

## Discussion for Question 1

Link: <https://www.examttopics.com/discussions/amazon/view/102778-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 92 votes

### Discussion

**Comment:** Ago Still Valid question and answer ( C is correct ) Ty Dumpspot

**Comment:** The correct answer is C. <https://aws.amazon.com/premiumsupport/knowledge-center/secrets-manager-share-between-accounts/> [https://docs.aws.amazon.com/secretsmanager/latest/userguide/auth-and-access\\_examples\\_cross.html](https://docs.aws.amazon.com/secretsmanager/latest/userguide/auth-and-access_examples_cross.html) Option A is wrong. It seems to be a good solution. However, AWS managed keys cannot be used for cross account accessing.

#### Replies:

**Comment:** Based on this AWS managed keys can be used for cross account accessing. <https://docs.aws.amazon.com/kms/latest/developerguide/key-policy-modifying-external-accounts.html>

#### Replies:

**Comment:** I am not sure if the documentation you provided specifically say that AWS managed keys can be used for cross account accessing. However, @Untamables explanation is on point. Please see this Stack Overflow thread - <https://stackoverflow.com/questions/63420732/sharing-an-aws-managed-kms-key-with-another-account>

**Comment:** cross account, rotate is key for 'Security Manager'

**Comment:** The correct answer is C.

**Comment:** <https://docs.aws.amazon.com/secretsmanager/latest/userguide/data-protection.html> [https://docs.aws.amazon.com/secretsmanager/latest/userguide/auth-and-access\\_resource-policies.html](https://docs.aws.amazon.com/secretsmanager/latest/userguide/auth-and-access_resource-policies.html) <https://docs.aws.amazon.com/secretsmanager/latest/userguide/security-encryption.html>

**Comment:** AWS Secrets Manager (Option C) is designed for exactly this kind of use case, providing built-in functionality for secure storage and retrieval of secrets with minimal management overhead, especially for managing access tokens and cross-account access. Amazon S3 with KMS (Option D), while familiar and powerful, requires more manual work to set up and manage the security aspects, which can lead to increased overhead in comparison to Secrets Manager. Given that the goal is to have the least management overhead, Option C is the best fit because it is purpose-built for managing secrets and automates much of the complexity involved in secure storage and retrieval.

**Comment:** C is the correct answer as the Secrets Manager supports resource-based policies, allowing you to grant access to other AWS accounts easily.

**Comment:** C is correct answer.

**Comment:** C is the correct answer.

**Comment:** Did the exam, thanks to my experience in AWS I passed the exam, Most of the questions are new, only few questions were from here.

**Comment:** I am very happy as I just got my AWS Certified Developer - Associate - Specialty DVA-C02 Exam results today and I passed it with a great score of 90%.

#### Replies:

**Comment:** Is this dump still valid?

**Comment:** This is the correct answer for lease overhead to manage the secret key

**Comment:** It is C

**Comment:** - Option A involves using AWS Systems Manager Parameter Store, which can work but requires additional configuration and doesn't offer some of the benefits tailored for secrets management like automatic rotation. - Option B involves storing the access token in DynamoDB, which is not specifically designed for secrets management, and managing encryption and decryption manually using AWS KMS. - Option D involves using S3, which again is not designed for secrets management, and adds complexity in managing access policies and permissions. Additionally, accessing the token would involve reading from S3, decrypting it, and then using it, which is less straightforward compared to using a service like Secrets Manager.

**Comment:** I think this would be A as this is cheaper than C. Any reason why A can not be the answer?

#### Replies:

**Comment:** From what I can find, You can apply resource-based policies at the Parameter Store level to control access to the entire Parameter Store service. However, you cannot apply resource-based policies directly to individual parameters within the Parameter Store. That is seemingly the only reason I would choose C over A. But were also not looking for whats cheapest, were looking for whats easiest to manage

**Comment:** 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.

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

**Comment:** customer managed key , its an extra work. So I am confused with option A and C

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## Discussion for Question 2

Link: <https://www.examttopics.com/discussions/amazon/view/102782-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- D: 29 votes

