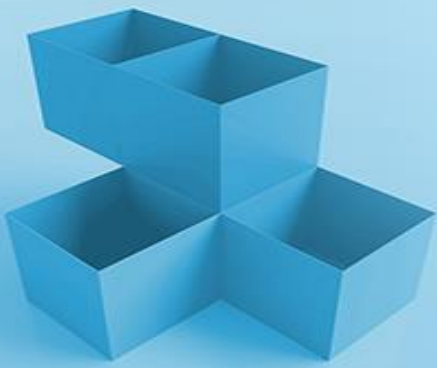


Integrating Hybrid Clouds with Microsoft Azure



Delivery: Instructor-led training (ILT) and virtual ILT (VILT)

Duration: 2 days

Course Description

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.

Role

Administrators, operators, architects, and implementation engineers

Prerequisites

- *Integrating Hybrid Clouds Foundation (STRSW-ILT-IHCF)*
- 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

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

Course Content

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

Module	Lessons	Exercises
Module 1: Public cloud essential concepts	<ul style="list-style-type: none"> Azure networking and other concepts Terraform introduction 	<ul style="list-style-type: none"> Controlling cloud resources with CLI Controlling cloud resources with PowerShell Controlling NetApp ONTAP (on-premises) resources with NetApp PowerShell Toolkit Configuring resources in Azure by using Terraform Reviewing resources by using Azure Portal Verifying connectivity to the VMs in front-end and back-end subnets
Module 2: Connectivity from the public cloud to other networks	<ul style="list-style-type: none"> Microsoft Azure VNet connectivity to an on-premises network 	<ul style="list-style-type: none"> Connecting Azure VNet to an on-premises network Configuring on-premises DNS for Azure VMs (Optional) Joining an Azure VM to Active Directory in the on-premises environment
Module 3: Deploying a connector	<ul style="list-style-type: none"> Review a connector 	<ul style="list-style-type: none"> Deploying a connector
Module 4: NetApp Cloud Volumes ONTAP	<ul style="list-style-type: none"> NetApp Cloud Volumes ONTAP architecture review Deploying Cloud Volumes ONTAP Highly available NetApp Cloud Volumes ONTAP in Azure 	<ul style="list-style-type: none"> Deploying a single-node Cloud Volumes ONTAP instance Creating an NFS volume and accessing it from an NFS client Creating an SMB volume and accessing it from an SMB client Deploying a Cloud Volumes ONTAP high-availability pair
Module 5: Administration of NetApp Cloud Volumes ONTAP	<ul style="list-style-type: none"> Administering Cloud Volumes ONTAP 	<ul style="list-style-type: none"> Using BlueXP for basic administration of Cloud Volumes ONTAP Doing basic administration of BlueXP

<p>Module 6: Data protection</p>	<ul style="list-style-type: none"> • Data protection • Administering Cloud Volumes ONTAP 	<ul style="list-style-type: none"> • Configuring and managing ransomware protection • Configuring and Managing Disaster Recovery in the Data Fabric
<p>Module 7: Tiering</p>	<ul style="list-style-type: none"> • Tiering in Azure 	<ul style="list-style-type: none"> • Tiering backup data to Azure Blob storage

Course ID: STRSW-ILT-IHCAZ
15FEB23