



**Enterprise Computing Solutions - Education Services**

## **TRAINING OFFERING**

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# Integrating Hybrid Clouds with Google Cloud

CODE:	LENGTH:	PRICE:
NEP_IHCGC	16 Hours (2 days)	€1,900.00

## Description

Learn to implement a hybrid cloud solution with Google Cloud by using NetApp® Cloud Volumes ONTAP® and how to connect a Virtual Private Cloud (VPC) and an on-premises data center to unify your infrastructure

Use NetApp Blue XP to move data and manage storage in the hybrid cloud and learn how NetApp cloud services integrate into Blue XP to provide enhanced data protection, security and compliance.

Learn to optimize capacity and performance of Cloud Volumes ONTAP.

## Objectives

- Create a VPN connection between a public cloud network VPC and the on-premises data center
- Deploy a connector in the public cloud
- Deploy Cloud Volumes ONTAP in both a single-node and high-availability (HA) configuration
- Use NetApp BlueXP to administer NetApp Cloud Volumes ONTAP
- Review data protection options of NetApp Cloud Volumes ONTAP
- Analyze data tiering option from on-premises to cloud

## Audience

NetApp Customers, Partners & Employees in the following roles..

- Systems Administrator
- Systems Operator
- Cloud Architect
- Enterprise Architect
- Integration Developer

## Prerequisites

Previous knowledge of Google Cloud and cloud computing concepts including: subscriptions, VPC, virtual machines (VMs), Google Cloud buckets, Classless Inter-Domain Routing (CIDR), and Network address translation (NAT). Additionally, attendance on the following 1 day course.. [IHCF - Integrating Hybrid Clouds Foundation](#)

## Programme

- Google Cloud networking and other concepts

### Module 1: Google Cloud Essential Concepts • Terraform introduction **Exercises**

- Controlling Cloud Resources with CLI
- Controlling NetApp ONTAP (On-Premises) Resources with NetApp PowerShell Toolkit
- Configuring Resources in Google Cloud Using Terraform
- Reviewing Resources Using Google Cloud Console
- Verifying Connectivity to the VMs

### Module 2: Network Connectivity Options in Google Cloud

- Google Cloud virtual public cloud connectivity to an on-premises network **Exercises**
- Connecting Google Cloud VPC to an On-Premises Network
- Configuring On-Premises DNS for Google Cloud (Optional)
- Joining a Google Cloud VM to Active Directory in On-Premises Environment (Optional) **Module 3: Deploying a Connector**
- Connector review **Exercises** • Deploying a Connector **Module 4: NetApp Cloud Volumes ONTAP**

- Cloud Volumes ONTAP use cases
  - Cloud Volumes ONTAP architecture
  - Deploying Cloud Volumes ONTAP
  - Cloud Volumes ONTAP supported features **Exercises**
  - Deploying a Single-Node Cloud Volumes ONTAP Instance with NFS
  - Creating an SMB volume and accessing it from an SMB Client
  - Deploying a Cloud Volumes ONTAP HA Pair
  - Performing Failover and Failback of the HA Pair of Nodes
- Module 5: Administration** • Provisioning storage review **Exercises**
- Using BlueXP for Basic Administration of Cloud Volumes ONTAP
  - Administering BlueXP with RBAC
  - Backup, Archive and Disaster Recovery
  - Ransomware Protection
- Module 6: Protection**
- Using Snapshot Protection
  - Exercises** • Configuring and Managing Disaster Recovery in the Data Fabric
- Module 7: Tiering** • Data tiering from on-premises to Google Cloud **Exercises** • Tiering Data to Google Cloud Storage

## Session Dates

On request. Please [Contact Us](#)

## Additional Information

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