

Szkolenie: HPE
HP-UX Administration for Experienced UNIX Administrators



Cel szkolenia:

This fast-paced intensive course is designed for experienced Tru64, AIX, Solaris, Linux, or other UNIX® administrators who need to understand the differences between HP-UX and standard UNIX. It is essential that students have existing UNIX system administration experience. Successful completion of the course will help prepare students for the HP-UX Certified System Administrator (CSA) certification exam. The course is 50 percent lecture and 50 percent hands-on labs using HP servers.

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

- Configure and manage HP-UX peripherals and device files
- Configure and manage disk devices via LVM
- Configure and manage JFS file systems
- Configure HP-UX network connectivity and services
- Configure HP-UX kernel drivers and tunable parameters
- Shutdown, boot, and reboot HP-UX
- Install HP-UX OS software, applications, and patches

Audience

Experienced UNIX system administrators who are new to HP-UX

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
- 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
 - HPE Integrity entry-class rackmount servers
 - HPE Integrity mid-range servers
 - HPE Integrity high-end servers
 - HPE BladeSystem
 - HPE Integrity Superdome 2
 - Viewing the system hardware configuration
 - Configuring Device Special Files
 - Managing Disk Devices
 - Viewing nPar, vPar, and VM hardware addresses
 - 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
 - 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
- 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 types
 - HFS and VxFS comparison
 - Creating file systems
 - Mounting 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
 - Disaster recovery, mirroring, and DRD clone 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
- Preparing for Disasters
 - Disaster recovery, mirroring, and DRD clone 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
- Managing System Startup

- Configuring network services via `/etc/rc.config.d/` files
- Controlling network services via `/sbin/rc*.d/` directories and scripts
- Starting and stopping network services via `/sbin/init.d/` scripts
- Configuring IP connectivity
 - Creating custom startup/shutdown scripts
 - Installing and verifying LAN software
 - Configuring link layer connectivity
 - Configuring IP connectivity
 - Configuring IP multiplexing
 - Configuring IP routing
 - Configuring the system hostname and `/etc/hosts`
 - Configuring network tunable parameters
 - Configuring static and default routes
 - Configuring the resolver
 - Configuring the name service switch
 - Troubleshooting network connectivity
 - Configuring network services
 - Kernel configuration concepts
 - Special kernel configurations
 - Kernel configuration commands
 - Modifying the current kernel configuration
 - Creating a named configuration
 - Copying and 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
 - Configuring the HP-UX Kernel
 - Kernel configuration concepts
 - Special kernel configurations

- Kernel configuration commands
- Modifying the current kernel configuration
- Creating a named configuration
- Copying and 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 HPSC patches
 - Installing patches from DVD, tape, and directory depots
 - Listing and removing patches
- Managing Depots with SD-UX
 - SD-UX depot server concepts and advantages
 - Planning for depots
 - Adding software and patches to a depot

- Removing software from a depot
- Registering or unregistering a depot
- Pulling and pushing software from a depot
- 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 or an Integrity install
 - Navigating the Ignite-UX menus
 - Verifying an installation
 - Completing post-install configuration tasks

Wymagania:

Existing knowledge and system administration experience of a version of UNIX.

Poziom trudności



Certyfikaty:

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

Prowadzący:

Authorized Veem Trainer.