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# NetApp & Google Cloud Hackathon: Migrating Windows Workloads to Google Cloud Platform (NAGOWMH)

ID NAGOWMH Price on request Duration 3 days

## Course Content

### Challenge 1: Exploring NetApp Public Cloud Services on the Google Cloud Platform

- Familiarize yourself with GCP Console, artefacts, terminal etc.
- Create Linux VM and leverage CVS for Simple NFS share, upload sample data. Create a second Linux VM connecting to the same file share.

### Challenge 2: Designing and deploying your virtual NetApp infrastructure in Google Cloud for Windows Migrations

- Create Windows VM with Active Directory Domain Services for hosting the Windows Domain
- Create CVS for storing files for Web Application
- Create Windows VM for Web server and connect it to AD
- Confirm that CVS for SMB Share is configured properly by uploading or creating a few sample files
- Create CVS for storing database
- Create Windows VM for Database server and connect it to AD
- Configure security features such as firewall to enable communication between VMs
- Make sure the Web server VM can communicate with the database VM

### Challenge 3: Migrating database and the data to the cloud

- Attendees will need to configure the database server and all of its components, deploy the database, move the data and make sure it works.
- Install SQL Server on the database VM
- Configure SQL Server to use CVS as data store
- Deploy the T-SQL script containing schema definition and data
- Test and ensure the application can access the database
- Configure snapshot base database backup

### Challenge 4: Migrating the application and files to the cloud

- Attendees will need to configure the application (web) server and all of its components, deploy the application, migrate files and make sure it works.
- Configure IIS role on application server
- Configure ports on both Windows and Cloud firewall and make sure IIS is accessible from the outside world
- Deploy web application from git repository (eg. BitBucket, GitHub...)
- Configure application to use CVS as a location for files
- Test and ensure the application can access the files from CVS

### Challenge 5: Monitoring and testing your Google Cloud + NetApp deployment

- Attendees will learn how to monitor and test the application, database and underlying infrastructure components
- Deploy and configure monitoring tools
- Load test the application and database
- Recover database from backup
- Clone application and database VM and create Dev/Test environment

### Challenge 6: Containers (K8S)

In the meantime, the IT department decided to re-architect the infrastructure and migrated the web application to containers. They also configured the K8s infrastructure for the next version of the application. Attendees will need to leverage CVS as a persistent storage in K8s cluster and deploy SQL Server container, the database and make sure the application is working. Create CVS for K8s Persistent Volume Edit the YAML file and deploy to the cluster Test that the application in the K8s cluster can access new database

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## Training Centres worldwide



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