

# **Enterprise Computing Solutions - Education Services**

# **TRAINING OFFERING**

Du kan nå oss her

Postboks 6562 ETTERSTAD, 0606 Oslo, Norge

Email: kurs.ecs.no@arrow.com Phone: +47 22 02 81 00

#### **ONTAP Performance Administration ■** NetApp

CODE: LENGTH: PRICE:

NEP OT-PERFADM 24 Hours (3 days) kr28,950.00

## **Description**

Learn how 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**

This course focuses on enabling you to do the following:

- 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**

Administrators & Architects

#### **Programme**

FAS/AFF system architecture

Module 1: NetApp Storage System Architecture • Read and write paths

Performance concepts

Module 2: Performance Analysis Fundamentals • Workloads

**Module 3: Performance Analysis Tools** 

SAN overview

SAN multipathing

SAN load balancing

SAN I/O misalignment

- · Performance analysis tools
  - Identifying network performance issues
- Using Active IQ Unified Manager Module 4: Network Layer Resolving network I/O performance issues
  - Network Attached Storage
  - Identifying NAS performance issues
  - · Resolving NAS performance issues

Module 5: NAS Protocols • Network I/O bottlenecks

Module 6: SAN Protocols • Queue depth

- WAFL functions
- WAFL readahead

- Storage subsystem hardware · Identifying storage performance issues
- Module 7: WAFL Layer Resolving WAFL performance issues Module 8: Storage Layer Identifying storage performance issues
  - Cache subsystems
    - Flash Cache
    - Flash Pool
    - · Cache policies
- Module 9: Cache Subsystem Cache sizing
- Module 10: Storage Quality of Service
  - CPU subsystem

• Managing System Performance with QoS · Monitoring storage QoS

· Memory subsystem

- · Performance service levels
- Module 11: CPU and Memory Resolving WAFL performance issues

Virus Scanning

Module 12: External Resources • File access policies

## **Session Dates**

Date	Location	Time Zone	Language	Туре	Guaranteed	PRICE
15 Dec 2025	Virtual Classroom (GMT / UTC)	GMT	English	Instructor Led Online		kr28,950.00

# Tilleggsinformasjon

Denne treningen er også tilgjengelig som trening på stedet. Kontakt oss for å finne ut mer.