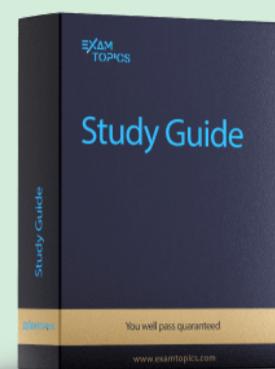




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Topic 1 - Exam A**Question #1****Topic 1**

A company is implementing an application on Amazon EC2 instances. The application needs to process incoming transactions. When the application detects a transaction that is not valid, the application must send a chat message to the company's support team. To send the message, the application needs to retrieve the access token to authenticate by using the chat API.

A developer needs to implement a solution to store the access token. The access token must be encrypted at rest and in transit. The access token must also be accessible from other AWS accounts.

Which solution will meet these requirements with the LEAST management overhead?

- A. Use an AWS Systems Manager Parameter Store SecureString parameter that uses an AWS Key Management Service (AWS KMS) AWS managed key to store the access token. Add a resource-based policy to the parameter to allow access from other accounts. Update the IAM role of the EC2 instances with permissions to access Parameter Store. Retrieve the token from Parameter Store with the decrypt flag enabled. Use the decrypted access token to send the message to the chat.
- B. Encrypt the access token by using an AWS Key Management Service (AWS KMS) customer managed key. Store the access token in an Amazon DynamoDB table. Update the IAM role of the EC2 instances with permissions to access DynamoDB and AWS KMS. Retrieve the token from DynamoDB and decrypt the token by using AWS KMS on the EC2 instances. Use the decrypted access token to send the message to the chat.
- C. Use AWS Secrets Manager with an AWS Key Management Service (AWS KMS) customer managed key to store the access token. Add a resource-based policy to the secret to allow access from other accounts. Update the IAM role of the EC2 instances with permissions to access Secrets Manager. Retrieve the token from Secrets Manager. Use the decrypted access token to send the message to the chat.
- D. Encrypt the access token by using an AWS Key Management Service (AWS KMS) AWS managed key. Store the access token in an Amazon S3 bucket. Add a bucket policy to the S3 bucket to allow access from other accounts. Update the IAM role of the EC2 instances with permissions to access Amazon S3 and AWS KMS. Retrieve the token from the S3 bucket. Decrypt the token by using AWS KMS on the EC2 instances. Use the decrypted access token to send the message to the chat.

Correct Answer: D*Community vote distribution*

C (92%)

5%

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 **Jerrygang**  2 months, 1 week ago

Selected Answer: C

Itexamslab.com Discussion: C
upvoted 36 times

 **hupoikicky**  2 months, 2 weeks ago

Selected Answer: C

Itexamstest.com
No Discussion: C
upvoted 26 times

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 **SD_CS**  2 weeks, 4 days ago

Selected Answer: A

I think this would be A as this is cheaper than C. Any reason why A can not be the answer?
upvoted 1 times

 **tsdsmth** 1 month ago

The answer would be C if an AWS-managed key was used, as Secrets Manager and KMS are good for situations like this. However, the use of a customer-managed key increases management overhead. So the best answer is D, not C.
upvoted 1 times

 **gilleep_17** 1 month, 2 weeks ago

You cannot use a resource-based policy with a parameter in the Parameter Store. The stephen answer Option C is correct Practise paper3
upvoted 1 times

 **gilleep_17** 1 month, 2 weeks ago

customer managed key , its an extra work. So I am confused with option A and C
upvoted 1 times

 **1432Ravi** 1 month, 2 weeks ago

anyone who can pls send the PDF version of all questions to ravikant.bellad@gmail.com
upvoted 2 times

 **Hemu0711** 1 month, 3 weeks ago
anyone who can pls send the PDF version of all questions to hemujays0711@gmail.com
I have exam scheduled in five days
upvoted 1 times

 **marcosbude** 2 months, 1 week ago
ahhhhhh
upvoted 1 times

 **Abhishek_Chandel** 2 months, 2 weeks ago
Can someone please share the pdf of questions on: sainalvin99@gmail.com
upvoted 1 times

 **abhinow** 2 months, 2 weeks ago
Can someone send me pdf at rawatabhi14@gmail.com
upvoted 1 times

 **dongocanh272** 4 months ago
Selected Answer: D
I think using S3 to store and KMS to decrypt is the solution for this requirement
upvoted 1 times

 **cgpt** 4 months ago
Selected Answer: A
By default, AWS Systems Manager Parameter Store does not natively support cross-account access for SecureString parameters. However, you can configure cross-account access to SecureString parameters by sharing the KMS key with the target AWS accounts. To do this, you need to create a resource-based KMS key policy that allows access to the key by the external AWS account(s). After configuring the KMS key policy to allow the necessary cross-account access, you can grant IAM roles in the target accounts permission to access the SecureString parameters that are encrypted using that KMS key.
upvoted 2 times

 **ssnei** 4 months, 2 weeks ago
Can anyone please send me the pdf for all the questions
Really appreciate your help
Email: snik2309@gmail.com
upvoted 4 times

 **Digo30sp** 4 months, 3 weeks ago
Selected Answer: C
Answer C is correct
upvoted 1 times

 **soumyaranjan7** 4 months, 3 weeks ago
Can anyone please send me the pdf of this whole questions. I have only 2 weeks to pass it. Thanks in advance. It would be a great help.
email- soumya.cr17@gmail.com
upvoted 1 times

 **huyhq** 4 months, 4 weeks ago
Selected Answer: C
i think c is correct
upvoted 1 times

Question #2

Topic 1

A company is running Amazon EC2 instances in multiple AWS accounts. A developer needs to implement an application that collects all the lifecycle events of the EC2 instances. The application needs to store the lifecycle events in a single Amazon Simple Queue Service (Amazon SQS) queue in the company's main AWS account for further processing.

Which solution will meet these requirements?

- A. Configure Amazon EC2 to deliver the EC2 instance lifecycle events from all accounts to the Amazon EventBridge event bus of the main account. Add an EventBridge rule to the event bus of the main account that matches all EC2 instance lifecycle events. Add the SQS queue as a target of the rule.
- B. Use the resource policies of the SQS queue in the main account to give each account permissions to write to that SQS queue. Add to the Amazon EventBridge event bus of each account an EventBridge rule that matches all EC2 instance lifecycle events. Add the SQS queue in the main account as a target of the rule.
- C. Write an AWS Lambda function that scans through all EC2 instances in the company accounts to detect EC2 instance lifecycle changes. Configure the Lambda function to write a notification message to the SQS queue in the main account if the function detects an EC2 instance lifecycle change. Add an Amazon EventBridge scheduled rule that invokes the Lambda function every minute.
- D. Configure the permissions on the main account event bus to receive events from all accounts. Create an Amazon EventBridge rule in each account to send all the EC2 instance lifecycle events to the main account event bus. Add an EventBridge rule to the main account event bus that matches all EC2 instance lifecycle events. Set the SQS queue as a target for the rule.

Correct Answer: D*Community vote distribution*

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hupoikicky 2 months, 2 weeks ago

Selected Answer: D

Itexamstest.com

No Discussion: D
upvoted 21 times

Untamables 11 months, 2 weeks ago

Selected Answer: D

The correct answer is D.
Amazon EC2 instances can send the state-change notification events to Amazon EventBridge.
<https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/monitoring-instance-state-changes.html>
Amazon EventBridge can send and receive events between event buses in AWS accounts.
<https://docs.aws.amazon.com/eventbridge/latest/userguide/eb-cross-account.html>
upvoted 15 times

jipark 7 months ago
thanks a lot
upvoted 1 times

xdkonorek2 2 months, 2 weeks ago

Selected Answer: D

Tried to implement both B and D
It's tricky, because B could be possible but you can't select cross-account SQS as target to the rule, option D is 100% correct
upvoted 1 times

dongocanh272 4 months ago
Selected Answer: D
My answer is D
upvoted 2 times

Digo30sp 4 months, 3 weeks ago
Selected Answer: D
Answer C is correct
upvoted 1 times

TeeTheMan 7 months, 1 week ago
Selected Answer: B

Seems to me the correct answer is B. The current most voted answer is B, but can someone explain why it's better than B? I think B is better because it has fewer steps. The events go straight from each account into the queue. Unlike in D which has the intermediate step of the event bus of the main account. Also, why would you want to pollute the event bus of the main account with events from other accounts when it isn't necessary?

upvoted 4 times

KillThemWithKindness 7 months, 3 weeks ago

B

Answer A is incorrect because Amazon EventBridge events can't be sent directly from one account's event bus to another.

Answer C is incorrect because it's unnecessary and inefficient to use Lambda to periodically scan all EC2 instances for lifecycle changes. Amazon EventBridge can capture these events automatically as they occur.

Answer D is incorrect because it is not possible to configure the main account event bus to receive events from all accounts directly, and Amazon EventBridge events can't be sent directly from one account's event bus to another. The EventBridge rules need to be set up in the accounts where the events are generated.

upvoted 2 times

KillThemWithKindness 7 months, 3 weeks ago

Sorry Im wrong, AWS allow to send and receive Amazon EventBridge events between AWS accounts.

<https://docs.aws.amazon.com/eventbridge/latest/userguide/eb-cross-account.html>

Both B and D works, but D is more centralized

upvoted 4 times

ezredame 9 months, 1 week ago

Selected Answer: D

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The correct answer is D.

<https://docs.aws.amazon.com/eventbridge/latest/userguide/eb-cross-account.html>

upvoted 2 times

geekdamsel 10 months ago

This question came in exam. Correct answer is D.

upvoted 10 times

Bibay 10 months ago

Selected Answer: A

Option D is not the best solution because it involves configuring the permissions on the main account's EventBridge event bus to receive events from all accounts, which can lead to potential security risks. Allowing other AWS accounts to send events to the main account's EventBridge event bus can potentially open up a security vulnerability, as it increases the attack surface area for the main account.

On the other hand, option A is the best solution because it involves using Amazon EventBridge, which is a serverless event bus that can be used to route events between AWS services or AWS accounts. By configuring Amazon EC2 to deliver the EC2 instance lifecycle events from all accounts to the Amazon EventBridge event bus of the main account, and adding the SQS queue as a target of the rule, the application can collect all the lifecycle events of the EC2 instances in a single queue in the main account without compromising the security posture of the AWS environment.

upvoted 1 times

ihebchorfi 10 months, 1 week ago

Selected Answer: B

B solution meets all da requirements. By using resource policies, you can grant permissions for other accounts to write to the SQS queue in the main account.

Then, you create EventBridge rules in each account dat match EC2 lifecycle events and use da main account's SQS queue as a target for these rules. It's da best choice for dis scenario.

upvoted 1 times

MrTee 10 months, 1 week ago

Selected Answer: D

This solution allows the collection of all the lifecycle events of the EC2 instances from multiple AWS accounts and stores them in a single Amazon SQS queue in the company's main AWS account for further processing

upvoted 2 times

shahs10 11 months, 1 week ago

For Option C using lambda does not seem to be a good solution as we would have to trigger lambda on some schedule and it will has less granularity in time.

For D. Why would we be matching EC2 instance lifecycle events in Main account event bus and not in each account event bus and reducing overhead for main account

upvoted 1 times

good_ 11 months, 3 weeks ago

I think the answer to this question is also A.

upvoted 4 times

haaris786 11 months, 3 weeks ago

Answer A: This makes more sense and a simplified solution.

upvoted 5 times

 aragon_saa 11 months, 3 weeks ago

D

<https://www.examtopics.com/discussions/amazon/view/96209-exam-aws-certified-developer-associate-topic-1-question-396/>

upvoted 4 times

Question #3

Topic 1

An application is using Amazon Cognito user pools and identity pools for secure access. A developer wants to integrate the user-specific file upload and download features in the application with Amazon S3. The developer must ensure that the files are saved and retrieved in a secure manner and that users can access only their own files. The file sizes range from 3 KB to 300 MB.

Which option will meet these requirements with the HIGHEST level of security?

- A. Use S3 Event Notifications to validate the file upload and download requests and update the user interface (UI).
- B. Save the details of the uploaded files in a separate Amazon DynamoDB table. Filter the list of files in the user interface (UI) by comparing the current user ID with the user ID associated with the file in the table.
- C. Use Amazon API Gateway and an AWS Lambda function to upload and download files. Validate each request in the Lambda function before performing the requested operation.
- D. Use an IAM policy within the Amazon Cognito identity prefix to restrict users to use their own folders in Amazon S3.

Correct Answer: D*Community vote distribution*

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✉ **hupoikicky** 2 months, 2 weeks ago

Selected Answer: D

Iexamstest.com

No Discussion: D
upvoted 20 times

✉ **Untamables** 11 months, 2 weeks ago

Selected Answer: D

D

I actually apply this solution the production applications.
Examples

https://docs.aws.amazon.com/IAM/latest/UserGuide/reference_policies_examples_s3_cognito-bucket.html
<https://docs.amplify.aws/lib/storage/getting-started/q/platform/js/>

upvoted 7 times

✉ **tfmzworld** 1 month ago

Selected Answer: D

D is the answer
upvoted 1 times

✉ **Ashish3246** 1 month, 1 week ago

Can someone email me a pdf of the questions (DVA-C02 & DVA-C01) at krashish3246@gmail.com

Thanks in advance!
upvoted 1 times

✉ **Chimzi** 1 month, 4 weeks ago

Selected Answer: D

B can work but does not provide the same level of security as D
upvoted 1 times

✉ **DatPT1808** 2 months ago

Can someone email me a pdf of the questions (DVA-C02 & DVA-C01) at shawnkool10@gmail.com

Thanks in advance!
upvoted 1 times

✉ **ra123498** 2 months, 4 weeks ago

can someone email a pdf of questions at rachita1997@gmail.com
upvoted 1 times

✉ **ksudheer7412** 2 months, 1 week ago

can someone please email pdf of DVA-C02 questions at sudheer.k.kancharla@gmail.com
upvoted 1 times

✉ **chewasa** 2 months, 3 weeks ago

could you send me to chemawhistle@gmail.com
upvoted 1 times

✉ **atindraraaut80** 3 months, 1 week ago
Can someone email me a pdf of the questions (DVA-C02) at atindraraaut80@gmail.com
upvoted 1 times

✉ **bala30** 3 months, 4 weeks ago
Can someone email me a pdf of the questions (DVA-C02 & DVA-C01) at balajisudharson@gmail.com
Thanks in advance!
upvoted 1 times

✉ **dongocanh272** 3 months, 4 weeks ago
Selected Answer: B
I consider between B & D
upvoted 1 times

✉ **Digo30sp** 4 months, 3 weeks ago
Selected Answer: D
Answer D is correct
upvoted 1 times

✉ **Bibay** 10 months ago
Selected Answer: C

D is not the best option as IAM policies only apply to actions taken through AWS Management Console, SDKs, and CLI. It does not apply to direct access to S3 from the application.

Option B is a good approach, but it requires additional overhead to manage the DynamoDB table.

Option A is also a possible solution but only provides limited security as it only validates the upload and download requests, and it does not provide user-level authorization.

Option C is the best choice as it allows the developer to implement a custom authentication mechanism in the Lambda function, providing the highest level of security. The authentication mechanism can be integrated with Amazon Cognito user pools and identity pools to authenticate users and ensure that only the owner of the file can upload and download it.

upvoted 1 times

✉ **grzess** 9 months, 3 weeks ago
Implementing custom authentication / authorization solution is extremely bad practice. Any developer is prone to mistakes. It's always better to trust the dedicated solution. Thus option C is definitely not the correct one.
upvoted 2 times

✉ **MrTee** 10 months, 1 week ago

Selected Answer: D

This solution ensures that users can access only their own files in a secure manner.
upvoted 3 times

✉ **haaris786** 11 months, 3 weeks ago
Answer D:

<https://docs.aws.amazon.com/cognito/latest/developerguide/amazon-cognito-integrating-user-pools-with-identity-pools.html>
upvoted 3 times

Question #4

Topic 1

A company is building a scalable data management solution by using AWS services to improve the speed and agility of development. The solution will ingest large volumes of data from various sources and will process this data through multiple business rules and transformations. The solution requires business rules to run in sequence and to handle reprocessing of data if errors occur when the business rules run. The company needs the solution to be scalable and to require the least possible maintenance. Which AWS service should the company use to manage and automate the orchestration of the data flows to meet these requirements?

- A. AWS Batch
- B. AWS Step Functions
- C. AWS Glue
- D. AWS Lambda

Correct Answer: D*Community vote distribution*

hupoikicky 2 months, 2 weeks ago

Selected Answer: B

lexamstest.com

No Discussion:
upvoted 20 times

geekdamsel 10 months ago

Got this question in exam. Correct answer is B.
upvoted 11 times

alven_alinan 3 months ago

Selected Answer: B

Answer is B. Step Function is about orchestrating workflows
upvoted 3 times

dongocanh272 3 months, 4 weeks ago

Selected Answer: B

My answer is B
upvoted 1 times

Digo30sp 4 months, 3 weeks ago

Selected Answer: B

B is correct
upvoted 1 times

NinjaCloud 5 months ago

Best option: B
upvoted 1 times

panoptica 5 months, 3 weeks ago

Selected Answer: B

b init
upvoted 1 times

sharma_ps93 6 months ago

The answer is B (Step Functions). For people confused with AWS Lambda, it is a compute service and can be used within Step Functions, but it alone does not provide the orchestration and error handling features required in this case.
upvoted 3 times

casharan 6 months ago

Selected Answer: D

check the link below:
<https://docs.aws.amazon.com/lambda/latest/operatorguide/orchestration.html>
upvoted 1 times

pefey26437 5 months, 1 week ago

My man.. in your link , 4th line, it says Step function.

upvoted 2 times

 **casharan** 4 months, 2 weeks ago

Thanks. You're right.

upvoted 1 times

 **hmdev** 6 months, 1 week ago

Selected Answer: B

You can use Step functions to create a workflow of functions that should be invoked in a sequence. You can also push output from one one-step function and use it as an input for next-step function. Also, Step functions have very useful Retry and Catch -> error-handling features.

upvoted 1 times

 **jayvarma** 6 months, 3 weeks ago

Keyword: run in sequence and to handle reprocessing of data. So, answer is option B. And also each task in a step function can be handled by a different AWS Service such as AWS Lambda or AWS Glue which is used for ETL jobs.

upvoted 1 times

 **elfinka9** 7 months ago

Selected Answer: B

I'm thinking B

upvoted 1 times

 **Suvomita** 7 months, 4 weeks ago

Selected Answer: D

D is the right answer

upvoted 1 times

 **MatthewHuiii** 8 months, 2 weeks ago

B is correct

upvoted 1 times

 **Baba_Eni** 9 months ago

Selected Answer: B

All the key words of the question points at Step Function, check the link below:

<https://docs.aws.amazon.com/step-functions/latest/dg/welcome.html>

upvoted 2 times

 **jipark** 7 months ago

"manage and automate the orchestration of the data flows"

upvoted 1 times

 **ricky536** 9 months, 1 week ago

B is correct

upvoted 1 times

 **ihebchorfi** 10 months, 1 week ago

Selected Answer: B

Easily B

upvoted 1 times

Question #5

Topic 1

A developer has created an AWS Lambda function that is written in Python. The Lambda function reads data from objects in Amazon S3 and writes data to an Amazon DynamoDB table. The function is successfully invoked from an S3 event notification when an object is created. However, the function fails when it attempts to write to the DynamoDB table.

What is the MOST likely cause of this issue?

- A. The Lambda function's concurrency limit has been exceeded.
- B. DynamoDB table requires a global secondary index (GSI) to support writes.
- C. The Lambda function does not have IAM permissions to write to DynamoDB.
- D. The DynamoDB table is not running in the same Availability Zone as the Lambda function.

Correct Answer: D

Community vote distribution

C (100%)

 **hupoikicky** Highly Voted 2 months, 2 weeks ago

Selected Answer: C

ltxamstest.com

No Discussion: C
upvoted 20 times

 **jifeyoy312** Most Recent 1 month ago

dumpsfactory.com

No Discussion: C
upvoted 1 times

 **alven_alinan** 3 months ago

Selected Answer: C

Answer is C
upvoted 1 times

 **dongocanh272** 3 months, 1 week ago

Why the correct answer is D? All of us think C must be the correct answer
upvoted 2 times

 **liddym2** 3 months, 3 weeks ago

Am I missing something? Why in God's name are the answer's provided wrong? It says D is the right answer. Its obviously C..
upvoted 3 times

 **dongocanh272** 3 months, 4 weeks ago

Selected Answer: C
I think C is correct.
upvoted 1 times

 **chvtejaswi** 5 months, 3 weeks ago

Selected Answer: C
correct answer is C
upvoted 3 times

 **hsinchang** 5 months, 3 weeks ago

Selected Answer: C
It is clearly something about permissions. So not A or B. Lambda functions can run in multiple Availability Zones (AZs) to ensure high availability and resilience. So it is not D.
upvoted 3 times

 **kvpa** 6 months, 2 weeks ago

Selected Answer: C
correct answer is C
upvoted 1 times

 **ssoratroi** 6 months, 3 weeks ago

Selected Answer: C

surely C
upvoted 1 times

 **elfinka9** 7 months ago

Does anyone know how the correct answer is determined?
Option C is the most voted and correct according to <https://www.examtopics.com/discussions/amazon/view/88237-exam-aws-certified-developer-associate-topic-1-question-164/>
upvoted 2 times

 **geekdamsel** 10 months ago

Got this question in exam. Correct answer is C.
upvoted 4 times

 **MrTee** 10 months, 1 week ago

Selected Answer: C

The Lambda function needs to have the appropriate IAM permissions to write to the DynamoDB table. If the function does not have these permissions, it will fail when it attempts to write to the table.
upvoted 1 times

 **zk1200** 10 months, 3 weeks ago

Selected Answer: C
C is the simples answer
upvoted 2 times

 **khaled1123** 11 months ago

Selected Answer: C
of course C
upvoted 2 times

 **TungNNS** 11 months ago

Selected Answer: C
No doubt C
upvoted 2 times

 **ihta_2031** 11 months ago

Selected Answer: C
C is the answer
upvoted 2 times

Question #6

Topic 1

A developer is creating an AWS CloudFormation template to deploy Amazon EC2 instances across multiple AWS accounts. The developer must choose the EC2 instances from a list of approved instance types.

How can the developer incorporate the list of approved instance types in the CloudFormation template?

- A. Create a separate CloudFormation template for each EC2 instance type in the list.
- B. In the Resources section of the CloudFormation template, create resources for each EC2 instance type in the list.
- C. In the CloudFormation template, create a separate parameter for each EC2 instance type in the list.
- D. In the CloudFormation template, create a parameter with the list of EC2 instance types as AllowedValues.

Correct Answer: D

Community vote distribution

D (100%)

 **Bibay** Highly Voted  10 months ago

Selected Answer: D

Option D is the correct answer. In the CloudFormation template, the developer should create a parameter with the list of approved EC2 instance types as AllowedValues. This way, users can select the instance type they want to use when launching the CloudFormation stack, but only from the approved list.

Option A is not a scalable solution as it requires creating a separate CloudFormation template for each EC2 instance type, which can become cumbersome and difficult to manage as the number of approved instance types grows.

Option B is not necessary as creating resources for each EC2 instance type in the list would not enforce the requirement to choose only from the approved list. It would also increase the complexity of the template and make it difficult to manage.

Option C is not ideal as it would require creating a separate parameter for each EC2 instance type, which can become difficult to manage as the number of approved instance types grows. Also, it does not enforce the requirement to choose only from the approved list.

upvoted 16 times

 **jipark** 7 months ago

quite much clear explanation !!!

upvoted 1 times

 **geekdamsel** Highly Voted  10 months ago

Got this question in exam.Correct answer is D.

upvoted 8 times

 **LocNV** Most Recent  2 months ago

Selected Answer: D

Parameters:

InstanceType:

Type: String

Default: 't2.micro'

AllowedValues:

- 't2.micro'
- 't2.small'
- 't2.medium'
- 't3.micro'
- 't3.small'
- 't3.medium'

Description: 'Select the EC2 instance type for deployment.'

Resources:

MyEC2Instance:

Type: 'AWS::EC2::Instance'

Properties:

ImageId: ami-12345678

InstanceType: !Ref InstanceType

upvoted 3 times

 **payireb682** 3 months ago

Selected Answer: D

D is correct

upvoted 1 times

 **leonardoliveros** 3 months, 2 weeks ago

Selected Answer: D

D is the correct, because you are restricting the possible options to that parameter
upvoted 1 times

 **Pupina** 8 months, 1 week ago

Why B instead of C? Each AWS SDK implements retry logic automatically. Most AWS SDKs now support exponential backoff and jitter as part of their retry behavior
Then D to increase capacity <https://docs.aws.amazon.com/amazondynamodb/latest/developerguide/TroubleshootingThrottling.html>
C&D
upvoted 1 times

 **Pupina** 8 months, 1 week ago

This answer is for question 7 not 6
upvoted 1 times

 **NanaDanso** 11 months ago

Selected Answer: D
D looks about right
upvoted 4 times

 **prabhay786** 11 months, 2 weeks ago

It should be D
upvoted 4 times

 **aragon_saa** 11 months, 3 weeks ago

D
<https://www.examtopics.com/discussions/amazon/view/88788-exam-aws-certified-developer-associate-topic-1-question-343/>
upvoted 3 times

Question #7

A developer has an application that makes batch requests directly to Amazon DynamoDB by using the BatchGetItem low-level API operation. The responses frequently return values in the UnprocessedKeys element. Which actions should the developer take to increase the resiliency of the application when the batch response includes values in UnprocessedKeys? (Choose two.)

- A. Retry the batch operation immediately.
- B. Retry the batch operation with exponential backoff and randomized delay.
- C. Update the application to use an AWS software development kit (AWS SDK) to make the requests.
- D. Increase the provisioned read capacity of the DynamoDB tables that the operation accesses.
- E. Increase the provisioned write capacity of the DynamoDB tables that the operation accesses.

Correct Answer: BD*Community vote distribution*

brandon87 Highly Voted 11 months ago

Selected Answer: BD

(B) If you delay the batch operation using exponential backoff, the individual requests in the batch are much more likely to succeed.
 (D) The most likely cause of a failed read or a failed write is throttling. For BatchGetItem, one or more of the tables in the batch request does not have enough provisioned read capacity to support the operation
<https://docs.aws.amazon.com/amazondynamodb/latest/developerguide/Programming.Errors.html#Programming.Errors.RetryAndBackoff>
 upvoted 19 times

Untamables Highly Voted 11 months, 2 weeks ago

Selected Answer: BC

B & C
<https://docs.aws.amazon.com/general/latest/gr/api-retries.html>
 upvoted 19 times

konieczny69 1 month ago

C already handles retries, why would want to do that manually?
 upvoted 1 times

badsati Most Recent 1 week ago

BC ...No discussion
 upvoted 1 times

CrescentShared 1 month ago

Why it's suggesting using SDK in the question from below link but not using C in this question?
<https://www.examtopics.com/discussions/amazon/view/96246-exam-aws-certified-developer-associate-topic-1-question-437/>
 upvoted 1 times

Sisanda_giiven 1 month, 1 week ago

Correct answer is B & D
 B- <https://docs.aws.amazon.com/amazondynamodb/latest/developerguide/Programming.Errors.html#Programming.Errors.BatchOperations>
 D - https://docs.aws.amazon.com/amazondynamodb/latest/APIReference/API_BatchGetItem.html
 upvoted 2 times

Cambrian 1 month, 2 weeks ago

Selected Answer: BC

Retry with exponential backoff and randomized delay (Option B) helps prevent overwhelming the system with repeated immediate requests and increases the likelihood of successful retries during intermittent issues.
 Using an AWS SDK (Option C) can provide built-in features for handling transient errors and retries, making the application more resilient to issues like UnprocessedKeys in batch responses.
 upvoted 1 times

SherzodBek 2 months, 2 weeks ago

Selected Answer: BD

B & D.
 B is correct. Because in the question, it is mentioned that low-level API is being used. It means exponential backoff can be implemented manually.
 D is correct. Because there is a frequent keyword in the question. If UnprocessedKeys error occurs frequently, DynamoDB doesn't have enough capacity to process requests. So read capacity should be increased.
 upvoted 2 times

 **Abdlhince** 4 months ago

Selected Answer: BC

- B. This is a good practice to handle throttling errors and avoid overwhelming the server with too many requests at the same time. Exponential backoff means increasing the waiting time between retries exponentially, such as 1 second, 2 seconds, 4 seconds, and so on. Randomized delay means adding some randomness to the waiting time, such as 1.2 seconds, 2.5 seconds, 3.8 seconds, and so on. This can help reduce the chance of collisions and spikes in the network traffic.
 - C. This is a recommended way to interact with DynamoDB, as AWS SDKs provide high-level abstractions and convenience methods for working with DynamoDB. AWS SDKs also handle low-level details such as authentication, retry logic, error handling, and pagination for you.
- upvoted 1 times

 **ronn555** 4 months ago

BC

The question only states that there are UnprocessedKeys.

That means that the batch operation occurred correctly most of the time. It states that frequently the batch contains more keys than can be returned with the present RCU.

The does not state that any single key has violated the ProvisionedThroughputExceededException (in which case D would be necessary).

So D would only make it more performant because of less Retries. However B and C are examples of resilience

upvoted 2 times

 **Rameez1** 4 months, 1 week ago

Selected Answer: BC

Option B & C.

upvoted 1 times

 **ashley369534** 4 months, 3 weeks ago

B&C

<https://docs.aws.amazon.com/amazondynamodb/latest/developerguide/Programming.Errors.html>

first thing first, this question ask for dealing with error. B&C

in the doc, error handling has 2 part: 1. Error handling in your application(The AWS SDKs perform their own retries and error checking.) 2.Error retries and exponential backoff

(If DynamoDB returns any unprocessed items, you should retry the batch operation on those items. However, we strongly recommend that you use an exponential backoff algorithm. If you retry the batch operation immediately, the underlying read or write requests can still fail due to throttling on the individual tables. If you delay the batch operation using exponential backoff, the individual requests in the batch are much more likely to succeed. which is b option) d is irrelevant

upvoted 1 times

 **cai123456** 5 months, 1 week ago

between C and B I choose C because of the key work "frequently". using AWS SDK we update the code and do not need to retry frequently.

upvoted 1 times

 **misa27** 5 months, 3 weeks ago

Selected Answer: BD

A single operation can retrieve up to 16 MB of data, which can contain as many as 100 items. BatchGetItem returns a partial result if the response size limit is exceeded, the table's provisioned throughput is exceeded, more than 1MB per partition is requested, or an internal processing failure occurs. If a partial result is returned, the operation returns a value for UnprocessedKeys. You can use this value to retry the operation starting with the next item to get.

https://docs.aws.amazon.com/amazondynamodb/latest/APIReference/API_BatchGetItem.html

upvoted 3 times

 **chvtejaswi** 5 months, 3 weeks ago

Selected Answer: BD

B and D

upvoted 1 times

 **mrsoa** 6 months, 1 week ago

Selected Answer: BD

B D

From Stephan's maarek course

BatchGetItem

- Return items from one or more tables
 - Up to 100 items, up to 16 MB of data
 - Items are retrieved in parallel to minimize latency
 - UnprocessedKeys for failed read operations (exponential backoff or add RCU)
- upvoted 9 times

 **love777** 6 months, 1 week ago

Selected Answer: BC

B. Retry with Exponential Backoff: When the batch response includes values in UnprocessedKeys, it indicates that some items could not be processed due to limitations like provisioned capacity or system overload. Retry the batch operation with an exponential backoff strategy, which means progressively increasing the time between retries. This helps prevent overwhelming the DynamoDB service and improves the chances of successfully processing the items in subsequent retries.

C. Use AWS SDK: AWS SDKs provide built-in retry mechanisms that handle transient errors like UnprocessedKeys. When using an AWS SDK, you

don't need to implement the retry logic yourself. The SDK will automatically handle retries with appropriate backoff strategies, making your application more resilient and reducing the burden of error handling.

upvoted 1 times

 **aanataliya** 6 months, 1 week ago

Selected Answer: BD

B and D is correct answer. AWS SDK automatically takes care of both retry and exponential backoff. If we choose C, selecting only C will answer our question(no need of B) but We need to choose 2 answer. In addition, question doesnot specifically say to change core logic from low level api to SDK. by choosing B and D we can improve resiliency.

<https://docs.aws.amazon.com/amazondynamodb/latest/developerguide/Programming.Errors.html#Programming.Errors.RetryAndBackoff>

upvoted 6 times

Question #8

A company is running a custom application on a set of on-premises Linux servers that are accessed using Amazon API Gateway. AWS X-Ray tracing has been enabled on the API test stage.
How can a developer enable X-Ray tracing on the on-premises servers with the LEAST amount of configuration?

- A. Install and run the X-Ray SDK on the on-premises servers to capture and relay the data to the X-Ray service.
- B. Install and run the X-Ray daemon on the on-premises servers to capture and relay the data to the X-Ray service.
- C. Capture incoming requests on-premises and configure an AWS Lambda function to pull, process, and relay relevant data to X-Ray using the PutTraceSegments API call.
- D. Capture incoming requests on-premises and configure an AWS Lambda function to pull, process, and relay relevant data to X-Ray using the PutTelemetryRecords API call.

Correct Answer: B

Community vote distribution

 B (100%)

 **Untamables**  11 months, 2 weeks ago

Selected Answer: B

B
<https://docs.aws.amazon.com/xray/latest/devguide/xray-daemon.html>
 upvoted 6 times

 **leonardoliveros**  3 months, 2 weeks ago

Selected Answer: B

B, you should to install the X-Ray daemon in on-premises without this all others option is wrong
 upvoted 1 times

 **Ugo_22** 4 months, 3 weeks ago

Selected Answer: B

The answer is obviously B.
 upvoted 1 times

 **Kowalsky95** 5 months ago

From doc: The AWS X-Ray daemon is a software application that listens for traffic on UDP port 2000, gathers raw segment data, and relays it to the AWS X-Ray API. The daemon works in conjunction with the AWS X-Ray SDKs and must be running so that data sent by the SDKs can reach the X-Ray service.
 Running just the daemon won't achieve anything.
 upvoted 2 times

 **geekdamsel** 10 months ago

Got this question in exam.Correct answer is B.
 upvoted 3 times

 **Bibay** 10 months ago

Selected Answer: B

. Install and run the X-Ray daemon on the on-premises servers to capture and relay the data to the X-Ray service is the correct option. The X-Ray daemon can be installed and configured on the on-premises servers to capture data and send it to the X-Ray service. This requires minimal configuration and setup. Option A is incorrect because while the X-Ray SDK can be used to capture data on the on-premises servers, it requires more configuration and development effort than the X-Ray daemon. Option C and D are also incorrect because they involve setting up an AWS Lambda function, which is not necessary for enabling X-Ray tracing on the on-premises servers.
 upvoted 2 times

 **ihta_2031** 11 months ago

Selected Answer: B

It's B
 upvoted 4 times

 **haaris786** 11 months, 3 weeks ago

B: It is Daemon which can be installed for Linux
 upvoted 3 times

 **aragon_saa** 11 months, 3 weeks ago

B
<https://www.examtopics.com/discussions/amazon/view/28998-exam-aws-certified-developer-associate-topic-1-question-324/>

upvoted 3 times

Question #9

A company wants to share information with a third party. The third party has an HTTP API endpoint that the company can use to share the information. The company has the required API key to access the HTTP API. The company needs a way to manage the API key by using code. The integration of the API key with the application code cannot affect application performance. Which solution will meet these requirements MOST securely?

- A. Store the API credentials in AWS Secrets Manager. Retrieve the API credentials at runtime by using the AWS SDK. Use the credentials to make the API call.
- B. Store the API credentials in a local code variable. Push the code to a secure Git repository. Use the local code variable at runtime to make the API call.
- C. Store the API credentials as an object in a private Amazon S3 bucket. Restrict access to the S3 object by using IAM policies. Retrieve the API credentials at runtime by using the AWS SDK. Use the credentials to make the API call.
- D. Store the API credentials in an Amazon DynamoDB table. Restrict access to the table by using resource-based policies. Retrieve the API credentials at runtime by using the AWS SDK. Use the credentials to make the API call.

Correct Answer: B*Community vote distribution* A (100%)

✉  Kristijan92  11 months, 1 week ago

Selected Answer: A

answer A

upvoted 11 times

✉  elfinka9  7 months ago

Selected Answer: A

Why B is marked as correct ????

upvoted 5 times

✉  bedmark  1 month, 1 week ago

Selected Answer: A

A is correct

upvoted 1 times

✉  leonardoliveros 3 months, 2 weeks ago

Selected Answer: A

B isn't secure

A is the best option for this scenario

upvoted 2 times

✉  gullyboy77 5 months ago

Selected Answer: A

Secret Manager is the safest way to store secrets in AWS.

upvoted 1 times

✉  chvtejaswi 5 months, 3 weeks ago

Selected Answer: A

Answer A

upvoted 2 times

✉  hmdev 6 months, 1 week ago

Selected Answer: A

A seems to be the most secure and correct. Always use Secret Manager to store secrets, as the name implies.

upvoted 1 times

✉  Yuxing_Li 6 months, 1 week ago

Selected Answer: A

A is correct

upvoted 1 times

□ **sivuca1** 6 months, 1 week ago

Selected Answer: A

The other options (B, C and D) are not as safe or manageable:

upvoted 1 times

□ **sp323** 6 months, 3 weeks ago

Selected Answer: A

parameter store is secure, so A

upvoted 2 times

□ **ssoratroi** 6 months, 3 weeks ago

Selected Answer: A

parameter store is the better solution so A

upvoted 1 times

□ **jayvarma** 6 months, 3 weeks ago

obviously we are not going to store the API credentials in the local code variables. So option B is ruled out

Coming to Option D, It is not wrong to store the API credentials in the DynamoDB table as long as you encrypt them. But, Considering the extent of human error, there is a chance for the DynamoDB to be given too many permissions.

As Option A, A secrets manager or a parameter store's primary purpose is to store a secret, It is ideal to use such kind of service to store the API credentials.

upvoted 4 times

□ **Kashan6109** 7 months ago

Selected Answer: A

Correct answer is A, option B is not secure at all

upvoted 2 times

□ **ttamttam** 7 months, 3 weeks ago

Selected Answer: A

Why it is marked as B?????????????????

upvoted 4 times

□ **SD_CS** 1 month ago

I had to re-read the question after seeing the answer - whether they had asked for the LEAST favourable option

upvoted 1 times

□ **Solovey** 4 months, 2 weeks ago

for you to read this comments

upvoted 3 times

□ **MrPie** 8 months ago

It's A, but at least on react native to retrieve secrets from AWS you need the API key so this option doesn't work. You would need to make an HTTP gateway for a lambda function that retrieves the secret.

upvoted 1 times

□ **Devon_Fazekas** 9 months, 4 weeks ago

We all know option A is the most secure and efficient method. Who decided the answer was B?

upvoted 3 times

□ **Babay** 10 months ago

Selected Answer: A

The MOST secure solution to manage the API key while ensuring that the integration of the API key with the application code does not affect application performance is to store the API key in AWS Secrets Manager. The API key can be retrieved at runtime by using the AWS SDK, which does not impact application performance. Therefore, option A is the correct answer.

Option B is not secure as it exposes the API key to anyone with access to the code repository, which increases the risk of unauthorized access.

Option C and D may work, but they require additional configuration and permissions management. Storing the API key in an S3 bucket or a DynamoDB table could expose the key to unauthorized users if proper IAM policies are not in place. Therefore, option A is the most secure and simple solution to manage the API key while not affecting the application's performance.

upvoted 1 times

Question #10

Topic 1

A developer is deploying a new application to Amazon Elastic Container Service (Amazon ECS). The developer needs to securely store and retrieve different types of variables. These variables include authentication information for a remote API, the URL for the API, and credentials. The authentication information and API URL must be available to all current and future deployed versions of the application across development, testing, and production environments.

How should the developer retrieve the variables with the FEWEST application changes?

- A. Update the application to retrieve the variables from AWS Systems Manager Parameter Store. Use unique paths in Parameter Store for each variable in each environment. Store the credentials in AWS Secrets Manager in each environment.
- B. Update the application to retrieve the variables from AWS Key Management Service (AWS KMS). Store the API URL and credentials as unique keys for each environment.
- C. Update the application to retrieve the variables from an encrypted file that is stored with the application. Store the API URL and credentials in unique files for each environment.
- D. Update the application to retrieve the variables from each of the deployed environments. Define the authentication information and API URL in the ECS task definition as unique names during the deployment process.

Correct Answer: B

Community vote distribution

A (100%)

 **geekdamsel** Highly Voted  10 months ago

Got this question in exam.Correct answer is A.
upvoted 15 times

 **Warlord_92** Highly Voted  11 months, 2 weeks ago

Selected Answer: A
The application has credentials and URL, so it's convenient to store them in ssm parameter store restive them.
upvoted 9 times

 **ez_24** Most Recent  2 months, 2 weeks ago

Correct Answer is A

Option B, using AWS Key Management Service (AWS KMS), is not ideal for this scenario primarily because AWS KMS is designed for creating and controlling encryption keys, not for storing configuration data or credentials. KMS keys are used to encrypt and decrypt data, rather than directly storing or managing it. For securely managing and retrieving application configuration data and sensitive information like API credentials, Systems Manager Parameter Store and AWS Secrets Manager are more appropriate, offering direct support for these use cases with better integration for applications.

upvoted 3 times

 **leonardoliveros** 3 months, 2 weeks ago

Selected Answer: A
You put the different variables for each environment, is the best solution because it's isolated between environment
upvoted 1 times

 **vmintam** 4 months ago

i think corrent is A, but why is B ?
upvoted 1 times

 **alihaiider907** 5 months, 2 weeks ago

I think the wording of option A has a typo first it mentioned " Update the application to retrieve the variables from AWS Systems Manager Parameter Store" then it says "Store the credentials in AWS Secrets Manager in each environment."
upvoted 1 times

 **meetparag81** 6 months ago

A is correct
upvoted 1 times

 **jayvarma** 6 months, 3 weeks ago

Option A is correct. The AWS Systems Manager Paramter Store's primary purpose is to secure sensitive information such as API URLs, credentials and the variables that we store in it.
upvoted 2 times

 **Tee400** 8 months, 2 weeks ago

Selected Answer: A

AWS Systems Manager Parameter Store is a service that allows you to securely store configuration data such as API URLs, credentials, and other variables. By updating the application to retrieve the variables from Parameter Store, you can separate the configuration from the application code, making it easier to manage and update the variables without modifying the application itself. Storing the credentials in AWS Secrets Manager provides an additional layer of security for sensitive information.

upvoted 2 times

- MrTee** 10 months, 1 week ago

Selected Answer: A

his solution allows the developer to securely store and retrieve different types of variables, including authentication information for a remote API, the URL for the API, and credentials.

upvoted 2 times

- [Removed]** 10 months, 1 week ago

Selected Answer: A

A; that's what Parameters Store is for.

upvoted 1 times

- qsergii** 10 months, 3 weeks ago

Definitely A

upvoted 1 times

- fqmark** 10 months, 3 weeks ago

it should be a, kms is used for encryption: <https://aws.amazon.com/kms/>

upvoted 3 times

- prabhay786** 11 months, 2 weeks ago

It should be option A

upvoted 2 times

Question #11

Topic 1

A company is migrating legacy internal applications to AWS. Leadership wants to rewrite the internal employee directory to use native AWS services. A developer needs to create a solution for storing employee contact details and high-resolution photos for use with the new application. Which solution will enable the search and retrieval of each employee's individual details and high-resolution photos using AWS APIs?

- A. Encode each employee's contact information and photos using Base64. Store the information in an Amazon DynamoDB table using a sort key.
- B. Store each employee's contact information in an Amazon DynamoDB table along with the object keys for the photos stored in Amazon S3.
- C. Use Amazon Cognito user pools to implement the employee directory in a fully managed software-as-a-service (SaaS) method.
- D. Store employee contact information in an Amazon RDS DB instance with the photos stored in Amazon Elastic File System (Amazon EFS).

Correct Answer: B*Community vote distribution***B (100%)**

 **Bibay** Highly Voted  10 months ago

Selected Answer: B

B. Store each employee's contact information in an Amazon DynamoDB table along with the object keys for the photos stored in Amazon S3.

Storing each employee's contact information in an Amazon DynamoDB table along with the object keys for the photos stored in Amazon S3 provides a scalable and efficient solution for storing and retrieving employee details and high-resolution photos using AWS APIs. The developer can use the DynamoDB table to query and retrieve employee details, while the S3 bucket can be used to store the high-resolution photos. By using S3, the solution can support large amounts of data while enabling fast retrieval times. The combination of DynamoDB and S3 can provide a cost-effective and scalable solution for storing employee data and photos.

upvoted 6 times

 **Baalhammun** Most Recent  3 weeks, 2 days ago

Selected Answer: B

I agree, B is correct, DynamoDB to store user's data along the Key for S3 objects knowing that S3 is a good solution to store large amount of data or "high quality" images

upvoted 1 times

 **leonardoliveros** 3 months, 2 weeks ago

Selected Answer: B

DynamoDb + S3 is the best option for those scenarios

upvoted 1 times

 **hmdev** 6 months, 1 week ago

Selected Answer: B

DynamoDB is very fast, secure, and scalable. The S3 is very in-expensive, virtually limitless, and can handle large files. So B is the correct answer.

upvoted 2 times

 **ninomfr64** 6 months, 2 weeks ago

Selected Answer: B

- A. is not really clear to me, however encoding all info in base64 would make search a bit complex
- C. does not provide a solution for high resolution image
- D. EFS does not provide API access to content

upvoted 2 times

 **jayarma** 6 months, 3 weeks ago

Option B. As the question says that we have to store high-resolution photos, the solution is to use the S3 here. Because, DynamoDb cannot be used to store anything that is above 400 KB for each object.

In this case, we can use DynamoDb to store the contact information of each of the employees and reference the object keys in the table to retrieve the high-resolution images.

upvoted 1 times

 **ihta_2031** 11 months ago

Selected Answer: B

Agreed with B

upvoted 4 times

 **aragon_saa** 11 months, 3 weeks ago

B

<https://www.examtopics.com/discussions/amazon/view/88823-exam-aws-certified-developer-associate-topic-1-question-240/>

upvoted 4 times

Question #12

A developer is creating an application that will give users the ability to store photos from their cellphones in the cloud. The application needs to support tens of thousands of users. The application uses an Amazon API Gateway REST API that is integrated with AWS Lambda functions to process the photos. The application stores details about the photos in Amazon DynamoDB.

Users need to create an account to access the application. In the application, users must be able to upload photos and retrieve previously uploaded photos. The photos will range in size from 300 KB to 5 MB.

Which solution will meet these requirements with the LEAST operational overhead?

- A. Use Amazon Cognito user pools to manage user accounts. Create an Amazon Cognito user pool authorizer in API Gateway to control access to the API. Use the Lambda function to store the photos and details in the DynamoDB table. Retrieve previously uploaded photos directly from the DynamoDB table.
- B. Use Amazon Cognito user pools to manage user accounts. Create an Amazon Cognito user pool authorizer in API Gateway to control access to the API. Use the Lambda function to store the photos in Amazon S3. Store the object's S3 key as part of the photo details in the DynamoDB table. Retrieve previously uploaded photos by querying DynamoDB for the S3 key.
- C. Create an IAM user for each user of the application during the sign-up process. Use IAM authentication to access the API Gateway API. Use the Lambda function to store the photos in Amazon S3. Store the object's S3 key as part of the photo details in the DynamoDB table. Retrieve previously uploaded photos by querying DynamoDB for the S3 key.
- D. Create a users table in DynamoDB. Use the table to manage user accounts. Create a Lambda authorizer that validates user credentials against the users table. Integrate the Lambda authorizer with API Gateway to control access to the API. Use the Lambda function to store the photos in Amazon S3. Store the object's S3 key as part of the photo details in the DynamoDB table. Retrieve previously uploaded photos by querying DynamoDB for the S3 key.

Correct Answer: B

Community vote distribution

B (100%)

 **Untamables**  11 months, 2 weeks ago

Selected Answer: B

B

<https://docs.aws.amazon.com/apigateway/latest/developerguide/apigateway-integrate-with-cognito.html>
<https://aws.amazon.com/blogs/big-data/building-and-maintaining-an-amazon-s3-metadata-index-without-servers/>
 upvoted 10 times

 **geekdamsel**  10 months ago

Got this question in exam.

upvoted 8 times

 **leonardoliveros**  3 months, 2 weeks ago

Selected Answer: B

It's easier if you leverage all pros of Amazon Cognito you don't need creating a IAM user by employee
 upvoted 1 times

 **jayarma** 6 months, 3 weeks ago

As it is not a good practice to create a new IAM user for each user that signs up for the application, Option C is ruled out. Amazon Cognito user pools primary purpose is to authenticate and authorize web and mobile applications.

As the solution requires the application to store images that are between 300KB and 5MB in size, The idea of storing the images in the DynamoDB is ruled out because the object size in a dynamoDb table cannot exceed 400kb. The ideal solution for this problem would be to store the photos in S3 and store the object's key in the DynamoDB table.

So, Option B is the right answer

upvoted 6 times

 **ihta_2031** 11 months ago

Selected Answer: B

Cognito,
 Item size in dynamodb is less than this scenario
 upvoted 4 times

 **pratchatcap** 11 months, 1 week ago

Selected Answer: B

B is the most valid solution.

A nearest, but invalid, because you cannot store object in Dynamo.

upvoted 3 times

Question #13

Topic 1

A company receives food orders from multiple partners. The company has a microservices application that uses Amazon API Gateway APIs with AWS Lambda integration. Each partner sends orders by calling a customized API that is exposed through API Gateway. The API call invokes a shared Lambda function to process the orders.

Partners need to be notified after the Lambda function processes the orders. Each partner must receive updates for only the partner's own orders. The company wants to add new partners in the future with the fewest code changes possible.

Which solution will meet these requirements in the MOST scalable way?

- A. Create a different Amazon Simple Notification Service (Amazon SNS) topic for each partner. Configure the Lambda function to publish messages for each partner to the partner's SNS topic.
- B. Create a different Lambda function for each partner. Configure the Lambda function to notify each partner's service endpoint directly.
- C. Create an Amazon Simple Notification Service (Amazon SNS) topic. Configure the Lambda function to publish messages with specific attributes to the SNS topic. Subscribe each partner to the SNS topic. Apply the appropriate filter policy to the topic subscriptions.
- D. Create one Amazon Simple Notification Service (Amazon SNS) topic. Subscribe all partners to the SNS topic.

Correct Answer: C

Community vote distribution

C (84%) A (16%)

✉️  **Untamables**  11 months, 2 weeks ago

Selected Answer: C

C

<https://docs.aws.amazon.com/sns/latest/dg/sns-message-filtering.html>

upvoted 8 times

✉️  **Bibay**  10 months ago

Selected Answer: C

Option C is the most scalable way to meet the requirements. This solution allows for a single SNS topic to be used for all partners, which minimizes the need for code changes when adding new partners. By publishing messages with specific attributes to the SNS topic and applying the appropriate filter policy to the topic subscriptions, partners will only receive notifications for their own orders. This approach allows for a more flexible and scalable solution, where new partners can be added to the system with minimal changes to the existing codebase. Option A and D may not be scalable when there are a large number of partners, as creating a separate SNS topic for each partner or subscribing all partners to a single topic may not be feasible. Option B may result in a large number of Lambda functions that need to be managed separately.

upvoted 5 times

✉️  **xdkonorek2**  2 months, 1 week ago

Selected Answer: A

you can create up to

10.000 filter policies per AWS account

200 filter policies per topic (not subscription!) limits option C to 200 partners

100 000 topics per AWS account, limits option A to 100 000 partners

A and C works but A has better scalability with ability to add 100 000 partners

upvoted 1 times

✉️  **leonardoliveros** 3 months, 2 weeks ago

Selected Answer: C

You can use a filter policy to just send the info by partner

upvoted 1 times

✉️  **ninomfr64** 6 months, 2 weeks ago

Selected Answer: C

C. adding a new partner would only require to create a new subscription with the right filter

upvoted 1 times

✉️  **ttamatitam** 7 months, 3 weeks ago

Selected Answer: C

C seems the most efficient way. When you add more partners, you can just assign new codes for each partner. With the codes, you can send notifications to specific partners

upvoted 1 times

✉️  **rInd2000** 7 months, 3 weeks ago

Selected Answer: A

The answer is A since this question has two crucial requirements:
a) ... with the fewest code changes possible.

b) ...in the MOST scalable way

ChatGPT initially gives an incorrect answer and then adjusts its response when requirements are asked.
upvoted 1 times

✉️ **Skywalker23** 5 months, 1 week ago

Cannot be A. It requires change of lambda function code to send notifications to new SNS topics for new partners. Not a scalable solution.
upvoted 2 times

✉️ **rInd2000** 7 months, 3 weeks ago

OOH another important requirement: Each partner must receive updates for only the partner's own orders, that is not achievable with option C
upvoted 1 times

✉️ **Jeremy11** 7 months ago

This part of C seems to meet that requirement: Apply the appropriate filter policy to the topic subscriptions.
upvoted 4 times

✉️ **geekdamsel** 10 months ago

Got this question in exam. Correct answer is C.
upvoted 4 times

✉️ **Rpod** 10 months, 2 weeks ago

Selected Answer: C

C is the answer
upvoted 2 times

✉️ **robotgeek** 10 months, 3 weeks ago

Selected Answer: A

The subscription depends on how the subscriber subscribes to the topic. It would be unsecure to allow customers to notify to whatever they want, they would get messages from other partners. This is more like a traditional queue scenario.
upvoted 2 times

✉️ **Baalhammun** 3 weeks, 2 days ago

You apply message filtering on the SNS so they receive only their messages, think C is the correct answer
upvoted 1 times

✉️ **grimsdev** 11 months ago

Selected Answer: C

C is the best answer. A would work but is less scalable as you have to create new topics for each new partner.
upvoted 2 times

✉️ **TungNNS** 11 months ago

Selected Answer: C

C is the answer
<https://docs.aws.amazon.com/sns/latest/dg/sns-message-filtering.html>
upvoted 3 times

✉️ **robotgeek** 10 months, 3 weeks ago

So you are allowing Customer A to subscribe to orders from Customer B? sounds like a security fiasco IMHO. Is there any way you as a publisher can limit what Customers can subscribe to which messages with only 1 topic?
upvoted 1 times

✉️ **ihta_2031** 11 months ago

Selected Answer: C

C is the answer.
To receive only a subset of the messages, a subscriber must assign a filter policy to the topic subscription.
upvoted 4 times

✉️ **shahs10** 11 months, 1 week ago

Selected Answer: A

I think Option A should be the answer where for each partner we should have an SNS topic
upvoted 1 times

Question #14

Topic 1

A financial company must store original customer records for 10 years for legal reasons. A complete record contains personally identifiable information (PII). According to local regulations, PII is available to only certain people in the company and must not be shared with third parties. The company needs to make the records available to third-party organizations for statistical analysis without sharing the PII.

A developer wants to store the original immutable record in Amazon S3. Depending on who accesses the S3 document, the document should be returned as is or with all the PII removed. The developer has written an AWS Lambda function to remove the PII from the document. The function is named removePii.

What should the developer do so that the company can meet the PII requirements while maintaining only one copy of the document?

- A. Set up an S3 event notification that invokes the removePii function when an S3 GET request is made. Call Amazon S3 by using a GET request to access the object without PII.
- B. Set up an S3 event notification that invokes the removePii function when an S3 PUT request is made. Call Amazon S3 by using a PUT request to access the object without PII.
- C. Create an S3 Object Lambda access point from the S3 console. Select the removePii function. Use S3 Access Points to access the object without PII.
- D. Create an S3 access point from the S3 console. Use the access point name to call the GetObjectLegalHold S3 API function. Pass in the removePii function name to access the object without PII.

Correct Answer: C

Community vote distribution

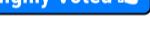
C (100%)

✉  **Untamables**  11 months, 2 weeks ago

Selected Answer: C

C

<https://aws.amazon.com/s3/features/object-lambda/>
upvoted 11 times

✉  **aragon_saa**  11 months, 3 weeks ago

C

<https://www.examtopics.com/discussions/amazon/view/88229-exam-aws-certified-developer-associate-topic-1-question-174/>
upvoted 7 times

✉  **gcmrjbr**  3 months, 2 weeks ago

An S3 Object Lambda access point is a new type of access point that you can create to invoke your own AWS Lambda function to modify the content of an S3 object. You can use S3 Object Lambda access points to transform data as it is being retrieved from an S3 bucket, without modifying the original data stored in the bucket
upvoted 5 times

✉  **pagyabeng** 9 months, 3 weeks ago

Why is it C?

upvoted 2 times

✉  **geekdamsel** 10 months ago

Got this question in exam.Correct answer is C.

upvoted 2 times

✉  **Rpod** 10 months, 2 weeks ago

Selected Answer: C

C answer

upvoted 1 times

✉  **ihta_2031** 11 months ago

Selected Answer: C

It is C

upvoted 3 times

Question #15

Topic 1

A developer is deploying an AWS Lambda function. The developer wants the ability to return to older versions of the function quickly and seamlessly.

How can the developer achieve this goal with the LEAST operational overhead?

- A. Use AWS OpsWorks to perform blue/green deployments.
- B. Use a function alias with different versions.
- C. Maintain deployment packages for older versions in Amazon S3.
- D. Use AWS CodePipeline for deployments and rollbacks.

