Veeam Backup & Replication v12.1: Architecture and Design (VMCA)

Course Description

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.

Attendees should expect to contribute to team exercises, present designs and defend decision making.

Course Duration:

3 days

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.

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.
- Perform the discovery process.
- Identify solution requirements, risks, constraints, and assumptions.
- Convert those details into conceptual, logical, and physical Veeam solution designs.
- Have extensive technical experience with Veeam.

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 existing infrastructures, and assess business/project requirements.
- Identify relevant infrastructure metrics and perform component (i.e., storage, CPU, memory) quantity sizing.
- Provide implementation and testing guidelines that are in-line with designs.
- Innovatively address design challenges and pain points by matching appropriate Veeam Backup &
- Replication features with requirements.

Outlines:

Introduction

- Review course expectations
- Analyze architecture principles
- Review Veeam architecture methodology
- Define the scope of a design project
- List the deliverables of a design project

Discovery

- Describe the data gathering process
- List key data to get from stakeholders
- Describe possible tools to analyze existing environments
- Identify complexity in the environment
- Review the course scenario

Conceptual design

- Clarify requirement, constraint, assumption, and risk concepts
- Identify received information as requirement, constraint, assumption, or risk
- Create high-level infrastructure and data flow diagrams

Logical design

- List required Veeam components based on requirements
- Describe logical grouping parameters
- Utilize appropriate sizing tools
- Create logical designs based on the course scenario

Physical design

- Describe the decision making procedure
- List the considerations behind designing backup repositories and VMware backup proxies
- Explain the implications of using backup from storage snapshots
- Document physical design decisions
- Create physical designs based on the course scenario

Group presentation

- Produce a presentation to a customer that summarizes your design
- Present your design

Implementation and Governance

- Describe the implementation guide
- List possible backup server configurations and security configurations
- Define the job design
- List the architect obligations for implementation

Validation and Iteration

- List the possible validation tests that can be performed on an implementation
- Describe validation tools and procedures
- List recovery validations that can be performed on an implementation
- Define malware detection methods
- Analyze considerations behind starting a new design cycle

Who should attend:

Senior engineers and architects responsible for creating architectures for Veeam environments.