Enterprise Computing Solutions - Education Services

TRAINING OFFERING

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Veritas NetBackup 8.3: Advanced Administration

CODE:	LENGTH:	PRICE:
VER_NB-8.3 AA	40 Hours (5 days)	£2,800.00

Description

Acquire the skills to make your data protection strategy successful with the *Veritas NetBackup 8.3: Advanced Administration* course. You will learn advanced NetBackup topics, including NetBackup performance, security, disaster recovery, application and database protection on physical and virtual machines, and protecting data backed up to and from the cloud. This course also covers using NetBackup to manage Oracle, Microsoft Exchange, Microsoft SQL, Microsoft SharePoint, and SAP HANA database backups and restores along with other modern workloads like Red Hat Virtualization and Nutanix Acropolis Hypervisor. NetBackup APIs, Parallel Streaming Framework, Universal Shares, and Veritas Smart Meter are also discussed in this course.

Hands-On

This course includes practical hands-on lab exercises to apply your new skills in a virtual NetBackup domain. At the start of class students will choose between Windows-based or Linux-based NetBackup servers to perform lab exercises.

Objectives

By the completion of this course, you will be able to:

• Improve NetBackup performance by addressing bottlenecks and becoming familiar with NetBackup performance enhancing features.
• Ensure your NetBackup environment and data is secure using security certificates, authentication, authorization, auditing, and encryption.
• Prepare for common disasters and plan for disaster recovery using optimized duplication and Auto Image Replication.
• Optimize NetBackup deduplication storage and use by understanding and managing performance enhancing features for backups and restores, and configuring MSDP catalog protection policies.
• Configure NetBackup to back up and restore Oracle, Microsoft Exchange, Microsoft SQL, Microsoft SharePoint and SAP HANA databases.
• Discuss strategies for Oracle, Microsoft Exchange, Microsoft SQL, and Microsoft SharePoint database recovery.
• Configure, run, and manage backups for applications running in virtual machines.
• Use NetBackup to protect modern workloads like Red Hat Virtualization and Nutanix Acropolis Hypervisor.
• Configure, run, and manage backups using NDMP filers with NetBackup. • Manage NetBackup cloud storage and cloud backups.
• Work with Veritas Smart Meter and NetBackup APIs. • Integrate NetBackup and Veritas Resiliency Platform.
• Configure NetBackup for Replication Director. • Configure NetBackup integration with Access Appliance 3340 (7.4.2).
• Configure Bare Metal Restore. • Configure local and remote NDMP backups.

Audience

This course is intended for NetBackup system administrators, system engineers, technical support personnel, and system integration and development staff who are responsible for implementing new and advanced NetBackup 8.3 features and functions.

Prerequisites

Students should be familiar with general network and storage concepts, and the administration and configuration of Windows or Linux operating systems. Students must also have one to three years of experience with basic NetBackup administration, configuration, and operation. These prerequisites can be met by attending any version of the NetBackup Administration course plus additional on-the-job experience.

