

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 physical 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 physical 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 manage 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 V7000  
Unit 2: Storwize V7000 hardware architecture  
Unit 3: Storwize V7000 planning and zoning requirements  
Unit 4: Storwize V7000 system initialization and user authentication  
Unit 5: Storwize V7000 storage provisioning  
Exercise 1: Storwize V7000 system initialization  
Exercise 2: Storwize V7000 system configuration  
Exercise 3: Configure user authentication  
Exercise 4: Provision internal storage  
Exercise 5: Examine external storage resources

Day 2 Review  
Unit 6: Storwize V7000 host and volume allocation  
Unit 7: Spectrum Virtualize advanced features  
Exercise 6: Managing external storage resources  
Exercise 7: Host definitions and volume allocations  
Exercise 8: Access storage from Windows and AIX  
Exercise 9: Hybrid pools and Easy Tier  
Exercise 10: Access Storwize V7000 through iSCSI host Day 3

Review  
Unit 8: Spectrum Virtualize data migration  
Unit 9: Spectrum Virtualize Copy Services: FlashCopy  
Unit 10: Spectrum Virtualize Copy Services: Remote Copy  
Exercise 11: Volume dependencies and tier migration  
Exercise 12: Reconfigure internal storage: RAID options  
Exercise 13: Thin provisioning and volume mirroring  
Exercise 14: Migrate existing data: Import Wizard

### Day 4

Review  
Unit 11: Storwize V7000 administration management  
Exercise 15: Copy Services: FlashCopy and consistency groups  
Exercise 16: User roles and access  
Exercise 17: Migrate existing data: Migration Wizard  
Exercise 18: Easy Tier and STAT analysis  
Class 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.