Google Discussions

EXAM ASSOCIATE CLOUD ENGINEER TOPIC 1 QUESTION 124 DISCUSSION

Actual exam question from Google's Associate Cloud Engineer
Question #: 124
Topic #: 1
[All Associate Cloud Engineer Questions]

You have an application that uses Cloud Spanner as a backend database. The application has a very predictable traffic pattern. You want to automatically scale up or down the number of Spanner nodes depending on traffic. What should you do?

A. Create a cron job that runs on a scheduled basis to review Cloud Monitoring metrics, and then resize the Spanner instance accordingly.

B. Create a Cloud Monitoring alerting policy to send an alert to oncall SRE emails when Cloud Spanner CPU exceeds the threshold. SREs would scale resources up or down accordingly.

C. Create a Cloud Monitoring alerting policy to send an alert to Google Cloud Support email when Cloud Spanner CPU exceeds your threshold. Google support would scale resources up or down accordingly.

D. Create a Cloud Monitoring alerting policy to send an alert to webhook when Cloud Spanner CPU is over or under your threshold. Create a Cloud Function that listens to HTTP and resizes Spanner resources accordingly.

Show Suggested Answer

by GCP_Student1 at *March 11, 2021, 10:54 p.m.*

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GCP_Student1 **Highly Voted** 3 years, 7 months ago

D. Create a Cloud Monitoring alerting policy to send an alert to webhook when Cloud Spanner CPU is over or under your threshold. Create a Cloud Function that listens to HTTP and resizes Spanner resources accordingly.

upvoted 26 times

theBestStudent **Highly Voted** 2 years, 2 months ago

Selected Answer: D

Without knowing that much, you can discard easily B,C as they don't make any sense. Automation should be a key in this answer. Also you should discard "A" as with a CronJob you won't spann on time as it will be a fixed time checking. So the only one that is left is D, as just creating an alert and sending it to "something else" (in this case a webhook) in an automated way, should be the common sense way of handling this.

upvoted 9 times

FeaRoX 1 year, 8 months ago

Isn't "fixed time chacking" appropriate for quote : very predictable traffic pattern?

upvoted 1 times

space_cadet 1 year, 7 months ago

Crossed my mind too, but why check every time when you can trigger a response when it happens. Predictability can also be used to determine the threshold.

upvoted 1 times

BuenaCloudDE **Most Recent** 3 months ago

Why not A if traffic very predictable?

upvoted 1 times

cooldude26 11 months, 1 week ago

Selected Answer: D

The most suitable approach to automatically scale the number of Cloud Spanner nodes based on predictable traffic patterns is:

D. Create a Cloud Monitoring alerting policy to send an alert to a webhook when Cloud Spanner CPU is over or under your threshold. Create a Cloud Function that listens to HTTP and resizes Spanner resources accordingly.

This option utilizes Cloud Monitoring alerts and Cloud Functions to dynamically scale Cloud Spanner resources based on CPU thresholds, providing an automated and responsive solution.

upvoted 2 times

scanner2 1 year, 1 month ago

Selected Answer: D

Correct answer is D.

upvoted 1 times

Captain1212 1 year, 1 month ago

Selected Answer: D

D is the correct Answer as B or C does not do it automatically, and a doesnot use for long spanning

upvoted 1 times

temppp 1 year, 10 months ago

Why not A is correct as question suggested specific time where as D is like an unpredectiable time?

upvoted 3 times

jrisl1991 1 year, 8 months ago

Because even though the traffic has a clear pattern, if the traffic changes one day (like a special holiday for ecommerce websites), you wouldn't be able to serve accordingly. It's never a good practice use fixed jobs for time-based traffic issues.

upvoted 3 times

roaming_panda 1 year, 10 months ago

D is definitely correct .. people

upvoted 1 times

abirroy 2 years, 2 months ago

Selected Answer: D

Correct answer is D

Correct answer is D

upvoted 1 times

AzureDP900 2 years, 4 months ago

D is correct, It is part of Tutorials Dojo practice test

upvoted 1 times

rsuresh27 2 years, 6 months ago

Answer is D. The keyword to look for is "automatically". A, B, C all have steps that are not automatic. Thus, only D is left.

upvoted 3 times

alaahakim 2 years, 11 months ago

D is the answer

upvoted 3 times

Ricky_92 2 years, 11 months ago

https://cloud.google.com/architecture/autoscaling-cloud-spanner

upvoted 5 times

kukabura 3 years ago

D is the answer

upvoted 3 times

ankatsu2010 3 years ago

It's a tricky question. The answer is 'A'.
Question says traffic pattern is predictable. This means you can schedule the scalability.
You can achieve this easily by using Cloud Spanner's API.

https://cloud.google.com/spanner/docs/reference/rest/v1/projects.instances/patch

upvoted 4 times

BobbyFlash 2 years, 12 months ago

Really tricky indeed...But if you think about it and you don't stick religiously to "traffic pattern is predictable" sentence (that sentence is to trick you), you would think that despite the pattern is very predictable, it could vary at some point in time. With a cron job you can schedule a job using a fixed starting point and a a fixed ending, can't you? Well, what would happen if the app traffic suddenly spikes before your cron job starts running? Or after?. At this point, I go for D, making scalability automatic thanks to Cloud Funtions.

upvoted 6 times

kuracpalac 8 months, 1 week ago

I would say A also, as your explanation doesn't satisfy me, as the question is really clear that traffic is predictable. It doesn't mention any wiggle room.

upvoted 1 times

erikamrqz 3 years ago

D 205%

upvoted 5 times

bubblegumbeach 3 years ago

seriously? 205%?

upvoted 4 times

jcols 3 years, 4 months ago

Option D. There's an official repository that does something similar to provide autoscaling to Cloud Spanner.
https://github.com/cloudspannerecosystem/autoscaler

upvoted 2 times

zaxxon 3 years ago

Which uses a Cloud Scheduler so answer A

upvoted 2 times

ryumada 2 years, 2 months ago

"...and then resize the Spanner instance accordingly." I think the last sentence says that the resize action is done manually. If so, then D is still the right answer.

upvoted 1 times

ryumada 2 years, 2 months ago

For the D option, "Create a Cloud Function that listens to HTTP and resizes Spanner resources accordingly." The listen and resize actions is done by Cloud Function.

upvoted 1 times

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