# WUVN

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# **Enterprise Computing Solutions - Education Services**

# NABÍDKA ŠKOLENÍ

#### Prosím kontaktujte nás zde

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# VERITAS Veritas NetBackup 10.0: Administration

Kód: DÉLKA: CENA:

VER NB-10.0-A 40 Hours (5 DENNÍ) Kč bez DPH 83,000.00

## Description

Školení je vedené virtuálně v angličtině.

Cena školení je 2 800 GBP bez DPH a bude přepočtena aktuálním kurzem v poslední den školení.

Acquire the skills to make your data protection strategy successful with the Veritas NetBackup 10.0: Administration course. You will learn the general principles, configuration, and management of NetBackup, including how to best utilize the NetBackup tools and interfaces, effectively monitor backup and restore operations, and ensure that the data recovery objectives are met.

## Cíle

After completing this course, you will be able to:

- Describe the functions of the Primary server, Media servers, and clients.
- · Describe how NetBackup backs up and restores data.
- Use the NetBackup Administration Console, Web User Interface, and OpsCenter.
- · Configure and manage NetBackup security certificates.
- · Configure, manage, and Monitor BasicDisk and AdvancedDisk storage units and storage unit groups.
- Configure file system backup policies and schedules.
- Perform manual backups and user-directed backups.
- Restore files using the Java or Windows BAR interface and OpsCenter Operational Restore.
- Provision storage and configure MSDP.
- Manage NetBackup cloud backups and cloud storage.
- Optimize file system backups with NetBackup Accelerator.
- · Backup, restore, and protect virtual environments like VMware.
- Configure Storage Lifecycle Policies (SLPs) and initiate jobs that use SLPs.
- Protect and manage the NetBackup catalog.
- Configure NetBackup WORM protection.
- Optimize NetBackup for performance.
- Generate NetBackup reports in NetBackup, OpsCenter, and NetBackup IT Analytics.
- Initiate NetBackup upgrades using VxUpdate.
- Identify and use resources for troubleshooting NetBackup.

## Určeno pro

This course is intended for technical professionals responsible for the design, configuration, operation, monitoring, or support of NetBackup.

# Vstupní znalosti

Students should be familiar with general network and storage concepts, and the administration and configuration of Windows or Linux operating systems. Knowledge of virtualization and cloud technologies is useful.

# Program

Introducing NetBackup:	<ul> <li>Exercise A: Creating Users and Groups</li> </ul>
<ul> <li>Data Protection and the NetBackup Environment</li> </ul>	t • Exercise B: Installing the NetBackup Primary Server Software
<ul> <li>NetBackup and Flex Appliances: Overview</li> </ul>	• Exercise C: Installing the NetBackup Java Remote Administration Console
<ul> <li>NetBackup Integrated Solutions</li> </ul>	<ul> <li>Exercise D: Installing the NetBackup Media Server Software</li> </ul>
NetBackup Installation	Exercise E: Installing the NetBackup Client Software

- NetBackup Administration Interfaces
- Exercise F: Exploring the NetBackup Administration Console

Working with the NetBackup Web UI:

- NetBackup Web User Interface
- Configuring NetBackup for Single Sign-On Exercise A: Accessing and Navigating the NetBackup Web User Interface
- Protecting Workload Assets
- Managing Role-based Access Control
- Alerts and Notifications
- Managing User Sessions
- Performing NetBackup Certificate Administration:
- Understanding Security Certificates
- Working with Certificate Revocation Lists
- Configuring NetBackup Security Certificates
- Managing NetBackup Security Certificates
- Exercise A: Viewing NetBackup Certificates Exercise B: Manually Deploying NetBackup Certificates
- Exercise C: Revoking and Reissuing Host ID-based Certificates
- Using External Security Certificates with NetBackup Exercise D: Using External Certificates with NetBackup
- Configuring Basic and Advanced Disk Storage
- NetBackup Storage Device Concepts
- · Configuring a BasicDisk Storage Unit
- Configuring AdvancedDisk
- Labs:
  - · Exercise A: Configuring a BasicDisk Storage Unit
- Managing AdvancedDisk Storage
- Exercise B: Configuring AdvancedDisk Storage
- · Exercise C: Monitoring and Managing AdvancedDisk Storage
- Configuring Storage Unit Groups • Exercise D: Configuring a Storage Unit Group
- Configuring NetBackup Policies and Schedules:
- Backup Policies: Overview
- · Creating and Configuring Policy Attributes

· Performing Manual Backup Operations

- · Creating a Policy Schedule
- Adding Clients to a Policy
- Creating Backup Selections · Exclude and Include Lists

Managing Policies

Protecting File Systems

- Labs:
- Exercise A: Configuring a Policy to Use a Frequencybased Schedule

Introduction to MSDP

MSDP Architecture

Memory-efficient Dedup Service

Configuring Cloud Storage:

