Enterprise Computing Solutions - Education Services

# TRAINING OFFERING

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# Veritas InfoScale 8.0 Fundamentals for UNIX/Linux: Administration

| Kod: | Czas trwania: | Cena netto: |
|---|---|---|
| VER_ISF_80_ADMIN | 40 Hours (5 days) | zł12,750.00 |

## Description

The Veritas InfoScale 8.0 Fundamentals for UNIX/Linux Administration course is designed for the IT professional who requires an overview of the Veritas InfoScale Storage and Veritas InfoScale Availability products.
This five-day class is a condensed version of the five-day Veritas InfoScale Storage 8.0 for UNIX/Linux: Administration course and the five-day Veritas InfoScale Availability 8.0 for UNIX/Linux: Administration course. This course is a subset of the two courses and it covers the basics of Veritas InfoScale Storage 8.0, and Veritas InfoScale Availability 8.0.
This course will NOT prepare you for the certification exams or the Advanced courses of both the products.

## Cel szkolenia

After completing this course, you will be able to:
• Provide an overview of the InfoScale product suite and InfoScale support for cloud environments.
• Install and configure the InfoScale Storage environment.
• Create, configure, and manage disks, disk groups, and volumes.
• Administer file systems and manage components in the VxVM architecture.
• Administer Mirrored Volumes
• Resize a Volume and a File System
• Create a cluster, and configure service groups and resources.
• Outline the different VCS cluster communication mechanisms.
• Explain InfoScale support for multi-version clusters.
• Perform common administrative cluster operations.
• Summarize VCS user and agent account passwords encryption standards.
• Outline online and offline configuration procedures.
• Configure notifications and triggers to customize VCS behavior in response to events.
• Explain how VCS responds to resources faults.
• Describe how the Intelligent Monitoring Framework improves fault detection.
• Describe VCS response to common system and cluster interconnect failures.

## Uczestnicy

This course is designed for UNIX/Linux system administrators, system engineers, technical support personnel, network/SAN administrators, and systems integration/development staff, who will install, configure, manage, and integrate InfoScale Storage and InfoScale Availability.

## Wymagania wstępne

Knowledge of and hands-on experience with UNIX/Linux systems administration is required.

## Program szkolenia

**PART 1: Veritas InfoScale Storage 8.0 for UNIX/Linux: Administration**

**I. Storage Foundation Basics**

**1. Installing and Licensing InfoScale**
• Introducing the Veritas InfoScale Product Suite

• Tools for Installing InfoScale Products
• InfoScale Cloud Offerings
• Installing Veritas InfoScale Storage
• Installing Veritas InfoScale Availability
• Upgrading Veritas InfoScale Enterprise

**Labs: Introduction**

• Exercise A: Viewing the Virtual Machine Configuration
• Exercise B: Displaying Networking Information

**Labs:**

• Exercise A: Verifying that the System Meets Installation Requirements
• Exercise B: Installing InfoScale Storage and Configuring Storage Foundation
• Exercise C: Performing Post-Installation and Version Checks

**2. Virtual Objects**

• Operating System Storage Devices and Virtual Data Storage
• Volume Manager (VxVM) Storage Objects
• VxVM Volume Layouts and RAID Levels
• Veritas InfoScale Operations Manager (VIOM): Overview

**Labs**

• Exercise A: Using Text-based VxVM Menu Interface
• Exercise B: Accessing CLI Commands
• Exercise C: Adding Managed Hosts to the VIOM Management Server
• Exercise D: Working with the VIOM GUI Dashboard and Inventory Information
• Exercise E: Exploring the VIOM GUI Licensing Option
• Exercise F: Working with the VIOM GUI Settings Option

**3. Creating a Volume and File System**

• Preparing Disks and Disk Groups for Volume Creation
• Creating a Volume and Adding a File System
• Displaying Disk and Disk Group Information
• Displaying Volume Configuration Information
• Removing Volumes, Disks, And Disk Groups

**Labs**

• Exercise A: Creating Disk Groups, Volumes, and File Systems (CLI)
• Exercise B: Removing Volumes and Disks (CLI)
• Exercise C: Destroying Disk Data Using Disk Shredding (CLI)
• Exercise D: (Optional) Creating Disk Groups, Volumes, and File Systems (VIOM)
• Exercise E: (Optional) Removing Volumes, Disks, and Disk groups (VIOM)

**4. Working with Volumes with Different Layouts**

• Volume Layouts
• Creating Volumes with Various Layouts
• Allocating Storage for Volumes

**Labs**

• Exercise A: Creating Volumes with Different Layouts (CLI)
• Exercise B: Creating Erasure Coded Volume for Object Store (CLI)
• Exercise C: (Optional) Creating Volumes with User Defaults (CLI)

**5. Making Configuration Changes**

• Administering Mirrored Volumes
• Resizing a Volume and a File System
• Moving Data Between Systems
• Renaming VxVM Objects

**Labs**

• Exercise A: Administering Mirrored Volumes
• Exercise B: Resizing a Volume and File System
• Exercise C: Renaming a Disk Group
• Exercise D: Moving Data Between Systems
• Exercise E: (Optional) Resizing Only the File System