Correct Answer: B*Community vote distribution* B (100%)

✉  **Untamables**  11 months, 2 weeks ago

Selected Answer: B

B

<https://docs.aws.amazon.com/lambda/latest/dg/configuration-aliases.html>

upvoted 5 times

✉  **ubiqinon**  9 months, 3 weeks ago

B is the least overhead solution

upvoted 3 times

✉  **geekdamsel** 10 months ago

Got this question in exam. Correct answer is B.

upvoted 3 times

✉  **zk1200** 10 months, 3 weeks ago

Selected Answer: B

I considered D as well which refers to using CodeDeploy. However using CodeDeploy adds more work. So alias makes more sense.

upvoted 2 times

✉  **ihta_2031** 11 months ago

Selected Answer: B

lambda function version => alias

upvoted 4 times

✉  **aragon_saa** 11 months, 3 weeks ago

B

<https://www.examtopics.com/discussions/amazon/view/96149-exam-aws-certified-developer-associate-topic-1-question-441/>

upvoted 3 times

Question #16

Topic 1

A developer has written an AWS Lambda function. The function is CPU-bound. The developer wants to ensure that the function returns responses quickly.

How can the developer improve the function's performance?

- A. Increase the function's CPU core count.
- B. Increase the function's memory.
- C. Increase the function's reserved concurrency.
- D. Increase the function's timeout.

Correct Answer: B

Community vote distribution

B (97%)

✉ **ihta_2031** Highly Voted 11 months ago

Selected Answer: B

Cpu utilisation => increase memory
upvoted 12 times

✉ **Kashan6109** Highly Voted 7 months ago

Selected Answer: B

Option B is correct, the only adjustable parameter (in terms of hardware) is lambda memory. Increasing lambda memory will result in automatic adjustment of CPU.

Lambda memory is adjustable from 128 MB upto 10 GB
upvoted 6 times

✉ **leonardoliveros** Most Recent 3 months, 2 weeks ago

Selected Answer: B

If you increase the memory on a Lambda Function hence your vCPU also increased
upvoted 1 times

✉ **james2033** 3 months, 3 weeks ago

Selected Answer: B

Quote 'If a function is CPU-, network- or memory-bound, then changing the memory setting can dramatically improve its performance.' at <https://docs.aws.amazon.com/lambda/latest/operatorguide/computing-power.html>
upvoted 3 times

✉ **Majong** 9 months, 1 week ago

Selected Answer: B

Lambda allocates CPU power in proportion to the amount of memory configured. You can read more here:

<https://docs.aws.amazon.com/lambda/latest/dg/configuration-function-common.html#configuration-memory-console>
upvoted 5 times

✉ **Devon_Fazekas** 9 months, 4 weeks ago

Increasing the function's CPU core count is not an option in AWS Lambda. AWS Lambda automatically manages the allocation of CPU power and only allows scaling of memory.
upvoted 2 times

✉ **geekdamsel** 10 months ago

Got this question in exam.Correct answer is B.
upvoted 3 times

✉ **Bibay** 10 months ago

Selected Answer: B

. Increase the function's memory.

The performance of an AWS Lambda function is primarily determined by the amount of allocated memory. When you increase the memory, you also increase the available CPU and network resources. This can result in faster execution times, especially for CPU-bound functions. Increasing the CPU core count, reserved concurrency, or timeout may not have as significant an impact on performance as increasing memory.

upvoted 1 times

✉ **blathul** 10 months, 1 week ago

Selected Answer: B

Adding more memory proportionally increases the amount of CPU, increasing the overall computational power available. If a function is CPU-, network- or memory-bound, then changing the memory setting can dramatically improve its performance.

<https://docs.aws.amazon.com/lambda/latest/operatorguide/computing-power.html>

upvoted 1 times

 **Syre** 10 months, 3 weeks ago

Selected Answer: A

On this particular question the answer is A.

while increasing memory can indirectly improve CPU performance, it's not always the most effective solution for CPU-bound functions, and increasing the CPU core count is usually a better option for improving performance in such cases. Please note - CPU-Bound functions. This question is to trick you

upvoted 1 times

 **Majong** 9 months, 1 week ago

In this particular question it is B. You are right that in normal question it might be A but for a Lambda function you are not able to change the CPU. Lambda allocates CPU power in proportion to the amount of memory configured. You can read more here:

<https://docs.aws.amazon.com/lambda/latest/dg/configuration-function-common.html#configuration-memory-console>

upvoted 4 times

 **Untamables** 11 months, 2 weeks ago

Selected Answer: B

B

<https://docs.aws.amazon.com/lambda/latest/dg/configuration-function-common.html#configuration-memory-console>

upvoted 3 times

Question #17

Topic 1

For a deployment using AWS Code Deploy, what is the run order of the hooks for in-place deployments?

- A. BeforeInstall -> ApplicationStop -> ApplicationStart -> AfterInstall
- B. ApplicationStop -> BeforeInstall -> AfterInstall -> ApplicationStart
- C. BeforeInstall -> ApplicationStop -> ValidateService -> ApplicationStart
- D. ApplicationStop -> BeforeInstall -> ValidateService -> ApplicationStart

Correct Answer: A

Community vote distribution



✉ **prchatcap** 11 months, 1 week ago

Selected Answer: B

It's B. Check the image in the link.

<https://docs.aws.amazon.com/codedeploy/latest/userguide/reference-appspec-file-structure-hooks.html#appspec-hooks-server>
upvoted 18 times

✉ **awsdummie** 9 months, 1 week ago

Answer A For InPlace deployment
upvoted 2 times

✉ **SD_CS** 4 weeks, 1 day ago

Selected Answer: B

Answer is B. There is no doubt - please go to the URL <https://docs.aws.amazon.com/codedeploy/latest/userguide/reference-appspec-file-structure-hooks.html>
and search with "In-place deployments"

In fact none of the deployments follow the order mentioned in A

upvoted 1 times

✉ **ez_24** 2 months, 2 weeks ago

B

In AWS CodeDeploy for in-place deployments, the hooks run in the following order:

ApplicationStop: Executed before the new application revision is downloaded.

DownloadBundle: The new application revision is downloaded.

BeforeInstall: Executed after the new revision is downloaded but before the new version is installed.

Install: The application revision specified in the deployment is installed.

AfterInstall: Executed after the application revision is installed.

ApplicationStart: Invoked to start any services that were stopped during ApplicationStop.

ValidateService: Ensures the service is operating correctly after the new deployment.

This sequence ensures a smooth deployment process by systematically stopping, updating, and restarting the application.

upvoted 2 times

✉ **quanbui** 4 months, 3 weeks ago

ApplicationStop -> BeforeInstall -> AfterInstall -> ApplicationStart -> ValidateService.

Ref: <https://docs.aws.amazon.com/codedeploy/latest/userguide/reference-appspec-file-structure-hooks.html>

upvoted 1 times

✉ **Skywalker23** 5 months, 1 week ago

Selected Answer: B

Application must be stopped before installation. Otherwise the installation may corrupt the running application's files and cause damages. Not good.

upvoted 2 times

✉ **Tony88** 6 months ago

Selected Answer: B

Stopped -> Installed -> Started -> Validated

Go with B.

upvoted 2 times

✉ **ninomfr64** 6 months, 2 weeks ago

Selected Answer: B

I's B as per doc <https://docs.aws.amazon.com/codedeploy/latest/userguide/reference-appspec-file-structure-hooks.html#appspec-hooks-server>:~:text=a%20load%20balancer.-,Lifecycle%20event%20hook%20availability,-The%20following%20table

upvoted 1 times

 **sp323** 6 months, 3 weeks ago

Application start is after install

upvoted 1 times

 **fcbc62d** 7 months ago

Selected Answer: B

For in-place deployment B is correct.

<https://docs.aws.amazon.com/codedeploy/latest/userguide/reference-appspec-file-structure-hooks.html>

upvoted 1 times

 **jipark** 7 months, 1 week ago

Selected Answer: B

this image explain all :

<https://docs.aws.amazon.com/codedeploy/latest/userguide/reference-appspec-file-structure-hooks.html#appspec-hooks-server>

upvoted 1 times

 **ScherbakovMike** 9 months, 1 week ago

Definitely, B: the order is the same in case of InPlace and Blue/Green deployment:

<https://docs.aws.amazon.com/codedeploy/latest/userguide/reference-appspec-file-structure-hooks.html#reference-appspec-file-structure-hooks-availability>

upvoted 1 times

 **awsdummyie** 9 months, 1 week ago

Selected Answer: A

Refere the video 18:00 time stamp <https://youtu.be/lSttjCIBd6U>

upvoted 2 times

 **Nagendarh** 9 months, 4 weeks ago

Ans: A

For an in-place deployment using AWS CodeDeploy, the run order of the hooks is option A, "BeforeInstall -> ApplicationStop -> ApplicationStart -> AfterInstall."

This is the correct order of hooks for an in-place deployment, where the deployment package is installed on the same set of Amazon EC2 instances that are running the current version of the application.

upvoted 2 times

 **DeaconStJohn** 10 months, 2 weeks ago

Selected Answer: B

I'll go with B based on the link provided by others

upvoted 2 times

 **Syre** 10 months, 3 weeks ago

Selected Answer: A

You guys should read the questions carefully. Answer is A.

You are confusing the run order of hooks for in-place deployments with the run order of hooks for blue/green deployments.

For blue/green deployments, the run order of the hooks is indeed ApplicationStop -> BeforeInstall -> AfterInstall -> ApplicationStart, which matches option B. However, for in-place deployments, the correct run order of the hooks is BeforeInstall -> ApplicationStop -> AfterInstall -> ApplicationStart, as stated in option A.

upvoted 3 times

 **[Removed]** 7 months, 2 weeks ago

BeforeInstall runs after ApplicationStop for ALL deployments types. The correct answer is B

upvoted 1 times

 **DeaconStJohn** 10 months, 2 weeks ago

From the below link:

<https://docs.aws.amazon.com/codedeploy/latest/userguide/reference-appspec-file-structure-hooks.html#appspec-hooks-server>

Neither type of deployment follows this order.

BeforeInstall -> ApplicationStop -> AfterInstall -> ApplicationStart

upvoted 2 times

 **brandon87** 11 months ago

Selected Answer: B

Refer to table.

ValidationService is last step in this scenario.

<https://docs.aws.amazon.com/codedeploy/latest/userguide/reference-appspec-file-structure-hooks.html>

upvoted 3 times

March2023 11 months, 2 weeks ago

Selected Answer: A

The answer is A
upvoted 2 times

March2023 11 months, 1 week ago

Looks like its B
upvoted 2 times

Question #18

A company is building a serverless application on AWS. The application uses an AWS Lambda function to process customer orders 24 hours a day, 7 days a week. The Lambda function calls an external vendor's HTTP API to process payments.

During load tests, a developer discovers that the external vendor payment processing API occasionally times out and returns errors. The company expects that some payment processing API calls will return errors.

The company wants the support team to receive notifications in near real time only when the payment processing external API error rate exceed 5% of the total number of transactions in an hour. Developers need to use an existing Amazon Simple Notification Service (Amazon SNS) topic that is configured to notify the support team.

Which solution will meet these requirements?

- A. Write the results of payment processing API calls to Amazon CloudWatch. Use Amazon CloudWatch Logs Insights to query the CloudWatch logs. Schedule the Lambda function to check the CloudWatch logs and notify the existing SNS topic.
- B. Publish custom metrics to CloudWatch that record the failures of the external payment processing API calls. Configure a CloudWatch alarm to notify the existing SNS topic when error rate exceeds the specified rate.
- C. Publish the results of the external payment processing API calls to a new Amazon SNS topic. Subscribe the support team members to the new SNS topic.
- D. Write the results of the external payment processing API calls to Amazon S3. Schedule an Amazon Athena query to run at regular intervals. Configure Athena to send notifications to the existing SNS topic when the error rate exceeds the specified rate.

Correct Answer: B

Community vote distribution

B (100%)

 **Bibay** Highly Voted  10 months ago

Selected Answer: B

B. Publish custom metrics to CloudWatch that record the failures of the external payment processing API calls. Configure a CloudWatch alarm to notify the existing SNS topic when the error rate exceeds the specified rate is the best solution to meet the requirements.

With CloudWatch custom metrics, developers can publish and monitor custom data points, including the number of failed requests to the external payment processing API. A CloudWatch alarm can be configured to notify an SNS topic when the error rate exceeds the specified rate, allowing the support team to be notified in near real-time.

Option A is not optimal since it involves scheduling a Lambda function to check the CloudWatch logs. Option C may not provide the desired functionality since it does not specify a rate at which to notify the support team. Option D is more complex than necessary, as it involves writing the results to S3 and configuring an Athena query to send notifications to an SNS topic.

upvoted 11 times

 **Untamables** Highly Voted  11 months, 2 weeks ago

Selected Answer: B

The correct answer is B.

You can use the Embedded Metrics format to embed custom metrics alongside detailed log event data. CloudWatch automatically extracts the custom metrics so you can visualize and alarm on them, for real-time incident detection.

<https://docs.aws.amazon.com/lambda/latest/operatorguide/custom-metrics.html>

upvoted 5 times

 **Tony88** Most Recent  6 months ago

Selected Answer: B

Require "near real-time" notification, so you should not use scheduled solution.

Creating a new SNS topic is no sense.

upvoted 2 times

 **Ponyi** 3 months, 4 weeks ago

In the question, it is also mentioned that "Developer needs to use the existing SNS topic...."

upvoted 1 times

 **jayarma** 6 months, 3 weeks ago

Option B. Using custom metrics, Developers will be able to publish and monitor custom data points such as the no. of failed requests to the external payment processing API. Create a CloudWatch alarm and configure it to be triggered when the rate of error exceeds the specified number in the question.

upvoted 1 times

 **svrntr** 11 months, 2 weeks ago

Selected Answer: B

It is B

upvoted 3 times

Question #19

Topic 1

A company is offering APIs as a service over the internet to provide unauthenticated read access to statistical information that is updated daily. The company uses Amazon API Gateway and AWS Lambda to develop the APIs. The service has become popular, and the company wants to enhance the responsiveness of the APIs. Which action can help the company achieve this goal?

- A. Enable API caching in API Gateway.
- B. Configure API Gateway to use an interface VPC endpoint.
- C. Enable cross-origin resource sharing (CORS) for the APIs.
- D. Configure usage plans and API keys in API Gateway.

Correct Answer: A*Community vote distribution*

A (100%)

 **Bibay** Highly Voted  10 months ago

Selected Answer: A

A. Enable API caching in API Gateway can help the company enhance the responsiveness of the APIs. By enabling caching, API Gateway stores the responses from the API and returns them for subsequent requests instead of forwarding the requests to Lambda. This reduces the number of requests to Lambda, improves API performance, and reduces latency for users.

upvoted 15 times

 **Pupina** 8 months ago

I agree

upvoted 1 times

 **yashika2005** 9 months ago

thanks a ton for all your explanations in every answer! Really appreciate it! Very helpful!

upvoted 1 times

 **leonardoliveros** Most Recent  3 months, 2 weeks ago

Selected Answer: A

Caching the request is the best option because the request don't forward to Lambda Function and this reduces latency and also recude costs

upvoted 2 times

 **zoro_chi** 5 months ago

can someone please share pdf file with me at jagbetuyi001@gmail.com. I have my exam next week. Thanks in advance beautiful people.

upvoted 1 times

 **Tony88** 6 months ago

Selected Answer: A

Go with A.

- A. Caching is the general solution to improve performance of non-frequently change data. (in this case, daily, not really frequent)
- B. interface endpoint is a VPC concept, in this architect we don't need to concern with VPC. For those who are interested, go check with interface endpoint and gateway endpoint.
- C. CORS is short for cross origin resource share. it is a distractor here. You may consider CORS when your client cannot access to your API Gateway resource, not when you want to improve the performance.
- D. usage plan is used when your API client's behaviour is predictable, and it can avoid anormal usage.

upvoted 3 times

 **yuruyenucakc** 6 months, 1 week ago

A-> Caching frequently accessed api calls allows reducing process time every time api is called.

B-> You shloud configure VPC if you want to change network security of your application. So it does not neccessarily increase the performance.

C-> CORS (Cross Origin Resource Sharing), allows you to proccess the api calls that comes from outside of your AWS organization.

Again nothing to do with the performance. One of the use case of this feature is if you want to keep your web app apis reachable from public internet you should enable CORS for it.

D-> This is mainly for throttling and controlling who can access the API and at what rate. While it's useful for controlling and metering access, it doesn't enhance the responsiveness of the API

upvoted 1 times

 **svrntr** 11 months, 2 weeks ago

Selected Answer: A

I vote for A

upvoted 3 times

 **Untamables** 11 months, 2 weeks ago

Selected Answer: A

A

<https://docs.aws.amazon.com/apigateway/latest/developerguide/api-gateway-caching.html>

upvoted 3 times

Question #20

Topic 1

A developer wants to store information about movies. Each movie has a title, release year, and genre. The movie information also can include additional properties about the cast and production crew. This additional information is inconsistent across movies. For example, one movie might have an assistant director, and another movie might have an animal trainer.

The developer needs to implement a solution to support the following use cases:

For a given title and release year, get all details about the movie that has that title and release year.

For a given title, get all details about all movies that have that title.

For a given genre, get all details about all movies in that genre.

Which data store configuration will meet these requirements?

- A. Create an Amazon DynamoDB table. Configure the table with a primary key that consists of the title as the partition key and the release year as the sort key. Create a global secondary index that uses the genre as the partition key and the title as the sort key.
- B. Create an Amazon DynamoDB table. Configure the table with a primary key that consists of the genre as the partition key and the release year as the sort key. Create a global secondary index that uses the title as the partition key.
- C. On an Amazon RDS DB instance, create a table that contains columns for title, release year, and genre. Configure the title as the primary key.
- D. On an Amazon RDS DB instance, create a table where the primary key is the title and all other data is encoded into JSON format as one additional column.

Correct Answer: A

Community vote distribution

A (100%)

 **Bibay** Highly Voted  10 months ago

Selected Answer: A

A. Create an Amazon DynamoDB table. Configure the table with a primary key that consists of the title as the partition key and the release year as the sort key. Create a global secondary index that uses the genre as the partition key and the title as the sort key.

This option is the best choice for the given requirements. By using DynamoDB, the developer can store the movie information in a flexible and scalable NoSQL database. The primary key can be set to the title and release year, allowing for efficient retrieval of information about a specific movie. The global secondary index can be created using the genre as the partition key, allowing for efficient retrieval of information about all movies in a specific genre. Additionally, the use of a NoSQL database like DynamoDB allows for the flexible storage of additional properties about the cast and crew, as each movie can have different properties without affecting the structure of the database.

upvoted 10 times

 **leonardoliveros** Most Recent  3 months, 2 weeks ago

Selected Answer: A

If you create a primary key with title(pk) and release(sk) date you covered two scenarios, and also you need a GSI by last scenario with genre so you should creating a GSI with genre (pk) and title (sk)

upvoted 1 times

 **Tony88** 6 months ago

Selected Answer: A

Go with A.

NoSQL is good when data attributes are inconsistent -> DynamoDB

Primary key should be unique, go with title + release year.

upvoted 3 times

 **jayvarma** 6 months, 3 weeks ago

As the schema for each entry of data into the database is not the same all the time, We would require a NoSQL database. So, RDS DB instance is ruled out. The answer is between A and B.

As we would need the partition key to be as unique as possible, we would like to have the title of the movie as the partition key. Because having the partition key as the genre will create a hot partition problem and our data stored in the DynamoDB will be skewed.

So option A is the answer.

upvoted 3 times

 **Krok** 11 months ago

Selected Answer: A

It's A - I totally agree. It's a single appropriate solution. But in my opinion genre isn't a quite good option as GSI partition key - it isn't high distribution and we can get a hot partition.

upvoted 2 times

 **shahs10** 11 months, 1 week ago

Selected Answer: A

Option A because we have to search on the basis of title so it is better to partition by title. Also we have to search by genre so it is good option to make GSI using genre as partition key

upvoted 2 times

 **Untamables** 11 months, 2 weeks ago

Selected Answer: A

The correct answer is A.

Amazon DynamoDB is suited for storing inconsistent attributes data across items.

Option B is wrong. This solution does not help get items with the condition of the combination, title and release year.

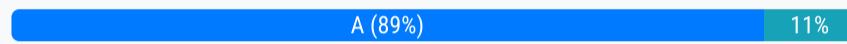
upvoted 3 times

Question #21

Topic 1

A developer maintains an Amazon API Gateway REST API. Customers use the API through a frontend UI and Amazon Cognito authentication. The developer has a new version of the API that contains new endpoints and backward-incompatible interface changes. The developer needs to provide beta access to other developers on the team without affecting customers. Which solution will meet these requirements with the LEAST operational overhead?

- A. Define a development stage on the API Gateway API. Instruct the other developers to point the endpoints to the development stage.
- B. Define a new API Gateway API that points to the new API application code. Instruct the other developers to point the endpoints to the new API.
- C. Implement a query parameter in the API application code that determines which code version to call.
- D. Specify new API Gateway endpoints for the API endpoints that the developer wants to add.

Correct Answer: A*Community vote distribution*

Bibay Highly Voted 10 months ago

Selected Answer: A

Option A is the correct solution to meet the requirements with the least operational overhead.

Defining a development stage on the API Gateway API enables other developers to test the new version of the API without affecting the production environment. This approach allows the developers to work on the new version of the API independently and avoid conflicts with the production environment.

The other options involve creating a new API or new endpoints, which could introduce additional operational overhead, such as managing multiple APIs or endpoints, configuring access control, and updating the frontend UI to point to the new endpoints or API. Option C also introduces additional complexity by requiring the implementation of a query parameter to determine which code version to call.

upvoted 8 times

hungnv6_rikkei Most Recent 3 weeks, 4 days ago

A is answer

upvoted 1 times

Alearn 2 months, 1 week ago

Selected Answer: B

LEAST operational overhead would be B.

upvoted 2 times

leonardoliveros 3 months, 2 weeks ago

Selected Answer: A

The stages gives the capacity to tests a new version in an APIg without affecting customers in others stages

upvoted 2 times

Tony88 6 months ago

Selected Answer: A

The best practice is to define a development stage.

upvoted 3 times

jayvarma 6 months, 3 weeks ago

Option A is the right answer. Defining a development stage on the API Gateway API would provide other developers with a way to test the newer version of the API without affecting prod.

The rest of the options would create a lot of operational overhead.

upvoted 1 times

MrTee 10 months, 1 week ago

Selected Answer: A

The developer should define a development stage on the API Gateway API. They should then instruct the other developers to point the endpoints to the development stage. This solution will meet the requirements with the least operational overhead

upvoted 1 times

Untamables 11 months, 2 weeks ago

Selected Answer: A

A

<https://docs.aws.amazon.com/apigateway/latest/developerguide/set-up-stages.html>

<https://docs.aws.amazon.com/apigateway/latest/developerguide/canary-release.html>

upvoted 3 times

 **aragon_saa** 11 months, 3 weeks ago

A

<https://www.examtopics.com/discussions/amazon/view/88872-exam-aws-certified-developer-associate-topic-1-question-318/>

upvoted 3 times

Question #22

Topic 1

A developer is creating an application that will store personal health information (PHI). The PHI needs to be encrypted at all times. An encrypted Amazon RDS for MySQL DB instance is storing the data. The developer wants to increase the performance of the application by caching frequently accessed data while adding the ability to sort or rank the cached datasets.

Which solution will meet these requirements?

- A. Create an Amazon ElastiCache for Redis instance. Enable encryption of data in transit and at rest. Store frequently accessed data in the cache.
- B. Create an Amazon ElastiCache for Memcached instance. Enable encryption of data in transit and at rest. Store frequently accessed data in the cache.
- C. Create an Amazon RDS for MySQL read replica. Connect to the read replica by using SSL. Configure the read replica to store frequently accessed data.
- D. Create an Amazon DynamoDB table and a DynamoDB Accelerator (DAX) cluster for the table. Store frequently accessed data in the DynamoDB table.

Correct Answer: A

Community vote distribution

A (100%)

✉  **Untamables**  11 months, 2 weeks ago

Selected Answer: A

A

You can use Amazon ElastiCache for Redis Sorted Sets to easily implement a dashboard that keeps a list of sorted data by their rank.
<https://docs.aws.amazon.com/AmazonElastiCache/latest/red-ug/elasticache-use-cases.html#elasticache-for-redis-use-cases-gaming>
<https://aws.amazon.com/elasticache/redis-vs-memcached/>

upvoted 12 times

✉  **jipark** 7 months ago

in sum,
 REDIS featured encryption, PCI-DSS
 MemCache support AutoDiscovery
 upvoted 2 times

✉  **Bibay**  10 months ago

Selected Answer: A

To meet the requirements of caching frequently accessed data while adding the ability to sort or rank cached datasets, a developer should choose Amazon ElastiCache for Redis. ElastiCache is a web service that provides an in-memory data store in the cloud, and it supports both Memcached and Redis engines. While both engines are suitable for caching frequently accessed data, Redis is a better choice for this use case because it provides sorted sets and other data structures that allow for sorting and ranking of cached datasets. The data in ElastiCache can be encrypted at rest and in transit, ensuring the security of the PHI. Therefore, option A is the correct answer.

upvoted 9 times

✉  **leonardoliveros**  3 months, 2 weeks ago

Selected Answer: A

Redis is the best option to cached the results of queries and it also offer a encryption in-transit and at-rest
 upvoted 1 times

✉  **nmc12** 5 months ago

Redis: Supports various data structures such as strings, hashes, lists, sets, sorted sets, bitmaps, hyperloglogs, and geospatial indexes.
 Memcached: Primarily supports string-based keys and values; does not support advanced data structures.
 upvoted 4 times

✉  **brandon87** 11 months ago

Selected Answer: A

ElastiCache for Redis also features Online Cluster Resizing, supports encryption, and is HIPAA eligible and PCI DSS compliant.
<https://aws.amazon.com/elasticache/redis-vs-memcached/>
 upvoted 5 times

Question #23

Topic 1

A company has a multi-node Windows legacy application that runs on premises. The application uses a network shared folder as a centralized configuration repository to store configuration files in .xml format. The company is migrating the application to Amazon EC2 instances. As part of the migration to AWS, a developer must identify a solution that provides high availability for the repository.

Which solution will meet this requirement MOST cost-effectively?

- A. Mount an Amazon Elastic Block Store (Amazon EBS) volume onto one of the EC2 instances. Deploy a file system on the EBS volume. Use the host operating system to share a folder. Update the application code to read and write configuration files from the shared folder.
- B. Deploy a micro EC2 instance with an instance store volume. Use the host operating system to share a folder. Update the application code to read and write configuration files from the shared folder.
- C. Create an Amazon S3 bucket to host the repository. Migrate the existing .xml files to the S3 bucket. Update the application code to use the AWS SDK to read and write configuration files from Amazon S3.
- D. Create an Amazon S3 bucket to host the repository. Migrate the existing .xml files to the S3 bucket. Mount the S3 bucket to the EC2 instances as a local volume. Update the application code to read and write configuration files from the disk.

Correct Answer: C

Community vote distribution

C (75%)

D (25%)

 **shahs10** Highly Voted 11 months, 1 week ago

Why is not there EFS to replace shared file system
upvoted 11 times

 **[Removed]** 2 months, 4 weeks ago

This is what I was looking for - but not an option
upvoted 1 times

 **nmc12** 5 months ago

it is best solution. But we can use S3 without EFS
upvoted 2 times

 **Babay** Highly Voted 9 months, 3 weeks ago

C
Option C is the most cost-effective solution to provide high availability for the centralized configuration repository. Amazon S3 provides a highly durable and available object storage service. S3 stores objects redundantly across multiple devices and multiple facilities within a region, making it highly available. The developer can migrate the existing .xml files to an S3 bucket and update the application code to use the AWS SDK to read and write configuration files from Amazon S3.

Option A and B are not the best solutions as they require the developer to use the host operating system to share a folder, which can lead to a single point of failure.

Option D is not a recommended solution as it is not a direct way of accessing an S3 bucket. While it is possible to use third-party tools to mount an S3 bucket as a local disk, it can lead to performance issues and additional complexity.
upvoted 7 times

 **someone234** Most Recent 3 weeks, 1 day ago

Selected Answer: C

Option C is the most cost-effective solution to provide high availability for the centralized configuration repository. Amazon S3 provides a highly durable and available object storage service. S3 stores objects redundantly across multiple devices and multiple facilities within a region, making it highly available. The developer can migrate the existing .xml files to an S3 bucket and update the application code to use the AWS SDK to read and write configuration files from Amazon S3.

upvoted 1 times

 **gqs3119** 2 months, 2 weeks ago

Selected Answer: D

Today It's D.
Few months ago I'd pick C, but since then amazon released mountpoint for linux, so it's possible to mount S3 on any major Linux distro, by using WSL 2 it is also possible to mount S3 on Windows. Doing so cuts the cost of modifying the legacy application.

<https://docs.aws.amazon.com/AmazonS3/latest/userguide/mountpoint-installation.html>
<https://aws.plainenglish.io/mounting-amazon-s3-buckets-on-windows-52b5f1434cd7>

upvoted 1 times

 **SD_CS** 4 weeks, 1 day ago

But the apps are legacy windows app so mountpoints will not help - my opinion

upvoted 1 times

✉ **squeeze_talus0y** 1 month, 2 weeks ago

Your solution overcomplicates things.

upvoted 1 times

✉ **leonardoliveros** 3 months, 2 weeks ago

Selected Answer: C

EBS and Instance Store just attached one instance so these's expense and don't scalable, and S3 it's the best option to handle the repository of .xml because it's very scalable and low-cost

upvoted 2 times

✉ **HanTran0795** 4 months, 2 weeks ago

Selected Answer: D

It is a Windows legacy application. What if the sdk doesn't support the app? I choose D.

upvoted 2 times

✉ **ronn555** 3 months, 4 weeks ago

C

S3 Buckets can only be mounted directly to Linux EC2 instances

upvoted 1 times

✉ **gqs3119** 2 months, 2 weeks ago

It can be mounted to many distros today, and using WSL2 also to Windows.

<https://docs.aws.amazon.com/AmazonS3/latest/userguide/mountpoint-installation.html>

upvoted 1 times

✉ **AhmedAliHashmi** 6 months, 1 week ago

Correct answer is C

upvoted 1 times

✉ **senadevtrd** 9 months, 1 week ago

Selected Answer: C

In theses options, this is more correct

upvoted 1 times

✉ **Untamables** 11 months, 2 weeks ago

Selected Answer: C

C

<https://docs.aws.amazon.com/AWSEC2/latest/WindowsGuide/AmazonS3.html>

<https://docs.aws.amazon.com/AmazonS3/latest/userguide/UsingAWSSDK.html>

upvoted 5 times

✉ **aragon_saa** 11 months, 3 weeks ago

C

<https://www.examtopics.com/discussions/amazon/view/88701-exam-aws-certified-developer-associate-topic-1-question-227/>

upvoted 4 times

Question #24

A company wants to deploy and maintain static websites on AWS. Each website's source code is hosted in one of several version control systems, including AWS CodeCommit, Bitbucket, and GitHub.

The company wants to implement phased releases by using development, staging, user acceptance testing, and production environments in the AWS Cloud. Deployments to each environment must be started by code merges on the relevant Git branch. The company wants to use HTTPS for all data exchange. The company needs a solution that does not require servers to run continuously.

Which solution will meet these requirements with the LEAST operational overhead?

- A. Host each website by using AWS Amplify with a serverless backend. Connect the repository branches that correspond to each of the desired environments. Start deployments by merging code changes to a desired branch.
- B. Host each website in AWS Elastic Beanstalk with multiple environments. Use the EB CLI to link each repository branch. Integrate AWS CodePipeline to automate deployments from version control code merges.
- C. Host each website in different Amazon S3 buckets for each environment. Configure AWS CodePipeline to pull source code from version control. Add an AWS CodeBuild stage to copy source code to Amazon S3.
- D. Host each website on its own Amazon EC2 instance. Write a custom deployment script to bundle each website's static assets. Copy the assets to Amazon EC2. Set up a workflow to run the script when code is merged.

Correct Answer: A

Community vote distribution



Untamables Highly Voted 11 months, 2 weeks ago

Selected Answer: A

The correct answer is A.

AWS Amplify is an all in one service for the requirement.

<https://docs.aws.amazon.com/amplify/latest/userguide/welcome.html>

Option C is almost correct, but it does not mention how to implement HTTPS.

Option B and D are wrong. They need to keep running servers.

upvoted 17 times

Bibay Highly Voted 9 months, 3 weeks ago

a

The solution that will meet these requirements with the LEAST operational overhead is option A: Host each website by using AWS Amplify with a serverless backend. AWS Amplify is a fully managed service that allows developers to build and deploy web applications and static websites. With Amplify, developers can easily connect their repositories, such as AWS CodeCommit, Bitbucket, and GitHub, to automatically build and deploy changes to the website based on code merges. Amplify also supports phased releases with multiple environments, including development, staging, user acceptance testing, and production, which can be linked to specific branches in the repository. Additionally, Amplify uses HTTPS for all data exchange by default and has a serverless backend, which means there are no servers to maintain. Overall, this solution provides the least operational overhead while meeting all the specified requirements.

upvoted 15 times

yashika2005 9 months ago

thanks a ton for all the explanations!

upvoted 3 times

Cerakoted Most Recent 4 months, 3 weeks ago

Selected Answer: A

Check About AWS Amplify Hosting

upvoted 1 times

jayvarma 6 months, 3 weeks ago

Option A is the answer. Ofcourse, until now we have been used to the fact that we need to use S3 for static website hosting.

But there are a lot of requirements described in the question like the source code hosting, phased releases with different environments and HTTPS for all data exchange (which is not possible with S3 Hosting).

AWS Amplify does all of this for you with the least operational overhead.

upvoted 3 times

Devon_Fazekas 9 months, 4 weeks ago

For fellow ACloudGurus, I was taught to associate static website hosting to S3 buckets. But apparently, "least operational overhead" is achieved using Amplify, as it natively supports deployment to various environments and seamlessly integrates with version control systems. Whereas, S3 requires configuring multiple buckets, configuring CodePipeline and integrating with each bucket.

upvoted 3 times

✉  **Rpod** 10 months, 2 weeks ago

Selected Answer: C

Static Website should be C ..using S3

upvoted 2 times

✉  **Arnaud92** 9 months, 3 weeks ago

Sadly Static Web Hosting on S3 does not supports HTTPS . So Response is A ;-)

<https://docs.aws.amazon.com/AmazonS3/latest/userguide/WebsiteHosting.html>

upvoted 5 times

✉  **jipark** 7 months ago

that is critical key !! thanks a lot.

upvoted 2 times

Question #25

A company is migrating an on-premises database to Amazon RDS for MySQL. The company has read-heavy workloads. The company wants to refactor the code to achieve optimum read performance for queries. Which solution will meet this requirement with LEAST current and future effort?

- A. Use a multi-AZ Amazon RDS deployment. Increase the number of connections that the code makes to the database or increase the connection pool size if a connection pool is in use.
- B. Use a multi-AZ Amazon RDS deployment. Modify the code so that queries access the secondary RDS instance.
- C. Deploy Amazon RDS with one or more read replicas. Modify the application code so that queries use the URL for the read replicas.
- D. Use open source replication software to create a copy of the MySQL database on an Amazon EC2 instance. Modify the application code so that queries use the IP address of the EC2 instance.

Correct Answer: B

Community vote distribution


 C (97%)

 **xdkonorek2** 2 months, 1 week ago

Selected Answer: B

easiest solution is to use multi-az rds deployment with 2 readable standby instances
setting up read replica is more effort than checking a single option

upvoted 1 times

 **Skywalker23** 5 months, 1 week ago

Selected Answer: C

Read heavy access need read replicas as the right solution.

upvoted 4 times

 **Tony88** 6 months ago

Selected Answer: C

Keyword: heavy read

upvoted 2 times

 **Akash619** 6 months, 1 week ago

Selected Answer: C

Read Replicas for high performance read operations

upvoted 2 times

 **jayvarma** 6 months, 3 weeks ago

Keyword: Achieve Optimum read performance for queries.

Answer: Use Read Replicas and use that specific URL for read queries.

upvoted 1 times

 **Devon_Fazekas** 9 months, 4 weeks ago

Selected Answer: C

Multi-AZ is for disaster recovery, not read scalability or performance.

upvoted 3 times

 **Malkia** 10 months ago

Selected Answer: C

C answer

upvoted 1 times

 **Rpod** 10 months, 2 weeks ago

Selected Answer: C

C answer

upvoted 3 times

 **Krok** 11 months ago

Selected Answer: C

It's C.

upvoted 2 times

 **Dun6** 11 months, 2 weeks ago

Selected Answer: C

Heavy reads, use read replica
upvoted 3 times

 **Untamables** 11 months, 2 weeks ago

Selected Answer: C

C
<https://aws.amazon.com/rds/features/read-replicas/>
upvoted 4 times

 **March2023** 11 months, 2 weeks ago

Selected Answer: C

It is C
upvoted 2 times

 **Ajaykumarlp** 11 months, 2 weeks ago

It is C
upvoted 2 times

 **svrntr** 11 months, 2 weeks ago

Selected Answer: C

Seems like it is C
upvoted 2 times

Question #26

Topic 1

A developer is creating an application that will be deployed on IoT devices. The application will send data to a RESTful API that is deployed as an AWS Lambda function. The application will assign each API request a unique identifier. The volume of API requests from the application can randomly increase at any given time of day.

During periods of request throttling, the application might need to retry requests. The API must be able to handle duplicate requests without inconsistencies or data loss.

Which solution will meet these requirements?

- A. Create an Amazon RDS for MySQL DB instance. Store the unique identifier for each request in a database table. Modify the Lambda function to check the table for the identifier before processing the request.
- B. Create an Amazon DynamoDB table. Store the unique identifier for each request in the table. Modify the Lambda function to check the table for the identifier before processing the request.
- C. Create an Amazon DynamoDB table. Store the unique identifier for each request in the table. Modify the Lambda function to return a client error response when the function receives a duplicate request.
- D. Create an Amazon ElastiCache for Memcached instance. Store the unique identifier for each request in the cache. Modify the Lambda function to check the cache for the identifier before processing the request.

Correct Answer: B

Community vote distribution

B (100%)

 **Devon_Fazekas**  9 months, 4 weeks ago

Selected Answer: B

I originally thought ElastiCache would provide the sufficient session management of the unique identifiers with the least latency. But apparently, the scope of this question revolves around durability, not latency. Hence, a persistent storage is better suited. And while RDS is a viable solution for durability and performance, the question specifies IoT devices which typically produce unstructured data that is better handled by No-SQL services like DynamoDB.

upvoted 21 times

 **Untamables**  11 months, 2 weeks ago

Selected Answer: B

B

The resolution is to make the Lambda function idempotent.

<https://repost.aws/knowledge-center/lambda-function-idempotent>

<https://aws.amazon.com/builders-library/making-retries-safe-with-idempotent-APIs/>

upvoted 8 times

 **Tony88**  6 months ago

Selected Answer: B

Cache topic.

So Elastic Redis and DynamoDB both can be used as a cache solution.

If you want high performance, low latency, go with Redis

If you want persistent storage, go with DyanmoDB.

upvoted 4 times

Question #27

Topic 1

A developer wants to expand an application to run in multiple AWS Regions. The developer wants to copy Amazon Machine Images (AMIs) with the latest changes and create a new application stack in the destination Region. According to company requirements, all AMIs must be encrypted in all Regions. However, not all the AMIs that the company uses are encrypted.

How can the developer expand the application to run in the destination Region while meeting the encryption requirement?

- A. Create new AMIs, and specify encryption parameters. Copy the encrypted AMIs to the destination Region. Delete the unencrypted AMIs.
- B. Use AWS Key Management Service (AWS KMS) to enable encryption on the unencrypted AMIs. Copy the encrypted AMIs to the destination Region.
- C. Use AWS Certificate Manager (ACM) to enable encryption on the unencrypted AMIs. Copy the encrypted AMIs to the destination Region.
- D. Copy the unencrypted AMIs to the destination Region. Enable encryption by default in the destination Region.

Correct Answer: B*Community vote distribution*

A (68%)

B (32%)

 **Bibay**  9 months, 3 weeks ago

A. Create new AMIs, and specify encryption parameters. Copy the encrypted AMIs to the destination Region. Delete the unencrypted AMIs.

The best solution for meeting the encryption requirement is to create new AMIs with encryption enabled and copy them to the destination Region. By default, when an AMI is copied to another Region, it is not encrypted in the destination Region even if it is encrypted in the source Region. Therefore, the developer must create new encrypted AMIs that can be used in the destination Region. Once the new encrypted AMIs have been created, they can be copied to the destination Region. The unencrypted AMIs can then be deleted to ensure that all instances running in all Regions are using only encrypted AMIs.

upvoted 14 times

 **Rameez1**  4 months, 3 weeks ago

Selected Answer: A

A is correct.

Unencrypted AMI can't be encrypted after creation. Need to create new encrypted AMI then it can be copied to other regions.

upvoted 6 times

 **SerialiDr**  6 days, 22 hours ago

Selected Answer: A

A. This approach ensures that all AMIs are encrypted using specified encryption parameters before they are copied to the destination Region, aligning with the company's encryption requirement. AWS provides the capability to encrypt AMIs during the AMI creation process and when copying AMIs between Regions. You can specify an AWS Key Management Service (AWS KMS) customer master key (CMK) during these processes to use for encryption, meeting the requirement to use a company-generated key.

upvoted 1 times

 **gqs3119** 2 months, 2 weeks ago

C ACM is about SSL/TLS

D Even if assumed that "encryption by default" is enabled in the destination before copy, original AMI is still not encrypted, so condition "AMIs must be encrypted in all Regions" is not met.

B I don't see any option in AWS Console or docs to encrypt in place existing AMI. It can be done when copying it. Option B doesn't handle existing unencrypted AMIs.

A I think, A is the best description of the procedure.

upvoted 2 times

 **BluntFarmer** 3 months ago

I would go with D: <https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/EBSEncryption.html#encryption-by-default>

Solves must be encrypted issue once and for all plus you can copy unencrypted to encrypted

upvoted 2 times

 **maurice2005** 2 weeks, 4 days ago

it still keeps the unencrypted AMI untouched. You have to delete them but not mentioned as explicit as A

upvoted 1 times

 **walala97** 3 months, 1 week ago

Selected Answer: A

kms keys is regional, so when you use kms before you copy to another region, the second region still has the unencrypted AMIs. so B is not correct

upvoted 1 times

 **ronn555** 3 months, 4 weeks ago

A

When you create an encrypted AMI and do not specify the KMS key, AWS will use the default Customer Managed Key which is the only multi-region key. If you select a KMS key from the origin region it will not work in the destination region (presently) so B is not correct.

upvoted 2 times

Cerakoted 4 months, 3 weeks ago

Selected Answer: B

Answer is B

check this link

<https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/CopyingAMIs.html#ami-copy-encryption>

upvoted 2 times

[Removed] 2 months, 3 weeks ago

If you read this link carefully it actually proves that B is wrong. The correct answer is A. You cannot enable encryption on an unencrypted AMI. --> an AMI backed by an unencrypted root snapshot is copied to an AMI with an encrypted root snapshot. The CopyImage action is invoked with two encryption parameters, including a customer managed key. As a result, the encryption status of the root snapshot changes, so that the target AMI is backed by a root snapshot containing the same data as the source snapshot, but encrypted using the specified key.

upvoted 1 times

manikantaJ 4 months, 3 weeks ago

Selected Answer: B

Here's why option B is the appropriate choice:

AWS KMS Encryption: AWS KMS is a service that allows you to easily enable encryption for your resources, including Amazon Machine Images (AMIs). You can create a customer managed key (CMK) in AWS KMS and use it to encrypt your AMIs.

Enable Encryption on Unencrypted AMIs: You can enable encryption for unencrypted AMIs by creating a copy of the AMI and specifying the AWS KMS key to use for encryption during the copy process. This ensures that your new AMIs in the destination Region are encrypted.

Maintain Data Integrity: This approach allows you to maintain data integrity and ensure that all AMIs are encrypted in compliance with company requirements.

upvoted 2 times

sofatiyan 5 months, 2 weeks ago

Selected Answer: B

Copy an unencrypted source AMI to an encrypted target AMI

In this scenario, an AMI backed by an unencrypted root snapshot is copied to an AMI with an encrypted root snapshot. The CopyImage action is invoked with two encryption parameters, including a customer managed key. As a result, the encryption status of the root snapshot changes, so that the target AMI is backed by a root snapshot containing the same data as the source snapshot, but encrypted using the specified key.

<https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/CopyingAMIs.html>

upvoted 2 times

Ap1011 6 months ago

Answer A

For any AMI copy to be encrypted the source AMI should be Encrypted first , You cant encrypt the copy of the AMI if the source Is not Encrypted

upvoted 3 times

Naj_64 6 months, 2 weeks ago

Selected Answer: B<https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/AMIEncryption.html#AMI-encryption-copy>

"Copy-image behaviors with both Encrypted and KmsKeyId set:

An unencrypted snapshot is copied to a snapshot encrypted by the specified KMS key."

upvoted 2 times

Naj_64 6 months, 2 weeks ago

B is wrong. Going with A

You just can't use KMS to encrypt an unencrypted snapshot, you'll need to first create a vol from the snapshot and select the option to encrypt it. Making A the correct answer.

upvoted 2 times

sanjoysarkar 11 months ago

A. Is the correct answer.

upvoted 1 times

Krok 11 months ago

Selected Answer: A

I think it's A.

Option D is also correct, but in this case, your source AMI stays unencrypted.

Options B and C - are incorrect, you can't just encrypt existing unencrypted AMI or create encrypted AMI from unencrypted EC2.

upvoted 2 times

5aga 11 months ago

Selected Answer: A

read the question carefully. yes, we can use kms to encrypt ami and use in multiple regions. but you cannot direct applying kms encryption on non encrypted AMI. Answer B is wrong.

upvoted 4 times

 **anhike** 11 months, 1 week ago

Selected Answer: A

<https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/AMIEncryption.html>

Encrypt an unencrypted image during copy

In this scenario, an AMI backed by an unencrypted root snapshot is copied to an AMI with an encrypted root snapshot. The CopyImage action is invoked with two encryption parameters, including a customer managed key.

A is the only logical answer.

upvoted 6 times

 **March2023** 11 months, 1 week ago

Selected Answer: B

My vote is B

upvoted 1 times

Question #28

Topic 1

A company hosts a client-side web application for one of its subsidiaries on Amazon S3. The web application can be accessed through Amazon CloudFront from <https://www.example.com>. After a successful rollout, the company wants to host three more client-side web applications for its remaining subsidiaries on three separate S3 buckets.

To achieve this goal, a developer moves all the common JavaScript files and web fonts to a central S3 bucket that serves the web applications.

However, during testing, the developer notices that the browser blocks the JavaScript files and web fonts.

What should the developer do to prevent the browser from blocking the JavaScript files and web fonts?

- A. Create four access points that allow access to the central S3 bucket. Assign an access point to each web application bucket.
- B. Create a bucket policy that allows access to the central S3 bucket. Attach the bucket policy to the central S3 bucket
- C. Create a cross-origin resource sharing (CORS) configuration that allows access to the central S3 bucket. Add the CORS configuration to the central S3 bucket.
- D. Create a Content-MD5 header that provides a message integrity check for the central S3 bucket. Insert the Content-MD5 header for each web application request.

Correct Answer: C

Community vote distribution

C (100%)

 **Untamables**  11 months, 2 weeks ago

Selected Answer: C

C

This is a frequent trouble. Web applications cannot access the resources in other domains by default, except some exceptions. You must configure CORS on the resources to be accessed.

<https://docs.aws.amazon.com/AmazonS3/latest/userguide/cors.html>

upvoted 6 times

 **svrntr**  11 months, 2 weeks ago

Selected Answer: C

It is C

upvoted 3 times

 **aragon_saa** 11 months, 3 weeks ago

C

<https://www.examtopics.com/discussions/amazon/view/88856-exam-aws-certified-developer-associate-topic-1-question-302/>

upvoted 3 times

Question #29

An application is processing clickstream data using Amazon Kinesis. The clickstream data feed into Kinesis experiences periodic spikes. The PutRecords API call occasionally fails and the logs show that the failed call returns the response shown below:

```
{
  "FailedRecordCount": 1,
  "Records": [
    {
      "SequenceNumber": "21269319989900637946712965403778482371",
      "ShardId": "shardId-000000000001"
    },
    {
      "ErrorCode": "ProvisionedThroughputExceededException",
      "ErrorMessage": "Rate exceeded for shard shardId-000000000001 in
                      stream exampleStreamName under account 123456789."
    },
    {
      "SequenceNumber": "21269319989999637946712965403778482985",
      "ShardId": "shardId-000000000002"
    }
  ]
}
```

Which techniques will help mitigate this exception? (Choose two.)

- A. Implement retries with exponential backoff.
- B. Use a PutRecord API instead of PutRecords.
- C. Reduce the frequency and/or size of the requests.
- D. Use Amazon SNS instead of Kinesis.
- E. Reduce the number of KCL consumers.

Correct Answer: AC

Community vote distribution

AC (77%)

BC (23%)

 **eboehm2** Highly Voted 8 months, 3 weeks ago

Selected Answer: AC

100% AC as per AWS : ProvisionedThroughputExceededException

The request rate for the stream is too high, or the requested data is too large for the available throughput. Reduce the frequency or size of your requests. For more information, see Streams Limits in the Amazon Kinesis Data Streams Developer Guide, and Error Retries and Exponential Backoff in AWS in the AWS General Reference.

https://docs.aws.amazon.com/kinesis/latest/APIReference/API_PutRecords.html

upvoted 5 times

 **Baba_Eni** Most Recent 9 months ago

Selected Answer: AC

AC is the best answer. When there is throttling, it is best practise to implement retries with exponential backoff.

upvoted 1 times

 **ezredame** 9 months, 1 week ago

Selected Answer: BC

I think this is really tricky question. To get this exception, the request rate for the stream is too high, or the requested data is too large for the available throughput. Reduce the frequency or size of your requests. So we can "Reduce the frequency and/or size of the requests" also decrease the size with "Use a PutRecord API instead of PutRecords"

The API already implements retries with exponential backoff. So there is no need for A.

upvoted 3 times

 **eboehm2** 8 months, 3 weeks ago

I thought this at first too, but I was doing some additional reading and using the PutRecord API over PutRecords is wrong as it could actually make the problem worse as producers may make too many rapid requests to write to the stream

<https://repost.aws/knowledge-center/kinesis-data-stream-throttling>

upvoted 3 times

 **Majong** 9 months ago

Can you please add a link where I can find this information. From what I can read on AWS is that you can implement exponential backoff but it is not by default.

upvoted 1 times

✉️ **Untamables** 11 months, 2 weeks ago

Selected Answer: AC

A and C

<https://aws.amazon.com/premiumsupport/knowledge-center/kinesis-data-stream-throttling-errors/>

upvoted 4 times

✉️ **aragon_saa** 11 months, 3 weeks ago

AC

<https://www.examtopics.com/discussions/amazon/view/69142-exam-aws-certified-developer-associate-topic-1-question-370/>

upvoted 4 times

✉️ **yashika2005** 9 months ago

thanks a lotttt!

upvoted 1 times

Question #30

Topic 1

A company has an application that uses Amazon Cognito user pools as an identity provider. The company must secure access to user records. The company has set up multi-factor authentication (MFA). The company also wants to send a login activity notification by email every time a user logs in.

What is the MOST operationally efficient solution that meets this requirement?

- A. Create an AWS Lambda function that uses Amazon Simple Email Service (Amazon SES) to send the email notification. Add an Amazon API Gateway API to invoke the function. Call the API from the client side when login confirmation is received.
- B. Create an AWS Lambda function that uses Amazon Simple Email Service (Amazon SES) to send the email notification. Add an Amazon Cognito post authentication Lambda trigger for the function.
- C. Create an AWS Lambda function that uses Amazon Simple Email Service (Amazon SES) to send the email notification. Create an Amazon CloudWatch Logs log subscription filter to invoke the function based on the login status.
- D. Configure Amazon Cognito to stream all logs to Amazon Kinesis Data Firehose. Create an AWS Lambda function to process the streamed logs and to send the email notification based on the login status of each user.

Correct Answer: B

Community vote distribution

B (100%)

✉️ **Bibay** **Highly Voted** 9 months, 3 weeks ago

B. Create an AWS Lambda function that uses Amazon Simple Email Service (Amazon SES) to send the email notification. Add an Amazon Cognito post authentication Lambda trigger for the function.

The most operationally efficient solution for sending login activity notifications by email for Amazon Cognito user pools is to use a Lambda trigger that is automatically invoked by Amazon Cognito every time a user logs in. This eliminates the need for client-side calls to an API or log subscription filter. A Lambda function can be used to send email notifications using Amazon SES.

Option B satisfies these requirements and is the most operationally efficient solution.

upvoted 7 times

✉️ **Untamables** **Highly Voted** 11 months, 2 weeks ago

Selected Answer: B

B

<https://docs.aws.amazon.com/cognito/latest/developerguide/user-pool-lambda-post-authentication.html>

upvoted 6 times

✉️ **aragon_saa** **Most Recent** 11 months, 3 weeks ago

B

<https://www.examtopics.com/discussions/amazon/view/78944-exam-aws-certified-developer-associate-topic-1-question-9/>

upvoted 3 times

Question #31

Topic 1

A developer has an application that stores data in an Amazon S3 bucket. The application uses an HTTP API to store and retrieve objects. When the PutObject API operation adds objects to the S3 bucket the developer must encrypt these objects at rest by using server-side encryption with Amazon S3 managed keys (SSE-S3).

Which solution will meet this requirement?

- A. Create an AWS Key Management Service (AWS KMS) key. Assign the KMS key to the S3 bucket.
- B. Set the x-amz-server-side-encryption header when invoking the PutObject API operation.
- C. Provide the encryption key in the HTTP header of every request.
- D. Apply TLS to encrypt the traffic to the S3 bucket.

Correct Answer: B

Community vote distribution



✉ **aanataliya** 6 months, 1 week ago

Answer for this question is changed starting January 5, 2023. Amazon S3 now applies server-side encryption with Amazon S3 managed keys (SSE-S3) as the base level of encryption for every bucket in Amazon S3.

<https://docs.aws.amazon.com/AmazonS3/latest/userguide/default-encryption-faq.html>

upvoted 8 times

✉ **fordiscussiontwo** 4 months, 4 weeks ago

what is correct answer then?

upvoted 2 times

✉ **cucuff** 2 months, 1 week ago

because it takes some time for exam questions to be updated

upvoted 1 times

✉ **svrnvrtr** 11 months, 2 weeks ago

Selected Answer: B

B <https://docs.aws.amazon.com/AmazonS3/latest/userguide/UsingServerSideEncryption.html>

upvoted 8 times

✉ **nderitunick** 3 months ago

Aren't objects on s3 encrypted using SSE-S3 by default? I don't understand why D is not the answer.

upvoted 1 times

✉ **nderitunick** 3 months ago

I misread the question. It's all good.

upvoted 1 times

✉ **[Removed]** 7 months, 2 weeks ago

Selected Answer: B

Header parameter "s3:x-amz-server-side-encryption": "AES256"

upvoted 3 times

✉ **tttamttam** 7 months, 3 weeks ago

Selected Answer: B

C is a way to use customer-provided keys not S3-managed keys.

upvoted 2 times

✉ **CisconAWSGURU** 8 months, 2 weeks ago

Selected Answer: C

C is correct and hear is the reason from AWS docs.

Visit AWS Regions and Endpoints in the AWS General Reference or the AWS Region Table to see the regional availability for ACM.

Certificates in ACM are regional resources. To use a certificate with Elastic Load Balancing for the same fully qualified domain name (FQDN) or set of FQDNs in more than one AWS region, you must request or import a certificate for each region. For certificates provided by ACM, this means you must revalidate each domain name in the certificate for each region. You cannot copy a certificate between regions.

To use an ACM certificate with Amazon CloudFront, you must request or import the certificate in the US East (N. Virginia) region. ACM certificates in this region that are associated with a CloudFront distribution are distributed to all the geographic locations configured for that distribution.

upvoted 1 times

⊕  **Bibay** 9 months, 3 weeks ago

B. Set the x-amz-server-side-encryption header when invoking the PutObject API operation.

When using the PutObject API operation to store objects in an S3 bucket, the x-amz-server-side-encryption header can be set to specify the server-side encryption algorithm used to encrypt the object. Setting this header to "AES256" or "aws:kms" enables server-side encryption with SSE-S3 or SSE-KMS respectively.

Option A is incorrect because assigning a KMS key to the S3 bucket will not enable SSE-S3 encryption.

Option C is incorrect because providing the encryption key in the HTTP header of every request is not a valid way to enable SSE-S3 encryption.

Option D is incorrect because applying TLS encryption to the traffic to the S3 bucket only encrypts the data in transit, but does not encrypt the objects at rest in the bucket.

upvoted 6 times

⊕  **jipark** 7 months ago

I now got to know 'KMS key to S3 bucket will not enable S3 encryption'

upvoted 1 times

Question #32

A developer needs to perform geographic load testing of an API. The developer must deploy resources to multiple AWS Regions to support the load testing of the API.

How can the developer meet these requirements without additional application code?

- A. Create and deploy an AWS Lambda function in each desired Region. Configure the Lambda function to create a stack from an AWS CloudFormation template in that Region when the function is invoked.
- B. Create an AWS CloudFormation template that defines the load test resources. Use the AWS CLI create-stack-set command to create a stack set in the desired Regions.
- C. Create an AWS Systems Manager document that defines the resources. Use the document to create the resources in the desired Regions.
- D. Create an AWS CloudFormation template that defines the load test resources. Use the AWS CLI deploy command to create a stack from the template in each Region.

Correct Answer: B
Community vote distribution


Bibay Highly Voted 9 months, 3 weeks ago

Selected Answer: B

B. Create an AWS CloudFormation template that defines the load test resources. Use the AWS CLI create-stack-set command to create a stack set in the desired Regions.

