Szkolenie: HPE

Managing HPE 3PAR StoreServ III: Performance and Health Management

Cel szkolenia:

This 3-day training covers advanced topics that a storage administrator will encounter after performing the tasks covered in the HPE 3PAR basic courses (HK902S and (HK904S). Topics included are: Space Explained, Performance, Alerts, Troubleshooting, Upgrading, Adaptive Flash Cache (AFC) and Configuration Rebalancing. The course is 50% lecture with 50% hands-on labs. Additional Scenario Labs compliment the Module Labs. These Lifecycle Labs include Adaptive optimization, Quality of Service and Adaptive Flash.

At the conclusion of this course the student should be able to:

- Explain how space is allocated and mapped
- Identify data reduction
- Understand performance
- Discuss best practices
- Explain HPE 3PAR events and alerts and how to get notifications about them
- Use CLI and GUI to troubleshoot your storage system
- Perform rebalancing
- Use Adaptive Flash Cache to increase performance
- Upgrade your hardware and software ofyour storage system
- Employ tools that can be used totroubleshoot and respond to HPE 3PAR performance issues.

Audience:

A storage administrator who has been managing HPE 3PAR StoreServ arrays on a daily basis for at least a year. This training is not for an individual who has no experience managing a HPE 3PAR array.

Plan szkolenia:

- Overview
  - Course Introduction
  - Course Agenda
  - Lab roadmap
- Space Explained

Compendium Centrum Edukacyjne Spółka z o.o.
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- Understand space utilization
- Volume space
- Large volumes
- Logical disk space
- CPG space
- Overprovisioning
- Distributed sparing
- Adaptive sparing
- Adaptive data reduction
- Thin deduplication
- Space reclamation
- Mapping space
- SR Space forecasting

- Performance
  - Understanding performance bottleneck
  - Servicing I/O
  - Express layout
  - RAID
  - Initiators
  - Front end vs back end
  - CPU
  - Cache
  - Adaptive Flash Cache
  - WriteBack single node
  - SSD Performance
  - Unbalanced systems
  - Express writes
  - Benchmarks
  - Hardware FC Links
  - I/O Queueing
  - Interactive response law
  - CLI Counters
  - Troubleshooting discussion
- Lifecycle Discussion
  - Lifecycle of a System
  - Introduction Lab

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- Introduction to the Ninja Stars output
- Roadmap

- Alerts
  - View, interpret, and manage system events and alerts
  - Alert tiering, Internationalization,
  - Spare Part Notification
  - Single Click Locate
  - Use the checkhealth command for troubleshooting
  - Alert notifications for System Reporter
  - Alerts threshold criteria editing
  - SR Alert space metrics
  - SSMC email notifications
  - Event log monitoring and management
  - SNMP settings and capabilities
  - Syslog support
  - SMI-S standard, WBEM Initiative, and 3PAR CIM Support
- Rebalancing
  - Balanced HPE 3PAR array definition
  - • Large volumes rebalancing
  - Phases and options of the tunesys command
  - Express Layout: Active-Active PDs
  - New options
  - Limitations
  - System tuning and related tasks from the HPE 3PAR SSMC and the CLI
  - Tunesys and tunevv options and limitations
  - New options
  - Tuning operations troubleshooting
  - Tuning scenarios
- Adaptive Flash Cache
  - AFC benefits
  - What can/cannot be moved into AFC
  - Different LRU (Least Recently Used) queues description and the concept of LRU queue demotion
  - CLI commands to setup, enable, disable, remove, and monitor AFC
  - Guidelines and rules regarding AFC
  - Improvements

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- Working with AFC using SSMC
- Monitoring AFC using the statcache and srstatcache commands

- Upgrading HPE 3PAR
  - Servicing options for your HPE 3PAR 7000/8000 components
  - Repair/replace procedures of CSR components
  - Customer Self Repair
  - Combo cards
  - Hardware Schematics
  - Safe to Remove
  - Storage system disks upgrade
  - Express Layout: Active-Active PDs
  - Best practices when upgrading
  - Contact Management
  - HPE 3PAR OS update operation
  - Customer Self-Upgrade
  - SP Upgrade
  - HPE 3PAR Service Console

Wymagania:

Students must have attended HK902S and HK904S.

Poziom trudności



Certyfikaty:

The participants will obtain certificates signed by HPE (course completion).

Prowadzący:

Authorized HPE Trainer

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