

## **Enterprise Computing Solutions - Education Services**

# **TRAINING OFFERING**

You can reach us at:

Arrow Enterprise Computing Solutions Ltd, Part 1st Floor, Suite 1D/1, Central House, Otley Road, Harrogate, HG3 1UG

Email: education.ecs.baltic@arrow.com

Phone: 0870 251 1000

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

CODE: LENGTH: PRICE:

NEP OT-PERFADM 24 Hours (3 days) €2.850.00

## **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** 

· 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

SAN I/O misalignment

SAN overview

SAN multipathing

SAN load balancing

· 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

- Managing System Performance with QoS
- · Monitoring storage QoS

· Memory subsystem

CPU 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)		English	Instructor Led Online		€2,850.00

## **Additional Information**

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