

Google

Exam Questions Professional-Cloud-DevOps-Engineer

Google Cloud Certified - Professional Cloud DevOps Engineer Exam



NEW QUESTION 1

You use Spinnaker to deploy your application and have created a canary deployment stage in the pipeline. Your application has an in-memory cache that loads objects at start time. You want to automate the comparison of the canary version against the production version. How should you configure the canary analysis?

- A. Compare the canary with a new deployment of the current production version.
- B. Compare the canary with a new deployment of the previous production version.
- C. Compare the canary with the existing deployment of the current production version.
- D. Compare the canary with the average performance of a sliding window of previous production versions.

Answer: A

Explanation:

<https://cloud.google.com/architecture/automated-canary-analysis-kubernetes-engine-spinnaker> <https://spinnaker.io/guides/user/canary/best-practices/#compare-canary-against-baseline-not-against-production>

NEW QUESTION 2

You are part of an organization that follows SRE practices and principles. You are taking over the management of a new service from the Development Team, and you conduct a Production Readiness Review (PRR). After the PRR analysis phase, you determine that the service cannot currently meet its Service Level Objectives (SLOs). You want to ensure that the service can meet its SLOs in production. What should you do next?

- A. Adjust the SLO targets to be achievable by the service so you can bring it into production.
- B. Notify the development team that they will have to provide production support for the service.
- C. Identify recommended reliability improvements to the service to be completed before handover.
- D. Bring the service into production with no SLOs and build them when you have collected operational data.

Answer: C

NEW QUESTION 3

You support a high-traffic web application and want to ensure that the home page loads in a timely manner. As a first step, you decide to implement a Service Level Indicator (SLI) to represent home page request latency with an acceptable page load time set to 100 ms. What is the Google-recommended way of calculating this SLI?

- A. Bucketize the request latencies into ranges, and then compute the percentile at 100 ms.
- B. Bucketize the request latencies into ranges, and then compute the median and 90th percentiles.
- C. Count the number of home page requests that load in under 100 ms, and then divide by the total number of home page requests.
- D. Count the number of home page requests that load in under 100 m
- E. and then divide by the total number of all web application requests.

Answer: C

Explanation:

<https://sre.google/workbook/implementing-slos/>

In the SRE principles book, it's recommended treating the SLI as the ratio of two numbers: the number of good events divided by the total number of events. For example: Number of successful HTTP requests / total HTTP requests (success rate)

NEW QUESTION 4

You are running an application on Compute Engine and collecting logs through Stackdriver. You discover that some personally identifiable information (PII) is leaking into certain log entry fields. All PII entries begin with the text userinfo. You want to capture these log entries in a secure location for later review and prevent them from leaking to Stackdriver Logging. What should you do?

- A. Create a basic log filter matching userinfo, and then configure a log export in the Stackdriver console with Cloud Storage as a sink.
- B. Use a Fluentd filter plugin with the Stackdriver Agent to remove log entries containing userinfo, and then copy the entries to a Cloud Storage bucket.
- C. Create an advanced log filter matching userinfo, configure a log export in the Stackdriver console with Cloud Storage as a sink, and then configure a log exclusion with userinfo as a filter.
- D. Use a Fluentd filter plugin with the Stackdriver Agent to remove log entries containing userinfo, create an advanced log filter matching userinfo, and then configure a log export in the Stackdriver console with Cloud Storage as a sink.

Answer: B

Explanation:

<https://medium.com/google-cloud/fluentd-filter-plugin-for-google-cloud-data-loss-prevention-api-42bbb1308e7>

NEW QUESTION 5

You support an application running on App Engine. The application is used globally and accessed from various device types. You want to know the number of connections. You are using Stackdriver Monitoring for App Engine. What metric should you use?

- A. flex/connections/current
- B. tcp_ssl_proxy/new_connections
- C. tcp_ssl_proxy/open_connections
- D. flex/instance/connections/current

Answer: A

Explanation:

https://cloud.google.com/monitoring/api/metrics_gcp#gcp-appengine

NEW QUESTION 6

Your application runs on Google Cloud Platform (GCP). You need to implement Jenkins for deploying application releases to GCP. You want to streamline the release process, lower operational toil, and keep user data secure. What should you do?

