

# Data ONTAP SAN Implementation (SANIMP)

## **Module 1: SAN Concepts**

- NetApp SAN
- SAN Protocols
- SAN Terminology
- Implementing SAN
- Designing and Planning a SAN Solution

## **Module 2: IP SAN Architecture**

- IP SAN Architecture
- iSCSI Protocol
- Implementing IP SAN on Data ONTAP
- Scaling IP SAN In clustered Data ONTAP

## **Module 3: Windows IP Connectivity**

- Windows iSCSI Configuration
- Windows iSCSI Implementation

## **Module 4: Windows LUN**

- LUN Access Overview
- Windows Setup
- Volume Management
- SnapDrive for Windows

## **Module 5: Linux IP Connectivity**

- Linux iSCSI Configuration

## **Module 6: Linux LUN**

- LUN Access Review
- Linux Setup
- Volume Management

## **Module 7: FC SAN Architecture**

- FC SAN Architecture
- FC SAN Connections
- FC Protocol

## **Module 8: FC SAN Fabrics**

- Fabric Design
- FC Initialization
- Switch Concepts
- FC Zoning
- Scaling FC SAN in clustered Data ONTAP

## **Module 9: Windows FC Connectivity**

- Windows FC Connectivity
- Data ONTAP 7-Mode CF Modes

- Windows Configuration
- Discovery and Provisioning

#### **Module 10: Unified Connect**

- Unified Connect
- FCoE-Enabling Technologies
- End-to-End FCoE Configuration
- FC-to-FCoE Connectivity

#### **Module 11: Linux FC**

- Linux FC Configuration
- SnapDrive for Unix

#### **Module 12: LUN Provisioning**

- LUN Provisioning
- LUN Overwrite Reservations
- SAN Provisioning Options
- HOST-Side Space Management
- Keeping LUNs Online

#### **Module 13: Host Considerations**

- Common Disk Structures
- Multipathing
- Clustered Data ONTAP Path Changes
- Selective LUN Mapping in Clustered Data ONTAP 8.3
- Queue Depth

#### **Module 14: SAN Management**

- Port and Logical Interface Management
- LUN Management
- LUN Mobility
- Copy Offload
- LUN Cloning
- Protecting a LUN
- Removing a LUN

#### **Module 15: SAN Troubleshooting**

- SAN Troubleshooting
- Data ONTAP Troubleshooting
- NetApp Data Center Tools

#### **Appendix A: Windows Miscellaneous**

- Windows Server 2012 CLI
- Windows Server 2012 Server Core
- Dynamic disks

#### **Appendix B: Brocade Configuration**

- Fabric OS
- Management IP address configuration
- Setting configuration
- Zone configuration

### **Appendix C: Cisco Configuration**

- NX-OS
- Initial configuration
- Port configuration
- Zone configuration

### **Appendix D: Scalable SAN Failover**

- SAN architecture
- SAN operations
- CLAM quorum
- Epsilon administration

### **Appendix E: SAN Migration**

- Foreign LUN import

### **New Features Addendum: ONTAP 9.1**

- ONTAP 9 introduction
- ONTAP 9.1 highlights
- 12-node SAN clusters
- Simply anywhere
- OTNAP select
- OnCommand management portfolio
- SAN management enhancements
- All Flash FAS
- SnapCenter 2.0
- 9.1 hardware refresh