### Discussion

**Comment:** 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>

#### Replies:

**Comment:** thanks a lot

**Comment:** This question came in exam. Correct answer is D.

**Comment:** The correct answer is D.

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

**Comment:** D is correct answer.

**Comment:** D is the correct answer.

**Comment:** 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

**Comment:** My answer is D

**Comment:** Answer C is correct

**Comment:** 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?

**Comment:** 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.

#### Replies:

**Comment:** 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

**Comment:** The correct answer is D. <https://docs.aws.amazon.com/eventbridge/latest/userguide/eb-cross-account.html>

**Comment:** 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.

**Comment:** 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.

**Comment:** 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

**Comment:** 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

**Comment:** I think the answer to this question is also A.

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## Discussion for Question 3

**Link:** <https://www.examtopycs.com/discussions/amazon/view/102788-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- D: 19 votes

### Discussion

**Comment:** The correct answer is D

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

**Comment:** D you benchods. It says cognito in the question motherchods

**Comment:** D is correct answer.

**Comment:** D is the correct answer.

**Comment:** The identity prefix in Amazon Cognito allows you to create a unique identity for each user. This prefix can be used as part of the IAM policy to control access at a more granular level. I would have said C but that is kind of a custom solution that is both more overhead and more prone to error

**Comment:** D is the answer

**Comment:** B can work but does not provide the same level of security as D

**Comment:** I consider between B & D

**Comment:** Answer D is correct

**Comment:** 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.

#### Replies:

**Comment:** Implementing custom authentication / authorization solution is extremely bad practice. Any developers is prone to mistakes. It's always better to trust the dedicated solution. Thus option C is definitely not the correct one.

**Comment:** This solution ensures that users can access only their own files in a secure manner.

**Comment:** Answer D: <https://docs.aws.amazon.com/cognito/latest/developerguide/amazon-cognito-integrating-user-pools-with-identity-pools.html>

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## Discussion for Question 4

**Link:** <https://www.examtopycs.com/discussions/amazon/view/102789-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 28 votes

### Discussion

**Comment:** Got this question in exam,Correct answer is B.

**Comment:** The correct answer is B.

**Comment:** B is correct answer.

**Comment:** B is the correct answer.

**Comment:** its clearly mention orchestration , sequence and multiple processing and transformations

**Comment:** StepFunctions, es el servicio recomendado para orquestar. B correcto

**Comment:** B is correct

**Comment:** Answer is B. Step Function is about orchestrating workflows

**Comment:** My answer is B

**Comment:** B is correct

**Comment:** Best option: B

**Comment:** b init

**Comment:** 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.

**Comment:** check the link below: <https://docs.aws.amazon.com/lambda/latest/operatorguide/orchestration.html>

#### Replies:

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

#### Replies:

**Comment:** Thanks. You're right.

**Comment:** 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.

**Comment:** 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.

**Comment:** I'm thinking B

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## Discussion for Question 5

**Link:** <https://www.examttopics.com/discussions/amazon/view/102783-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 29 votes

### Discussion

**Comment:** The correct answer is C.

**Comment:** Its c, who on earth would vote for D??

**Comment:** This question was on my exam July 23rd, 2024.

**Comment:** C is correct because the question does not contain any details about the placement of the resources in different availability zones hence making it obvious for users to assume they al are running in the same region and that's the reason why it makes sense that the Lambda execution role does not have the write permission for dynamodb table.

**Comment:** C is correct

**Comment:** C is the correct answer.

**Comment:** it mentions lambda is unable to write to Dynamodb and C seems most logical answer here

**Comment:** C. es correcto. En general para estos comportamientos, se debe a temas de permisos.

**Comment:** C is correct

**Comment:** It is C

**Comment:** Answer is C

**Comment:** Why the correct answer is D? All of us think C must be the correct answer

**Comment:** 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..

**Comment:** I think C is correct.

**Comment:** correct answer is C

**Comment:** 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.

**Comment:** correct answer is C

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## Discussion for Question 6

**Link:** <https://www.examttopics.com/discussions/amazon/view/102784-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- D: 37 votes

### Discussion

**Comment:** 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.

#### Replies:

**Comment:** quite much clear explanation !!!

**Comment:** Got this question in exam Correct answer is D.

**Comment:** D is correct

**Comment:** D is the correct answer.

**Comment:** Correcta D. Con este parámetro se permite dar permisos de elegir el tipo de instancia.

**Comment:** option D is correct

**Comment:** 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

**Comment:** D is correct

**Comment:** D is the correct, because you are restricting the possible options to that parameter

**Comment:** 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

#### Replies:

**Comment:** This answer is for question 7 not 6

**Comment:** D looks about right

**Comment:** It should be D

**Comment:** D <https://www.examtopycs.com/discussions/amazon/view/88788-exam-aws-certified-developer-associate-topic-1-question-343/>

