

Azure VMware Solution: Deploy Disaster Recovery with VMware SRM

Course Duration: 16 Hours Course code: Azure VMware Solution

1. Course Overview

During the 2-day course, you focus on how to implement disaster recovery for on-premises VMware vSphere virtual machines (VMs) or Azure VMware Solution-based VMs. The solution in this article uses VMware Site Recovery Manager (SRM) and vSphere Replication with Azure VMware Solution. Instances of VMware SRM and replication servers are deployed at both the protected and the recovery sites.

2. What you'll learn?

By the end of the course, you should be able to meet the following objectives:

- Describe VMware Site Recovery Manager
- Summarize the components of VMware SRM
- Deploy and configure SRM appliance
- Describe the principal DR topologies that are used with SRM
- Configure inventory and resource mappings
- Explain SRM functionalities
- Describe vSphere Replication architecture
- Deploy and configure vSphere Replication for use with Site Recovery Manager
- Build, edit, execute, test, and remove a recovery plan
- Perform a planned migration

3. Target Audience

AVS and vSphere administrators, architects, system engineers, and systems integrators who are responsible for the deployment or management of Site Recovery Manager.

4. Pre-Requisites

- Understanding of Azure VMware Solution Private Cloud
- VMware vSphere, Experience working with Azure cloud.

5. Course content

Module 1: Course Introduction

- Introduction
- Course Contents
- References

Module 2: Site Recovery Manager Architecture

- Describe SRM architecture
- Identify disaster recovery options with Site Recovery Manager
- List the disaster recovery topologies supported by Site Recovery Manager in AVS
- Operational Limits of SRM on AVS
- Describe Site Recovery Manager licensing options

Module 3: Deploying and Configuring Site Recovery Manager in AVS

- Prerequisites
- Deployment Workflow
- Deploying VMware SRM: On-Prem to AVS
- Deploying VMware SRM: Primary AVS to Secondary AVS
- Install the vSphere Replication Appliance
- Configuring Site pairing in vCenter Server

- Identify the vSphere and vCenter Server requirements for deploying Site Recovery Manager
- Define Site Recovery Manager virtual appliance system requirements
- Deploy the Site Recovery Manager appliance
- Navigate the Site Recovery Manager configuration UI
- Describe the process for registering Site Recovery Manager with vCenter Server
- Describe how to start and stop services in Site Recovery Manager
- Describe the options for accessing the Site Recovery Manager
- Describe the process for configuring site pairing

Module 4: Configuring Inventory Mappings

- Explain the importance of inventory mappings
- Identify configuration options for inventory mappings
- Describe the importance of placeholder virtual machines and datastores
- Describe the importance of the vSphere inventory changes for Site Recovery Manager operation

Module 5: vSphere Replication

- Describe Site Recovery Manager with vSphere Replication Architecture
- Discuss the role of vSphere Replication components
- Discuss use cases for vSphere Replication
- Discuss system requirements and operational limits of vSphere Replication
- Determine how to calculate bandwidth requirements for vSphere Replication
- Identify the advantages of vSphere Replication
- Deploy a vSphere Replication appliance
- Configure a vSphere Replication appliance and register it with vCenter Server
- Pair vSphere Replication appliances
- Deploy an additional vSphere Replication server

- Register a vSphere Replication server with a vSphere Replication management server

Module 6: Replicating VMs Using vSphere Replication

- Describe the replication process used by vSphere Replication
- List vSphere Replication replica states
- Describe vSphere Replication of encrypted virtual machines
- Describe vSphere native key provider
- Describe how to configure vSphere Replication
- Discuss vSphere Replication RPO settings
- Describe MPIT instances
- Describe additional vSphere Replication settings
- Describe how to disable vSphere Replication

Module 7: Protection Groups

- Define protection group functionality
- Create a protection group
- View a placeholder virtual machine in the inventory
- Configure protection for virtual machines and edit protection groups

Module 8: Recovery Plans

- Discuss recovery plan concepts
- Discuss network planning
- Discuss the organization of storage for recovery plans
- Describe customization options in recovery planning
- Describe priority groups and VM dependencies
- Describe how to implement a recovery plan
- Configure VM recovery plan properties
- Describe the customization of recovery plans
- Configure additional steps in the recovery plan
- Delete a recovery plan

Module 9: Executing Recovery Plans

- Discuss use cases for Site Recovery Manager
- Describe planned migration
- Identify Site Recovery Manager workflows
- Examine Site Recovery Manager integration with various vSphere technologies
- Describe how to conduct a recovery plan test
- Perform a recovery plan test
- Identify the effect on the storage layer during the test recovery steps
- Review the recovery plan test steps
- Describe how to cancel a recovery plan test and clean up after recovery plan test cancelation
- Explain a recovery plan execution in planned migration or disaster recovery mode
- Identify the recovery steps for each execution type
- Describe a forced recovery
- Explain the importance of reprotection processes and states
- Examine failback steps
- Describe how to reprotect a data center

Module 10: Monitoring and Troubleshooting

- Import and export Site Recovery Manager configurations
- Identify Site Recovery Manager alarm options
- Generate Site Recovery Manager recovery plan history reports
- Configure Site Recovery Manager advanced settings
- Identify Site Recovery Manager logs
- Describe the vRealize Operations management pack for Site Recovery Manager