Enterprise Computing Solutions - Education Services

TRAINING OFFERING

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Veritas Backup Exec 22: Administration

CODE:	LENGTH:	PRICE:
VER_BE22-A	40 Hours (5 days)	€3,360.00

Description

Acquire the skills to make your data protection strategy successful with the Veritas Backup Exec 22: Administration course. The course is designed for the data protection professional tasked with deploying, configuring, maintaining, and managing a Backup Exec environment. The course covers Backup Exec concepts, how to back up and restore critical data, configure storage devices and media, and work with various Backup Exec agents and options, which protect applications like Microsoft Exchange, Microsoft SharePoint, Microsoft SQL, Microsoft 365, Active Directory, Cloud, Oracle, and Virtual environments.

Objectives

By the completion of this course, you will be able to:
• Describe the functionality and architecture of Backup Exec.
• Install and upgrade to Backup Exec 22.
• Configure storage devices – Cloud-based storage and Network storage.
• Backup data to and restore data from disk, network, and the Cloud.
• Perform tape devices and tape management.
• Manage servers and jobs.
• Set backup and recovery settings and methods.
• Work with the Database Encryption Key.
• Perform online Disaster Recovery.
• Install the SDR disk creation wizard, create an SDR disk image and recover a server with SDR.
• Back up a physical machine and convert to a virtual machine either simultaneously or on a schedule.
• Install, configure, and manage the Backup Exec Central Admin Server feature.
• Configure Backup Exec Deduplication Storage.
• Protect remote servers using the appropriate remote agents, applications, and databases.
• Use Backup Exec to protect databases and applications, including;
o Microsoft Hyper-V
o Microsoft SQL Server
o Microsoft Exchange
o Microsoft SharePoint
o Microsoft 365
o Active Directory
o Oracle
• Protect virtual environments.
• Perform virtual machine conversions.

Audience

This course is designed for system administrators, system engineers, technical support personnel, consultants, backup administrators, backup operators, and others who are responsible for installing, configuring, managing, and monitoring Backup Exec 22.

Prerequisites

You must have a basic working knowledge of administrating and configuring Windows Server 2016 and later platforms. Basic working knowledge of the following applications is beneficial, but not required:
• Microsoft SQL Server
• Microsoft Exchange Server
• Microsoft SharePoint Portal Server
• Microsoft Hyper-V
• VMware virtual infrastructure.

• Oracle
• Cloud Technologies
• Microsoft 365

Programme

Backup Exec Fundamentals
• Data Backup Basics
• Backup Exec Solution Offerings
• Backup Exec Architecture
Licensing Backup Exec
• Subscription, Perpetual, and Custom Licensing
• Trialware and Upgrades
• Capacity and subscription license enforcement
• Updating Licensing Information
• Capacity Widget and Capacity Metering
• Maintenance and Extended Support Licensing
Installing Backup Exec
• Backup Exec: New installation
• Typical Installation of Backup Exec
• Custom Installation of Backup Exec
• Installation Details
• Applying Backup Exec Updates
Labs
• Exercise A: Installing Veritas Backup Exec
• Exercise B: Verifying the Veritas Backup Exec Installation
• Exercise C: Adding Backup Exec Licenses
• Exercise D: Configuring and Running Veritas Update
• Exercise E: Viewing the Backup Exec License
Working with the Backup Exec Administration Console
• Installing and Configuring the Backup Exec Administration Console
• Using the Backup Exec Administration Console
• Exploring the Backup Exec Administration Console
• Introduction to Backup and Restore
• Introduction to BEMCLI
Labs
• Exercise A: Installing the Backup Exec Remote Administration Console
• Exercise B: Exploring the Home tab of the Backup Exec Administration Console
• Exercise C: Working with the Configuration Task Widget
• Exercise D: Exploring the Backup Exec Administration Console
• Exercise E: Creating a Configured View
• Exercise F: Creating a Disk Storage
• Exercise G: Creating a Basic Backup Job
• Exercise H: Creating a Basic Restore Job
Disk Storage Devices
• Backup Exec Storage Devices
• Viewing disk storage: Storage View
• Disk Cartridge Devices
• Deduplication Disk Storage
• Importing a Legacy Backup-to-disk Folder
• Backup Exec Storage Pools
• Windows Storage Pool and Spaces
Labs
• Exercise A: Creating a Disk Storage Device Using the Configuration Wizard
• Exercise B: Viewing the Disk Storage in the Backup Exec Management Command Line Interface
• Exercise C: Viewing Disk Storage Device Properties
• Exercise D: Creating a Storage Pool
Cloud-based Storage Devices
• Basics of Cloud storage Support in Backup Exec
• Amazon S3 Cloud-based Storage
• Google Cloud-based Storage
• Microsoft Azure Cloud-based Storage
• Backup Exec Cloud Deduplication
• Configuring a Cloud-storage Device in Backup Exec
• Managing Cloud-storage in Backup Exec
Labs
• Exercise A: Configuring Generic S3 Compatible Cloud
Storage in Backup Exec