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## Discussion for Question 7

**Link:** <https://www.examtopycs.com/discussions/amazon/view/102785-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- BD: 66 votes
- BC: 42 votes

### Discussion

**Comment:** (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/ProgrammingErrors.html#ProgrammingErrors.RetryAndBackoff>

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

#### Replies:

**Comment:** C already handles retries, why would want to do that manually?

**Comment:** BC is the correct answer.

**Comment:** [https://docs.aws.amazon.com/amazondynamodb/latest/APIReference/API\\_BatchGetItem.html](https://docs.aws.amazon.com/amazondynamodb/latest/APIReference/API_BatchGetItem.html)  
<https://docs.aws.amazon.com/amazondynamodb/latest/developerguide/ProgrammingErrors.html#ProgrammingErrors.RetryAndBackoff>

**Comment:** BC is the correct answer.

**Comment:** among B C D, it is hard to say D copes with the problem directly I guess. Increasing RCU will affects the ratio of unprocessed items but that does not mean it handles the unprocessed items.

**Comment:** B,D. La combinación de estrategias es ideal para este comportamiento

**Comment:** B,D is correct

**Comment:** the aws documentation for unprocessedkeys reads: "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." Therefore I am taking the two options that provide this functionality. [https://docs.aws.amazon.com/amazondynamodb/latest/APIReference/API\\_BatchGetItem.html](https://docs.aws.amazon.com/amazondynamodb/latest/APIReference/API_BatchGetItem.html)

**Comment:** B & D is correct

**Comment:** According to AWS docs, the answer is B and D

**Comment:** Exponential backoff with randomized delay is a common technique used to handle transient failures and throttle errors in distributed systems like DynamoDB. This approach involves retrying the failed operation after waiting for an increasing amount of time, which helps reduce the load on the service and increases the likelihood of success during periods of high demand or throttling. If the BatchGetItem operation frequently returns values in the UnprocessedKeys element, it indicates that the table's read capacity might be insufficient to handle the requested workload. By increasing the provisioned read capacity for the DynamoDB tables, the application can better handle the read throughput requirements and reduce the likelihood of encountering UnprocessedKeys in batch responses. AWS SDK might provide additional features and simplifications for making requests, it does not directly address the issue of UnprocessedKeys in batch responses. This option might be beneficial for improving code maintainability and leveraging SDK features however.

**Comment:** BC ...No discussion

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

**Comment:** Correct answer is B & D B- <https://docs.aws.amazon.com/amazondynamodb/latest/developerguide/ProgrammingErrors.html#ProgrammingErrors.BatchOperations> D - [https://docs.aws.amazon.com/amazondynamodb/latest/APIReference/API\\_BatchGetItem.html](https://docs.aws.amazon.com/amazondynamodb/latest/APIReference/API_BatchGetItem.html)

**Comment:** 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.

**Comment:** 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 frequently keyword in the question. If UnprocessedKeys error occurs frequently, DynamoDB doesn't have enough capacity to process requests. So read capacity should be increased.

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## Discussion for Question 8

**Link:** <https://www.examtopycs.com/discussions/amazon/view/102786-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 19 votes

### Discussion

**Comment:** B <https://docs.aws.amazon.com/xray/latest/devguide/xray-daemon.html>

**Comment:** This question was on my exam July 23rd, 2024.

**Comment:** B is the correct answer.

**Comment:** B. El daemon, es una capacidad propia de X-Ray, para instalar directamente

**Comment:** B is correct

**Comment:** B, you should to install the X-Ray daemon in on-premises without this all others option is wrong

**Comment:** The answer is obviously B.

**Comment:** 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.

**Comment:** Got this question in exam. Correct answer is B.

**Comment:** . 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.

**Comment:** It's B

**Comment:** B: It is Daemon which can be installed for Linux

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

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## Discussion for Question 9

**Link:** <https://www.examtopycs.com/discussions/amazon/view/103334-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 57 votes

### Discussion

**Comment:** answer A

**Comment:** Why B is marked as correct ????

#### Replies:

**Comment:** Why is developer being a benchod? A, b, c or d?

**Comment:** Got this question was on my exam July 23rd, 2024.

#### Replies:

**Comment:** what was the answer. B?

**Comment:** B is certainly a wrong answer because if you read the application development with AWS case study and also the best practices then in it the AWS itself does not encourage the developer to store the sensitive API and license keys in code on the other hand it encourages to use the provided solutions like KMS, Secrets Manager and Parameter Store.

