

# **SFSA - Element Software Administration**

**Modality: Virtual Classroom**

**Duration: 2 Days**

**NATU: 24 Units**

## **About this Course:**

This two-day, instructor-led course uses lecture and hands-on exercises to teach basic administration of a NetApp Element software cluster in a SolidFire system. You configure and maintain a cluster. You practice working with Element software features, using the Element CLI and web UI to manage storage and network resources.

## **Course Objectives:**

- Identify the basic hardware components of an Element cluster
- Complete the configuration steps for a new Element cluster
- Perform basic system administration tasks from the Element UI
- Identify the Element data replication features for backup and recovery
- Monitor the health and performance of an Element cluster
- Use the Element API to perform basic system administration tasks

## **Audience:**

- Element Administration is an intermediate course in a comprehensive learning path for NetApp customers, partners, and employees.

## **Prerequisites:**

- Element Fundamentals (Web-based training [WBT])

## **Course Outline:**

### **Module 1: System Overview and Configuration**

- SolidFire hardware
- NetApp HCI hardware
- SolidFire Networking
- Storage Architecture
- Cluster Setup

### **Module 2: System Management**

- Web-based element UI
- NetApp SolidFire VCP

- Element API

### **Module 3: Access Control**

- Accounts
- Quality of service
- Volumes
- Modifying and deleting volumes
- Volume access and authentication

### **Module 4: Host Access**

- Microsoft windows
- Windows best practices
- VMware vSphere
- VMware vSphere best practices

### **Module 5: Data Protection**

- Snapshots
- Cloning
- Pairing
- SnapMirror

### **Module 6: Monitoring, Reporting and Active IQ**

- Event log and alerts
- Support bundles
- Active IQ
- Software upgrades

### **Appendix A: Windows Best Practices**

### **Appendix B: VMware vSphere Best Practices**

### **Appendix C: Linux**

#### **Labs:**

- Creating the cluster
- Using the Element UI to manage storage systems
- Creating cluster administrator and tenant accounts
- Creating and managing volumes
- Creating volume access groups
- Connecting host initiators with Element UI
- Connecting host initiators with the Element API
- Using the vCenter plug-in to manage SolidFire storage
- Configuring data protection

- Configuring Element data protection with ONTAP
- Monitor system faults
- Quality of service (optional)
- Using the Element API and Python SDK on a Windows system to optimize cluster performance