



## TRAINING OFFERING

---

**You can reach us at:**

Arrow ECS, Nidderdale House, Beckwith Knowle, Harrogate, HG3 1SA

Email: [educationteam.ecs.uk@arrow.com](mailto:educationteam.ecs.uk@arrow.com)

Phone: 0870 251 1000



# StorageGRID Software Troubleshooting

CODE:	LENGTH:	PRICE:
NEP_SG-TS	24 Hours (3 days)	£2,660.00

## Description

In this course, students learn troubleshooting skills to support the implementation and lifecycle management of NetApp StorageGRID software. Through theoretical explanations and hands on exercises, delegates will learn to control the architecture, option, services and features of the StorageGRID system

Students will also learn about the security and authentication mechanisms, logging and monitoring resources and Apache Cassandra implementation. Additionally, the processes to expand and upgrade the system, FabricPool technology plus investigating Simple Storage Services (S3) issues.

## Objectives

- Understand the networking architecture of a StorageGRID deployment
- Describe the load-balancing features of StorageGRID
- Review the StorageGRID services and ports
- Understand the impact of the StorageGRID options
- Understand the Cassandra implementation in StorageGRID
- Review the StorageGRID security and authentication mechanisms
- Define the StorageGRID logging and monitoring resources
- Review the expansion and upgrade processes
- Examine FabricPool technology with StorageGRID
- Investigate S3 issues with StorageGRID

## Audience

Professionals & Engineers who use or implement StorageGRID solutions (from all audience types). Supporting the following job roles..

- Systems Administrators
- System Operators
- System Engineers

## Prerequisites

- 6 to 12 months of StorageGRID experience
- The NetApp StorageGRID Implementation Engineer accreditation (see NetApp Accreditation link below)
- Good knowledge of Simple Storage Service (S3)
- StorageGRID Troubleshooting Essentials (via NetApp Learning Center link below)
- DataStax DS101 and DS201 training courses

[NetApp Accreditation](#)

[Details](#) [NetApp Learning Center](#)

## Programme

	<b>Module 1:StorageGRID networking</b>	<b>Module 2:StorageGRID software concepts</b>
	StorageGRID network topology	<ul style="list-style-type: none"><li>• Grid node services</li><li>• Managing node services</li><li>• StorageGRID configuration options</li></ul>
	<b>Exercises</b>	<b>Exercises</b>
	Examining StorageGRID network architecture	Exploring nodetool commands

### **Module 3:StorageGRID logging and monitoring**

- StorageGRID service log files
- StorageGRID audit logging
- Log analysis
- Log forwarding

#### **Exercises**

Managing StorageGRID logs

### **Module 5:TroubleshootingStorageGRID decommission,expansion and upgrade**

- StorageGRID decommissioning
- StorageGRID expansion process and issues
- StorageGRID major version upgrade

#### **Exercises**

Decommissioning and upgrading

### **Module 6: StorageGRID authentication and user management**

- StorageGRID authorization and authentication
- StorageGRID multitenancy implementation

#### **Exercises**

Configuring StorageGRID authentication

### **Module 8:StorageGRID performance troubleshooting**

- StorageGRID performance factors
- Identify performance bottlenecks

#### **Exercises**

Examining StorageGRID performance details

### **Module 10:Troubleshoot S3 client and application issues**

- Troubleshoot S3 request failures
- S3 request logging

### **Module 4: Troubleshooting Cassandra**

- Cassandra fundamentals
- Cassandra startup
- Nodetool

#### **Exercises**

Examining Cassandra fundamentals

### **Module 7:Troubleshooting StorageGRID security issues**

- StorageGRID security
- StorageGRID system hardening
- Certificate-related Issues

#### **Exercises**

Troubleshooting StorageGRID authorization

### **Module 9:ONTAP FabricPool with StorageGRID**

- FabricPool object store
- Investigate object store unavailability
- Troubleshooting connection issues
- Object store access issues

#### **Exercises**

Troubleshooting ONTAP FabricPool technology

## **Session Dates**

On request. Please [Contact Us](#)

## **Additional Information**

[This training is also available as onsite training. Please contact us to find out more.](#)