**Comment:** A is correct. B is wrong because you never store credentials in source control.

**Comment:** Most secure

**Comment:** A is the correct answer.

**Comment:** A is it

**Comment:** Straight A

**Comment:** A is correct

**Comment:** B isn't security A is the best option for this scenario

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

**Comment:** Answer A

**Comment:** A seems to be the most secure and correct. Always use Secret Manger to store secrets, as the name implies.

**Comment:** A is correct

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

**Comment:** parameter store is secure, so A

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## Discussion for Question 10

**Link:** <https://www.examtopycs.com/discussions/amazon/view/103335-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 17 votes

### Discussion

**Comment:** Got this question in exam. Correct answer is A.

**Comment:** The application has credentials and URL, so it's convenient to store them in ssm parameter store restive them.

**Comment:** This question was on my exam July 23rd, 2024.

**Comment:** A is the correct answer.

**Comment:** SSM parameter store with proper posh is the answer.

**Comment:** Answer is A AWS Systems Manager Parameter Store and AWS Secrets Manager are designed for securely storing and managing sensitive information such as credentials, API URLs, and configuration variables. Using AWS Systems Manager Parameter Store allows the developer to centrally manage configuration variables across different environments (development, testing, production) without requiring application code changes. Each variable can have a unique path in Parameter Store, ensuring separation and organization.

**Comment:** 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.

**Comment:** You put the different variables for each environment, is the best solution because it's isolated between environment

**Comment:** i think corrent is A, but why is B ?

**Comment:** 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."

**Comment:** A is correct

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

**Comment:** 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.

**Comment:** 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.

**Comment:** A; that's what Parameters Store is for.

**Comment:** Definitely A

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

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## Discussion for Question 11

**Link:** <https://www.examttopics.com/discussions/amazon/view/102787-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 22 votes

### Discussion

**Comment:** 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.

**Comment:** A: Base 64 is a distraction. You can use encryption at rest using KMS for most things. Would you store photos in DynamoDB? Would be silly C. Cognito has nothing to do with the question. Question is asking about searching for employee details D. Could work, but seems convoluted. Relational DBs are easily searchable, but how would you link the db to the image in EC2? B is the simplest and correct answer here.

**Comment:** Got This question was on my exam July 23rd, 2024. Answer is B

**Comment:** B is the correct answer.

**Comment:** Answer is B

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

**Comment:** DynamoDb + S3 is the best option for those scenarios

**Comment:** 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.

**Comment:** 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

**Comment:** 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.

**Comment:** Agreed with B

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

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## Discussion for Question 12

**Link:** <https://www.examttopics.com/discussions/amazon/view/103439-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 23 votes

### Discussion

**Comment:** 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/>

**Comment:** Got this question in exam.

**Comment:** B is the correct answer.

**Comment:** No question, Answer is B

**Comment:** Definitly do not add all users manually, so that rules out C and D. You wouldnt use DynamoDB to store the photos because DynamoDB limits the size of each item that you store in a table to 400 KB. So that rules out A

**Comment:** It's easier if you leverage all pros of Amazon Cognito you don't need creating a IAM user by employeeer

**Comment:** 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

**Comment:** Cognito, Item size in dynamodb is less than this scenario

**Comment:** B is the most valid solution. A nearest, but invalid, because you cannot store object in Dynamo.

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## Discussion for Question 13

**Link:** <https://www.examttopics.com/discussions/amazon/view/103442-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 35 votes

### Discussion

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

**Comment:** 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.

**Comment:** because of the fact that By default, you can have up to 200 filter policies per topic, the C option can't be the wright answer, but it's the A choice. since we can go up to 100 00 topics per SNS

### Replies:

**Comment:** With C, if it's more that 200 partners, we could create another SNS for the next 200 partners. so it couls support up to 2000000 partners.

