Enterprise Computing Solutions - Education Services

TRAINING OFFERING

You can reach us at:

Arrow ECS, Woluwedal 30, 1932 Sint-Stevens-Woluwe

Email: education.ecs.benelux@arrow.com
Phone: +32 2 332 19 57

ONTAP Performance Analysis (ONTAP 9.6)

CODE:	LENGTH:	PRICE:
NEP_OT-CLU-PA9.6	24 Hours (3 days)	€2,850.00

Description

This course enables you to collect and analyze system performance data from NetApp® storage systems that run NetApp ONTAP® 9 software. You learn how to interpret data and how to identify and implement changes that improve system efficiency. You also learn how to use system commands and features to monitor and enhance storage system performance. You learn from hands-on exercises, case studies, and technical discussions.

Objectives

- Describe how to use NetApp tools for performance measurement
- Describe the layers within the ONTAP architecture
- Diagram the flow of read and write requests through the network and data layers of ONTAP software
- Discuss how storage quality of service (QoS) operates in an ONTAP cluster
- Explain how to monitor and manage workload performance
- Use the performance analysis tools to identify NAS and SAN performance obstacles

Audience

Professionals who manage NetApp storage systems and would like a deeper understanding of Clustered Data ONTAP system performance

Prerequisites

Hands-on experience with ONTAP software (6 months to 12 months) is required in addition to the OT-CLU-DPA instructor led class..
OT-CLU-DPA - ONTAP Cluster Administration and Data Protection

Programme

Module 1: Performance Analysis Fundamentals
Basic Concepts of Performance
Performance Monitoring Methodology
Performance terminology
Using Active IQ Unified Manager

Module 2: Performance Analysis Tools
FAS and AFF Architecture
Data Flow
NVRAM Functionality

Module 3: Storage System Architecture and Data Flow
WAFL Functions
WAFL Readahead

Module 4: WAFL
Resolving WAFL issues

Module 5: CPU and Memory
Identifying CPU Performance Bottlenecks
Resolving CPU Performance Bottlenecks
Identifying Memory Performance Bottlenecks
Resolving Memory Performance Bottlenecks

Module 6: Disk Subsystem
Disk Subsystem Hardware
Analyzing and Isolating Disk Subsystem Bottlenecks
Analyzing Disk Subsystem Bottlenecks with Statit
Resolving Disk Subsystem Bottlenecks

Module 7: Cache Subsystem
Cache Subsystem Overview
Flash Cache Feature
Flash Pool Feature
Flash Cache Policies and Flash Pool Policies
Storage Pool
Cache Sizing

Module 8: Storage Quality of Service
Managing System Performance with QoS

NAS functions
Identifying NAS Bottlenecks
Resolving NAS Bottlenecks

SAN Overview
SAN Multipathing
SAN load balancing
SAN I/O Misalignment
Queue depth

Module 9: NAS Subsystem **Module 10: SAN Subsystem** **Labs:**

Identifying cluster components
Analyzing performance statistics
OnCommand performance manager thresholds, events and alerts
Identifying and resolving storage controller performance issues
WAFL performance monitoring and analysis
Identifying and resolving disk I/O bottlenecks
Exploring cache performance
Cluster interconnect performance
Workload management with storage QoS
NAS performance
SAN protocol performance

Session Dates

Date	Location	Time Zone	Language	Type	Guaranteed	PRICE
09 Dec 2024	Virtual Classroom (GMT / UTC)	GMT	English	Instructor Led Online		€2,850.00

Additional Information

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