

Szkolenie: HPE

## Veeam® Backup & Replication™ v12.1: Configure, Manage, and Recover (VMCE)



### Cel szkolenia:

Veeam Backup & Replication v12.1: Configure, Manage, and Recover is a technical course that provides IT professionals with the skills needed to configure, manage, and support a Veeam Backup & Replication v12.1 solution. With extensive hands-on labs, the class teaches administrators and engineers how to effectively protect and manage data in ever-changing technology and business environments, bringing tangible benefits to businesses in the digital world.

This course is based on Veeam Backup & Replication v12.1, part of Veeam Data Platform, and is approximately 60% theory and 40% hands-on labs

### Course objectives

After completing this course, you should be able to:

- Describe Veeam security concepts
- Given a scenario, configure a backup job and a backup copy job
- Explain network-attached storage (NAS) backups and configuration
- Describe Veeam's replication capabilities
- Determine appropriate use case for backups, replicas and/or continuous data protection
- Configure backup infrastructure components, including proxy and repository servers
- Given a scenario, evaluate when and how to apply immutability settings
- Given a scenario, recover data from backups

### Audience

This course is suitable for anyone responsible for configuring, managing, or supporting a Veeam Backup & Replication v12.1 environment.

### Plan szkolenia:

- Data protection strategies
  - Review of key data protection strategies that ensure the safety of your data.

- Analysis of risks to data
  - Explore different risk scenarios - What risks do we face daily within our environment?
- What is protected?
  - Review of Veeam Data Platform and introduction to the class scenario.
- Security and protection considerations
  - Describe strategies and tools to secure the Veeam backup server to avoid unauthorized access and data leaks.
- Protecting workloads
  - Efficiently protect VMware and Hyper-V virtual machines based on well-defined SLAs through the creation of backup jobs.
- Deploying agents
  - Identify the use of protection groups to automate the installation of Veeam Agents and protecting workloads with agent backup jobs.
- Unstructured data backup
  - List required components and features available to protect unstructured data.
- Optimizing your backups
  - Analyze features and settings that allow backup storage optimization, faster backups, and data consistency.
- Immutability and hardened repositories
  - Describe backup data protection mechanisms to avoid premature deletion and unwanted modifications.
  - Identify characteristics and deployment steps of Linux Hardened Repositories to achieve backup data immutability.
- Backup infrastructure optimization
  - List deployment options and additional settings to improve general backup solution performance.
- Replication
  - Describe use cases, architectures, and features of replication jobs and continuous data protection (CDP) policies.
- Backup copy jobs
  - Ensure recoverability and adhere to the 3-2-1 Rule with backup copy jobs.
- Long-term retention
  - List different mechanisms for data archiving, including grandfather-father-son retention policies.
- Scale-out Backup Repository™
  - Describe architecture, placement policies, data tiers, and management of Scale-out Backup Repositories.
- Move and copy backups with VeeamMover
  - Identify use cases for virtual machine and backup migrations with VeeamMover.

- Recovery verification
  - Create automated tests to ensure recoverability from backups and replicas.
- Veeam Backup Enterprise Manager
  - Describe the use cases for Veeam Backup Enterprise Manager.
- Incident Response Planning
  - Integrating Veeam Backup and Replication into your incident response plan.
- Advanced recovery features
  - Explore some more in-depth recovery features of Veeam Backup and Replication.
- Selecting the ideal recovery method
  - What are the implications of different recovery methods and selecting the correct recovery method?
- Enacting a recovery
  - Get practice in recovering different recovery types with a variety of data types.
- Lab 1: Secure Veeam backup server
  - Lab 1.1: Secure the Veeam backup server
- Lab 2: Protect virtual machines
  - Lab 2.1: Add the virtual infrastructure to the Veeam Backup & Replication inventory
  - Lab 2.2: Protect virtual workloads
- Lab 3: Veeam Agent backup capabilities
  - Lab 3.1: Automate deployment of Veeam Agents
  - Lab 3.2: Protect physical workloads
- Lab 4: Unstructured data backup capabilities
  - Lab 4.1: Prepare Veeam infrastructure for file share backups
  - Lab 4.2: Protect file share workloads
- Lab 5: Backup infrastructure optimization
  - Lab 5.1: Deploy a dedicated VMware backup proxy
  - Lab 5.2: Deploy a Veeam Hardened Repository
  - Lab 5.3: Deploy immutable object storage
- Lab 6: Second site backup and backup management
  - Lab 6.1: Create a backup copy job
  - Lab 6.2: Create a Scale-out Backup Repository (SOBR)
  - Lab 6.3: Create a dynamic backup job
  - Lab 6.4: Migrate virtual machine backups to another job
- Lab 7: Building replication capabilities
  - Lab 7.1: Prepare Veeam infrastructure for virtual machine replication
  - Lab 7.2: Working with replication jobs
  - Lab 7.3: Working with CDP policies

- Lab 8: Testing virtual machine backups
  - Lab 8.1: Create a SureBackup job to verify backups
  - Lab 8.2: Create a SureBackup job to verify replicas
- Lab 9: Working with Veeam Backup Enterprise Manager
  - Lab 9.1: Connect the backup server with Veeam Backup Enterprise Manager
  - Lab 9.2: Decrypt an imported encrypted file
  - Lab 9.3: Create a restore operator user
- Lab 10: Application items recovery
  - Lab 10.1: Perform a Microsoft SQL Server instant database recovery
  - Lab 10.2: Restore an Active Directory user
- Lab 11: Recovering a guest OS file
  - Lab 11.1: Restore a guest operating system file
  - Lab 11.2: Restore a guest operating system file with disk publishing
- Lab 12: Full virtual machines recovery
  - Lab 12.1: Recover a virtual machine with Instant Recovery
  - Lab 12.2: Recover a virtual machine with full VM recovery and quick rollback
- Lab 13: Restore a physical machine from an Agent backup
  - Lab 13.1: Perform a bare metal recovery of a Windows physical machine from an Agent backup
  - Lab 13.2: Perform an instant VM recovery of a Linux physical machine from an Agent backup
- Lab 14: Restore from a replica
  - Lab 14.1: Disaster failover to a VMware vSphere® replica and failback to production
  - Lab 14.2: Working with replica failover plans
  - Lab 14.3: Planned failover to a Microsoft Hyper-V replica
- Lab 15: Restore from a file share backup
  - Lab 15.1: Recover a file share folder from backup
  - Lab 15.2: Recover an entire file share with instant file share recovery

## Wymagania:

- Students should have fundamental IT experience working with networking, servers, storage, cloud, virtualization and operating systems.
- To get the most out of this course, students should be familiar with the core fundamental concepts of Veeam Backup & Replication through hands-on experience.

## Poziom trudności



## Certyfikaty:

Completion of this course satisfies the prerequisite for the Veeam Certified Engineer (VMCE™) v12 exam.

## Prowadzący:

Authorized Veeam Trainer