

# Preparing for the Google Cloud Professional Cloud Architect Exam



Google Cloud Platform

- Intended Audience
- Study Strategy
- Exam Taking Strategy
- What You Need To Know
- Sample Questions
- Resources

# Study Strategy

- Follow Certification exam guide
  - High level domains & detailed tasks
  - <https://cloud.google.com/certification/guides/professional-cloud-architect/>
- Take Practice Exam
  - Good assessment, actual test is more difficult
  - Identify weakest areas
      - We often focus on some, not all domains in our work
      - You will be tested on all domains
  - Perform tasks using Cloud Console and Cloud Shell

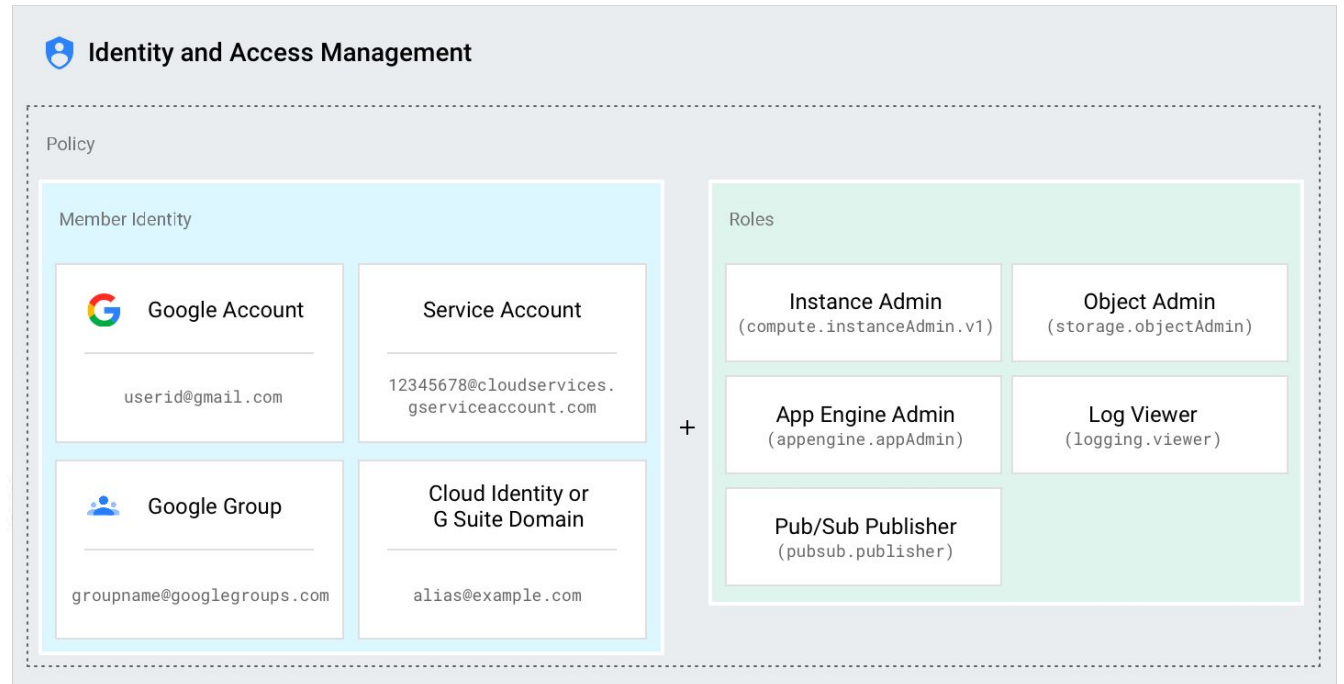
# Exam Taking Strategy

- Timed test, know your remaining time
  - 50 multiple choice questions
  - 2 hours
  - Mark questions
- Read questions carefully
  - Identify key services and software
  - Identify technical requirements
- Focus on how to choose between likely options or near misses

# What You Need to Know

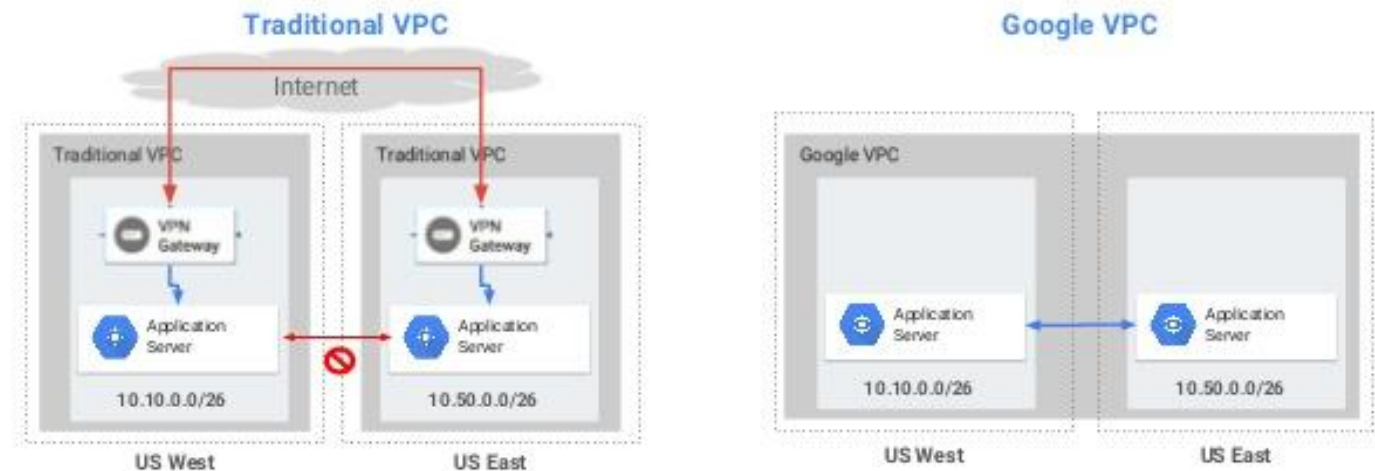
## Identity & Access Management (IAM)

