This 2-day course will help students understand where virtual library systems fit in a modern data protection strategy. The course introduces the HP StorageWorks 6000, 9000 and 12000 Gateway Series Virtual Library System (VLS). In addition, students will learn how to configure, operate and monitor the VLS; how to configure a target Tape Unit and run Echo Copy operations and how to perform VLS disaster recovery.

**Audience**
- System and Storage Administrators
- Backup Administrators
- Other HP customer personnel who provide configuration and/or operational support assistance for backup operations

**Prerequisites**
Before taking this course, students should have knowledge of the following:
- The fundamentals and troubleshooting curriculum for backup environments
- Tape backup technologies and Standalone Tape Drives, tape libraries, and backup software
- Command View TL
- SAN environments and basic connectivity foundations

**Course objective**
- At the end of this course, you should be able to:
  - Demonstrate an understanding of the VLS hardware and software components
  - Define the cabling and configure a VLS
  - Understand the initial setup parameter values
  - Perform typical library operations using Command View VLS and the command-line interface
  - Configure VLS in to the Customer environment
  - Monitor the VLS
  - Setup and configure a target unit and run Echo Copy to a physical tape device
  - Troubleshoot the device and perform disaster recovery tasks
Benefits to you
- Improved backup windows, faster restores, increased reliability. Ideal for slow data sources.
- Seamless integration into an existing Backup Environment.
- High effective capacity and low bandwidth replication through deduplication.

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Detailed course outline

Introduction
- Course and class introductions

VLS Overview
- What is a virtual tape?
- The HP VLS devices
- VLS usage model
- VLS Benefits
- Virtual tape compared with write-to-disk
- HP Storage Works disk-based backup
- VLS6200
- VLS6000 and VLS9000 model numbers and descriptions
- VLS9000 capacity and performance
- VLS12000 capacity and performance
- Emulated libraries, autoloaders, and tape drives
- Compatibility
- Copy to physical tape - Automigration

VLS Basic Operations
- VLS Software Overview
- VLS Network Settings
- VLS GUI, CLI and Serial Access
- VLS power on/off and reboot operations
- Multi-Node Setup on VLS9000 and VLS Gateway
- VLS6000 Storage Pool Operations
- VLS9000 Storage Pool Operations
- VLS12000 Storage Pool Operations
- VLS License Installation
- VLS Software and Firmware Upgrade
- VLS Gathering Support Information

Device Configuration
- VLS Virtual Library, Drive and Cartridge Configuration
- VLS Cartridge Management
- VLS LUN Mapping (1.x and 2.x firmware)
- VLS LUN Mapping (3.x firmware or higher)
- VLS Status and Notifications
- VLS Reporting
- VLS General Preferences

Deduplication
- Accelerated deduplication overview
- Accelerated deduplication sizing and licensing
- Accelerated deduplication configuration and reporting

Replication
- VLS Replication Overview: Features, topologies, licensing, configuration overview
- VLS Replication: Network Configuration
- Remote VLS Configuration
- Local VLS Configuration
- Tape Initialization for Deduplicated Replication
- Job Reporting
- Cartridge Summary Screen
Automigration

- VLS Automigration Overview
- HP VLS Automigration Pool/Policy Configuration
- HP VLS Automigration Destination Library Management

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