Programme

Securing Backup Data • Understanding security concerns in a backup environment • Encrypting NetBackup deduplication data
• Using NetBackup client encryption • Using NetBackup Key Management Services ***Labs***
• Exercise A: Configuring and performing an MSDP encrypted backup
• Exercise B: Configuring and performing a client encrypted backup
• Exercise C: Configuring the NetBackup Key Management Service • Exercise D: Configuring NetBackup to work with KMS
• Exercise E: Backing up and recovering KMS database files **Improving NetBackup Performance**
• NetBackup performance overview • Addressing performance issues • Using Network Resiliency ***Labs***
• Exercise A: Optimizing backups using synthetic backups • Exercise B: Configuring for and using FlashBackup
Optimizing NetBackup Deduplication • Improving deduplication backup performance
• Optimizing deduplication restores and rehydration ***Labs*** • Exercise A: Configuring client direct restores
• Exercise B: Performing a client direct restore • Exercise C: Seeding MSDP FingerPrint cache
• Exercise D: Rehydration performance **NetBackup Parallel Streaming Framework** • Parallel Streaming Framework: Overview
• Protecting Hadoop data using NetBackup • Installing the Hadoop plug-in • Configuring NetBackup for Hadoop
• Configuring backup policies for Hadoop • Backing up a Hadoop cluster • Recovering data to a Hadoop cluster ***Labs***
• Exercise A: Understanding Hadoop configuration • Exercise B: Configuring Credentials for Hadoop in NetBackup
• Exercise C: Configuring the NetBackup policy • Exercise D: Performing Hadoop backup • Exercise E: Restoring Hadoop data
Protecting Microsoft SQL Databases • Introduction to Microsoft SQL Server • NetBackup for SQL Server: Overview
• Managing SQL Server objects • Protecting Microsoft SQL Server assets • Using SQL Server Intelligent Policies
• Restoring Microsoft SQL Server assets • Instant Access for Microsoft SQL Server ***Labs***
• Exercise A: Introduction to the SQL Server environment • Exercise B: Registering SQL instance with NetBackup
• Exercise C: Configuring and performing a SQL server backup • Exercise D: Deleting a SQL database
• Exercise E: Restoring a SQL database • Exercise F: Creating a NetBackup SQL Intelligent Policy (Optional)
• Exercise G: Performing a manual SQL Server backup using an Intelligent Policy (Optional)
• Exercise H: Restoring a SQL database using NetBackup MS SQL Client (Optional) **Protecting Oracle Databases**
• Introduction to Oracle databases • NetBackup for Oracle: Overview • Managing Oracle • Configuring Oracle database backups
• Monitoring and maintaining Oracle database backups • Oracle database disaster recovery considerations
• Real Application Clusters ***Labs*** • Exercise A: Initial configuration of Oracle
• Exercise B: Registering the Oracle instance with NetBackup • Exercise C: Creating an Oracle Intelligent Policy
• Exercise D: Performing a backup using an Oracle Intelligent Policy • Exercise E: Simulating a failure of an Oracle database
• Exercise F: Restoring an Oracle database **Protecting Microsoft Exchange** • Introduction to Microsoft Exchange Server
• Configuring NetBackup for Exchange • Exchange and high availability environments
• Monitoring and maintaining Exchange database backups • Exchange disaster recovery considerations ***Labs***
• Exercise A: Configuring a Microsoft Exchange backup policy
• Exercise B: Performing non-NetBackup pre-requisite tasks for Exchange GRT
• Exercise C: Performing NetBackup tasks to enable Exchange Granular Recovery (GRT)
• Exercise D: Performing a Microsoft Exchange database backup • Exercise E: Performing a Roll-Forward recovery
• Exercise F: Performing Point-in-Time recovery • Exercise G: Performing an Exchange GRT database backup
• Exercise H: Recovering a deleted e-mail message
• Exercise I: Performing full and differential backups of an Exchange database (Optional)
• Exercise J: Restoring the Exchange database from full and differential backup images (Optional)
Protecting Red Hat Virtualization Workloads • Introduction to Red Hat Virtualization (RHV)
• NetBackup for RHV: Configuration and deployment • Protecting Red Hat Virtualization virtual machines
• Recovering Red Hat Virtualization virtual machines ***Labs*** • Exercise A: Configuring NetBackup communication with RHV
• Exercise B: Protecting RHV virtual machines • Exercise C: Recovering RHV virtual machines
Protecting Nutanix Acropolis Hypervisor Workloads • NetBackup for Nutanix Acropolis Hypervisor: Overview
• Configuring NetBackup communication with AHV • Configuring secure communication • Configuring backup policies for AHV
• Backing up Nutanix AHV virtual machines • Recovering Nutanix AHV virtual machines ***Labs***
• Exercise A: Configuring NetBackup communication with AHV
• Exercise B: Configuring, performing, and monitoring backups of Nutanix AHV virtual machines
• Exercise C: Recovering Nutanix AHV virtual machines **Universal Shares** • Introduction to Universal Shares
• BYO Universal Shares • Configuring Universal Shares • Backing up to a Universal Share • Protecting data in a Universal Share
Labs • Exercise A: Verifying BYO media server configuration • Exercise B: Creating and mounting a Universal Share
• Exercise B: Performing a backup to a Universal Share • Exercise C: Protecting data in a Universal Share
• Exercise D: Restoring data to a Universal Share **NetBackup Cloud Solutions** • Using the cloud with NetBackup
• Configure NetBackup cloud storage • Managing NetBackup cloud storage and cloud backups • Veritas CloudPoint: Overview
• NetBackup integration with CloudPoint • Protecting cloud workloads • Recovering cloud workloads ***Labs***
• Exercise A: Performing preliminary tasks • Exercise B: Configuring cloud storage in NetBackup
• Exercise C: Configuring and performing backups to the cloud • Exercise D: Restoring client data from cloud-based storage
• Exercise E: Protecting cloud assets using NetBackup (Optional) • Exercise F: Restoring cloud assets using NetBackup (Optional)
Veritas Smart Meter • Introduction to Veritas Smart Meter • Privacy and Data security
• Data types collected and data collection events • Enabling Veritas Smart Meter **NetBackup APIs** • Introduction to NetBackup API
• Using NetBackup APIs for automation • Creating and using API keys ***Labs*** • Exercise A: Using NetBackup APIs with Swagger
• Exercise B: Using Swagger to configure MSDP • Exercise C: Configuring VMware protection using NetBackup APIs
• Exercise D: Automating the use of NetBackup Universal Shares • Exercise E: Automating SQL database backup and recovery
NetBackup Resilience • Introduction to Veritas Resiliency Platform • Integrating NetBackup and Veritas Resiliency Platform
• Configuring Resiliency Group with NetBackup virtual machines • Restoring NetBackup virtual machines ***Labs***
• Exercise A: Understanding the lab environment.

