

# Veeam Backup & Replication v12.1: Architecture and Design

Course code: VEE-VBRV

The three-day Veeam Backup & Replication v12.1: Architecture and Design training course is focused on teaching IT professionals how to effectively architect a Veeam solution by attaining technical excellence through following the Veeam architecture methodology used by Veeam's own solution architects. Over the course of these three days, attendees will explore the process of requirement gathering and infrastructure assessment and use that information to design Veeam solutions within team exercises. Attendees will also analyze considerations when turning conceptual designs into logical designs, make those designs physical, and then describe obligations to the implementation team that will implement design. Other topics covered will include security, governance, and validation impacts when architecting a Veeam solution and how to build these into the overall design. Attendees should expect to contribute to team exercises, present designs, and defend their decision making. Completion of this course satisfies the prerequisite for taking the Veeam Certified Architect (VMCA) exam, the highest level of Veeam certification. VMCA certification proves knowledge of architecture and design concepts, highlighting the level of skill required to efficiently architect a Veeam solution in a range of real-world environments.

## Who is the course for

Senior Engineers and Architects responsible for creating architectures for Veeam environments.

## What we teach you

After completing this course attendees should be able to:

- Design and architect a Veeam solution in a real-world environment
- Describe best practices, review an existing infrastructure and assess business/project requirements
- Identify relevant infrastructure metrics and perform component (storage, CPU, memory) quantity sizing
- Provide implementation and testing guidelines in line with designs
- Innovatively address design challenges and pain points, matching appropriate Veeam Backup & Replication features with requirements

## Required skills

Ideally VMCE certified, attendees should have extensive commercial experience with Veeam and a broad sphere of technical knowledge of servers, storage, networks, virtualization and cloud environments.

At least, a candidate should be able to:

- Explain core concepts from the Veeam Backup & Replication v12.1: Configure, Manage and Recover course.
- Configure common Veeam components.
- Operate Veeam Backup & Replication Console.
- Optimize an existing backup environment after studying its current implementation.
- Describe repository types and usage priorities (i.e., fast cloning, dedupe, object storage, data flow recommendations).
- Awareness of backup targets for Veeam Backup for cloud products and Veeam Plug-ins for enterprise applications.
- Have extensive technical experience with Veeam.

## Course outline

Introduction

- Review the architecture principles
- Explore what a successful architecture looks like
- Review Veeam's architecture methodology

Discovery

- Analyze the existing environment
- Uncover relevant infrastructure metrics

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- Uncover assumptions and risks
- Identify complexity in the environment

## Conceptual design

- Review scenario and data from discovery phase
- Identify logical groups of objects that will share resources based on requirements
- Create a set of detailed tables of business and technical requirements, constraints, assumptions and risks
- Review infrastructure data with each product component in mind
- Create high level design and data flow

## Logical design

- Match critical components and features of VBR with requirements
- Create logical groupings
- Determine location of components and relationship to logical grouping
- Aggregate totals of component resources needed per logical grouping
- Calculate component (storage, CPU, memory) quantity sizing

## Physical/tangible design

- Convert the logical design into a physical design
- Physical hardware sizing
- Create a list of physical Veeam backup components

## Implementation and Governance

- Review physical design and implantation plan
- Review Veeam deployment hardening
- Describe the architect's obligations to the implementation team
- Provide guidance on implementation specifics that relate to the design

## Validation and Iteration

- Provide framework for how to test the design
- Further develop the design according to a modification scenario

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