**Comment:** A works, but C is better, benchods. More efficient. Have to remember good curry cannot be had in a hurry

**Comment:** <https://docs.aws.amazon.com/sns/latest/dg/example-filter-policies.html>

**Comment:** C is the correct answer.

**Comment:** Funny understand why some people want to create separate SNS for each partner. You have got the option to filter and send notifications to the appropriate partner.

**Comment:** Answer is C ... No Question

**Comment:** 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

#### Replies:

**Comment:** the best answer

**Comment:** You can using a filter policy to just sent the info by partner

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

**Comment:** 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 paters

**Comment:** 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.

#### Replies:

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

#### Replies:

**Comment:** This part of C seems to meet that requirement: Apply the appropriate filter policy to the topic subscriptions.

**Comment:** Cannot be A. It requires change of lambda function code to send notifications to new SNS topics for new partners. Not a scalable solution.

**Comment:** Got this question in exam. Correct answer is C.

**Comment:** C is the answer

**Comment:** 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.

#### Replies:

**Comment:** You apply message filtering on the SNS so they recieve only their messages, think C is the correct answer

**Comment:** C is the best answer. A would work but is less scalable as you have to create new topics for each new partner.

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## Discussion for Question 14

**Link:** <https://www.examtopycs.com/discussions/amazon/view/102741-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 21 votes

### Discussion

**Comment:** 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

#### Replies:

**Comment:** Thanks for the info. Great heads up!

**Comment:** C <https://aws.amazon.com/s3/features/object-lambda/>

**Comment:** <https://aws.amazon.com/s3/features/object-lambda/> With S3 Object Lambda, you can add your own code to S3 GET, HEAD, and LIST requests to modify and process data as it is returned to an application. You can use custom code to modify the data returned by S3 GET requests to filter rows, dynamically resize images, redact confidential data, and much more.

**Comment:** <https://docs.aws.amazon.com/AmazonS3/latest/userguide/transforming-objects.html>

**Comment:** This appear at 17 Jun exam

**Comment:** C is the correct answer.

**Comment:** <https://docs.aws.amazon.com/AmazonS3/latest/userguide/olap-create.html>

**Comment:** Why is it C?

**Comment:** Got this question in exam. Correct answer is C.

**Comment:** C answer

**Comment:** It is C

**Comment:** C <https://www.examtopycs.com/discussions/amazon/view/88229-exam-aws-certified-developer-associate-topic-1-question-174/>

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## Discussion for Question 15

**Link:** <https://www.examtopycs.com/discussions/amazon/view/102742-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 15 votes

### Discussion

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

**Comment:** B is the correct answer.

**Comment:** c ra unga amma

**Comment:** B is the least overhead solution

**Comment:** Got this question in exam. Correct answer is B.

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

**Link:** <https://www.examttopics.com/discussions/amazon/view/103444-exam-aws-certified-developer-associate-dva-c02-topic-1/>

- B: 39 votes

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

**Link:** <https://www.examttopics.com/discussions/amazon/view/102743-exam-aws-certified-developer-associate-dva-c02-topic-1/>

- B: 44 votes

**Comment:** 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.



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

**Comment:** 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.

#### Replies:

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

**Comment:** From the below link: <https://docs.aws.amazon.com/codedeploy/latest/userguide/reference-appspec-file-structure-hooks.htm#appspec-hooks-server> Neither type of deployment follows this order. BeforeInstall -> ApplicationStop -> AfterInstall -> ApplicationStart

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## Discussion for Question 18

**Link:** <https://www.examttopics.com/discussions/amazon/view/103466-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 25 votes

### Discussion

**Comment:** 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.

**Comment:** 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>

**Comment:** This appear at 17 Jun exam

**Comment:** B is the correct answer.

**Comment:** Require "near real-time" notification, so you should not use scheduled solution. Creating a new SNS topic is no sense.

#### Replies:

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

**Comment:** 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.

**Comment:** It is B

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## Discussion for Question 19

**Link:** <https://www.examttopics.com/discussions/amazon/view/103467-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 41 votes

### Discussion

**Comment:** 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.

#### Replies:

**Comment:** I agree

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

**Comment:** This question was on my exam July 23rd, 2024. Answer is A

**Comment:** A is the correct answer.

**Comment:** Answer is A. Caching will enhance the responsiveness of the APIs.

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

**Comment:** can someone please share pdf file with me at[[email protected](mailto:email protected)]. I have my exam next week. Thanks in advance beautiful people.

