

## **Enterprise Computing Solutions - Education Services**

# **TRAINING OFFERING**

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## **IBM FlashSystem V9000 Storage Implementation**

CODE: LENGTH: PRICE:

SSFS3G 32 Hours (4 days) £2,600.00

### **Description**

IBM FlashSystem V9000 is a comprehensive all-flash enterprise storage solution that delivers the full capabilities of IBM FlashCore technology. FlashSystem V9000 offers a rich set of storage virtualization features designed to improve efficiency, management, scalability and flexibility for any storage environments. FlashSystem V9000 delivers industry-leading value to enterprises along three dimensions: Scalable Performance, Enduring Economics, and Agile Integration.

This course focuses on the planning and implementation tasks associated with integrating the FlashSystem V9000 into the storage area network, and facilitate storage application data access independence from storage management functions and requirements. 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 optimization of flash, enterprise or nealine 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.

#### **Objectives**

After completing this course, you should be able to:

- Summarize the units associated with this course.
- Recall the history and fundamentals for IBM FlashSystem storage.
- Distinguish the core principles of the IBM FlashCore Technology.
- Classify the characteristics and components of the IBM FlashSystem V9000 storage system.
- Outline the physical and logical planning requirements to setup and configure a FlashSystem system environment.
- Summarize the symmetric virtualization process converting IBM MicroLatency modules to storage resources.
- Recall the process to create host access storage on the IBM FlashSystem V9000.
- Determinate the advanced software features designed to simplify data management, improve data security, and preserve storage investments.
- Interpret the process in which to migrate data to and from the virtualized FlashSystem V9000 system environment.
- Recall the administrative functions and maintenance procedures to centralize the management and servicing of IBM FlashSystem V9000 storage resources.

#### **Audience**

This lecture and exercise-based course is for individuals who are assessing and/or planning to deploy IBM System Storage networked storage virtualization solutions. Typical students may include: Customers Technical IBM personnel Business Partner technical personnel IT consultants and architects

#### **Prerequisites**

- An understanding of the basic concepts of open systems disk storage system and I/O operations we recommend the following:
- Foundations of Storage (SS00DG) or
- Introduction to Storage (SS01G) and
- IBM Flash Storage Fundamentals (SSFS1G / SSFS1WG)

#### **Programme**

Day 1

WelcomeUnit 1: IBM FlashSystem V9000 IntroductionUnit 2: Emergence of flash storageUnit 3: IBM FlashCore technologyUnit 4: IBM FlashSystem V9000 hardware architectureUnit 5: FlashSystem V9000 installation and configurationUnit 6: IBM Spectrum Virtualize RAID protectionExercise 0: Lab environment overviewExercise 1: System user authenticationExercise 2: Provisioning internal storage

Day 2

Unit 7: FlashSystem V9000 storage provisioningUnit 8: IBM Spectrum Virtualize host integrationUnit 9: IBM Spectrum Virtualize volume allocationUnit 10: IBM Spectrum Virtualize data reduction technologiesUnit 11: IBM Spectrum Virtualize Easy TierExercise 3: Managing external storage resourcesExercise 4: Windows host definitions and volume allocationsExercise 5: AIX host definitions and volume allocationsExercise 6: Linux host definitions and volume allocationsExercise 7: Thin Provision and Volume MirroringExercise 8: Easy Tier Hybrid pool implementation Day 3

Unit 12: IBM Spectrum Virtualize data migrationUnit 13: IBM Spectrum Virtualize FlashCopy and Consistency groupsUnit 14: IBM Spectrum Virtualize Transparent Cloud TieringExercise 9: Easy Tier and STAT analysisExercise 10: V9000 data pool migrationExercise 11: Migrate existing data with Import Wizard GUIExercise 12: Migrate existing data with Migration Wizard Day 4

Unit 11: IBM Spectrum Virtualize remote data replicationUnit 16: IBM Spectrum Virtualize administration managementExercise 13: Migrate existing data with Import Wizard CLIExercise 14: Real-time Compression and IBM ComprestimatorExercise 15: FlashCopy and consistency groupsExercise 16: FlashCopy snapshot monitoring user roles and accessExercise 19: Snapshot to the CloudClass review and evaluation

#### **Session Dates**

On request. Please Contact Us

#### **Additional Information**

This training is also available as onsite training. Please contact us to find out more.