• Exercise B: Preparing master server(Windows) for VMware backup with Auto Image Replication.
• Exercise C: Preparing master server(Linux) for VMware backup with Auto Image Replication
• Exercise D: Running and monitoring backup, replication, and import jobs.
• Exercise E: Adding master(Windows) to the New York data center in VRP.
• Exercise F: Adding master(Linux) to the London data center in VRP.
• Exercise G: Performing a rehearsal with VMware and NetBackup Auto Image Replication.
• Exercise H: Performing a rehearsal cleanup with VMware and NetBackup Auto Image Replication.
Appendix A: NetBackup Replication Director • Introduction to NetBackup Replication Director
• NetBackup configuration for Replication Director • Restoring from a snapshot • Using NetApp disk arrays with Replication director
• Using Oracle with Replication Director • Using Virtual Machines with Replication Director ***Labs***
• Exercise A: Creating a NetBackup storage server for snapshot replication
• Exercise B: Creating disk pools and storage units for snapshots and replication
• Exercise C: Creating a storage lifecycle policy for snapshots and snapshot replication
• Exercise D: Configuring backup policies for snapshots and snapshot replication
• Exercise E: Restoring files and folders from an array-based snapshot **Appendix B: Long Term Retention using Veritas Access**
• NetBackup Integration with Access Appliance 3340 (7.4.2) • Configuring Access as a cloud storage server
• Configuring backup over S3 • Veritas Data Deduplication **Labs**
• Exercise A: Configuring Veritas Data Deduplication with Veritas Access
• Exercise B: Configuring Veritas Data Deduplication storage in NetBackup • Exercise C: Creating a S3 bucket on Veritas Access
• Exercise D: Configuring Veritas Access cloud storage in NetBackup
• Exercise E: Configuring and performing backups using NetBackup policies **Appendix C: Protecting SAP HANA databases**
• Introduction to NetBackup SAP HANA • Configuring NetBackup for SAP • Performing backups and restores of SAP HANA
Appendix D: NetBackup Bare Metal Restore • Introduction to Bare Metal Restore • Configuring Bare Metal Restore
• Protecting clients • Setting up restore environments • Creating virtual machine from client backup ***Labs***
• Exercise A: Configuring BMR Master Server • Exercise B: Configuring BMR Boot server
• Exercise C: Configuring backup policy for BMR • Exercise D: Configuring SRT • Exercise E: Performing BMR Restore
• Exercise F: Creating a Virtual Machine from client Image Backup **Appendix E: Protecting NAS Data**
• Introduction to NetBackup for NDMP • Preparing for NDMP backups • Configuring local NDMP backup
• Configuring remote NDMP backups • Accelerator for NDMP filers • Protecting a NetApp cDOT NDMP filer
• Understanding NDMP three-way backups • Data Protection Configuring NDMP three-way backups • Dynamic NAS (DNAS)
Appendix F: Protecting Microsoft SharePoint • Introduction to Microsoft SharePoint Server
• Configuring NetBackup for SharePoint • SharePoint disaster recovery considerations ***Labs***
• Exercise A: Configuring a Microsoft SharePoint policy in NetBackup
• Exercise B: Performing non-NetBackup tasks to enable SharePoint Granular Recovery
• Exercise C: Performing NetBackup tasks to enable SharePoint Granular Recovery
• Exercise D: Performing a manual backup using a SharePoint policy • Exercise E: Deleting a document from a SharePoint site
• Exercise F: Performing a SharePoint document restore **Appendix G: Legacy Policies and Generic Application Backups**
• Configuring NetBackup with legacy Oracle policies • Monitoring and maintaining Oracle database backups from legacy policies
• Using the NetBackup Microsoft SQL Client console • Using SQL server batch files in NetBackup policies
• Customizing generic application backups ***Labs*** • Exercise A: Viewing Initial configuration of Oracle
• Exercise B: Registering the Oracle instance with NetBackup • Exercise C: Creating an Oracle Legacy Policy
• Exercise D: Performing a backup using an Oracle Legacy Policy • Exercise E: Simulating a failure of an Oracle database
• Exercise F: Restoring an Oracle database **Appendix H: Processing MSDP** • MSDP Processing: In-depth

Session Dates

On request. Please Contact Us

Additional Information

This training is also available as onsite training. Please contact us to find out more.