- A. Implement Jenkins on local workstations.
- B. Implement Jenkins on Kubernetes on-premises
- C. Implement Jenkins on Google Cloud Functions.
- D. Implement Jenkins on Compute Engine virtual machines.

Answer: D

Explanation:

Your application runs on Google Cloud Platform (GCP). You need to implement Jenkins for deploying application releases to GCP. You want to streamline the release process, lower operational toil, and keep user data secure. What should you do?

<https://plugins.jenkins.io/google-compute-engine/>

NEW QUESTION 7

You support a high-traffic web application with a microservice architecture. The home page of the application displays multiple widgets containing content such as the current weather, stock prices, and news headlines. The main serving thread makes a call to a dedicated microservice for each widget and then lays out the homepage for the user. The microservices occasionally fail; when that happens, the serving thread serves the homepage with some missing content. Users of the application are unhappy if this degraded mode occurs too frequently, but they would rather have some content served instead of no content at all. You want to set a Service Level Objective (SLO) to ensure that the user experience does not degrade too much. What Service Level Indicator (SLI) should you use to measure this?

- A. A quality SLI: the ratio of non-degraded responses to total responses
- B. An availability SLI: the ratio of healthy microservices to the total number of microservices
- C. A freshness SLI: the proportion of widgets that have been updated within the last 10 minutes
- D. A latency SLI: the ratio of microservice calls that complete in under 100 ms to the total number of microservice calls

Answer: B

Explanation:

<https://cloud.google.com/blog/products/gcp/available-or-not-that-is-the-question-cre-life-lessons>

NEW QUESTION 8

You are ready to deploy a new feature of a web-based application to production. You want to use Google Kubernetes Engine (GKE) to perform a phased rollout to half of the web server pods. What should you do?

- A. Use a partitioned rolling update.
- B. Use Node taints with NoExecute.
- C. Use a replica set in the deployment specification.
- D. Use a stateful set with parallel pod management policy.

Answer: A

Explanation:

<https://medium.com/velotio-perspectives/exploring-upgrade-strategies-for-stateful-sets-in-kubernetes-c02b8286f>

NEW QUESTION 9

You need to run a business-critical workload on a fixed set of Compute Engine instances for several months. The workload is stable with the exact amount of resources allocated to it. You want to lower the costs for this workload without any performance implications. What should you do?

- A. Purchase Committed Use Discounts.
- B. Migrate the instances to a Managed Instance Group.
- C. Convert the instances to preemptible virtual machines.
- D. Create an Unmanaged Instance Group for the instances used to run the workload.

Answer: A

NEW QUESTION 10

You support a high-traffic web application that runs on Google Cloud Platform (GCP). You need to measure application reliability from a user perspective without making any engineering changes to it. What should you do?

Choose 2 answers

- A. Review current application metrics and add new ones as needed.
- B. Modify the code to capture additional information for user interaction.
- C. Analyze the web proxy logs only and capture response time of each request.
- D. Create new synthetic clients to simulate a user journey using the application.
- E. Use current and historic Request Logs to trace customer interaction with the application.

Answer: CE

Explanation:

<https://cloud.google.com/architecture/adopting-slos?hl=en>

NEW QUESTION 10

Your organization recently adopted a container-based workflow for application development. Your team develops numerous applications that are deployed continuously through an automated build pipeline to a Kubernetes cluster in the production environment. The security auditor is concerned that developers or operators could circumvent automated testing and push code changes to production without approval. What should you do to enforce approvals?

- A. Configure the build system with protected branches that require pull request approval.
- B. Use an Admission Controller to verify that incoming requests originate from approved sources.
- C. Leverage Kubernetes Role-Based Access Control (RBAC) to restrict access to only approved users.
- D. Enable binary authorization inside the Kubernetes cluster and configure the build pipeline as an attestor.

