Course Code: SNV1G

Course Title: SAN Volume Controller (SVC) Planning and Implementation Workshop

Description:

Plan and implement IBM SAN Volume Controller in your data center!

After completing 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
- Summarize the SVC systems' ability to scale for capacity and performance
- Summarize the virtualization process converting ysical 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
- Summarize 3-Site Replication and Safeguarded Copy

Agenda:

- Day 1:
- Unit 1: Introduction to IBM SAN Volume Controller
- Unit 2: IBM SAN Volume Controller Hardware Architecture
- Unit 3: IBM SVC SAS-Attached Storage
- Unit 4: IBM SVC System Scaling
- Unit 5: IBM SVC System Installation and Management Access
- Exercise 0: Lab environment overview
- Exercise 1: System user authentication

- Day 2:
- Unit 6: IBM Spectrum Virtualize: Storage Provisioning
- Unit 7: IBM Spectrum Virtualize Volume Allocation
- Unit 8: IBM Spectrum Virtualize Host Integration

- Unit 9: IBM Spectrum Virtualize Data Reduction Technologies
- Exercise 2: Manage external storage resources
- Exercise 3: Provision external storage resources
- Exercise 4: Windows host definitions and volume allocations
- Exercise 5: AIX host definitions and volume allocations
- Exercise 6: iSCSI host definitions and volume allocations
- Exercise 7: Thin Provisioning and Volume Mirroring

- Day 3:
- Unit 10: IBM Spectrum Virtualize Easy Tier
- Unit 11: IBM Spectrum Virtualize Data Migration
- Unit 12: IBM Spectrum Virtualize FlashCopy and Consistency Groups
- Unit 13: IBM Spectrum Virtualize Remote Data Mirroring
- Exercise 8: Data pool migration
- Exercise 9: Migrate existing data with Import Wizard
- Exercise 10: Migrate existing data with Migration Wizard
- Exercise 11: Migrate existing data with Import Wizard CLI
- Exercise 12: System scripting

- Day 4:
- Unit 14: IBM Spectrum Virtualize Administration Management
- Unit 15: IBM Storage Insights
- Unit 16: IBM Spectrum Virtualize 3-Site Replication
- Unit 17: IBM Spectrum Virtualize Safeguarded Copy
- Exercise 13: IBM Real-time Compression and IBM Comprestimator
- Exercise 14: FlashCopy and consistency groups
- Exercise 15: Volume expansion
- Exercise 16: Monitoring user roles and access

Objectives:

- 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
- Summarize the SVC systems' ability to scale for capacity and performance
- Summarize the virtualization process converting ysical 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
- Summarize 3-Site Replication and Safeguarded Copy

Prerequisites:

Duration:

32 Hrs

Topics:

- Day 1:
- Unit 1: Introduction to IBM SAN Volume Controller
- Unit 2: IBM SAN Volume Controller Hardware Architecture
- Unit 3: IBM SVC SAS-Attached Storage
- Unit 4: IBM SVC System Scaling
- Unit 5: IBM SVC System Installation and Management Access
- Exercise 0: Lab environment overview
- Exercise 1: System user authentication

- Day 2:
- Unit 6: IBM Spectrum Virtualize: Storage Provisioning
- Unit 7: IBM Spectrum Virtualize Volume Allocation
- Unit 8: IBM Spectrum Virtualize Host Integration
- Unit 9: IBM Spectrum Virtualize Data Reduction Technologies
- Exercise 2: Manage external storage resources
- Exercise 3: Provision external storage resources
- Exercise 4: Windows host definitions and volume allocations
- Exercise 5: AIX host definitions and volume allocations
- Exercise 6: iSCSI host definitions and volume allocations
- Exercise 7: Thin Provisioning and Volume Mirroring

- Day 3:
- Unit 10: IBM Spectrum Virtualize Easy Tier
- Unit 11: IBM Spectrum Virtualize Data Migration
- Unit 12: IBM Spectrum Virtualize FlashCopy and Consistency Groups
- Unit 13: IBM Spectrum Virtualize Remote Data Mirroring
- Exercise 8: Data pool migration
- Exercise 9: Migrate existing data with Import Wizard
- Exercise 10: Migrate existing data with Migration Wizard
- Exercise 11: Migrate existing data with Import Wizard CLI
- Exercise 12: System scripting

- Day 4:
- Unit 14: IBM Spectrum Virtualize Administration Management
- Unit 15: IBM Storage Insights
- Unit 16: IBM Spectrum Virtualize 3-Site Replication
- Unit 17: IBM Spectrum Virtualize Safeguarded Copy
- Exercise 13: IBM Real-time Compression and IBM Compretimator
- Exercise 14: FlashCopy and consistency groups
- Exercise 15: Volume expansion
- Exercise 16: Monitoring user roles and access

Audience:

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