• Exercise B: Backing up data to Generic S3 Cloudbased Storage
• Exercise C: Configuring Deduplication on Generic S3 Compatible Cloud Storage

Network Storage Devices

• Network Storage Devices
• OpenStorage Devices (Third-party deduplication)
• Backup Exec Remote Media Agent for Linux
• NDMP Servers

Disk and Network Data Management

• Data Lifecycle Management Fundamentals
• DLM Rules: Overview
• Dependent Backup Sets
• DLM Dependent Rules
• Manual Expiration and Retention
• Read-only Setting
• Media Catalogs

Labs

• Exercise A: Manually Performing Two Sets of Full and Incremental Backups
• Exercise B: Manually Expiring the Backup Sets
• Exercise C: Retaining Backup Sets and Changing the Expiration Date of a Backup Set

Tape Devices and Tape Management

• Tape Storage
• Managing Tapes
• Robotic Libraries
• Tape Storage Operations
• Tape Storage: Alerts

Labs

• Exercise A: Inventorying Robotic Libraries when Backup Exec Services Start
• Exercise B: Configuring Barcode Rules for a Robotic Library
• Exercise C: Assigning a Cleaning Slot to a Robotic Library
• Exercise D: Understanding Storage Default Values
• Exercise E: Viewing Default Media Sets
• Exercise F: Creating a Media Set
• Exercise G: Creating a Media Vault
• Exercise H: Assigning a Media Set to a Media Vault
• Exercise I: Assigning Tapes to a Media Set
• Exercise J: Backing up to Tape
• Exercise K: Restoring from Tape

Backing Up Data

• Preparing for Backups
• Adding a Server
• Creating a Backup Job
• Multi-server Backups
• Accounts and Credentials in Backup Exec
• Managing Server Selections
• Backup Selections
• Excluding Files from the Backup
• Backup Settings
• Backup Stage Basics
• Job Name Fundamentals
• Manually Running Backup Jobs

Labs

• Exercise A: Adding a Server
• Exercise B: Backing Up Files and Folders
• Exercise C: Creating a One-time Backup Job
• Exercise D: Creating a New Backup Job Using the Settings from an Existing Backup
• Exercise E: Backing up Multiple Servers
• Exercise F: Backing up System State
• Exercise G: Working with Backup Methods
• Exercise H: Adding a Stage to a Backup

Managing Servers and Jobs

• Backup and Restore View
• Server Groups
• Tag as Business-Critical

Labs

• Exercise A: Creating a Server Group
• Exercise B: Viewing Server Details
• Exercise C: Tagging a Resource as Business-critical and Backing it up
• Exercise D: Tagging a Resource as Business-critical from the Include/Exclude Window
• Exercise E: Examining Pre-defined and Custom Reports

• Exercise F: Viewing Job Log Details
Restoring Data
• Contents of a Backup Set
• Restore Job Basics
• Restore Settings
• Granular Restore Technology (GRT)
• Restoring Data
• Online Disaster Recovery
• Restoring System State
• Shadow Copy Components
Labs
• Exercise A: Viewing the Contents of a Backup Set
• Exercise B: Restoring Data to the Default Location
• Exercise C: Restoring Data to an Alternate Location
• Exercise D: Restoring File and Folder Permissions
• Exercise E: Restoring Data Using the Search Wizard
• Exercise F: Restoring Data to a VHD
• Exercise G: Restoring Data Directly from a Disk
• Exercise H: Restoring Data from a Tape Backup
• Exercise I: Restoring a Business-Critical Resource
Working with the Database Encryption Key
• Backup Exec Database Sensitive Data Components
• Auto-generated AES-256 Encryption Key
• Protecting the Database Encryption Key (DEK)
Labs
• Exercise A: Viewing the Database Encryption Key
• Exercise B: Viewing the Database Encryption Key and Attempting to Back it up
• Exercise C: Exporting the Database Encryption Key
• Exercise D: Backing Up and Restoring the Database Encryption Key
Simplified Disaster Recovery
• Simplified Disaster Recovery Fundamentals
• Simplified Disaster Recovery: Backup
• Installing the SDR Disk Creation Wizard
• Creating an SDR Disk Image (.iso) file
• Recovering a Server with SDR
• Windows Storage Pools and Spaces
Labs
• Exercise A: Adding a Server
• Exercise B: Viewing and Identifying Critical System Devices
• Exercise C: Creating a Simplified Disaster Recovery Enabled Backup Job
• Exercise D: Performing a Complete Online Restore of a Computer – Walkthrough
• Exercise E: Creating a Simplified Disaster Recovery Disk
• Exercise F: Recovering appsrv1 Using the SDR Disk
Upgrading Backup Exec
• Basics of Upgrading the Backup Exec Server
• Standard and Rolling Upgrade – Backup Exec
• Agent for Windows Upgrade
• Migration Report
Labs
• Exercise A: Upgrading Veritas Backup Exec
• Exercise B: Upgrading the Agent for Windows
Central Admin Server Feature
• Backup Exec CAS: Overview
• Installing the CAS
• Installing the Managed Backup Exec Server (MBES)
• Instant Recovery Jobs in a CAS Environment
• MBES Settings
• Backup Jobs: MBES and Server Pools
• Restoring Files using CAS
• Copying Configuration to MBES
• Instant Recovery jobs in a CAS environment
• MBES Settings
• Copy Configuration to MBES
• Upgrading a CAS Environment to Backup Exec 22
• Renaming CAS and MBES
• MBES to Standalone
• Offline Central Admin Server Restore from a Managed Backup Exec Server
Labs
• Exercise A: Installing the CAS Feature

