

Configuring and Monitoring NetApp E-Series and EF-Series Storage Systems

Duration: 4 Day(s)

Course Overview

In this course, you learn how to deploy, configure, and monitor NetApp E-Series or EF-Series storage systems. In the deployment phase, you use both the NetApp SANtricity® Storage Management and System Management software to create the configuration, perform administrative tasks, and employ data protection features. You also learn how to configure attached servers for I/O operations. During post-deployment, you use SANtricity Unified Manager and System Management software and to collect storage system information for trend analysis, troubleshooting, performance monitoring and tuning.

Review this course online at <https://www.alta3.com/courses/CMESERIES>

Objectives

- Deploy and configure NetApp E-Series and EF-Series storage systems.
- Administer storage using SANtricity management tools.
- Monitor and optimize storage system performance.
- Troubleshoot hardware and performance issues.

Who Should Attend

- Professional Services workers
- NetApp employees
- NetApp partners
- NetApp customers

Prerequisites

- Basic Windows administrative experience
- Technical Overview of NetApp E-Series Storage Systems

Course Outline

Module 1: Introduction to E-Series and EF-Series Storage

1. E-Series and EF-Series storage products
2. SANtricity management interfaces
3. SANtricity storage manager
4. SANtricity unified manager
5. System manager overview

Module 2: E-Series and EF-Series Functionality

6. Configuration and I/O Operations
7. Cache and battery operation
8. Data assurance

- 9. Media scan
- 10. Drive security

Module 3: Configuration Concepts and Initial Setup

- 11. Host-Side configuration concepts
- 12. Disk-side configuration concepts
- 13. Pool and volume group configuration concepts
- 14. Initial setup steps
- 15. Additional setup steps

Module 4: Volume Group Administration

- 16. Volume groups
- 17. Creating volume groups and volumes
- 18. System administration tasks
- 19. Managing volume group disks

Module 5: Pools Administration

- 20. Pools
- 21. Creating unsecured disk pools and volumes
- 22. Creating secure pools
- 23. System administration tasks
- 24. Managing disk pool disks

Module 6: SSD Cache Administration

- 25. SSD Cache overview
- 26. SSD Cache administration

Module 7: Snapshot Administration

- 27. The SANtricity Snapshot Feature
- 28. Snapshot administration
- 29. Snapshot volume operational sequences
- 30. Snapshot volume administration
- 31. Snapshot consistency group administration

Module 8: Copy Volume Function

- 32. Copy volume function overview
- 33. Copy volume administration

Module 9: Mirroring Administration

- 34. Mirroring technology
- 35. Synchronous mirroring
- 36. Synchronous mirroring administration
- 37. Asynchronous mirroring
- 38. Asynchronous mirroring administration
- 39. SANtricity feature considerations

Module 10: Data Collection and Monitoring

- 40. Resources for collection and monitoring
- 41. Storage array component information
- 42. AutoSupport support tool
- 43. Informational files
- 44. Performance monitoring

Module 11: General Administrative Tasks

- 45. General administrative tasks
- 46. Alert management
- 47. Storage array, controller and drive tasks
- 48. Managing upgrades

Appendix A: E-Series Configuration tools and Resources

- 49. Interoperability matrix tool
- 50. Performance sizing
- 51. Config advisor
- 52. Synergy
- 53. SANtricity Unified Manager support center
- 54. SANtricity system manager support center
- 55. SANtricity cloud connector

Labs

- 56. Installing SANtricity storage manager
- 57. Adding a storage array to the EMW management domain
- 58. Exploring SANtricity system manager
- 59. Using the setup wizard to configure the storage array
- 60. Creating volume group configurations
- 61. Managing volumes in volume groups
- 62. Managing hot spares
- 63. Creating volume groups from the command line

64. Deleting a volume group configuration
65. Creating pool configurations
66. Managing volumes in pools
67. Managing failed drives
68. Using the command line to create pools
69. Creating an SSD cache drive
70. Creating and preparing pool volumes for I/O
71. Creating a Snapshot environment
72. Rolling back a file system
73. Creating a Snapshot volume
74. Mounting and accessing a Snapshot volume
75. Performing an online volume copy operation
76. Performing an offline volume copy operation
77. Collecting data
78. Taking a controller offline for servicing
79. Installing SANtricity unified manager software
80. Exploring SANtricity unified manager functions
81. Exploring E-Series and EF-Series resources