MSDP Cloud Support

Variable-Length Deduplication

MSDP Cloud Immutable (WORM) Storage

- Exercise B: Configuring a Policy to Use a Calendarbased Schedule
- Exercise C: Managing NetBackup Policies
- · Using and Customizing the NetBackup Activity Monitor • Performing User-directed Backups
- Backup Job-related Tips
- Introduction to Restores
- · Performing Restore Operations Using the NetBackup Web UI
- · Performing Restore Operations Using the BAR interface
- Labs:
- Exercise A: Using and Customizing the Activity Monitor
- Exercise B: Performing Manual Backups
- Exercise C: Performing User-initiated Backups
- · Exercise D: Restoring Client Files to their Original Location
- Exercise E: Restoring Client Files to an Alternate File System Location Planning a Deployment
- Exercise F: Restoring Client Files to an Alternate Client System Labs:
- Exercise A: Configuring NetBackup Media Server Deduplication Using the Cloud with NetBackup
- Exercise B: Configuring a Policy to Use MSDP Storage
- Exercise C: Performing Backups to MSDP Storage

• Exercise B: Configuring Cloud Storage in NetBackup

- · Exercise D: Configuring and Using Client-side Deduplication
- Exercise E: Managing and Monitoring NetBackup MSDP Storage Image Sharing using MSDP Cloud
  - Optimizing Filesystem Backups:
    - File System Backup Challenges
    - Optimizing File System Backups
  - · Optimizing File System Backups with NetBackup Accelerator

Configuring Media Server Deduplication:

Provisioning Storage and Configuring MSDP

- NetBackup FlashBackup
- Exercise C: Configuring and Performing Backups to the Cloud Using multiple Data Streams
- Exercise D: Restoring Client Data from Cloud-based Storage Handling Busy Files on UNIX/Linux and Windows File Systems Protecting VMware Environments:
  - Introduction to Virtual Machine Backups
- Exercise B: Optimizing Backups Using NetBackup Accelerator Configuring VMware Backups
- Exercise C: Optimizing Backups Using NetBackup FlashBackup Continuous Data Protection for VMware
  - Performing and Monitoring VMware Backups
- · Exercise D: Configuring and Using Multiple Data Streams Labs:

Labs:

Labs:

· Exercise A: Configuring NetBackup for VMware Backups

Exercise A: Configuring and Performing Synthetic Backups

• Exercise B: Configuring a VMware Policy

Exercise A: Performing Preliminary Tasks

- **Recovering VMware Environments:**
- Exercise C: Performing and Monitoring VMware Virtual Machine Backups Performing VMware Restores
- · Exercise D: Excluding Disks from a VMware Virtual Machine Backup
- · Exercise E: Configuring Continuous Data Protection
- Instant Access and Instant Rollback for VMware
- VMware Agentless Restores

Labs:

- Exercise B: Configuring Role-based Access Control
  - Exercise C: Configuring NetBackup for Single SignOn
    - Exercise D: Viewing and Configuring Notifications
    - Exercise E: Managing User Sessions

#### Labs:

- Exercise A: Recovering Virtual Machine Files (Agentbased)
- Exercise B: Recovering a VMware Virtual Machine Disk
- Exercise C: Recovering the Entire VMware Virtual Machine
- Exercise D: Using VMware Agentless Restore
- Exercise E: Downloading Files and Folders from a Virtual Machine Backup Image
- Exercise F: Creating an Instant Access Virtual Machine from a NetBackup Backup Image
- · Exercise G: Performing Instant Rollback for Virtual Machines

### · Exercise H: Performing Restores from a Continuous Data Protection Backup

- **Duplicating and Replicating Backups:**
- Duplication Strategies
- Storage Lifecycle Policy: Concepts
- Using Storage Lifecycle Policies
- Additional Storage Lifecycle Policy Features and Benefits
- Labs:
- Exercise A: Configuring a Storage Lifecycle Policy
- Exercise B: Configuring a Policy to Use a Storage Lifecycle Policy
- Exercise C: Customizing Storage Lifecycle Policy Settings
- Exercise D: Viewing and Monitoring Storage Lifecycle Policy Operations
- Exercise E: Using Storage Lifecycle Policies to Perform MSDP Optimized Duplication Performing NetBackup Catalog Recovery
- Exercise F: Configuring Storage Lifecycle Policies for Replicating Backup Images
- Labs:
- Exercise A: Verifying Catalog Configuration Files
- · Exercise B: Configuring and Running NetBackup Catalog Backups
- Exercise C: Recovering the Catalogs Using the NetBackup Catalog Recovery Wizard
- Exercise D: Performing Catalog Operations
- Exercise E: Configuring a Policy for Catalog Archive Mitigating Impact of Ransomware
- Ransomware Overview
- NetBackup Protect Against Ransomware
- Backup Anomaly Detection
- NetBackup Malware Tool
- Labs: Part A (Using Flex Appliance):
- Exercise A: Configuring a Disk Pool and WORM Storage Unit
- Exercise B: Configuring a NetBackup Policy
- · Exercise C: Understanding Catalog Operations on the WORM Image Copy
- Exercise D: Configuring and Identifying Backup Anomaly
- Labs: Part B (Using AWS S3):
- Exercise A: Configuring a Disk Po:ol and WORM Storage Unit
- Exercise B: Configuring a NetBackup Policy
- Exercise C: Understanding Catalog Operations on the WORM Backup Image NetBackup OpsCenter
- Exercise D: Configuring and Identifying Backup Anomaly
- Exercise E: Configuring and Using NetBackup Malware Scanner
- Labs:
- Exercise A: Using the NetBackup Reports Utility
- Exercise B: Configuring OpsCenter Data Collection for NetBackup Initiating Upgrades Using VxUpdate
- Exercise C: Generating Reports Using OpsCenter
- Labs:
- · Exercise A: Populating the Repository with NetBackup Packages
- Exercise B: Configuring a Deployment Policy
- Exercise C: Manually Initiating Upgrades from the Primary Server Using VxUpdate
- Exercise D: Initiating Upgrades from the Client Using VxUpdate
- · Exercise E: Viewing the Deployment Job Status

