



Professional Cloud Developer

v2309

Quiz questions*

Cloud Run Deployment Patterns

** These are for practice only and are not actual exam questions*

Question: You've designed a flagship stateless web application for deployment on Google Cloud. Given the fluctuating and unpredictable user traffic, which approach should you adopt to ensure automatic scaling while optimizing costs using Google Cloud services?

- A. Deploy the application on Google Kubernetes Engine (GKE) with manual scaling.
- B. Use Cloud Functions with Firestore as the database and trigger based on HTTP requests.
- C. Build the application in Python with Firestore as the database. Deploy the application to Cloud Run.
- D. Deploy the application on Compute Engine with static VM instances.

Question: In a blue/green deployment on Cloud Run, how can you test the new "green" revision without migrating traffic to it?

- A. By accessing the default Cloud Run service URL.
- B. By using the "green" tag to directly test the new revision at a specific URL.
- C. By setting the traffic percentage to 0% for the "green" revision.
- D. By deploying the "green" revision in a separate project.

Question: In Cloud Run, how can you ensure that a new revision does not serve traffic immediately upon deployment?

- A. By unchecking the "Serve this revision immediately" checkbox.
- B. By setting the traffic percentage to 100% for the old revision.
- C. By deploying the revision in "maintenance mode".
- D. By pausing the deployment process.

Question: What is the primary purpose of a canary test pattern in Cloud Run deployments?

- A. To deploy a new revision to a subset of users to test its performance and functionality.
- B. To deploy two different versions of an application and split traffic equally.
- C. To deploy a new revision only to internal testers.
- D. To deploy a new revision that shadows the current version without serving any real traffic.

Answers to Quiz questions

Cloud Run Deployment Patterns

Question: You've designed a flagship stateless web application for deployment on Google Cloud. Given the fluctuating and unpredictable user traffic, which approach should you adopt to ensure automatic scaling while optimizing costs using Google Cloud services?

- A. Deploy the application on Google Kubernetes Engine (GKE) with manual scaling.
- B. Use Cloud Functions with Firestore as the database and trigger based on HTTP requests.
- C. Build the application in Python with Firestore as the database. Deploy the application to Cloud Run.
- D. Deploy the application on Compute Engine with static VM instances.

Correct Answer: C. Build the application in Python with Firestore as the database. Deploy the application to Cloud Run.

Explanation: Cloud Run is a fully managed compute platform by Google Cloud that automatically scales stateless containers. By building the application in Python with Firestore as the database and deploying it to Cloud Run, you can ensure that the application scales automatically based on the incoming traffic, thus optimizing costs.

Resource: [Deploying from source code directly to Cloud Run](#)

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- B. By using the "green" tag to directly test the new revision at a specific URL.
- C. By setting the traffic percentage to 0% for the "green" revision.
- D. By deploying the "green" revision in a separate project.

Correct Answer: B. By using the "green" tag to directly test the new revision at a specific URL.

Explanation: In Cloud Run, when you tag a revision as "green", it allows you to directly test the new revision at a specific URL without migrating any traffic to it. This provides a way to validate the new revision before starting the process of traffic migration.

Resource: [Cloud Run now supports gradual rollouts and rollbacks](#)

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- C. By deploying the revision in "maintenance mode".
- D. By pausing the deployment process.

Correct Answer: A. By unchecking the "Serve this revision immediately" checkbox.

Explanation: When deploying a new revision in Cloud Run, there is an option labeled "Serve this revision immediately." By unchecking this option, you can ensure that the new revision does not start serving traffic immediately upon deployment.

Resource: [Rollbacks, gradual rollouts, and traffic migration | Cloud Run](#)

Question: What is the primary purpose of a canary test pattern in Cloud Run deployments?

- A. To deploy a new revision to a subset of users to test its performance and functionality.
- B. To deploy two different versions of an application and split traffic equally.
- C. To deploy a new revision only to internal testers.
- D. To deploy a new revision that shadows the current version without serving any real traffic.

Correct Answer: A. To deploy a new revision to a subset of users to test its performance and functionality.

Explanation: The canary test pattern involves deploying a new revision of an application to a small subset of users. This allows developers to test the new revision's performance and functionality in a real-world setting before rolling it out to all users.

Resource: [Application deployment and testing strategies - Google Cloud](#)