



Enterprise Computing Solutions - Education Services

TRAINING OFFERING

Du kan nå oss här

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ONTAP Hardware Troubleshooting – Partners Only

CODE:	LENGTH:	PRICE:
NEP_OT-HW-TS	24 Hours (3 days)	kr35,600.00

Description

Discover the tools and techniques of NetApp® ONTAP® hardware analysis and troubleshooting. Learn to triage and gather the right data for all hardware cases, to work 60% to completion with no help, and to properly frame and get assistance to resolve the remaining 40%.

Objectives

This course focuses on enabling you to do the following:

- Troubleshoot system controllers, power supplies, fans, and add-in cards
- Troubleshoot storage shelf issues
- Troubleshoot disk failures
- Identify high availability issues
- Analyze RAID issues
- Identify troubleshooting tools

Audience

- Support Engineer
- Implementation Engineer
- Professional Services Engineer

Prerequisites

- Technical Support Engineer New Hire OnRamp Program
- Three months of experience taking support calls
- FAS, AFF, and ASA web-based training

Programme

This course includes the following modules, lessons, and exercises:

Module 1: Storage controller

Lessons

- System categories
- Storage controller components
- System memory
- Fans, PSUs, and LEDs
- SP and BMC
- Model-specific I/O expansion
- Add-on cards
- HA interconnect

Exercises

Discovering storage controller attributes

Module 2: Storage

Lessons

- Storage shelves
- Shelf components
- Shelf cables
- Disk drives and IOMs
- Shelf cabling
- Shelf protocols
- Logs

Exercises

Documenting system cabling

Module 3: Disks

Lessons

- Disk types
- Disk interfaces
- Encryption
- Disk ownership
- Common disk issues and error recovery
- Maintenance Center

Exercises

Managing a disk

Module 4: RAID

Lessons

- ONTAP RAID types
- RAID reconstruction
- Drive spares
- ADP
- RAID labels
- RAID and media scrubbing
- ASA r2

Exercises

Recovering RAID

Module 5: High availability

Lessons

- NVRAM mirroring
- Mailbox disks
- Failover and giveback
- Disk ownership
- Nonmaskable Interrupts and hardware panics

Exercises

Performing takeover and giveback

Module 6: Cluster high availability

Lessons

- Quorum and replicated databases
- Cluster high availability
- Epsilon
- Cluster switches and network connectivity
- Switch vendor support

Exercises

Investigating cluster connectivity issues

Module 7: Firmware

Lessons

- Automatic System Manager firmware updates
- Disk firmware upgrades
- IOM firmware upgrades
- SP and BMC firmware
- BIOS upgrades and issues
- Add-on PCIe card firmware upgrades

Exercises

Performing firmware validation

Module 8: AutoSupport

Lessons

- AutoSupport
- Automatically created cases

Exercises

Uploading AutoSupport messages manually

Module 9: Tools

Lessons

- Fix It
- Dexter
- Active IQ
- Hardware Universe and IMT
- Net2

Exercises

Using support tools

Using Net2

Further Information

Session Dates

Date	Location	Time Zone	Language	Type	Guaranteed	PRICE
01 Sep 2026	Virtual Classroom (GMT)	BST	English	Instructor Led Online		kr35,600.00
04 Nov 2026	Virtual Classroom (GMT)	GMT	English	Instructor Led Online		kr35,600.00

Ytterligare information

[Denna utbildning finns också som utbildning på plats. Kontakta oss för mer information.](#)