AWS CloudFormation StackSets allow developers to deploy CloudFormation stacks across multiple AWS accounts and regions with a single CloudFormation template. By using the AWS CLI create-stack-set command, the developer can deploy the same CloudFormation stack to multiple regions without additional application code, thereby meeting the requirement for geographic load testing of an API.

upvoted 7 times

hsinchang Most Recent 5 months, 3 weeks ago

in desired Regions better than in each Region.

upvoted 3 times

rInd2000 6 months, 3 weeks ago

Selected Answer: C

If using Edge-Optimized endpoint, then the certificate must be in us-east-1

If using Regional endpoint, the certificate must be in the API Gateway region

upvoted 1 times

Untamables 11 months, 2 weeks ago

Selected Answer: B

B

<https://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/stacksets-concepts.html>

<https://awscli.amazonaws.com/v2/documentation/api/2.1.30/reference/cloudformation/create-stack-set.html>

upvoted 4 times

svrntr 11 months, 2 weeks ago

Selected Answer: B

B

<https://aws.amazon.com/ru/about-aws/whats-new/2021/04/deploy-cloudformation-stacks-concurrently-across-multiple-aws-regions-using-aws-cloudformation-stacksets/>

upvoted 3 times

Question #33

Topic 1

A developer is creating an application that includes an Amazon API Gateway REST API in the us-east-2 Region. The developer wants to use Amazon CloudFront and a custom domain name for the API. The developer has acquired an SSL/TLS certificate for the domain from a third-party provider.

How should the developer configure the custom domain for the application?

- A. Import the SSL/TLS certificate into AWS Certificate Manager (ACM) in the same Region as the API. Create a DNS A record for the custom domain.
- B. Import the SSL/TLS certificate into CloudFront. Create a DNS CNAME record for the custom domain.
- C. Import the SSL/TLS certificate into AWS Certificate Manager (ACM) in the same Region as the API. Create a DNS CNAME record for the custom domain.
- D. Import the SSL/TLS certificate into AWS Certificate Manager (ACM) in the us-east-1 Region. Create a DNS CNAME record for the custom domain.

Correct Answer: B

Community vote distribution

D (81%) C (19%)

✉ **brandon87** 11 months ago

Selected Answer: D

To use a certificate in AWS Certificate Manager (ACM) to require HTTPS between viewers and CloudFront, make sure you request (or import) the certificate in the US East (N. Virginia) Region (us-east-1).

<https://docs.aws.amazon.com/AmazonCloudFront/latest/DeveloperGuide/cnames-and-https-requirements.html>
<https://docs.aws.amazon.com/AmazonCloudFront/latest/DeveloperGuide/CNAMEs.html>

upvoted 21 times

✉ **Untamables** 11 months, 2 weeks ago

Selected Answer: D

The correct answer is D.

<https://docs.aws.amazon.com/AmazonCloudFront/latest/DeveloperGuide/cnames-and-https-requirements.html>
<https://docs.aws.amazon.com/acm/latest/userguide/import-certificate.html>
<https://docs.aws.amazon.com/AmazonCloudFront/latest/DeveloperGuide/CNAMEs.html>

upvoted 7 times

✉ **AjeshA1990** 1 month, 2 weeks ago

Import cert in the same region

upvoted 1 times

✉ **Jonalb** 4 months, 1 week ago

D. Importe o certificado SSL/TLS para o AWS Certificate Manager (ACM) na região us-east-1. Crie um registro DNS CNAME para o domínio personalizado.

upvoted 1 times

✉ **fossil123** 6 months ago

Selected Answer: D

AWS Region for AWS Certificate Manager

To use a certificate in AWS Certificate Manager (ACM) to require HTTPS between viewers and CloudFront, make sure you request (or import) the certificate in the US East (N. Virginia) Region (us-east-1).

upvoted 2 times

✉ **ancomedian** 7 months, 2 weeks ago

Selected Answer: D

I have checked at various places

Answer is D

Reason: ACM just can only import certificate in us-east-1 and we need to associate the imported certificate with us-east-2

The caused confusion regarding it is because of import and associate

Crux: we will import in us-east-1 but use in us-east-2

upvoted 5 times

✉ **acordovam** 7 months, 2 weeks ago

Selected Answer: D

D

If you need to use CloudFront, then, you must import it into us-east-1.

<https://docs.aws.amazon.com/acm/latest/userguide/import-certificate.html>
upvoted 2 times

✉ **Pupina** 8 months ago

Selected Answer: D

A is not right because for CloudFront you create a CNAME not a DNS A

<https://docs.aws.amazon.com/AmazonCloudFront/latest/DeveloperGuide/CNAMEs.html>

C is not right because ACM cannot import certificates in us-east-2

<https://docs.aws.amazon.com/AmazonCloudFront/latest/DeveloperGuide/cnames-and-https-requirements.html>

B is not right. The certificate is for an external CA but can be uploaded to ACM or you must request a public certificate from AWS Certificate Manager <https://repost.aws/knowledge-center/install-ssl-cloudfront> but you cannot import the certificate into CloudFront

upvoted 3 times

✉ **rInd2000** 8 months, 2 weeks ago

Selected Answer: C

C

The first statement of the question: A developer is creating an application that includes an Amazon API Gateway REST API in the us-east-2 Region. ... it is a Regional API, when using a Regional endpoint, the SSL/TLS certificate for the custom domain must be imported into AWS Certificate Manager (ACM) in the same Region as the API, only if we use a Edge-Optimized endpoint, the certificate must be in us-east-1.

upvoted 2 times

✉ **KarBiswa** 2 months, 2 weeks ago

Initially I also thought but it is a specific hard core requirement "To use an ACM certificate with CloudFront, make sure you request (or import) the certificate in the US East (N. Virginia) Region (us-east-1)."

upvoted 1 times

✉ **peterpain** 9 months, 2 weeks ago

Selected Answer: D

The ACM has to be implemented at US-East-1

upvoted 2 times

✉ **Bibay** 9 months, 3 weeks ago

Selected Answer: C

To use Amazon CloudFront and a custom domain name for an Amazon API Gateway REST API, the developer should import the SSL/TLS certificate into AWS Certificate Manager (ACM) in the same Region as the API, and create a DNS CNAME record for the custom domain. This is because AWS Certificate Manager can only issue SSL/TLS certificates in the same Region as the API, and a DNS CNAME record maps the custom domain to the CloudFront distribution.

Option A is incorrect because a DNS A record is not sufficient to map the custom domain to the CloudFront distribution.

Option B is incorrect because AWS Certificate Manager must issue the SSL/TLS certificate in the same Region as the API.

Option D is incorrect because the SSL/TLS certificate must be issued in the same Region as the API, and a DNS CNAME record is required to map the custom domain to the CloudFront distribution.

upvoted 5 times

✉ **KhyatiChhajed** 10 months ago

Selected Answer: C

C. Import the SSL/TLS certificate into AWS Certificate Manager (ACM) in the same Region as the API. Create a DNS CNAME record for the custom domain.

Explanation:

Amazon CloudFront can use SSL/TLS certificates stored in AWS Certificate Manager (ACM) to provide secure HTTPS connections for custom domain names. In this scenario, the developer should import the SSL/TLS certificate acquired from a third-party provider into ACM in the same Region as the API (us-east-2 in this case). This allows the certificate to be used by CloudFront.

upvoted 1 times

✉ **hanJR** 10 months, 1 week ago

It's D. It is trying to integrate with CloudFront, therefore it must upload certificates in us-east-1. If it was a regional API, then certificates must be uploaded in the same region of the API Gateway.

upvoted 1 times

✉ **March2023** 11 months, 2 weeks ago

Selected Answer: C

I was thinking this answer would be C

upvoted 1 times

Question #34

Topic 1

A developer is creating a template that uses AWS CloudFormation to deploy an application. The application is serverless and uses Amazon API Gateway, Amazon DynamoDB, and AWS Lambda.

Which AWS service or tool should the developer use to define serverless resources in YAML?

- A. CloudFormation serverless intrinsic functions
- B. AWS Elastic Beanstalk
- C. AWS Serverless Application Model (AWS SAM)
- D. AWS Cloud Development Kit (AWS CDK)

Correct Answer: C

Community vote distribution

C (100%)

✉  **Bibay**  9 months, 3 weeks ago

The recommended AWS service for defining serverless resources in YAML is the AWS Serverless Application Model (AWS SAM).

AWS SAM is an open-source framework that extends AWS CloudFormation to provide a simplified way to define the Amazon API Gateway APIs, AWS Lambda functions, and Amazon DynamoDB tables needed by your serverless application. You can define your serverless resources in a YAML template and then use the AWS SAM CLI to package and deploy your application.

AWS CloudFormation serverless intrinsic functions can also be used to define serverless resources in YAML, but they have some limitations compared to AWS SAM. AWS Elastic Beanstalk is a platform as a service (PaaS) that is not serverless specific, while the AWS Cloud Development Kit (AWS CDK) is an alternative to YAML-based templates that uses familiar programming languages like TypeScript, Python, and Java to define AWS infrastructure.

upvoted 14 times

✉  **jipark** 7 months ago

your explanation helps me a lot !

upvoted 2 times

✉  **Untamables**  11 months, 2 weeks ago

Selected Answer: C

C

<https://aws.amazon.com/serverless/sam/>

upvoted 5 times

✉  **Jonalb**  4 months, 1 week ago

O AWS Serverless Application Model (AWS SAM) é uma extensão do AWS CloudFormation que facilita a definição de aplicações sem servidor. AWS SAM fornece modelos mais simples para configurar recursos sem servidor como AWS Lambda, Amazon API Gateway e Amazon DynamoDB. Os modelos podem ser definidos em YAML ou JSON.

C

upvoted 1 times

✉  **svrntr** 11 months, 2 weeks ago

Selected Answer: C

C is the answer

upvoted 3 times

Question #35

Topic 1

A developer wants to insert a record into an Amazon DynamoDB table as soon as a new file is added to an Amazon S3 bucket.

Which set of steps would be necessary to achieve this?

- A. Create an event with Amazon EventBridge that will monitor the S3 bucket and then insert the records into DynamoDB.
- B. Configure an S3 event to invoke an AWS Lambda function that inserts records into DynamoDB.
- C. Create an AWS Lambda function that will poll the S3 bucket and then insert the records into DynamoDB.
- D. Create a cron job that will run at a scheduled time and insert the records into DynamoDB.

Correct Answer: B

Community vote distribution

B (100%)

 **Bibay**  9 months, 3 weeks ago

The correct answer is B.

To insert a record into DynamoDB as soon as a new file is added to an S3 bucket, you can configure an S3 event notification to invoke an AWS Lambda function that inserts the records into DynamoDB. When a new file is added to the S3 bucket, the S3 event notification will trigger the Lambda function, which will insert the record into the DynamoDB table.

Option A is incorrect because Amazon EventBridge is not necessary to achieve this. S3 event notifications can directly invoke a Lambda function to insert records into DynamoDB.

Option C is incorrect because polling the S3 bucket periodically to check for new files is inefficient and not necessary with S3 event notifications.

Option D is incorrect because running a cron job at a scheduled time is not real-time and would not insert the record into DynamoDB as soon as a new file is added to the S3 bucket.

upvoted 9 times

 **Untamables**  11 months, 1 week ago

Selected Answer: B

B

<https://docs.aws.amazon.com/AmazonS3/latest/userguide/NotificationHowTo.html>

upvoted 7 times

 **JohnPI**  1 month, 2 weeks ago

Selected Answer: B

A is also a solution for this which is better if we want loose coupling but will introduce a slight latency. The key word here is "as soon as" so the correct answer will be B.

upvoted 1 times

 **svrntr** 11 months, 2 weeks ago

It is B

upvoted 4 times

Question #36

A development team maintains a web application by using a single AWS CloudFormation template. The template defines web servers and an Amazon RDS database. The team uses the Cloud Formation template to deploy the Cloud Formation stack to different environments. During a recent application deployment, a developer caused the primary development database to be dropped and recreated. The result of this incident was a loss of data. The team needs to avoid accidental database deletion in the future. Which solutions will meet these requirements? (Choose two.)

- A. Add a CloudFormation Deletion Policy attribute with the Retain value to the database resource.
- B. Update the CloudFormation stack policy to prevent updates to the database.
- C. Modify the database to use a Multi-AZ deployment.
- D. Create a CloudFormation stack set for the web application and database deployments.
- E. Add a Cloud Formation DeletionPolicy attribute with the Retain value to the stack.

Correct Answer: AD

Community vote distribution

AB (100%)

 **Mtho96** Highly Voted 8 months ago

A. Add a CloudFormation Deletion Policy attribute with the Retain value to the database resource: By adding a DeletionPolicy attribute with the Retain value to the database resource in the CloudFormation template, the database will not be deleted even if the CloudFormation stack is deleted. This helps prevent accidental database loss during stack deletion.

B. Update the CloudFormation stack policy to prevent updates to the database: By updating the CloudFormation stack policy, the development team can restrict updates to the database resource. This prevents accidental modifications or recreations of the database during stack updates. The stack policy can define specific actions that are allowed or denied, providing an additional layer of protection against unintentional database changes.

upvoted 11 times

 **svrntr** Highly Voted 11 months, 2 weeks ago

Selected Answer: AB

AB

<https://aws.amazon.com/ru/premiumsupport/knowledge-center/cloudformation-accidental-updates/>

upvoted 7 times

 **Jonalb** Most Recent 4 months, 1 week ago

Selected Answer: AB

<https://aws.amazon.com/ru/premiumsupport/knowledge-center/cloudformation-accidental-updates/>

upvoted 1 times

 **magicjims** 5 months, 3 weeks ago

Selected Answer: AB

This came up in the exam today, I chose A&B

upvoted 3 times

 **panoptica** 5 months, 3 weeks ago

D & A for me

upvoted 2 times

 **nguyenta** 7 months, 2 weeks ago

Selected Answer: AB

A and B

upvoted 2 times

 **marvel21** 8 months, 3 weeks ago

A & B Correct Answer

upvoted 2 times

 **s50600822** 9 months ago

D because grandma said?

upvoted 2 times

 **Japanjot** 10 months ago

A B CORRECT

upvoted 1 times

✉ **ihebchorfi** 10 months, 1 week ago

Selected Answer: AB

D is wrong, because while it still doesn't protect from the accidental deletion of the DB.

upvoted 1 times

✉ **ihebchorfi** 10 months, 1 week ago

After more thinking, combining A & D is the correct answer, so i would go with AD

upvoted 2 times

✉ **Untamables** 11 months, 1 week ago

Selected Answer: AB

A and B

<https://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/aws-attribute-deletionpolicy.html>

<https://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/protect-stack-resources.html>

upvoted 5 times

✉ **March2023** 11 months, 2 weeks ago

Selected Answer: AB

I agree it is AB

upvoted 3 times

Question #37

Topic 1

A company has an Amazon S3 bucket that contains sensitive data. The data must be encrypted in transit and at rest. The company encrypts the data in the S3 bucket by using an AWS Key Management Service (AWS KMS) key. A developer needs to grant several other AWS accounts the permission to use the S3 GetObject operation to retrieve the data from the S3 bucket.

How can the developer enforce that all requests to retrieve the data provide encryption in transit?

- A. Define a resource-based policy on the S3 bucket to deny access when a request meets the condition "aws:SecureTransport": "false".
- B. Define a resource-based policy on the S3 bucket to allow access when a request meets the condition "aws:SecureTransport": "false".
- C. Define a role-based policy on the other accounts' roles to deny access when a request meets the condition of "aws:SecureTransport": "false".
- D. Define a resource-based policy on the KMS key to deny access when a request meets the condition of "aws:SecureTransport": "false".

Correct Answer: A

Community vote distribution



✉ **Untamables** Highly Voted 11 months, 1 week ago

Selected Answer: A

A

<https://repost.aws/knowledge-center/s3-bucket-policy-for-config-rule>

upvoted 7 times

✉ **Watascript** Highly Voted 11 months, 1 week ago

Selected Answer: A

A is correct.

upvoted 5 times

✉ **CrescentShared** Most Recent 4 months, 2 weeks ago

Selected Answer: D

Hesitate between A and D.

Question is not clear on whether we want to block all the information or only the sensitive part.

upvoted 2 times

✉ **KarBiswa** 2 months, 2 weeks ago

Agree, but if we compare between A & D, A seems to be more accurate.

upvoted 1 times

✉ **winzzhhzzhh** 6 months ago

I know A is correct but D seems correct as well, since users will need access to the KMS key to decrypt the data in the bucket.

upvoted 3 times

✉ **Malkia** 10 months ago

Selected Answer: A

A is correct.

upvoted 1 times

Question #38

An application that is hosted on an Amazon EC2 instance needs access to files that are stored in an Amazon S3 bucket. The application lists the objects that are stored in the S3 bucket and displays a table to the user. During testing, a developer discovers that the application does not show any objects in the list.

What is the MOST secure way to resolve this issue?

- A. Update the IAM instance profile that is attached to the EC2 instance to include the S3:* permission for the S3 bucket.
- B. Update the IAM instance profile that is attached to the EC2 instance to include the S3>ListBucket permission for the S3 bucket.
- C. Update the developer's user permissions to include the S3>ListBucket permission for the S3 bucket.
- D. Update the S3 bucket policy by including the S3>ListBucket permission and by setting the Principal element to specify the account number of the EC2 instance.

Correct Answer: B

Community vote distribution



✉ **Untamables** Highly Voted 11 months, 1 week ago

Selected Answer: B

The correct answer is B.

<https://repost.aws/knowledge-center/ec2-instance-access-s3-bucket>

Option A also works, but it is not compliant to the AWS security practice of the least privilege permissions.

upvoted 9 times

✉ **yeacuz** 9 months, 2 weeks ago

Option B only allows you to list the bucket - you will still not see the objects if only s3>ListBucket permission is configured.

upvoted 2 times

✉ **yeacuz** Highly Voted 9 months, 4 weeks ago

Selected Answer: A

Option A allows you to list buckets AND objects. Option B only allows you to list the bucket - you will still not see the objects if only s3>ListBucket permission is configured.

upvoted 5 times

✉ **Jeremy11** 7 months ago

Not true:

https://docs.aws.amazon.com/AmazonS3/latest/API/API_ListObjectsV2.html

To use this action in an AWS Identity and Access Management (IAM) policy, you must have permission to perform the s3>ListBucket action.

upvoted 2 times

✉ **ninomfr64** Most Recent 6 months, 2 weeks ago

Selected Answer: B

It is B, but I had to dig into docs to learn that to use ListObjectsV2, in an AWS Identity and Access Management (IAM) policy, you must have permission to perform the s3>ListBucket action.

https://docs.aws.amazon.com/AmazonS3/latest/API/API_ListObjectsV2.html

upvoted 1 times

✉ **ashish_roy** 6 months, 3 weeks ago

Can someone email me a pdf of the questions (DVA-C02 & DVA-C01) at qwert19roy@gmail.com

Thanks in advance!

upvoted 2 times

✉ **jipark** 7 months ago

are there anyone who can explain D ? - S3 bucket policy

upvoted 3 times

✉ **nmc12** 5 months ago

Option D is not the most secure choice, as utilizing bucket policies and specifying account numbers can potentially lead to overly complex and less secure configurations, especially if not managed carefully.

To implement option B, follow these and it most secure!!!

```
{
  "Version": "2012-10-17",
  "Statement": [
```

```
{  
    "Effect": "Allow",  
    "Action": "s3>ListBucket",  
    "Resource": "arn:aws:s3:::your-bucket-name"  
}  
]  
}  
upvoted 1 times
```

✉ **s50600822** 9 months ago

A violated least privilege principle so B
upvoted 3 times

✉ **yashika2005** 9 months ago

Selected Answer: B

the s3>ListBucket permission allows the user to use the Amazon S3 GET Bucket (List Objects) operation.
Reference: <https://docs.aws.amazon.com/AmazonS3/latest/userguide/access-policy-language-overview.html>
upvoted 3 times

✉ **yashika2005** 9 months ago

the s3>ListBucket permission allows the user to use the Amazon S3 GET Bucket (List Objects) operation.
Reference: <https://docs.aws.amazon.com/AmazonS3/latest/userguide/access-policy-language-overview.html>
upvoted 1 times

✉ **svrntr** 11 months, 2 weeks ago

Selected Answer: B

It is B
upvoted 4 times

Question #39

Topic 1

A company is planning to securely manage one-time fixed license keys in AWS. The company's development team needs to access the license keys in automation scripts that run in Amazon EC2 instances and in AWS CloudFormation stacks.
Which solution will meet these requirements MOST cost-effectively?

- A. Amazon S3 with encrypted files prefixed with "config"
- B. AWS Secrets Manager secrets with a tag that is named SecretString
- C. AWS Systems Manager Parameter Store SecureString parameters
- D. CloudFormation NoEcho parameters

Correct Answer: C*Community vote distribution* C (100%)

✉  **alohayo**  5 months, 3 weeks ago

Both B and C are feasible solutions. Just consider the "MOST cost effectively" here.
AWS Systems Manager Parameter Store comes with no additional cost (Standard type). However, AWS Secrets Manager costs \$0.40 per secret per month, and data retrieval costs \$0.05 per 10,000 API calls.
C is much cheaper, guy.

upvoted 12 times

✉  **hanJR**  10 months, 1 week ago

I chose C because AWS Secrets Manager does auto key rotation(The question says that the key is one-time fixed).
upvoted 12 times

✉  **s50600822**  9 months ago

PS prob is free for this use case <https://docs.aws.amazon.com/systems-manager/latest/userguide/parameter-store-advanced-parameters.html>, even though SM cost may also count to nothing(due to the scale of the use case and caching client).
Again the only notable difference is the aforementioned irrelevant tag.

upvoted 2 times

✉  **Untamables** 11 months, 1 week ago

Selected Answer: C

C

'<https://docs.aws.amazon.com/systems-manager/latest/userguide/systems-manager-parameter-store.html>

upvoted 8 times

Question #40

Topic 1

A company has deployed infrastructure on AWS. A development team wants to create an AWS Lambda function that will retrieve data from an Amazon Aurora database. The Amazon Aurora database is in a private subnet in company's VPC. The VPC is named VPC1. The data is relational in nature. The Lambda function needs to access the data securely.

Which solution will meet these requirements?

- A. Create the Lambda function. Configure VPC1 access for the function. Attach a security group named SG1 to both the Lambda function and the database. Configure the security group inbound and outbound rules to allow TCP traffic on Port 3306.
- B. Create and launch a Lambda function in a new public subnet that is in a new VPC named VPC2. Create a peering connection between VPC1 and VPC2.
- C. Create the Lambda function. Configure VPC1 access for the function. Assign a security group named SG1 to the Lambda function. Assign a second security group named SG2 to the database. Add an inbound rule to SG1 to allow TCP traffic from Port 3306.
- D. Export the data from the Aurora database to Amazon S3. Create and launch a Lambda function in VPC1. Configure the Lambda function query the data from Amazon S3.

Correct Answer: B*Community vote distribution*

shahs10 Highly Voted 11 months, 1 week ago

Selected Answer: A

Correct Answer is Answer A
For B creating new VPC for lambda does not seems a suitable solution
For C Assigning different security groups to both will not work
Option D will not be suitable for relational data and involve S3 in solution
upvoted 6 times

Watascript Highly Voted 11 months, 1 week ago

Selected Answer: A

A?
<https://repost.aws/en/knowledge-center/connect-lambda-to-an-rds-instance>
upvoted 6 times

[Removed] Most Recent 2 months, 3 weeks ago

oooh this one was rough. I am going with A --> <https://repost.aws/en/knowledge-center/connect-lambda-to-an-rds-instance>
I was between A and C... wording for both tricky. But the only way C would work is if the last portion of the sentence read "Add an inbound rule to SG2 to allow TCP traffic from port 3306" or "Add an outbound rule to SG1 to allow TCP traffic..."

upvoted 4 times

quanghao 4 months ago

Selected Answer: B

A Lambda function and RDS instance in different VPCs
First, use VPC peering to connect the two VPCs. Then, use the networking configurations to connect the Lambda function in one VPC to the RDS instance in the other:
upvoted 2 times

hcsaba1982 4 months, 2 weeks ago

Selected Answer: B

This is the only one where lambda can reach the Database anyway, seems to me a prerequisite if the VPC was mentioned. Lambda by default, launched outside your VPC (in an AWS-owned VPC) so it cannot access resources.
upvoted 1 times

if it were private maybe... but public so this answer definitely wrong
upvoted 1 times

dexdinh91 4 months, 2 weeks ago

Selected Answer: B

B is correct?
upvoted 1 times

quanbui 4 months, 3 weeks ago

Selected Answer: C

C, need 2 SG
upvoted 2 times

 **[Removed]** 2 months, 3 weeks ago

C the wording throws me off... Because the inbound rule in the end of the statement should be to the database not SG1. so we want to allow lambda access to the DB... The way this option is worded is not really giving lambda access to the db... it's giving DB access to lambda but not the other way around which we need. So leaning with A

upvoted 1 times

 **sofianian** 5 months, 2 weeks ago

Selected Answer: C

Need two security groups. One is for Lambda function. The other one is for DB
upvoted 1 times

 **konieczny69** 1 month ago

nonsense
why would anyone want sql application port access to lambda??

A is the only naswer
upvoted 1 times

 **hsinchang** 5 months, 3 weeks ago

- A. right
- B. public, unsecure
- C. excessive connections
- D. additional cost and complexity

upvoted 3 times

 **love777** 6 months, 1 week ago

Selected Answer: A

VPC Configuration:

Ensure that your Lambda function is configured to run within the same VPC where your Amazon Aurora database resides (VPC1 in this case). Configure the Lambda function to use the appropriate subnets within VPC1, which are associated with the private subnet where your Amazon Aurora database is located.

Security Groups:

Attach a security group (SG1) to both the Lambda function and the Amazon Aurora database.

Configure the security group inbound rules for SG1 to allow incoming TCP traffic on Port 3306, which is the default port for MySQL (used by Aurora). This will allow communication between the Lambda function and the database.

Outbound rules should be allowed by default, so you don't need to make any changes there.

upvoted 2 times

 **ninomfr64** 6 months, 2 weeks ago

Selected Answer: A

There isn't the ideal solution to the use case among the options.

B) no need to create a new VPC and also you need to add route tables and configure SGs to make it works

C) this could work if the rule on SG1 was outbound instead of inbound (the connection is initiated from Lambda to Aurora)

D) export data to S3 is overkill and if you do that you no longer need to deploy the lambda in the VPC

A) works, as SG1 is attached to both Lambda and Aurora we need outbound rule to 3306 (Lambda initiate communication to Aurora) and also inbound rule from 3306 (to allow Aurora accept connection from Lambda). I don't like to have the same SG1 for both the Lambda and the Aurora
upvoted 5 times

 **AWSdeveloper08** 7 months, 2 weeks ago

Selected Answer: C

https://www.youtube.com/watch?v=UgWjbSixRg4&ab_channel=DevProblems

upvoted 2 times

 **ancomedian** 7 months, 2 weeks ago

Selected Answer: C

The correct answer is C

<https://www.youtube.com/watch?v=UgWjbSixRg4>

upvoted 3 times

 **awsazedevesh** 8 months, 1 week ago

It seems it is A but as I know we don't need to create outbound rules when we return something. So why it is A ?

upvoted 1 times

 **awsazedevesh** 7 months, 4 weeks ago

Nevermind. We need it to let Lambda to make outbound request

upvoted 2 times

 **awsazedevsh** 8 months, 1 week ago

It seems it is A but as I know we don't need to create outbound rules when we return something. So why it is A ?
upvoted 1 times

 **umer1998** 8 months, 1 week ago

The correct answer is C
<https://www.youtube.com/watch?v=UgWjbSixRg4>
upvoted 1 times

 **umer1998** 8 months, 1 week ago

For B (There is no need to create another VPC, since we can simply add a lambda to a VPC with private subnets)
For A (Security Group (SG) is stateless. By using NACL we can do outbound and inbound rules modification + SG is used to give access, if you keep both Lambda and DB in same SG, if you try to give access of lambda to another resource, that another resource will automatically gets the RDS access - which is out of question)
upvoted 2 times

 **rInd2000** 8 months, 2 weeks ago

Selected Answer: C

C is correct,
A is a wrong choice, how to config outbound rules in SG? :)
upvoted 1 times

Question #41

Topic 1

A developer is building a web application that uses Amazon API Gateway to expose an AWS Lambda function to process requests from clients.

During testing, the developer notices that the API Gateway times out even though the Lambda function finishes under the set time limit.

Which of the following API Gateway metrics in Amazon CloudWatch can help the developer troubleshoot the issue? (Choose two.)

- A. CacheHitCount
- B. IntegrationLatency
- C. CacheMissCount
- D. Latency
- E. Count

Correct Answer: BD

Community vote distribution

BD (100%)

 **Untamables**  11 months, 1 week ago

Selected Answer: BD

B and D
The issue is caused by timeout. So the developer needs to know the latency information.
<https://docs.aws.amazon.com/apigateway/latest/developerguide/api-gateway-metrics-and-dimensions.html>
<https://repost.aws/knowledge-center/api-gateway-rest-api-504-errors>
upvoted 10 times

 **Watascript**  11 months, 1 week ago

Selected Answer: BD

<https://docs.aws.amazon.com/apigateway/latest/developerguide/monitoring-cloudwatch.html>
upvoted 5 times

 **Jonalb**  4 months, 1 week ago

Selected Answer: BD

As melhores opções são, portanto, B. IntegraçãoLatência e D. Latência. Ambas as métricas fornecerão insights sobre onde pode estar ocorrendo a latência ou o atraso, ajudando o desenvolvedor a solucionar o problema.
upvoted 1 times

Question #42

Topic 1

A development team wants to build a continuous integration/continuous delivery (CI/CD) pipeline. The team is using AWS CodePipeline to automate the code build and deployment. The team wants to store the program code to prepare for the CI/CD pipeline. Which AWS service should the team use to store the program code?

- A. AWS CodeDeploy
- B. AWS CodeArtifact
- C. AWS CodeCommit
- D. Amazon CodeGuru

Correct Answer: C

Community vote distribution

C (100%)

✉  **Untamables**  11 months, 1 week ago

Selected Answer: C

C

<https://aws.amazon.com/codecommit/>

upvoted 7 times

✉  **Lucian2407**  6 months, 1 week ago

Selected Answer: C

Simple answer: CodeCommit

upvoted 2 times

✉  **[Removed]** 2 months, 3 weeks ago

yep. I hope to get this one

upvoted 1 times

✉  **jgopireddy** 11 months, 1 week ago

Selected Answer: C

C is the right answer

upvoted 4 times

Question #43

Topic 1

A developer is designing an AWS Lambda function that creates temporary files that are less than 10 MB during invocation. The temporary files will be accessed and modified multiple times during invocation. The developer has no need to save or retrieve these files in the future. Where should the temporary files be stored?

- A. the /tmp directory
- B. Amazon Elastic File System (Amazon EFS)
- C. Amazon Elastic Block Store (Amazon EBS)
- D. Amazon S3

Correct Answer: A

Community vote distribution

A (100%)

 **Untamables**  11 months, 1 week ago

Selected Answer: A

A

A Lambda function has access to local storage in the /tmp directory. Each execution environment provides between 512 MB and 10,240 MB, in 1-MB increments, of disk space in the /tmp directory.

<https://docs.aws.amazon.com/lambda/latest/dg/foundation-progmodel.html>

upvoted 15 times

 **Mtho96**  7 months, 3 weeks ago

The correct answer is A

The /tmp directory is the recommended location for storing temporary files within an AWS Lambda function. The /tmp directory provides a writable space with a local storage capacity of 512 MB. It is specifically designed for temporary storage within the Lambda execution environment.

upvoted 3 times

Question #44

Topic 1

A developer is designing a serverless application with two AWS Lambda functions to process photos. One Lambda function stores objects in an Amazon S3 bucket and stores the associated metadata in an Amazon DynamoDB table. The other Lambda function fetches the objects from the S3 bucket by using the metadata from the DynamoDB table. Both Lambda functions use the same Python library to perform complex computations and are approaching the quota for the maximum size of zipped deployment packages.

What should the developer do to reduce the size of the Lambda deployment packages with the LEAST operational overhead?

- A. Package each Python library in its own .zip file archive. Deploy each Lambda function with its own copy of the library.
- B. Create a Lambda layer with the required Python library. Use the Lambda layer in both Lambda functions.
- C. Combine the two Lambda functions into one Lambda function. Deploy the Lambda function as a single .zip file archive.
- D. Download the Python library to an S3 bucket. Program the Lambda functions to reference the object URLs.

Correct Answer: B

Community vote distribution

B (100%)

✉  **Untamables**  11 months, 1 week ago

Selected Answer: B

B

<https://docs.aws.amazon.com/lambda/latest/dg/invocation-layers.html>

upvoted 9 times

✉  **Ponyi**  3 months, 4 weeks ago

Whenever you see "to make deployment package smaller" -----> Layers

upvoted 4 times

✉  **Mtho96** 7 months, 3 weeks ago

B

creating a Lambda layer with the required Python library and using it in both Lambda functions, is the most suitable solution for reducing the size of the deployment packages with minimal operational overhead.

<https://docs.aws.amazon.com/lambda/latest/dg/invocation-layers.html>

upvoted 4 times

✉  **Baba_Eni** 9 months ago

Selected Answer: B

<https://docs.aws.amazon.com/lambda/latest/dg/invocation-layers.html>

upvoted 4 times

Question #45

Topic 1

A developer is writing an AWS Lambda function. The developer wants to log key events that occur while the Lambda function runs. The developer wants to include a unique identifier to associate the events with a specific function invocation. The developer adds the following code to the Lambda function:

```
function handler(event, context) {  
}
```

Which solution will meet this requirement?

- A. Obtain the request identifier from the AWS request ID field in the context object. Configure the application to write logs to standard output.
- B. Obtain the request identifier from the AWS request ID field in the event object. Configure the application to write logs to a file.
- C. Obtain the request identifier from the AWS request ID field in the event object. Configure the application to write logs to standard output.
- D. Obtain the request identifier from the AWS request ID field in the context object. Configure the application to write logs to a file.

Correct Answer: D
Community vote distribution


ninomfr64 Highly Voted 6 months, 2 weeks ago

Selected Answer: A

Both A and D could work here, as both rely on the context object to get access to execution ID
https://docs.aws.amazon.com/us_en/lambda/latest/dg/python-context.html

While A uses stoud to send log to CloudWatch Log, D writes to a file. D is less specific (where is the file stored? A single file for each execution?) and looks more complex (manage file(s), manage concurrency access to the file ...), thus I'll go for A

upvoted 7 times

Untamables Highly Voted 11 months, 1 week ago

Selected Answer: A

A

<https://docs.aws.amazon.com/lambda/latest/dg/nodejs-context.html>

<https://docs.aws.amazon.com/lambda/latest/dg/nodejs-logging.html>

There is no explicit information for the runtime, the code is written in Node.js.

upvoted 7 times

Pupina 7 months, 3 weeks ago

- <https://docs.aws.amazon.com/prescriptive-guidance/latest/implementing-logging-monitoring-cloudwatch/lambda-logging-metrics.html>
- Lambda automatically streams standard output and standard error messages from a Lambda function to CloudWatch Logs, without requiring logging drivers.

upvoted 2 times

james2033 Most Recent 1 week, 4 days ago

Selected Answer: A

See `getAwsRequestId()` at <https://docs.aws.amazon.com/lambda/latest/dg/java-context.html>

upvoted 1 times

rimaSamir 2 weeks, 1 day ago

Tricky question. Sure A and D both can do, but... The question is: why we need to get the request identifier if we will write logs to CloudWatch? So, I will go with answer A.

upvoted 1 times

SD_CS 4 weeks, 1 day ago

I think it should be A. Also can anyone advise why the two answers are different ?

<https://www.examtopics.com/discussions/amazon/view/29007-exam-aws-certified-developer-associate-topic-1-question-26/>

upvoted 2 times

KarBiswa 2 months, 2 weeks ago

The Option A is correct because:

The second argument is the context object. A context object is passed to your function by Lambda at runtime. This object provides methods and properties that provide information about the invocation, function, and runtime environment.

<https://docs.aws.amazon.com/lambda/latest/dg/python-handler.html>

upvoted 1 times

hsinchang 5 months, 3 weeks ago

invocation is in the Context object, and logging into Standard output, which goes into CloudWatch(more durable, more scalable, etc.), is generally better than using temporary Files

upvoted 1 times

 **Pupina** 7 months, 3 weeks ago

Selected Answer A:

Handler function <https://docs.aws.amazon.com/lambda/latest/dg/nodejs-handler.html>

Context object awsRequestId – The identifier of the invocation request. <https://docs.aws.amazon.com/lambda/latest/dg/nodejs-context.html>

upvoted 1 times

 **rInd2000** 8 months, 2 weeks ago

Selected Answer: A

In my opinion both options A and D can fulfill the requirement, since there is no requirement about any specific logging and monitoring tool I will go with defaults (A) because, simple is better than complex :)

upvoted 1 times

 **Prem28** 9 months, 2 weeks ago

Selected Answer: A

The application can write logs to standard output or to a file. Standard output is the default destination for logs. Logs that are written to standard output are sent to Amazon CloudWatch Logs. Logs that are written to a file are stored on the Lambda function's execution environment.

upvoted 3 times

 **Nagendarh** 9 months, 3 weeks ago

Ans: D

The code snippet provided in the question is obtaining the request identifier from the context.awsRequestId property, which is available in the context object provided to the Lambda function handler. Therefore, the correct option is:

D. Obtain the request identifier from the AWS request ID field in the context object. Configure the application to write logs to a file.

This option meets the requirement of logging key events and including a unique identifier to associate the events with a specific function invocation.

upvoted 1 times

 **Rpod** 10 months, 2 weeks ago

Selected Answer: D

Why not D ? Writing logs to a file seems more appropriate than stdout

upvoted 3 times

 **Watascript** 11 months, 1 week ago

Selected Answer: A

https://docs.aws.amazon.com/us_en/lambda/latest/dg/python-context.html

https://docs.aws.amazon.com/us_en/lambda/latest/dg/python-logging.html

upvoted 4 times

 **Dun6** 11 months, 2 weeks ago

Selected Answer: A

A it is

upvoted 3 times

 **March2023** 11 months, 2 weeks ago

Selected Answer: A

I think the answer is A

upvoted 3 times

Question #46

Topic 1

A developer is working on a serverless application that needs to process any changes to an Amazon DynamoDB table with an AWS Lambda function.

How should the developer configure the Lambda function to detect changes to the DynamoDB table?

- A. Create an Amazon Kinesis data stream, and attach it to the DynamoDB table. Create a trigger to connect the data stream to the Lambda function.
- B. Create an Amazon EventBridge rule to invoke the Lambda function on a regular schedule. Connect to the DynamoDB table from the Lambda function to detect changes.
- C. Enable DynamoDB Streams on the table. Create a trigger to connect the DynamoDB stream to the Lambda function.
- D. Create an Amazon Kinesis Data Firehose delivery stream, and attach it to the DynamoDB table. Configure the delivery stream destination as the Lambda function.

Correct Answer: C

Community vote distribution

C (100%)

 Untamables Highly Voted 11 months, 1 week ago

Selected Answer: C

C

<https://docs.aws.amazon.com/amazondynamodb/latest/developerguide/Streams.Lambda.html>

upvoted 8 times

 nmc12 Most Recent 5 months ago

Selected Answer: C

C

Enabling DynamoDB Streams on the table allows you to capture and process changes (inserts, updates, deletes) to the table in real-time. You can then create a Lambda trigger that listens to the DynamoDB stream and invokes the Lambda function whenever there is a change in the table. This is a common and effective way to react to changes in DynamoDB tables with AWS Lambda functions.

upvoted 2 times

 Baba_Eni 9 months ago

Selected Answer: C

<https://docs.aws.amazon.com/amazondynamodb/latest/developerguide/Streams.html>

upvoted 2 times

Question #47

Topic 1

An application uses an Amazon EC2 Auto Scaling group. A developer notices that EC2 instances are taking a long time to become available during scale-out events. The UserData script is taking a long time to run.

The developer must implement a solution to decrease the time that elapses before an EC2 instance becomes available. The solution must make the most recent version of the application available at all times and must apply all available security updates. The solution also must minimize the number of images that are created. The images must be validated.

Which combination of steps should the developer take to meet these requirements? (Choose two.)

- A. Use EC2 Image Builder to create an Amazon Machine Image (AMI). Install all the patches and agents that are needed to manage and run the application. Update the Auto Scaling group launch configuration to use the AMI.
- B. Use EC2 Image Builder to create an Amazon Machine Image (AMI). Install the latest version of the application and all the patches and agents that are needed to manage and run the application. Update the Auto Scaling group launch configuration to use the AMI.
- C. Set up AWS CodeDeploy to deploy the most recent version of the application at runtime.
- D. Set up AWS CodePipeline to deploy the most recent version of the application at runtime.
- E. Remove any commands that perform operating system patching from the UserData script.

Correct Answer: AB

Community vote distribution



✉ **imvb88** 9 months, 1 week ago

Selected Answer: AE

Why choose A over B? Problem is that B will tie an AMI with a specific version, so if there is a new version, we need to create a new AMI, and that contradicts with "minimize the number of images that are created".

Then E over C, D? E is obviously complementary to A, where removing commands from User Data will make the instance booting process much faster (and of course with A you don't need that anymore).

C and D also works but 1/not complementary with any other options; 2/CodeDeploy takes time to execute.

Hope this helps somebody struggling with this question.

upvoted 21 times

✉ **r3mo** 7 months, 1 week ago

And what about this requisit? "The solution must make the most recent version of the application available at all times". Only the Answer B fulfill this part.

upvoted 4 times

✉ **minh12312312** 4 months, 1 week ago

The solution must make the most recent version of the application available at all times

upvoted 1 times

✉ **[Removed]** 2 months, 3 weeks ago

I agree I think between A and B.- answer is B

upvoted 3 times

✉ **yashika2005** 9 months ago

thanksss a lott!

upvoted 1 times

✉ **KillThemWithKindness** 7 months, 1 week ago

Selected Answer: AC

Option E, which suggests removing operating system patching from the UserData script, might reduce the startup time. But this could leave your instances unpatched and vulnerable, which doesn't meet the requirement to apply all available security updates.

upvoted 11 times

✉ **SerialiDr** 6 days, 11 hours ago

Selected Answer: BE

B. Use EC2 Image Builder to create an Amazon Machine Image (AMI) that includes the latest version of the application and all necessary patches and agents required to manage and run the application. This approach allows instances to launch faster because it minimizes the amount of setup required after instance startup, reducing the reliance on lengthy UserData scripts for initial setup.

E. Remove any commands that perform operating system patching from the UserData script. Operating system patching can significantly increase

the time it takes for an instance to become available, especially if there are many updates to apply. By removing these commands and ensuring that the AMI used already includes the latest patches, the startup time can be reduced.

upvoted 1 times

 **konieczny69** 1 month ago

Selected Answer: DE

Answers: DE

A and B sound good, but since you only have 2 options they are not enough.

C is not enough.

D is wider and can build an AMI.

E is a must to speed it up.

upvoted 1 times

 **Ashwinvdm22** 1 month ago

Selected Answer: AE

AE is correct.

upvoted 1 times

 **BaYaga** 2 months ago

Option A suggests using EC2 Image Builder to create an AMI and install all the patches and agents needed for the application. This ensures that the AMI is pre-configured with the necessary updates and configurations, reducing the time it takes for instances to become available during scale-out events.

Option E recommends removing operating system patching from the UserData script. This is because, with EC2 Image Builder, the patches are applied during the AMI creation process, so there's no need to perform patching in the UserData script. This helps in minimizing the time it takes for instances to launch during scale-out events.

It's A&E

upvoted 1 times

 **xdkonorek2** 2 months, 1 week ago

Selected Answer: AD

I think D > C

"The solution must make the most recent version of the application available at all times"

Most recent version of an application lives in source control and we need whole CI/CD for releasing this version which is use case for code pipeline, code deploy itself won't conduct the whole process

upvoted 1 times

 **Auronb** 2 months, 2 weeks ago

Selected Answer: AC

A-- Decrease the time for EC2 instance availability while minimizing the number of images created

C-- Ensure the most recent version of the application(not d because it will also use code deploy)

upvoted 1 times

 **KarBiswa** 2 months, 2 weeks ago

Selected Answer: CE

The script had time out issues so E covers that, again it must use minimum images so option C is suitable. A & B are created for confusions.

upvoted 1 times

 **KarBiswa** 1 week ago

Modifying my answer to A,C

upvoted 1 times

 **KarBiswa** 2 months, 2 weeks ago

I would go for C&E

upvoted 2 times

 **Abdlhince** 2 months, 3 weeks ago

it is BC

EC2 Image Builder (Option B):

Using EC2 Image Builder to create an AMI allows you to pre-bake the required configurations, application updates, and security patches into the image. This significantly reduces the launch time of instances as the AMI is already prepared with the necessary software and configurations. Installing the latest version of the application along with patches and agents ensures that the AMI is up-to-date and secure.

AWS CodeDeploy (Option C):

AWS CodeDeploy allows you to deploy the most recent version of the application at runtime without the need to create a new AMI for every update. This helps in minimizing the number of images created and allows you to quickly roll out changes without launching new instances. This approach also ensures that the most recent version of the application is always available.

upvoted 1 times

 **tqiu654** 3 months ago

Selected Answer: BE

Based on ChatGPT: BE

upvoted 1 times

□ **Cable01011000** 2 months, 1 week ago

i just asked chatgpt for answer. It replied A and C. After reevaluation it was still A and C

upvoted 1 times

□ **ronn555** 3 months, 3 weeks ago

Selected Answer: AC

A is correct. C vs E. C satisfies latest software req. E contradicts latest patch req., it is red herring to A bc you think that patches are unnecessary on a patched image, but they will eventually be.

upvoted 1 times

□ **Jonalb** 4 months, 1 week ago

Selected Answer: AC

A. Use o EC2 Image Builder para criar uma Amazon Machine Image (AMI). Instale todos os patches e agentes necessários para gerenciar e executar o aplicativo. Atualize a configuração de inicialização do grupo do Auto Scaling para usar a AMI.

C. Configure o AWS CodeDeploy para implantar a versão mais recente do aplicativo em tempo de execução.

upvoted 1 times

□ **Rameez1** 4 months, 3 weeks ago

Selected Answer: AC

If I look for eliminating options which contradicts with the requirements BDE gets eliminated as below:

B: Would need to recreate AMI for every version update (As per the requirement we need to minimize image creations) -> On contrary A will boost faster with all necessary packages and minimum number of AMI creations.

D: Code pipeline can't deploy code of its own and would need code deploy for doing it -> Making C a better choice.

E: User script is necessary for security updates.

upvoted 2 times

□ **Cerakoted** 4 months, 3 weeks ago

Selected Answer: AC

I think AC

Why not AE? -> "must apply all available security updates" on the question. need to update OS with userdata script

upvoted 1 times

□ **Die_fa_ed** 5 months, 1 week ago

Selected Answer: AC

- Option B: Use EC2 Image Builder to create an Amazon Machine Image (AMI) that includes the latest version of the application and all necessary patches and agents. This ensures that the AMI is up-to-date and ready to use. Then, update the Auto Scaling group launch configuration to use this AMI.

- Option C: Set up AWS CodeDeploy to deploy the most recent version of the application at runtime. CodeDeploy allows you to easily manage and deploy application updates without creating new AMIs. This helps ensure that the most recent version of the application is available without the need to recreate AMIs.

These steps minimize the number of images created (as you update the AMI when necessary) and allow for efficient updates of the application while ensuring security patches and updates are applied.

upvoted 1 times

Question #48

Topic 1

A developer is creating an AWS Lambda function that needs credentials to connect to an Amazon RDS for MySQL database. An Amazon S3 bucket currently stores the credentials. The developer needs to improve the existing solution by implementing credential rotation and secure storage. The developer also needs to provide integration with the Lambda function.

Which solution should the developer use to store and retrieve the credentials with the LEAST management overhead?

- A. Store the credentials in AWS Systems Manager Parameter Store. Select the database that the parameter will access. Use the default AWS Key Management Service (AWS KMS) key to encrypt the parameter. Enable automatic rotation for the parameter. Use the parameter from Parameter Store on the Lambda function to connect to the database.
- B. Encrypt the credentials with the default AWS Key Management Service (AWS KMS) key. Store the credentials as environment variables for the Lambda function. Create a second Lambda function to generate new credentials and to rotate the credentials by updating the environment variables of the first Lambda function. Invoke the second Lambda function by using an Amazon EventBridge rule that runs on a schedule. Update the database to use the new credentials. On the first Lambda function, retrieve the credentials from the environment variables. Decrypt the credentials by using AWS KMS. Connect to the database.
- C. Store the credentials in AWS Secrets Manager. Set the secret type to Credentials for Amazon RDS database. Select the database that the secret will access. Use the default AWS Key Management Service (AWS KMS) key to encrypt the secret. Enable automatic rotation for the secret. Use the secret from Secrets Manager on the Lambda function to connect to the database.
- D. Encrypt the credentials by using AWS Key Management Service (AWS KMS). Store the credentials in an Amazon DynamoDB table. Create a second Lambda function to rotate the credentials. Invoke the second Lambda function by using an Amazon EventBridge rule that runs on a schedule. Update the DynamoDB table. Update the database to use the generated credentials. Retrieve the credentials from DynamoDB with the first Lambda function. Connect to the database.

Correct Answer: C

Community vote distribution

C (100%)

 **Untamables**  11 months, 1 week ago

Selected Answer: C

C

<https://docs.aws.amazon.com/secretsmanager/latest/userguide/intro.html>
https://docs.aws.amazon.com/secretsmanager/latest/userguide/create_database_secret.html
https://docs.aws.amazon.com/secretsmanager/latest/userguide/retrieving-secrets_lambda.html

upvoted 10 times

 **jipark** 7 months ago

"automatic rotation" "cross region" - Security Manager

upvoted 1 times

 **jayvarma**  6 months, 3 weeks ago

Option C.

Keyword: Implementing credential rotation and secure storage.

upvoted 1 times

 **Mtho96** 7 months, 3 weeks ago

C

This solution minimizes management overhead by leveraging the built-in capabilities of AWS Secrets Manager, such as encryption, automatic rotation, and integration with AWS Lambda. It provides a secure and efficient way to store and retrieve

<https://docs.aws.amazon.com/secretsmanager/latest/userguide/intro.html>
https://docs.aws.amazon.com/secretsmanager/latest/userguide/create_database_secret.html
https://docs.aws.amazon.com/secretsmanager/latest/userguide/retrieving-secrets_lambda.html

upvoted 2 times

Question #49

Topic 1

A developer has written the following IAM policy to provide access to an Amazon S3 bucket:

```
{
    "Version": "2012-10-17",
    "Statement": [
        {
            "Effect": "Allow",
            "Action": [
                "s3:GetObject",
                "s3:PutObject"
            ],
            "Resource": "arn:aws:s3:::DOC-EXAMPLE-BUCKET/*"
        },
        {
            "Effect": "Deny",
            "Action": "s3:*",
            "Resource": "arn:aws:s3:::DOC-EXAMPLE-BUCKET/secrets*"
        }
    ]
}
```

Which access does the policy allow regarding the s3:GetObject and s3:PutObject actions?

- A. Access on all buckets except the “DOC-EXAMPLE-BUCKET” bucket
- B. Access on all buckets that start with “DOC-EXAMPLE-BUCKET” except the “DOC-EXAMPLE-BUCKET/secrets” bucket
- C. Access on all objects in the “DOC-EXAMPLE-BUCKET” bucket along with access to all S3 actions for objects in the “DOC-EXAMPLE-BUCKET” bucket that start with “secrets”
- D. Access on all objects in the “DOC-EXAMPLE-BUCKET” bucket except on objects that start with “secrets”

Correct Answer: D

Community vote distribution

D (100%)

✉️  **Untamables**  11 months, 1 week ago

Selected Answer: D

D

<https://docs.aws.amazon.com/AmazonS3/latest/userguide/using-with-s3-actions.html>

upvoted 10 times

✉️  **nmc12**  5 months ago

Selected Answer: D

D

<https://docs.aws.amazon.com/AmazonS3/latest/userguide/using-with-s3-actions.html>

upvoted 2 times

Question #50

Topic 1

A developer is creating a mobile app that calls a backend service by using an Amazon API Gateway REST API. For integration testing during the development phase, the developer wants to simulate different backend responses without invoking the backend service. Which solution will meet these requirements with the LEAST operational overhead?

- A. Create an AWS Lambda function. Use API Gateway proxy integration to return constant HTTP responses.
- B. Create an Amazon EC2 instance that serves the backend REST API by using an AWS CloudFormation template.
- C. Customize the API Gateway stage to select a response type based on the request.
- D. Use a request mapping template to select the mock integration response.

Correct Answer: B*Community vote distribution*

D (100%)

 **Untamables**  11 months, 1 week ago

Selected Answer: D

D

<https://docs.aws.amazon.com/apigateway/latest/developerguide/how-to-mock-integration.html>

upvoted 15 times

 **Dun6**  11 months, 2 weeks ago

Chatgpt said D

upvoted 6 times

 **Umntu**  4 months, 4 weeks ago

D. Use a request mapping template to select the mock integration response.

Option D allows you to use a request mapping template in API Gateway to select the mock integration response. This approach allows you to simulate different backend responses without invoking the actual backend service. It provides flexibility and control over the responses without the need for additional AWS resources like Lambda functions or EC2 instances, thus minimizing operational overhead.

upvoted 3 times

 **hsinchang** 5 months, 3 weeks ago

without invoking backend service -> mock

upvoted 1 times

 **ninomfr64** 6 months, 2 weeks ago

Selected Answer: DD as per doc <https://docs.aws.amazon.com/apigateway/latest/developerguide/how-to-mock-integration.html>

Wording confused me a bit, with mapping template you do not "select" a response, instead you actually craft it in this case
upvoted 1 times

 **KhyatiChhajed** 9 months, 4 weeks ago

Selected Answer: D

it's D

upvoted 1 times

 **March2023** 11 months, 2 weeks ago

Selected Answer: D

I'm going with D as well.

upvoted 4 times

Question #51

Topic 1

A developer has a legacy application that is hosted on-premises. Other applications hosted on AWS depend on the on-premises application for proper functioning. In case of any application errors, the developer wants to be able to use Amazon CloudWatch to monitor and troubleshoot all applications from one place.

How can the developer accomplish this?

- A. Install an AWS SDK on the on-premises server to automatically send logs to CloudWatch.
- B. Download the CloudWatch agent to the on-premises server. Configure the agent to use IAM user credentials with permissions for CloudWatch.
- C. Upload log files from the on-premises server to Amazon S3 and have CloudWatch read the files.
- D. Upload log files from the on-premises server to an Amazon EC2 instance and have the instance forward the logs to CloudWatch.

Correct Answer: B

Community vote distribution

B (100%)

✉  **Untamables**  11 months, 1 week ago

Selected Answer: B

B

<https://docs.aws.amazon.com/AmazonCloudWatch/latest/monitoring/Install-CloudWatch-Agent.html>
<https://docs.aws.amazon.com/AmazonCloudWatch/latest/monitoring/install-CloudWatch-Agent-on-premise.html>
upvoted 11 times

✉  **Dun6**  11 months, 2 weeks ago

Selected Answer: B

We need cloudwatchagent
upvoted 5 times

✉  **Baba_Eni**  9 months ago

Selected Answer: B

<https://docs.aws.amazon.com/AmazonCloudWatch/latest/monitoring/Install-CloudWatch-Agent.html>
upvoted 2 times

Question #52

Topic 1

An Amazon Kinesis Data Firehose delivery stream is receiving customer data that contains personally identifiable information. A developer needs to remove pattern-based customer identifiers from the data and store the modified data in an Amazon S3 bucket. What should the developer do to meet these requirements?

- A. Implement Kinesis Data Firehose data transformation as an AWS Lambda function. Configure the function to remove the customer identifiers. Set an Amazon S3 bucket as the destination of the delivery stream.
- B. Launch an Amazon EC2 instance. Set the EC2 instance as the destination of the delivery stream. Run an application on the EC2 instance to remove the customer identifiers. Store the transformed data in an Amazon S3 bucket.
- C. Create an Amazon OpenSearch Service instance. Set the OpenSearch Service instance as the destination of the delivery stream. Use search and replace to remove the customer identifiers. Export the data to an Amazon S3 bucket.
- D. Create an AWS Step Functions workflow to remove the customer identifiers. As the last step in the workflow, store the transformed data in an Amazon S3 bucket. Set the workflow as the destination of the delivery stream.

Correct Answer: A*Community vote distribution* A (100%)

 **Untamables**  11 months, 1 week ago

Selected Answer: A

A

<https://docs.aws.amazon.com/firehose/latest/dev/data-transformation.html>

upvoted 11 times

 **tttamtttam**  7 months, 3 weeks ago

Selected Answer: A

It supports custom data transformation using AWS Lambda

upvoted 2 times

Question #53

Topic 1

A developer is using an AWS Lambda function to generate avatars for profile pictures that are uploaded to an Amazon S3 bucket. The Lambda function is automatically invoked for profile pictures that are saved under the /original/ S3 prefix. The developer notices that some pictures cause the Lambda function to time out. The developer wants to implement a fallback mechanism by using another Lambda function that resizes the profile picture.

Which solution will meet these requirements with the LEAST development effort?

- A. Set the image resize Lambda function as a destination of the avatar generator Lambda function for the events that fail processing.
- B. Create an Amazon Simple Queue Service (Amazon SQS) queue. Set the SQS queue as a destination with an on failure condition for the avatar generator Lambda function. Configure the image resize Lambda function to poll from the SQS queue.
- C. Create an AWS Step Functions state machine that invokes the avatar generator Lambda function and uses the image resize Lambda function as a fallback. Create an Amazon EventBridge rule that matches events from the S3 bucket to invoke the state machine.
- D. Create an Amazon Simple Notification Service (Amazon SNS) topic. Set the SNS topic as a destination with an on failure condition for the avatar generator Lambda function. Subscribe the image resize Lambda function to the SNS topic.

