

SNV1G: SAN Volume Controller Planning and Implementation Workshop

Course Code: SNV1G

Duration: 4 days

Instructor-led Training (ILT) | Virtual Instructor-led Training (VILT)

OVERVIEW

This course is designed to leverage SAN storage connectivity by integrating a layer of intelligence or virtualization, the SAN Volume Controller (SVC) to facilitate storage application data access independence from storage management functions and requirements. The focus is on planning and implementation tasks associated with integrating the SVC into the storage area network. It also explains how to:

- Centralize storage provisioning to host servers from common storage pools.
- Facilitate the coexistence and migration of data from non-virtualized to the virtualized environment.
- Improve storage utilization effectiveness using Thin Provisioning and Real-time Compression.
- Implement storage tiering and optimize solid state drives (SSDs) or flash systems usage with Easy Tier.
- Utilize network-level storage subsystem-independent data replication services to satisfy backup and disaster recovery requirements.

SKILLS COVERED

After completion of this course, you should be able to:

- Distinguish the concepts of IBM Spectrum virtualization.
- Recall the history for IBM SAN Volume Controller.

- Classify the characteristics and components of the IBM SAN Volume Controller system and SAS attached expansion enclosures.
- Outline setups required to integrate an SVC system solution.
- Compare the characteristics of the RAID and DRAID.
- Summarize the SVC systems' ability to scale for capacity and performance.
- Summarize the virtualization process converting physical storage space into virtual resources.
- Recall the process to create host access storage on an SVC system.
- Differentiate the advanced software features designed to simplify data management, reclaim storage space, and preserve storage investments.
- Differentiate methods in which to migrate data to and from the virtualized system environment.
- Summarize the methods of remote data replications to improve availability and support for disaster recovery.
- Employ administrative operations to manage, monitor, and troubleshoot the system. environment.
- Summarize the characteristics of IBM Storage Insights' ability to identify, troubleshoot and minimize potential system downtime.

WHO SHOULD ATTEND?

This intermediate lecture and exercise-based course is for individuals who are assessing and/or planning to deploy networked storage virtualization solutions.

PREREQUISITES

- Introduction to Storage (SS01G)
- Storage Area Networking - Fundamentals (SN71G or SN71SG)

- An understanding of the concepts of open systems disk storage systems and I/O operations

MODULES

Module 1

- Welcome
- Unit 1: Introduction to IBM SAN Volume Controller
- Unit 2: SVC hardware architecture
- Unit 3: SVC planning and zoning requirements
- Unit 4: SVC cluster initialization and user authentication
 - o Exercise 0: Lab environment overview
 - o Exercise 1: SVC system initialization
 - o Exercise 2: SVC system configuration
 - o Exercise 3: Examine back-end storage system

Module 2

- Review
- Unit 5: SVC storage provisioning
- Unit 6: SVC host access
 - o Exercise 4: Storage provisioning
 - o Exercise 5: Access SVC storage from Windows and AIX
- Unit 7: Spectrum Virtualize advanced features
 - o Exercise 6: Thin Provisioning and Volume Mirroring
 - o Exercise 7: Storage access and SDD path selection

Module 3

- Review
- Unit 8: Spectrum Virtualize data migration
 - o Exercise 8: SVC data migration
 - o Exercise 9: Migrate existing data: Migration Wizard
 - o Exercise 10: Migrate existing data with Import Wizard GUI
 - o Exercise 11: Migrate existing data with

Import Wizard CLI

- Unit 9: Spectrum Virtualize Copy Services

Module 4

- Review
 - o Exercise 12: SVC scripting and I/O group modification
 - o Exercise 13: Real-time Compression and the IBM Comprestimator
- Unit 10: SVC administration management
 - o Exercise 14: SVC FlashCopy and consistency groups
 - o Exercise 15: Assign user roles and access
- Class Review and Evaluation

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