- Collecting Logs and Diagnostic Information:
- Performing Basic NetBackup Troubleshooting
- NetBackup Logging: Overview
- Using Support Utilities
- Using NetBackup Support Resources

- Protecting the NetBackup Catalog:
- Understanding the NetBackup Catalog
- Managing Images
- Protecting the NetBackup Catalog
- Maintaining the NetBackup Catalog

- Generating NetBackup Reports:
- Generating Reports in NetBackup
- Generating NetBackup Reports in OpsCenter
- Generating Reports Using NetBackup IT Analytics
- Upgrading and Updating NetBackup:
- NetBackup Upgrades: Overview
- VxUpdate: Overview
- Deployment Policy Management
- VxUpdate: Error Codes

- Exercise A: Viewing NetBackup Services
- · Exercise B: Using the nbsu and nbcplogs Commands
- Exercise C: Viewing and Setting Debug Logging Properties
- Identifying NetBackup Processes, Services, and Daemons
   Exercise D: Enabling NetBackup Legacy Debug Logging
  - Exercise E: Viewing Debug Logging Levels for Unified Logs
  - · Exercise F: Using the Logging Assistant
  - · Exercise G: Using the NetBackup Smart Diagnostics Utility

#### Appendix A: Protecting NAS Data:

- Introduction to NetBackup for NDMP
- Preparing for NDMP Backups
- Configuring Local NDMP Backups
- Configuring Remote NDMP Backups
- Accelerator for NDMP Filers
- Protecting a NetApp cDOT NDMP Filer
- Understanding NDMP Three-way Backups
- Dynamic NAS (DNAS) Data Protection
- Appendix B: Configuring and Managing Tape Storage:
- Media Manager Storage Units
- Configuring Tape Devices
- Verifying Tape Storage
- NetBackup Media Concepts
- · Configuring Media
- Managing Robots and Tape Drives
- Monitoring Media and Media States
- Managing Tapes
- NetBackup Device Troubleshooting
- Common NetBackup Device Issues
- Media And Device Selection
- Media-related Status Codes
- Using Multiple Data Streams
- Optimizing Tape Drive Performance Using Multiplexing
- Troubleshooting Frozen and Suspended Media
- Labs:
- Exercise A: Verifying and Discovering Tape Devices
- Exercise B: Viewing Configured Tape Devices
- Exercise C: Configuring Tape Devices
- Exercise D: Configuring Volume Pools
- Exercise E: Configuring Media
- Exercise F: Viewing Tape Drive and Robot Configuration Settings
- Exercise G: Using the Device Monitor to Monitor and Manage Tape Drives VMware Instant Recovery: Process
- Exercise H: Managing Media
- · Exercise I: Using the Robtest Utility
- Exercise J: Running NetBackup Reports from the Command Line
- · Exercise K: Media State Management Using the Command Line

Labs:

- Exercise A: Performing Non-NetBackup Pre-requisite Tasks for Instant Recovery for VMware
- Exercise B: Performing NetBackup Pre-requisite Tasks for Instant Recovery for VMware
- Exercise C: Performing Instant Recovery for VMware Using the vSphere Web Client

# Termíny školení

Termíny školení na vyžádání, kontaktujte nás prosím

# Dodatečné informace

Školení je možné zajistit na míru. Kontaktujte nás pro bližší informace.

- Exercise A: Authorizing NetBackup Access to NDMP Hosts
  - Exercise B: Configuring and Performing NDMP Backups
  - Exercise C: Using NetBackup Accelerator for NDMP
  - Exercise D: Performing NDMP Restores
  - Exercise E: Performing Prerequisite Tasks for DNAS Configuration
- Data Protection: Configuring NDMP Three-way Backups Exercise F: Configuring and Performing DNAS Backups
  - Exercise G: Restoring Files from DNAS Backups

- Appendix C: Performing Instant Recovery
- Using VMware Instant Recovery
- VMware Instant Recovery: Differences
- VMware Instant Recovery: Options
- NetBackup Plug-in in vSphere Web Client
- Instant Recovery Cleanup
- · Executing the nbrestorevm Command