Correct Answer: C

Community vote distribution



✉️ March2023 11 months, 2 weeks ago

Selected Answer: A

Wouldn't A be the Least Effort

upvoted 11 times

✉️ Untamables 11 months, 1 week ago

Selected Answer: C

C

Before execute the recovery Lambda function, the fallback mechanism must catch the timeout error of the generator Lambda function.
<https://docs.aws.amazon.com/step-functions/latest/dg/concepts-error-handling.html>

upvoted 7 times

✉️ KarBiswa 2 months, 2 weeks ago

Selected Answer: A

Least development effort no emphasis on orchestration

upvoted 2 times

✉️ KarBiswa 1 week ago

<https://aws.amazon.com/ru/blogs/compute/introducing-aws-lambda-destinations/> this link justifies the answer

upvoted 1 times

✉️ Jonalb 4 months, 1 week ago

Selected Answer: A

A. Defina a função Lambda de redimensionamento de imagem como um destino da função Lambda do gerador de avatar para os eventos que falham no processamento

upvoted 1 times

✉️ jingle494 5 months, 1 week ago

Selected Answer: A

Previously, you needed to write the SQS/SNS/EventBridge handling code within your Lambda function and manage retries and failures yourself.

With Destinations, you can route asynchronous function results as an execution record to a destination resource without writing additional code.

<https://aws.amazon.com/ru/blogs/compute/introducing-aws-lambda-destinations/>

upvoted 7 times

✉️ appuNBablu 5 months, 1 week ago

A, because we can map another Lambda function as destination alongside (SQS, SNS, Event Bridge)

upvoted 1 times

✉️ ninomfr64 6 months, 2 weeks ago

Selected Answer: A

A is the easiest option

<https://docs.aws.amazon.com/lambda/latest/dg/invocation-async.html#invocation-async-destinations>

upvoted 1 times

 **jayvarma** 6 months, 3 weeks ago

Option B is the right answer. Can someone say why B cannot be the right answer for this question?

Option A fails when there are huge amounts of requests coming to the lambda functions. There is every chance for lambda to throw ProvisionedThroughputExceeded Exception because of the throttling issues. Which is almost the similar reason why Option C will also fail at some point.

However, you could use SNS but it is not the best solution.

Definitely Option B.

upvoted 6 times

 **backfringe** 7 months, 1 week ago

Selected Answer: A

least amount of effort to set up destination on failure events to REsize Lambda

upvoted 1 times

 **AWSdeveloper08** 7 months, 2 weeks ago

Selected Answer: B

I agree with the explanation for option B. Scalability is the key

upvoted 2 times

 **[Removed]** 7 months, 2 weeks ago

Selected Answer: A

A is a simplest solution

<https://aws.amazon.com/ru/blogs/compute/introducing-aws-lambda-destinations/>

<https://docs.aws.amazon.com/lambda/latest/dg/invocation-async.html#invocation-async-destinations>

upvoted 3 times

 **jipark** 7 months ago

your explanation looks correct.

Lambda "Denstination" seems exact solution for this.

it explains how to handle success, failed case.

upvoted 1 times

 **umer1998** 8 months, 1 week ago

I agree with B because I am considering scalability in my mind if we have thousands/millions of requests at the same time. because of the quota limit, the lambda can fail if we continuously call two functions (step function) together, which may result in another function doing a throttling issue.

If we pass the message to the SQS, our function will never face this issue with throttling.

and since the question asks us to do the least development efforts.

Separation of concerns will make development easier.

upvoted 3 times

 **ScherbakovMike** 9 months ago

SQS or SNS can be assigned as 'TargetArn' in the 'DeadLetterConfig'.

I think, D variant is more appropriate: in case of timeout (image is too large), there will be push to SNS and to subscribed resizing function. Subscribed resizing function writes the resized image to S3 and original Lambda function processes the resized image again.

upvoted 1 times

 **rInd2000** 9 months, 2 weeks ago

Selected Answer: B

B is the best option in my opinion, I agree with Nagendhar and junrun3 explanations and because decoupling using SQS is a best practice, I think when they say ... with the LEAST development effort that imply following the best practices in AWS.

upvoted 3 times

 **marijabtw** 9 months, 2 weeks ago

Selected Answer: C

The key in the question is "LEAST development effort", which indicates that we should choose step functions.

upvoted 3 times

 **Nagendhar** 9 months, 3 weeks ago

Ans: B

Option B involves creating an Amazon SQS queue and setting the SQS queue as a destination with an on failure condition for the avatar generator Lambda function. The image resize Lambda function is then configured to poll from the SQS queue. This approach ensures that the image resize Lambda function is invoked in case of a timeout, and using an SQS queue is a common pattern for decoupling services. This approach requires the least development effort because it involves setting up an SQS queue and configuring the Lambda functions to use it, which is a simple process.

upvoted 4 times

 **junrun3** 9 months, 3 weeks ago

Selected Answer: B

In case B, the SQS queue can be used to send a message containing a failure condition for the avatar generator Lambda function. The image resize Lambda function can then be configured to poll the SQS queue. This will ensure that the image resize Lambda function is retried as needed,

reducing costs.
upvoted 1 times

Question #54

A developer needs to migrate an online retail application to AWS to handle an anticipated increase in traffic. The application currently runs on two servers: one server for the web application and another server for the database. The web server renders webpages and manages session state in memory. The database server hosts a MySQL database that contains order details. When traffic to the application is heavy, the memory usage for the web server approaches 100% and the application slows down considerably.

The developer has found that most of the memory increase and performance decrease is related to the load of managing additional user sessions. For the web server migration, the developer will use Amazon EC2 instances with an Auto Scaling group behind an Application Load Balancer.

Which additional set of changes should the developer make to the application to improve the application's performance?

- A. Use an EC2 instance to host the MySQL database. Store the session data and the application data in the MySQL database.
- B. Use Amazon ElastiCache for Memcached to store and manage the session data. Use an Amazon RDS for MySQL DB instance to store the application data.
- C. Use Amazon ElastiCache for Memcached to store and manage the session data and the application data.
- D. Use the EC2 instance store to manage the session data. Use an Amazon RDS for MySQL DB instance to store the application data.

Correct Answer: A

Community vote distribution



✉ **Untamables** Highly Voted 11 months, 1 week ago

Selected Answer: B

B

Session stores are easy to create with Amazon ElastiCache for Memcached.

<https://aws.amazon.com/elasticsearch/memcached/>

With Amazon RDS, you can deploy scalable MySQL servers in minutes with cost-efficient and resizable hardware capacity.

<https://aws.amazon.com/rds/mysql/>

upvoted 9 times

✉ **clarksu** Highly Voted 11 months, 2 weeks ago

Selected Answer: B

Option B ,

how can you image using an EC2 as cache

upvoted 8 times

✉ **KarBiswa** Most Recent 2 months, 2 weeks ago

Selected Answer: B

The additional requirement for the faster retrieval of data

upvoted 1 times

✉ **Aws_aspr** 6 months, 3 weeks ago

Selected Answer: B

B is correct

upvoted 1 times

✉ **nkelesidis** 7 months, 3 weeks ago

Selected Answer: A

I choose A.

It says that the most of the memory increase is related to the load of managing additional user sessions. So I think Memcached doesn't make sense.

Also, isn't bad practice to store session information in db.

upvoted 1 times

✉ **ninomfr64** 6 months, 2 weeks ago

Session Store is one of the main use case for ElastiCache for Memcached as pwe AWS website

<https://aws.amazon.com/elasticsearch/memcached/#:~:text=ElastiCache%20for%20Memcached.-,Session%20Store,-Session%20stores%20are>

upvoted 3 times

✉  **Dun6** 11 months, 2 weeks ago

Selected Answer: B

B it is
upvoted 6 times

Question #55

Topic 1

An application uses Lambda functions to extract metadata from files uploaded to an S3 bucket; the metadata is stored in Amazon DynamoDB. The application starts behaving unexpectedly, and the developer wants to examine the logs of the Lambda function code for errors. Based on this system configuration, where would the developer find the logs?

- A. Amazon S3
- B. AWS CloudTrail
- C. Amazon CloudWatch
- D. Amazon DynamoDB

Correct Answer: C

Community vote distribution

C (100%)

✉  **Untamables**  11 months, 1 week ago

Selected Answer: C

C
<https://docs.aws.amazon.com/prescriptive-guidance/latest/implementing-logging-monitoring-cloudwatch/lambda-logging-metrics.html>
upvoted 7 times

✉  **AhmedAliHashmi**  6 months ago

Answer is C
upvoted 1 times

Question #56

Topic 1

A company is using an AWS Lambda function to process records from an Amazon Kinesis data stream. The company recently observed slow processing of the records. A developer notices that the iterator age metric for the function is increasing and that the Lambda run duration is constantly above normal.

Which actions should the developer take to increase the processing speed? (Choose two.)

- A. Increase the number of shards of the Kinesis data stream.
- B. Decrease the timeout of the Lambda function.
- C. Increase the memory that is allocated to the Lambda function.
- D. Decrease the number of shards of the Kinesis data stream.
- E. Increase the timeout of the Lambda function.

Correct Answer: AC

Community vote distribution

AC (100%)

✉️  **Untamables**  11 months, 1 week ago

Selected Answer: AC

A and C
<https://repost.aws/knowledge-center/lambda-iterator-age>
upvoted 12 times

✉️  **KarBiswa**  2 months, 2 weeks ago

Selected Answer: AC

As the lambda has no timing issue
upvoted 1 times

✉️  **gcmrjbr** 3 months ago

CE
Shards (option A) works on the parallelism part and not on the function's execution time.
upvoted 1 times

✉️  **gcmrjbr** 3 months ago

A and C.
I would like to change my answer. More shards means more parallel processing.
upvoted 1 times

Question #57

Topic 1

A company needs to harden its container images before the images are in a running state. The company's application uses Amazon Elastic Container Registry (Amazon ECR) as an image registry. Amazon Elastic Kubernetes Service (Amazon EKS) for compute, and an AWS CodePipeline pipeline that orchestrates a continuous integration and continuous delivery (CI/CD) workflow.

Dynamic application security testing occurs in the final stage of the pipeline after a new image is deployed to a development namespace in the EKS cluster. A developer needs to place an analysis stage before this deployment to analyze the container image earlier in the CI/CD pipeline. Which solution will meet these requirements with the MOST operational efficiency?

- A. Build the container image and run the docker scan command locally. Mitigate any findings before pushing changes to the source code repository. Write a pre-commit hook that enforces the use of this workflow before commit.
- B. Create a new CodePipeline stage that occurs after the container image is built. Configure ECR basic image scanning to scan on image push. Use an AWS Lambda function as the action provider. Configure the Lambda function to check the scan results and to fail the pipeline if there are findings.
- C. Create a new CodePipeline stage that occurs after source code has been retrieved from its repository. Run a security scanner on the latest revision of the source code. Fail the pipeline if there are findings.
- D. Add an action to the deployment stage of the pipeline so that the action occurs before the deployment to the EKS cluster. Configure ECR basic image scanning to scan on image push. Use an AWS Lambda function as the action provider. Configure the Lambda function to check the scan results and to fail the pipeline if there are findings.

Correct Answer: D*Community vote distribution*

Untamables Highly Voted 11 months, 1 week ago

Selected Answer: B

B

<https://docs.aws.amazon.com/AmazonECR/latest/userguide/image-scanning-basic.html>

The below blog post refers to the solution using Amazon Inspector and ECS, but the architecture is almost same as required in this scenario. The built in image scanning in Amazon ECR provides a simpler solution.

<https://aws.amazon.com/blogs/security/use-amazon-inspector-to-manage-your-build-and-deploy-pipelines-for-containerized-applications/>
upvoted 12 times

love777 Highly Voted 6 months, 1 week ago

Selected Answer: B

This approach integrates security scanning directly into the CI/CD pipeline and leverages AWS services for image scanning. Here's how it works:

A new CodePipeline stage is added after the container image is built, but before it's pushed to Amazon ECR.

ECR basic image scanning is configured to scan the image automatically upon push. This ensures that security scanning is part of the process.

An AWS Lambda function is used as an action provider in the pipeline. This Lambda function can be configured to analyze the scan results of the image.

If the Lambda function detects any security findings in the scan results, it can fail the pipeline, preventing the deployment of images with security vulnerabilities.

upvoted 6 times

ninomfr64 Most Recent 6 months, 2 weeks ago

Selected Answer: B

B as per <https://docs.aws.amazon.com/amplify/latest/userguide/running-tests.html>

You can run end-to-end (E2E) tests in the test phase of your Amplify app to catch regressions before pushing code to production. The test phase can be configured in the build specification YAML. Currently, you can run only the Cypress testing framework during a build.

build specification is provided in the amplify.yml file

upvoted 1 times

imvb88 9 months, 1 week ago

Selected Answer: D

So it narrows down to option B and D which using ECR basic image scanning.

B: create a stage

D: add an action to the existing stage

I'd go with D since executing an additional action will be faster than executing a whole stage.

upvoted 3 times

✉️ **Toby_S** 8 months, 4 weeks ago

The question states "A developer needs to place an analysis stage" therefore I'd go with B.

upvoted 3 times

✉️ **Rpod** 10 months, 2 weeks ago

Selected Answer: D

Chat GPT says D

upvoted 3 times

✉️ **Ummman** 7 months, 1 week ago

ChatGPT says option B

upvoted 1 times

✉️ **MrTee** 10 months, 2 weeks ago

Selected Answer: B

The developer should choose option B. Create a new CodePipeline stage that occurs after the container image is built. Configure ECR basic image scanning to scan on image push. Use an AWS Lambda function as the action provider. Configure the Lambda function to check the scan results and to fail the pipeline if there are findings. This will allow the developer to place an analysis stage before deployment to analyze the container image earlier in the CI/CD pipeline with the most operational efficiency.

CHATGPT

upvoted 5 times

Question #58

Topic 1

A developer is testing a new file storage application that uses an Amazon CloudFront distribution to serve content from an Amazon S3 bucket. The distribution accesses the S3 bucket by using an origin access identity (OAI). The S3 bucket's permissions explicitly deny access to all other users. The application prompts users to authenticate on a login page and then uses signed cookies to allow users to access their personal storage directories. The developer has configured the distribution to use its default cache behavior with restricted viewer access and has set the origin to point to the S3 bucket. However, when the developer tries to navigate to the login page, the developer receives a 403 Forbidden error. The developer needs to implement a solution to allow unauthenticated access to the login page. The solution also must keep all private content secure.

Which solution will meet these requirements?

- A. Add a second cache behavior to the distribution with the same origin as the default cache behavior. Set the path pattern for the second cache behavior to the path of the login page, and make viewer access unrestricted. Keep the default cache behavior's settings unchanged.
- B. Add a second cache behavior to the distribution with the same origin as the default cache behavior. Set the path pattern for the second cache behavior to *, and make viewer access restricted. Change the default cache behavior's path pattern to the path of the login page, and make viewer access unrestricted.
- C. Add a second origin as a failover origin to the default cache behavior. Point the failover origin to the S3 bucket. Set the path pattern for the primary origin to *, and make viewer access restricted. Set the path pattern for the failover origin to the path of the login page, and make viewer access unrestricted.
- D. Add a bucket policy to the S3 bucket to allow read access. Set the resource on the policy to the Amazon Resource Name (ARN) of the login page object in the S3 bucket. Add a CloudFront function to the default cache behavior to redirect unauthorized requests to the login page's S3 URL.

Correct Answer: A

Community vote distribution

A (100%)

Untamables **Highly Voted** 11 months, 1 week ago

Selected Answer: A

A

If you create additional cache behaviors, the default cache behavior is always the last to be processed.

<https://docs.aws.amazon.com/AmazonCloudFront/latest/DeveloperGuide/distribution-web-values-specify.html#DownloadDistValuesCacheBehavior>
upvoted 9 times

ShinobiGrappler **Most Recent** 2 months, 2 weeks ago

Answer is A. --The original way the developer had designed this application was too restrictive and didn't allow someone to even authenticate to get a signed cookie. By caching the second behavior, it allows the person authenticating to retrieve a cookie to access their personal data.
upvoted 1 times

LR2023 3 months ago

D cloud front function acts as lamda function

upvoted 1 times

ninomfr64 6 months, 2 weeks ago

Selected Answer: A

B) you cannot override the path pattern of the default Cache behavior

C) the origin failover is used when the primary origin is not available, this is not our case

D) with this configuration I think users wil get 403 Forbidden error and then redirected to the login page's S3 URL

A is a workable approach in my opinion

upvoted 1 times

Harddive 8 months, 3 weeks ago

Should it be D? In case s3 bucket restricts permissions, those should be open for login.

upvoted 3 times

MrTee 10 months, 1 week ago

Selected Answer: A

By adding a second cache behavior with unrestricted viewer access to the login page's path pattern, unauthenticated users will be allowed to access the login page. At the same time, the default cache behavior's settings remain unchanged, and private content remains secure because it still requires signed cookies for access.

upvoted 3 times

Question #59

Topic 1

A developer is using AWS Amplify Hosting to build and deploy an application. The developer is receiving an increased number of bug reports from users. The developer wants to add end-to-end testing to the application to eliminate as many bugs as possible before the bugs reach production. Which solution should the developer implement to meet these requirements?

- A. Run the amplify add test command in the Amplify CLI.
- B. Create unit tests in the application. Deploy the unit tests by using the amplify push command in the Amplify CLI.
- C. Add a test phase to the amplify.yml build settings for the application.
- D. Add a test phase to the aws-exports.js file for the application.

Correct Answer: C*Community vote distribution*

C (86%)

14%

 **gpt_test** Highly Voted 11 months ago

Selected Answer: C

Explanation: Adding a test phase to the amplify.yml build settings allows the developer to define and execute end-to-end tests as part of the build and deployment process in AWS Amplify Hosting. This will help ensure that bugs are caught and fixed before the application reaches production, improving the overall quality of the application.

upvoted 12 times

 **Untamables** Highly Voted 11 months, 1 week ago

Selected Answer: C

C

<https://docs.aws.amazon.com/amplify/latest/userguide/running-tests.html>

upvoted 6 times

 **jipark** 7 months ago

ton of thanks !!

document commented 'End to End Test'

upvoted 1 times

 **ninomfr64** Most Recent 6 months, 2 weeks ago

Selected Answer: BB as per <https://docs.aws.amazon.com/amplify/latest/userguide/running-tests.html>

You can run end-to-end (E2E) tests in the test phase of your Amplify app to catch regressions before pushing code to production. The test phase can be configured in the build specification YAML. Currently, you can run only the Cypress testing framework during a build.

build specification is provided in the amplify.yml file

upvoted 1 times

 **SachinR28** 7 months, 2 weeks ago

Selected Answer: B

I'LL GO WITH B

upvoted 1 times

 **rInd2000** 9 months, 2 weeks ago

Selected Answer: B

We can use amplify.yml file to run any test commands at build time. Since the test must run while the program is being deployed (E2E) I'll go with B.

upvoted 1 times

Question #60

Topic 1

An ecommerce company is using an AWS Lambda function behind Amazon API Gateway as its application tier. To process orders during checkout, the application calls a POST API from the frontend. The POST API invokes the Lambda function asynchronously. In rare situations, the application has not processed orders. The Lambda application logs show no errors or failures.

What should a developer do to solve this problem?

- A. Inspect the frontend logs for API failures. Call the POST API manually by using the requests from the log file.
- B. Create and inspect the Lambda dead-letter queue. Troubleshoot the failed functions. Reprocess the events.
- C. Inspect the Lambda logs in Amazon CloudWatch for possible errors. Fix the errors.
- D. Make sure that caching is disabled for the POST API in API Gateway.

Correct Answer: B

Community vote distribution



✉️ **Untamables** 11 months, 1 week ago

Selected Answer: A

A

The Lambda function might have not been called since the Lambda logs show no errors or failures. The cause might be that the frontend application does not call the API or an error occurs in the API Gateway processing.

upvoted 11 times

✉️ **konieczny69** 1 month ago

Read it carefully: "The Lambda application logs show no errors or failures"
There are logs, so the lambda was called

answer B

upvoted 1 times

✉️ **gpt-test** 11 months ago

Selected Answer: B

Explanation: By configuring a dead-letter queue (DLQ) for the Lambda function, you can capture asynchronous invocation events that were not successfully processed. This allows you to troubleshoot the failed functions and reprocess the events, ensuring that orders are not missed. The DLQ will hold information about the failed events, allowing you to analyze and resolve the issue.

upvoted 10 times

✉️ **rInd2000** 9 months, 4 weeks ago

as you said "... events that were not successfully processed." but there is not failure in Lambda log, so the lambda was not invoked by the POST API event. B is id not the answer.

upvoted 2 times

✉️ **kavi00203** 8 months, 3 weeks ago

Its an asynchronous invocation events, that's y there is no log.
Because in asynchronous its not mandatory to get the result after invocation events.
upvoted 2 times

✉️ **TeeTheMan** 7 months, 1 week ago

Asynchronous invocation means that the caller of the lambda does not wait for a response. The type of invocation has no effect on the lambda having logs or not. I picked A, because the lambda not having logs suggests something's gone wrong upstream of the lambda.
upvoted 4 times

✉️ **KarBiswa** 2 months, 2 weeks ago

Selected Answer: B

<https://aws.amazon.com/about-aws/whats-new/2016/12/aws-lambda-supports-dead-letter-queues/>
upvoted 1 times

✉️ **Jonalb** 4 months, 1 week ago

Selected Answer: B

B. Crie e inspecione a fila de mensagens mortas do Lambda. Solucione os problemas das funções com falha. Reprocesse os eventos. Mais Votados
upvoted 1 times

✉️ **mr_swal** 4 months, 3 weeks ago

Selected Answer: A

The Lambda application logs show no errors or failures. - So Lambda function was not invoked at all

upvoted 1 times

 **daicoso** 4 months, 2 weeks ago

if the application code doesn't log errors and doesn't throw exceptions, no error or failure will be logged

upvoted 1 times

 **nmc12** 5 months ago

Selected Answer: B

The Lambda Dead Letter Queue is a feature that helps in troubleshooting events that failed processing by a Lambda function. When an asynchronous invocation of a Lambda function fails, AWS Lambda can direct the failed event to an Amazon SNS topic or an Amazon SQS queue (the dead-letter queue), where the event is stored and can be analyzed or reprocessed.

upvoted 1 times

 **norris81** 5 months, 1 week ago

Selected Answer: C

I don't like B which has reprocess the errors, which will make a whole load of errors be process creating orders which could be months old

upvoted 3 times

 **misa27** 5 months, 3 weeks ago

Selected Answer: B

B

<https://aws.amazon.com/what-is/dead-letter-queue/>

upvoted 1 times

 **ninomfr64** 6 months, 2 weeks ago

Selected Answer: B

A) asynchronous invocations do not return result to the caller, thus I do not expect errors in frontend log

C) the scenario question rules out the option to have error messages in the Lambda log

D) I do not see how caching can have impact in this scenario

B) having a dead-letter queue is a viable option to troubleshoot asynchronous lambda invocation error, another option would be using Destination

upvoted 1 times

 **backfringe** 7 months, 1 week ago

Selected Answer: C

Option C is the appropriate choice because it involves inspecting the Lambda logs in Amazon CloudWatch to identify any potential issues or errors that might be causing the orders not to be processed

Option B is not the most appropriate choice because the dead-letter queue is generally used to capture events that cannot be processed by a Lambda function. In this scenario, it seems that the Lambda function is executing without apparent errors. Thus, the issue might not be related to dead-letter queue failures.

upvoted 2 times

 **redfivedog** 7 months, 1 week ago

Selected Answer: D

I think D should be the correct answer to this question. The logs have no indications of errors or failed events, so if some transactions are not being processed, that probably means that the lambda function wasn't invoked for those calls. One reason could be that caching is enabled in API gateway for the POST request, so the lambda function isn't triggered for any cache hits.

- A is not correct as the frontend would be getting 202s for all asynchronous post requests.
- B is not correct because lambda logs have no errors => no lambda execution errors => DLQ won't get any requests of interest if we enable it. A comment below mentioned that asynchronous lambda invocations don't generate logs, but that is not true.
- C is obviously incorrect. The premise explicitly mentions that there aren't any errors in the logs.

upvoted 3 times

 **xdkonorek2** 2 months, 1 week ago

Absolutely agree, D is the answer

upvoted 1 times

 **gomurali** 8 months, 1 week ago

<https://aws.amazon.com/about-aws/whats-new/2016/12/aws-lambda-supports-dead-letter-queues/>

upvoted 1 times

 **csG13** 9 months ago

Selected Answer: B

It's B. Apparently C & D are wrong.

Also it's not A because the call is async. Meaning that the response code from the lambda service is 202. Since generally frontend can make POST requests, the problem should be visible somewhere in the backed. Dead-letter queues are for debugging and further analysis. Hence should be B.

upvoted 3 times

 **rn5357** 5 months, 2 weeks ago

How can you tell from this context that the POST API call was successful?

upvoted 1 times

✉  **Nagendhar** 9 months, 3 weeks ago

Ans: B

B. Create and inspect the Lambda dead-letter queue. Troubleshoot the failed functions. Reprocess the events.

Since the Lambda application logs show no errors or failures, it is possible that the asynchronous invocation is not being processed successfully. In this case, the best solution would be to inspect the Lambda dead-letter queue, which stores failed asynchronous invocations. By doing this, the developer can troubleshoot any failed functions and reprocess the events.

upvoted 3 times

✉  **clarksu** 11 months, 1 week ago

Selected Answer: A

B is wrong, if send to DLQ, there should be failed and try logs for lambda before sending to DLQ

upvoted 2 times

✉  **Dun6** 11 months, 2 weeks ago

Selected Answer: B

Use DLQ

upvoted 4 times

Question #61

Topic 1

A company is building a web application on AWS. When a customer sends a request, the application will generate reports and then make the reports available to the customer within one hour. Reports should be accessible to the customer for 8 hours. Some reports are larger than 1 MB. Each report is unique to the customer. The application should delete all reports that are older than 2 days. Which solution will meet these requirements with the LEAST operational overhead?

- A. Generate the reports and then store the reports as Amazon DynamoDB items that have a specified TTL. Generate a URL that retrieves the reports from DynamoDB. Provide the URL to customers through the web application.
- B. Generate the reports and then store the reports in an Amazon S3 bucket that uses server-side encryption. Attach the reports to an Amazon Simple Notification Service (Amazon SNS) message. Subscribe the customer to email notifications from Amazon SNS.
- C. Generate the reports and then store the reports in an Amazon S3 bucket that uses server-side encryption. Generate a presigned URL that contains an expiration date. Provide the URL to customers through the web application. Add S3 Lifecycle configuration rules to the S3 bucket to delete old reports.
- D. Generate the reports and then store the reports in an Amazon RDS database with a date stamp. Generate an URL that retrieves the reports from the RDS database. Provide the URL to customers through the web application. Schedule an hourly AWS Lambda function to delete database records that have expired date stamps.

Correct Answer: B

Community vote distribution

C (100%)

 **March2023**  11 months, 1 week ago

Selected Answer: C

Presigned URL
upvoted 8 times

 **gpt_test**  11 months ago

Selected Answer: C

Explanation: Storing the reports in an Amazon S3 bucket provides a cost-effective and scalable solution for handling files larger than 1 MB. Server-side encryption ensures data security. Generating a presigned URL with an expiration date allows the customer to access the report for 8 hours, and S3 Lifecycle configuration rules automatically delete the reports older than 2 days, reducing operational overhead.

upvoted 8 times

 **KarBiswa**  2 months, 2 weeks ago

Selected Answer: C

The 1MB condition denies the TTL option so C is best
upvoted 1 times

 **LR2023** 3 months ago

C
presigned and lifecycle rules to move
upvoted 1 times

 **ninomfr64** 6 months, 2 weeks ago

A) DynamoDB cannot store object larger than 400K
B) SNS cannot send email with attachment - <https://repost.aws/questions/QUOvaKJVB3QzOqVENONBZUag/sns-send-file-attachment>
D) the nature or format of the report is not specified, however RDS does not look like a great place to store large document file. Also generating a url to the reports from the RDS database requires some work while it is a native capability in S3

C) is a workable solution as S3 is designed to store file objects, it allows to easily generate pre-signed url, and provide lifecycle management rule that allows to expire objects
upvoted 5 times

 **imvb88** 9 months, 1 week ago

Selected Answer: C

Dynamo DB cannot store object > 400KB -> option A is out immediately.
Limited access to S3 calls for presigned URL which is option C. C also has lifecycle config to delete old object while B does not have that.
D is possible but too much effort compared to design pattern in C.
upvoted 5 times

 **Untamables** 11 months, 1 week ago

Selected Answer: C

C

<https://docs.aws.amazon.com/AmazonS3/latest/userguide/using-presigned-url.html><https://docs.aws.amazon.com/AmazonS3/latest/userguide/object-lifecycle-mgmt.html>

upvoted 4 times

Question #62

Topic 1

A company has deployed an application on AWS Elastic Beanstalk. The company has configured the Auto Scaling group that is associated with the Elastic Beanstalk environment to have five Amazon EC2 instances. If the capacity is fewer than four EC2 instances during the deployment, application performance degrades. The company is using the all-at-once deployment policy.

What is the MOST cost-effective way to solve the deployment issue?

- A. Change the Auto Scaling group to six desired instances.
- B. Change the deployment policy to traffic splitting. Specify an evaluation time of 1 hour.
- C. Change the deployment policy to rolling with additional batch. Specify a batch size of 1.
- D. Change the deployment policy to rolling. Specify a batch size of 2.

Correct Answer: C

Community vote distribution

C (96%) 4%

✉ gpt_test Highly Voted 11 months ago

Selected Answer: C

Explanation: The rolling with additional batch deployment policy allows Elastic Beanstalk to launch additional instances in a new batch before terminating the old instances. In this case, specifying a batch size of 1 means that Elastic Beanstalk will deploy the application updates to 1 new instance at a time, ensuring that there are always at least 4 instances available during the deployment process. This method maintains application performance while minimizing the additional cost.

upvoted 12 times

✉ gagol14 Highly Voted 8 months, 2 weeks ago

Selected Answer: C

1. Rolling with additional batch deployment: This type of deployment maintains full capacity while new application versions are deployed. It launches a new batch of instances with the new application version, and if the new batch is healthy, it terminates a batch of instances running the old application version.

2. Batch size of 1: This will ensure that one new instance is launched with the new version of the application. Once it is deemed healthy, one of the old instances will be terminated. This will continue until all instances are running the new version, ensuring the capacity is never less than four instances. This approach will add only a minimal additional cost for the temporary overlapping instances during deployment.

upvoted 8 times

✉ Alearn Most Recent 2 months, 1 week ago

Selected Answer: D

Option D is the best solution because it allows the company to update the application without losing service or reducing availability significantly, and without increasing the cost or complexity of the solution.

upvoted 1 times

✉ KarBiswa 2 months, 2 weeks ago

Selected Answer: C

<https://docs.aws.amazon.com/elasticbeanstalk/latest/dg/using-features.rolling-version-deploy.html>

upvoted 1 times

✉ quangphungdev218 7 months, 1 week ago

Selected Answer: C

The correct answer is: C

upvoted 1 times

✉ Prem28 8 months, 4 weeks ago

The correct answer is: D. Change the deployment policy to rolling. Specify a batch size of 2.

A rolling deployment policy will deploy the new application version to one batch of instances at a time, while the other batches continue to serve traffic. This ensures that the application always has at least four instances available during the deployment.

Specifying a batch size of 2 means that two instances will be deployed at a time. This is the most cost-effective option because it minimizes the number of instances that are needed to maintain application performance during the deployment.

The other options are not as cost-effective because they require more instances to be running during the deployment. Option A requires six instances, option B requires at least five instances, and option C requires at least four instances.

upvoted 2 times

✉ nmc12 5 months ago

If batch size of 1:

During the time the new instances are being deployed and are not yet in service, there are only $5 - 2 = 3$ old instances available to serve the traffic, which violates the requirement to maintain at least 4 instances to avoid performance degradation.

so, i go with A answer.

upvoted 1 times

✉  **gagol14** 8 months, 2 weeks ago

The rolling deployment policy updates a few instances at a time, but unlike the "rolling with additional batch" option, it does not launch new instances before terminating the old ones. Therefore, capacity could drop below four during deployment, affecting application performance.

upvoted 2 times

✉  **jipark** 7 months ago

C: cost 1 additional EC2

D : degrade performance

it looks exam gave key "2 batch" meaning - do not choose this answer.

upvoted 1 times

✉  **Untamables** 11 months, 1 week ago

Selected Answer: C

C

<https://docs.aws.amazon.com/elasticbeanstalk/latest/dg/using-features.rolling-version-deploy.html>

upvoted 3 times

Question #63

Topic 1

A developer is incorporating AWS X-Ray into an application that handles personal identifiable information (PII). The application is hosted on Amazon EC2 instances. The application trace messages include encrypted PII and go to Amazon CloudWatch. The developer needs to ensure that no PII goes outside of the EC2 instances.

Which solution will meet these requirements?

- A. Manually instrument the X-Ray SDK in the application code.
- B. Use the X-Ray auto-instrumentation agent.
- C. Use Amazon Macie to detect and hide PII. Call the X-Ray API from AWS Lambda.
- D. Use AWS Distro for Open Telemetry.

Correct Answer: B

<https://shop335422782.taobao.com> 淘宝搜索店铺:黑马专业认证
微信添加 hello231119

Community vote distribution

A (79%) B (21%)

 **gpt_test** Highly Voted 11 months ago

Selected Answer: A

Explanation: By manually instrumenting the X-Ray SDK in the application code, the developer can have full control over which data is included in the trace messages. This way, the developer can ensure that no PII is sent to X-Ray by carefully handling the PII within the application and not including it in the trace messages.

upvoted 17 times

 **SerialiDr** Most Recent 5 days, 22 hours ago

Selected Answer: A

A. To ensure that no personally identifiable information (PII) goes outside of the EC2 instances while incorporating AWS X-Ray into an application that handles PII, the developer should manually instrument the X-Ray SDK in the application code. This approach allows for precise control over what data is captured and sent to X-Ray, enabling the developer to exclude or anonymize PII before it leaves the application environment, thereby meeting the requirement to ensure that no PII goes outside of the EC2 instances.

upvoted 1 times

 **SerialiDr** 1 month, 3 weeks ago

Selected Answer: A

This approach allows for granular control over what data is captured and sent to AWS X-Ray. The developer can instrument the code to ensure that PII is either not included in the trace data or is properly encrypted before being sent. This method provides the necessary control to meet the requirement.

upvoted 1 times

 **a_win** 2 months, 1 week ago

Selected Answer: B

The X-Ray auto-instrumentation agent can help ensure that sensitive information like PII is not transmitted outside of the EC2 instances. It automatically instruments the application without requiring manual intervention, making it easier to maintain traceability without risking the exposure of sensitive data.

Options A and D involve manual or custom instrumentations, which might inadvertently expose PII if not implemented correctly. Option C, using Amazon Macie to detect and hide PII and calling the X-Ray API from Lambda, might add complexity to the architecture and doesn't directly address the prevention of PII leaving the EC2 instances.

upvoted 1 times

 **chewasa** 2 months, 3 weeks ago

Selected Answer: B

Option B, using the X-Ray auto-instrumentation agent, is the most appropriate solution for ensuring that no PII goes outside of the EC2 instances.

upvoted 4 times

 **chewasa** 2 months, 3 weeks ago

A. Manually instrumenting the X-Ray SDK in the application code might lead to the possibility of inadvertently including PII in trace messages, and it may not be as foolproof as the auto-instrumentation agent.

B. The X-Ray auto-instrumentation agent automatically instruments the supported runtime environments, making it less error-prone and ensuring that sensitive information like PII is not leaked.

upvoted 1 times

 **chewasa** 2 months, 3 weeks ago

C. Amazon Macie is a service designed for discovering, classifying, and protecting sensitive data, but using it to detect and hide PII in combination with X-Ray is not a standard approach. It's more focused on data discovery and classification.

D. AWS Distro for OpenTelemetry is an observability project but may not provide the same level of automation for ensuring that no PII goes outside of the EC2 instances as the X-Ray auto-instrumentation agent.

upvoted 1 times

love777 6 months, 1 week ago

Selected Answer: B

The X-Ray auto-instrumentation agent is designed to automatically trace and collect data from AWS resources and services without requiring manual instrumentation in your application code.

It helps ensure that sensitive information, such as PII, remains within the EC2 instances by not transmitting the data outside explicitly. The agent focuses on tracing the application behavior and performance without directly sending PII to external services.

This solution is suitable for ensuring compliance and data security while still benefiting from X-Ray's tracing and insights.

upvoted 2 times

r3mo 7 months, 1 week ago

Option "B" : Because. Avoids human error.

upvoted 2 times

Umman 7 months, 1 week ago

Using the X-Ray auto-instrumentation agent (Option B) is the best choice in this scenario because it will automatically instrument the application without requiring any manual code changes. Additionally, when using X-Ray with auto-instrumentation, you can control the sampling rate to ensure that only a subset of trace data (and encrypted PII) is sent to X-Ray and CloudWatch, reducing the risk of sensitive data being exposed outside of the instances.

upvoted 2 times

jasper_pigeon 7 months, 1 week ago

For non-Java applications running on EC2 instances, you will need to use the appropriate X-Ray SDKs to manually instrument the application code. You can't use auto-agent

upvoted 2 times

kris_jec 7 months, 1 week ago

Its very clear from Macie definition that it also provides automated protection as well apart from findings the PII data

upvoted 1 times

ttamtttam 7 months, 3 weeks ago

Selected Answer: A

I think B is incorrect as the auto instrument cannot hide it, right?

upvoted 1 times

dan80 10 months, 1 week ago

Selected Answer: A

C is wrong, Amazon Macie discover PII but dont hide it

upvoted 3 times

Untamables 11 months, 1 week ago

Selected Answer: A

A

Not to send any PII to AWS X-Ray service, add instrumentation code in your application at each location to send trace information that PII is eliminated.

<https://docs.aws.amazon.com/xray/latest/devguide/xray-instrumenting-your-app.html>

upvoted 4 times

macross 11 months, 1 week ago

c <https://docs.aws.amazon.com/macie/latest/user/data-classification.html>

upvoted 1 times

StarLord 11 months, 1 week ago

C : Amazon Macie is a data security service that discovers sensitive data using machine learning and pattern matching, provides visibility into data security risks, and enables you to automate protection against those risks.

https://aws.amazon.com/macie/features/?nc1=h_ls

upvoted 3 times

jipark 7 months ago

exactly sayed there.

upvoted 2 times

ninomfr64 6 months, 2 weeks ago

It is my understanding that Macie only supports S3

upvoted 2 times

Question #64

A developer is migrating some features from a legacy monolithic application to use AWS Lambda functions instead. The application currently stores data in an Amazon Aurora DB cluster that runs in private subnets in a VPC. The AWS account has one VPC deployed. The Lambda functions and the DB cluster are deployed in the same AWS Region in the same AWS account.

The developer needs to ensure that the Lambda functions can securely access the DB cluster without crossing the public internet.

Which solution will meet these requirements?

- A. Configure the DB cluster's public access setting to Yes.
- B. Configure an Amazon RDS database proxy for the Lambda functions.
- C. Configure a NAT gateway and a security group for the Lambda functions.
- D. Configure the VPC, subnets, and a security group for the Lambda functions.

Correct Answer: D

Community vote distribution



jayarma Highly Voted 6 months, 3 weeks ago

Option D is the right answer. When we want the lambda to privately access the DB cluster instead of moving the traffic over the public internet, we need to have the lambda and db cluster to be in the same VPC.

When we configure the VPC, subnets, and a security group for the lambda function, the lambda function will be able to communicate with the db cluster using the private IPs that are associated to the VPC.

NAT gateway comes into use when you have the lambda deployed in a private subnet and you would want to provide internet access to it.
upvoted 13 times

gpt_test Highly Voted 11 months ago

Selected Answer: D

Explanation: To securely access the Amazon Aurora DB cluster without crossing the public internet, the Lambda functions need to be configured to run within the same VPC as the DB cluster. This involves configuring the VPC, subnets, and a security group for the Lambda functions. This setup ensures that the Lambda functions can communicate with the DB cluster using private IP addresses within the VPC.

upvoted 7 times

Wendy1113 Most Recent 3 months, 2 weeks ago

B

<https://repost.aws/questions/QULXSqEPGbQx6qiyBa1D1Udg/lambda-to-db-connectivity-best-practices>

upvoted 1 times

alex_heavy 5 months ago

Selected Answer: B

<https://www.udemy.com/course/aws-certified-developer-associate-dva-c01/learn/lecture/36527788#overview>

<https://aws.amazon.com/ru/blogs/compute/using-amazon-rds-proxy-with-aws-lambda/>

upvoted 1 times

eberhe900 8 months ago

Selected Answer: C

<https://docs.aws.amazon.com/lambda/latest/dg/configuration-vpc.html>

upvoted 2 times

Untamables 11 months, 1 week ago

Selected Answer: D

D

<https://docs.aws.amazon.com/lambda/latest/dg/foundation-networking.html>

upvoted 4 times

Dun6 11 months, 2 weeks ago

Selected Answer: D

D is correct, NATGateway is for when we want Lambda to access the public when it is in a private VPC

upvoted 4 times

Question #65

Topic 1

A developer is building a new application on AWS. The application uses an AWS Lambda function that retrieves information from an Amazon DynamoDB table. The developer hard coded the DynamoDB table name into the Lambda function code. The table name might change over time. The developer does not want to modify the Lambda code if the table name changes.

Which solution will meet these requirements MOST efficiently?

- A. Create a Lambda environment variable to store the table name. Use the standard method for the programming language to retrieve the variable.
- B. Store the table name in a file. Store the file in the /tmp folder. Use the SDK for the programming language to retrieve the table name.
- C. Create a file to store the table name. Zip the file and upload the file to the Lambda layer. Use the SDK for the programming language to retrieve the table name.
- D. Create a global variable that is outside the handler in the Lambda function to store the table name.

Correct Answer: C -

Community vote distribution

A (100%)

✉  **Dun6**  11 months, 2 weeks ago

Selected Answer: A

You need to use environment variables
upvoted 7 times

✉  **Untamables**  11 months, 1 week ago

Selected Answer: A

A
<https://docs.aws.amazon.com/lambda/latest/dg/configuration-envvars.html>
upvoted 6 times

✉  **mma34**  3 months, 1 week ago

Selected Answer: A

Why are some answers wrong on here?
upvoted 1 times

✉  **[Removed]** 3 months, 1 week ago

So you can do your due diligence and study. Stop being so lazy.. Study and learn the concepts
upvoted 5 times

✉  **eberhe900** 8 months ago

Selected Answer: A

You can use environment variables to adjust your function's behavior without updating code. An environment variable is a pair of strings that is stored in a function's version-specific configuration. The Lambda runtime makes environment variables available to your code and sets additional environment variables that contain information about the function and invocation request.
upvoted 2 times

✉  **gpt_test** 11 months ago

Selected Answer: A

Explanation: Using Lambda environment variables allows you to store configuration information separate from your code, which makes it easy to update the table name without changing the Lambda function code. AWS Lambda provides built-in support for environment variables, making it the most efficient solution.
upvoted 4 times

Question #66

A company has a critical application on AWS. The application exposes an HTTP API by using Amazon API Gateway. The API is integrated with an AWS Lambda function. The application stores data in an Amazon RDS for MySQL DB instance with 2 virtual CPUs (vCPUs) and 64 GB of RAM.

Customers have reported that some of the API calls return HTTP 500 Internal Server Error responses. Amazon CloudWatch Logs shows errors for "too many connections." The errors occur during peak usage times that are unpredictable.

The company needs to make the application resilient. The database cannot be down outside of scheduled maintenance hours.

Which solution will meet these requirements?

- A. Decrease the number of vCPUs for the DB instance. Increase the max_connections setting.
- B. Use Amazon RDS Proxy to create a proxy that connects to the DB instance. Update the Lambda function to connect to the proxy.
- C. Add a CloudWatch alarm that changes the DB instance class when the number of connections increases to more than 1,000.
- D. Add an Amazon EventBridge rule that increases the max_connections setting of the DB instance when CPU utilization is above 75%.

Correct Answer: B

Community vote distribution



MrTee Highly Voted 10 months, 1 week ago

Selected Answer: B

The best solution to meet these requirements would be to use Amazon RDS Proxy to create a proxy that connects to the DB instance and update the Lambda function to connect to the proxy.

upvoted 7 times

SerialiDr Most Recent 1 month, 3 weeks ago

Selected Answer: B

Amazon RDS Proxy is designed to handle a large number of simultaneous connections efficiently. It sits between your application and your RDS database to pool and share database connections, improving database efficiency and application scalability. This approach can reduce the number of connections to the database and handle unpredictable peak loads more effectively.

upvoted 1 times

hsinchang 5 months, 3 weeks ago

Selected Answer: B

B: RDS Proxy establishes and manages the necessary connection pools to your database so that your Lambda function creates fewer database connections¹. RDS Proxy also handles failovers and retries automatically, which improves the availability of your application.

A will reduce the performance and capacity of the database.

C may incur additional charges for scaling up the DB instance. It may also cause downtime during the scaling process, which violates the requirement that the database cannot be down outside of scheduled maintenance hours.

D may not react fast enough to handle unpredictable peak usage times. It may also cause memory issues if the max_connections setting is too high.

upvoted 1 times

love777 6 months ago

Selected Answer: B

Adding an Amazon EventBridge rule to increase the max_connections setting based on CPU utilization is not directly addressing the issue of too many connections. Additionally, focusing solely on CPU utilization might not be the best metric for handling connection-related issues.

upvoted 2 times

ttamattem 7 months, 3 weeks ago

Selected Answer: B

I think D is incorrect because it increases the number of connections based on the CPU consumption not the number of connections.

upvoted 1 times

Naj_64 7 months, 3 weeks ago

Selected Answer: D

<https://repost.aws/knowledge-center/rds-mysql-max-connections>

upvoted 1 times

csG13 9 months ago

Selected Answer: B

It's B. RDS proxy can handle many open connections to the database.

upvoted 2 times

 **awsdummyie** 9 months, 1 week ago

Selected Answer: D

There should not be any downtime. Create an Event bridge rule to update the max_connections parameter in Parameter group of DB instance.

upvoted 1 times

Question #67

Topic 1

A company has installed smart meters in all its customer locations. The smart meters measure power usage at 1-minute intervals and send the usage readings to a remote endpoint for collection. The company needs to create an endpoint that will receive the smart meter readings and store the readings in a database. The company wants to store the location ID and timestamp information.

The company wants to give its customers low-latency access to their current usage and historical usage on demand. The company expects demand to increase significantly. The solution must not impact performance or include downtime while scaling.

Which solution will meet these requirements MOST cost-effectively?

- A. Store the smart meter readings in an Amazon RDS database. Create an index on the location ID and timestamp columns. Use the columns to filter on the customers' data.
- B. Store the smart meter readings in an Amazon DynamoDB table. Create a composite key by using the location ID and timestamp columns. Use the columns to filter on the customers' data.
- C. Store the smart meter readings in Amazon ElastiCache for Redis. Create a SortedSet key by using the location ID and timestamp columns. Use the columns to filter on the customers' data.
- D. Store the smart meter readings in Amazon S3. Partition the data by using the location ID and timestamp columns. Use Amazon Athena to filter on the customers' data.

Correct Answer: B

Community vote distribution

B (100%)

MrTee Highly Voted 10 months, 1 week ago

Selected Answer: B

The most cost-effective solution to meet these requirements would be to store the smart meter readings in an Amazon DynamoDB table and create a composite key using the location ID and timestamp columns

upvoted 6 times

SerialiDr Most Recent 1 month, 3 weeks ago

Selected Answer: B

This solution provides low-latency access to real-time and historical data, scales seamlessly to accommodate increased demand without downtime, and is likely to be more cost-effective than the alternatives for this specific use case. DynamoDB's managed service nature also reduces the administrative burden of managing the database.

upvoted 1 times

Gold07 4 months, 2 weeks ago

C is the right answer

upvoted 2 times

zoro_chi 5 months ago

Selected Answer: B

Can Someone please explain why A isn't viable? Thanks

upvoted 3 times

cucuff 2 months, 1 week ago

While talking about Databases, low-latency usually refers to DynamoDB.

upvoted 1 times

Naj_64 7 months, 1 week ago

Selected Answer: B

Going with B. DynamoDB is the most cost-effective solution.

upvoted 3 times

jasper_pigeon 7 months, 1 week ago

You need to use Athena as well to do partitioning

upvoted 2 times

HuiHsin 8 months, 4 weeks ago

<https://docs.aws.amazon.com/amazondynamodb/latest/developerguide/bp-sort-keys.html>

upvoted 1 times

Question #68

Topic 1

A company is building a serverless application that uses AWS Lambda functions. The company needs to create a set of test events to test Lambda functions in a development environment. The test events will be created once and then will be used by all the developers in an IAM developer group. The test events must be editable by any of the IAM users in the IAM developer group.

Which solution will meet these requirements?

- A. Create and store the test events in Amazon S3 as JSON objects. Allow S3 bucket access to all IAM users.
- B. Create the test events. Configure the event sharing settings to make the test events shareable.
- C. Create and store the test events in Amazon DynamoDB. Allow access to DynamoDB by using IAM roles.
- D. Create the test events. Configure the event sharing settings to make the test events private.

Correct Answer: B
Community vote distribution


renekton Highly Voted 10 months ago

Selected Answer: B

Under the "Test" tab there's an option. (Shareable)

This event is available to IAM users within the same account who have permissions to access and use shareable events.

You can check this by yourself on the Lambda

Also, here's a documentation

<https://docs.aws.amazon.com/lambda/latest/dg/testing-functions.html#creating-shareable-events>

upvoted 21 times

delak Highly Voted 9 months, 2 weeks ago

Selected Answer: B

Since March of this year, this is now possible to share test events within the same account with different users.

upvoted 5 times

SerialiDr Most Recent 5 days, 9 hours ago

Selected Answer: A

This option is the most straightforward and aligns with AWS practices for managing shared resources like test events. IAM policies can be configured to grant the necessary permissions to the developer group, ensuring that all members can access and edit the test events stored in S3. This method leverages the scalability and security features of S3, along with the granular permission control provided by IAM, to meet the requirements.

upvoted 1 times

manngupta007 1 month ago

Answer: B

<https://aws.amazon.com/about-aws/whats-new/2022/03/aws-lambda-console-test-events/>

upvoted 1 times

SerialiDr 1 month, 3 weeks ago

Selected Answer: A

This option is viable. Amazon S3 can store JSON objects (test events), and access to these objects can be controlled through S3 bucket policies or IAM policies. By setting the correct permissions, all IAM users in the developer group can read and write to the S3 bucket, enabling them to edit and use the test events.

upvoted 1 times

ez_24 1 month, 4 weeks ago

Selected Answer: A

The key Concept here is Sharing - test events in the Lambda console are for individual account can't be used by other developers

upvoted 1 times

a_win 2 months, 1 week ago

Selected Answer: A

This approach ensures that the test events are stored centrally in an S3 bucket where all IAM users within the developer group have access. By granting access to the S3 bucket to all IAM users, any user within the group can create, edit, and retrieve the test events, meeting the requirement for collaborative access and editing.

Options B and D don't directly address the need for IAM users to edit the test events; sharing settings might allow access, but they might not allow editing by all IAM users in the group. Option C, using DynamoDB, requires specific IAM role configurations for each user, which could become complex to manage and might not provide the same level of straightforward access and editing capability for all users within the IAM group.

upvoted 1 times

 **tqiu654** 3 months ago

Selected Answer: A

Based on ChatGPT:A

upvoted 1 times

 **Jonalb** 4 months, 1 week ago

Selected Answer: B

No AWS Lambda, você pode criar eventos de teste no console da AWS para invocar sua função e ver a resposta. Esses eventos de teste podem ser salvos e compartilhados com outros usuários IAM. Ao definir as configurações de compartilhamento de eventos para tornar os eventos de teste compartilháveis, você permite que todos os desenvolvedores do grupo de desenvolvedores IAM os usem e editem.

upvoted 1 times

 **DUBERS** 7 months ago

Would this not be C just because that's the only one that has the added security of the IAM roles?

upvoted 1 times

 **Cloud_Cloud** 10 months, 2 weeks ago

Selected Answer: B

there is an option in lambda console to share the event with other users

upvoted 1 times

 **MrTee** 10 months, 2 weeks ago

Selected Answer: A

I meant to select A

upvoted 3 times

 **MrTee** 10 months, 2 weeks ago

Selected Answer: B

To create a set of test events that can be used by all developers in an IAM developer group and that are editable by any of the IAM users in the group, the company should create and store the test events in Amazon S3 as JSON objects and allow S3 bucket access to all IAM users (Option A). This will allow all developers in the IAM developer group to access and edit the test events as needed. The other options do not provide a way for multiple developers to access and edit the test events.

upvoted 1 times

 **Fyssy** 10 months, 2 weeks ago

Selected Answer: C

Use roles. Not all IAM users

upvoted 1 times

 **Fyssy** 10 months, 2 weeks ago

Selected Answer: A

To create test events that can be edited by any IAM user in a developer group, the company can create an Amazon S3 bucket and store the test event data as JSON files in the bucket.

upvoted 2 times

 **Naj_64** 7 months, 3 weeks ago

A is wrong. To edit a test you only need IAM permissions.

"To see, share, and edit shareable test events, you must have permissions for all of the following..."

<https://docs.aws.amazon.com/lambda/latest/dg/testing-functions.html#creating-shareable-events>

I'll go with B.

upvoted 2 times

Question #69

Topic 1

A developer is configuring an application's deployment environment in AWS CodePipeline. The application code is stored in a GitHub repository. The developer wants to ensure that the repository package's unit tests run in the new deployment environment. The developer has already set the pipeline's source provider to GitHub and has specified the repository and branch to use in the deployment.

Which combination of steps should the developer take next to meet these requirements with the LEAST overhead? (Choose two.)

- A. Create an AWS CodeCommit project. Add the repository package's build and test commands to the project's buildspec.
- B. Create an AWS CodeBuild project. Add the repository package's build and test commands to the project's buildspec.
- C. Create an AWS CodeDeploy project. Add the repository package's build and test commands to the project's buildspec.
- D. Add an action to the source stage. Specify the newly created project as the action provider. Specify the build artifact as the action's input artifact.
- E. Add a new stage to the pipeline after the source stage. Add an action to the new stage. Specify the newly created project as the action provider. Specify the source artifact as the action's input artifact.

Correct Answer: BD

Community vote distribution



MrTee Highly Voted 10 months, 1 week ago

The correct answer is B and E

The buildspec file is a collection of build commands and related settings, in YAML format, that CodeBuild uses to run a build. By adding the build and test commands to the buildspec file, the developer can ensure that these commands are executed as part of the build process. Option E will ensure that the CodeBuild project is triggered as part of the pipeline and that the unit tests are run in the new deployment environment.

upvoted 15 times

imvb88 Highly Voted 9 months, 1 week ago

Selected Answer: BE

For those who just skim the question, keyword between D and E is "unit tests run in the new deployment environment.", which signifies a new stage should be created instead of just adding an action.

upvoted 12 times

SerialiDr Most Recent 1 month, 3 weeks ago

Selected Answer: BE

E. Add a new stage to the pipeline after the source stage: This is the correct step. The developer should add a new stage to the pipeline specifically for building and testing the code. Within this stage, an action should be added that specifies the AWS CodeBuild project (created in step B) as the action provider. The source artifact (code fetched from GitHub) should be specified as the action's input artifact.

So, the combination of steps that should be taken next to meet these requirements with the least overhead are:

- B. Create an AWS CodeBuild project. Add the repository package's build and test commands to the project's buildspec.
 - E. Add a new stage to the pipeline after the source stage. Add an action to the new stage. Specify the newly created CodeBuild project as the action provider. Specify the source artifact as the action's input artifact.
- upvoted 2 times

LR2023 2 months, 3 weeks ago

Selected Answer: BD

Choosing D as that is the least overhead. There is already a stage and you need to add an action test

upvoted 1 times

LR2023 2 months, 3 weeks ago

Sorry will go with BE after doing more research as unit tests cannot be run in source stage as an action

upvoted 1 times

marolisa 6 months, 2 weeks ago

B e D.

https://docs.aws.amazon.com/pt_br/codebuild/latest/userguide/how-to-create-pipeline-add-test.html

upvoted 2 times

aaok 9 months, 4 weeks ago

Selected Answer: BE

As MrTee says.

upvoted 3 times

Question #70

Topic 1

An engineer created an A/B test of a new feature on an Amazon CloudWatch Evidently project. The engineer configured two variations of the feature (Variation A and Variation B) for the test. The engineer wants to work exclusively with Variation A. The engineer needs to make updates so that Variation A is the only variation that appears when the engineer hits the application's endpoint.

Which solution will meet this requirement?

- A. Add an override to the feature. Set the identifier of the override to the engineer's user ID. Set the variation to Variation A.
- B. Add an override to the feature. Set the identifier of the override to Variation A. Set the variation to 100%.
- C. Add an experiment to the project. Set the identifier of the experiment to Variation B. Set the variation to 0%.
- D. Add an experiment to the project. Set the identifier of the experiment to the AWS account's account ID. Set the variation to Variation A.