• Exercise B: Converting a Backup Exec Server to a Managed Backup Exec Server
• Exercise C: Viewing the Settings for a Managed Backup Exec Server
• Exercise D: Creating a Backup Exec Server Pool
• Exercise E: Restoring Data from CAS
• Exercise F: Using Optimized Duplication with the Central Admin Server
• Exercise G: (Optional) Changing the CAS Storage and Media Data Location for MBES
• Exercise H: (Optional) Running the Backup Exec Utility for CAS Operations

Deduplication Feature

• Data Deduplication and Open Storage Technology: Fundamentals
• Deduplication Feature Option
• Configuring Backup Exec Deduplication Storage
• Exclusion from Windows Deduplication
• Deduplication Backup Job
• Configuring Client-side Deduplication
• Rehydration
• Optimized Duplication
• Protecting the Backup Exec Deduplication Storage
• Best Practices for the Deduplication Feature
• OpenStorage devices (Third-party deduplication)
• OpenDedupe OST Connector
• OpenDedupe Installation and Configuration
• Configuring OpenStorage in Backup Exec
• Upgrading from Backup Exec 21 to Backup Exec 22

Labs

• Exercise A: Verifying the Deduplication Feature Installation
• Exercise B: Creating a Deduplication Storage Folder
• Exercise C: Creating a Backup Job to Backup Data to the Deduplication Disk Storage (Server-side deduplication)
• Exercise E: Verifying Data Deduplication
• Exercise F: Restoring Deduplication Data
• Exercise G: Creating a Client-side Deduplication Job

Security and Compliance Features

• Backup Exec Support for GDPR
• Backup Exec Support for Ransomware Resilience

Labs

• Exercise A: Working with the GDPR Guard Feature
• Exercise B: Working with the Ransomware Resilience Feature

Remote Agent, Applications, and Databases

• Agent for Windows: Fundamentals
• Installing the Agent for Windows
• Managing the Agent for Windows
• Agent for Applications and Databases: Fundamentals
• GRT Support for Agent, Applications, and Databases
• Enabling the Agent for Applications and Databases Feature

Labs

• Exercise A: Viewing Backup Exec License Information
• Exercise B: Installing the Agent for Windows
• Exercise C: Viewing the Agent for Windows Installation Footprint
• Exercise D: Backing Up a Remote Windows Computer
• Exercise E: Restoring Data to a Remote Windows Computer

Protecting Microsoft Exchange Server

• Installing the Backup Exec Agent for Microsoft Exchange
• Backing up a DAG
• Exchange Backup Selections
• Exchange Backup Settings
• Exchange Preferred Servers Only Backups
• Restoring Exchange data
• Redirected Restore Considerations
• VSS Providers and Exchange Writers

Labs

• Exercise A: Viewing the Exchange DAG Configuration
• Exercise B: Backing Up an Exchange DAG
• Exercise C: Restoring Exchange Mailbox Items
• Exercise D: Restoring Exchange Mailbox Items Using Search
• Exercise E: Performing a Redirected Restore of Exchange Databases and Logs

Protecting Microsoft SQL Server

• Agent for Microsoft SQL Server: Fundamentals
• Microsoft SQL Backup Selections
• Backing up a Microsoft SQL Server
• Restoring a Microsoft SQL Server Database

