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Course Code: SSE12DGW

Course Title: Monitoring the IBM Elastic Storage System

### **Description:**

This is a digital course with interactive digital labs.

The IBM Elastic Storage Server (ESS) is a big data storage system that combines Power servers, storage enclosures, and disks along with IBM Spectrum Scale and IBM Spectrum Scale RAID technology, providing analytic and technical computing storage and data services. This online course provides an overview of the IBM Elastic Storage Server. It reviews benefits, features for protection from data loss, storage terms, hardware components, software components, and network considerations.

The course details the monitoring tasks to manage the Elastic Storage Server environment including working with the command line interface, working with graphical user interface, and to manage both file systems and filesets. It also reviews ESA support, disk replacement procedures, update procedures, and the data collection and contact procedures for IBM service and support.

### **Objectives:**

After completing this course, you should be able to:

- Recall the data protection features used in IBM Elastic Storage Server
- Distinguish between traditional RAID and IBM Spectrum Scale RAID
- Compile the requirements for the IBM Elastic Storage Server solution
- Apply the GUI and CLI to manage an IBM Elastic Storage Server environment
- Recall the process to create and delete a file system and a fileset in an IBM Elastic Storage Server environment
- Summarize selected service processes to maintain and update the ESS

### **Prerequisites:**

The following courses or equivalent knowledge is recommended prior to this course:

- Introduction to Storage (SS01G)
- IBM Spectrum Scale Basic Administration for Linux (H005G)

### **Duration:**

8 Hrs

## Topics:

- Unit 1: IBM Elastic Storage System Introduction [25 minutes]
- Topic 1.1 IBM Elastic Storage Server benefits (6 minutes)
- Topic 1.2 IBM Spectrum Scale RAID features (4 minutes)
- Topic 1.3 ESS storage structure and terms (8 minutes)
- Topic 1.4 ESS data protection (5 minutes)
- Unit 2: Define the ESS components [55 minutes]
- Topic 2.1: ESS hardware components (30 minutes)
- Topic 2.2: ESS software components (15 minutes)
- Topic 2.3: ESS networking considerations (8 minutes)
- Unit 3: Monitor the ESS [1 hour, 15 minutes]
- Topic 3.1: Monitor the ESS using the CLI (8 minutes)
- Topic 3.2: Monitor the ESS using the GUI (5 minutes)
- Exercise 3.2: Monitor ESS with CLI/GUI demonstrations (50 minutes)
- Topic 3.3: mmvdisk command (12 minutes)
- Unit 4: IBM Manage ESS file systems and filesets [1 hour, 10 minutes]
- Topic 4.1 Manage ESS file systems (20 minutes)
- Introduction (5 minutes)
- Create file system (5 minutes)
- CLI: Define vdisk stanza file (3 minutes)
- GUI delete: Unmount file system (1 minute)
- CLI delete: Unmount file system (2 minutes)
- CLI expand: Review file system space (2 minutes)
- Summary (1 minute)
- Exercise 4.1: Manage ESS file systems demonstrations (30 minutes)
- Topic 4.2 Manage ESS filesets (9 minutes)
- Introduction (2 minutes)
- Files management tasks (2 minutes)
- GUI custom: Create fileset (1 minute)
- CLI: Create fileset (1 minute)
- GUI: Delete fileset (1 minute)
- CLI: Unlike fileset (1 minute)
- Summary (1 minute)
- Exercise 4.2 Manage ESS filesets demonstrations (12 minutes)
- Unit 5: Manage ESS service support [50 minutes]
- Topic 5.1: Call home support for ESS [6 minutes]
- Topic 5.2: ESS disk replacement procedure [9 minutes]
- Topic 5.3: IBM ESS update procedure [5 minutes]
- Topic 5.4: IBM Service tools for ESS [5 minutes]
- Lab demos are on:
  - CLI / GUI Monitoring
  - CLI / GUI File System
  - CLI / GUI Filesets

## Audience:

This is a base course for individuals who are involved in administering, configuring, upgrading, and monitoring the IBM Elastic Storage Server.