Correct Answer: B

Community vote distribution


 A (100%)

 **Fyssy**  10 months, 2 weeks ago

Selected Answer: A

Overrides let you pre-define the variation for selected users. to always receive the editable variation.
<https://aws.amazon.com/blogs/aws/cloudwatch-evidently/>

upvoted 10 times

 **jipark** 7 months ago

the key looks "override" and allow only "userID"

upvoted 1 times

 **Baba_Eni**  8 months, 3 weeks ago

Selected Answer: A

Check Bullet point 9 in the link below

<https://docs.aws.amazon.com/AmazonCloudWatch/latest/monitoring/CloudWatch-Evidently-newfeature.html>

upvoted 7 times

 **hsinchang**  5 months, 3 weeks ago

Set the variation to 0% or 100% makes no sense. Plus, the identifier should not be an account.

upvoted 2 times

 **ancomedian** 7 months, 2 weeks ago

Selected Answer: A

You have to give identifier

upvoted 1 times

Question #71

Topic 1

A developer is working on an existing application that uses Amazon DynamoDB as its data store. The DynamoDB table has the following attributes: partNumber (partition key), vendor (sort key), description, productFamily, and productType. When the developer analyzes the usage patterns, the developer notices that there are application modules that frequently look for a list of products based on the productFamily and productType attributes.

The developer wants to make changes to the application to improve performance of the query operations.

Which solution will meet these requirements?

- A. Create a global secondary index (GSI) with productFamily as the partition key and productType as the sort key.
- B. Create a local secondary index (LSI) with productFamily as the partition key and productType as the sort key.
- C. Recreate the table. Add partNumber as the partition key and vendor as the sort key. During table creation, add a local secondary index (LSI) with productFamily as the partition key and productType as the sort key.
- D. Update the queries to use Scan operations with productFamily as the partition key and productType as the sort key.

Correct Answer: A
Community vote distribution

 A (100%)

 **Fyssy**  10 months, 2 weeks ago

Selected Answer: A

create a Global Secondary Index (GSI): The developer should create a new GSI on the DynamoDB table with the productFamily attribute as the partition key and the productType attribute as the sort key. This will allow the application to perform fast queries on these attributes without scanning the entire table.

upvoted 8 times

 **Majong**  9 months, 1 week ago

Selected Answer: A

LSI can't be created on an already existing table and as Fyssy says. A - create new GSI will make the querying faster and you do not need to recreate the whole table.

upvoted 7 times

 **SerialiDr**  1 month, 3 weeks ago

Selected Answer: A

This is a viable solution. A GSI allows you to query data using an alternate key, in this case, productFamily and productType. This would enable efficient queries based on these attributes, which is aligned with the observed usage patterns.

upvoted 1 times

 **winzzhhzzhh** 5 months, 3 weeks ago

Selected Answer: A

LSI: different sort key but the same partition key
GSI: different partition key and a different sort key

upvoted 3 times

Question #72

Topic 1

A developer creates a VPC named VPC-A that has public and private subnets. The developer also creates an Amazon RDS database inside the private subnet of VPC-A. To perform some queries, the developer creates an AWS Lambda function in the default VPC. The Lambda function has code to access the RDS database. When the Lambda function runs, an error message indicates that the function cannot connect to the RDS database.

How can the developer solve this problem?

- A. Modify the RDS security group. Add a rule to allow traffic from all the ports from the VPC CIDR block.
- B. Redeploy the Lambda function in the same subnet as the RDS instance. Ensure that the RDS security group allows traffic from the Lambda function.
- C. Create a security group for the Lambda function. Add a new rule in the RDS security group to allow traffic from the new Lambda security group.
- D. Create an IAM role. Attach a policy that allows access to the RDS database. Attach the role to the Lambda function.

Correct Answer: C

Community vote distribution



✉ **MrTee** 10 months, 1 week ago

Selected Answer: B

To solve this problem, the developer should redeploy the Lambda function in the same subnet as the RDS instance and ensure that the RDS security group allows traffic from the Lambda function. This will allow the Lambda function to access the RDS database within the private subnet of VPC-A. The developer should also make sure that the Lambda function is configured with the appropriate network settings and permissions to access resources within the VPC.

upvoted 11 times

✉ **Fyssy** 10 months, 2 weeks ago

Selected Answer: B

Redeploy

upvoted 11 times

✉ **SerialiDr** 4 days, 22 hours ago

Selected Answer: B

Option B ("Redeploy the Lambda function in the same subnet as the RDS instance. Ensure that the RDS security group allows traffic from the Lambda function.") is the most accurate approach if the Lambda function and RDS are to communicate within the same VPC. It directly addresses the need for the Lambda function to access the VPC and the security group configuration.

upvoted 1 times

✉ **cauchy06** 1 month, 2 weeks ago

Selected Answer: C

No need for redeploy. ChatGPT also says C.

upvoted 1 times

✉ **toan_nguyen** 2 weeks, 3 days ago

ChatGPT don't know anything. It's only read data

upvoted 1 times

✉ **SerialiDr** 1 month, 3 weeks ago

Selected Answer: B

B. Redeploy the Lambda function in the same subnet as the RDS instance. Ensure that the RDS security group allows traffic from the Lambda function: This is a viable solution. Placing the Lambda function in the same VPC as the RDS instance (preferably in a private subnet for security reasons) and ensuring the security groups are correctly configured to allow traffic between the Lambda function and the RDS instance will enable connectivity.

C. Create a security group for the Lambda function. Add a new rule in the RDS security group to allow traffic from the new Lambda security group: This option would be correct if the Lambda function and the RDS instance were in the same VPC. However, since they are in different VPCs, simply adjusting security groups won't address the cross-VPC connectivity issue.

upvoted 4 times

✉ **nickolaj** 1 month, 4 weeks ago

Selected Answer: B

Option C would be the correct choice, but it doesn't include the route configuration between subnets needed to access the RDS. I chose option B, but according to architectural best practices, it's not the ideal solution.

upvoted 2 times

a_win 2 months, 1 week ago

Selected Answer: C

Seems more efficient solution.

upvoted 1 times

KarBiswa 2 months, 2 weeks ago

Selected Answer: B

<https://docs.aws.amazon.com/vpc/latest/userguide/default-vpc.html>

The default VPC is the public subnet, this is the main trick

upvoted 1 times

BaYaga 2 months ago

Have you even read the documentation that you're providing. It says clearly:

You can use a default VPC as you would use any other VPC:

Add additional nondefault subnets.

Modify the main route table.

Add additional route tables.

Associate additional security groups.

Update the rules of the default security group.

Add AWS Site-to-Site VPN connections.

Add more IPv4 CIDR blocks.

Access VPCs in a remote Region by using a Direct Connect gateway. For information about Direct Connect gateway options, see Direct Connect gateways in the AWS Direct Connect User Guide.

You can use a default subnet as you would use any other subnet; add custom route tables and set network ACLs. You can also specify a specific default subnet when you launch an EC2 instance.

upvoted 1 times

KarBiswa 2 months, 2 weeks ago

Selected Answer: B

B is the option. Because they meant here A default VPC comes with a public subnet in each Availability Zone, So here default VPC they meant Public, so the lambda must be redeployed to Private subnet.

<https://docs.aws.amazon.com/vpc/latest/userguide/default-vpc.html>

upvoted 1 times

Certified101 2 months, 3 weeks ago

Selected Answer: B

B is correct, the lambda function lives in a different VPC, so it needs a VPC peering connection from both VPC's and a route to VPC-A.

If you select C you will be assuming that the default VPC can communicate with VPC-A

So redeployment and amendment of the SG will fit the needs.

upvoted 1 times

[Removed] 2 months, 3 weeks ago

These questions are so wordy... so when we say default VPC is it the VPC-A or is the default VPC another one. Because if default VPC is another one other than VPC-A then it needs to be redeployed. Tricky question

upvoted 2 times

chewasa 2 months, 3 weeks ago

Selected Answer: C

Option C is the recommended approach. By creating a security group for the Lambda function and adding a rule in the RDS security group to allow traffic from the new Lambda security group, you create a more controlled and secure configuration. This allows the Lambda function to communicate with the RDS database without exposing unnecessary access.

upvoted 2 times

walala97 3 months ago

Selected Answer: C

I dont know why we need redeploy lambda here,I will go with C

upvoted 3 times

hsinchang 5 months, 3 weeks ago

Selected Answer: B

Security group cannot include services from different VPCs, the Lambda function needs to be redeployed.

upvoted 2 times

[Removed] 2 months, 3 weeks ago

Exactly... VPC to VPC connection you must use VPC peering

upvoted 1 times

 **love777** 6 months, 1 week ago

Selected Answer: C

The issue here is most likely due to the fact that the Lambda function, running in the default VPC, is trying to access the RDS database located in another VPC (VPC-A). By default, resources in different VPCs cannot communicate directly with each other.

To enable communication between the Lambda function and the RDS database in a different VPC, you should create a security group for the Lambda function and configure the RDS security group to allow traffic from the Lambda security group.

upvoted 3 times

 **r3mo** 7 months, 1 week ago

Option 'C' is better. Because it offers a more secure, flexible, and scalable solution for allowing communication between the Lambda function and the RDS database, without tightly coupling the Lambda function with the database's network configuration. It also follows best practices for security and access control.

upvoted 2 times

 **jipark** 7 months ago

the key is "security group", not "IAM role"

upvoted 1 times

 **Naj_64** 7 months, 3 weeks ago

Selected Answer: C

B and C are correct. Going with C though. C will take only a few minutes to implement while redeploying the Lambda function will definitely take more time to complete.

upvoted 3 times

Question #73

Topic 1

A company runs an application on AWS. The company deployed the application on Amazon EC2 instances. The application stores data on Amazon Aurora.

The application recently logged multiple application-specific custom DECRYP_ERROR errors to Amazon CloudWatch logs. The company did not detect the issue until the automated tests that run every 30 minutes failed. A developer must implement a solution that will monitor for the custom errors and alert a development team in real time when these errors occur in the production environment.

Which solution will meet these requirements with the LEAST operational overhead?

- A. Configure the application to create a custom metric and to push the metric to CloudWatch. Create an AWS CloudTrail alarm. Configure the CloudTrail alarm to use an Amazon Simple Notification Service (Amazon SNS) topic to send notifications.
- B. Create an AWS Lambda function to run every 5 minutes to scan the CloudWatch logs for the keyword DECRYP_ERROR. Configure the Lambda function to use Amazon Simple Notification Service (Amazon SNS) to send a notification.
- C. Use Amazon CloudWatch Logs to create a metric filter that has a filter pattern for DECRYP_ERROR. Create a CloudWatch alarm on this metric for a threshold ≥ 1 . Configure the alarm to send Amazon Simple Notification Service (Amazon SNS) notifications.
- D. Install the CloudWatch unified agent on the EC2 instance. Configure the application to generate a metric for the keyword DECRYP_ERROR errors. Configure the agent to send Amazon Simple Notification Service (Amazon SNS) notifications.

Correct Answer: C

Community vote distribution

C (100%)

 **MrTee** Highly Voted 10 months, 2 weeks ago

Selected Answer: C

To monitor for custom DECRYP_ERROR errors and alert a development team in real time when these errors occur in the production environment with the least operational overhead, the developer should use Amazon CloudWatch Logs to create a metric filter that has a filter pattern for DECRYP_ERROR. The developer should then create a CloudWatch alarm on this metric for a threshold ≥ 1 and configure the alarm to send Amazon Simple Notification Service (Amazon SNS) notifications (Option C). This solution will allow the developer to monitor for custom errors in real time and receive notifications when they occur with minimal operational overhead.

upvoted 8 times

 **SerialiDr** Most Recent 1 month, 3 weeks ago

Selected Answer: C

This is a straightforward and effective solution. CloudWatch Logs allows you to create a metric filter for specific log patterns (such as DECRYP_ERROR) and then create an alarm based on that metric. When the alarm is triggered, it can send a notification through Amazon SNS. This approach provides real-time monitoring with minimal operational overhead.

upvoted 1 times

 **hsinchang** 5 months, 3 weeks ago

Selected Answer: C

A and B are not real-time, and the CloudWatch unified agent in D is used to collect metrics and logs from EC2 instances and on-premises servers, not to send notifications.

So C.

upvoted 3 times

 **Fyssy** 10 months, 2 weeks ago

Selected Answer: C

CloudWatch Logs can use filter expressions. For example, find a specific IP inside of a log Or count occurrences of "ERROR" in your logs• Metric filters can be used to trigger CloudWatch alarms

upvoted 2 times

Question #74

A developer created an AWS Lambda function that accesses resources in a VPC. The Lambda function polls an Amazon Simple Queue Service (Amazon SQS) queue for new messages through a VPC endpoint. Then the function calculates a rolling average of the numeric values that are contained in the messages. After initial tests of the Lambda function, the developer found that the value of the rolling average that the function returned was not accurate.

How can the developer ensure that the function calculates an accurate rolling average?

- A. Set the function's reserved concurrency to 1. Calculate the rolling average in the function. Store the calculated rolling average in Amazon ElastiCache.
- B. Modify the function to store the values in Amazon ElastiCache. When the function initializes, use the previous values from the cache to calculate the rolling average.
- C. Set the function's provisioned concurrency to 1. Calculate the rolling average in the function. Store the calculated rolling average in Amazon ElastiCache.
- D. Modify the function to store the values in the function's layers. When the function initializes, use the previously stored values to calculate the rolling average.

Correct Answer: C

Community vote distribution

B (51%)

A (48%)

 **MrTee**  10 months, 1 week ago

Selected Answer: B

By using ElastiCache, the Lambda function can store the values of the previous messages it has received, which can be used to calculate an accurate rolling average.

upvoted 16 times

 **eboehm**  8 months, 2 weeks ago

Selected Answer: A

You need to set the reserved concurrency to 1 otherwise multiple functions could run at the same time causing the math to be off. Also there was a similar question in another practice exam set that stated the same thing

upvoted 14 times

 **jipark** 7 months ago

reserve concurrency 1 means poll in order.
this looks answer.

upvoted 1 times

 **SerialiDr**  4 days, 19 hours ago

Selected Answer: A

Option A ("Set the function's reserved concurrency to 1. Calculate the rolling average in the function. Store the calculated rolling average in Amazon ElastiCache.") is the most suitable solution. It ensures that only one instance of the Lambda function processes messages at any given time, maintaining the sequence of message processing which is crucial for an accurate rolling average calculation. Additionally, using Amazon ElastiCache to store and retrieve the rolling average across invocations addresses the statelessness of AWS Lambda, enabling stateful processing.

upvoted 1 times

 **d323bvmiqj** 2 weeks ago

Selected Answer: A

What if one of the instances freezes and holds one of the values for some time, not updating cache, while the others continue calculating the avg giving wrong output ?

upvoted 1 times

 **SerialiDr** 1 month, 3 weeks ago

Selected Answer: B

By storing individual message values in ElastiCache (a fast, in-memory data store), the Lambda function can retrieve these values upon initialization to calculate an accurate rolling average. This approach effectively maintains state across Lambda invocations.

upvoted 1 times

 **Chimzi** 1 month, 3 weeks ago

Selected Answer: B

Using ElastiCache allows you to maintain a shared state across all instances of your Lambda function

upvoted 1 times

 **ShinobiGrappler** 2 months, 1 week ago

Selected Answer: A

This approach controls concurrency by ensuring only one instance runs at a time. Provisioned concurrency also has the added benefit of reducing cold start latency. Storing the rolling average in ElastiCache is a good practice for maintaining state. However, like option A, it may limit the function's throughput.

upvoted 2 times

 **chewasa** 2 months, 1 week ago

Selected Answer: B

Both options A and B provide valid approaches to address potential issues, but they have different trade-offs. Option A focuses on limiting concurrency, while Option B suggests using a caching solution to store and retrieve intermediate values.

If avoiding concurrency problems is a top priority and the function's execution time is not a concern, Option A could be a suitable choice. However, if you are looking for a solution that allows for better scalability and doesn't impose strict concurrency limitations, Option B with Amazon ElastiCache provides a more scalable and distributed approach.

upvoted 2 times

 **sasiy4886** 2 months, 2 weeks ago

itexamslab.com

A is correct

upvoted 2 times

 **Certified101** 2 months, 2 weeks ago

Selected Answer: A

A is correct

upvoted 1 times

 **[Removed]** 2 months, 3 weeks ago

Another tricky question. I go with A mainly because ElastiCache is mainly used along with databases. See this link
<https://docs.aws.amazon.com/lambda/latest/dg/lambda-concurrency.html#reserved-and-provisioned>

Pulled from AWS Website --> What is Amazon ElastiCache?

Amazon ElastiCache allows you to seamlessly set up, run, and scale an in-memory cache in the cloud. ElastiCache is compatible with both Redis and Memcached. Boost your application performance and achieve microsecond latency by caching alongside your existing databases. ElastiCache is a popular choice for real-time use cases like caching, session stores, gaming, geo-spatial services, real-time analytics, and queuing.

upvoted 1 times

 **[Removed]** 2 months, 3 weeks ago

Actually after reading the question more carefully... I change my answer to B

upvoted 1 times

 **tqiu654** 3 months ago

Selected Answer: B

ChatGPT:B

upvoted 1 times

 **Jonalb** 4 months, 1 week ago

Selected Answer: A

Ao definir a simultaneidade reservada da função como 1, isso garante que apenas uma instância da função Lambda será invocada ao mesmo tempo. Isso pode ajudar a evitar qualquer problema de concorrência que possa causar imprecisões na média móvel. Ao calcular a média móvel na função e armazená-la no Amazon ElastiCache, a função pode acessar e atualizar rapidamente a média sempre que for invocada.

upvoted 1 times

 **dexdinh91** 4 months, 2 weeks ago

Selected Answer: D

D. Modify the function to store the values in the function's layers. When the function initializes, use the previously stored values to calculate the rolling average.

This is the best solution because it does not add any overhead to the function, and it does not increase the cost of running the function. Storing the values in the function's layers is a simple and effective way to ensure that the function calculates an accurate rolling average.

upvoted 1 times

 **nnecode** 5 months ago

Selected Answer: B

The best way for the developer to ensure that the function calculates an accurate rolling average is to modify the function to store the values in Amazon ElastiCache. When the function initializes, use the previous values from the cache to calculate the rolling average.

This solution is the best because it ensures that the rolling average is always calculated from the latest values, even if the Lambda function is scaled out to multiple instances.

upvoted 2 times

 **nnecode** 5 months, 1 week ago

Selected Answer: B

The correct answer is B. Modify the function to store the values in Amazon ElastiCache. When the function initializes, use the previous values from the cache to calculate the rolling average.

This solution will ensure that the Lambda function calculates an accurate rolling average, even if the function is invoked multiple times simultaneously.

upvoted 2 times

 **sofiantian** 5 months, 3 weeks ago

Selected Answer: A

Reserved concurrency is the maximum number of concurrent instances you want to allocate to your function.

<https://docs.aws.amazon.com/lambda/latest/dg/lambda-concurrency.html#reserved-and-provisioned>

upvoted 1 times

Question #75

Topic 1

A developer is writing unit tests for a new application that will be deployed on AWS. The developer wants to validate all pull requests with unit tests and merge the code with the main branch only when all tests pass.

The developer stores the code in AWS CodeCommit and sets up AWS CodeBuild to run the unit tests. The developer creates an AWS Lambda function to start the CodeBuild task. The developer needs to identify the CodeCommit events in an Amazon EventBridge event that can invoke the Lambda function when a pull request is created or updated.

Which CodeCommit event will meet these requirements?

- A.

```
{
    "source": ["aws.codecommit"],
    "detail": {
        "event": ["pullRequestMergeStatusUpdated"]
    }
}
```
- B.

```
{
    "source": ["aws.codecommit"],
    "detail": {
        "event": ["pullRequestApprovalRuleCreated"]
    }
}
```
- C.

```
{
    "source": ["aws.codecommit"],
    "detail": {
        "event": ["pullRequestSourceBranchUpdated", "pullRequestCreated"]
    }
}
```
- D.

```
{
    "source": ["aws.codecommit"],
    "detail": {
        "event": ["pullRequestUpdated", "pullRequestSourceBranchCreated"]
    }
}
```

Correct Answer: C

Community vote distribution

C (81%) D (19%)

✉️  **Dushank** 5 months, 3 weeks ago

Answer is C. There's no event call pullRequestUpdated
upvoted 4 times

✉️  **csG13** 9 months ago

Selected Answer: C

It's definitely C. Events in answer D are not real. A & B are clearly wrong since two events are required.
upvoted 4 times

✉️  **Majong** 9 months, 1 week ago

Selected Answer: C

Two events is needed so A and B is no.
The events mentioned in D does not exist as Zodraz says (just look in the link)
upvoted 3 times

✉️  **Prem28** 9 months, 3 weeks ago

Selected Answer: C

its c ,Event mentioned in D not Exist
upvoted 3 times

✉️  **zodraz** 9 months, 4 weeks ago

Selected Answer: C

It's C. Any of the events mentioned on D exist. <https://docs.aws.amazon.com/codecommit/latest/userguide/monitoring-events.html#pullRequestSourceBranchUpdated>
upvoted 3 times

 **zodraz** 9 months, 4 weeks ago

It's C. Any of the events mentioned on D exist. <https://docs.aws.amazon.com/codecommit/latest/userguide/monitoring-events.html#pullRequestSourceBranchUpdated>

upvoted 2 times

 **Fyssy** 10 months, 2 weeks ago

Selected Answer: D

```
"detail": {
"event": ["pullRequestCreated", "pullRequestSourceBranchUpdated"]}
```

upvoted 3 times

Question #76

Topic 1

A developer deployed an application to an Amazon EC2 instance. The application needs to know the public IPv4 address of the instance.

How can the application find this information?

- A. Query the instance metadata from <http://169.254.169.254/latest/meta-data/>.
- B. Query the instance user data from <http://169.254.169.254/latest/user-data/>.
- C. Query the Amazon Machine Image (AMI) information from <http://169.254.169.254/latest/meta-data/ami/>.
- D. Check the hosts file of the operating system.

Correct Answer: A

Community vote distribution

A (100%)

 **SerialiDr** 1 month, 3 weeks ago

Selected Answer: A

This is the correct approach. The instance metadata includes details such as the instance's public IPv4 address. The application can make a request to this URL, specifically to <http://169.254.169.254/latest/meta-data/public-ipv4>, to retrieve the public IPv4 address of the instance.

upvoted 1 times

 **Naj_64** 7 months, 3 weeks ago

Selected Answer: A

<https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/instancedata-data-retrieval.html>

upvoted 4 times

 **zodraz** 9 months, 4 weeks ago

Selected Answer: A

You can retrieve ip through <http://169.254.169.254/latest/meta-data/local-ipv4> or <http://169.254.169.254/latest/meta-data/public-ipv4>
<https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/instancedata-data-retrieval.html>

upvoted 2 times

 **zodraz** 9 months, 4 weeks ago

Selected Answer: A

It's C. Any of the events mentioned on D exist. <https://docs.aws.amazon.com/codecommit/latest/userguide/monitoring-events.html#pullRequestSourceBranchUpdated>

upvoted 2 times

 **zodraz** 9 months, 3 weeks ago

Please remove this comment @admin

upvoted 4 times

Question #77

Topic 1

An application under development is required to store hundreds of video files. The data must be encrypted within the application prior to storage, with a unique key for each video file.

How should the developer code the application?

- A. Use the KMS Encrypt API to encrypt the data. Store the encrypted data key and data.
- B. Use a cryptography library to generate an encryption key for the application. Use the encryption key to encrypt the data. Store the encrypted data.
- C. Use the KMS GenerateDataKey API to get a data key. Encrypt the data with the data key. Store the encrypted data key and data.
- D. Upload the data to an S3 bucket using server side-encryption with an AWS KMS key.

Correct Answer: C

Community vote distribution

C (100%)

✉  **MrTee**  10 months, 1 week ago

Selected Answer: C

option C: use the KMS GenerateDataKey API to get a data key. Encrypt the data with the data key. Store the encrypted data key and data.
upvoted 8 times

✉  **SerialiDr**  1 month, 3 weeks ago

Selected Answer: C

This is the most suitable option. AWS KMS's GenerateDataKey API provides a unique data key for each invocation, which can be used to encrypt each video file. The data key itself is also returned in an encrypted form, which can be safely stored alongside the encrypted data. This approach satisfies the requirement of unique encryption for each file and securely manages the encryption keys.

upvoted 1 times

✉  **Tinez** 4 months ago

Option C seems correct
upvoted 1 times

✉  **hsinchang** 5 months, 3 weeks ago

Selected Answer: C

A and B cannot meet the requirement of having a unique key for each file, and D cannot meet the requirement of encrypting the data within the application.
C meets all requirements.
upvoted 2 times

Question #78

Topic 1

A company is planning to deploy an application on AWS behind an Elastic Load Balancer. The application uses an HTTP/HTTPS listener and must access the client IP addresses.

Which load-balancing solution meets these requirements?

- A. Use an Application Load Balancer and the X-Forwarded-For headers.
- B. Use a Network Load Balancer (NLB). Enable proxy protocol support on the NLB and the target application.
- C. Use an Application Load Balancer. Register the targets by the instance ID.
- D. Use a Network Load Balancer and the X-Forwarded-For headers.

Correct Answer: A

Community vote distribution

A (100%)

 **MrTee** Highly Voted 10 months, 1 week ago

Selected Answer: A

Use an Application Load Balancer (ALB) and the X-Forwarded-For headers. When an ALB is used, the X-Forwarded-For header can be used to pass the client IP address to the backend servers.

upvoted 8 times

 **SerialiDr** Most Recent 1 month, 3 weeks ago

Selected Answer: A

An Application Load Balancer (ALB) operates at the application layer (Layer 7) of the OSI model and supports HTTP/HTTPS traffic. It adds the X-Forwarded-For header to the request as it forwards it to the target, which contains the original client's IP address. This allows the application behind the ALB to access the client IP addresses.

upvoted 1 times

 **HuiHsin** 8 months, 3 weeks ago

is A

<https://docs.aws.amazon.com/elasticloadbalancing/latest/application/x-forwarded-headers.html>
<https://aws.amazon.com/elasticloadbalancing/features/?nc=sn&loc=2>

upvoted 4 times

Question #79

Topic 1

A developer wants to debug an application by searching and filtering log data. The application logs are stored in Amazon CloudWatch Logs. The developer creates a new metric filter to count exceptions in the application logs. However, no results are returned from the logs.

What is the reason that no filtered results are being returned?

- A. A setup of the Amazon CloudWatch interface VPC endpoint is required for filtering the CloudWatch Logs in the VPC.
- B. CloudWatch Logs only publishes metric data for events that happen after the filter is created.
- C. The log group for CloudWatch Logs should be first streamed to Amazon OpenSearch Service before metric filtering returns the results.
- D. Metric data points for logs groups can be filtered only after they are exported to an Amazon S3 bucket.

Correct Answer: B

Community vote distribution

B (100%)

 **zodraz**  9 months, 4 weeks ago

Selected Answer: B

Filters do not retroactively filter data. Filters only publish the metric data points for events that happen after the filter was created.

<https://docs.aws.amazon.com/AmazonCloudWatch/latest/logs/MonitoringLogData.html>

upvoted 11 times

 **SerialiDr**  1 month, 3 weeks ago

Selected Answer: B

CloudWatch Logs metric filters apply to new log events only after the filter is created. They do not retroactively analyze or filter log events that were ingested before the creation of the metric filter. Therefore, if the log events in question were ingested before the metric filter was created, they would not trigger the filter or generate metric data.

upvoted 1 times

 **Dushank** 5 months, 3 weeks ago

Selected Answer: B

Metric filters in Amazon CloudWatch Logs are applied only to new log events. If you create a metric filter and are looking to count exceptions, the filter will only apply to log events generated after the metric filter was created. Existing logs are not scanned.

upvoted 4 times

Question #80

Topic 1

A company is planning to use AWS CodeDeploy to deploy an application to Amazon Elastic Container Service (Amazon ECS). During the deployment of a new version of the application, the company initially must expose only 10% of live traffic to the new version of the deployed application. Then, after 15 minutes elapse, the company must route all the remaining live traffic to the new version of the deployed application.

Which CodeDeploy predefined configuration will meet these requirements?

- A. CodeDeployDefault.ECSCanary10Percent15Minutes
- B. CodeDeployDefault.LambdaCanary10Percent5Minutes
- C. CodeDeployDefault.LambdaCanary10Percentl15Minutes
- D. CodeDeployDefault.ECSLinear10PercentEvery1Minutes

Correct Answer: A

Community vote distribution

A (100%)

✉  **zodraz**  9 months, 4 weeks ago

Selected Answer: A

<https://docs.aws.amazon.com/codedeploy/latest/userguide/deployment-configurations.html>
upvoted 7 times

✉  **SerialiDr**  1 month, 3 weeks ago

Selected Answer: A

This configuration aligns with the company's requirement. It specifies a "canary" deployment where initially only 10% of live traffic is exposed to the new version of the application. After a period of 15 minutes, the remaining 90% of the traffic is shifted to the new version. This approach allows for monitoring the new version with a small portion of traffic before fully deploying it.

upvoted 1 times

✉  **Dushank** 5 months, 3 weeks ago

Selected Answer: A

This predefined deployment configuration for AWS CodeDeploy with Amazon ECS will initially shift 10% of the traffic to the new version and wait for 15 minutes before shifting the remaining 90% of the traffic to the new version.

upvoted 3 times

Question #81

Topic 1

A company hosts a batch processing application on AWS Elastic Beanstalk with instances that run the most recent version of Amazon Linux. The application sorts and processes large datasets.

In recent weeks, the application's performance has decreased significantly during a peak period for traffic. A developer suspects that the application issues are related to the memory usage. The developer checks the Elastic Beanstalk console and notices that memory usage is not being tracked.

How should the developer gather more information about the application performance issues?

- A. Configure the Amazon CloudWatch agent to push logs to Amazon CloudWatch Logs by using port 443.
- B. Configure the Elastic Beanstalk .ebextensions directory to track the memory usage of the instances.
- C. Configure the Amazon CloudWatch agent to track the memory usage of the instances.
- D. Configure an Amazon CloudWatch dashboard to track the memory usage of the instances.

Correct Answer: B

Community vote distribution



✉ **MrTee** 10 months, 2 weeks ago

Selected Answer: C

Configure the Amazon CloudWatch agent to track the memory usage of the instances.

upvoted 14 times

✉ **xdkonorek2** 2 months, 1 week ago

Using elastic beanstalk .ebextensions dir

upvoted 1 times

✉ **eboehm** 8 months, 2 weeks ago

Selected Answer: B

for elastic beanstalk you make this configuration in the .ebextensions folder

<https://repost.aws/knowledge-center/elastic-beanstalk-memory-metrics-windows>

upvoted 13 times

✉ **DumPisach** 8 months, 2 weeks ago

But the question says Linux

upvoted 2 times

✉ **Naj_64** 7 months, 1 week ago

Applies to Linux as well:

<https://medium.com/tomincode/cloudwatch-memory-monitoring-for-elastic-beanstalk-1caa98d57d5c>

upvoted 1 times

✉ **SerialiDr** 4 days, 18 hours ago

Selected Answer: C

This option allows the developer to gather detailed performance metrics, including memory usage, from the EC2 instances. By configuring the CloudWatch agent, the developer can monitor the memory usage in real-time and analyze historical data to identify trends or patterns that may be affecting the application's performance. This approach provides actionable insights with minimal overhead and without the need for custom logging or external tools.

upvoted 1 times

✉ **prathameshpathak** 1 month, 2 weeks ago

Selected Answer: C

.....

upvoted 1 times

✉ **SerialiDr** 1 month, 3 weeks ago

Selected Answer: C

This is the most direct and appropriate solution. By installing and configuring the Amazon CloudWatch agent on the Elastic Beanstalk instances, the developer can collect detailed system-level metrics, such as memory usage, and send them to CloudWatch for monitoring and analysis.

upvoted 1 times

✉ **Chimzi** 1 month, 3 weeks ago

Selected Answer: C

The .ebextensions directory is used for customizing the environment (installing packages, running scripts...) it can't track memory usage alone.
upvoted 2 times

 **Chimzi** 1 month, 3 weeks ago

Selected Answer: C

No Discussion
upvoted 1 times

 **JohnPI** 1 month, 3 weeks ago

Selected Answer: C

We configure the agent not the directory itself.
upvoted 1 times

 **a_win** 2 months, 1 week ago

Selected Answer: C

The Amazon CloudWatch agent can be configured to collect various metrics, including memory usage, from the instances. By setting up the CloudWatch agent to monitor memory metrics, the developer can get insights into the memory usage patterns during peak traffic periods. This data can help diagnose if memory constraints are causing the performance degradation.

upvoted 1 times

 **vozulem** 2 months, 1 week ago

Selected Answer: B

it should be B:
<https://docs.aws.amazon.com/elasticbeanstalk/latest/dg/customize-containers-cw.html#customize-containers-cw-update-roles>
upvoted 2 times

 **KarBiswa** 2 months, 2 weeks ago

Selected Answer: C

Going with C after going through this link:
<https://repost.aws/knowledge-center/elastic-beanstalk-memory-cpu-issues>
upvoted 1 times

 **TallManDan** 3 months, 2 weeks ago

It requires both B and C. I'm guessing the question is supposed to say "Select Two".

<https://docs.aws.amazon.com/elasticbeanstalk/latest/dg/customize-containers-cw.html>
upvoted 1 times

 **bala30** 3 months, 3 weeks ago

Selected Answer: B

I m confused between B & C ,as for beanstalk we need to configure Amazon CloudWatch agent to track the memory usage of the instances in the .ebextensions folder .
upvoted 2 times

 **Nagasoracle** 4 months, 2 weeks ago

Selected Answer: B

I vote for B, since it is already available with .ebextensions and not required agent
upvoted 1 times

 **Dushank** 5 months, 3 weeks ago

Selected Answer: C

Amazon CloudWatch does not collect memory metrics by default. You need to install the CloudWatch agent on your instances to collect this additional system-level metric like memory utilization.
upvoted 5 times

 **love777** 6 months ago

Selected Answer: C

The .ebextensions directory is used for configuration and customization settings, but it doesn't directly enable tracking memory usage metrics.
upvoted 2 times

 **fossil123** 6 months ago

Selected Answer: B

You can provision Elastic Beanstalk configuration files (.ebextensions) to monitor memory utilization with CloudWatch.
upvoted 1 times

Question #82

Topic 1

A developer is building a highly secure healthcare application using serverless components. This application requires writing temporary data to /tmp storage on an AWS Lambda function.

How should the developer encrypt this data?

- A. Enable Amazon EBS volume encryption with an AWS KMS key in the Lambda function configuration so that all storage attached to the Lambda function is encrypted.
- B. Set up the Lambda function with a role and key policy to access an AWS KMS key. Use the key to generate a data key used to encrypt all data prior to writing to /tmp storage.
- C. Use OpenSSL to generate a symmetric encryption key on Lambda startup. Use this key to encrypt the data prior to writing to /tmp.
- D. Use an on-premises hardware security module (HSM) to generate keys, where the Lambda function requests a data key from the HSM and uses that to encrypt data on all requests to the function.

Correct Answer: B*Community vote distribution* B (100%)

✉  **SerialiDr** 1 month, 3 weeks ago

Selected Answer: B

AWS Key Management Service (KMS) provides secure management of encryption keys. The Lambda function can use a KMS key to generate data keys for encrypting and decrypting data. The Lambda function would require appropriate permissions to access the KMS key. This approach provides a high level of security, which is essential for a healthcare application.

upvoted 1 times

✉  **Milan61** 4 months, 4 weeks ago

B is the solution
upvoted 1 times

✉  **Yuxing_Li** 6 months, 1 week ago

Selected Answer: B

Go with B
upvoted 2 times

✉  **abdelbz16** 10 months, 1 week ago

Selected Answer: B

B is the best solution
upvoted 4 times

✉  **MrTee** 10 months, 1 week ago

Selected Answer: B

is the best solution for encrypting temporary data written to /tmp storage on an AWS Lambda function
upvoted 4 times

Question #83

Topic 1

A developer has created an AWS Lambda function to provide notification through Amazon Simple Notification Service (Amazon SNS) whenever a file is uploaded to Amazon S3 that is larger than 50 MB. The developer has deployed and tested the Lambda function by using the CLI. However, when the event notification is added to the S3 bucket and a 3,000 MB file is uploaded, the Lambda function does not launch.

Which of the following is a possible reason for the Lambda function's inability to launch?

- A. The S3 event notification does not activate for files that are larger than 1,000 MB.
- B. The resource-based policy for the Lambda function does not have the required permissions to be invoked by Amazon S3.
- C. Lambda functions cannot be invoked directly from an S3 event.
- D. The S3 bucket needs to be made public.

Correct Answer: B

Community vote distribution

B (90%) 10%

✉ **Jamshif01** 9 months, 3 weeks ago

Selected Answer: B

B - is right answer

A is incorrect because the size of the file should not affect whether the event notification is triggered.
 C is incorrect because Lambda functions can indeed be invoked directly from an S3 event.
 D is incorrect because the S3 bucket does not need to be made public for the Lambda function to be invoked.
 (c)chatgpt
 upvoted 7 times

✉ **Melisa202401** 1 week, 6 days ago

Why answer B while dev deployed and tested via CLI is ok, but the reason would be lack of resource policy?
 upvoted 1 times

✉ **Prem28** 9 months ago

B
 A. The S3 event notification does not activate for files that are larger than 1,000 MB. This is not the case. S3 event notifications can activate for files that are larger than 1,000 MB.
 C. Lambda functions cannot be invoked directly from an S3 event. This is also not the case. Lambda functions can be invoked directly from an S3 event.
 D. The S3 bucket needs to be made public. This is not necessary. The S3 bucket does not need to be made public in order for the Lambda function to be invoked.
 upvoted 2 times

✉ **chumji** 9 months, 3 weeks ago

Selected Answer: B

anser is B
 upvoted 2 times

✉ **junrun3** 9 months, 3 weeks ago

Selected Answer: A

Ansewer A
 upvoted 1 times

✉ **junrun3** 9 months, 3 weeks ago

not A, answer is B
 upvoted 4 times

Question #84

Topic 1

A developer is creating a Ruby application and needs to automate the deployment, scaling, and management of an environment without requiring knowledge of the underlying infrastructure.

Which service would best accomplish this task?

- A. AWS CodeDeploy
- B. AWS CloudFormation
- C. AWS OpsWorks
- D. AWS Elastic Beanstalk

Correct Answer: D

Community vote distribution

D (100%)

✉ Prem28 **Highly Voted** 9 months ago

answer- d

AWS CodeDeploy can automate the deployment of code to any instance, including Amazon EC2 instances and on-premises servers. However, it does not provide the same level of automation as Elastic Beanstalk, and it requires more manual intervention from developers.

AWS CloudFormation can help you model and set up your AWS resources. However, it does not provide any automation for deploying or managing applications.

AWS OpsWorks is a configuration management service that provides managed instances of Chef and Puppet. However, it is not as easy to use as Elastic Beanstalk, and it does not provide the same level of automation for deploying or managing applications.

upvoted 10 times

✉ zodraz **Highly Voted** 9 months, 4 weeks ago

Selected Answer: D

<https://www.examtopics.com/discussions/amazon/view/88659-exam-aws-certified-developer-associate-topic-1-question-197/>

upvoted 5 times

✉ Dushank **Most Recent** 5 months, 3 weeks ago

Selected Answer: D

AWS Elastic Beanstalk is designed for developers like the one in your scenario who want to deploy and manage applications without worrying about the underlying infrastructure. It automates the deployment process and automatically handles capacity provisioning, load balancing, auto-scaling, and application health monitoring. You can use it with various platforms including Ruby.

upvoted 2 times

Question #85

A company has a web application that is deployed on AWS. The application uses an Amazon API Gateway API and an AWS Lambda function as its backend.

The application recently demonstrated unexpected behavior. A developer examines the Lambda function code, finds an error, and modifies the code to resolve the problem. Before deploying the change to production, the developer needs to run tests to validate that the application operates properly.

The application has only a production environment available. The developer must create a new development environment to test the code changes. The developer must also prevent other developers from overwriting these changes during the test cycle.

Which combination of steps will meet these requirements with the LEAST development effort? (Choose two.)

- A. Create a new resource in the current stage. Create a new method with Lambda proxy integration. Select the Lambda function. Add the hotfix alias. Redeploy the current stage. Test the backend.
- B. Update the Lambda function in the API Gateway API integration request to use the hotfix alias. Deploy the API Gateway API to a new stage named hotfix. Test the backend.
- C. Modify the Lambda function by fixing the code. Test the Lambda function. Create the alias hotfix. Point the alias to the \$LATEST version.
- D. Modify the Lambda function by fixing the code. Test the Lambda function. When the Lambda function is working as expected, publish the Lambda function as a new version. Create the alias hotfix. Point the alias to the new version.
- E. Create a new API Gateway API for the development environment. Add a resource and method with Lambda integration. Choose the Lambda function and the hotfix alias. Deploy to a new stage. Test the backend.

Correct Answer: BD
Community vote distribution

BD (92%)

8%

 **KillThemWithKindness** 1 week, 3 days ago

Selected Answer: BD

Not C, you can't use an unqualified ARN (\$LATEST) to create an alias.
<https://docs.aws.amazon.com/lambda/latest/dg/configuration-versions.html>

E

After the initial deployment, you can add more stages and associate them with existing deployments. You can use the API Gateway console to create a new stage, or you can choose an existing stage while deploying an API. You can add a new stage to an API deployment before redeploying the API.

<https://docs.aws.amazon.com/apigateway/latest/developerguide/stages.html>
 upvoted 1 times

 **CrescentShared** 3 weeks, 4 days ago

Selected Answer: BE

I cannot find another choice that meets this requirement.
 "The developer must create a new development environment to test the code changes."
 upvoted 1 times

 **SerialiDr** 1 month, 2 weeks ago

Selected Answer: BD

The order is D and then B
 upvoted 1 times

 **Ponyi** 3 months, 3 weeks ago

Selected Answer: BD

Why D over C?
 Versions are immutable. \$Latest is mutable, which means anyone access to Lambda can edit and deploy a new code. The question simply doesn't want that.
 Why B over E?
 You don't need to create a whole new API to test some new feature. You can simply achieve this by deploying it to a different stage. Afterwards, you can redirect the users to a new stage or do A/B testing.
 upvoted 2 times

 **r3mo** 7 months, 1 week ago

C - D.

C vs B : option C is preferred over option B because it provides a more isolated and controlled environment for testing the hotfix without directly affecting the production environment. It gives you the flexibility to iterate on the hotfix if needed and promotes a safer development and testing process.

D vs E : Option E is preferred over option D because it provides a more isolated and controlled environment for testing the hotfix. It avoids version management complexities and promotes a safer development and testing process by creating a dedicated development environment.

upvoted 4 times

 **tttamttam** 7 months, 3 weeks ago

Selected Answer: BD

D ==> change the lambda function.

B ==> update the API gateway to use the updated lambda function & deploy it into another(new) stage. so that developers can use the newly deployed API endpoint.

upvoted 3 times

 **csG13** 9 months ago

Selected Answer: BD

It is B & D.

Clearly E isn't operationally efficient. So we got to choose from A & B one, and C & D the second.

Between A & B, we gotta pick B since in the question it clearly states that we don't want to touch the existing solution.

Regarding C & D, seems like D is more thorough and also pointing to \$LATEST is not sufficiently explicit when you troubleshoot.

upvoted 3 times

 **zodraz** 9 months, 4 weeks ago

Selected Answer: BD

<https://www.examtopics.com/discussions/amazon/view/89549-exam-aws-certified-developer-associate-topic-1-question-334/>

upvoted 2 times

Question #86

A developer is implementing an AWS Cloud Development Kit (AWS CDK) serverless application. The developer will provision several AWS Lambda functions and Amazon API Gateway APIs during AWS CloudFormation stack creation. The developer's workstation has the AWS Serverless Application Model (AWS SAM) and the AWS CDK installed locally.

How can the developer test a specific Lambda function locally?

- A. Run the sam package and sam deploy commands. Create a Lambda test event from the AWS Management Console. Test the Lambda function.
- B. Run the cdk synth and cdk deploy commands. Create a Lambda test event from the AWS Management Console. Test the Lambda function.
- C. Run the cdk synth and sam local invoke commands with the function construct identifier and the path to the synthesized CloudFormation template.
- D. Run the cdk synth and sam local start-lambda commands with the function construct identifier and the path to the synthesized CloudFormation template.

Correct Answer: D

Community vote distribution

C (100%)

 **MrTee**  10 months, 2 weeks ago

Selected Answer: C

The developer can test a specific Lambda function locally by running the cdk synth command to synthesize the AWS CDK application into an AWS CloudFormation template. Then, the developer can use the sam local invoke command with the function construct identifier and the path to the synthesized CloudFormation template to test the Lambda function locally (option C).

upvoted 9 times

 **Dushank**  5 months, 3 weeks ago

Selected Answer: C

o test a specific Lambda function locally when using the AWS Cloud Development Kit (AWS CDK), the developer can use the AWS Serverless Application Model (AWS SAM) CLI's local testing capabilities in conjunction with the CDK. The typical process would be:

Run cdk synth to synthesize the AWS CDK app into a CloudFormation template.

Use sam local invoke to run the specific Lambda function locally, providing the function's logical identifier and the path to the synthesized CloudFormation template as arguments.

upvoted 5 times

 **KillThemWithKindness**  1 week, 3 days ago

Selected Answer: C

<https://docs.aws.amazon.com/serverless-application-model/latest/developerguide/serverless-sam-cli-using-invoke.html>

sam local invoke: Invoke Lambda locally

sam local start-lambda: Integrating with automated-tests

upvoted 1 times

 **NaghamAbdellatif** 3 months, 1 week ago

Selected Answer: C

<https://docs.aws.amazon.com/serverless-application-model/latest/developerguide/serverless-cdk-testing.html>

C

upvoted 1 times

 **fossil123** 6 months ago

Selected Answer: C

Use the AWS SAM CLI sam local invoke subcommand to initiate a one-time invocation of an AWS Lambda function locally.

<https://docs.aws.amazon.com/serverless-application-model/latest/developerguide/using-sam-cli-local-invoke.html>

upvoted 2 times

 **JamalDaBoss** 7 months ago

Selected Answer: C

Answer is clearly C. If you say it's not C, you are wrong.

upvoted 2 times

 **zodraz** 9 months, 4 weeks ago

Selected Answer: C

sam local invoke StackLogicalId/FunctionLogicalId
<https://docs.aws.amazon.com/serverless-application-model/latest/developerguide/using-sam-cli-local-invoke.html>
upvoted 4 times

Question #87

Topic 1

A company's new mobile app uses Amazon API Gateway. As the development team completes a new release of its APIs, a developer must safely and transparently roll out the API change.

What is the SIMPLEST solution for the developer to use for rolling out the new API version to a limited number of users through API Gateway?

- A. Create a new API in API Gateway. Direct a portion of the traffic to the new API using an Amazon Route 53 weighted routing policy.
- B. Validate the new API version and promote it to production during the window of lowest expected utilization.
- C. Implement an Amazon CloudWatch alarm to trigger a rollback if the observed HTTP 500 status code rate exceeds a predetermined threshold.
- D. Use the canary release deployment option in API Gateway. Direct a percentage of the API traffic using the canarySettings setting.

Correct Answer: D

Community vote distribution

D (100%)

 **zodraz**  9 months, 4 weeks ago

Selected Answer: D

<https://www.examtopics.com/discussions/amazon/view/51596-exam-aws-certified-developer-associate-topic-1-question-355/>
upvoted 5 times

 **Dushank**  5 months, 3 weeks ago

Selected Answer: D

Canary deployments allow you to divert a percentage of your API traffic to a new API version, enabling you to test how the new version will perform under real-world conditions without fully replacing the previous version. This is especially useful for reducing the risk associated with deploying new versions.

upvoted 4 times

Question #88

Topic 1

A company caches session information for a web application in an Amazon DynamoDB table. The company wants an automated way to delete old items from the table.

What is the simplest way to do this?

- A. Write a script that deletes old records; schedule the script as a cron job on an Amazon EC2 instance.
- B. Add an attribute with the expiration time; enable the Time To Live feature based on that attribute.
- C. Each day, create a new table to hold session data; delete the previous day's table.
- D. Add an attribute with the expiration time; name the attribute ItemExpiration.

Correct Answer: B

Community vote distribution

B (100%)

 **Dushank** 5 months, 3 weeks ago

Selected Answer: B

The simplest way to automatically delete old items from an Amazon DynamoDB table is to use DynamoDB's Time to Live (TTL) feature. This feature allows you to define an attribute that stores the expiration time for each item. Once the specified time has passed, DynamoDB automatically deletes the expired items, freeing up storage and reducing costs without the need for custom scripts or manual intervention.

upvoted 4 times

 **catcatpunch** 9 months, 1 week ago

https://docs.aws.amazon.com/ko_kr/amazondynamodb/latest/developerguide/TTL.html

upvoted 2 times

 **zodraz** 9 months, 4 weeks ago

Selected Answer: B

<https://www.examtopics.com/discussions/amazon/view/7225-exam-aws-certified-developer-associate-topic-1-question-107/>

upvoted 4 times

Question #89

Topic 1

A company is using an Amazon API Gateway REST API endpoint as a webhook to publish events from an on-premises source control management (SCM) system to Amazon EventBridge. The company has configured an EventBridge rule to listen for the events and to control application deployment in a central AWS account. The company needs to receive the same events across multiple receiver AWS accounts.

How can a developer meet these requirements without changing the configuration of the SCM system?

- A. Deploy the API Gateway REST API to all the required AWS accounts. Use the same custom domain name for all the gateway endpoints so that a single SCM webhook can be used for all events from all accounts.
- B. Deploy the API Gateway REST API to all the receiver AWS accounts. Create as many SCM webhooks as the number of AWS accounts.
- C. Grant permission to the central AWS account for EventBridge to access the receiver AWS accounts. Add an EventBridge event bus on the receiver AWS accounts as the targets to the existing EventBridge rule.
- D. Convert the API Gateway type from REST API to HTTP API.

Correct Answer: C

Community vote distribution

C (100%)

  csG13  9 months ago

Selected Answer: C

It's C - eventbridge event buses in one (target) account can be a target of another event rule in a source account.

For reference, watch the video in the following link:

<https://docs.aws.amazon.com/eventbridge/latest/userguide/eb-cross-account.html>

upvoted 11 times

Question #90

Topic 1

A company moved some of its secure files to a private Amazon S3 bucket that has no public access. The company wants to develop a serverless application that gives its employees the ability to log in and securely share the files with other users.

Which AWS feature should the company use to share and access the files securely?

- A. Amazon Cognito user pool
- B. S3 presigned URLs
- C. S3 bucket policy
- D. Amazon Cognito identity pool

Correct Answer: A

Community vote distribution

B (51%)	D (25%)	A (24%)
---------	---------	---------

✉  **Dushank**  5 months, 3 weeks ago

Selected Answer: B

Employees log into the serverless application using an Amazon Cognito User Pool. Once logged in, the application's back-end logic (possibly a Lambda function) generates an S3 pre-signed URL for the requested file. The pre-signed URL is then given to the authenticated user, allowing them secure, time-limited access to that specific S3 object. So, while both Amazon Cognito User Pool and S3 Pre-signed URLs would be used in the solution, S3 Pre-signed URLs (Option B) are the specific feature that allows for the secure, temporary sharing of S3 files. Therefore, Option B would be the best answer to the question of how to "share and access the files securely."

upvoted 16 times

✉  **loctong**  9 months, 3 weeks ago

Selected Answer: A

the key words are ability to log in and securely share the files. It is A

upvoted 15 times

✉  **rimaSamir** 2 weeks, 1 day ago

But we need to answer a question not task condition

upvoted 1 times

✉  **jipark** 7 months ago

I agree 'log in' would go user pool.

upvoted 2 times

✉  **SerialiDr**  4 days, 16 hours ago

Selected Answer: B

This option allows secure, temporary access to specific objects in an S3 bucket. By generating presigned URLs, the serverless application can grant users time-limited access to download or upload files without altering the permissions of the S3 bucket or the objects. This method ensures secure access management and is suitable for sharing private files among authenticated users.

upvoted 1 times

✉  **SD_CS** 4 weeks ago

Selected Answer: A

in order to log in you need to use cognito user pools

upvoted 2 times

✉  **rimaSamir** 1 month ago

Actually, the question is about "what feature will be used by the new serverless application to share and access the files securely". Ability to log in is about "Amazon Cognito user pool". Imagine "Lambda function" and "API Gateway" are created as a serverless app to provide some API. When you call API endpoint, it will login to "Amazon Cognito user pool" and then share files using SDK. How it will share is the next question.

My answer is A

upvoted 2 times

✉  **Ashwinvdm22** 1 month ago

Selected Answer: B

The answer must be B. So although in the question it says "gives its employees the ability to log in" (which is hinting towards Cognito User Pools) the question is actually asking: "Which AWS feature should the company use to share and access the files securely?"

The question is actually about how to share and access the files securely. Hence it must be the S3 pre-signed URL option. To read up more on S3 pre-signed URLs check here: <https://docs.aws.amazon.com/AmazonS3/latest/userguide/ShareObjectPreSignedURL.html>

upvoted 1 times

 **peekingpicker** 1 month, 1 week ago

Selected Answer: B

Which AWS feature should the company use to share and access the files securely?
So, It's B. S3 Pre-signed URL can be used to share S3 object to other people securely.

upvoted 2 times

 **gqs3119** 2 months ago

It's not A, Cognito user pool is not needed, only employees need ability to log in, they can be provided with IAM accounts.

upvoted 1 times

 **a_win** 2 months, 1 week ago

Selected Answer: D

An Amazon Cognito identity pool provides temporary AWS credentials for users who authenticate via Amazon Cognito. This allows your application users (employees, in this case) to securely authenticate and gain access to AWS services like S3 based on their assigned roles and permissions.

Through Amazon Cognito, you can manage user identities, control user access to resources, and provide temporary, limited-privilege credentials to access the S3 bucket securely.

upvoted 2 times

 **KarBiswa** 2 months, 2 weeks ago

Selected Answer: B

I will go with B because it's purely asking about sharing and no mention about external logins so we should go by default AWS feature which provides this feature,

<https://docs.aws.amazon.com/AmazonS3/latest/userguide/ShareObjectPreSignedURL.html>

upvoted 2 times

 **tqiu654** 3 months ago

Selected Answer: B

ChatGPT: B

upvoted 2 times

 **didorins** 4 months, 1 week ago

Login of external to AWS users, we can use Cognito. Identity Pool is specifically for DynamoDB and S3.

Use an identity pool when you need to:

Give your users access to AWS resources, such as an Amazon Simple Storage Service (Amazon S3) bucket or an Amazon DynamoDB table.

<https://repost.aws/knowledge-center/cognito-user-pools-identity-pools>

upvoted 1 times

 **Rameez1** 4 months, 2 weeks ago

Selected Answer: B

Actual ask is in the final line "Which AWS feature should the company use to share and access the files securely?" -> S3 Pre-signed URL provides the most secure feature.

upvoted 1 times

 **[Removed]** 2 months, 3 weeks ago

I agree... B is the only option that is specific to sharing of files. Identity/User pools are for authentication (log in to the S3 bucket).

upvoted 2 times

 **EMPERBACH** 5 months, 2 weeks ago

Selected Answer: B

Secure solution for sharing private s3 resource

upvoted 1 times

 **Iamtany** 5 months, 3 weeks ago

Selected Answer: B

I say 'B' because:

The question is "Which AWS feature should the company use to share and access the files securely?"
if you look at this part there is no mention about login part. Though there is requirement for the application as a whole, the question targets only about sharing and accessing files securely.

upvoted 4 times

 **fossil123** 6 months ago

Selected Answer: A

'Login' points to A

upvoted 2 times

 **Yuxing_Li** 6 months, 1 week ago

Selected Answer: D

You need access to S3

upvoted 2 times

Question #91

Topic 1

A company needs to develop a proof of concept for a web service application. The application will show the weather forecast for one of the company's office locations. The application will provide a REST endpoint that clients can call. Where possible, the application should use caching features provided by AWS to limit the number of requests to the backend service. The application backend will receive a small amount of traffic only during testing.

Which approach should the developer take to provide the REST endpoint MOST cost-effectively?

- A. Create a container image. Deploy the container image by using Amazon Elastic Kubernetes Service (Amazon EKS). Expose the functionality by using Amazon API Gateway.
- B. Create an AWS Lambda function by using the AWS Serverless Application Model (AWS SAM). Expose the Lambda functionality by using Amazon API Gateway.
- C. Create a container image. Deploy the container image by using Amazon Elastic Container Service (Amazon ECS). Expose the functionality by using Amazon API Gateway.
- D. Create a microservices application. Deploy the application to AWS Elastic Beanstalk. Expose the AWS Lambda functionality by using an Application Load Balancer.

Correct Answer: B*Community vote distribution* B (100%)

 **loctong**  9 months, 3 weeks ago

Selected Answer: B

AWS Lambda function absolutely ability to do the requirements.

upvoted 7 times

 **JamalDaBoss** 7 months ago

Yes, Lambda bery certain great.

upvoted 3 times

 **SerialiDr**  4 days, 9 hours ago

Selected Answer: B

This solution is cost-effective because AWS Lambda charges are based on the number of requests and the duration of code execution, making it ideal for applications with low to moderate traffic. Amazon API Gateway can efficiently manage the REST endpoint and offers built-in caching capabilities to reduce the number of requests to the backend Lambda function, further optimizing costs. This setup also leverages the serverless model, reducing the operational overhead and cost associated with provisioning and managing servers.

upvoted 1 times

 **a5fc516** 3 weeks, 4 days ago

Selected Answer: B

yes B is correct

upvoted 1 times

 **hmdev** 6 months, 1 week ago

Selected Answer: B

B is the cost-effective one.

upvoted 3 times

Question #92

Topic 1

An e-commerce web application that shares session state on-premises is being migrated to AWS. The application must be fault tolerant, natively highly scalable, and any service interruption should not affect the user experience.

What is the best option to store the session state?

- A. Store the session state in Amazon ElastiCache.
- B. Store the session state in Amazon CloudFront.
- C. Store the session state in Amazon S3.
- D. Enable session stickiness using elastic load balancers.