• Supported Microsoft SQL Server Features
Labs
• Exercise A: Backing up SQL Server System Databases
• Exercise B: Restoring a SQL Server Database
• Exercise C: Restoring a SQL Server Database to an Alternate Location
Protecting Microsoft SharePoint Server
• Agent for Microsoft SharePoint: Fundamentals
• Backing up Microsoft SharePoint
• Restoring Microsoft SharePoint
Labs
• Exercise A: Viewing the SharePoint Site Details
• Exercise B: Backing Up SharePoint
• Exercise C: Performing a SharePoint GRT Restore for a Task
• Exercise D: Performing a SharePoint Redirect Restore for a Document
• Exercise E: Restoring a Versioned Document
• Exercise F: Restoring a SharePoint Portal Site
Protecting Microsoft Active Directory
• Agent for Microsoft Active Directory: Fundamentals
• Traditional Active Directory Restore
• Active Directory: Granular Recovery Technology
Labs
• Exercise A: Backing up Microsoft Active Directory
• Exercise B: Restoring Active Directory Objects
Protecting Microsoft 365
• Integrated Microsoft 365
• Support for Backing Up Microsoft 365 Tenant Data
• Restoring Microsoft 365 Tenant Data
• Notes And Best Practices For Microsoft 365Protecting Virtual Environments – Part 1
• Virtualization Technologies
• Backup Exec Virtualization Agents
• Installing Agent for VMware and Hyper-V
• Backing up Virtual Machines
• Restoring Virtual Machines
Labs
• Exercise A: Verifying the Agent for VMware and Hyper-V Installation
• Exercise B: Connecting to and Viewing the ESX Server Configuration
• Exercise C: Adding the vCenter Server to Backup Exec
• Exercise D: Backing up an ESXi Server
• Exercise E: Restoring a VMware Virtual Machine
Protecting Virtual Environments – Part 2
• Instant Cloud Recovery for Hyper-V and VMware
• Instant Recovery for Hyper-V and VMware Virtual Machines
• Performing an Instant Recovery for a Virtual MachineRemoving an Instantly Recovered Virtual Machine
• Instant Recovery Resiliency
• Virtual Machine Recovery Ready Validation
Labs
• Exercise A: Performing an Instant Recovery of a Windows Virtual Machine
• Exercise B: Performing an Instant Recovery of a NonWindows Virtual Machine
• Exercise C: Removing Instantly Recovered Virtual Machines
• Exercise D: Creating a Validate Virtual Machine for a Recovery Job for a Windows Virtual Machine
• Exercise E: Creating a Validate Virtual Machine for a Recovery Job for a Non-Windows Virtual Machine
• Exercise F: Working with the Virtual Machine Backups Widget
• Exercise G: Backing Up a Virtual Machine Skipping PageFile.sys
Performing Virtual Machine Conversions
• Conversion to Virtual Machine: Fundamentals
• Backup and then Convert Workflow
• Backup and Simultaneously Convert Workflow
• Convert to a Virtual Machine from a Point-in-time
• One-time Convert to Virtual Machine
• Virtual Conversion Options
• Conversion Considerations
Labs
• Exercise A: Performing a Backup and then a Virtual Conversion
Agent for Linux and UNIX
• Agent for Linux
• Installing the Agent for Linux
• Backing up Linux Servers
• Agent for Linux: Best Practices
• Linux References

Labs
• Exercise A: Installing the Agent for Linux
• Exercise B: Backing up a Linux Server
• Exercise C: Restoring Data to Linux Computers
• Exercise D: Restoring Data to an Alternate Location
• Exercise E: Configuration Options for Linux Computers
Agent for Oracle
• Agent for Oracle on Windows or Linux Servers
• Installing the Oracle Agent on Windows or Linux Servers
• Configuring the Oracle Agent on Windows or Linux Servers
• Authenticating Credentials on the Backup Exec Server
• Backing up Oracle Databases
• Restoring Oracle Databases
• Best Practices for Backup Exec Agent for Oracle on Windows and Linux Servers
Labs
• Exercise A: Verifying the Backup Exec Remote Agent (RALUS) Installation on the Linux Server
• Exercise B: Configuring the Oracle Agent on the Linux Server
• Exercise C: Performing Oracle Database Backup
• Exercise D: Restoring Data
• Exercise E: Performing a DBA-Initiated Backup Job
• Exercise F: Installing and Configuring Backup Exec Remote Media Agent (RMAL) on the Linux Server

Further Information

Duration
• Instructor-led training - ILT: 5 days, including 6 months of lab access
• Virtual instructor-led training - VILT: 5 days, including 6 months of lab access
• Learning Lab – Self-paced lesson guide plus 6 months of lab access
Hands-On
This course includes practical, hands-on lab exercises that enable you to test your new s

Session Dates

On request. Please Contact Us

Additional Information

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