

## ONTAP Troubleshooting Training

### Course Outline

**Duration : 4 days**

#### **Module 1: Troubleshooting the Management Component**

- Management component
- RDB Concepts: Units, Quorum, Master, Epoch and Epsilon
- Configuration and replication databases
- Job manager
- RDB backup and recovery
- Non-RDB user-space applications
- Event management system, logs, traces and user-space core files

#### **Module 2: Troubleshooting Scale-out Networking**

- ONTAP networking overview
- Networking-related management component application and databases
- Networking evolution
- Cluster session manager
- Tools to triage networking issues
- Troubleshooting scenarios

#### **Module 3: Troubleshooting Network Component and Security Services**

- Network component
- SecD
- SecD troubleshooting
- Network component troubleshooting

#### **Module 4: Troubleshooting NFS**

- NFS Overview
- How NFS works in ONTAP software
- ONTAP NFS authorization using export policies and UNIX permissions

- Export-related caches
- NFS troubleshooting

#### **Module 5: Troubleshooting SMB**

- SMB
- SMB services
- SMB troubleshooting

#### **Module 6: Troubleshooting Scalable SAN**

- SAN architecture
- Scalable SAN configuration
- Scalable SAN functional components
- CLAM quorum
- Scalable SAN troubleshooting