**6.Administering File Systems**

• Veritas File System: Benefits
• Using Veritas File System Commands
• Veritas File System: Logging
• Controlling File System Fragmentation
• Using Thin Provisioning Disk Arrays

**Labs**

• Exercise A: Preparing to Defragment the Veritas File System

• Exercise B: Defragmenting a Veritas File System
• Exercise C: Working with SmartMove
• Exercise D: Observing Thin Reclamation

**PART 2: Veritas InfoScale Availability 8.0 for UNIX/Linux: Administration**

**I. Cluster Server Basics**

**1. High Availability Concepts**
• High Availability Concepts
• Clustering Concepts
• High Availability Applications
• Clustering Prerequisites
**Labs: Introduction**
• Exercise A: Viewing Virtual Machine Configuration Details
• Exercise B: Verifying Network Connectivity
**Labs:**
• Exercise A: Performing a CPI Pre-installation Verification
• Exercise B: Performing a SORT Pre-installation Verification
**Labs:**
• Exercise A: Installing InfoScale Enterprise Using the Common Product Installer (CPI)
• Exercise B: Running a Post-Installation Check
• Exercise C: Adding Managed Hosts to the VIOM Management Server

**2. VCS Building Blocks**
• VCS Terminology
• Cluster Communication
• VCS Architecture
• Multi-version Cluster
• Veritas InfoScale Operations Manager (VIOM): Overview
**Labs:**
• Exercise A: Working with the VIOM GUI Dashboard and Inventory Information
• Exercise B: Exploring the VIOM GUI License Options
• Exercise C: Working with the VIOM GUI Settings Option

**3. VCS Operations**
• Common VCS Tools and Operations
• Service Group Operations
• Resource Operations
• VCS Custom Scripts: Operations
**Labs:**
• Exercise A: Displaying Cluster Information
• Exercise B: Displaying Status and Attributes
• Exercise C: Performing Service Group Operations
• Exercise D: Manipulating Resources

**4. VCS Configuration Methods**
• Starting and Stopping VCS
• Configuration Methods: Overview
• Online Configuration
• Controlling Access to VCS
• VCS Password Encryption
**Labs:**
• Exercise A: VCS Configuring the State and Stopping VCS
• Exercise B: Configuring Automatic Backup of VCS Configuration
• Exercise C: Setting Non-default VCS Stop Options

**5. Preparing Services for VCS**
• Preparing Applications for VCS
• Performing One-time Configuration Tasks
• Testing the Application Service
• Stopping and Migrating a Service
• Collecting Configuration Information
**Labs:**
• Exercise A: Configuring and Examining Storage for a Service

• Exercise B: Examining the Application
• Exercise C: Manually Starting and Stopping the Application

**6. Online Configuration**
• Online Service Group Configuration
• Adding Resources
• Solving Common Configuration Errors
• Testing the Service Group
**Labs:**
• Exercise A: Creating a Service Group for the Loopy Application
• Exercise B: Configuring Resources for the Loopy Application
• Exercise C: Performing a Virtual Fire Drill (VFD) on the Service Group
• Exercise D: Testing the Service Group
• Exercise E: Setting Resources to Critical
• Exercise F: (Optional) Examining Veritas File System Locking by VCS

**7. Offline Configuration**
• Offline Configuration Examples
• Offline Configuration Procedures
• Solving Offline Configuration Problems
• Testing the Service Group
**Labs:**
• Exercise A: Editing a Copy of the main.cf File Using a System Editor
• Exercise B: Stopping VCS
• Exercise C: Restarting VCS Using the Edited main.cf File

**8. Configuring Notification**
• Notification: Overview
• Configuring Notification
• Triggers: Overview
**Labs:**
• Exercise A: Configuring and Testing Notifier Using VIOM
• Exercise B: Configuring Trigger Scripts

**II. Cluster Server Additions**

1. **Handling Resource Faults**
• VCS Response to Resource Faults
• Determining Failover Duration
• Controlling Fault Behavior
• Recovering from Resource Faults
• Fault Notification and Event Handling
**Labs:**
• Exercise A: Observing Non-Critical Resource Faults
• Exercise B: Observing Critical Resource Faults
• Exercise C: (Optional) Observing Faults in Frozen Service Groups
• Exercise D: (Optional) Observing ManageFaults Behavior
• Exercise E: (Optional) Observing RestartLimit Behavior

**2. Intelligent Monitoring Framework**
• Intelligent Monitoring Framework: Overview
• Intelligent Monitoring Framework: Configuration
• Faults and Failover with Intelligent Monitoring
**Labs:**
• Exercise A: Examining IMF Monitoring on a Resource
• Exercise B: (Optional) Examining IMF Default Configuration

**3.Cluster Communications**
• VCS Communications: Overview
• Cluster Interconnect Configuration
• Cluster Startup
• System and Cluster Interconnect Failure
• Changing the Interconnect Configuration
**Labs:**
• Exercise A: Reconfiguring LLT
• Exercise B: Observing Jeopardy Membership

## Terminy

Na żądanie. Prosimy o kontakt

## Dodatkowe informacje

Jeśli interesują Cię inne szkolenia tego producenta - skontaktuj się z nami.