

Szkozenie: HPE
HP-UX System and Network Administration I



Cel szkolenia:

This hands-on course is the first of two courses that prepare system administrators to successfully configure, manage, maintain, and administer HP-UX servers in a networked environment. This course focuses on configuring disks, file systems, peripherals, and user accounts, as well as managing and configuring core OS, patches, and application software. Successful completion of HP-UX System and Network Administration I and II will help prepare students for the HPUX CSA technical certification exam. This course is 50 percent lecture and 50 percent hands-on labs using HPE servers.

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

- Install and manage HP-UX software and patches
- Configure and manage peripheral devices and device files
- Configure and manage disks using HPE Logical Volume Manager (LVM)
- Configure and manage file systems using HPE Journal File System (JFS)
- Configure HP-UX kernel drivers, subsystems, and tunable parameters
- Minimize planned and unplanned downtime with DRD
- Shutdown, boot, reboot Integrity HP-UX servers

Audience :

- HP-UX 11i system administrators and others who install, configure, and maintain HP-UX servers.

Plan szkolenia:

- Navigating the System Management Homepage (SMH)
 - SAM and SMH overview
 - Launching the SMH GUI and TUI
 - Verifying SMH certificates
 - Logging into the SMH
 - Navigating the SMH interface
 - Launching SMH tools
 - Launching SMH tasks
 - Viewing SMH logs

- Managing SMH access control
- Managing SMH authentication
- SMH and SIM integration concepts
- Managing Users and Groups
 - User and group concepts
 - /etc/passwd, /etc/shadow, and /etc/group concepts
 - Creating, modifying, deactivating, and removing user accounts
 - Configuring password aging and password security policies
 - Managing groups
 - Managing /etc/skel
- Navigating the HP-UX File System
 - Static and dynamic files and directory concepts
 - OS and application directory concepts
 - Top level directory concepts and contents
 - Searching for files and executables using the find, whereis, which, and file commands
- Configuring Hardware
 - Hardware component overview
 - CPU, cell, crossbar, and Blade overview
 - SBA, LBA, and I/O overview
 - iLO/MP, core I/O, and interface adapter card overview
 - Internal disks, tapes, and DVD overview
 - Disk array, LUN, SAN, and multipathing overview
 - Partitioning overview
 - nPar, vPar, VM, and secure resource partition overview
 - System type overview
 - Entry-class rackmount server overview
 - Mid-range rackmount server overview
 - High-end server overview
 - HPE BladeSystem overview
 - HPE BladeSystem c-class enclosure overview
 - HPE Integrity blade server overview
 - HPE Integrity Superdome 2 overview
 - Viewing system hardware configuration
 - Viewing nPar, vPar, and VM hardware
 - Hardware address concepts
 - Legacy HBA, SCSI, and FC hardware address concepts

- Agile View HBA, SCSI, and FC hardware address concepts
- Viewing legacy hardware addresses
- Viewing LUNs via Agile View
- Viewing a LUN's lunpaths via Agile View
- Viewing an HBA's lunpaths via Agile View
- Viewing LUN health via Agile View
- Viewing LUN attributes via Agile View
- Enabling and disabling lunpaths
- Slot address concepts
- Slot address components
- Viewing slot addresses
- Installing interface cards with and without OL*
- Installing new devices
- Configuring Device Special Files
 - DSF attribute concepts
 - DSF directories
 - Legacy DSF names
 - Persistent DSF names
 - LUN, disk, and DVD DSF names
 - Boot disk DSFs
 - Tape drive DSFs
 - Tape autochanger DSFs
 - Terminal, modem, and printer DSFs
 - Listing legacy DSFs
 - Listing persistent DSFs
 - Correlating persistent and legacy DSFs
 - Correlating persistent DSFs with lunpaths and WWIDs
 - Decoding legacy and persistent DSF attributes
 - Creating DSFs via insf, mksf, and mknod
 - Removing DSFs via rmsf
 - Disabling and enabling legacy mode DSFs
- Managing Disk Devices
 - Disk partitioning concepts
 - Whole disk partitioning concepts
 - LVM disk partitioning concepts
 - LVM physical volume concepts

- LVM volume group concepts
- LVM logical volume concepts
- LVM extent concepts
- LVM extent size concepts
- LVM versions and limits
- LVM DSF directories
- LVMv1 device files
- LVMv2 device files
- Creating physical volumes
- Creating LVMv1 volume groups
- Creating LVMv2 volume groups
- Creating logical volumes
- Verifying the LVM configuration
- Comparing disk space management tools
- Managing File Systems
 - File system concepts
 - File system types
 - Superblock, inode, directory, block, extent, and intent log concepts
 - Hard and symbolic link concepts
 - HFS and VxFS comparison
 - Creating file systems
 - Mounting file systems
 - Unmounting file systems
 - Automatically mounting file systems
 - Mounting CDFS file systems
 - Mounting LOFS file systems
 - Mounting ISO file systems
 - Mounting MemFS file systems
- Managing Swap Space
 - HP-UX memory concepts
 - HP-UX swap concepts
 - HP-UX swap types
 - HP-UX pseudoswap
 - Enabling swap via the CLI
 - Enabling swap via /etc/fstab
 - Monitoring swap space

