

Backup Exec 15: Administration

COURSE DESCRIPTION

The *Symantec Backup Exec 15: Administration* course is designed for the data protection professional tasked with architecting, implementing, backing up, and restoring critical data. This five-day, Instructor-led, hands-on class covers how to back up and restore data, configure storage devices, manage media, and maintain the Backup Exec environment.

Students also learn how to configure and work with various Backup Exec Agents, which protect applications like Microsoft Exchange, Microsoft SharePoint, and Microsoft SQL. The course also covers the Virtual Environment Agents and the Deduplication Option.

Delivery Method

Instructor-Led Training

Duration

Five days

Course Objectives

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

- Describe the basic functionality of Backup Exec 15.
- Describe the basic architecture of Backup Exec 15.
- Install and upgrade to Backup Exec 15.
- Install and work with the Backup Exec 15 RAC.
- Configure storage devices.
- Manage devices and media used by Backup Exec.
- Run basic backup jobs.
- Set backup settings and methods.
- Restore backed-up data.
- Perform Online Disaster Recovery.
- Work with the Database Encryption Key.
- Install the SDR disk creation wizard.
- Create an SDR disk image (.iso).
- Recovering a server with SDR.
- Backup a physical machine and convert to virtual simultaneously.
- Backup a physical machine and convert to virtual based on a schedule.
- Install, configure, and manage the Symantec Backup Exec Central Admin Server Option.
- Protect remote servers using the appropriate Remote Agent.
- Install, configure, and work with the Agent for Windows and the Agent for Linux and Agent for Mac.
- Use Backup Exec to protect databases and applications.

- Install, configure, backup and restore data with the following Backup Exec Agents:
 - Agent for Microsoft SQL Server
 - Agent for Microsoft Exchange
 - Agent for Microsoft SharePoint
 - Agent for VMware and Hyper-V
 - Agent for Active Directory
- List the supported virtual conversion configurations.
- Install the Deduplication option.
- Configure Backup Exec Deduplication Storage.
- Backup and restore deduplicated data.

Who Should Attend

This course is designed for system administrators, system engineers, technical support personnel, systems professionals, consultants, network managers, network administrators, backup administrators, backup operators, and others who are responsible for installing, configuring, and day-to-day management of Backup Exec 15 in a variety of network environments, and who are responsible for troubleshooting and tuning the performance of this product in the enterprise environment.

Prerequisites

You must have basic working knowledge of administration and configuration of the Windows Server 2008 and Windows Server 2012 platforms. You must also have experience configuring server software and hardware. Basic working knowledge of domain security and experience with Active Directory and Windows Server 2008 and Windows Server 2012 are recommended.

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

Hands-On

This course includes practical, hands-on lab exercises that enable you to test your new skills and begin to transfer them to your working environment. Additionally, assessment items at the end of each lesson test your knowledge and comprehension of the information provided.

COURSE OUTLINE

Symantec Backup Exec 15: Install and Configure

Course Introduction

- Course overview
- Classroom lab environment
- Symantec's Education and Support resources

Backup Exec Fundamentals

- Data backup basics
- Symantec's backup solution offerings
- Backup Exec architecture
- Backup Exec 15 Feature Pack 1: End of Life Items

Installing and Licensing Backup Exec 15

- New installation
- Typical installation
- Launching Backup Exec 15
- Updating Backup Exec 15

Installing Backup Exec 15 Remote Administration Console

- New Installation
- Blocked BES and RAC 32-bit Installation Scenarios
- Remote Administration Console Compatibility

Upgrading and Migrating to Backup Exec 15

- Backup Exec Server
- BE CASO and MBES Rolling Upgrades
- Agent for Windows
- Performing Step Upgrades
- Upgrading from BE 2010 R3 and Earlier
- Backup Exec Server Migration from 32-bit to 64-bit Server
- Migrating from a 32-bit Backup Exec server to a 64-bit Backup Exec server
- Viewing the Migration Report

Storage Devices

- Configuring storage devices
- Disk-based storage
- Legacy backup-to-disk folder
- Configure disk cartridge devices
- Configure Deduplication Disk Storage
- Storage Provisioning Option
- Windows Storage Pools and Spaces
- Network Storage
- OpenStorage devices (Third-party deduplication)
- RMAL
- Tape Storage
- Storage Pools
- Storage view: Overview

