

40 HORAS

OVERVIEW

This course provides participants with the knowledge necessary to expand their Avamar integration and performance management skills. The course explores performance management procedures and best practices. Hands-on experience in integrating Avamar with various applications, Data Domain is provided through a lab environment.

AUDIENCE

This course is intended all audiences.

PREREQUISITE KNOWLEDGE/SKILLS

To understand the content and successfully complete this course, a student must have a suitable knowledgebase/skill set. The student must have an understanding of:

- EMC Avamar concepts and administration
- Network administration in a TCP/IP environment
- Unix/Linux system administration

This list of specific prerequisite courses can also be found in EMC Education Services Learning Management System.

- EMC Avamar Fundamentals – eLearning
- EMC Avamar Management – ILT, Online ILT or VILT

COURSE OBJECTIVES

Upon successful completion of this course, participants should be able to:

- Describe Avamar client, initialization, and security best practices
- Install, configure, and run backups and restores of supported database applications, NDMP appliances, and VMware environments
- Install, configure, and run backups and restores in environments integrated with Data Domain
- Describe recommended practices for Avamar performance management including sizing client caches and recovering from server capacity issues

COURSE OUTLINE

Module 1: Configuring the Avamar Server & Clients

- Lesson: Configuring the Client Backup Environment
 - Client environment and client type considerations
 - Time zone considerations
 - Client initialization
 - Client/Server Authentication
 - Encryption
 - Secure Delete
 - Editing firewall settings

Module 2: Performance Management

- Lesson: Performance Rates and Factors
 - Server ingest performance
 - Restore performance
 - Replication Performance Backup Performance
- Lesson: Client Performance
 - Identifying bottlenecks
 - Increasing client backup performance
 - Client performance considerations
- Lesson: Tuning File and Hash files
 - On-demand page cache
 - Tuning the hash cache
 - When to tune the caches
- Lesson: Network Bandwidth Considerations and Tuning
 - Testing client to server connection
 - Data throttling
- Lesson: Managing Avamar Server Capacity
 - Avamar capacity
 - Recovering from capacity issues
 - Monitoring capacity

Module 3: Avamar Integration with Data Domain

- Lesson: Data Domain Integration Overview
 - Overview of Data Domain Integration
 - Data flow and processes
 - Data Domain Integration capabilities and features
 - Sizing the Data Domain
- Lesson: Configuration and Troubleshooting
 - Data Domain Integration requirements
 - Installation and configuration procedure
 - Troubleshooting
- Lesson: Data Domain Cloud Tier Overview
 - What is Data Domain Cloud tier?
 - How does Avamar use Cloud Tier?
 - How to configure and use Cloud Tier, Tier groups
 - Considerations with Cloud Tier

Module 4: Avamar Integration with Microsoft Applications

- Lesson: Microsoft Exchange VSS
 - Describe the Avamar Exchange VSS client
 - Installing and configuring the Avamar Exchange VSS client
 - Perform backup and recovery of Exchange VSS
- Lesson: Microsoft SQL Server
 - Describe the Avamar SQL Server client
 - Installing and configuring the Avamar SQL Server client
 - Perform backup and recovery of SQL Server
- Lesson: Microsoft SharePoint VSS
 - Describe the Avamar SharePoint VSS client
 - Installing and configuring the Avamar SharePoint VSS client

- Perform backup and recovery of SharePoint VSS

Module 5: Avamar Integration with Databases

- Lesson: Avamar Oracle Client
 - Describe the Avamar Oracle client
 - Install and configure the Avamar Oracle client
 - Perform backup and recovery of an Oracle client
- Lesson: Avamar DB2 Client
 - Describe the Avamar DB2 client
 - Install and configure the Avamar DB2 client
 - Perform backup and recovery of an DB2 client

Module: Avamar Integration with NDMP

- Lesson: Installing and Using an NDMP Accelerator

Module: Virtual Environments

- Lesson: Backing up Virtual Machines Lesson: Backing up VMware with Avamar
 - VMware Image Backup overview
 - VMware Image Backup Installation and usage
 - Auto-discover and Automatic member selection using Rules
 - Log file truncation on SQL and Exchange VMs
 - File-level restore
 - VMware integration features
- Lesson: Avamar Plug-ins and utilities for VMware
 - Avamar Plug-in for vSphere
 - Avamar Plug-in for vCloud Director
 - Proxy monitoring with vRealize LogInsight
 - Lesson: Microsoft Hyper-V Backups
 - Avamar for Hyper-V features and capabilities
 - Configuring and performing Hyper-V Backups

Module: Avamar Tape-out Solutions

- Lesson: Avamar Data Migration Enabler