Course Code: SSE1G

Course Title: IBM Storwize V7000 Implementation Workshop

Description:

This course is designed to leverage SAN storage connectivity by integrating a layer of intelligence of virtualization, the IBM Storwize V7000 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 Storwize V7000 into the storage area network. It also explains how to:

- Centralize storage provisioning to host servers from common storage pools using internal storage and SAN attached external heterogeneous storage.
- 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.
- Facilitate the coexistence and migration of data from non-virtualization to the virtualized environment.
- Utilize network-level storage subsystem-independent data replication services to satisfy backup and disaster recovery requirements.
- This course lecture offering is at the Storwize V7000 V7.6. level.

Objectives:

After completing this course, you should be able to:

- Outline the benefits of implementing an Storwize V7000 storage virtualization solution.
- Differentiate between the Storwize V7000 2076-524 control enclosure and the 2076-312/324 expansion enclosure models.
- Outline the ysical and logical requirements to integrate the Storwize V7000 system solution.
- Implement the Storwize V7000 GUI and CLI system setup to configure the V7000 systems.
- Summarize the symmetric virtualization process to convert ysical storage into virtual storage resources.
- Implement volume allocations and map volumes to SAN attached host systems.
- Summarize the advanced system management strategies to maintain storage efficiency, enhance storage performance and reliability.
- Employ data migration strategies to the virtualized Storwize V7000 system environment.
- Implement Copy Services strategies to managed Storwize V7000 system environment remotely
- Employ administration operations to maintain system ability.

Prerequisites:

You should have completed:

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

or equivalent knowledge

You should:

- Have a basic understanding of concepts associated with open systems, disk storage systems, **and** I/O operations.

Duration:

32 Hrs

Topics:

Day 1 Welcome

Unit 1: Introduction to IBM Storwize V7000Unit 2: Storwize V7000 hardware architectureUnit 3: Storwize V7000 planning and zoning requirementsUnit 4: Storwize V7000 system initialization and user authenticationUnit 5: Storwize V7000 storage provisioningExercise 1: Storwize V7000 system initializationExercise 2: Storwize V7000 system configurationExercise 3: Configure user authenticationExercise 4: Provision internal storageExercise 5: Examine external storage resources

Day 2 ReviewUnit 6: Storwize V7000 host and volume allocationUnit 7: Spectrum Virtualize advanced featuresExercise 6: Managing external storage resourcesExercise 7: Host definitions and volume allocationsExercise 8: Access storage from Windows and AIXExercise 9: Hybrid pools and Easy TierExercise10: Access Storwize V7000 through iSCSI host Day 3

ReviewUnit 8: Spectrum Virtualize data migrationUnit 9: Spectrum Virtualize Copy Services: FlashCopyUnit 10: Spectrum Virtualize Copy Services: Remote CopyExercise 11: Volume dependencies and tier migrationExercise 12: Reconfigure internal storage: RAID optionsExercise 13: Thin provisioning and volume mirroringExercise 14: Migrate existing data: Import Wizard

Day 4

ReviewUnit 11: Storwize V7000 administration managementExercise 15: Copy Services: FlashCopy and consistency groupsExercise 16: User roles and accessExercise 17: Migrate existing data: Migration WizardExercise 18: Easy Tier and STAT analysisClass review and evaluation

Audience:

This intermediate course is for individuals who assess or plan to deploy the IBM Storwize V7000 and leverage storage network virtualization solutions.