- Disabling swap
- Guidelines for configuring swap space
- Maintaining Logical Volumes and File Systems
 - Defragmenting file systems
 - Repairing corrupted file systems
 - Monitoring free space
 - Reclaiming wasted file system space
 - Extending, reducing, and removing volume groups
 - Extending, reducing, and removing logical volumes
 - Extending and reducing file systems
- Preparing for Disasters
 - Disaster recovery, mirroring, and DRD concepts
 - Using DRD to minimize planned downtime
 - Using DRD to minimize unplanned downtime
 - Installing DRD
 - Using the drd command
 - Creating a DRD clone
 - Synchronizing a DRD clone
 - Verifying a DRD clone's status
 - Accessing inactive images via DRD-safe commands
 - Managing software via DRD-safe commands
 - Managing kernel tunables via DRD-safe commands
 - Accessing inactive images via other commands
 - Activating and deactivating an inactive image
 - Customizing the make_*_recovery archive contents
 - Backing up the boot disk via make_tape_recovery
 - Backing up the boot disk via make_net_recovery
 - Using a make_*_recovery archive
 - Interacting with the recovery process
- Accessing the System Console and the iLO/MP
 - Management processor concepts
 - Viewing MP/console ports
 - Connecting MP serial and LAN ports
 - Accessing the MP
 - Navigating the MP menu and web interfaces
 - Accessing nPar, vPar, and VM consoles

- Accessing the VFP, console log, and system event log
- Accessing the MP help menus
- Accessing the MP command menu
- Configuring the MP LAN interface
- Enabling MP remote access
- Managing MP user accounts and access levels
- Managing MP login sessions
- Rebooting via the MP
- Booting PA-RISC Systems
 - HP-UX shutdown and reboot concepts
 - PA-RISC boot process major players
 - PA-RISC boot disk structures
 - PA-RISC boot process overview
 - Autoboot and manual boot concepts
 - Interacting with the BCH and ISL/IPL
- Booting Integrity Systems
 - HP-UX shutdown and reboot concepts
 - Integrity boot process major players
 - Integrity boot disk structures
 - Integrity boot disk system, OS, and HPSP structures
 - Integrity and PA-RISC boot process comparison
 - UEFI/EFI addressing concepts
 - Autoboot and manual boot concepts
 - Booting from primary, alternate, and arbitrary boot devices
 - Booting from Ignite-UX servers and recovery archives
 - Managing boot menu settings
 - Managing console settings
 - Interacting with the UEFI/EFI shell
 - Interacting with the hpux.efi OS loader
- Configuring the HP-UX Kernel
 - Kernel configuration concepts
 - Special kernel configurations
 - Kernel configuration commands
 - Modifying the current kernel configuration
 - Creating a named configuration
 - Copying a configuration

- Loading a configuration
- Kernel module concepts, states, and state changes
- Viewing and managing module states
- Kernel tunable concepts and types
- Viewing, managing, and monitoring kernel tunables
- Viewing, managing, and monitoring kernel resource alarms
- Kernel troubleshooting
- Viewing the kernel change log
- Booting from an alternate kernel
- Booting via override parameters
- Booting to tunable maintenance mode
- Managing Software with SD-UX
 - SD-UX software structure concepts
 - SD-UX software depot concepts
 - SD-UX IPD concepts
 - SD-UX daemon and agent concepts
 - Listing software
 - Installing and updating software
 - Removing software
- Managing Patches with SD-UX
 - Patch concepts
 - Patch naming convention concepts
 - Patch supersession concepts
 - Patch rating concepts
 - Patch source concepts
 - Patch tool concepts
 - Downloading and installing patches from the HPSC
 - Installing patches from DVD, tape, and directory depots
 - Listing patches
 - Removing patches
- Installing the OS with Ignite-UX
 - Install source concepts
 - Planning an install
 - Choosing an operating environment
 - Choosing an install-time security bundle
 - Locating the source media

- Initiating a PA-RISC install
- Initiating an Integrity install
- Navigating the Ignite-UX menus
- Verifying an installation
- Completing post-install configuration tasks
- Self-Study Appendices
 - Managing printers
 - Connecting to a network
 - Navigating the System Administration Manager (SAM)
 - Configuring the HP-UX 11i v1 kernel

Wymagania:

UNIX® Fundamentals (51434S) or equivalent experience.

Poziom trudności



Certyfikaty:

After completing the course, participants receive a certificate of completion of an authorized Veem course.

Prowadzący:

Authorized Veem Trainer.