Correct Answer: A

Community vote distribution

A (100%)

SerialiDr 4 days, 9 hours ago

Selected Answer: A

Amazon ElastiCache is a high-performance, in-memory data store that provides sub-millisecond latency to applications. It supports data structures such as strings, hashes, lists, sets, and sorted sets, making it suitable for storing session state data. ElastiCache offers both Redis and Memcached engines, with Redis providing more advanced data structures and features such as persistence, replication, and transaction support. This solution is fault-tolerant and highly scalable, ensuring that any service interruption does not affect the user experience.

upvoted 1 times

Phongsanth 8 months, 1 week ago

Selected Answer: A

I vote A

<https://aws.amazon.com/blogs/developer/elasticsearch-as-an-asp-net-session-store/>

upvoted 4 times

loctong 9 months, 3 weeks ago

Selected Answer: A

the answer came from the discussion at <https://www.examtopics.com/discussions/amazon/view/8789-exam-aws-certified-developer-associate-topic-1-question-176/>

upvoted 3 times

zodraz 9 months, 4 weeks ago

Selected Answer: A

<https://www.examtopics.com/discussions/amazon/view/8789-exam-aws-certified-developer-associate-topic-1-question-176/>

upvoted 4 times

Question #93

A developer is building an application that uses Amazon DynamoDB. The developer wants to retrieve multiple specific items from the database with a single API call.

Which DynamoDB API call will meet these requirements with the MINIMUM impact on the database?

- A. BatchGetItem
- B. GetItem
- C. Scan
- D. Query

Correct Answer: D

Community vote distribution

A (100%)

✉ **MrTee** Highly Voted 10 months, 2 weeks ago

Selected Answer: A

A Is the correct answer with the minimum impact on the database.
upvoted 10 times

✉ **dan80** Highly Voted 10 months, 1 week ago

Selected Answer: A

<https://beabetterdev.com/2022/10/12/dynamodb-getitem-vs-query-when-to-use-what/#:~:text=If%20you'd%20like%20to%20retrieve%20multiple%20items%20at%20once,retrieve%20multiple%20items%20at%20once.>
upvoted 8 times

✉ **jipark** 7 months ago

tons of thanks.

Looking for just a single item on the main table index? Use GetItem

Looking for just a single item on a GSI? Use Query.

Looking for multiple items with different partition key and sort key combinations at once? Use BatchGetItem

Looking for multiple items that share the same partition key? Use Query

upvoted 7 times

✉ **prathameshpathak** Most Recent 1 month, 2 weeks ago

Selected Answer: A

.....
upvoted 1 times

✉ **marolisa** 5 months, 1 week ago

D.

"Query" allows you to use filter - multiple specific items and is less expensive than the Scan operation.

upvoted 1 times

✉ **Baba_Eni** 8 months, 3 weeks ago

Selected Answer: A

https://docs.aws.amazon.com/amazondynamodb/latest/APIReference/API_BatchGetItem.html

upvoted 1 times

✉ **imvb88** 9 months, 1 week ago

Selected Answer: A

Need specific Item -> cannot be Scan or Query since they are for retrieving items that match conditions.

We need multiple item then A is the option left.

upvoted 1 times

Question #94

Topic 1

A developer has written an application that runs on Amazon EC2 instances. The developer is adding functionality for the application to write objects to an Amazon S3 bucket.

Which policy must the developer modify to allow the instances to write these objects?

- A. The IAM policy that is attached to the EC2 instance profile role
- B. The session policy that is applied to the EC2 instance role session
- C. The AWS Key Management Service (AWS KMS) key policy that is attached to the EC2 instance profile role
- D. The Amazon VPC endpoint policy

Correct Answer: A

Community vote distribution

A (100%)

 **Ja13** 8 months, 3 weeks ago

Selected Answer: A

A: <https://repost.aws/knowledge-center/ec2-instance-access-s3-bucket>
upvoted 4 times

 **mgonblan** 9 months, 1 week ago

B: I Think B is better, because we need to use it on the instance session
upvoted 1 times

 **Prem28** 9 months, 3 weeks ago

Selected Answer: A

a is correct
upvoted 4 times

Question #95

Topic 1

A developer is leveraging a Border Gateway Protocol (BGP)-based AWS VPN connection to connect from on-premises to Amazon EC2 instances in the developer's account. The developer is able to access an EC2 instance in subnet A, but is unable to access an EC2 instance in subnet B in the same VPC.

Which logs can the developer use to verify whether the traffic is reaching subnet B?

- A. VPN logs
- B. BGP logs
- C. VPC Flow Logs
- D. AWS CloudTrail logs

Correct Answer: C

Community vote distribution

C (100%)

✉  **Dushank**  5 months, 3 weeks ago

Selected Answer: C

VPC Flow Logs capture information about the IP traffic going to and from network interfaces in a VPC. This includes traffic that traverses a VPN connection. VPC Flow Logs can be used to monitor and troubleshoot connectivity issues, including verifying whether traffic is reaching a particular subnet within the VPC.

upvoted 5 times

✉  **KarBiswa**  2 months, 2 weeks ago

Selected Answer: C

<https://docs.aws.amazon.com/vpc/latest/userguide/flow-logs.html>

upvoted 1 times

✉  **Prem28** 9 months, 3 weeks ago

Selected Answer: C

<https://www.examtopics.com/discussions/amazon/view/28802-exam-aws-certified-developer-associate-topic-1-question-219/>

upvoted 3 times

✉  **zodraz** 9 months, 4 weeks ago

Selected Answer: C

<https://www.examtopics.com/discussions/amazon/view/28802-exam-aws-certified-developer-associate-topic-1-question-219/>

upvoted 3 times

Question #96

Topic 1

A developer is creating a service that uses an Amazon S3 bucket for image uploads. The service will use an AWS Lambda function to create a thumbnail of each image. Each time an image is uploaded, the service needs to send an email notification and create the thumbnail. The developer needs to configure the image processing and email notifications setup.

Which solution will meet these requirements?

- A. Create an Amazon Simple Notification Service (Amazon SNS) topic. Configure S3 event notifications with a destination of the SNS topic. Subscribe the Lambda function to the SNS topic. Create an email notification subscription to the SNS topic.
- B. Create an Amazon Simple Notification Service (Amazon SNS) topic. Configure S3 event notifications with a destination of the SNS topic. Subscribe the Lambda function to the SNS topic. Create an Amazon Simple Queue Service (Amazon SQS) queue. Subscribe the SQS queue to the SNS topic. Create an email notification subscription to the SQS queue.
- C. Create an Amazon Simple Queue Service (Amazon SQS) queue. Configure S3 event notifications with a destination of the SQS queue. Subscribe the Lambda function to the SQS queue. Create an email notification subscription to the SQS queue.
- D. Create an Amazon Simple Queue Service (Amazon SQS) queue. Send S3 event notifications to Amazon EventBridge. Create an EventBridge rule that runs the Lambda function when images are uploaded to the S3 bucket. Create an EventBridge rule that sends notifications to the SQS queue. Create an email notification subscription to the SQS queue.

Correct Answer: A

Community vote distribution

A (100%)

 **MrTee**  10 months, 2 weeks ago

Selected Answer: A

This solution will allow the developer to receive notifications for each image uploaded to the S3 bucket, and also create a thumbnail using the Lambda function. The SNS topic will serve as a trigger for both the Lambda function and the email notification subscription. When an image is uploaded, S3 will send a notification to the SNS topic, which will trigger the Lambda function to create the thumbnail and also send an email notification to the specified email address.

upvoted 14 times

 **payireb682** 2 months, 3 weeks ago

Thanks. As mentioned Multiple subscription can be added for SNS

upvoted 1 times

 **jipark** 7 months ago

greate !! send email do not need SQS.

upvoted 2 times

 **SerialiDr**  1 month, 2 weeks ago

Selected Answer: A

SNS can be used to fan out notifications. When an image is uploaded to the S3 bucket, an event notification is sent to the SNS topic. The Lambda function is subscribed to this topic to create a thumbnail, and an email subscription can also be configured on the same SNS topic to send email notifications. This approach meets all requirements with minimal components.

upvoted 1 times

Question #97

Topic 1

A developer has designed an application to store incoming data as JSON files in Amazon S3 objects. Custom business logic in an AWS Lambda function then transforms the objects, and the Lambda function loads the data into an Amazon DynamoDB table. Recently, the workload has experienced sudden and significant changes in traffic. The flow of data to the DynamoDB table is becoming throttled.

The developer needs to implement a solution to eliminate the throttling and load the data into the DynamoDB table more consistently.

Which solution will meet these requirements?

- A. Refactor the Lambda function into two functions. Configure one function to transform the data and one function to load the data into the DynamoDB table. Create an Amazon Simple Queue Service (Amazon SQS) queue in between the functions to hold the items as messages and to invoke the second function.
- B. Turn on auto scaling for the DynamoDB table. Use Amazon CloudWatch to monitor the table's read and write capacity metrics and to track consumed capacity.
- C. Create an alias for the Lambda function. Configure provisioned concurrency for the application to use.
- D. Refactor the Lambda function into two functions. Configure one function to store the data in the DynamoDB table. Configure the second function to process the data and update the items after the data is stored in DynamoDB. Create a DynamoDB stream to invoke the second function after the data is stored.

Correct Answer: B
Community vote distribution


ihebchorfi Highly Voted 10 months, 1 week ago

Selected Answer: A

A. Refactor the Lambda function into two functions. Configure one function to transform the data and one function to load the data into the DynamoDB table. Create an Amazon Simple Queue Service (Amazon SQS) queue in between the functions to hold the items as messages and to invoke the second function.

By breaking the Lambda function into two separate functions and using an SQS queue to hold the transformed data as messages, you can decouple the data transformation and loading processes. This allows for more controlled loading of data into the DynamoDB table and helps eliminate throttling issues.

upvoted 18 times

MrTee Highly Voted 10 months, 2 weeks ago

Selected Answer: D

This solution will allow the developer to store the incoming data into the DynamoDB table more consistently without being throttled. By splitting the Lambda function into two functions, the first function can store the data into the DynamoDB table and exit quickly, avoiding any throttling issues. The second function can then process the data and update the items after the data is stored in DynamoDB using a DynamoDB stream to invoke the second function.

Option A is also a good option but not the best solution because it introduces additional complexity and cost by using an Amazon SQS queue.

upvoted 8 times

[Removed] 2 months, 3 weeks ago

The issue is between S3 to DynamoDB this is where we need to fix the bottleneck. So configuring two functions to work on the data after it has been uploaded to DynamoDB makes no sense.

upvoted 1 times

[Removed] 2 months, 3 weeks ago

I disagree... the order of the function with this option makes NO sense. I go with A

upvoted 1 times

Ashwinvdm22 1 month ago

The problem I have with option D is that it is adding more load on the DynamoDB table. What is the need to insert the item and then update the item later. This is performing two operations on every item just to get it into the correct state. I would go with option A since it is not performing two operations on the DB and hence reducing the load which will help with throttling.

upvoted 1 times

robotgeek 9 months ago

Sorry but when you say "the first function can store the data into the DynamoDB table and exit quickly, avoiding any throttling issues" I don't understand your point

upvoted 5 times

 **SerialiDr** Most Recent 4 days, 8 hours ago

Selected Answer: A

This solution addresses the need to eliminate throttling and ensure consistent data loading into the Amazon DynamoDB table by separating the transformation and loading processes into two different functions. Using an Amazon SQS queue to hold items as messages between the two functions helps manage the flow of data and prevents overloading the DynamoDB table, thereby eliminating throttling issues.

upvoted 1 times

 **Brisun** 4 weeks ago

Selected Answer: A

A is correct as it requires to write to DynamoDB "more consistently". Option B can solve the problem too but the writing won't be consistent as the traffic will go up and down instantly.

In reality, I will probably do Option B only.

upvoted 1 times

 **SD_CS** 4 weeks ago

Selected Answer: B

I do not feel refactoring the data transformation and loading would help here as I do not think the number of concurrent calls to the DB would decrease because of this. Autoscaling DynamoDB would seem a more potent option to me.

upvoted 3 times

 **peekingpicker** 1 month, 1 week ago

Selected Answer: B

Why not B ?

DynamoDB can autoscale the RCU and WCU

upvoted 3 times

 **SerialiDr** 1 month, 2 weeks ago

Selected Answer: A

A. Refactor the Lambda function into two functions, using an Amazon SQS queue to manage the data flow, and/or

B. Turn on auto scaling for the DynamoDB table to automatically adjust its write capacity based on traffic patterns.

Both A and B address the core issue of managing write throughput to the DynamoDB table to prevent throttling. Option A provides a way to smooth out data flow and manage write requests more effectively, while option B allows the table to scale its capacity automatically in response to changing traffic, although with potential limitations in response speed to sudden traffic spikes. Combining these approaches could provide an even more robust solution.

upvoted 2 times

 **KarBiswa** 2 months, 2 weeks ago

Selected Answer: A

Off course A & D are options but here after inserting the data further we cannot modify because one extra writing cost will incur rather using queue lambda can poll the transformed data

upvoted 2 times

 **Nagasaracle** 4 months, 2 weeks ago

Selected Answer: A

Answer : A

SQS can be configured to invoke Lambda.

<https://docs.aws.amazon.com/AWSSimpleQueueService/latest/SQSDeveloperGuide/sqs-configure-lambda-function-trigger.html>

upvoted 3 times

 **dexdinh91** 4 months, 2 weeks ago

Selected Answer: B

I think B

upvoted 1 times

 **jingle4944** 4 months, 3 weeks ago

Lambda functions can be triggered by SQS: <https://docs.aws.amazon.com/AWSSimpleQueueService/latest/SQSDeveloperGuide/sqs-configure-lambda-function-trigger.html>

upvoted 1 times

 **Balliache520505** 5 months, 1 week ago

Selected Answer: B

I don't believe that option A is correct because an Amazon SQS queue wouldn't invoke a Lambda function; in any case, the Lambda function would be configured to retrieve messages from the SQS queue. For that reason, I believe option B would be the correct choice in this case.

upvoted 1 times

 **Chicote** 4 months, 1 week ago

ESTAS BIEN PENDEJO

upvoted 1 times

 **Dushank** 5 months, 3 weeks ago

Selected Answer: A

Refactoring the Lambda function into two functions and introducing an Amazon Simple Queue Service (Amazon SQS) queue between them would provide a buffering mechanism. The first Lambda function would transform the data and push it to the SQS queue. The second Lambda function would be triggered by messages in the SQS queue to write the data into DynamoDB. This decouples the two operations and allows for more controlled and consistent data loading into DynamoDB, helping to avoid throttling.

upvoted 2 times

✉ **jipark** 7 months ago

Selected Answer: A

the requirement is Lambda function load data to DynamoDB.
D is incorrect : "DynamoDB stream invoke Lambda" - the order is reversed.

upvoted 3 times

✉ **baboopan18** 7 months, 2 weeks ago

Selected Answer: B

The key point is "eliminate the throttling"
I prefer B than A

upvoted 3 times

✉ **qwan** 8 months ago

Selected Answer: D

<https://docs.aws.amazon.com/AWSSimpleQueueService/latest/SQSDeveloperGuide/sqs-basic-architecture.html>
This is the lifecycle for a SQS message.
For my understanding, option A is wrong. SQS cannot invoke function, like is it stated there.
So D it's the right answer.

upvoted 1 times

✉ **tttamtttam** 7 months, 3 weeks ago

Lambda functions can be triggered by messages in a SQS queue.

upvoted 4 times

✉ **eberhe900** 8 months ago

Selected Answer: B

The developer needs to implement a solution to eliminate the throttling and load the data into the DynamoDB table more consistently. The problem is in DynamoDB does not associate with the lambda. Then the better solution is to auto scale the table of the DynamoDB.

upvoted 7 times

Question #98

A developer is creating an AWS Lambda function in VPC mode. An Amazon S3 event will invoke the Lambda function when an object is uploaded into an S3 bucket. The Lambda function will process the object and produce some analytic results that will be recorded into a file. Each processed object will also generate a log entry that will be recorded into a file.

Other Lambda functions, AWS services, and on-premises resources must have access to the result files and log file. Each log entry must also be appended to the same shared log file. The developer needs a solution that can share files and append results into an existing file.

Which solution should the developer use to meet these requirements?

- A. Create an Amazon Elastic File System (Amazon EFS) file system. Mount the EFS file system in Lambda. Store the result files and log file in the mount point. Append the log entries to the log file.
- B. Create an Amazon Elastic Block Store (Amazon EBS) Multi-Attach enabled volume. Attach the EBS volume to all Lambda functions. Update the Lambda function code to download the log file, append the log entries, and upload the modified log file to Amazon EBS.
- C. Create a reference to the /tmp local directory. Store the result files and log file by using the directory reference. Append the log entry to the log file.
- D. Create a reference to the /opt storage directory. Store the result files and log file by using the directory reference. Append the log entry to the log file.

Correct Answer: A

Community vote distribution

A (100%)

 **Dushank**  5 months, 3 weeks ago

Selected Answer: A

The requirement is to have a shared file system that allows for appending to files and can be accessed by multiple Lambda functions, AWS services, and on-premises resources. Amazon Elastic File System (Amazon EFS) is a good fit for these requirements. EFS provides a scalable and elastic NFS file system which can be mounted to multiple EC2 instances and Lambda functions at the same time, making it easier for these resources to share files. You can also append to existing files on an EFS file system, which meets the requirement for a shared log file that can have new entries appended to it.

upvoted 6 times

 **mgonblan**  9 months ago

A) There are several references for this:

<https://docs.aws.amazon.com/lambda/latest/operatorguide/networking-vpc.html> and

this blog entry:

<https://aws.amazon.com/es/blogs/compute/choosing-between-aws-lambda-data-storage-options-in-web-apps/>

upvoted 1 times

 **delak** 9 months, 2 weeks ago

Selected Answer: A

shared files == EFS

upvoted 3 times

 **loctong** 9 months, 2 weeks ago

Selected Answer: A

EFS is true

upvoted 2 times

Question #99

Topic 1

A company has an AWS Lambda function that processes incoming requests from an Amazon API Gateway API. The API calls the Lambda function by using a Lambda alias. A developer updated the Lambda function code to handle more details related to the incoming requests. The developer wants to deploy the new Lambda function for more testing by other developers with no impact to customers that use the API.

Which solution will meet these requirements with the LEAST operational overhead?

- A. Create a new version of the Lambda function. Create a new stage on API Gateway with integration to the new Lambda version. Use the new API Gateway stage to test the Lambda function.
- B. Update the existing Lambda alias used by API Gateway to a weighted alias. Add the new Lambda version as an additional Lambda function with a weight of 10%. Use the existing API Gateway stage for testing.
- C. Create a new version of the Lambda function. Create and deploy a second Lambda function to filter incoming requests from API Gateway. If the filtering Lambda function detects a test request, the filtering Lambda function will invoke the new Lambda version of the code. For other requests, the filtering Lambda function will invoke the old Lambda version. Update the API Gateway API to use the filtering Lambda function.
- D. Create a new version of the Lambda function. Create a new API Gateway API for testing purposes. Update the integration of the new API with the new Lambda version. Use the new API for testing.

Correct Answer: C

Community vote distribution



✉️ **Alearn** 2 months, 1 week ago

Selected Answer: B

Option A requires creating a new stage on API Gateway, which might increase the operational overhead and complexity of managing multiple stages.

upvoted 1 times

✉️ **NaghmAbdellatif** 5 months, 1 week ago

Why not B?

There is canary testing in Lambda Functions

upvoted 1 times

✉️ **Cerakoted** 4 months, 4 weeks ago

Cuz of it -> new Lambda function for more testing by other developers with no impact to customers that use the API.

upvoted 3 times

✉️ **[Removed]** 2 months, 3 weeks ago

Thank you for this... I too thought B --> definitely A then

upvoted 1 times

✉️ **jayarma** 6 months, 4 weeks ago

There is no need for us to create an all-new API Gateway in order to test the newer version of lambda. As a newer version of the lambda function is deployed with the necessary changes, a new stage of the API Gateway can be used to test the changes of the lambda function.

upvoted 3 times

✉️ **jayarma** 6 months, 4 weeks ago

So A is the right option

upvoted 2 times

✉️ **jipark** 7 months ago

Selected Answer: A

A : create new API stage (add stage) - correct

D: crew new API Gateway (create new one) - incorrect

upvoted 3 times

✉️ **[Removed]** 2 months, 3 weeks ago

yea D makes no sense. I think it was placed in there to throw people off.

upvoted 1 times

✉️ **MrPie** 8 months ago

Selected Answer: A

A is correct. Why the "correct answer" is always wrong? What's the point?

upvoted 3 times

✉ **JamalDaBoss** 7 months ago

I agree, very stupid

upvoted 1 times

✉ **FunkyFresco** 8 months ago

Selected Answer: A

A is ok according to my perspective.

upvoted 1 times

✉ **loctong** 9 months, 2 weeks ago

Selected Answer: A

A's true

upvoted 1 times

✉ **delak** 9 months, 3 weeks ago

Selected Answer: A

A is true

upvoted 1 times

✉ **rInd2000** 9 months, 3 weeks ago

Selected Answer: A

In my perspective, A is the correct answer and a pretty typical pattern; I'm not sure why C was chosen, but testing in production is not a smart practice.

upvoted 1 times

✉ **chumji** 9 months, 3 weeks ago

The answer is A

upvoted 3 times

Question #100

Topic 1

A company uses AWS Lambda functions and an Amazon S3 trigger to process images into an S3 bucket. A development team set up multiple environments in a single AWS account.

After a recent production deployment, the development team observed that the development S3 buckets invoked the production environment Lambda functions. These invocations caused unwanted execution of development S3 files by using production Lambda functions. The development team must prevent these invocations. The team must follow security best practices.

Which solution will meet these requirements?

- A. Update the Lambda execution role for the production Lambda function to add a policy that allows the execution role to read from only the production environment S3 bucket.
- B. Move the development and production environments into separate AWS accounts. Add a resource policy to each Lambda function to allow only S3 buckets that are within the same account to invoke the function.
- C. Add a resource policy to the production Lambda function to allow only the production environment S3 bucket to invoke the function.
- D. Move the development and production environments into separate AWS accounts. Update the Lambda execution role for each function to add a policy that allows the execution role to read from the S3 bucket that is within the same account.

Correct Answer: C

Community vote distribution



👤 **AgboolaKun** Highly Voted 9 months, 2 weeks ago

Selected Answer: C

B is a wrong answer because I do not understand the need to move the environments to separate AWS accounts. The resource policy in the production environment can be used to control which S3 bucket invokes the function.

In my understanding, the answer choice C fulfills the security best practices requirement in the question.

upvoted 19 times

👤 **MrPie** 8 months ago

It's a best practice: Best Practices:

Separate workloads using accounts: Establish common guardrails and isolation between environments (such as production, development, and test) and workloads through a multi-account strategy. Account-level separation is strongly recommended, as it provides a strong isolation boundary for security, billing, and access. https://wa.aws.amazon.com/wat.question.SEC_1.en.html

upvoted 9 times

👤 **jipark** 7 months ago

resource policy totally fulfill requirement

upvoted 3 times

👤 **csG13** Highly Voted 9 months ago

Selected Answer: B

I choose B because it says that the team should follow the best security practices. AWS well-architected framework suggests separation. For reference see the link below: https://wa.aws.amazon.com/wat.question.SEC_1.en.html

upvoted 15 times

👤 **SerialiDr** Most Recent 3 days, 17 hours ago

Selected Answer: C

This approach involves configuring a resource-based policy (also known as a Lambda function policy) that explicitly defines which resources (in this case, S3 buckets) can invoke the Lambda function. By specifying only the production S3 bucket in the resource policy of the production Lambda function, you ensure that only events from the designated production S3 bucket can trigger the production Lambda function. This prevents development or other non-production buckets from inadvertently invoking production Lambda functions, thus maintaining environment integrity and security best practices.

upvoted 1 times

👤 **KarBiswa** 6 days, 21 hours ago

Selected Answer: D

I feel it is D as there is no doubt we need to separately create two accounts for DEV & PROD. After that there must lambda execution roles where we can the specific policies. Resource based policies more of a Cross Account access.

<https://docs.aws.amazon.com/lambda/latest/dg/access-control-resource-based.html>

<https://repost.aws/knowledge-center/lambda-execution-role-s3-bucket>

As the question demands the best practices scenario so option D fulfills that.

upvoted 1 times

 **SD_CS** 2 weeks, 3 days ago

Selected Answer: B

I initially thought C, but after going through the below, I dont think there is any scope for doubt.

stablish common guardrails and isolation between environments (such as production, development, and test) and workloads through a multi-account strategy. Account-level separation is strongly recommended, as it provides a strong isolation boundary for security, billing, and access

https://docs.aws.amazon.com/en_us/wellarchitected/latest/framework/sec_securely_operate_multi_accounts.html

upvoted 1 times

 **rrshah83** 1 month, 4 weeks ago

Selected Answer: C

new accounts not necessary...

upvoted 1 times

 **todado** 2 months, 2 weeks ago

itexamslab.com

Vote for B

upvoted 2 times

 **Certified101** 2 months, 2 weeks ago

Selected Answer: B

B - following best practices

upvoted 1 times

 **[Removed]** 2 months, 3 weeks ago

OMG this questions can be very wordy... be careful and read carefully - Answer is C

upvoted 1 times

 **[Removed]** 2 months, 3 weeks ago

after reading this link --> https://wa.aws.amazon.com/wat.question.SEC_1.en.html changing answer to B

upvoted 1 times

 **Mimi666** 3 months ago

Selected Answer: B

Keeping the security best-practices.

upvoted 1 times

 **tqiu654** 3 months ago

Selected Answer: B

ChatGPT: B

upvoted 1 times

 **[Removed]** 2 months, 3 weeks ago

ChatGPT is not always right. be careful

upvoted 2 times

 **Rameez1** 4 months, 2 weeks ago

Selected Answer: B

Moving the Dev and Prod environments to separate Accounts will make them totally isolated with cross account Lambda invocations. Whereas in Option C though Prod Lambda won't trigger with Dev S3 bucket Event, Dev Lambda may still get mistakenly invoked by Prod S3 Bucket event and perform unwanted actions.

upvoted 4 times

 **Nagasoracle** 4 months, 2 weeks ago

Selected Answer: B

Sorry it is B

As it mentions to follow security practice

upvoted 1 times

 **Chicote** 4 months, 1 week ago

COMO CHINGAS

upvoted 1 times

 **Nagasoracle** 4 months, 2 weeks ago

Selected Answer: A

Answer : A

As it mentions to follow best security practice

upvoted 1 times

 **Millie024** 5 months, 2 weeks ago

B seems to be the correct one

https://docs.aws.amazon.com/wellarchitected/latest/framework/sec_securely_operate_multi_accounts.html

Establish common guardrails and isolation between environments (such as production, development, and test) and workloads through a multi-account strategy. Account-level separation is strongly recommended, as it provides a strong isolation boundary for security, billing, and access.

upvoted 1 times

 fossil123 6 months ago

Selected Answer: C

C meets the contextual security requirements.

upvoted 1 times

 stilloneway 6 months, 1 week ago

Selected Answer: B

See the question, in terms of "Security best practices", Answer is B. It could be C for 2nd option if separate AWS account is not possible.

upvoted 1 times

Question #101

Topic 1

A developer is creating an application. New users of the application must be able to create an account and register by using their own social media accounts.

Which AWS service or resource should the developer use to meet these requirements?

- A. IAM role
- B. Amazon Cognito identity pools
- C. Amazon Cognito user pools
- D. AWS Directory Service

Correct Answer: C

Community vote distribution

C (77%) B (23%)

✉ **HuiHsin** 9 months ago

Selected Answer: C

<https://docs.aws.amazon.com/cognito/latest/developerguide/cognito-user-identity-pools.html>

upvoted 9 times

✉ **Bhatfield** 5 months, 1 week ago

Amazon Cognito user pools provide user identity management and authentication for your application. They allow you to create and maintain a user directory, and you can enable social identity providers like Facebook, Google, or Amazon to allow users to register and log in using their social media accounts. This service is specifically designed for user management and authentication scenarios like the one described.

Option B, "Amazon Cognito identity pools," is more focused on providing temporary AWS credentials for users to access AWS services securely after they have been authenticated through a user pool.

upvoted 5 times

✉ **[Removed]** 2 months, 3 weeks ago

The big difference being users authenticates to applications (web and mobile) vs identity authenticates to AWS resources.

upvoted 2 times

✉ **SerialiDr** 3 days, 17 hours ago

Selected Answer: B

Option B: Amazon Cognito identity pools

Amazon Cognito identity pools (also known as federated identities) enable you to create unique identities for your users and authenticate them with identity providers. With identity pools, your users can obtain temporary AWS credentials to access AWS services. This service supports authentication through social identity providers such as Amazon, Facebook, Google, and also supports unauthenticated identities.

upvoted 1 times

✉ **rrharris** 1 week, 5 days ago

C

Amazon Cognito user pools provide user identity management and authentication for your application.

upvoted 1 times

✉ **SerialiDr** 1 month, 2 weeks ago

Selected Answer: B

B. Amazon Cognito identity pools: Amazon Cognito identity pools (also known as Federated Identities) enable you to create unique identities for your users and authenticate them with identity providers, including social media platforms like Facebook, Google, Amazon, and Apple. With identity pools, you can grant your users access to other AWS services. They are designed to handle scenarios where users can sign in through a third-party identity provider or use guest access.

upvoted 1 times

✉ **Dushank** 5 months, 3 weeks ago

Selected Answer: C

For creating an application where new users can create accounts and register using their social media accounts, Amazon Cognito is the most suitable service. Specifically, you'd want to use Amazon Cognito User Pools.

Amazon Cognito User Pools support sign-ins using social identity providers like Facebook, Google, and Amazon, as well as enterprise identity providers via SAML 2.0. With a user pool, you can create a fully managed user directory to enable user sign-up and sign-in, as well as handle password recovery, user verification, and other user management tasks.

upvoted 2 times

✉  **Dushank** 5 months, 3 weeks ago

The answer is (B).

Amazon Cognito identity pools is a managed service that provides user sign-in and identity management for your web and mobile applications. It supports social sign-in with a variety of providers, including Amazon, Facebook, Google, and Twitter.

upvoted 1 times

✉  **hanJR** 10 months, 1 week ago

Selected Answer: C

You can't register using Identity Pool. It lets you authenticate with provided identification pools.

upvoted 4 times

✉  **Cloud_Cloud** 10 months, 2 weeks ago

Selected Answer: C

<https://medium.com/wolox/integrating-social-media-to-your-app-with-aws-cognito-8943329aa89b>

upvoted 5 times

✉  **MrTee** 10 months, 2 weeks ago

Selected Answer: B

Key word is registration using their social media accounts

upvoted 4 times

✉  **rInd2000** 9 months, 3 weeks ago

Using Cognito identity pools you can get the token and access AWS using social media accounts, BUT you can't create an account, in this case we need Cognito user pools.

upvoted 1 times

✉  **awsdummie** 9 months, 4 weeks ago

B is incorrect. <https://www.youtube.com/watch?v=9pvygKluCpl>

upvoted 1 times

Question #102

Topic 1

A social media application uses the AWS SDK for JavaScript on the frontend to get user credentials from AWS Security Token Service (AWS STS). The application stores its assets in an Amazon S3 bucket. The application serves its content by using an Amazon CloudFront distribution with the origin set to the S3 bucket.

The credentials for the role that the application assumes to make the SDK calls are stored in plaintext in a JSON file within the application code. The developer needs to implement a solution that will allow the application to get user credentials without having any credentials hardcoded in the application code.

Which solution will meet these requirements?

- A. Add a Lambda@Edge function to the distribution. Invoke the function on viewer request. Add permissions to the function's execution role to allow the function to access AWS STS. Move all SDK calls from the frontend into the function.
- B. Add a CloudFront function to the distribution. Invoke the function on viewer request. Add permissions to the function's execution role to allow the function to access AWS STS. Move all SDK calls from the frontend into the function.
- C. Add a Lambda@Edge function to the distribution. Invoke the function on viewer request. Move the credentials from the JSON file into the function. Move all SDK calls from the frontend into the function.
- D. Add a CloudFront function to the distribution. Invoke the function on viewer request. Move the credentials from the JSON file into the function. Move all SDK calls from the frontend into the function.

Correct Answer: A

Community vote distribution



csG13 Highly Voted 8 months, 4 weeks ago

Selected Answer: A

The answer is A. Here is a reference directly from AWS docs:

"If you need some of the capabilities of Lambda@Edge that are not available with CloudFront Functions, such as network access or a longer execution time, you can still use Lambda@Edge before and after content is cached by CloudFront."

Since the requirement is to access the STS service, network access is required. Therefore, it can't be Cloudfront functions. Also, as a side note it's worth to mention that Cloudfront functions can only execute for up to 1ms. Apparently this isn't enough to fetch user creds (tokens) from STS.

The table in the following link summarises the differences between Cloudfront functions and Lambda@edge

<https://aws.amazon.com/blogs/aws/introducing-cloudfront-functions-run-your-code-at-the-edge-with-low-latency-at-any-scale/>
upvoted 10 times

rrharris Most Recent 1 week, 5 days ago

Selected Answer: A

Why A is Correct:

Lambda@Edge for Secure Credential Management: Lambda@Edge allows you to run Lambda functions in response to CloudFront events. By using Lambda@Edge, the developer can securely manage credentials by keeping them out of the client-side code.

Invoking on Viewer Request: Invoking the Lambda@Edge function on viewer requests ensures that the credential generation happens in real-time, securely, and as needed, without exposing any sensitive information.

Execution Role with STS Access: Assigning the Lambda function an execution role with permissions to access AWS STS (Security Token Service) enables the function to securely request temporary, limited-privilege credentials on behalf of the client.

Moving SDK Calls to Lambda@Edge: Transferring all AWS SDK calls from the frontend to the Lambda@Edge function prevents exposing any credentials in the frontend code, enhancing security.

upvoted 1 times

SerialiDr 1 month, 2 weeks ago

Selected Answer: A

A. Lambda@Edge allows you to run Lambda functions in response to CloudFront events. By using a Lambda@Edge function, you can securely handle the process of obtaining credentials from AWS STS without exposing them in the client-side application code. The function's execution role can be granted the necessary permissions to interact with AWS STS, and SDK calls can be made from within this server-side environment. This approach centralizes credential management and AWS interactions in a more secure, server-side context.

upvoted 3 times

LR2023 3 months ago

I think i will also go with A as cloudfront functions can only read authorization headers from the viewer request if it sees the authorization header request. And Cloud front functions has no access to internet.

upvoted 2 times

Baba_Eni 5 months, 3 weeks ago

Selected Answer: A

I will go for A, check the link below, Cloudfront functions are just within Cloudfront, hence, they DON'T HAVE NETWORK ACCESS. Network access is required to make a call to AWS STS.

<https://docs.aws.amazon.com/AmazonCloudFront/latest/DeveloperGuide/edge-functions.html>

upvoted 1 times

MG1407 6 months, 3 weeks ago

The answer is B. I was in agreement with csG13 until a further research into the JavaScript SDK and STS. Found the following:
<https://docs.aws.amazon.com/AWSJavaScriptSDK/v3/latest/clients/client-cloudfront/classes/stsclient.html>.

Since the question states JS SDK and STS the answer is B.

upvoted 1 times

FunkyFresco 9 months, 1 week ago

Selected Answer: A

Option A.

upvoted 1 times

zodraz 9 months, 4 weeks ago

Selected Answer: A

<https://www.examtopics.com/discussions/amazon/view/89838-exam-aws-certified-developer-associate-topic-1-question-361/>

upvoted 2 times

vic614 10 months, 1 week ago

Selected Answer: A

Cloud front function doesn't have network access, it has to be lambda @ edge

||

upvoted 2 times

MrTee 10 months, 2 weeks ago

Selected Answer: B

The difference between A and B is the SDK for Javascript in use here; Lambda@Edge functions can be written in a variety of programming languages, including Node.js, Python, and Java, while CloudFront functions are written in JavaScript.

upvoted 4 times

Cloud_Cloud 10 months, 2 weeks ago

Now one problem is lambda function can not perform AWS STS command

upvoted 1 times

eboehm 8 months, 2 weeks ago

After rereading the last part of the question. It doesn't mention that it must remain written in Javascript, but does seem using AWS STS is a requirement so I think I would stick with A being the answer

upvoted 1 times

Question #103

An ecommerce website uses an AWS Lambda function and an Amazon RDS for MySQL database for an order fulfillment service. The service needs to return order confirmation immediately.

During a marketing campaign that caused an increase in the number of orders, the website's operations team noticed errors for "too many connections" from Amazon RDS. However, the RDS DB cluster metrics are healthy. CPU and memory capacity are still available.

What should a developer do to resolve the errors?

- A. Initialize the database connection outside the handler function. Increase the max_user_connections value on the parameter group of the DB cluster. Restart the DB cluster.
- B. Initialize the database connection outside the handler function. Use RDS Proxy instead of connecting directly to the DB cluster.
- C. Use Amazon Simple Queue Service (Amazon SQS) FIFO queues to queue the orders. Ingest the orders into the database. Set the Lambda function's concurrency to a value that equals the number of available database connections.
- D. Use Amazon Simple Queue Service (Amazon SQS) FIFO queues to queue the orders. Ingest the orders into the database. Set the Lambda function's concurrency to a value that is less than the number of available database connections.

Correct Answer: A
Community vote distribution
 B (100%)

 **MrTee**  10 months, 2 weeks ago

Selected Answer: B

Use an RDS Proxy instead of connecting directly to the DB cluster.

upvoted 10 times

 **hanJR**  10 months, 1 week ago

B

<https://aws.amazon.com/blogs/compute/using-amazon-rds-proxy-with-aws-lambda/>
upvoted 5 times

 **SerialiDr**  1 month, 2 weeks ago

Selected Answer: B

AWS RDS Proxy is designed to manage and pool database connections, which makes it ideal for environments with highly variable and potentially high-volume database access patterns, such as those driven by Lambda functions. It helps to reduce the number of direct connections to the database and can efficiently manage the connections from the pool.

upvoted 1 times

 **hmdev** 6 months, 1 week ago

Selected Answer: B

We can use an RDS proxy to handle a lot of connections. We are choosing this option because the load on the RDS is normal. If the RDS was unable to handle loads, we would've checked other options like queues or transactions.

upvoted 2 times

 **eberhe900** 7 months, 4 weeks ago

Selected Answer: B

<https://repost.aws/questions/QULXSqEPGbQx6qiyBa1D1Udg/lambda-to-db-connectivity-best-practices>

upvoted 1 times

 **loctong** 9 months, 2 weeks ago

Selected Answer: B

Using an RDS Proxy can manage connections to the RDS instance, reducing the overhead of establishing new connections and thereby preventing the "too many connections" error.

upvoted 2 times

Question #104

A company stores its data in data tables in a series of Amazon S3 buckets. The company received an alert that customer credit card information might have been exposed in a data table on one of the company's public applications. A developer needs to identify all potential exposures within the application environment.

Which solution will meet these requirements?

- A. Use Amazon Athena to run a job on the S3 buckets that contain the affected data. Filter the findings by using the SensitiveData:S3Object/Personal finding type.
- B. Use Amazon Macie to run a job on the S3 buckets that contain the affected data. Filter the findings by using the SensitiveData:S3Object/Financial finding type.
- C. Use Amazon Macie to run a job on the S3 buckets that contain the affected data. Filter the findings by using the SensitiveData:S3Object/Personal finding type.
- D. Use Amazon Athena to run a job on the S3 buckets that contain the affected data. Filter the findings by using the SensitiveData:S3Object/Financial finding type.

Correct Answer: D

Community vote distribution

B (100%)

 **MrTee**  10 months, 2 weeks ago

Selected Answer: B

Use Amazon Macie to run a job on the S3 buckets that contain the affected data. Filter the findings by using the SensitiveData:S3Object/Financial finding type.

Option A and D suggest using Amazon Athena, which is an interactive query service that can be used to analyze data stored in S3 using standard SQL queries. While Athena can help identify data in S3 buckets, it does not provide the same level of automated scanning and pattern matching that Amazon Macie does.

Option C is incorrect because the SensitiveData:S3Object/Personal finding type is designed to identify personally identifiable information (PII), such as names and addresses, but not credit card information.

upvoted 16 times

 **SD_CS**  3 weeks, 6 days ago

Selected Answer: B

SensitiveData:S3Object/Financial only works with Macie?? so how can it be D?

upvoted 1 times

 **SerialiDr** 1 month, 2 weeks ago

Selected Answer: B

B. Use Amazon Macie to run a job on the S3 buckets that contain the affected data. Filter the findings by using the SensitiveData:S3Object/Financial finding type: Amazon Macie is a security service that uses machine learning and pattern matching to discover and protect sensitive data in AWS. Macie is designed to identify various types of sensitive data, including financial data, which would cover credit card information. This option is suitable for the requirement as it leverages Macie's capability to specifically identify and report on exposures of sensitive financial data.

upvoted 1 times

 **Baba_Eni** 8 months, 3 weeks ago

Selected Answer: B

<https://docs.aws.amazon.com/macie/latest/user/findings-types.html>

upvoted 4 times

 **HuiHsin** 9 months ago

Selected Answer: B

https://docs.aws.amazon.com/zh_tw/macie/latest/user/findings-types.html

upvoted 1 times

 **Prem28** 9 months, 3 weeks ago

Selected Answer: B

The best solution to identify all potential exposures within the application environment after receiving an alert that customer credit card information might have been exposed in a data table on one of the company's public applications is to use Amazon Macie. Amazon Macie is a fully managed data security and privacy service that uses machine learning and pattern matching to discover and protect sensitive data in AWS.

upvoted 1 times

Question #105

A software company is launching a multimedia application. The application will allow guest users to access sample content before the users decide if they want to create an account to gain full access. The company wants to implement an authentication process that can identify users who have already created an account. The company also needs to keep track of the number of guest users who eventually create an account.

Which combination of steps will meet these requirements? (Choose two.)

- A. Create an Amazon Cognito user pool. Configure the user pool to allow unauthenticated users. Exchange user tokens for temporary credentials that allow authenticated users to assume a role.
- B. Create an Amazon Cognito identity pool. Configure the identity pool to allow unauthenticated users. Exchange unique identity for temporary credentials that allow all users to assume a role.
- C. Create an Amazon CloudFront distribution. Configure the distribution to allow unauthenticated users. Exchange user tokens for temporary credentials that allow all users to assume a role.
- D. Create a role for authenticated users that allows access to all content. Create a role for unauthenticated users that allows access to only the sample content.
- E. Allow all users to access the sample content by default. Create a role for authenticated users that allows access to the other content.

Correct Answer: BE

Community vote distribution

BD (100%)

 **MrTee**  10 months, 2 weeks ago

Selected Answer: BD

option B because by configuring the identity pool to allow unauthenticated users, you can enable guest users to access the sample content. When users create an account, they can be authenticated, and then given access to the full content by assuming a role that allows them access. Option D is correct because creating roles for authenticated and unauthenticated users with different levels of access is an appropriate way to meet the requirement of identifying users who have created an account and keeping track of the number of guest users who eventually create an account.

upvoted 17 times

 **a_win**  2 months, 1 week ago

Selected Answer: BD

E won't be a choice because "The company also needs to keep track of the number of guest users who eventually create an account."

upvoted 1 times

 **KarBiswa** 2 months, 2 weeks ago

Selected Answer: BD

Covers Unauthenticated and authenticated users scenario

upvoted 1 times

 **jipark** 7 months ago

Selected Answer: BD

"who already created account" means User Pool not required. - NOT A

upvoted 4 times

Question #106

Topic 1

A company is updating an application to move the backend of the application from Amazon EC2 instances to a serverless model. The application uses an Amazon RDS for MySQL DB instance and runs in a single VPC on AWS. The application and the DB instance are deployed in a private subnet in the VPC.

The company needs to connect AWS Lambda functions to the DB instance.

Which solution will meet these requirements?

- A. Create Lambda functions inside the VPC with the AWSLambdaBasicExecutionRole policy attached to the Lambda execution role. Modify the RDS security group to allow inbound access from the Lambda security group.
- B. Create Lambda functions inside the VPC with the AWSLambdaVPCAccessExecutionRole policy attached to the Lambda execution role. Modify the RDS security group to allow inbound access from the Lambda security group.
- C. Create Lambda functions with the AWSLambdaBasicExecutionRole policy attached to the Lambda execution role. Create an interface VPC endpoint for the Lambda functions. Configure the interface endpoint policy to allow the lambda:InvokeFunction action for each Lambda function's Amazon Resource Name (ARN).
- D. Create Lambda functions with the AWSLambdaVPCAccessExecutionRole policy attached to the Lambda execution role. Create an interface VPC endpoint for the Lambda functions. Configure the interface endpoint policy to allow the lambda:InvokeFunction action for each Lambda function's Amazon Resource Name (ARN).

Correct Answer: B
Community vote distribution


MrTee Highly Voted 10 months, 2 weeks ago

Selected Answer: B

The AWSLambdaVPCAccessExecutionRole policy allows the Lambda function to create elastic network interfaces (ENIs) in the VPC and use the security groups attached to those ENIs for controlling inbound and outbound traffic.

upvoted 12 times

SerialiDr Most Recent 1 month, 2 weeks ago

Selected Answer: B

This is the correct solution. The AWSLambdaVPCAccessExecutionRole policy includes permissions that allow the Lambda function to access resources within a VPC, such as an RDS instance. Additionally, modifying the RDS security group to allow inbound access from the Lambda security group is necessary to enable network connectivity between the Lambda functions and the RDS instance.

upvoted 1 times

KarBiswa 2 months, 2 weeks ago

Selected Answer: B

<https://docs.aws.amazon.com/lambda/latest/dg/lambda-intro-execution-role.html>

upvoted 1 times

Nagasoracle 4 months, 2 weeks ago

Selected Answer: D

Answer : D

upvoted 2 times

love777 6 months, 1 week ago

Selected Answer: D

While Lambda functions cannot run directly in private subnets, they can be configured to access resources within a VPC by creating a VPC endpoint for Lambda.

AWS Lambda supports VPC Endpoints for Lambda, which allow Lambda functions to securely access resources within a VPC without needing to traverse the public internet.

You should attach the AWSLambdaVPCAccessExecutionRole policy to your Lambda execution role to enable it to create network interfaces in your VPC for accessing resources.

By configuring an interface VPC endpoint for Lambda, you can enable the Lambda function to communicate with resources within the private subnet and the RDS instance.

upvoted 3 times

Baba_Eni 8 months, 3 weeks ago

Selected Answer: B

<https://docs.aws.amazon.com/aws-managed-policy/latest/reference/AWSLambdaVPCAccessExecutionRole.html>

<https://docs.aws.amazon.com/lambda/latest/dg/lambda-intro-execution-role.html>

upvoted 3 times

□ **Prem28** 9 months ago

ans-opt d

Option A does not allow Lambda functions to access resources in the VPC.

Option B does not create an interface VPC endpoint, which means that Lambda functions will be exposed to the public internet.

Option C does not configure the interface endpoint policy to allow the lambda:InvokeFunction action, which means that Lambda functions will not be able to invoke each other.

upvoted 3 times

□ **jipark** 7 months ago

I definitely agree.

Lambda cannot be installed inside VPC, instead, AWSLambdaVPCAccessExecutionRole allow to connect via ENI.

upvoted 1 times

Question #107

Topic 1

A company has a web application that runs on Amazon EC2 instances with a custom Amazon Machine Image (AMI). The company uses AWS CloudFormation to provision the application. The application runs in the us-east-1 Region, and the company needs to deploy the application to the us-west-1 Region.

An attempt to create the AWS CloudFormation stack in us-west-1 fails. An error message states that the AMI ID does not exist. A developer must resolve this error with a solution that uses the least amount of operational overhead.

Which solution meets these requirements?

- A. Change the AWS CloudFormation templates for us-east-1 and us-west-1 to use an AWS AMI. Relaunch the stack for both Regions.
- B. Copy the custom AMI from us-east-1 to us-west-1. Update the AWS CloudFormation template for us-west-1 to refer to AMI ID for the copied AMI. Relaunch the stack.
- C. Build the custom AMI in us-west-1. Create a new AWS CloudFormation template to launch the stack in us-west-1 with the new AMI ID.
- D. Manually deploy the application outside AWS CloudFormation in us-west-1.

Correct Answer: B

Community vote distribution

B (100%)

□ **MrTee** Highly Voted 10 months, 2 weeks ago

Selected Answer: B

This will allow the company to deploy the application to the us-west-1 Region using the same custom AMI that is used in the us-east-1 Region.
upvoted 10 times

□ **gomurali** Most Recent 8 months, 1 week ago

<https://www.examtopics.com/discussions/amazon/view/78848-exam-aws-certified-developer-associate-topic-1-question-118/>
upvoted 2 times

Question #108

A developer is updating several AWS Lambda functions and notices that all the Lambda functions share the same custom libraries. The developer wants to centralize all the libraries, update the libraries in a convenient way, and keep the libraries versioned.

Which solution will meet these requirements with the LEAST development effort?

- A. Create an AWS CodeArtifact repository that contains all the custom libraries.
- B. Create a custom container image for the Lambda functions to save all the custom libraries.
- C. Create a Lambda layer that contains all the custom libraries.
- D. Create an Amazon Elastic File System (Amazon EFS) file system to store all the custom libraries.

Correct Answer: D

Community vote distribution

C (100%)

 **MrTee** Highly Voted 10 months, 2 weeks ago

Selected Answer: C

the most efficient solution is to use a Lambda layer to store the common libraries, update them in one place, and reference them from each Lambda function that requires them.

upvoted 16 times

 **HuiHsin** Most Recent 8 months, 4 weeks ago

Selected Answer: C

The Lambda layer of option C provides a simpler solution without the need to introduce an additional CodeArtifact service.

upvoted 2 times

 **loctong** 9 months, 2 weeks ago

Selected Answer: C

Lambda layers are a distribution mechanism for libraries, custom runtimes, and other function dependencies in AWS Lambda. By creating a Lambda layer, you can package and centrally manage the shared custom libraries for the Lambda functions.

upvoted 2 times

 **loctong** 9 months, 3 weeks ago

Selected Answer: C

It should be Create a Lambda layer.

upvoted 1 times

 **Ryan1002** 10 months ago

Why not CodeArtifact?

"CodeArtifact allows you to store artifacts using popular package managers and build tools like Maven, Gradle, npm, Yarn, Twine, pip, and NuGet. CodeArtifact can automatically fetch software packages on demand from public package repositories so you can access the latest versions of application dependencies."

upvoted 2 times

 **[Removed]** 2 months, 3 weeks ago

We are updating a Lambda function. Lambda layers are specifically used for situations mentioned in this question

upvoted 1 times

 **jipark** 7 months ago

"LEAST development effort"

upvoted 2 times

Question #109

Topic 1

A developer wants to use AWS Elastic Beanstalk to test a new version of an application in a test environment.

Which deployment method offers the FASTEST deployment?

- A. Immutable
- B. Rolling
- C. Rolling with additional batch
- D. All at once

Correct Answer: D

Community vote distribution

D (100%)

 **yeacuz**  9 months, 3 weeks ago

Selected Answer: D

The answer is D.

"All at once – The quickest deployment method." <https://docs.aws.amazon.com/elasticbeanstalk/latest/dg/using-features.deploy-existing-version.html>

upvoted 7 times

 **loctong**  9 months, 2 weeks ago

Selected Answer: D

The "All at once" deployment method deploys the new version of the application to all instances simultaneously. It updates all instances of the environment in a short period of time, resulting in the fastest overall deployment.

upvoted 6 times

Question #110

Topic 1

A company is providing read access to objects in an Amazon S3 bucket for different customers. The company uses IAM permissions to restrict access to the S3 bucket. The customers can access only their own files.

Due to a regulation requirement, the company needs to enforce encryption in transit for interactions with Amazon S3.

Which solution will meet these requirements?

- A. Add a bucket policy to the S3 bucket to deny S3 actions when the aws:SecureTransport condition is equal to false.
- B. Add a bucket policy to the S3 bucket to deny S3 actions when the s3:x-amz-acl condition is equal to public-read.
- C. Add an IAM policy to the IAM users to enforce the usage of the AWS SDK.
- D. Add an IAM policy to the IAM users that allows S3 actions when the s3:x-amz-acl condition is equal to bucket-owner-read.

Correct Answer: D

Community vote distribution

A (100%)

 **MrTee** Highly Voted 10 months, 2 weeks ago

Selected Answer: A

This solution enforces encryption in transit for interactions with Amazon S3 by denying access to the S3 bucket if the request is not made over an HTTPS connection. This condition can be enforced by using the "aws:SecureTransport" condition key in a bucket policy.

upvoted 16 times

 **jipark** 7 months ago

'in transit' = SSL Secure Transport

upvoted 2 times

 **loctong** Most Recent 9 months, 2 weeks ago

Selected Answer: A

To enforce encryption in transit for interactions with Amazon S3, you can add a bucket policy to the S3 bucket that denies S3 actions when the aws:SecureTransport condition is equal to false. This condition checks whether the requests to S3 are made over a secure (HTTPS) connection.

upvoted 3 times

 **rInd2000** 9 months, 3 weeks ago

Selected Answer: A

<https://repost.aws/knowledge-center/s3-bucket-policy-for-config-rule>

upvoted 3 times

Question #111

Topic 1

A company has an image storage web application that runs on AWS. The company hosts the application on Amazon EC2 instances in an Auto Scaling group. The Auto Scaling group acts as the target group for an Application Load Balancer (ALB) and uses an Amazon S3 bucket to store the images for sale.

The company wants to develop a feature to test system requests. The feature will direct requests to a separate target group that hosts a new beta version of the application.

Which solution will meet this requirement with the LEAST effort?

- A. Create a new Auto Scaling group and target group for the beta version of the application. Update the ALB routing rule with a condition that looks for a cookie named version that has a value of beta. Update the test system code to use this cookie to test the beta version of the application.
- B. Create a new ALB, Auto Scaling group, and target group for the beta version of the application. Configure an alternate Amazon Route 53 record for the new ALB endpoint. Use the alternate Route 53 endpoint in the test system requests to test the beta version of the application.
- C. Create a new ALB, Auto Scaling group, and target group for the beta version of the application. Use Amazon CloudFront with Lambda@Edge to determine which specific request will go to the new ALB. Use the CloudFront endpoint to send the test system requests to test the beta version of the application.
- D. Create a new Auto Scaling group and target group for the beta version of the application. Update the ALB routing rule with a condition that looks for a cookie named version that has a value of beta. Use Amazon CloudFront with Lambda@Edge to update the test system requests to add the required cookie when the requests go to the ALB.

Correct Answer: D

Community vote distribution



MrTee Highly Voted 10 months, 2 weeks ago

Selected Answer: A

This solution will allow the company to direct requests to a separate target group that hosts the new beta version of the application without having to create a new ALB or use additional services such as Amazon Route 53 or Amazon CloudFront.

Option D adds additional complexity and effort compared to option A, which simply involves updating the ALB routing rule with a condition that looks for a cookie named version that has a value of beta and updating the test system code to use this cookie to test the beta version of the application.

upvoted 19 times

backfringe Highly Voted 7 months ago

Selected Answer: B

Option B provides the simplest and least effort solution to test the beta version of the application. By creating a new ALB, Auto Scaling group, and target group for the beta version, the company can deploy the new version of the application separately from the production version. Configuring an alternate Amazon Route 53 record for the new ALB endpoint allows the test system requests to be directed to the beta version.

upvoted 7 times

SerialiDr Most Recent 2 days, 23 hours ago

Selected Answer: A

This approach allows for the least amount of effort in setting up a beta environment where test system requests can be directed to a new version of the application for testing purposes. It leverages ALB's ability to conditionally route traffic based on request attributes, such as cookies, allowing for flexible and efficient testing of new application versions alongside existing production workloads.

upvoted 1 times

SerialiDr 1 month, 2 weeks ago

Selected Answer: A

A. Create a new Auto Scaling group and target group for the beta version of the application. Update the ALB routing rule with a condition that looks for a cookie named version that has a value of beta. Update the test system code to use this cookie to test the beta version of the application: This is a straightforward and effective solution. By creating a new Auto Scaling group and target group for the beta version and updating the ALB to route based on a specific cookie, the company can easily direct test traffic to the beta version without needing additional infrastructure or complex configurations. The test system would simply include the specified cookie in its requests to access the beta version.

upvoted 1 times

JohnPl 1 month, 2 weeks ago

Selected Answer: D

A is modifying the code for testing, not a good practice. D is the least effort compared to B and C

upvoted 1 times

 **gqs3119** 2 months ago

Selected Answer: D

Modifying ALB (A/D) is less effort than modifying route 53 and adding ALB (B/C), 1 action vs 2.

So it's A or D, let's think about effort in both cases.

In case of A you will need to:

- 1.Add a new temporary code to set cookies
 - 2.Test app with new temporary code, to make sure it won't break the production
 - 3.Deploy it to the production
- After tests are finished:
- 4.Remove temporary code
 - 5.Deploy to production

In case of D you will need:

- 1.Create lambda
 - 2.Do a simple testing to make sure it won't affect production
- After tests are finished:
- 3.Remove lambda

I'd say D is the least effort.

upvoted 3 times

 **a_win** 2 months, 1 week ago

Selected Answer: A

requirement with the LEAST effort

upvoted 1 times

 **LR2023** 2 months, 4 weeks ago

Selected Answer: D

just using voting...explanation in a different thread

upvoted 2 times

 **LR2023** 2 months, 4 weeks ago

I am going with D.....

<https://docs.aws.amazon.com/AmazonCloudFront/latest/DeveloperGuide/lambda-at-the-edge.html>

A Lambda function can inspect cookies and rewrite URLs so that users see different versions of a site for A/B testing.

