VMCA

Veeam Backup & Replication v12.1: Architecture and Design

VMCA course

Course duration: three days

Theory/labs: 50/50

Overview

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 through attaining technical excellence following the Veeam Architecture Methodology used by Veeam's own Solution Architects. During the three days, attendees will explore the goals of requirement gathering and infrastructure assessment and use that information to design Veeam solutions within team exercises. Attendees will analyze considerations when turning logical designs into physical designs and describe the obligations to the implementation team that will implement that 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 decision making.

Audience

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

Prerequisites

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.

Certification

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.

Objectives

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

Course Contents

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
- 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 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