Answer: D

Explanation:

The keywords here is "developers or operators". Option A the operators could push images to production without approval (operators could touch the cluster directly and the cluster cannot do any action against them). Rest same as francisco_guerra.

NEW QUESTION 13

You have a CI/CD pipeline that uses Cloud Build to build new Docker images and push them to Docker Hub. You use Git for code versioning. After making a change in the Cloud Build YAML configuration, you notice that no new artifacts are being built by the pipeline. You need to resolve the issue following Site Reliability Engineering practices. What should you do?

- A. Disable the CI pipeline and revert to manually building and pushing the artifacts.
- B. Change the CI pipeline to push the artifacts to Container Registry instead of Docker Hub.
- C. Upload the configuration YAML file to Cloud Storage and use Error Reporting to identify and fix the issue.
- D. Run a Git compare between the previous and current Cloud Build Configuration files to find and fix the bug.

Answer: D

Explanation:

"After making a change in the Cloud Build YAML configuration, you notice that no new artifacts are being built by the pipeline"- means something wrong on the recent change not with the image registry.

NEW QUESTION 15

You are running an application on Compute Engine and collecting logs through Stackdriver. You discover that some personally identifiable information (PII) is leaking into certain log entry fields. You want to prevent these fields from being written in new log entries as quickly as possible. What should you do?

- A. Use the filter-record-transformer Fluentd filter plugin to remove the fields from the log entries in flight.
- B. Use the fluent-plugin-record-reformer Fluentd output plugin to remove the fields from the log entries in flight.
- C. Wait for the application developers to patch the application, and then verify that the log entries are no longer exposing PII.
- D. Stage log entries to Cloud Storage, and then trigger a Cloud Function to remove the fields and write the entries to Stackdriver via the Stackdriver Logging API.

Answer: A

NEW QUESTION 17

You support a Node.js application running on Google Kubernetes Engine (GKE) in production. The application makes several HTTP requests to dependent applications. You want to anticipate which dependent applications might cause performance issues. What should you do?

- A. Instrument all applications with Stackdriver Profiler.
- B. Instrument all applications with Stackdriver Trace and review inter-service HTTP requests.
- C. Use Stackdriver Debugger to review the execution of logic within each application to instrument all applications.
- D. Modify the Node.js application to log HTTP request and response times to dependent application
- E. Use Stackdriver Logging to find dependent applications that are performing poorly.

Answer: B

NEW QUESTION 20

You are responsible for the reliability of a high-volume enterprise application. A large number of users report that an important subset of the application's functionality – a data intensive reporting feature – is consistently failing with an HTTP 500 error. When you investigate your application's dashboards, you notice a strong correlation between the failures and a metric that represents the size of an internal queue used for generating reports. You trace the failures to a reporting backend that is experiencing high I/O wait times. You quickly fix the issue by resizing the backend's persistent disk (PD). How you need to create an availability Service Level Indicator (SLI) for the report generation feature. How would you define it?

- A. As the I/O wait times aggregated across all report generation backends
- B. As the proportion of report generation requests that result in a successful response
- C. As the application's report generation queue size compared to a known-good threshold
- D. As the reporting backend PD throughput capacity compared to a known-good threshold

Answer: B

Explanation:

According to SRE Workbook, one of potential SLI is as below:

* Type of service: Request-driven

* Type of SLI: Availability

* Description: The proportion of requests that resulted in a successful response. <https://sre.google/workbook/implementing-slos/>

NEW QUESTION 23

You support an application running on GCP and want to configure SMS notifications to your team for the most critical alerts in Stackdriver Monitoring. You have already identified the alerting policies you want to configure this for. What should you do?

- A. Download and configure a third-party integration between Stackdriver Monitoring and an SMS gateway. Ensure that your team members add their SMS/phone numbers to the external tool.
- B. Select the Webhook notifications option for each alerting policy, and configure it to use a third-party integration too
- C. Ensure that your team members add their SMS/phone numbers to the external tool.
- D. Ensure that your team members set their SMS/phone numbers in their Stackdriver Profile
- E. Select the SMS notification option for each alerting policy and then select the appropriate SMS/phone numbers from the list.
- F. Configure a Slack notification for each alerting policy
- G. Set up a Slack-to-SMS integration to send SMS messages when Slack messages are received
- H. Ensure that your team members add their SMS/phone numbers to the external integration.