Option B & C requires to create new ALB - which is not least effort. And option A requires to update code.

upvoted 3 times

 **Nagasoracle** 4 months, 2 weeks ago

Selected Answer: B

Considering Least effort

upvoted 3 times

 **LemonGremlin** 4 months, 2 weeks ago

Selected Answer: A

Agree that this is A

upvoted 1 times

 **Rameez1** 4 months, 2 weeks ago

Selected Answer: A

Option A serves the requirement with least efforts.

upvoted 1 times

 **nnecode** 5 months ago

Selected Answer: B

Which solution will meet this requirement with the LEAST effort? Updating code will be more effort, hence B is the correct answer.

upvoted 4 times

 **eboehm** 8 months, 2 weeks ago

Selected Answer: B

im going to go with B as well since updating code is way more labor intensive than creating a new route entry

upvoted 6 times

 **yeacuz** 9 months, 3 weeks ago

Selected Answer: A

Option A is the least effort. With option B, you have to additionally create a new ALB *and* also a new route 53 record. With option A, you can create a new listener based on HTTP header: <https://docs.aws.amazon.com/elasticloadbalancing/latest/application/listener-update-rules.html> and it will fulfill the requirements. You will also need a new auto scaling group and target group with option A - but you also need this with option B as well, so option A is the least effort.

upvoted 3 times

 junrun3 9 months, 3 weeks ago

Selected Answer: B

The question is: "Which solution meets this requirement with the least amount of effort?" The question is: Which solution meets this requirement with the least amount of effort?

The answer is B.

A is more labor intensive to implement because it requires updating the ALB routing rules and the test system code needs to be updated.
upvoted 4 times

Question #112

Topic 1

A team is developing an application that is deployed on Amazon EC2 instances. During testing, the team receives an error. The EC2 instances are unable to access an Amazon S3 bucket.

Which steps should the team take to troubleshoot this issue? (Choose two.)

- A. Check whether the policy that is assigned to the IAM role that is attached to the EC2 instances grants access to Amazon S3.
- B. Check the S3 bucket policy to validate the access permissions for the S3 bucket.
- C. Check whether the policy that is assigned to the IAM user that is attached to the EC2 instances grants access to Amazon S3.
- D. Check the S3 Lifecycle policy to validate the permissions that are assigned to the S3 bucket.
- E. Check the security groups that are assigned to the EC2 instances. Make sure that a rule is not blocking the access to Amazon S3.

Correct Answer: D E

Community vote distribution

AB (90%)

10%

 **MrTee**  10 months, 2 weeks ago

Selected Answer: AB

Option A is correct because IAM roles are used to grant permissions to AWS services, such as EC2 instances, to access other AWS services, such as S3 buckets. The policy assigned to the IAM role attached to the EC2 instances should be checked to ensure that it grants access to the S3 bucket.

Option B is also correct because the S3 bucket policy controls access to the S3 bucket. The S3 bucket policy should be checked to ensure that the access permissions are correctly configured.

upvoted 15 times

 **koneczny69**  1 month ago

Selected Answer: AB

Incorrectly stated question. Its not mentioned how does the application us IAM, that is wether its STS or user credentials. AC is as well perfectly correct answer.

upvoted 1 times

 **SerialiDr** 1 month, 2 weeks ago

Selected Answer: AB

The two steps most relevant to troubleshooting the issue are:

- A. Check whether the policy that is assigned to the IAM role that is attached to the EC2 instances grants access to Amazon S3.
- B. Check the S3 bucket policy to validate the access permissions for the S3 bucket.

upvoted 2 times

 **Nagasoracle** 4 months, 2 weeks ago

Selected Answer: AB

<https://repost.aws/knowledge-center/ec2-instance-access-s3-bucket>

upvoted 4 times

 **love777** 6 months, 1 week ago

Selected Answer: AE

Explanation:

A. IAM Role Policy: EC2 instances are typically associated with IAM roles. These roles have policies attached to them that define the permissions the instances have. If the instances are unable to access an S3 bucket, it's essential to verify that the IAM role assigned to the EC2 instances has the necessary permissions to interact with S3.

E. Security Groups: Security groups act as virtual firewalls for EC2 instances. They control inbound and outbound traffic. If the EC2 instances are unable to access S3, it's possible that the associated security group is blocking outbound traffic to the S3 service. Make sure the security group rules allow outbound traffic to the S3 service.

upvoted 3 times

 **love777** 6 months, 1 week ago

The correct steps to troubleshoot the issue are:

- A. Check whether the policy that is assigned to the IAM role that is attached to the EC2 instances grants access to Amazon S3.
- E. Check the security groups that are assigned to the EC2 instances. Make sure that a rule is not blocking the access to Amazon S3.

Explanation:

E. Security Groups: Security groups act as virtual firewalls for EC2 instances. They control inbound and outbound traffic. If the EC2 instances are unable to access S3, it's possible that the associated security group is blocking outbound traffic to the S3 service. Make sure the security group rules allow outbound traffic to the S3 service.

upvoted 2 times

 **awsazedevsh** 7 months, 4 weeks ago

Why not E ?

upvoted 2 times

 **remynick** 6 months, 2 weeks ago

access to S3 is controlled by IAM, not security groups.

upvoted 3 times

 **indirasubbaraj** 8 months, 3 weeks ago

AB

<https://repost.aws/knowledge-center/ec2-instance-access-s3-bucket>

upvoted 1 times

 **Prem28** 9 months ago

AE

B. Check the S3 bucket policy to validate the access permissions for the S3 bucket. The S3 bucket policy controls who has access to the bucket, but it does not control how they can access it. The IAM role or user that is attached to the EC2 instances must have the appropriate permissions to access the bucket, regardless of what the S3 bucket policy says.

C. Check whether the policy that is assigned to the IAM user that is attached to the EC2 instances grants access to Amazon S3. This is unlikely to be the cause of the issue, as the IAM role is what is typically used to control access to AWS resources.

D. Check the S3 Lifecycle policy to validate the permissions that are assigned to the S3 bucket. The S3 Lifecycle policy controls how objects are stored and moved in Amazon S3. It does not control who has access to the bucket.

upvoted 2 times

 **vic614** 10 months, 1 week ago

Selected Answer: AB

A: Make sure EC2 instance profile has permission to access s3

B: Make sure S3 resource policy allows the access from instance

upvoted 4 times

Question #113

Topic 1

A developer is working on an ecommerce website. The developer wants to review server logs without logging in to each of the application servers individually. The website runs on multiple Amazon EC2 instances, is written in Python, and needs to be highly available.

How can the developer update the application to meet these requirements with MINIMUM changes?

- A. Rewrite the application to be cloud native and to run on AWS Lambda, where the logs can be reviewed in Amazon CloudWatch.
- B. Set up centralized logging by using Amazon OpenSearch Service, Logstash, and OpenSearch Dashboards.
- C. Scale down the application to one larger EC2 instance where only one instance is recording logs.
- D. Install the unified Amazon CloudWatch agent on the EC2 instances. Configure the agent to push the application logs to CloudWatch.

Correct Answer: D

Community vote distribution

D (100%)

 **MrTee**  10 months, 2 weeks ago

Selected Answer: D

Option D is the best option because it requires minimum changes and leverages the existing infrastructure.
upvoted 11 times

 **SerialiDr**  1 month, 2 weeks ago

Selected Answer: D

D. Install the unified Amazon CloudWatch agent on the EC2 instances. Configure the agent to push the application logs to CloudWatch: This is the most appropriate solution. The unified CloudWatch agent can be easily installed and configured on each EC2 instance to push logs to Amazon CloudWatch. This allows for centralized log storage and access without a significant change to the application architecture or its high availability setup. It provides a straightforward way to aggregate logs from multiple instances in one place.

upvoted 2 times

 **loctong** 9 months, 2 weeks ago

Selected Answer: D

By installing the Amazon CloudWatch agent on the EC2 instances, the developer can easily collect and send logs from each instance to Amazon CloudWatch. The CloudWatch agent provides a unified way to collect logs, system-level metrics, and custom metrics from the EC2 instances.
upvoted 3 times

Question #114

Topic 1

A company is creating an application that processes .csv files from Amazon S3. A developer has created an S3 bucket. The developer has also created an AWS Lambda function to process the .csv files from the S3 bucket.

Which combination of steps will invoke the Lambda function when a .csv file is uploaded to Amazon S3? (Choose two.)

- A. Create an Amazon EventBridge rule. Configure the rule with a pattern to match the S3 object created event.
- B. Schedule an Amazon EventBridge rule to run a new Lambda function to scan the S3 bucket.
- C. Add a trigger to the existing Lambda function. Set the trigger type to EventBridge. Select the Amazon EventBridge rule.
- D. Create a new Lambda function to scan the S3 bucket for recently added S3 objects.
- E. Add S3 Lifecycle rules to invoke the existing Lambda function.

Correct Answer: BD

Community vote distribution

AC (91%)

5%

 **MrTee**  10 months, 2 weeks ago

Selected Answer: AC

Option A is correct because an Amazon EventBridge rule can be created to detect when an object is created in an S3 bucket. The rule should be configured with a pattern to match the S3 object created event.

Option C is correct because the existing Lambda function can be updated with an EventBridge trigger. The trigger type should be set to EventBridge, and the Amazon EventBridge rule created in step A should be selected.

upvoted 16 times

 **tqiu654**  3 months ago

Selected Answer: AE

ChatGPT:AE

upvoted 1 times

 **Hari4455** 2 months, 2 weeks ago

ChatGPT: AC

A. Create an Amazon EventBridge rule. Configure the rule with a pattern to match the S3 object created event.

This sets up an EventBridge rule to respond to S3 object creation events.

C. Add a trigger to the existing Lambda function. Set the trigger type to EventBridge. Select the Amazon EventBridge rule.

This associates the Lambda function with the EventBridge rule, ensuring that the Lambda function is triggered when the specified event occurs.

upvoted 1 times

 **tqiu654** 3 months ago

Lambda functions are not currently supported as triggers directly from EventBridge rules. Lambda can be used as the target of an EventBridge rule, but is not added to a Lambda function as a trigger.

upvoted 1 times

 **Nagasoracle** 4 months, 2 weeks ago

Selected Answer: AC

AC is combination of steps required

upvoted 2 times

 **Jing2023** 4 months, 3 weeks ago

Why not just use the S3 event as the trigger directly.

upvoted 3 times

 **ValeriiRadchenko** 3 months, 3 weeks ago

I agree that in general this is a stupid question. But maybe company need's to use EB in application 

upvoted 1 times

 **Naj_64** 7 months, 2 weeks ago

Selected Answer: AC

A C for sure

upvoted 2 times

 **loctong** 9 months, 1 week ago

Selected Answer: AB

A, B are correctly
upvoted 1 times

Question #115

Topic 1

A developer needs to build an AWS CloudFormation template that self-populates the AWS Region variable that deploys the CloudFormation template.

What is the MOST operationally efficient way to determine the Region in which the template is being deployed?

- A. Use the AWS::Region pseudo parameter.
- B. Require the Region as a CloudFormation parameter.
- C. Find the Region from the AWS::StackId pseudo parameter by using the Fn::Split intrinsic function.
- D. Dynamically import the Region by referencing the relevant parameter in AWS Systems Manager Parameter Store.

Correct Answer: A

Community vote distribution

A (100%)

 **MrTee**  10 months, 2 weeks ago

Selected Answer: A

A. Use the AWS::Region pseudo parameter.
upvoted 9 times

 **Baba_Eni**  8 months, 2 weeks ago

Selected Answer: A

<https://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/pseudo-parameter-reference.html>
upvoted 2 times

 **Baba_Eni** 8 months, 2 weeks ago

Selected Answer: A

<https://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/pseudo-parameter-reference.html>
<https://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/pseudo-parameter-reference.html>
upvoted 1 times

 **loctong** 9 months, 2 weeks ago

Selected Answer: A

The AWS::Region pseudo parameter is a built-in CloudFormation parameter that automatically resolves to the AWS Region where the CloudFormation stack is being created. By using this pseudo parameter, you can dynamically access the current Region without requiring any additional configuration or input.
upvoted 3 times

Question #116

Topic 1

A company has hundreds of AWS Lambda functions that the company's QA team needs to test by using the Lambda function URLs. A developer needs to configure the authentication of the Lambda functions to allow access so that the QA IAM group can invoke the Lambda functions by using the public URLs.

Which solution will meet these requirements?

- A. Create a CLI script that loops on the Lambda functions to add a Lambda function URL with the AWS_IAM auth type. Run another script to create an IAM identity-based policy that allows the lambda:InvokeFunctionUrl action to all the Lambda function Amazon Resource Names (ARNs). Attach the policy to the QA IAM group.
- B. Create a CLI script that loops on the Lambda functions to add a Lambda function URL with the NONE auth type. Run another script to create an IAM resource-based policy that allows the lambda:InvokeFunctionUrl action to all the Lambda function Amazon Resource Names (ARNs). Attach the policy to the QA IAM group.
- C. Create a CLI script that loops on the Lambda functions to add a Lambda function URL with the AWS_IAM auth type. Run another script to loop on the Lambda functions to create an IAM identity-based policy that allows the lambda:InvokeFunctionUrl action from the QA IAM group's Amazon Resource Name (ARN).
- D. Create a CLI script that loops on the Lambda functions to add a Lambda function URL with the NONE auth type. Run another script to loop on the Lambda functions to create an IAM resource-based policy that allows the lambda:InvokeFunctionUrl action from the QA IAM group's Amazon Resource Name (ARN).

Correct Answer: A
Community vote distribution


MrTee Highly Voted 10 months, 2 weeks ago

Selected Answer: A

Option A meets these requirements?

upvoted 14 times

jipark 7 months ago

create 'AWS_IAM auth type' -> Attach the policy to the QA IAM group

upvoted 4 times

ppardav 8 months, 1 week ago

<https://docs.aws.amazon.com/lambda/latest/dg/urls-auth.html>

upvoted 3 times

SerialiDr Most Recent 2 days, 22 hours ago

Selected Answer: A

This approach leverages AWS IAM authentication (AWS_IAM auth type) for Lambda function URLs, ensuring that only authenticated and authorized IAM entities can invoke the Lambda functions. By creating an IAM policy that specifies the lambda:InvokeFunctionUrl action and attaching it to the QA IAM group, you provide the necessary permissions for the QA team to invoke the Lambda functions securely. This method aligns with AWS best practices for security and access control, allowing for scalable and manageable access management across multiple Lambda functions.

upvoted 1 times

CrescentShared 1 week, 1 day ago

Selected Answer: C

I don't know why so much A, but isn't A giving the access to all the lambda?

upvoted 1 times

SD_CS 2 weeks, 3 days ago

Selected Answer: A

I have to go for A even though it appears both should suffice. I took this from AWS Documentation

If you choose the AWS_IAM auth type, users who need to invoke your Lambda function URL must have the lambda:InvokeFunctionUrl permission. Depending on who makes the invocation request, you may have to grant this permission using a resource-based policy.

If the principal making the request is in the same AWS account as the function URL, then the principal must either have lambda:InvokeFunctionUrl permissions in their identity-based policy, OR have permissions granted to them in the function's resource-based policy.

AWS clearly states both should be good. The reason for selecting A is the wording is clear, loop on to lambda function to provide the permission was bit of confusing to me.

upvoted 1 times

✉ **konieczny69** 1 month ago

Selected Answer: C

I don't get all A answers. This is typical resource based policy that allows invoking a function by concrete principal - in this case its the QA role.

For all those who vote for A - go ahead and create simple API Gateway with a lambda integration type. Then look at the resource based policy - lambda:InvokeFunction allowed by apigateway.amazonaws.com with ArnLike condition.

ChatGTP also says C.

upvoted 2 times

✉ **love777** 6 months, 1 week ago

Selected Answer: C

Explanation:

In this scenario, the QA team needs to test AWS Lambda functions using Lambda function URLs while ensuring proper authentication and access control. Here's why option C is the appropriate solution:

Authentication Type: Using the AWS_IAM auth type for the Lambda function URLs ensures that the Lambda functions can be invoked only by users and roles that have the necessary IAM permissions.

Identity-Based Policy: By creating an IAM identity-based policy, you grant permissions directly to the QA IAM group to invoke the Lambda functions using the Lambda function URLs. This provides fine-grained control over which IAM entities can access the functions.

Option A uses the AWS_IAM auth type and creates a policy for the QA IAM group, which is a good direction. However, the creation of a policy that allows lambda:InvokeFunctionUrl for all Lambda function ARNs might grant excessive permissions.

upvoted 4 times

✉ **[Removed]** 2 months, 3 weeks ago

pay attention to the wording of the answers:

A - Run another script to create an IAM identity-based policy that allows the lambda:InvokeFunctionUrl action to all the Lambda function Amazon Resource Names (ARNs).

*This option is very clear. You are creating an IAM identity based policy allowing access to invoke the function and then attaching this policy to the QA IAM group.

C - Run another script to loop on the Lambda functions to create an IAM identity-based policy that allows the lambda:InvokeFunctionUrl action from the QA IAM group's Amazon Resource Name (ARN).

*What does "Run another script to loop on the Lambda functions" What does this even mean?? are we doing some sort of while loop here? Wording for this option is very confusing and makes no sense to me. I go with A

upvoted 3 times

✉ **Manel87** 2 months, 1 week ago

good thought!

upvoted 1 times

✉ **dezoito** 4 months, 2 weeks ago

Why A grant excessive permissions? The policy will contain only the Lambda's ARNs which the QA group should have access to.

upvoted 2 times

Question #117

Topic 1

A developer maintains a critical business application that uses Amazon DynamoDB as the primary data store. The DynamoDB table contains millions of documents and receives 30-60 requests each minute. The developer needs to perform processing in near-real time on the documents when they are added or updated in the DynamoDB table.

How can the developer implement this feature with the LEAST amount of change to the existing application code?

- A. Set up a cron job on an Amazon EC2 instance. Run a script every hour to query the table for changes and process the documents.
- B. Enable a DynamoDB stream on the table. Invoke an AWS Lambda function to process the documents.
- C. Update the application to send a PutEvents request to Amazon EventBridge. Create an EventBridge rule to invoke an AWS Lambda function to process the documents.
- D. Update the application to synchronously process the documents directly after the DynamoDB write.

Correct Answer: B

Community vote distribution



B (100%)

✉  **MrTee**  10 months, 2 weeks ago

Selected Answer: B

Option B is the best solution because it proposes enabling a DynamoDB stream on the table, which allows the developer to capture document-level changes in near-real time without modifying the application code. Then, the stream can be configured to invoke an AWS Lambda function to process the documents in near-real time. This solution requires minimal changes to the existing application code, and the Lambda function can be developed and deployed separately, enabling the developer to easily maintain and update it as needed.

upvoted 9 times

✉  **SerialiDr**  1 month, 2 weeks ago

Selected Answer: B

GPT

To implement near-real-time processing of documents when they are added or updated in an Amazon DynamoDB table with the least amount of change to the existing application code, let's evaluate the options:

- A. Set up a cron job on an Amazon EC2 instance. Run a script every hour to query the table for changes and process the documents: This approach introduces additional complexity and is not near-real time. Running a script periodically to check for updates is inefficient and does not meet the requirement for immediate processing upon document addition or update.
- B. Enable a DynamoDB stream on the table. Invoke an AWS Lambda function to process the documents: This is the most efficient and least intrusive option. DynamoDB Streams capture changes to items in the DynamoDB table as they occur in near-real time and can trigger an AWS Lambda function automatically. This setup requires minimal changes to the existing application code, as the processing logic is moved to the Lambda function, which is triggered by the stream events.

upvoted 1 times

✉  **loctong** 9 months, 2 weeks ago

Selected Answer: B

To implement near-real-time processing on documents added or updated in a DynamoDB table with the least amount of change to the existing application code, the developer should:

- B. Enable a DynamoDB stream on the table and invoke an AWS Lambda function to process the documents.

Enabling a DynamoDB stream on the table allows capturing and processing of the changes made to the table in near-real-time. The stream provides an ordered sequence of item-level modifications (inserts, updates, and deletes) that can be consumed by other AWS services, such as AWS Lambda.

upvoted 4 times

Question #118

Topic 1

A developer is writing an application for a company. The application will be deployed on Amazon EC2 and will use an Amazon RDS for Microsoft SQL Server database. The company's security team requires that database credentials are rotated at least weekly.

How should the developer configure the database credentials for this application?

- A. Create a database user. Store the user name and password in an AWS Systems Manager Parameter Store secure string parameter. Enable rotation of the AWS Key Management Service (AWS KMS) key that is used to encrypt the parameter.
- B. Enable IAM authentication for the database. Create a database user for use with IAM authentication. Enable password rotation.
- C. Create a database user. Store the user name and password in an AWS Secrets Manager secret that has daily rotation enabled.
- D. Use the EC2 user data to create a database user. Provide the user name and password in environment variables to the application.

Correct Answer: C

Community vote distribution


 C (100%)

✉  **MrTee**  10 months, 2 weeks ago

Selected Answer: C

option C: Create a database user. Store the user name and password in an AWS Secrets Manager secret that has daily rotation enabled. This will allow the developer to securely store the database credentials and automatically rotate them at least weekly to meet the company's security requirements.

upvoted 12 times

✉  **SerialiDr**  1 month, 2 weeks ago

Selected Answer: C

C. Create a database user. Store the user name and password in an AWS Secrets Manager secret that has daily rotation enabled: This is the correct solution. AWS Secrets Manager is specifically designed to handle secrets like database credentials, including their rotation. You can configure Secrets Manager to automatically rotate the credentials as frequently as needed (e.g., daily or weekly), which aligns with the security team's requirements.

upvoted 1 times

✉  **jipark** 7 months ago

Selected Answer: C

rotation key & cross account key is feature of Secret Manager
<https://tutorialsdojo.com/aws-secrets-manager-vs-systems-manager-parameter-store/>
 upvoted 2 times

✉  **Baba_Eni** 8 months, 2 weeks ago

Selected Answer: C

<https://docs.aws.amazon.com/secretsmanager/latest/userguide/rotating-secrets.html>

https://docs.aws.amazon.com/secretsmanager/latest/userguide/rotate-secrets_turn-on-for-other.html

https://docs.aws.amazon.com/secretsmanager/latest/userguide/rotate-secrets_schedule.html

upvoted 3 times

✉  **loctong** 9 months, 2 weeks ago

Selected Answer: C

the keyword is "rotation"

upvoted 4 times

Question #119

A real-time messaging application uses Amazon API Gateway WebSocket APIs with backend HTTP service. A developer needs to build a feature in the application to identify a client that keeps connecting to and disconnecting from the WebSocket connection. The developer also needs the ability to remove the client.

Which combination of changes should the developer make to the application to meet these requirements? (Choose two.)

- A. Switch to HTTP APIs in the backend service.
- B. Switch to REST APIs in the backend service.
- C. Use the callback URL to disconnect the client from the backend service.
- D. Add code to track the client status in Amazon ElastiCache in the backend service.
- E. Implement \$connect and \$disconnect routes in the backend service.

Correct Answer: CD

Community vote distribution



✉ **MrTee** Highly Voted 10 months, 2 weeks ago

Selected Answer: DE

Option D because by storing the client status in the cache, the backend service can quickly access the client status data without the need to query the database or perform other time-consuming operations.

Option E. Implement \$connect and \$disconnect routes in the backend service: \$connect and \$disconnect are the reserved routes in WebSocket APIs, which are automatically called by API Gateway whenever a client connects or disconnects from the WebSocket. By implementing these routes in the backend service, the developer can track and manage the client status, including identifying and removing the client when needed.

upvoted 15 times

✉ **catcatpunch** Highly Voted 9 months, 1 week ago

Selected Answer: CE

C => https://docs.aws.amazon.com/ko_kr/apigateway/latest/developerguide/apigateway-how-to-call-websocket-api-connections.html

E => https://docs.aws.amazon.com/ko_kr/apigateway/latest/developerguide/apigateway-websocket-api-route-keys-connect-disconnect.html

upvoted 8 times

✉ **SerialiDr** Most Recent 2 days, 22 hours ago

Selected Answer: DE

When a client connects to your WebSocket API, the \$connect route is invoked, and when they disconnect, the \$disconnect route is invoked. You can use these routes to track the state of each client. By maintaining a record of each client's connections and disconnections, possibly in a database or an in-memory data store like Amazon ElastiCache, you can identify clients that frequently connect and disconnect.

Hence, the combination of changes that should be made to the application to meet these requirements includes:

Implement \$connect and \$disconnect routes in the backend service (Option E).

Add code to track the client status in Amazon ElastiCache in the backend service (Option D).

upvoted 1 times

✉ **KarBiswa** 6 days, 19 hours ago

Selected Answer: CE

C option - Supports <https://docs.aws.amazon.com/apigateway/latest/developerguide/apigateway-how-to-call-websocket-api-connections.html>

E option supports - <https://docs.aws.amazon.com/apigateway/latest/developerguide/apigateway-websocket-api-route-keys-connect-disconnect.html>

upvoted 1 times

✉ **Ashwinvdm22** 1 month ago

Selected Answer: CD

C: https://docs.aws.amazon.com/ko_kr/apigateway/latest/developerguide/apigateway-how-to-call-websocket-api-connections.html

D: You need a way to track which user is continuously reconnecting. That is why option D is so important because without it you will just be disconnecting every user that tries to connect cause then how will you know which user is the "problem" user. Note that you don't need the \$disconnect endpoint to disconnect a client if you use option C. So CD is the only combination to solve the problem.

upvoted 1 times

✉ **Abdullah22** 1 month, 1 week ago

going with DE

upvoted 1 times

 **SerialiDr** 1 month, 2 weeks ago

Selected Answer: CD

C. Use the callback URL to disconnect the client from the backend service: The callback URL can be used to send messages to connected clients or to disconnect them from the WebSocket connection. This approach allows the backend service to programmatically disconnect a client, which is useful for managing clients that frequently connect and disconnect.

D. Add code to track the client status in Amazon ElastiCache in the backend service: Implementing client status tracking in the backend service, possibly using a fast, in-memory data store like Amazon ElastiCache, allows the application to monitor and record the behavior of each client. This can be used to identify clients with frequent connect/disconnect patterns.

upvoted 1 times

 **a_win** 2 months, 1 week ago

Selected Answer: DE

D. Add code to track the client status in Amazon ElastiCache in the backend service.

E. Implement \$connect and \$disconnect routes in the backend service.

upvoted 1 times

 **LR2023** 2 months, 4 weeks ago

Selected Answer: CE

<https://docs.aws.amazon.com/apigateway/latest/developerguide/apigateway-how-to-call-websocket-api-connections.html>

upvoted 1 times

 **Balliache520505** 5 months, 3 weeks ago

Selected Answer: CE

I go with C and E.

<https://docs.aws.amazon.com/apigateway/latest/developerguide/apigateway-websocket-api-route-keys-connect-disconnect.html>

<https://docs.aws.amazon.com/apigateway/latest/developerguide/apigateway-how-to-call-websocket-api-connections.html>

upvoted 2 times

 **love777** 6 months, 1 week ago

Selected Answer: DE

D. Tracking Client Status: To identify and manage clients that connect and disconnect from the WebSocket connection, you need a way to persist this information. Amazon ElastiCache is a managed in-memory caching service that can be used to store this kind of data. By adding code to your backend service to track client status in ElastiCache, you can keep a record of client connections and disconnections.

E.

connectanddisconnect Routes: In API Gateway WebSocket APIs, the connectanddisconnect routes are special routes that are automatically triggered when a client connects and disconnects from the WebSocket connection. By implementing these routes in your backend service, you can capture the client information and update the client status in the ElastiCache, thus achieving the requirement of identifying clients and managing their connections.

upvoted 3 times

 **Phongsanth** 8 months, 1 week ago

Selected Answer: CE

Option C and E is my preferable choice.

why do we have to use option D in case we apply \$connect and \$disconnect already in option E ?

<https://docs.aws.amazon.com/apigateway/latest/developerguide/apigateway-how-to-call-websocket-api-connections.html>

<https://docs.aws.amazon.com/apigateway/latest/developerguide/apigateway-websocket-api-route-keys-connect-disconnect.html>

upvoted 4 times

 **delak** 9 months, 2 weeks ago

Selected Answer: CE

<https://docs.aws.amazon.com/apigateway/latest/developerguide/apigateway-how-to-call-websocket-api-connections.html>

upvoted 4 times

 **loctong** 9 months, 2 weeks ago

Selected Answer: CE

Implementing a callback URL allows the backend service to initiate disconnection from the WebSocket connection.

upvoted 4 times

Question #120

Topic 1

A developer has written code for an application and wants to share it with other developers on the team to receive feedback. The shared application code needs to be stored long-term with multiple versions and batch change tracking.

Which AWS service should the developer use?

- A. AWS CodeBuild
- B. Amazon S3
- C. AWS CodeCommit
- D. AWS Cloud9

Correct Answer: C

Community vote distribution

C (100%)

✉  **MrTee**  10 months, 2 weeks ago

Selected Answer: C

option C, AWS CodeCommit.

upvoted 5 times

✉  **LR2023**  2 months, 4 weeks ago

Selected Answer: C

Code commit is a code source repository

upvoted 1 times

✉  **loctong** 9 months, 2 weeks ago

Selected Answer: C

must be C

upvoted 3 times

✉  **delak** 9 months, 3 weeks ago

it's C

upvoted 2 times

Question #121

Topic 1

A company's developer is building a static website to be deployed in Amazon S3 for a production environment. The website integrates with an Amazon Aurora PostgreSQL database by using an AWS Lambda function. The website that is deployed to production will use a Lambda alias that points to a specific version of the Lambda function.

The company must rotate the database credentials every 2 weeks. Lambda functions that the company deployed previously must be able to use the most recent credentials.

Which solution will meet these requirements?

- A. Store the database credentials in AWS Secrets Manager. Turn on rotation. Write code in the Lambda function to retrieve the credentials from Secrets Manager.
- B. Include the database credentials as part of the Lambda function code. Update the credentials periodically and deploy the new Lambda function.
- C. Use Lambda environment variables. Update the environment variables when new credentials are available.
- D. Store the database credentials in AWS Systems Manager Parameter Store. Turn on rotation. Write code in the Lambda function to retrieve the credentials from Systems Manager Parameter Store.

Correct Answer: A

Community vote distribution

A (100%)

MrTee Highly Voted 10 months, 2 weeks ago

Selected Answer: A

Option A is the correct solution; Option D is also a valid solution, but it is not the best option since Secrets Manager provides built-in rotation, which ensures that the latest credentials are automatically updated. Additionally, AWS Systems Manager Parameter Store does not provide the ability to rotate secrets automatically.

upvoted 11 times

loctong Highly Voted 9 months, 2 weeks ago

Selected Answer: A

the key word is "rotation"

upvoted 5 times

SerialiDr Most Recent 1 month, 2 weeks ago

Selected Answer: A

A. Store the database credentials in AWS Secrets Manager. Turn on rotation. Write code in the Lambda function to retrieve the credentials from Secrets Manager: This is the most suitable solution. AWS Secrets Manager is designed to manage, retrieve, and rotate secrets such as database credentials. By storing the credentials in Secrets Manager and enabling rotation, the credentials will be automatically rotated every 2 weeks. The Lambda function can retrieve the latest credentials programmatically from Secrets Manager, ensuring it always has access to the current credentials.

upvoted 2 times

LR2023 2 months, 4 weeks ago

Selected Answer: A

Secrets manager for rotation

upvoted 1 times

Question #122

Topic 1

A developer is developing an application that uses signed requests (Signature Version 4) to call other AWS services. The developer has created a canonical request, has created the string to sign, and has calculated signing information.

Which methods could the developer use to complete a signed request? (Choose two.)

- A. Add the signature to an HTTP header that is named Authorization.
- B. Add the signature to a session cookie.
- C. Add the signature to an HTTP header that is named Authentication.
- D. Add the signature to a query string parameter that is named X-Amz-Signature.
- E. Add the signature to an HTTP header that is named WWW-Authenticate.

Correct Answer: AD

Community vote distribution

AD (100%)

 **vicvega** Highly Voted 8 months ago

Header:

```
Authorization: AWS4-HMAC-SHA256
Credential=AKIAIOSFODNN7EXAMPLE/20220830/us-east-1/ec2/aws4_request,
SignedHeaders=host;x-amz-date,
Signature=calculated-signature
```

Query String:

```
https://ec2.amazonaws.com/?
Action=DescribeInstances&
Version=2016-11-15&
X-Amz-Signature=calculated-signature
```

<https://docs.aws.amazon.com/IAM/latest/UserGuide/create-signed-request.html>
upvoted 7 times

 **MrTee** Highly Voted 10 months, 2 weeks ago

Selected Answer: AD

the correct options are A and D.

upvoted 7 times

 **SerialiDr** Most Recent 1 month, 2 weeks ago

Selected Answer: AD

A. Add the signature to an HTTP header that is named Authorization: This is a correct method. In Signature Version 4, the completed signature is typically added to the request's Authorization header. This header includes the signing information along with other necessary components such as the Credential Scope and the Signed Headers.

D. Add the signature to a query string parameter that is named X-Amz-Signature: This is a correct method. In addition to including the signature in the Authorization header, Signature Version 4 also allows for presigned URLs where the signature is part of the query string parameters. The signature is included in the X-Amz-Signature query string parameter.

upvoted 1 times

 **loctong** 9 months, 2 weeks ago

Selected Answer: AD

Option B,C And E are not correct;

upvoted 1 times

 **awsdummie** 10 months ago

Selected Answer: AD

<https://docs.aws.amazon.com/IAM/latest/UserGuide/create-signed-request.html>

upvoted 2 times

Question #123

Topic 1

A company must deploy all its Amazon RDS DB instances by using AWS CloudFormation templates as part of AWS CodePipeline continuous integration and continuous delivery (CI/CD) automation. The primary password for the DB instance must be automatically generated as part of the deployment process.

Which solution will meet these requirements with the LEAST development effort?

- A. Create an AWS Lambda-backed CloudFormation custom resource. Write Lambda code that generates a secure string. Return the value of the secure string as a data field of the custom resource response object. Use the CloudFormation Fn::GetAtt intrinsic function to get the value of the secure string. Use the value to create the DB instance.
- B. Use the AWS CodeBuild action of CodePipeline to generate a secure string by using the following AWS CLI command: aws secretsmanager get-random-password. Pass the generated secure string as a CloudFormation parameter with the NoEcho attribute set to true. Use the parameter reference to create the DB instance.
- C. Create an AWS Lambda-backed CloudFormation custom resource. Write Lambda code that generates a secure string. Return the value of the secure string as a data field of the custom resource response object. Use the CloudFormation Fn::GetAtt intrinsic function to get a value of the secure string. Create secrets in AWS Secrets Manager. Use the secretsmanager dynamic reference to use the value stored in the secret to create the DB instance.
- D. Use the AWS::SecretsManager::Secret resource to generate a secure string. Store the secure string as a secret in AWS Secrets Manager. Use the secretsmanager dynamic reference to use the value stored in the secret to create the DB instance.

Correct Answer: B

Community vote distribution



MrTee Highly Voted 10 months, 2 weeks ago

Its a difficult choice between B and D

Option B leverages the existing AWS CLI command to generate a secure string, and then passes it as a parameter to CloudFormation, where it can be used to create the DB instance. But, if the use of Secrets Manager is already part of the organization's infrastructure, and the setup has already been completed, then option D may indeed be the simplest solution.

upvoted 5 times

SerialiDr Most Recent 1 month, 2 weeks ago

Selected Answer: D

D. Use the AWS::SecretsManager::Secret resource to generate a secure string. Store the secure string as a secret in AWS Secrets Manager. Use the secretsmanager dynamic reference to use the value stored in the secret to create the DB instance: This solution efficiently uses AWS CloudFormation's native integration with AWS Secrets Manager. The AWS::SecretsManager::Secret resource type in CloudFormation can generate a secure string and store it as a secret. The secret value can then be used directly in the CloudFormation template to set the RDS instance password, using the secretsmanager dynamic reference. This approach minimizes development effort and leverages existing AWS services.

upvoted 1 times

fagilom 2 months, 2 weeks ago

D: This option leverages a native CloudFormation resource specifically designed for secret management. It eliminates the need for custom code or external tools, making it the simplest and most effort-efficient solution.

This approach minimizes custom code and utilizes native CloudFormation features, reducing overall complexity and maintenance.

upvoted 1 times

chewasa 2 months, 3 weeks ago

Selected Answer: D

you can create secrets with AWS::SecretsManager::Secret so it is the correct answer.

upvoted 2 times

LR2023 2 months, 4 weeks ago

Selected Answer: D

I was dilly dallying between B and D....but this helped me solidify my answer choice

https://docs.aws.amazon.com/secretsmanager/latest/userguide/cfn-example_reference-secret.html

upvoted 1 times

dezoito 4 months, 2 weeks ago

Selected Answer: D

With AWS CloudFormation, you can retrieve a secret to use in another AWS CloudFormation resource. A common scenario is to first create a secret with a password generated by Secrets Manager, and then retrieve the username and password from the secret to use as credentials for a new

database.

https://docs.aws.amazon.com/secretsmanager/latest/userguide/cfn-example_reference-secret.html

upvoted 2 times

□ **love777** 6 months, 1 week ago

Selected Answer: B

Option B provides a straightforward approach to generating a secure string for the DB instance password and using it in CloudFormation with minimal development effort. Here's why this option is efficient:

CodeBuild Action: Using the AWS CodeBuild action within CodePipeline to generate a secure string using the aws secretsmanager get-random-password command allows you to easily create a random password without writing custom Lambda code.

CloudFormation Parameter: You can pass the generated secure string as a CloudFormation parameter with the NoEcho attribute set to true. This ensures that the parameter value won't be exposed in CloudFormation outputs or logs.

upvoted 4 times

□ **FunkyFresco** 9 months, 1 week ago

Selected Answer: D

The correct option is D. Create the password from secrets manager.

upvoted 4 times

□ **delak** 9 months, 2 weeks ago

Selected Answer: D

yes it's D

upvoted 2 times

□ **rInd2000** 9 months, 3 weeks ago

Selected Answer: D

The answer is D

This is a secretsmanager dynamic reference sample in cloud formation

upvoted 2 times

□ **chumji** 9 months, 3 weeks ago

I think answer is D

<https://aws.amazon.com/about-aws/whats-new/2022/12/amazon-rds-integration-aws-secrets-manager/>

upvoted 2 times

Question #124

Topic 1

An organization is storing large files in Amazon S3, and is writing a web application to display meta-data about the files to end-users. Based on the metadata a user selects an object to download. The organization needs a mechanism to index the files and provide single-digit millisecond latency retrieval for the metadata.

What AWS service should be used to accomplish this?

- A. Amazon DynamoDB
- B. Amazon EC2
- C. AWS Lambda
- D. Amazon RDS

Correct Answer: A

Community vote distribution

A (100%)

✉  **MrTee**  10 months, 2 weeks ago

Selected Answer: A

In this scenario, the metadata about the files can be stored in a DynamoDB table with a primary key based on the metadata attributes. This would enable the organization to quickly query and retrieve metadata about the files in real-time, with single-digit millisecond latency.

upvoted 12 times

✉  **SerialiDr**  1 month, 2 weeks ago

Selected Answer: A

A. Amazon DynamoDB: DynamoDB is a fast and flexible NoSQL database service that provides consistent single-digit millisecond latency for data retrieval. It is well-suited for applications that require high-performance data retrieval. The metadata of the files stored in S3 can be indexed and stored in a DynamoDB table, enabling efficient and quick access for the web application. This setup allows users to quickly browse metadata and select files for download.

upvoted 1 times

✉  **loctong** 9 months, 2 weeks ago

Selected Answer: A

Amazon DynamoDB is a highly scalable and fully managed NoSQL database service that can provide fast and consistent performance at any scale. It is a suitable choice for indexing and storing metadata associated with files.

upvoted 3 times

Question #125

Topic 1

A developer is creating an AWS Serverless Application Model (AWS SAM) template. The AWS SAM template contains the definition of multiple AWS Lambda functions, an Amazon S3 bucket, and an Amazon CloudFront distribution. One of the Lambda functions runs on Lambda@Edge in the CloudFront distribution. The S3 bucket is configured as an origin for the CloudFront distribution.

When the developer deploys the AWS SAM template in the eu-west-1 Region, the creation of the stack fails.

Which of the following could be the reason for this issue?

- A. CloudFront distributions can be created only in the us-east-1 Region.
- B. Lambda@Edge functions can be created only in the us-east-1 Region.
- C. A single AWS SAM template cannot contain multiple Lambda functions.
- D. The CloudFront distribution and the S3 bucket cannot be created in the same Region.

Correct Answer: C

Community vote distribution

B (91%)

9%

MrTee Highly Voted 10 months, 2 weeks ago

Selected Answer: B
it must be deployed to a region where Lambda@Edge is supported, such as us-east-1.
upvoted 10 times

zodraz Highly Voted 9 months, 4 weeks ago

Selected Answer: B
<https://docs.aws.amazon.com/AmazonCloudFront/latest/DeveloperGuide/edge-functions-restrictions.html>
The Lambda function must be in the US East (N. Virginia) Region.
upvoted 8 times

SD_CS Most Recent 3 weeks, 6 days ago

Selected Answer: B
B is the only answer that makes sense
upvoted 1 times

KarBiswa 2 months, 2 weeks ago

Selected Answer: B
<https://docs.aws.amazon.com/AmazonCloudFront/latest/DeveloperGuide/lambda-edge-how-it-works-tutorial.html>
clear mention
upvoted 1 times

tinyflame 7 months ago

Selected Answer: B
SAM can only specify one region
Langda@Edge only in us-east1 region
<https://docs.aws.amazon.com/AmazonCloudFront/latest/DeveloperGuide/lambda-edge-how-it-works-tutorial.html>
upvoted 1 times

loctong 9 months, 2 weeks ago

Selected Answer: C
Option A states that CloudFront distributions can only be created in the us-east-1 Region. This statement is incorrect because CloudFront distributions can be created in various AWS regions, including the eu-west-1 Region.
upvoted 2 times

Question #126

Topic 1

A developer is integrating Amazon ElastiCache in an application. The cache will store data from a database. The cached data must populate real-time dashboards.

Which caching strategy will meet these requirements?

- A. A read-through cache
- B. A write-behind cache
- C. A lazy-loading cache
- D. A write-through cache

Correct Answer: D

Community vote distribution



✉ **MrTee** Highly Voted 10 months, 2 weeks ago

Selected Answer: D

The best caching strategy for populating real-time dashboards using Amazon ElastiCache would be a write-through caching strategy. In this strategy, when new data is written to the database, it is also written to the cache. This ensures that the most current data is always available in the cache for the real-time dashboards to access, reducing the latency of the data retrieval. Additionally, using a write-through cache ensures that data consistency is maintained between the database and the cache, as any changes to the data are written to both locations simultaneously.

upvoted 12 times

✉ **Walker17** Most Recent 3 weeks, 4 days ago

B. Write Behind Cache.

upvoted 1 times

✉ **SerialiDr** 1 month, 2 weeks ago

Selected Answer: D

D. A write-through cache: A write-through caching strategy immediately writes data to both the cache and the database at the same time. This approach ensures that the cache always contains the most recent data, making it highly suitable for applications that require up-to-date information, such as real-time dashboards.

upvoted 1 times

✉ **tqiu654** 3 months ago

Selected Answer: C

ChatGPT:C

upvoted 1 times

✉ **Prem28** 9 months ago

ans- A

Option D, a write-through cache, is incorrect because it would not meet the requirement of populating real-time dashboards. A write-through cache writes data to the cache and the database at the same time. This means that the data in the cache would always be up-to-date, but it would also mean that the cache would always be lagging behind the database. This would cause a delay in populating real-time dashboards.

upvoted 1 times

✉ **[Removed]** 2 months, 3 weeks ago

I agree. I think it's A because D is better option when you need data to be consistent and highly available since data is always up to date but as Prem28 says it lags behind on latency when compared to read-through. What I get from the question is they need strategy for "real-time" dashboards --> reduction of latency not accuracy or consistent data

upvoted 1 times

✉ **loctong** 9 months, 2 weeks ago

Selected Answer: D

A write-through cache strategy involves writing data to both the cache and the underlying database simultaneously. When data is updated or inserted into the database, it is also stored or updated in the cache to ensure that the cache remains up-to-date with the latest data.

upvoted 2 times

Question #127

Topic 1

A developer is creating an AWS Lambda function. The Lambda function needs an external library to connect to a third-party solution. The external library is a collection of files with a total size of 100 MB. The developer needs to make the external library available to the Lambda execution environment and reduce the Lambda package space.

Which solution will meet these requirements with the LEAST operational overhead?

- A. Create a Lambda layer to store the external library. Configure the Lambda function to use the layer.
- B. Create an Amazon S3 bucket. Upload the external library into the S3 bucket. Mount the S3 bucket folder in the Lambda function. Import the library by using the proper folder in the mount point.
- C. Load the external library to the Lambda function's /tmp directory during deployment of the Lambda package. Import the library from the /tmp directory.
- D. Create an Amazon Elastic File System (Amazon EFS) volume. Upload the external library to the EFS volume. Mount the EFS volume in the Lambda function. Import the library by using the proper folder in the mount point.

Correct Answer: C

Community vote distribution

A (100%)

https://shop335422782.taobao.com 淘宝搜索店铺:黑马专业认证
微信添加 hello231119

 MrTee  10 months, 2 weeks ago

Selected Answer: A

Create a Lambda layer to store the external library. Configure the Lambda function to use the layer. This will allow the developer to make the external library available to the Lambda execution environment without having to include it in the Lambda package, which will reduce the Lambda package space. Using a Lambda layer is a simple and straightforward solution that requires minimal operational overhead.

upvoted 10 times

 KillThemWithKindness  1 week, 4 days ago

Selected Answer: A

You can add up to five layers to a Lambda function. The total unzipped size of the function and all layers cannot exceed the unzipped deployment package size quota of 250 MB. For more information, see Lambda quotas.

upvoted 1 times

 SerialiDr 1 month, 2 weeks ago

Selected Answer: A

A. Create a Lambda layer to store the external library. Configure the Lambda function to use the layer: This is the most suitable solution. Lambda layers allow you to include libraries and other dependencies without including them in the deployment package of your Lambda function. By creating a layer with the external library and configuring the Lambda function to use this layer, the developer can easily manage and update the library independently of the Lambda function code, reducing the package size and operational overhead.

upvoted 1 times

 CalvinL4 1 month, 4 weeks ago

One lambda layer only allows 50 mb for storage. The file is 100 MB. So I will vote for D unless the library can break down into less than 5 layers.

upvoted 1 times

 loctong 9 months, 2 weeks ago

Selected Answer: A

By creating a Lambda layer, you can separate the external library from the Lambda function code itself and make it available to multiple functions. This approach offers the following benefits:

upvoted 2 times

 dan80 10 months, 1 week ago

Selected Answer: A

<https://docs.aws.amazon.com/lambda/latest/dg/configuration-layers.html>

upvoted 3 times

Question #128

Topic 1

A company has a front-end application that runs on four Amazon EC2 instances behind an Elastic Load Balancer (ELB) in a production environment that is provisioned by AWS Elastic Beanstalk. A developer needs to deploy and test new application code while updating the Elastic Beanstalk platform from the current version to a newer version of Node.js. The solution must result in zero downtime for the application.

Which solution meets these requirements?

- A. Clone the production environment to a different platform version. Deploy the new application code, and test it. Swap the environment URLs upon verification.
- B. Deploy the new application code in an all-at-once deployment to the existing EC2 instances. Test the code. Redeploy the previous code if verification fails.
- C. Perform an immutable update to deploy the new application code to new EC2 instances. Serve traffic to the new instances after they pass health checks.
- D. Use a rolling deployment for the new application code. Apply the code to a subset of EC2 instances until the tests pass. Redeploy the previous code if the tests fail.

Correct Answer: D
Community vote distribution


MrTee 10 months, 2 weeks ago

Selected Answer: C

Option C is the correct solution that meets the requirements. Performing an immutable update to deploy the new application code to new EC2 instances and serving traffic to the new instances after they pass health checks will ensure zero downtime for the application.

Option A would work but cloning the production environment to a different platform version will result in a longer deployment time and can impact the cost of the environment.

upvoted 17 times

yeacuz 9 months, 2 weeks ago

I would agree that option A can affect the cost, but cost is not the issue. The question is asking for zero downtime. I believe the answer is option A

upvoted 2 times

awsdummie 10 months ago

C is incorrect, after passing health checks the elastic Beanstalk transfers them to the original Auto Scaling group. No testing or platform update is done.

upvoted 5 times

gago14 8 months, 2 weeks ago

Selected Answer: A

Not C: While an immutable update can ensure zero downtime during the deployment process, it doesn't account for updating the Elastic Beanstalk platform version.

upvoted 6 times

SerialiDr 1 month, 2 weeks ago

Selected Answer: C

The solutions that best meet the requirements for zero downtime are:

- A. Clone the production environment to a different platform version. Deploy the new application code, and test it. Swap the environment URLs upon verification.
 - C. Perform an immutable update to deploy the new application code to new EC2 instances. Serve traffic to the new instances after they pass health checks.
- Both options A and C provide robust strategies for deploying updates with zero downtime, allowing for thorough testing in an isolated environment before directing production traffic to the new setup.

upvoted 1 times

Certified101 2 months, 3 weeks ago

Selected Answer: A

Not C: It doesn't account for updating the Elastic Beanstalk platform version. This would affect both the live and test environments.

It's also best practice to have 2 separate environments for production and test and there is no mention of cost optimisation here.

upvoted 3 times

 **tqiu654** 3 months ago

Selected Answer: A

ChatGPT:A

upvoted 2 times

 **Rameez1** 4 months, 2 weeks ago

Selected Answer: C

A & C both works for given scenario but C does it more feasibly for Elastic Beanstalk with zero downtime.

upvoted 1 times

 **stilloneway** 6 months, 1 week ago

Selected Answer: C

Key terminology in question is "Test". So it should be immutable for quick rollback in case of test not working.

upvoted 2 times

 **[Removed]** 2 months, 3 weeks ago

Option A offers quick rollback too... did some research and cloning is same as blue/green deployments. with that said, I think the answer is A

upvoted 1 times

 **CrescentShared** 1 month, 2 weeks ago

It's a downtime if test fails and rollback.

upvoted 1 times

 **love777** 6 months, 1 week ago

Selected Answer: C

Explanation:

Immutable Update with Elastic Beanstalk:

With an immutable update, Elastic Beanstalk provisions new instances with the updated code while keeping the existing instances running. The traffic is shifted gradually to the new instances after they pass health checks, ensuring that there is no downtime during the deployment. If any issue arises during the deployment, traffic is still being served by the existing instances.

upvoted 4 times

 **Naj_64** 6 months, 2 weeks ago

Selected Answer: D

Screenshot of Step 4 of Method 1 in the link:

https://docs.amazonaws.cn/en_us/elasticbeanstalk/latest/dg/using-features.platform.upgrade.html#using-features.platform.upgrade.config

"...your application is unavailable during the update. To keep at least one instance in service during the update, enable rolling updates"

upvoted 1 times

 **Naj_64** 6 months, 2 weeks ago

I take this back. I'm going with A

"However, you can avoid this downtime by deploying the new version to a separate environment. The existing environment's configuration is copied and used to launch the green environment with the new version of the application. The new green environment will have its own URL. When it's time to promote the green environment to serve production traffic, you can use Elastic Beanstalk's Swap Environment URLs feature."

<https://docs.aws.amazon.com/whitepapers/latest/blue-green-deployments/swap-the-environment-of-an-elastic-beanstalk-application.html>

upvoted 1 times

 **MG1407** 6 months, 2 weeks ago

Selected Answer: A

A is the answer. Sorry about the double post ...

https://docs.amazonaws.cn/en_us/elasticbeanstalk/latest/dg/using-features.platform.upgrade.html#using-features.platform.upgrade.config

upvoted 4 times

 **MG1407** 6 months, 2 weeks ago

Selected Answer: D

Can't be clearer than this ... https://docs.amazonaws.cn/en_us/elasticbeanstalk/latest/dg/using-features.platform.upgrade.html#using-features.platform.upgrade.config

upvoted 1 times

 **redfivedog** 7 months, 1 week ago

Selected Answer: A

A is the correct solution here. From <https://docs.aws.amazon.com/elasticbeanstalk/latest/dg/using-features.CNAMESwap.html>, "A blue/green deployment is also required if you want to update an environment to an incompatible platform version.". An immutable deployment would ensure zero downtime, but the new instances launched would have the same platform version as before.

upvoted 2 times

 **bob0777** 7 months, 1 week ago

Selected Answer: A

A developer also needs to update to a new platform version and it's more likely a new major version of node.js. To update to the new major version there is only one method and it is a blue/green deployment by creating (cloning) a new environment with the latest platform version. Then deploy

a new app version to it. Test it, then swap the env URL without downtime.

upvoted 3 times

 **Phongsanth** 8 months, 1 week ago

Selected Answer: D

On the step 4 of Method 1 in the link. you will see it clearly that rolling update is perfect fit with this question. Of course with zero downtime.

https://docs.amazonaws.cn/en_us/elasticbeanstalk/latest/dg/using-features.platform.upgrade.html#using-features.platform.upgrade.config
upvoted 2 times

 **Naj_64** 6 months, 2 weeks ago

+1

"...your application is unavailable during the update. To keep at least one instance in service during the update, enable rolling updates"

upvoted 1 times

 **yeacuz** 9 months, 2 weeks ago

Selected Answer: A

Option A is referring to Blue/Green deployments and will fulfill the requirements of the question
(<https://docs.aws.amazon.com/elasticbeanstalk/latest/dg/using-features.CNAMESwap.html>)

upvoted 4 times

 **loctong** 9 months, 2 weeks ago

Selected Answer: D

Performing an immutable update involves creating new EC2 instances with the updated code and the newer version of Node.js, and then swapping the traffic to the new instances once they pass health checks. This approach ensures zero downtime as the existing instances continue to serve traffic until the new instances are ready.

upvoted 1 times

 **awsdummie** 10 months ago

Option A

upvoted 5 times

Question #129

Topic 1

A developer is creating an AWS Lambda function. The Lambda function will consume messages from an Amazon Simple Queue Service (Amazon SQS) queue. The developer wants to integrate unit testing as part of the function's continuous integration and continuous delivery (CI/CD) process.

How can the developer unit test the function?

- A. Create an AWS CloudFormation template that creates an SQS queue and deploys the Lambda function. Create a stack from the template during the CI/CD process. Invoke the deployed function. Verify the output.
- B. Create an SQS event for tests. Use a test that consumes messages from the SQS queue during the function's CI/CD process.
- C. Create an SQS queue for tests. Use this SQS queue in the application's unit test. Run the unit tests during the CI/CD process.
- D. Use the aws lambda invoke command with a test event during the CI/CD process.

Correct Answer: D

Community vote distribution



✉ **gagol14** 8 months, 2 weeks ago

Selected Answer: C

Unit testing is a type of testing that verifies the correctness of individual units of source code, typically functions or methods. When unit testing a Lambda function that interacts with Amazon SQS, you can create a separate test SQS queue that the Lambda function interacts with during testing. You would then validate the behavior of the function based on its interactions with the test queue. This approach isolates the function's behavior from the rest of the system, which is a key principle of unit testing.

Option A is incorrect because AWS CloudFormation is typically used for infrastructure deployment, not for unit testing.

Option B is incorrect because it does not actually test the function; it only creates an event.

Option D is incorrect because the 'aws lambda invoke' command is used to manually trigger a Lambda function, but doesn't necessarily facilitate testing the function's behavior when consuming messages from an SQS queue.

upvoted 11 times

✉ **redfivedog** 7 months, 1 week ago

Selected Answer: D

D is correct here. Both B and C are integration tests as they are using an actual SQS queue in the tests and not mocking it out.

upvoted 8 times

✉ **KillThemWithKindness** 1 week, 4 days ago

Selected Answer: D

In production, our Lambda function code will directly access the AWS resources we defined in our function handler; however, in our unit tests we want to isolate our code and replace the AWS resources with simulations. This isolation facilitates running unit tests in an isolated environment to prevent accidental access to actual cloud resources.

<https://aws.amazon.com/blogs/devops/unit-testing-aws-lambda-with-python-and-mock-aws-services/>

upvoted 1 times

✉ **SerialiDr** 1 month, 2 weeks ago

Selected Answer: D

D. Use the aws lambda invoke command with a test event during the CI/CD process: This option is closer to what unit testing entails. The aws lambda invoke command can be used to invoke the Lambda function with a simulated event payload that mimics an SQS message. This allows the developer to test the function's logic and handling of SQS messages without needing an actual SQS queue. The test can focus on how the function processes the input and generates output, which is the essence of unit testing.

upvoted 2 times

✉ **CrescentShared** 1 month, 2 weeks ago

Anybody find this question in the exam, please? The question itself looks so wrong to me, the action of testing the lambda function does not seem like a 'unit test' already... Isn't the unit test testing all the Classes inside the lambda function?

upvoted 1 times

✉ **Certified101** 2 months, 3 weeks ago

Selected Answer: C

C there should be a separate isolated test environment
D will only invoke the lambda and not test SQS polling.

upvoted 2 times

 **tqiu654** 3 months ago

Selected Answer: D

ChatGPT:D

upvoted 1 times

 **ShawnWon** 3 months, 2 weeks ago

B.

Option A (CloudFormation template for SQS queue and Lambda function) involves more of an integration test rather than a unit test. It's typically preferable to keep unit tests isolated and focused on the specific functionality of the function.

Option C (Create an SQS queue for tests) might involve additional setup and cleanup steps, and it could introduce dependencies that impact the isolation of unit tests.

Option D (aws lambda invoke command with a test event) is similar to Option B, but creating a test event is generally more flexible and allows for a clearer representation of the expected input to the Lambda function.

upvoted 1 times

 **dilleman** 4 months, 3 weeks ago

Selected Answer: D

Option D is the only true unit test.

upvoted 3 times

 **love777** 6 months, 1 week ago

Selected Answer: B

Explanation:

Option B involves simulating the SQS event trigger for testing purposes. This is a common practice in AWS Lambda unit testing. Here's how it works:

SQS Event for Tests: In your unit test code, you can create an SQS event object that simulates the event structure that Lambda receives when an SQS message is consumed. This event object will contain the necessary information, such as the message content, message attributes, etc.