- Understand roles and permissions
- Review primitive roles
- Know types of identities



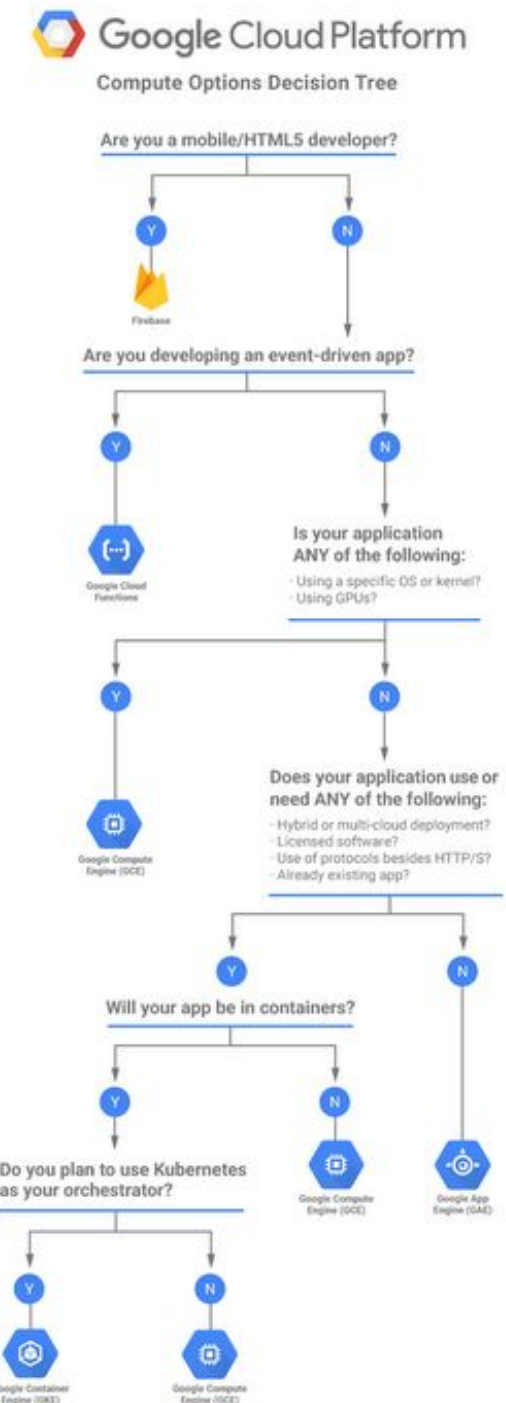
## Networking

- VPC
- Subnets
- CIDR blocks
- Firewall rules
- DNS
- Hybrid Cloud



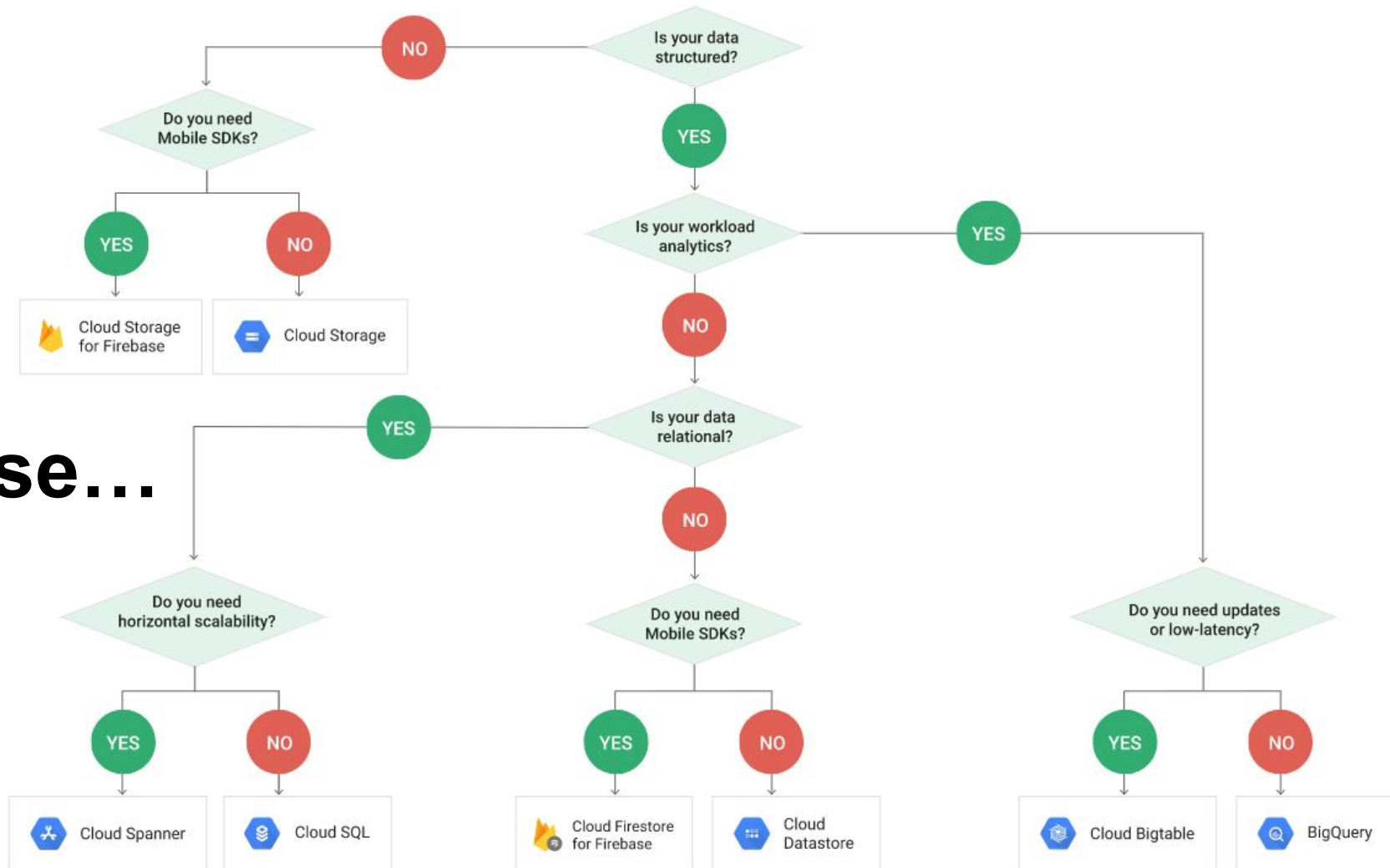
# Services to Know in Depth

- Compute
  - Compute engine
  - App engine
  - Kubernetes Engine
  - Cloud Functions
- Storage
  - Cloud Storage
  - Big Query
- Cloud Pub/Sub
- Stack driver



# How to choose between ...

- Cloud SQL
- Cloud Spanner
- Cloud Data store
- Cloud BigTable
- BigQuery
- Cloud Storage



## When to Choose...

- Cloud DataProc
- Cloud Dataflow
- Dataprep
- Deployment Manager

# Sample Question 1

**You want to automate the creation of a managed instance group and a startup script to install the OS package dependencies. You want to minimize the startup time for VMs in the instance group.**

**What should you do?**

- A. Use Terraform to create the managed instance group and a startup script to install the OS package dependencies.
- B. Create a custom VM image with all OS package dependencies. Use Deployment Manager to create the managed instance group with the VM image.
- C. Use Puppet to create the managed instance group and install the OS package dependencies.
- D. Use Deployment Manager to create the managed instance group and Ansible to install the OS package dependencies.

<https://cloud.google.com/solutions/scalable-and-resilient-apps>