Answer: C

Explanation:

https://cloud.google.com/monitoring/support/notification-options#creating_channels To configure SMS notifications, do the following:

In the SMS section, click Add new and follow the instructions. Click Save. When you set up your alerting policy, select the SMS notification type and choose a verified phone number from the list.

NEW QUESTION 27

You are deploying an application that needs to access sensitive information. You need to ensure that this information is encrypted and the risk of exposure is minimal if a breach occurs. What should you do?

- A. Store the encryption keys in Cloud Key Management Service (KMS) and rotate the keys frequently
- B. Inject the secret at the time of instance creation via an encrypted configuration management system.
- C. Integrate the application with a Single sign-on (SSO) system and do not expose secrets to the application
- D. Leverage a continuous build pipeline that produces multiple versions of the secret for each instance of the application.

Answer: A

Explanation:

<https://cloud.google.com/security-key-management>

NEW QUESTION 32

Your product is currently deployed in three Google Cloud Platform (GCP) zones with your users divided between the zones. You can fail over from one zone to another, but it causes a 10-minute service disruption for the affected users. You typically experience a database failure once per quarter and can detect it within five minutes. You are cataloging the reliability risks of a new real-time chat feature for your product. You catalog the following information for each risk:

- Mean Time to Detect (MTTD) in minutes
- Mean Time to Repair (MTTR) in minutes
- Mean Time Between Failure (MTBF) in days
- User Impact Percentage

The chat feature requires a new database system that takes twice as long to successfully fail over between zones. You want to account for the risk of the new database failing in one zone. What would be the values for the risk of database failover with the new system?

- A. MTTD: 5 MTTR: 10 MTBF: 90 Impact: 33%
- B. MTTD: 5 MTTR: 20 MTBF: 90 Impact: 33%
- C. MTTD: 5 MTTR: 10 MTBF: 90 Impact: 50%
- D. MTTD: 5 MTTR: 20 MTBF: 90 Impact: 50%

Answer: B

Explanation:

<https://www.atlassian.com/incident-management/kpis/common-metrics> <https://linkedin.github.io/school-of-sre/>

NEW QUESTION 34

Your team is designing a new application for deployment both inside and outside Google Cloud Platform (GCP). You need to collect detailed metrics such as system resource utilization. You want to use centralized GCP services while minimizing the amount of work required to set up this collection system. What should you do?

- A. Import the Stackdriver Profiler package, and configure it to relay function timing data to Stackdriver for further analysis.
- B. Import the Stackdriver Debugger package, and configure the application to emit debug messages with timing information.
- C. Instrument the code using a timing library, and publish the metrics via a health check endpoint that is scraped by Stackdriver.
- D. Install an Application Performance Monitoring (APM) tool in both locations, and configure an export to a central data storage location for analysis.

Answer: A

NEW QUESTION 38

You support the backend of a mobile phone game that runs on a Google Kubernetes Engine (GKE) cluster. The application is serving HTTP requests from users. You need to implement a solution that will reduce the network cost. What should you do?

- A. Configure the VPC as a Shared VPC Host project.
- B. Configure your network services on the Standard Tier.
- C. Configure your Kubernetes cluster as a Private Cluster.
- D. Configure a Google Cloud HTTP Load Balancer as Ingress.

Answer: D

Explanation:

Costs associated with a load balancer are charged to the project containing the load balancer components. Because of these benefits, container-native load balancing is the recommended solution for load balancing through Ingress. When NEGs are used with GKE Ingress, the Ingress controller facilitates the creation of all aspects of the L7 load balancer. This includes creating the virtual IP address, forwarding rules, health checks, firewall rules, and more.

