

Unit 6 - Week 4: There's an API for that! You can't secure the Cloud right?

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Assignment 4

The due date for submitting this assignment has passed.
Due on 2020-03-25, 23:59 IST.

- 1) Which of the following is the most common API format in GCP? 1 point

CLI
 gRPC
 REST
 SOAP

No, the answer is incorrect.
Score: 0

Feedback:
REST APIs is the default API format for GCP. It is the most common API format today.

Accepted Answers:
REST

- 2) What is the purpose of an API? 1 point

APIs replace web pages
 APIs create GUI interfaces
 APIs simplify the way disparate software resources communicate.
 APIs are non-HTTPS interfaces used to interface with web interfaces

No, the answer is incorrect.
Score: 0

Feedback:
APIs are used to simplify the way different, disparate, software resources communicate. APIs provide a uniform format for different applications to communicate

Accepted Answers:
APIs simplify the way disparate software resources communicate.

- 3) Which of the following is the protocol used by REST APIs? 1 point

HTTPS
 RDP
 SSH
 Telnet

No, the answer is incorrect.
Score: 0

Feedback:
REST API implementations can make use of standards, such as HTTP, URI, JSON, and XML.

Accepted Answers:
HTTPS

- 4) You are looking for a managed API service for your cloud-based services? Which of these services would meet your needs? 1 point

Apigee Edge
 Cloud Endpoints
 CLI
 gRPC

No, the answer is incorrect.
Score: 0

Feedback:
Cloud Endpoints is a managed API Service used to create web front ends to GCP services

Accepted Answers:
Cloud Endpoints

- 5) You are looking for a managed API service to provide an API frontend to your legacy systems? Which of these services would meet your needs? 1 point

Apigee Edge
 Cloud Endpoints
 CLI
 gRPC

No, the answer is incorrect.
Score: 0

Feedback:
Apigee Edge is a platform for developing and managing APIs used for both cloud and legacy systems. Apigee Edge provides an abstraction for your backend service APIs and provides a variety of services include security, rate limiting, quotas, and analytics

Accepted Answers:
Apigee Edge

- 6) What are the specifications that Cloud Endpoints supports? 1 point

CLI
 gRPC
 IEEE
 OpenAPI
 RFC

No, the answer is incorrect.
Score: 0

Feedback:
gRPC and OpenAPI are the two formats that Cloud Endpoints supports

Accepted Answers:
gRPC
OpenAPI

- 7) True or False. Firebase Authentication and Auth0 are two of the utilities Cloud Endpoints uses to support service-to-service and user authentication 1 point

True
 False

No, the answer is incorrect.
Score: 0

Feedback:
The answer is True. Firebase, Auth0, and Google authentication are all used for service-to-service and user authentication.

Accepted Answers:
True

- 8) You need a simple and reliable staging location for your event data on its journey towards processing, storage, and analysis. Which one of the following services should you consider? 1 point

Apigee Edge
 Cloud Dataflow
 Cloud Endpoints
 Cloud Pub/Sub

No, the answer is incorrect.
Score: 0

Feedback:
Cloud Pub/Sub is global managed service that provides the storage and distribution of messages. Messages use a publish/subscribe delivery format and can be delivered either via push or pull messaging. Pub/Sub can serve as a buffer for applications as messages get processed

Accepted Answers:
Cloud Pub/Sub

- 9) What are the types of message delivery supported with Cloud Pub/Sub? 1 point

Bounce
 Poll
 Pull
 Push

No, the answer is incorrect.
Score: 0

Feedback:
Messages can be delivered via push or pull methods

Accepted Answers:
Pull
Push

- 10) How does Cloud Pub/Sub deliver messages to endpoints? 1 point

Through an internal ID
 Through a publish/subscribe pattern.
 Messages have to be pulled by the front end.
 By pushing messages to all available endpoints based on an internal list.

No, the answer is incorrect.
Score: 0

Feedback:
Cloud Pub/Sub uses a publisher subscription format. Publishers are services or applications that produce messages to another application to process. When messages are placed in a topic, they will ultimately be delivered to an application or service to process via a subscription

Accepted Answers:
Through a publish/subscribe pattern.

