



Professional Cloud Developer

v2309

Quiz questions: Cloud Run^{*}

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

Your client wants to build a website using a mature technology stack using ExpressJS and will access your SQL database on Cloud SQL, and render dynamic HTML pages. Which computing solution should you use to have lightweight and portable applications to improve application development and application deployment, in a serverless manner?

- A. Containers and Compute Engine
- B. Containers and App Engine Flexible
- C. Cloud Run
- D. Cloud Functions

A company wants to build a data processing application that transforms lightweight data as it arrives and stores it as structured data. The data will be stored in a BigQuery table. Which of the following is the best way to implement this application?

- A. Use an Eventarc to trigger a Cloud Run service when a new file is created. The Cloud Run service will then extract, structure, and store the data in BigQuery.
- B. Use a Pub/Sub topic to publish an event when a new file is created. A Cloud Run service can then subscribe to the topic and extract, structure, and store the data in BigQuery.
- C. Use a Cloud Dataflow pipeline to extract, structure, and store the data in BigQuery.
- D. Use a Cloud Dataproc cluster to extract, structure, and store the data in BigQuery.

A company wants to schedule a monthly job to generate invoices using a Cloud Run service. The invoices will be generated in PDF format using LibreOffice. Which of the following is the best way to implement this automation?

- A. Create a Compute Engine application that generates the invoices in PDF format using LibreOffice. The Compute Engine can then be triggered by a Cloud Scheduler job.
- B. Create a Cloud Run service that generates the invoices in PDF format using LibreOffice. The Cloud Run service can then be invoked manually or by a HTTP request.
- C. Create a Cloud Dataflow pipeline that generates the invoices in PDF format using LibreOffice. The Cloud Dataflow pipeline can then be scheduled to run on a monthly basis.

- D. Create a Cloud Scheduler job that triggers a Cloud Run service. The Cloud Run service will then run a script that generates the invoices in PDF format using LibreOffice.

When connecting to Google Cloud services in code, you do not need to provide credentials manually inside Cloud Run instances because:

- A. Cloud Run uses a default runtime service account that has the Project > Editor role.
- B. Cloud Run uses a default runtime service account that has the Project > Viewer role.
- C. Cloud Run uses a default runtime service account that has the Project > Editor role, but you can restrict this by assigning a service account with a minimal set of permissions to your Cloud Run services.
- D. Cloud Run uses a default runtime service account that has the Project > Editor role, and you cannot restrict this.

Answers

You are managing a regional Managed Instance Group (MIG) in Google Cloud with instances spread across three zones. You are planning to roll out an update to the instances in the MIG. If you want to ensure the least disruption to your service during the update, what should be the value of the maxUnavailable option?

(c) Cloud Run is a serverless platform that allows you to run stateless containers that are invocable via HTTP requests. It is a good choice for lightweight and portable applications because you do not need to manage any infrastructure. You simply deploy your container image to Cloud Run and it will be scaled automatically based on demand.

<https://cloud.google.com/run/docs/overview/what-is-cloud-run>

A company wants to build a data processing application that transforms lightweight data as it arrives and stores it as structured data. The data will be stored in a BigQuery table. Which of the following is the best way to implement this application?

(a) Eventarc trigger can be triggered when a new file is created. Cloud Run is a serverless platform, so it is easy to deploy and manage. And BigQuery is a scalable and reliable data warehouse, so it is a good place to store the structured data. The B is more complex to set up and manage than using Cloud Functions. C is a good choice for large-scale data processing, but it is overkill for this use case. And D is a good choice for batch data processing, but it is not as well-suited for streaming data processing.

<https://cloud.google.com/run/docs/triggering/trigger-with-events>

<https://cloud.google.com/run/docs/storage-options>

A company wants to schedule a monthly job to generate invoices using a Cloud Run service. The invoices will be generated in PDF

format using LibreOffice. Which of the following is the best way to implement this automation?

(D) Cloud Scheduler is a fully managed cron job scheduler that can be used to schedule jobs on a recurring basis. Cloud Run is a serverless platform that can be used to run stateless containers. The A requires you to create a Compute Engine Application, which is not serverless and is more complex to set up and manage than a Cloud Run service. B does not allow you to schedule the job to run on a monthly basis. It will need a Cloud Functions or Cloud Run and cloud Scheduler. C is a good choice for large-scale data processing, but it is overkill for this use case.

<https://cloud.google.com/run/#section-9>

<https://cloud.google.com/run/docs/create-jobs>

When connecting to Google Cloud services in code, you do not need to provide credentials manually inside Cloud Run instances because:

(C). Cloud Run uses a default runtime service account that has the Project > Editor role, but you can restrict this by assigning a service account with a minimal set of permissions to your Cloud Run services. This is done by creating a service account and granting it the appropriate IAM permissions. You can then assign the service account to your Cloud Run service in the Cloud Run console or in the Cloud Run API.

<https://cloud.google.com/run/docs/integrate/using-gcp-services>