<https://cloud.google.com/architecture/best-practices-for-running-cost-effective-kubernetes-applications-on-gke>

NEW QUESTION 39

You support a multi-region web service running on Google Kubernetes Engine (GKE) behind a Global HTTP'S Cloud Load Balancer (CLB). For legacy reasons, user requests first go through a third-party Content Delivery Network (CDN). which then routes traffic to the CLB. You have already implemented an availability Service Level Indicator (SLI) at the CLB level. However, you want to increase coverage in case of a potential load balancer misconfiguration. CDN failure, or other global networking catastrophe. Where should you measure this new SLI?

Choose 2 answers

- A. Your application servers' logs
- B. Instrumentation coded directly in the client
- C. Metrics exported from the application servers
- D. GKE health checks for your application servers
- E. A synthetic client that periodically sends simulated user requests

Answer: BE

NEW QUESTION 43

You have migrated an e-commerce application to Google Cloud Platform (GCP). You want to prepare the application for the upcoming busy season. What should you do first to prepare for the busy season?

- A. Load test the application to profile its performance for scaling.
- B. Enable AutoScaling on the production clusters, in case there is growth.
- C. Pre-provision double the compute power used last season, expecting growth.
- D. Create a runbook on inflating the disaster recovery (DR) environment if there is growth.

Answer: A

Explanation:

<https://cloud.google.com/blog/topics/retail/preparing-for-peak-holiday-season-while-wfh>

NEW QUESTION 46

You support an e-commerce application that runs on a large Google Kubernetes Engine (GKE) cluster deployed on-premises and on Google Cloud Platform. The application consists of microservices that run in containers. You want to identify containers that are using the most CPU and memory. What should you do?

- A. Use Stackdriver Kubernetes Engine Monitoring.
- B. Use Prometheus to collect and aggregate logs per container, and then analyze the results in Grafana.
- C. Use the Stackdriver Monitoring API to create custom metrics, and then organize your containers using groups.
- D. Use Stackdriver Logging to export application logs to BigQuery
- E. aggregate logs per container, and then analyze CPU and memory consumption.

Answer: A

Explanation:

<https://cloud.google.com/anthos/clusters/docs/on-prem/1.7/concepts/logging-and-monitoring>

NEW QUESTION 48

You are developing a strategy for monitoring your Google Cloud Platform (GCP) projects in production using Stackdriver Workspaces. One of the requirements is to be able to quickly identify and react to production environment issues without false alerts from development and staging projects. You want to ensure that you adhere to the principle of least privilege when providing relevant team members with access to Stackdriver Workspaces. What should you do?

- A. Grant relevant team members read access to all GCP production project
- B. Create Stackdriver workspaces inside each project.
- C. Grant relevant team members the Project Viewer IAM role on all GCP production project
- D. Create Stackdriver workspaces inside each project.
- E. Choose an existing GCP production project to host the monitoring workspace
- F. Attach the production projects to this workspace
- G. Grant relevant team members read access to the Stackdriver Workspace.
- H. Create a new GCP monitoring project, and create a Stackdriver Workspace inside it
- I. Attach the production projects to this workspace
- J. Grant relevant team members read access to the Stackdriver Workspace.

Answer: D

Explanation:

"A Project can host many Projects and appear in many Projects, but it can only be used as the scoping project once. We recommend that you create a new Project for the purpose of having multiple Projects in the same scope."

NEW QUESTION 50

.....

Thank You for Trying Our Product

We offer two products:

1st - We have Practice Tests Software with Actual Exam Questions

2nd - Questions and Answers in PDF Format

Professional-Cloud-DevOps-Engineer Practice Exam Features:

- * Professional-Cloud-DevOps-Engineer Questions and Answers Updated Frequently
- * Professional-Cloud-DevOps-Engineer Practice Questions Verified by Expert Senior Certified Staff
- * Professional-Cloud-DevOps-Engineer Most Realistic Questions that Guarantee you a Pass on Your FirstTry
- * Professional-Cloud-DevOps-Engineer Practice Test Questions in Multiple Choice Formats and Updatesfor 1 Year

100% Actual & Verified — Instant Download, Please Click
[Order The Professional-Cloud-DevOps-Engineer Practice Test Here](#)