- 11) Which statement regarding GCP and data encryption is accurate? 1 point

Only data at rest is encrypted.
 Only data in transit is encrypted.
 Data is encrypted at rest and in transit.
 Nothing is encrypted by default. Data must be encrypted by the customer

No, the answer is incorrect.
Score: 0

Feedback:
Google encrypts data at rest and in transit by default. The customer can also encrypt data with customer managed or customer supplied keys

Accepted Answers:
Data is encrypted at rest and in transit.

- 12) When comparing on-premises, IaaS, PaaS, and managed services, which option requires the least amount of work for the user in terms of security? 1 point

IaaS
 Managed service
 On-premises
 PaaS

No, the answer is incorrect.
Score: 0

Feedback:
Managed services usually also manage some of the security burden rather than the user

Accepted Answers:
Managed service

- 13) True or False. Managing GCP users through Google Groups allows an administrator to manage team identities centrally. 1 point

True
 False

No, the answer is incorrect.
Score: 0

Feedback:
The answer is False. With Google Groups, if someone leaves the organization or team there's no centralized way to remove their access to the cloud resources immediately. GCP users who are also G Suite users can be managed centrally through the Google Admin Console. Alternatively, Cloud Identity can be used for non-G Suite users

Accepted Answers:
False

- 14) What is the main purpose of a service account? 1 point

Lock down a user
 Create a user in GCP
 Give permissions to a group of users
 Allow for service-to-service interaction with GCP

No, the answer is incorrect.
Score: 0

Feedback:
Service accounts allow for the authorization of service-to-service interaction.

Accepted Answers:
Allow for service-to-service interaction with GCP

- 15) What do primitive roles grant permissions to? 1 point

Folders
 Groups
 Organizations
 Projects

No, the answer is incorrect.
Score: 0

Feedback:
Primitive roles, such as Owner, Editor, and Viewer, apply to projects and services..

Accepted Answers:
Projects

- 16) True or False. Admin is an example of a primitive role? 1 point

True
 False

No, the answer is incorrect.
Score: 0

Feedback:
The answer is False. The primitive roles are Owner, Editor, Viewer, and Billing Administrator

Accepted Answers:
False

- 17) When setting up user/role pairings in GCP, which of the following is true? 1 point

Permissions are not inherited
 Everyone is a project owner by default
 The user will always inherit the stricter permission applied
 Permissions are inherited and the least restrictive permission will be inherited

No, the answer is incorrect.
Score: 0

Feedback:
GCP uses an inherited permission model. The user will always get the least restrictive permission when inherited.

Accepted Answers:
Permissions are inherited and the least restrictive permission will be inherited

- 18) What service is used to supply encryption keys when users want to manage their own keys? 1 point

CloudHSM
 Cloud Key Management System
 Google is encrypted by default. No keys are required
 The customer must bring their own keys and manage them.

No, the answer is incorrect.
Score: 0

Feedback:
Cloud KMS creates encryption keys in the cloud for customers to manage

Accepted Answers:
Cloud Key Management System

- 19) True or False. Cloud Identity-Aware Proxy (Cloud IAP) allows you to use an application-level access control model instead of relying on network-level firewalls. 1 point

True
 False

No, the answer is incorrect.
Score: 0

Feedback:
The answer is True. Cloud IAP lets you establish a central authorization layer for applications over TLS, so you can use an application-level access control model instead of relying on network-level firewalls

Accepted Answers:
True

- 20) There are a number of best practices that should be applied to identity and access management. Which of the following does Google recommend? 1 point

Use folders to group instances
 Use custom roles for all objects
 Try to use primitive roles instead of pre-defined roles
 Use the "principle of least privilege" when distributing permissions

No, the answer is incorrect.
Score: 0

Feedback:
Because of inheritance, Google recommends using the "principle of least privilege" when granting roles

Accepted Answers:
Use the "principle of least privilege" when distributing permissions