Enterprise Computing Solutions - Education Services

TRAINING OFFERING

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NetApp ONTAP Troubleshooting

CODE:	LENGTH:	PRICE:
NEP_OT-TS	32 Hours (4 days)	€3,800.00

Description

In this course, you increase your proficiency as a NetApp® ONTAP® software engineer by learning how to troubleshoot ONTAP environments. Specifically, you learn how to troubleshoot the management component, scale-out networking, NAS protocols (NFS and SMB), and SAN protocols (iSCSI). From lectures, demonstrations, and active exercises, you learn how to isolate issues, verify configurations, view logs, view trace messages, and use event management system messages for troubleshooting.

Objectives

This course focuses on enabling you to do the following:

- Describe the different software components in the ONTAP architecture
- Describe the methodologies for troubleshooting management component applications, networks, and protocols
- Use troubleshooting workflows to identify failure symptoms, determine potential causes, and resolve issues
- Use debugging commands, logs, and tools to identify, isolate, and fix complex technical issues that involve different core components
- Check the health of a cluster and summarize the results
- Identify issues with the management component
- Use administrative commands to verify the configuration of NFS, SMB, and iSCSI
- Use the troubleshooting methodology for NFS, SMB, and iSCSI to define and isolate issues
- Locate logs for the management component, network, NFS, SMB, and iSCSI protocols
- Collect data for support cases

Audience

NetApp Technical Support Engineers, Support Services Certified Partner Engineers, and Professional Services Engineers

Prerequisites

A working knowledge of ONTAP software and NAS and SAN protocols is required in addition to the 3 day instructor led Cluster Administration class as below..
OT-CLU-A - Cluster Administration

Programme

Module 1: Troubleshooting the Management Component
The management component
RDB Concepts: RDB units, RDB quorum, RDB master, epoch and epsilon
Configuration databases and replication databases
Root volume recovery
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
NetApp ONTAP networking overview
Networking-related management component application and databases
Networking evolution
Cluster Session Manager (CSM)
Tools to triage networking issues

	Network component
	SecD
	Troubleshooting with vserver services
Module 3: Troubleshooting Network Component and Security Services	Network component troubleshooting
	How NFS works in ONTAP software
	NetApp ONTAP NFS authorization using export policies and UNIX permissions
	Export-related caches
Module 4: Troubleshooting NFS	NFS troubleshooting
	SAN architecture
	Scalable SAN configuration
	Scalable SAN functional components (SCSI)
	Cluster Liveliness Activity Monitor (CLAM) quorum
	LUN space accounting
	Scalable SAN functional components (NVMe)
Module 5: Troubleshooting Scalable SAN	Scalable SAN troubleshooting

Session Dates

On request. Please Contact Us

Additional Information

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