

🔗 Google Discussions



Exam Professional Cloud Security Engineer All Questions

View all questions & answers for the Professional Cloud Security Engineer exam

[Go to Exam](#)

📄 EXAM PROFESSIONAL CLOUD SECURITY ENGINEER TOPIC 1 QUESTION 74 DISCUSSION

Actual exam question from Google's Professional Cloud Security Engineer

Question #: 74

Topic #: 1

[\[All Professional Cloud Security Engineer Questions\]](#)

What are the steps to encrypt data using envelope encryption?

A.

- Generate a data encryption key (DEK) locally.
- Use a key encryption key (KEK) to wrap the DEK.
- Encrypt data with the KEK.
- Store the encrypted data and the wrapped KEK.

B.

- Generate a key encryption key (KEK) locally.
- Use the KEK to generate a data encryption key (DEK).
- Encrypt data with the DEK.
- Store the encrypted data and the wrapped DEK.

C.

- Generate a data encryption key (DEK) locally.
- Encrypt data with the DEK.
- Use a key encryption key (KEK) to wrap the DEK.
- Store the encrypted data and the wrapped DEK.

D.

- Generate a key encryption key (KEK) locally.
- Generate a data encryption key (DEK) locally.
- Encrypt data with the KEK.

Store the encrypted data and the wrapped DEK.

▪

Show Suggested Answer

by  Tabayashi at April 29, 2022, 2:53 a.m.

Comments

Type your comment...

Submit



  **Tabayashi** Highly Voted  3 years, 3 months ago

Answer is (C).

The process of encrypting data is to generate a DEK locally, encrypt data with the DEK, use a KEK to wrap the DEK, and then store the encrypted data and the wrapped DEK. The KEK never leaves Cloud KMS.

https://cloud.google.com/kms/docs/envelope-encryption#how_to_encrypt_data_using_envelope_encryption

   upvoted 19 times

  **AzureDP900** 2 years, 8 months ago



C is right

   upvoted 3 times

  **Mr_MIXER007** Most Recent  11 months ago

Answer is (C).

   upvoted 1 times

  **desertlotus1211** 1 year, 11 months ago

Answer is C;

<https://cloud.google.com/kms/docs/envelope-encryption#:~:text=decrypt%20data%20directly.-,How%20to%20encrypt%20data%20using%20envelope%20encryption,data%20and%20the%20wrapped%20DEK.>

   upvoted 3 times

  **Appsec977** 2 years, 2 months ago

C is the correct solution because KEK is never generated on the client's side, KEK is stored in GCP.

   upvoted 4 times

  **AwesomeGCP** 2 years, 9 months ago

Answer - C is correct.

https://cloud.google.com/kms/docs/envelope-encryption#how_to_encrypt_data_using_envelope_encryption

   upvoted 3 times

  **[Removed]** 2 years, 10 months ago

C it is

   upvoted 3 times



Platform

> Home

> Examtopics PRO

> All Exams

> Training Courses