Data Management

- Media basics
- Data Lifecycle Management
- Data Lifecycle Management Debug Log Enhancement

- Managing tapes with media sets
- Media catalogs

Backing Up Data

- Adding a server
- Creating Backup workflows
- Multi-server backup definition
- Accounts and Credentials in Backup Exec
- Server Selections options
- Backup Selections: Dynamic Inclusion
- Resource order
- Backup Selections: Excludes
- Adding a Backup Task
- Backup Settings: Backup Methods
- Backup Settings: Additional settings
- Backup Stage
- Job Name
- Manually running backup jobs

Managing Servers and Jobs

- Backup and Restore view
- Server Groups
- Retired Servers Group

Restoring Data

- Restore job basics
- Restore settings
- Granular restore
- Restoring data from single backup set
- Restoring data from multiple backup sets
- Restoring data from tape
- Restoring data from backup job
- Online Disaster Recovery
- Restoring System State
- Restoring Shadow Copy Components

Working with the Database Encryption Key

- BEDB Sensitive Data components
- Auto-generated AES-256 Encryption Key
- Protecting the DEK
- Troubleshooting Database Encryption Issues

Simplified Disaster Recovery

- Simplified Disaster Recovery fundamentals
- Simplified Disaster Recovery: Backup
- Installing the SDR disk creation wizard
- Creating an SDR disk image (.iso)
- Recovering a server with SDR
- Windows Storage Pools and Spaces
- SDR additional options

Virtual Machine Conversion

- Conversion to virtual machines fundamentals
- Convert to virtual machine
- Backup and convert simultaneously
- Backup and convert on a schedule
- Convert from a backup set
- Virtual conversion options
- Incremental Conversions

- Conversion Considerations

Central Admin Server Option

- Backup Exec 15 CASO: Overview
- Installing the CAS
- Installing MBES
- Backup jobs: MBES and Server Pools
- Restoring Files using CASO
- MBES Settings
- Copy Configuration to MBES
- Upgrading a CASO environment to Backup Exec 15
- MBES to Standalone
- Offline Central Admin Server Restore from a Managed Backup Exec Server

Symantec Backup Exec 15: Manage and Administer

Course Introduction

- Course overview
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Remote Agents

- Introduction to Remote Agents
- Agent for Windows
- Agent for Linux and Agent for Mac

Agent for Applications and Databases

- Agent for Applications and Databases fundamentals
- Installing the Agent for Applications and Databases

Agent for Microsoft Exchange Server

- Backup Exec Agent for Microsoft Exchange: Installation
- Adding an Exchange Server or Database Availability Group
- Backup Selections
- Backup Settings
- Restoring Exchange
- Database Restore
- GRT Browse Restore
- GRT Search Restore
- Restore Considerations: GRT
- Restore Considerations: Public Folders
- Restore Considerations: Site Mailbox
- Restore Considerations: Database Overwrite
- Restore Considerations: RSG/RDB
- Restore Considerations: Disaster Recovery
- Volume Shadow Copy
- Troubleshooting: VSS Provider and Exchange Writer

Agent for Microsoft SQL Server

- Microsoft SQL Server agent installation
- Backup Selections
- Backup Settings
- Restoring a Microsoft SQL Server database
- Unsupported Microsoft SQL Server features

Agent for Microsoft SharePoint Server

- SharePoint Agent Overview
- Add SharePoint Farm
- Backing up SharePoint
- Restoring SharePoint

Agent for Microsoft Active Directory

- Agent for Microsoft Active Directory
- Traditional Restore of Active Directory
- GRT Restore

Virtual Environment Agents

- Virtualization technologies
- Backup Exec Virtualization Agents
- Installing the Agent for VMware and Hyper-V
- Adding a host
- Installing Agent for Windows on virtual machines
- Backup
- Restore
- VMware VDDK 6.0 Enhancements
- Security enhancements

Deduplication Option

- Data deduplication and Open Storage Technology: Fundamentals
- Installing the Deduplication Option
- Configuring Backup Exec Deduplication Storage
- Exclusion from Windows deduplication
- OpenStorage devices
- Deduplication backup job
- Configuring Client-side Dedup
- Rehydration
- Optimized duplication
- Protecting Backup Exec Dedup Storage