
- General cluster and configuration requirements
- 3PAR storage system concepts
- Remote Copy configurations
- Metrocluster site-aware failover

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### Module 4: Metrocluster with 3PAR Remote Copy Installation and Configuration

- Installation and configuration steps
- Create the Metrocluster package
- 3PAR and Remote Copy commands

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### Module 5: Metrocluster with 3PAR Remote Copy Theory of Operations

- Basic design
- Components in Metrocluster 3PAR Remote Copy
- Remote Copy operation
- Synchronous and asynchronous replication
- Remote Copy volume group roles
- Failure scenarios

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### Module 6: Metrocluster Problem Analysis and Troubleshooting

- Troubleshooting
- Cluster problems
- Package problems
- 3PAR storage system problems
- Patches

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### Module 7: Disaster Recovery with Continentalclusters

- Continentalclusters architectures
- Installation and configuration of Continentalclusters
- Testing packages and operations

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### Module 8: Disaster Recovery Rehearsal with Continentalclusters

- Network migration options
  - Enabling and disabling maintenance mode
  - Steps for a disaster recovery rehearsal
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## **Next steps**

- HPE Systems Insight Manager (HB508S) or consider attending other courses in the HPE Virtual Server Environment curriculum to learn more about virtualization

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