



Enterprise Computing Solutions - Education Services

## TRAINING OFFERING

---

**You can reach us at:**

Arrow ECS, Woluwedal 30, 1932 Sint-Stevens-Woluwe

Email: [education.ecs.benelux@arrow.com](mailto:education.ecs.benelux@arrow.com)

Phone: +32 2 332 19 57



# Integrating Hybrid Cloud with Microsoft Azure

CODE:	LENGTH:	PRICE:
NEP_UNCMMAZ	16 Hours (2 days)	€2,000.00

## Description

In this course, you learn to implement a hybrid cloud solution with Microsoft Azure by using NetApp® Cloud Volumes ONTAP®. You connect an Azure Virtual Network (VNet) and an on-premises data center to unify your infrastructure. You use NetApp BlueXP™ (formerly Cloud Manager) to move data and manage storage in the hybrid cloud. You learn how NetApp cloud services are integrated into BlueXP to provide persistent storage for Kubernetes containers and enhance data protection, security, and compliance. You also learn to optimize the capacity and performance of Cloud Volumes ONTAP.

## Objectives

This course focuses on enabling you to do the following:

- Configure a VNet and connect it to an on-premises data center with VPN Internet Protocol security (IPsec)
- Describe Cloud Volumes ONTAP architecture
- Install a connector and deploy Cloud Volumes ONTAP
- Explain basic system administration tasks with BlueXP
- Copy data between an ONTAP based system and Cloud Volumes ONTAP for Azure for disaster recovery
- Use data tiering to Azure Blob storage for Cloud Volumes ONTAP
- Use Cloud Volumes ONTAP as persistent storage for Kubernetes containers
- Identify performance and sizing options for Cloud Volumes ONTAP

## Audience

- NetApp Employees
- NetApp Partners
- Customer Storage Administrators of any experience level

## Prerequisites

Understanding of the following is required..

- Cloud computing concepts: Cloud characteristics, service delivery methods, and cloud deployment models
- Networking concepts and definitions: Classless Inter-Domain Routing (CIDR) and network address translation (NAT)
- Azure concepts: Subscriptions, VNet, virtual machines (VMs), Azure storage accounts, and Azure Blob storage

In addition to attendance on the following one day course..

## IHCF - Integrating Hybrid Clouds Foundation

## Programme

### Module 1: Public cloud essential concepts

Lesson 1: Azure networking and other concepts

Lesson 2: Terraform introduction

Exercise 1: Controlling cloud resources with CLI

Exercise 2: Controlling cloud resources with PowerShell

Exercise 3: Controlling NetApp ONTAP (on-premises) resources with NetApp PowerShell Toolkit

Exercise 4: Configuring resources in Azure by using Terraform

Exercise 5: Reviewing resources by using Azure Portal

Exercise 6: Verifying connectivity to the VMs in front-end and back-end subnets

## Module 2: Connectivity from the public cloud to other networks

Lesson 1: Microsoft Azure VNet connectivity to an on-premises network

Exercise 1: Connecting Azure VNet to an on-premises network

Exercise 2: Configuring on-premises DNS for Azure VMs

Exercise 3: (Optional) Joining an Azure VM to Active Directory in the on-premises environment

## Module 3: Deploying a connector

Lesson 1: Review a connector

Exercise 1: Deploying a connector

## Module 4: NetApp Cloud Volumes ONTAP

Lesson 1: NetApp Cloud Volumes ONTAP architecture review

Lesson 2: Deploying Cloud Volumes ONTAP

Lesson 3: Highly available NetApp Cloud Volumes ONTAP in Azure

Exercise 1: Deploying a single-node Cloud Volumes ONTAP instance

Exercise 2: Creating an NFS volume and accessing it from an NFS client

Exercise 3: Creating an SMB volume and accessing it from an SMB client

Exercise 4: Deploying a Cloud Volumes ONTAP high-availability pair

## Module 5: Administration of NetApp Cloud Volumes ONTAP

Lesson 1: Administering Cloud Volumes ONTAP

Exercise 1: Using BlueXP for basic administration of Cloud Volumes ONTAP

Exercise 2: Doing basic administration of BlueXP

## Module 6: Data protection

Lesson 1: Data protection

Lesson 2: Administering Cloud Volumes ONTAP

Exercise 1: Configuring and managing ransomware protection

Exercise 2: Configuring and Managing Disaster Recovery in the Data Fabric

## Module 7: Tiering

Lesson 1: Tiering in Azure

Exercise 1: Tiering backup data to Azure Blob storage

## Session Dates

Date	Location	Time Zone	Language	Type	Guaranteed	PRICE
03 Sep 2026	Virtual Classroom (GMT / UTC)	BST	English	Instructor Led Online		€2,000.00
05 Nov 2026	Virtual Classroom (GMT / UTC)	GMT	English	Instructor Led Online		€2,000.00

## Additional Information

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