Testing Logic: You can then pass this event object to your Lambda function's handler function as if it were an actual SQS event. This allows you to test your Lambda function's logic as it would work in response to an SQS message.

Mocking Dependencies: During unit testing, you might want to mock any AWS service calls, such as SQS, to isolate your Lambda function's logic from external services.

upvoted 6 times

 **r3mo** 7 months, 1 week ago

Option B!

Offers a practical and efficient way to unit test an AWS Lambda function consuming messages from an SQS queue. It provides an accurate representation of the actual event source, simplifies the testing process, integrates well with CI/CD pipelines, isolates production resources, and is cost-effective.

upvoted 2 times

 **nguyenta** 7 months, 2 weeks ago

Selected Answer: D

D, from Google Bard

upvoted 2 times

 **vicvega** 8 months ago

The idea of creating permanent, persistent AWS resources for a test that might take 3 seconds is an anti-pattern. During a CI/CD pipeline, resources should be spun up, used, and then torn down. Nothing should hang around after a CI/CD pipeline runs.

Does that not negate B and C?

upvoted 3 times

 **Phongsanth** 8 months, 1 week ago

Selected Answer: C

I vote C.

Unit test should be isolated. Check out in this link.

<https://aws.amazon.com/blogs/devops/unit-testing-aws-lambda-with-python-and-mock-aws-services/>

upvoted 3 times

 **hexie** 8 months, 1 week ago

Selected Answer: B

B. And before explaining it I would like to ask you guys to use ChatGPT if you want, but don't take it as a source of truth and either use its answers here, where people usually come to read USEFUL stuff and understand correctly what it's all about. Moderators should review those votes before approving it lol

B option is ONE approach for unit testing AWS Lambda functions, since it involves creating a mock SQS event and passing it to the function to be tested. This will allow the function behavior to be tested in isolation, which is the aim of unit testing. :)

C option is more like a integration test, not a unit test. That's all. :)

upvoted 4 times

 **patrick889** 8 months, 2 weeks ago

chatGPT said C is correct

upvoted 3 times

Question #130

A developer is working on a web application that uses Amazon DynamoDB as its data store. The application has two DynamoDB tables: one table that is named artists and one table that is named songs. The artists table has artistName as the partition key. The songs table has songName as the partition key and artistName as the sort key.

The table usage patterns include the retrieval of multiple songs and artists in a single database operation from the webpage. The developer needs a way to retrieve this information with minimal network traffic and optimal application performance.

Which solution will meet these requirements?

- A. Perform a BatchGetItem operation that returns items from the two tables. Use the list of songName/artistName keys for the songs table and the list of artistName key for the artists table.
- B. Create a local secondary index (LSI) on the songs table that uses artistName as the partition key. Perform a query operation for each artistName on the songs table that filters by the list of songName. Perform a query operation for each artistName on the artists table.
- C. Perform a BatchGetItem operation on the songs table that uses the songName/artistName keys. Perform a BatchGetItem operation on the artists table that uses artistName as the key.
- D. Perform a Scan operation on each table that filters by the list of songName/artistName for the songs table and the list of artistName in the artists table.

Correct Answer: A
Community vote distribution


csG13 Highly Voted 8 months, 3 weeks ago

Selected Answer: A

The correct answer is A. BatchGetItem can return one or multiple items from one or more tables. For reference check the link below

https://docs.aws.amazon.com/amazondynamodb/latest/APIReference/API_BatchGetItem.html
upvoted 7 times

KarBiswa Most Recent 6 days, 18 hours ago

Selected Answer: C

I would go for it because typically we are taking the advantage of key selection
upvoted 1 times

KarBiswa 6 days, 18 hours ago

Sorry its Option A saying multiple songs so list will be right option
upvoted 1 times

SerialiDr 1 month, 2 weeks ago

Selected Answer: A

The BatchGetItem API allows you to get up to 100 items from one or more DynamoDB tables in a single operation, which can reduce the number of network requests. This is efficient for retrieving a specific list of items when you know the primary keys (partition key and sort key, if applicable) of the items you want to retrieve.

upvoted 2 times

norris81 5 months, 1 week ago

Selected Answer: A

https://docs.aws.amazon.com/amazondynamodb/latest/APIReference/API_BatchGetItem.html
upvoted 1 times

rInd2000 7 months, 1 week ago

Selected Answer: B

Agree 100% with Caiyi.
upvoted 1 times

caiyi 8 months ago

B.
By creating a local secondary index (LSI) on the songs table with artistName as the partition key, you can efficiently query the songs table for each artistName in the list of artists. This approach allows you to retrieve the desired songs for multiple artists with minimal network traffic.

upvoted 3 times

 **GripZA** 6 months, 2 weeks ago

You can't create a LSI on an existing DDB table
upvoted 5 times

 **remynick** 6 months, 2 weeks ago

I dont agree, we need to creat a global secondary index to use artistName as the partition key
upvoted 2 times

 **Baba_Eni** 8 months, 2 weeks ago

Selected Answer: A

https://docs.aws.amazon.com/amazondynamodb/latest/APIReference/API_BatchGetItem.html
upvoted 3 times

Question #131

Topic 1

A company is developing an ecommerce application that uses Amazon API Gateway APIs. The application uses AWS Lambda as a backend. The company needs to test the code in a dedicated, monitored test environment before the company releases the code to the production environment.

Which solution will meet these requirements?

- A. Use a single stage in API Gateway. Create a Lambda function for each environment. Configure API clients to send a query parameter that indicates the environment and the specific Lambda function.
- B. Use multiple stages in API Gateway. Create a single Lambda function for all environments. Add different code blocks for different environments in the Lambda function based on Lambda environment variables.
- C. Use multiple stages in API Gateway. Create a Lambda function for each environment. Configure API Gateway stage variables to route traffic to the Lambda function in different environments.
- D. Use a single stage in API Gateway. Configure API clients to send a query parameter that indicates the environment. Add different code blocks for different environments in the Lambda function to match the value of the query parameter.

Correct Answer: C

Community vote distribution

C (100%)

 **csG13** **Highly Voted** 8 months, 3 weeks ago

Selected Answer: C

The answer is C - we should create multiple stages and different Lambdas that will be utilised based on API Gateway stages variables.

<https://docs.aws.amazon.com/apigateway/latest/developerguide/amazon-api-gateway-using-stage-variables.html>
upvoted 11 times

 **SerialiDr** **Most Recent** 1 month, 2 weeks ago

Selected Answer: C

C. Use multiple stages in API Gateway. Create a Lambda function for each environment. Configure API Gateway stage variables to route traffic to the Lambda function in different environments: This is the recommended approach. Using multiple stages in API Gateway (one for testing and one for production) allows for clear separation of environments. Having a dedicated Lambda function for each environment ensures isolation and reduces the risk of accidental changes impacting the production environment. API Gateway stage variables can be used to manage configurations specific to each stage, such as function names or other parameters.

upvoted 1 times

Question #132

A developer creates an AWS Lambda function that retrieves and groups data from several public API endpoints. The Lambda function has been updated and configured to connect to the private subnet of a VPC. An internet gateway is attached to the VPC. The VPC uses the default network ACL and security group configurations.

The developer finds that the Lambda function can no longer access the public API. The developer has ensured that the public API is accessible, but the Lambda function cannot connect to the API.

How should the developer fix the connection issue?

- A. Ensure that the network ACL allows outbound traffic to the public internet.
- B. Ensure that the security group allows outbound traffic to the public internet.
- C. Ensure that outbound traffic from the private subnet is routed to a public NAT gateway.
- D. Ensure that outbound traffic from the private subnet is routed to a new internet gateway.

Correct Answer: A

Community vote distribution

C (100%)

 **SerialiDr** 1 month, 2 weeks ago

Selected Answer: C

C. Ensure that outbound traffic from the private subnet is routed to a public NAT gateway: This is the most likely solution. Lambda functions in a private subnet require a NAT (Network Address Translation) gateway or NAT instance in a public subnet to access the public internet, as private subnets do not have direct internet access. The VPC route table associated with the private subnet needs to have a route that directs internet-bound traffic to the NAT gateway.

upvoted 1 times

 **Dushank** 5 months, 3 weeks ago

Selected Answer: C

When a Lambda function is configured to connect to a VPC, it loses its default internet access. To allow the Lambda function to access the public internet, it must be connected to a private subnet in the VPC that is configured to route its traffic through a NAT Gateway (Network Address Translation Gateway).

The Internet Gateway is usually used to provide internet access to resources in the public subnet, but for resources in the private subnet, a NAT Gateway is required.

upvoted 3 times

 **Naj_64** 6 months, 2 weeks ago

Selected Answer: C

NAT Gateway from a public subnet is required.

upvoted 1 times

 **cmonthatsme** 6 months, 4 weeks ago

Selected Answer: C

The Lambda function is running in a private subnet of the VPC, it needs to send outbound traffic to the internet to reach the API endpoints. To enable this, a NAT gateway is required.

upvoted 1 times

 **Parsons** 7 months ago

Selected Answer: C

C is correct.
with Lambda, You need an IP of NAT GW to be able to access public internet.

upvoted 1 times

 **cloudenthusiast** 7 months ago

Selected Answer: C

it leverages a NAT gateway, which is a service that enables instances in a private subnet to connect to the internet or other AWS services, but prevents the internet from initiating a connection with those instances.

upvoted 2 times

Question #133

Topic 1

A developer needs to store configuration variables for an application. The developer needs to set an expiration date and time for the configuration. The developer wants to receive notifications before the configuration expires.

Which solution will meet these requirements with the LEAST operational overhead?

- A. Create a standard parameter in AWS Systems Manager Parameter Store. Set Expiration and ExpirationNotification policy types.
- B. Create a standard parameter in AWS Systems Manager Parameter Store. Create an AWS Lambda function to expire the configuration and to send Amazon Simple Notification Service (Amazon SNS) notifications.
- C. Create an advanced parameter in AWS Systems Manager Parameter Store. Set Expiration and ExpirationNotification policy types.
- D. Create an advanced parameter in AWS Systems Manager Parameter Store. Create an Amazon EC2 instance with a cron job to expire the configuration and to send notifications.

Correct Answer: D

Community vote distribution



✉️ **Parsons** Highly Voted 7 months ago

Selected Answer: C

C is correct.

You have to use "advanced parameter in AWS Systems Manager Parameter Store" to be able to Set Expiration and ExpirationNotification policy types.

upvoted 9 times

✉️ **KarBiswa** Most Recent 6 days, 18 hours ago

Selected Answer: C

<https://docs.aws.amazon.com/systems-manager/latest/userguide/parameter-store-policies.html>

upvoted 1 times

✉️ **Trung125122** 1 week ago

Selected Answer: A

A is sufficient. C is abundant

upvoted 1 times

✉️ **NijeshT** 3 months ago

Advanced Parameters: These offer more capabilities, such as adding policies for expiration and triggering notifications

upvoted 1 times

✉️ **Rameez1** 4 months, 2 weeks ago

Selected Answer: B

Using Lambda function and SNS will address the requirement with least operational overhead.

upvoted 2 times

✉️ **Rameez1** 4 months, 1 week ago

Changing my mind option A is correct here.

upvoted 2 times

✉️ **Fizbo** 2 months, 3 weeks ago

It is C. standard tier does not have those features

upvoted 1 times

✉️ **Gold07** 4 months, 3 weeks ago

A is the right Answer

upvoted 2 times

✉️ **worseforwear** 6 months, 3 weeks ago

Selected Answer: C

You can't set expiration policy on standard parameter

upvoted 4 times

✉️ **cmonthatsme** 6 months, 4 weeks ago

Selected Answer: A

By creating a standard parameter, you can set an expiration date for the parameter

upvoted 2 times

 **cloudenthusiast** 7 months ago

Selected Answer: C

it leverages the advanced parameter tier and the parameter policies feature of Parameter Store, which meet the requirements with the least operational overhead.

upvoted 4 times

Question #134

Topic 1

A company is developing a serverless application that consists of various AWS Lambda functions behind Amazon API Gateway APIs. A developer needs to automate the deployment of Lambda function code. The developer will deploy updated Lambda functions with AWS CodeDeploy. The deployment must minimize the exposure of potential errors to end users. When the application is in production, the application cannot experience downtime outside the specified maintenance window.

Which deployment configuration will meet these requirements with the LEAST deployment time?

- A. Use the AWS CodeDeploy in-place deployment configuration for the Lambda functions. Shift all traffic immediately after deployment.
- B. Use the AWS CodeDeploy linear deployment configuration to shift 10% of the traffic every minute.
- C. Use the AWS CodeDeploy all-at-once deployment configuration to shift all traffic to the updated versions immediately.
- D. Use the AWS CodeDeploy predefined canary deployment configuration to shift 10% of the traffic immediately and shift the remaining traffic after 5 minutes.

Correct Answer: A*Community vote distribution*

KarBiswa 6 days, 18 hours ago

Selected Answer: D

<https://docs.aws.amazon.com/whitepapers/latest/practicing-continuous-integration-continuous-delivery/deployment-methods.html#:~:text=A%20variation%20of,is%20gradually%20increased.>

upvoted 1 times

rimaSamir 1 month ago

Selected answer is A.
To them who have chosen D, you have forgotten also about "When the application is in production, the application cannot experience downtime outside the specified maintenance window."

upvoted 1 times

SerialiDr 1 month, 2 weeks ago

Selected Answer: D

D. Use the AWS CodeDeploy predefined canary deployment configuration to shift 10% of the traffic immediately and shift the remaining traffic after 5 minutes: The canary deployment strategy first shifts a small percentage of traffic to the new version (e.g., 10%) and, after a specified period (e.g., 5 minutes), shifts the remaining traffic. This approach allows for initial validation of the new version with minimal user exposure before full rollout, balancing speed and risk mitigation.

upvoted 2 times

c9ebec2 2 months, 2 weeks ago

Selected Answer: D

Lambda deploy supports just Linear or Canary. So answer is D. Linear or All

upvoted 1 times

aravindpti 3 months ago

Answer A.

<https://aws.amazon.com/blogs/containers/aws-codedeploy-now-supports-linear-and-canary-deployments-for-amazon-ecs/>

upvoted 1 times

jingle4944 4 months, 1 week ago

Canary deployment is supported: <https://aws.amazon.com/blogs/compute/implementing-safe-aws-lambda-deployments-with-aws-codedeploy/>
upvoted 1 times

passhojaun 4 months, 2 weeks ago

Selected Answer: A

Canary is not supported in AWS CodeDeploy.

upvoted 1 times

<https://aws.amazon.com/es/blogs/containers/aws-codedeploy-now-supports-linear-and-canary-deployments-for-amazon-ecs/>

upvoted 2 times

passhojaun 4 months, 2 weeks ago

Canary is not supported in AWS CodeDeploy.

upvoted 1 times

□ **Monivs** 1 month, 3 weeks ago

Canary is supported by code deploy
<https://docs.aws.amazon.com/codedeploy/latest/userguide/welcome.html>

upvoted 1 times

□ **Yuxing_Li** 6 months ago

Selected Answer: D

Canary is faster than linear in this case.

upvoted 2 times

□ **love777** 6 months, 1 week ago

Selected Answer: A

Explanation:

In an AWS Lambda context, using the in-place deployment configuration minimizes deployment time and provides fast updates to the function's code. In this case, the application consists of AWS Lambda functions behind Amazon API Gateway APIs. With the in-place deployment configuration, all traffic is shifted to the updated versions of the Lambda functions immediately after deployment.

Option B suggests a linear deployment configuration that shifts 10% of the traffic every minute. While this provides controlled deployment and gradual rollout, it might not be the fastest approach if you want to minimize deployment time.

Option C suggests an all-at-once deployment configuration. While this configuration might be fast, it poses a higher risk of exposing potential errors to end users all at once.

upvoted 1 times

□ **Monivs** 1 month, 3 weeks ago

Inplace deployment is not supported by ECS and Lambda

upvoted 1 times

□ **RaidenKurosaki** 7 months ago

Selected Answer: D

Canary deployment

upvoted 2 times

□ **Parsons** 7 months ago

Selected Answer: D

D is correct.

Keyword:

- "must minimize the exposure of potential errors to end users", you just have to trade-off 10% of traffic
- "cannot experience downtime ", eliminate C.
- "LEAST deployment time", with B, You have to take 10 mins other than D just 5 min.

upvoted 4 times

□ **clouderthusiast** 7 months ago

Selected Answer: D

the predefined canary deployment configuration, which shifts a small percentage of traffic to the updated versions immediately, and then shifts the remaining traffic after a specified period

upvoted 2 times

Question #135

Topic 1

A company created four AWS Lambda functions that connect to a relational database server that runs on an Amazon RDS instance. A security team requires the company to automatically change the database password every 30 days.

Which solution will meet these requirements MOST securely?

- A. Store the database credentials in the environment variables of the Lambda function. Deploy the Lambda function with the new credentials every 30 days.
- B. Store the database credentials in AWS Secrets Manager. Configure a 30-day rotation schedule for the credentials.
- C. Store the database credentials in AWS Systems Manager Parameter Store secure strings. Configure a 30-day schedule for the secure strings.
- D. Store the database credentials in an Amazon S3 bucket that uses server-side encryption with customer-provided encryption keys (SSE-C). Configure a 30-day key rotation schedule for the customer key.

Correct Answer: C

Community vote distribution

B (100%)

 **Dushank** 5 months, 3 weeks ago

Selected Answer: B

The most secure and automated way to handle database credential rotation is to use AWS Secrets Manager. Secrets Manager can automatically rotate, manage, and retrieve database credentials, API keys, and other secrets throughout their lifecycle. You can configure Secrets Manager to automatically rotate the secrets for you according to a schedule you specify, making it easier to adhere to best practices for security.

upvoted 3 times

 **RaidenKurosaki** 7 months ago

Selected Answer: B

Secrets Manager supports auto rotation. Systems Manager does not do that.

upvoted 2 times

 **Parsons** 7 months ago

Selected Answer: B

B is correct.

Keyword: "automatically change the database password every 30 days"

upvoted 2 times

 **cloudenthusiast** 7 months ago

Selected Answer: B

Secrets Manager supports automatic rotation of secrets by using either built-in or custom Lambda functions

upvoted 3 times

 **niks1221** 7 months ago

Did you give your exam recently?

If yes, how many questions were from here?

upvoted 1 times

Question #136

Topic 1

A developer is setting up a deployment pipeline. The pipeline includes an AWS CodeBuild build stage that requires access to a database to run integration tests. The developer is using a buildspec.yml file to configure the database connection. Company policy requires automatic rotation of all database credentials.

Which solution will handle the database credentials MOST securely?

- A. Retrieve the credentials from variables that are hardcoded in the buildspec.yml file. Configure an AWS Lambda function to rotate the credentials.
- B. Retrieve the credentials from an environment variable that is linked to a SecureString parameter in AWS Systems Manager Parameter Store. Configure Parameter Store for automatic rotation.
- C. Retrieve the credentials from an environment variable that is linked to an AWS Secrets Manager secret. Configure Secrets Manager for automatic rotation.
- D. Retrieve the credentials from an environment variable that contains the connection string in plaintext. Configure an Amazon EventBridge event to rotate the credentials.

Correct Answer: A

Community vote distribution

C (100%)

 **rimaSamir** 1 month ago

Answer is C as CodeBuild already supports Secret Manager
upvoted 1 times

 **Gold07** 5 months ago

c is the correct answer
upvoted 3 times

 **cmonthatsme** 6 months, 4 weeks ago

Selected Answer: C

Secure + Rotation are key words for Secrets Manager
upvoted 3 times

 **Parsons** 7 months ago

Selected Answer: C

C is correct.
Explanation: "requires automatic rotation of all database credentials" => "Secrets Manager for automatic rotation."
With the Systems Manager Parameter Store, you have to do that manually.
upvoted 3 times

 **cloudenthusiast** 7 months ago

Selected Answer: C

Because configure Secrets Manager for automatic rotation
upvoted 2 times

Question #137

Topic 1

A company is developing a serverless multi-tier application on AWS. The company will build the serverless logic tier by using Amazon API Gateway and AWS Lambda.

While the company builds the logic tier, a developer who works on the frontend of the application must develop integration tests. The tests must cover both positive and negative scenarios, depending on success and error HTTP status codes.

Which solution will meet these requirements with the LEAST effort?

- A. Set up a mock integration for API methods in API Gateway. In the integration request from Method Execution, add simple logic to return either a success or error based on HTTP status code. In the integration response, add messages that correspond to the HTTP status codes.
- B. Create two mock integration resources for API methods in API Gateway. In the integration request, return a success HTTP status code for one resource and an error HTTP status code for the other resource. In the integration response, add messages that correspond to the HTTP status codes.
- C. Create Lambda functions to perform tests. Add simple logic to return either success or error, based on the HTTP status codes. Build an API Gateway Lambda integration. Select appropriate Lambda functions that correspond to the HTTP status codes.
- D. Create a Lambda function to perform tests. Add simple logic to return either success or error-based HTTP status codes. Create a mock integration in API Gateway. Select the Lambda function that corresponds to the HTTP status codes.

Correct Answer: C

Community vote distribution



Parsons Highly Voted 7 months ago

Selected Answer: A

A is correct (with the LEAST effort)

"API Gateway supports mock integrations for API methods"

"As an API developer, you decide how API Gateway responds to a mock integration request. For this, you configure the method's integration request and integration response to associate a response with a given status code."

<https://docs.aws.amazon.com/apigateway/latest/developerguide/how-to-mock-integration.html>

upvoted 9 times

SerialiDr Most Recent 1 month, 2 weeks ago

Selected Answer: A

This is an efficient solution. Mock integrations in API Gateway allow you to simulate backend logic directly within API Gateway, without the need for an actual backend like Lambda. You can define the behavior and response (including HTTP status codes and messages) directly in API Gateway, making it ideal for quickly developing and testing various scenarios.

upvoted 1 times

[Removed] 6 months, 3 weeks ago

Selected Answer: B

The tests must cover both positive and negative scenarios, depending on success and error HTTP status codes.

upvoted 3 times

cloudenthusiast 7 months ago

Selected Answer: A

A because set up a mock integration for API methods in API Gateway with the least effort.

upvoted 3 times

Question #138

Topic 1

Users are reporting errors in an application. The application consists of several microservices that are deployed on Amazon Elastic Container Service (Amazon ECS) with AWS Fargate.

Which combination of steps should a developer take to fix the errors? (Choose two.)

- A. Deploy AWS X-Ray as a sidecar container to the microservices. Update the task role policy to allow access to the X-Ray API.
- B. Deploy AWS X-Ray as a daemonset to the Fargate cluster. Update the service role policy to allow access to the X-Ray API.
- C. Instrument the application by using the AWS X-Ray SDK. Update the application to use the PutXrayTrace API call to communicate with the X-Ray API.
- D. Instrument the application by using the AWS X-Ray SDK. Update the application to communicate with the X-Ray daemon.
- E. Instrument the ECS task to send the stdout and stderr output to Amazon CloudWatch Logs. Update the task role policy to allow the cloudwatch:PullLogs action.

Correct Answer: A*Community vote distribution*

MG1407 Highly Voted 6 months, 3 weeks ago

AD

- A. You can only use X-ray with Fargate as a side car because there is not EC2 image.
D. <https://github.com/aws-samples/aws-xray-fargate>

upvoted 10 times

Nagasoracle 4 months, 2 weeks ago

I agree - AD

<https://github.com/aws-samples/aws-xray-fargate>
upvoted 1 times

Iamtany 5 months, 3 weeks ago

With AWS Fargate, there are no EC2 instances to install the X-Ray daemon onto.

However, the X-Ray daemon is actually provided automatically with Fargate - it runs as an additional container alongside the application containers in the task. So there is no need to deploy it as a sidecar.

When using X-Ray with Fargate, you just need to:

Instrument the application code with the X-Ray SDK

The SDK will communicate with the daemon container provided by Fargate

So you're right that there are no EC2 hosts to install daemons on directly. But Fargate handles running the X-Ray daemon automatically as part of the task, eliminating the need for a sidecar. The SDK can communicate with the daemon container transparently.

upvoted 2 times

rrshah83 Most Recent 2 months ago

Selected Answer: A

AC

Fargate cannot have daemon. This rules out B and C. D is distractor.

upvoted 1 times

tqiuj654 3 months ago

Selected Answer: A

CHatGpt: AD

upvoted 1 times

ShawnWon 3 months, 2 weeks ago

DE

Option A is incorrect because deploying AWS X-Ray as a sidecar container to the microservices is not the common practice for Fargate deployments. Fargate tasks usually run as a single container, and the application is instrumented to communicate with the X-Ray daemon.

Option B is not applicable because deploying AWS X-Ray as a daemonset is a concept related to Kubernetes, not AWS Fargate.

Option C is incorrect because using the AWS X-Ray SDK involves instrumenting the application, but the suggested approach is to communicate with the X-Ray daemon rather than directly calling the X-Ray API.

upvoted 1 times

✉️ **Passeexam4sure_com** 4 months, 2 weeks ago

Selected Answer: D

Instrument the application by using the AWS X-Ray SDK. Update the application to communicate with the X-Ray daemon
upvoted 1 times

✉️ **Claire_KMT** 4 months, 3 weeks ago

D. Instrument the application by using the AWS X-Ray SDK. Update the application to communicate with the X-Ray daemon.

E. Instrument the ECS task to send the stdout and stderr output to Amazon CloudWatch Logs. Update the task role policy to allow the cloudwatch:PullLogs action.

upvoted 1 times

✉️ **fossil123** 5 months, 4 weeks ago

Selected Answer: A

AD is correct.

A - X-Ray container as a "Side car" in ECS/Fargate cluster

D - Instrument the application using the AWS X-Ray SDK to collect telemetry data.

upvoted 3 times

✉️ **love777** 6 months, 1 week ago

Selected Answer: D

D and E

Option D:

Instrumenting the application using the AWS X-Ray SDK is essential for collecting traces and telemetry data. The X-Ray SDK helps you identify bottlenecks, errors, and other issues within your microservices.

Communicating with the X-Ray daemon allows your microservices to send trace data to X-Ray for analysis and visualization. This requires minimal configuration and is efficient for capturing and analyzing traces.

Option E:

Instrumenting the ECS task to send the application's standard output (stdout) and standard error (stderr) logs to Amazon CloudWatch Logs provides visibility into the application's behavior, errors, and issues.

Updating the task role policy to allow the cloudwatch:PullLogs action ensures that the ECS task has the necessary permissions to access and send logs to CloudWatch Logs.

upvoted 3 times

✉️ **AWSdeveloper08** 6 months, 3 weeks ago

Selected Answer: C

Answer is CE

To diagnose and fix errors in an application deployed on Amazon ECS with AWS Fargate using AWS X-Ray, you should take the following steps:

C. Instrument the application by using the AWS X-Ray SDK. Update the application to use the PutXrayTrace API call to communicate with the X-Ray API.

Instrumenting the application using the AWS X-Ray SDK allows you to capture traces and data about requests as they flow through your application's components.

E. Instrument the ECS task to send the stdout and stderr output to Amazon CloudWatch Logs. Update the task role policy to allow the cloudwatch:PullLogs action.

This step will help you capture logs from your microservices, which can provide additional insights into the errors and issues occurring within the application.

upvoted 1 times

Question #139

Topic 1

A developer is creating an application for a company. The application needs to read the file doc.txt that is placed in the root folder of an Amazon S3 bucket that is named DOC-EXAMPLE-BUCKET. The company's security team requires the principle of least privilege to be applied to the application's IAM policy.

Which IAM policy statement will meet these security requirements?

- A.

```
{
    "Action": [
        "s3:GetObject"
    ],
    "Effect": "Allow",
    "Resource": "arn:aws:s3:::DOC-EXAMPLE-BUCKET/doc.txt"
}
```
- B.

```
{
    "Action": [
        "s3:*"
    ],
    "Effect": "Allow",
    "Resource": "*"
}
```
- C.

```
{
    "Action": [
        "s3:GetObject"
    ],
    "Effect": "Allow",
    "Resource": "arn:aws:s3:::DOC-EXAMPLE-BUCKET/*"
}
```
- D.

```
{
    "Action": [
        "s3:*"
    ],
    "Effect": "Allow",
    "Resource": "arn:aws:s3:::DOC-EXAMPLE-BUCKET/doc.txt"
}
```

Correct Answer: D

Community vote distribution

A (100%)

 **Gadu** 6 months, 4 weeks ago

Selected Answer: A

Only read permission for the file
upvoted 4 times

 **cmonthatsme** 6 months, 4 weeks ago

Selected Answer: A

Only allow to get this one file. A
upvoted 3 times

Question #140

Topic 1

A company has an application that uses AWS CodePipeline to automate its continuous integration and continuous delivery (CI/CD) workflow. The application uses AWS CodeCommit for version control. A developer who was working on one of the tasks did not pull the most recent changes from the main branch. A week later, the developer noticed merge conflicts.

How can the developer resolve the merge conflicts in the developer's branch with the LEAST development effort?

- A. Clone the repository. Create a new branch. Update the branch with the changes.
- B. Create a new branch. Apply the changes from the previous branch.
- C. Use the Commit Visualizer view to compare the commits when a feature was added. Fix the merge conflicts.
- D. Stop the pull from the main branch to the feature branch. Rebase the feature branch from the main branch.

Correct Answer: D

Community vote distribution



love777 Highly Voted 6 months, 1 week ago

Selected Answer: D

Option D is the best approach for resolving the merge conflicts with minimal development effort. Here's how it works:

Stop Pull from Main: By stopping the pull from the main branch to the feature branch, the developer can prevent the introduction of new conflicts while they are resolving the existing ones.

Rebase the Feature Branch: After stopping the pull, the developer can rebase the feature branch onto the main branch. This essentially replays the feature branch's changes on top of the main branch's latest changes. This allows the developer to resolve conflicts one commit at a time, addressing any conflicts that arise from the difference between the feature branch and the main branch.

upvoted 5 times

SerialiDr Most Recent 1 month, 2 weeks ago

Selected Answer: D

D. Stop the pull from the main branch to the feature branch. Rebase the feature branch from the main branch: Rebasing the feature branch from the main branch is an effective way to resolve merge conflicts. This approach involves updating the feature branch with the latest changes from the main branch and then applying the feature branch's changes on top of it. Rebasing can simplify the process of resolving conflicts and is generally less effort-intensive compared to creating new branches and transferring changes.

C. Use the Commit Visualizer view to compare the commits when a feature was added. Fix the merge conflicts: Using tools like Commit Visualizer to understand the changes and conflicts can be helpful. However, this step alone doesn't resolve the conflicts. The developer still needs to manually resolve the conflicts in the code.

upvoted 1 times

Passeexam4sure_com 4 months, 2 weeks ago

D

D. Stop the pull from the main branch to the feature branch. Rebase the feature branch from the main branch.

upvoted 1 times

Claire_KMT 4 months, 3 weeks ago

D. Stop the pull from the main branch to the feature branch. Rebase the feature branch from the main branch.

upvoted 1 times

Iamtany 5 months, 3 weeks ago

Selected Answer: D

Rebasing the feature branch from the main branch would apply the changes from the main branch directly onto the feature branch, effectively bringing it up to date. This would resolve the conflicts in a way that minimizes manual effort.

upvoted 3 times

DhiegoPimenta 6 months, 1 week ago

Selected Answer: D

Option D is the best approach for resolving the merge conflicts

upvoted 2 times

[Removed] 6 months, 3 weeks ago

Selected Answer: D

Using the git rebase command to rebase a repository changes the history of a repository, which might cause commits to appear out of order.

<https://docs.aws.amazon.com/codecommit/latest/userguide/how-to-view-commit-details.html>

upvoted 1 times

✉ **AWSdeveloper08** 6 months, 3 weeks ago

Selected Answer: C

Comparing commits in the Commit Visualizer view can provide a clear overview of the changes made over time and aid in understanding the context of the conflicts. This approach can help you pinpoint where conflicts arose and assist you in making informed decisions about how to resolve them.

upvoted 4 times

✉ **worseforwear** 6 months, 3 weeks ago

Selected Answer: C

Answer D won't fix the problem

upvoted 1 times

✉ **Cerakoted** 4 months, 3 weeks ago

I think C would take huge development effort

upvoted 1 times

✉ **maurice2005** 9 hours, 2 minutes ago

because visualizing make it harder? You have to fix the conflict anyway! rebase or merge. in both resolve the conflict will happened in one go (unlike the comments I see which they say rebase is commit by commit). I don't think those who pick rebase ever used it before in practice!

upvoted 1 times

Question #141

Topic 1

A developer wants to add request validation to a production environment Amazon API Gateway API. The developer needs to test the changes before the API is deployed to the production environment. For the test, the developer will send test requests to the API through a testing tool.

Which solution will meet these requirements with the LEAST operational overhead?

- A. Export the existing API to an OpenAPI file. Create a new API. Import the OpenAPI file. Modify the new API to add request validation. Perform the tests. Modify the existing API to add request validation. Deploy the existing API to production.
- B. Modify the existing API to add request validation. Deploy the updated API to a new API Gateway stage. Perform the tests. Deploy the updated API to the API Gateway production stage.
- C. Create a new API. Add the necessary resources and methods, including new request validation. Perform the tests. Modify the existing API to add request validation. Deploy the existing API to production
- D. Clone the existing API. Modify the new API to add request validation. Perform the tests. Modify the existing API to add request validation. Deploy the existing API to production.

Correct Answer: B

Community vote distribution

B (100%)

 AWSdeveloper08 Highly Voted 6 months, 3 weeks ago

Selected Answer: B

In this option, you are making changes directly to the existing API, adding request validation. Then, you deploy the updated API to a new API Gateway stage, which allows you to test the changes without affecting the production environment. After performing the tests and ensuring everything works as expected, you can then deploy the updated API to the production stage, thus minimizing operational overhead.

upvoted 8 times

 SerialiDr Most Recent 1 month, 2 weeks ago

Selected Answer: B

B. Modify the existing API to add request validation. Deploy the updated API to a new API Gateway stage. Perform the tests. Deploy the updated API to the API Gateway production stage: This is a more streamlined approach. By deploying the updated API to a new stage, the developer can test the changes in an environment that closely mirrors production without affecting the current production traffic. Once testing is complete, the changes can be deployed to the production stage. This approach minimizes operational overhead.

upvoted 1 times

 imyashkale 5 months, 2 weeks ago

Selected Answer: B

It looks Correct

upvoted 2 times

Question #142

An online food company provides an Amazon API Gateway HTTP API to receive orders for partners. The API is integrated with an AWS Lambda function. The Lambda function stores the orders in an Amazon DynamoDB table.

The company expects to onboard additional partners. Some of the partners require additional Lambda functions to receive orders. The company has created an Amazon S3 bucket. The company needs to store all orders and updates in the S3 bucket for future analysis.

How can the developer ensure that all orders and updates are stored to Amazon S3 with the LEAST development effort?

- A. Create a new Lambda function and a new API Gateway API endpoint. Configure the new Lambda function to write to the S3 bucket. Modify the original Lambda function to post updates to the new API endpoint.
- B. Use Amazon Kinesis Data Streams to create a new data stream. Modify the Lambda function to publish orders to the data stream. Configure the data stream to write to the S3 bucket.
- C. Enable DynamoDB Streams on the DynamoDB table. Create a new Lambda function. Associate the stream's Amazon Resource Name (ARN) with the Lambda function. Configure the Lambda function to write to the S3 bucket as records appear in the table's stream.
- D. Modify the Lambda function to publish to a new Amazon Simple Notification Service (Amazon SNS) topic as the Lambda function receives orders. Subscribe a new Lambda function to the topic. Configure the new Lambda function to write to the S3 bucket as updates come through the topic.

Correct Answer: C

Community vote distribution

C (100%)

 **AWSdeveloper08** Highly Voted 6 months, 3 weeks ago

Selected Answer: C

By enabling DynamoDB Streams on the DynamoDB table, you can capture changes (orders and updates) to the table. Whenever a new order or an update is made to the table, a stream record is generated. You can then create a new Lambda function, associate the stream's ARN with this Lambda function, and configure it to write the stream records (orders and updates) to the S3 bucket. This approach leverages built-in features of DynamoDB and Lambda, minimizing the development effort required to achieve the desired outcome.

upvoted 7 times

 **SerialiDr** Most Recent 1 month, 2 weeks ago

Selected Answer: C

This is a streamlined and effective approach. Enabling DynamoDB Streams captures modifications to the DynamoDB table (such as new orders) and triggers a new Lambda function. This function can then write these changes to the S3 bucket. This approach requires minimal changes to the existing setup and leverages the integration between DynamoDB Streams and Lambda.

upvoted 1 times

 **Dushank** 5 months, 3 weeks ago

Selected Answer: C

Enabling DynamoDB Streams on the existing DynamoDB table and associating a new Lambda function to it would be a straightforward way to capture all changes (new orders and updates) in the DynamoDB table. The new Lambda function would automatically be triggered when a new record appears in the table's stream and could be configured to write this data to the S3 bucket. This is likely the least effort-intensive approach for meeting the requirement.

upvoted 3 times

Question #143

Topic 1

A company's website runs on an Amazon EC2 instance and uses Auto Scaling to scale the environment during peak times. Website users across the world are experiencing high latency due to static content on the EC2 instance, even during non-peak hours.

Which combination of steps will resolve the latency issue? (Choose two.)

- A. Double the Auto Scaling group's maximum number of servers.
- B. Host the application code on AWS Lambda.
- C. Scale vertically by resizing the EC2 instances.
- D. Create an Amazon CloudFront distribution to cache the static content.
- E. Store the application's static content in Amazon S3.

Correct Answer: DE

Community vote distribution

DE (100%)

✉️  **SerialiDr** 1 month, 2 weeks ago

Selected Answer: DE

D. Create an Amazon CloudFront distribution to cache the static content: This is an effective solution. Amazon CloudFront is a content delivery network (CDN) service that securely delivers data, videos, applications, and APIs to customers globally with low latency and high transfer speeds. Using CloudFront to cache static content closer to users can significantly reduce latency.

E. Store the application's static content in Amazon S3: This is another effective solution. Amazon S3 can serve as a highly durable and scalable storage solution for static content. When combined with Amazon CloudFront, it provides an efficient way to manage and deliver static content with reduced latency.

The combination of steps that will best resolve the latency issue is:

- D. Create an Amazon CloudFront distribution to cache the static content.
- E. Store the application's static content in Amazon S3.

upvoted 1 times

✉️  **Digo30sp** 4 months, 4 weeks ago

Selected Answer: DE

Option (D), creating an Amazon CloudFront distribution to cache static content, is the most recommended solution. CloudFront is a global content delivery network (CDN) that can cache static content on servers distributed around the world. This can help significantly reduce latency for users around the world. Option (E), storing your application's static content in Amazon S3, can also help reduce latency. S3 is a high-performance object storage service that can be used to store static content.

upvoted 4 times

Question #144

Topic 1

A company has an Amazon S3 bucket containing premier content that it intends to make available to only paid subscribers of its website. The S3 bucket currently has default permissions of all objects being private to prevent inadvertent exposure of the premier content to non-paying website visitors.

How can the company limit the ability to download a premier content file in the S3 bucket to paid subscribers only?

- A. Apply a bucket policy that allows anonymous users to download the content from the S3 bucket.
- B. Generate a pre-signed object URL for the premier content file when a paid subscriber requests a download.
- C. Add a bucket policy that requires multi-factor authentication for requests to access the S3 bucket objects.
- D. Enable server-side encryption on the S3 bucket for data protection against the non-paying website visitors.

Correct Answer: B

Community vote distribution

B (100%)

 **SerialiDr** 1 month, 2 weeks ago

Selected Answer: B

B. Generate a pre-signed object URL for the premier content file when a paid subscriber requests a download: This is the most appropriate solution. A pre-signed URL grants temporary access to a private object stored in S3. The URL can be generated programmatically, and its validity can be limited to a short duration. This approach allows only those who have been provided with the URL (paid subscribers, in this case) to download the specific content.

upvoted 2 times

 **Digo30sp** 4 months, 4 weeks ago

Selected Answer: B

The correct answer is (B).

By generating a pre-signed object URL for the main content file when a paid subscriber requests a download, the company can control who can download the file. The pre-signed object URL will be valid for a limited period of time and can only be used by the paid subscriber who requested the download.

upvoted 4 times

Question #145

Topic 1

A developer is creating an AWS Lambda function that searches for items from an Amazon DynamoDB table that contains customer contact information. The DynamoDB table items have the customer's email_address as the partition key and additional properties such as customer_type, name and job_title.

The Lambda function runs whenever a user types a new character into the customer_type text input. The developer wants the search to return partial matches of all the email_address property of a particular customer_type. The developer does not want to recreate the DynamoDB table.

What should the developer do to meet these requirements?

- A. Add a global secondary index (GSI) to the DynamoDB table with customer_type as the partition key and email_address as the sort key. Perform a query operation on the GSI by using the begins_with key condition expression with the email_address property.
- B. Add a global secondary index (GSI) to the DynamoDB table with email_address as the partition key and customer_type as the sort key. Perform a query operation on the GSI by using the begins_with key condition expression with the email_address property.
- C. Add a local secondary index (LSI) to the DynamoDB table with customer_type as the partition key and email_address as the sort key. Perform a query operation on the LSI by using the begins_with key condition expression with the email_address property.
- D. Add a local secondary index (LSI) to the DynamoDB table with job_title as the partition key and email_address as the sort key. Perform a query operation on the LSI by using the begins_with key condition expression with the email_address property.

Correct Answer: D

Community vote distribution

A (100%)

□ **Examenee** 3 weeks, 2 days ago

Selected Answer: A

Only global secondary indices can be added after a table has been created.

upvoted 2 times

□ **SerialiDr** 1 month, 2 weeks ago

Selected Answer: A

A. Add a global secondary index (GSI) to the DynamoDB table with customer_type as the partition key and email_address as the sort key. Perform a query operation on the GSI by using the begins_with key condition expression with the email_address property: This approach is correct. By creating a GSI with customer_type as the partition key and email_address as the sort key, the developer can efficiently query items based on customer_type. The begins_with condition can be applied to the sort key (email_address) in the GSI, allowing for searches that return partial matches.

upvoted 1 times

□ **RamyaMunipala** 1 month, 3 weeks ago

Selected Answer: A

A is correct

upvoted 1 times

□ **Jing2023** 4 months, 3 weeks ago

A is correct

upvoted 1 times

□ **Patel_ajay745** 4 months, 4 weeks ago

A

Add a global secondary index (GSI) to the DynamoDB table with customer_type as the partition key and email_address as the sort key. Perform a query operation on the GSI by using the begins_with key condition expression with the email_address property.

upvoted 2 times

□ **Digo30sp** 4 months, 4 weeks ago

Selected Answer: A

The correct answer is (A).

By adding a global secondary index (GSI) to the DynamoDB table with customer_type as the partition key and email_address as the sort key, the developer can perform a query operation on the GSI using the Begins_with key condition expression with the email_address property. This will return partial matches of all email_address properties of a specific customer_type.

upvoted 4 times

Question #146

A developer is building an application that uses AWS API Gateway APIs, AWS Lambda functions, and AWS DynamoDB tables. The developer uses the AWS Serverless Application Model (AWS SAM) to build and run serverless applications on AWS. Each time the developer pushes changes for only to the Lambda functions, all the artifacts in the application are rebuilt.

The developer wants to implement AWS SAM Accelerate by running a command to only redeploy the Lambda functions that have changed.

Which command will meet these requirements?

- A. sam deploy --force-upload
- B. sam deploy --no-execute-changeset
- C. sam package
- D. sam sync --watch

Correct Answer: C

Community vote distribution

D (100%)

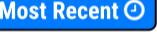
✉  **Digo30sp**  4 months, 4 weeks ago

Selected Answer: D

The correct answer is (D).

The sam sync --watch command will only deploy the Lambda functions that have changed. This command uses AWS SAM Accelerate to compare the local versions of your Lambda functions to the versions deployed in AWS. If there are differences, the command deploys only the changed Lambda functions.

upvoted 5 times

✉  **hayjaykay**  2 weeks ago

Correct answer is B.

To deploy only the Lambda functions that have changed using AWS SAM Accelerate, the developer can use the sam deploy --no-execute-changeset command. This command will create an AWS CloudFormation change set without executing it, allowing the developer to preview the changes before deploying.

upvoted 1 times

✉  **SerialiDr** 1 month, 2 weeks ago

Selected Answer: D

D. sam sync --watch: This command is a part of SAM Accelerate and is used for rapid iterative development. When run, it watches for changes in the source files of your Lambda functions and APIs and deploys only those changes, rather than redeploying the entire stack. This greatly speeds up the deployment process during development.

Therefore, to implement AWS SAM Accelerate and only redeploy the Lambda functions that have changed, the developer should use sam sync --watch. This command aligns with the goal of deploying changes rapidly and efficiently, focusing only on the components that have been modified.

upvoted 1 times

✉  **dilleman** 4 months, 3 weeks ago

Selected Answer: D

D is correct

upvoted 1 times

Question #147

Topic 1

A developer is building an application that gives users the ability to view bank accounts from multiple sources in a single dashboard. The developer has automated the process to retrieve API credentials for these sources. The process invokes an AWS Lambda function that is associated with an AWS CloudFormation custom resource.

The developer wants a solution that will store the API credentials with minimal operational overhead.

Which solution will meet these requirements in the MOST secure way?

- A. Add an AWS Secrets Manager GenerateSecretString resource to the CloudFormation template. Set the value to reference new credentials for the CloudFormation resource.
- B. Use the AWS SDK ssm:PutParameter operation in the Lambda function from the existing custom resource to store the credentials as a parameter. Set the parameter value to reference the new credentials. Set the parameter type to SecureString.
- C. Add an AWS Systems Manager Parameter Store resource to the CloudFormation template. Set the CloudFormation resource value to reference the new credentials. Set the resource NoEcho attribute to true.
- D. Use the AWS SDK ssm:PutParameter operation in the Lambda function from the existing custom resource to store the credentials as a parameter. Set the parameter value to reference the new credentials. Set the parameter NoEcho attribute to true.

Correct Answer: D

Community vote distribution



✉ Jing2023 Highly Voted 4 months, 3 weeks ago

Answer is B

A is not correct as the requirement asked to store API credentials, GenerateSecretString will create a random string as password.

C the API credential will be retrieved by the Lambda function, it is un-available to the template.

D no echo is a attribute of cloud formation template.

upvoted 10 times

✉ Digo30sp Highly Voted 4 months, 4 weeks ago

Selected Answer: D

The correct answer is (D).

Solution (D) is the most secure because it stores the API credentials in AWS Secrets Manager, which is a managed service that provides secure, policy-controlled storage for secrets. The parameter's NoEcho attribute prevents the parameter value from being displayed in the console or request history.

upvoted 6 times

✉ KarBiswa Most Recent 6 days, 16 hours ago

Selected Answer: A

I will got with A.

Because <https://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/parameters-section-structure.html> nullifying the B&D. Justifying A <https://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/dynamic-references.html>

upvoted 1 times

✉ KillThemWithKindness 1 week, 5 days ago

Selected Answer: B

The solution that will meet the requirements is to use the AWS SDK ssm PutParameter operation in the Lambda function from the existing custom resource to store the credentials as a parameter. Set the parameter value to reference the new credentials. Set the parameter type to SecureString. This way, the developer can store the API credentials with minimal operational overhead, as AWS Systems Manager Parameter Store provides secure and scalable storage for configuration data. The SecureString parameter type encrypts the parameter value with AWS Key Management Service (AWS KMS). The other options either involve adding additional resources to the CloudFormation template, which increases complexity and cost, or do not encrypt the parameter value, which reduces security.

upvoted 1 times

✉ SerialiDr 1 month, 2 weeks ago

Selected Answer: B

B. Use the AWS SDK ssm:PutParameter operation in the Lambda function from the existing custom resource to store the credentials as a parameter. Set the parameter value to reference the new credentials. Set the parameter type to SecureString: This is a secure and operationally efficient solution. AWS Systems Manager Parameter Store can securely store parameters as SecureString, which encrypts the parameter value. The ssm:PutParameter operation can be used within the Lambda function to store the credentials directly after retrieval, minimizing operational overhead.

upvoted 1 times

□ **Snape** 1 month, 3 weeks ago

Selected Answer: B

Answer is B

upvoted 1 times

□ **rrshah83** 2 months ago

Selected Answer: B

noecho is CF feature, not ssm param store

upvoted 1 times

□ **Certified101** 2 months, 3 weeks ago

Selected Answer: B

Agree with B - D will be stored in plain text, this is credentials so should be secure string

upvoted 2 times

□ **kaes** 3 months, 1 week ago

Selected Answer: D

ANS: D

NoEcho <https://github.com/aws-cloudformation/cloudformation-coverage-roadmap/issues/82#issuecomment-517704282>

upvoted 3 times

□ **kaes** 3 months, 1 week ago

ANS: D

NoEcho <https://github.com/aws-cloudformation/cloudformation-coverage-roadmap/issues/82#issuecomment-517704282>

upvoted 1 times

□ **ut18** 4 months, 1 week ago

Is B the correct answer?

SecureString isn't currently supported for AWS CloudFormation templates.

https://docs.aws.amazon.com/systems-manager/latest/APIReference/API_PutParameter.html

upvoted 2 times

□ **Bolu_Jay** 4 months, 1 week ago

Answer is A

AWS Secrets Manager is specifically designed for securely storing sensitive information like API credentials, database passwords, and other secrets

upvoted 5 times

□ **Nagasoracle** 4 months, 2 weeks ago

Selected Answer: B

I agree with Jing2023 answer

upvoted 2 times

□ **dilleman** 4 months, 3 weeks ago

Selected Answer: B

B should be correct since the type SecureString encrypts the value i think?

upvoted 4 times

Question #148

Topic 1

A developer is trying to get data from an Amazon DynamoDB table called demoman-table. The developer configured the AWS CLI to use a specific IAM user's credentials and ran the following command:

```
aws dynamodb get-item --table-name demoman-table --key '{"id": {"N": "1993"}}'
```

The command returned errors and no rows were returned.

What is the MOST likely cause of these issues?

- A. The command is incorrect; it should be rewritten to use put-item with a string argument.
- B. The developer needs to log a ticket with AWS Support to enable access to the demoman-table.
- C. Amazon DynamoDB cannot be accessed from the AWS CLI and needs to be called via the REST API.
- D. The IAM user needs an associated policy with read access to demoman-table.

Correct Answer: A*Community vote distribution* D (100%)

✉  **Jing2023** 4 months, 3 weeks ago

Selected Answer: D

D is correct

upvoted 2 times

✉  **dilleman** 4 months, 3 weeks ago

Selected Answer: D

D is correct

upvoted 1 times

✉  **Digo30sp** 4 months, 4 weeks ago

Selected Answer: D

The correct answer is (D).

The command is correct and the demoman table exists. The most likely issue is that the IAM user does not have a policy associated with read access to the demoman table.

To resolve the issue, the developer must add a policy to the IAM user that grants read access to the demoman table.

upvoted 4 times

Question #149

Topic 1

An organization is using Amazon CloudFront to ensure that its users experience low-latency access to its web application. The organization has identified a need to encrypt all traffic between users and CloudFront, and all traffic between CloudFront and the web application.

How can these requirements be met? (Choose two.)

- A. Use AWS KMS to encrypt traffic between CloudFront and the web application.
- B. Set the Origin Protocol Policy to "HTTPS Only".
- C. Set the Origin's HTTP Port to 443.
- D. Set the Viewer Protocol Policy to "HTTPS Only" or "Redirect HTTP to HTTPS".
- E. Enable the CloudFront option Restrict Viewer Access.

Correct Answer: BD

Community vote distribution

BD (100%)

✉️  **SerialiDr** 1 month, 2 weeks ago

Selected Answer: BD

- B. Set the Origin Protocol Policy to "HTTPS Only": This setting ensures that all traffic between CloudFront and the web application (origin) is encrypted. By setting the Origin Protocol Policy to "HTTPS Only," CloudFront will only connect to the origin over HTTPS, ensuring encryption of data in transit.
- D. Set the Viewer Protocol Policy to "HTTPS Only" or "Redirect HTTP to HTTPS": This setting is crucial for ensuring that all traffic between the users (viewers) and CloudFront is encrypted. By setting the Viewer Protocol Policy to "HTTPS Only" or "Redirect HTTP to HTTPS," CloudFront ensures that user requests are either only served over HTTPS or automatically redirected from HTTP to HTTPS.

upvoted 2 times

✉️  **Jeff1719** 3 months ago

Selected Answer: BD

BD: Protocol and Viewer protocol policy, see
<https://docs.aws.amazon.com/AmazonCloudFront/latest/DeveloperGuide/distribution-web-values-specify.html>

upvoted 2 times

✉️  **dilleman** 4 months, 3 weeks ago

Selected Answer: BD

- B and D are the correct ones.
- B: Setting the Origin Protocol Policy to "HTTPS Only" ensures that CloudFront always uses HTTPS to connect to the origin, which is the web application in this scenario.
- D: Setting the Viewer Protocol Policy to "HTTPS Only" ensures that CloudFront will only serve requests over HTTPS. Setting it to "Redirect HTTP to HTTPS" ensures that any HTTP request from viewers is redirected to HTTPS.

upvoted 4 times

✉️  **Digo30sp** 4 months, 4 weeks ago

Selected Answer: BD

The correct answers are (B) and (D).

To meet the requirement to encrypt all traffic between users and CloudFront, your organization must set the Viewer Protocol Policy to "HTTPS Only" or "Redirect HTTP to HTTPS". This will force users to use HTTPS to connect to CloudFront.

To meet the requirement to encrypt all traffic between CloudFront and the web application, your organization must set the Origin Protocol Policy to "HTTPS Only". This will force CloudFront to use HTTPS to connect to the web application.

upvoted 3 times

Question #150

A developer is planning to migrate on-premises company data to Amazon S3. The data must be encrypted, and the encryption keys must support automatic annual rotation. The company must use AWS Key Management Service (AWS KMS) to encrypt the data.

Which type of keys should the developer use to meet these requirements?

- A. Amazon S3 managed keys
- B. Symmetric customer managed keys with key material that is generated by AWS
- C. Asymmetric customer managed keys with key material that is generated by AWS
- D. Symmetric customer managed keys with imported key material

Correct Answer: D

Community vote distribution

B (67%)

A (33%)

✉  **PrakashM14**  4 months, 3 weeks ago

Selected Answer: B

Asymmetric keys (option C) are typically used for different use cases, such as digital signatures and key pairs, and may not be as suitable for automatic rotation in the described scenario.

Imported key material (option D) means that you bring your own key material, and AWS KMS doesn't support automatic rotation for such keys.

Amazon S3 managed keys (option A) are used specifically for Amazon S3 and don't support automatic rotation.

so, option B is correct
upvoted 7 times

✉  **SerialiDr**  1 day, 13 hours ago

Selected Answer: B

This option allows for automatic rotation of the keys, aligning with AWS best practices for key management and security. AWS KMS supports key rotation, which can be configured to occur automatically on an annual basis for customer managed keys. This ensures that data remains encrypted with a key that is periodically rotated, enhancing the security posture of the data stored in Amazon S3.

upvoted 1 times

✉  **KarBiswa** 6 days, 16 hours ago

Selected Answer: B

<https://docs.aws.amazon.com/kms/latest/developerguide/rotate-keys.html> Its a symmetric key rotation

upvoted 1 times

✉  **konieczny69** 4 weeks, 1 day ago

Selected Answer: A

<https://docs.aws.amazon.com/AmazonS3/latest/userguide/UsingServerSideEncryption.html>

Server-side encryption protects data at rest. Amazon S3 encrypts each object with a unique key. As an additional safeguard, it encrypts the key itself with a key that it rotates regularly. Amazon S3 server-side encryption uses 256-bit Advanced Encryption Standard Galois/Counter Mode (AES-GCM) to encrypt all uploaded objects.

upvoted 1 times

✉  **SerialiDr** 1 month, 2 weeks ago

Selected Answer: B

B. Symmetric customer managed keys with key material that is generated by AWS: This option allows the developer to create and manage their own encryption keys in AWS KMS, with AWS generating the key material. AWS KMS supports automatic rotation of customer managed keys. You can configure the key to rotate automatically once per year.

upvoted 1 times

✉  **Certified101** 2 months, 3 weeks ago

Selected Answer: B

B is correct, it must use KMS

upvoted 1 times

✉  **ShawnWon** 3 months, 2 weeks ago

Option A (Amazon S3 managed keys) does not involve using AWS Key Management Service (AWS KMS) directly. Instead, it relies on Amazon S3 to manage the keys for server-side encryption. If the requirement is specifically to use AWS KMS for encryption, then Option A would not meet that requirement.

upvoted 1 times

 **wonder_man** 4 months, 1 week ago

Selected Answer: B

Only this option supports AWS KMS with the key rotation

upvoted 1 times

 **PrakashM14** 4 months, 3 weeks ago

Asymmetric keys (option C) are typically used for different use cases, such as digital signatures and key pairs, and may not be as suitable for automatic rotation in the described scenario.

Imported key material (option D) means that you bring your own key material, and AWS KMS doesn't support automatic rotation for such keys.

Amazon S3 managed keys (option A) are used specifically for Amazon S3 and don't support automatic rotation.

so, option B is correct

upvoted 1 times

 **dilleman** 4 months, 3 weeks ago

Selected Answer: A

A: <https://docs.aws.amazon.com/AmazonS3/latest/userguide/UsingServerSideEncryption.html>

upvoted 2 times

 **Digo30sp** 4 months, 4 weeks ago

Selected Answer: A

A) Amazon S3 Managed Keys

https://docs.aws.amazon.com/pt_br/AmazonS3/latest/userguide/serv-side-encryption.html

upvoted 3 times