



Enterprise Computing Solutions - Education Services

## TRAINING OFFERING

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**You can reach us at:**

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# ONTAP Performance Administration

| 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

### Module 1: NetApp Storage System Architecture

- FAS/AFF system architecture
- Read and write paths

### Module 2: Performance Analysis Fundamentals

- Performance concepts
- Workloads

### Module 3: Performance Analysis Tools

- Performance analysis tools
- Using Active IQ Unified Manager

### Module 4: Network Layer

- Identifying network performance issues
- Resolving network I/O performance issues

### Module 5: NAS Protocols

- Network Attached Storage
- Identifying NAS performance issues
- Resolving NAS performance issues
- Network I/O bottlenecks

### Module 6: SAN Protocols

- SAN overview
- SAN multipathing
- SAN load balancing
- SAN I/O misalignment
- Queue depth

### Module 7: WAFL Layer

- WAFL functions
- WAFL readahead

- Resolving WAFL performance issues

#### **Module 8: Storage Layer**

- Storage subsystem hardware
- Identifying storage performance issues
- Identifying storage performance issues

#### **Module 9: Cache Subsystem**

- Cache subsystems
- Flash Cache
- Flash Pool
- Cache policies
- Cache sizing

#### **Module 10: Storage Quality of Service**

- Managing System Performance with QoS
- Monitoring storage QoS
- Performance service levels

#### **Module 11: CPU and Memory**

- CPU subsystem
- Memory subsystem
- Resolving WAFL performance issues

#### **Module 12: External Resources**

- Virus Scanning
- File access policies

### **Session Dates**

| Date        | Location                      | Time Zone | Language | Type                  | Guaranteed | PRICE     |
|-------------|-------------------------------|-----------|----------|-----------------------|------------|-----------|
| 05 May 2026 | Virtual Classroom (GMT / UTC) |           | English  | Instructor Led Online |            | €2,850.00 |
| 01 Sep 2026 | Virtual Classroom (GMT / UTC) |           | English  | Instructor Led Online |            | €2,850.00 |
| 02 Nov 2026 | 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.