Google is launching a new certification for Professional Cloud Developer and has offered Deloitte an opportunity to join in the beta testing. The ground rules and content are described below. There will be a webinar this Thursday and there is a registration link for that below. **Please could you respond to the survey on this email so that we have a record of those who have registered.**

Google are announcing the Professional Cloud Developer beta certification. The beta exam will be available from Nov 15 - Dec 30.

During the beta period, partners could save 60% off the exam cost. Passing the beta exam will count towards the Professional CloudDeveloper certification. The participants are limited to one attempt/person during the beta period.

We are hosting a partner-only informational webinar (registration link) on Nov 15 @12PM EST to cover some of the commonly asked questions such as (a) who is the certification for (b) exam timeline (c) taking the exam during the beta period and (d) preparation resources. In the meantime, please find below some learning resources that should help with the exam preparation.

Training

- Google Cloud Platform Fundamentals
- Developing Applications with Google Cloud Platform Specialization.

Qwiklabs

- Application Development - Python
- Application Development - Java
- Websites and Web Applications
- Deploying Applications
- Deployment Manager

Solutions Design

Review solutions at Google Cloud Solutions. A few examples listed:

Microservices & Containers

- Preparing a Kubernetes Engine Environment for Production
- Heterogeneous Deployment Patterns with Kubernetes
- Best Practices for Operating Containers
- Deploying Memcached on Kubernetes Engine
- Architecture: Scalable Commerce Workloads using Microservices

CI/CD, Development & Test

- Continuous Deployment to Kubernetes Engine using Jenkins
- Continuous Deployment on Compute Engine Using Ansible with Spinnaker

- Continuous Delivery Pipelines with Spinnaker and Kubernetes Engine
- Using Jenkins for Distributed Builds on Compute Engine

Mobile Apps
- Mobile App Backend Services
- Build an Android App Using Firebase and the App Engine Flexible Environment

Deployment
- Best Practices for Using Deployment Manager
- Compute Engine Management with Puppet, Chef, Salt, and Ansible

Logging, Monitoring
- Design Patterns for Exporting Stackdriver Logging
- Customizing Stackdriver Logs for Kubernetes Engine with Fluentd
- Using Stackdriver Uptime Checks for Triggering Cloud Functions on a Schedule

Beta Exam questions

- Gloud IAP with compute engine to secure web applications for G suite users in the finance department -> turn on Cloud IAP for the G suite domain. Check the JWT in the HTTP header for users in the finance dept.
- Performance troubleshoot Google Cloud Storage bucket: gsutil perfdiag ...
- Google App engine scaling limit instances to 5 -> manual_scaling:
- instances: 5, Incorrect -> [basic_scaling: instances: 5, manual_scaling: max_instances: 5]
- Case study's IP strategy for VPC and on-prem network via cloud interconnect -> use custom subnets for on-prem Hadoop clusters to read data. Incorrect -> [Auto mode subnet]. Why -> Important: Read the considerations for auto mode networks before you create one for production use. Production networks should be planned in advance, and custom mode networks are better suited for most production use cases.
- Cloud Spanner, BigTable schema design to avoid hotspot
- Deployment manager python template instance name appended with deployment name ->“`name: vm-{{ env["deployment"] }}`”. Incorrect -> [“instance`Name: vm-{{ env["deployment"] }}`”, “instance`Name: vm-${deployment}`”]
- Be aware of StackDriver profiler in one of the multiple choices.
- All coding questions are in Java, not Python, about 15% of the questions.

- Expect questions of HipLocal case study -> Choose Cloud Spanner as the solution to store application state for scaling out globally; state is currently stored in a mySQL instance in compute engine. Incorrect -> add memcache to the current mySQL instance.
- Learn and understand cloud security scanner, cloud armor. Know how and when to use them.