Google Cloud Fundamentals for Azure Professionals

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Course#:T-GCPAZURE-B
Duration:1 Day
Price:0.00
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Course Description

This course teaches Azure professionals about the core capabilities of Google Cloud in the four technology pillars: networking, compute, storage, and database. It is designed for Azure system administrators, solutions architects, and SysOps administrators who are familiar with Azure features and setup and want to gain experience configuring Google Cloud products immediately. This course uses lectures, demos, and hands-on labs to show you the similarities and differences between the two platforms and teach you about some basic tasks on Google Cloud.

Objectives

This course teaches participants the following skills:

 Identify Google Cloud counterparts for Azure IaaS, Azure PaaS, Azure SQL, Azure Blob Storage, Azure Application Insights, and Azure Data Lake.
 Configure accounts, billing, projects, networks, subnets, firewalls, VMs, disks, auto scaling, load balancing, storage, Databases, IAM, and more.
 Manage and monitor applications.
 Explain feature and pricing model differences.

Audience

This course is intended for the following participants:

 Individuals planning to deploy applications and create application environments on Google Cloud Platform.
 Developers, systems operations professionals, and solution architects getting started with Google Cloud Platform.
 Executives and business decision makers evaluating the potential of Google Cloud Platform to

address their business needs.

Prerequisites

To get the most out of this course, participants should:

 Have basic proficiency with networking technologies like subnets and routing.
 Have basic proficiency with command-line tools.
 Have experience with Microsoft Azure and IIS.

Content

Course Outline

Module 1 :Introducing Google Cloud

 Explain the advantages of Google Cloud.
 Define the components of Googles network infrastructure, including: Points of presence, data centers, regions, and zones.
 Understand the difference between Infrastructure-as-a-Service (IaaS) and Platform-as-a-Service (PaaS).

Module 2 :Getting Started with Google Cloud

 Identify the purpose of projects on Google Cloud.
 Understand how Azures resource hierarchy differs from Google Clouds
 Understand the purpose of and use cases for Identity and Access Management.
 Understand how Azure AD differs from Google Cloud IAM.
 List the methods of interacting with Google Cloud.
 Launch a solution using Cloud Marketplace.

Module 3 :Virtual Machines in the Cloud

Identify the purpose and use cases for Google Compute Engine.

Understand the basics of networking in Google Cloud.

Understand how Azure VPC differs from Google VPC.

Understand the similarities and differences between Azure VM and Google Compute Engine.

Understand how typical approaches to load-balancing in Google Cloud differ from those in Azure.

Deploy applications using Google Compute Engine.

Module 4 :Storage in the Cloud

Understand the purpose of and use cases for: Cloud Storage, Cloud SQL, Cloud Bigtable and Cloud Datastore.

Understand how Azure Blob compares to Cloud Storage.

Compare Google Clouds managed database services with Azure SQL.

Learn how to choose among the various storage options on Google Cloud.

Load data from Cloud Storage into BigQuery.

Module 5 :Containers in the Cloud

Define the concept of a container and identify uses for containers.

Identify the purpose of and use cases for Google Container Engineband Kubernetes.

Understand how Azure Kubernetes Service differs from from Google Kubernetes Engine.

Provision a Kubernetes cluster using Kubernetes Engine.

Deploy and manage Docker containers using kubectl.

Module 6 :Applications in the Cloud

Understand the purpose of and use cases for Google App Engine.
Contrast the App Engine Standard environment with the App Engine Flexible environment.
Understand how App Engine differs from Azure App Service.
Understand the purpose of and use cases for Google Cloud Endpoints.

Module 7 :Developing, Deploying and Monitoring in the Cloud

Understand options for software developers to host their source code.
Understand the purpose of template-based creation and management of resources.
Understand how Google Cloud Deployment Manager differs from Azure Resource Manager.
Understand the purpose of integrated monitoring, alerting, and debugging
Understand how Google Monitoring differs from Azure Application Insights and Azure Log Analytics.
Create a Deployment Manager deployment.
Update a Deployment Manager deployment.
View the load on a VM instance using Google Monitoring.

Module 8 :Big Data and Machine Learning in the Cloud

Understand the purpose of and use cases for the products and services in the Google Cloud big data and machine learning platforms.
Understand how Google Cloud BigQuery differs from Azure Data Lake.
Understand how Google Cloud Pub/Sub differs from Azure Event Hubs and Service Bus.
Understand how Google Clouds machine-learning APIs differ from Azures.

Load data into BigQuery from Cloud Storage.

Perform queries using BigQuery to gain insight into data.

Module 9 :Summary and Review

Review the products that make up Google Cloud and remember how to choose among them

Understand next steps for training and certification

Understand, at a high level, the process of migrating from Azure to Google Cloud.