# Sample Question 2

**Your company just finished a rapid lift and shift to Google Compute Engine for your compute needs. You have another 9 months to design and deploy a more cloud-native solution. Specifically, you want a system that is no-ops and auto-scaling. Which two compute products should you choose? Choose 2 answers**

- A. Compute Engine with containers
- B. Google Container Engine with containers
- C. Google App Engine Standard Environment
- D. Compute Engine with custom instance types
- E. Compute Engine with managed instance groups

# Sample Question 3

For this question, refer to the Mountkirk Games case study Mountkirk Games needs to create a repeatable and configurable mechanism for deploying isolated application environments.

Developers and testers can access each other's environments and resources, but they cannot access staging or production resources. The staging environment needs access to some services from production.

What should you do to isolate development environments from staging and production?

- A. Create a project for development and test and another for staging and production.
- B. Create a network for development and test and another for staging and production.
- C. Create one subnetwork for development and another for staging and production.
- D. Create one project for development, a second for staging and a third for production.

# Resources

<https://cloud.google.com/certification/guides/professional-cloud-architect/>

<https://www.coursera.org/learn/preparing-cloud-professional-cloud-architect-exam>

<https://linuxacademy.com/google-cloud-platform/training/course/name/google-cloud-certified-professional-cloud-architect>

Archive of Best practices documentation below:

Google Cloud Best Practices Document Archive