**Comment:** 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 anomalous usage.

**Comment:** A-> Caching frequently accessed api calls allows reducing process time every time api is called. B-> You should configure VPC if you want to change network security of your application. So it does not necessarily increase the performance. C-> CORS (Cross Origin Resource Sharing), allows you to process the api calls that comes from outside of your AWS organization. Again nothing to do with the performance. One of the use cases 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

**Comment:** I vote for A

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

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## Discussion for Question 20

**Link:** <https://www.examttopics.com/discussions/amazon/view/103468-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 28 votes

### Discussion

**Comment:** 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.

**Comment:** This question was on my exam July 23rd, 2024. Answer is A

**Comment:** A is mostly correct , but I do see one problem there because in one year there can be same title movies can come which invalidate our primary key having title as partition key and year as a. Sort. key

**Comment:** A is the correct answer.

**Comment:** 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 scenary with genre so you should creating a GSI with genre (pk) and title (sk)

**Comment:** Go with A. NoSQL is good when data attributes are inconsistent -> DynamoDB Primary key should be unique, go with title + release year.

**Comment:** 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.

**Comment:** 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.

**Comment:** 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

**Comment:** 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.

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## Discussion for Question 21

**Link:** <https://www.examt topics.com/discussions/amazon/view/102899-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 24 votes

### Discussion

**Comment:** 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.

#### Replies:

**Comment:** Thank you!

**Comment:** A is correct as the Q asked for 'with the LEAST operational overhead' C got less operation than B but more than A

**Comment:** It is A you chutiya

**Comment:** This question was on my exam July 23rd, 2024. Answer is A

**Comment:** A is the correct answer.

**Comment:** B ra unga amma

**Comment:** The correct answer is A (development stage). You can configure a development stage for your API Gateway API and then integrate it with the new version of the backend functionality that has new endpoints and backward-incompatible interface changes. The customers can continue to use the existing API.

**Comment:** The option that meets the requirements with the least operational overhead is: 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. Here's why: A. Defining a development stage on the existing API Gateway API could potentially affect customers if not managed properly. It might introduce changes or issues to the existing API that customers are using. C. Implementing a query parameter in the API application code to determine the code version introduces complexity and potential risk, as it requires changes to the application code itself. It also doesn't isolate the beta access from the main API. D. Specifying new API Gateway endpoints for the new API endpoints adds complexity and overhead. It requires managing multiple endpoints, potentially affecting the API's simplicity and increasing maintenance overhead.

**Comment:** A is answer

**Comment:** LEAST operational overhead would be B.

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

**Comment:** The best practice is to define a development stage.

**Comment:** 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.

**Comment:** 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

**Comment:** A <https://docs.aws.amazon.com/apigateway/latest/developerguide/set-up-stages.html> <https://docs.aws.amazon.com/apigateway/latest/developerguide/canary-release.html>

**Comment:** A <https://www.examt topics.com/discussions/amazon/view/88872-exam-aws-certified-developer-associate-topic-1-question-318/>

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## Discussion for Question 22

**Link:** <https://www.examt topics.com/discussions/amazon/view/103644-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 37 votes

### Discussion

**Comment:** 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/>

#### Replies:

**Comment:** in sum, REDIS featured encryption, PCI-DSS MemCache support AutoDiscovery

#### Replies:

**Comment:** Both supported encryption, but MemCache doesn't support 'sort or rank'

**Comment:** 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.

**Comment:** This question was on my exam July 23rd, 2024. Answer is A.

**Comment:** This appear at 17 Jun exam

**Comment:** A is the correct answer.

**Comment:** Sorted Sets in ElastiCache redis can do this job.

**Comment:** Redis is the best option to cached the results of queries and it also offer a encryption in-transit and at-rest

**Comment:** 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.

**Comment:** 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/>

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## Discussion for Question 23

**Link:** <https://www.examtactics.com/discussions/amazon/view/102900-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 12 votes

### Discussion

**Comment:** Why is not there EFS to replace shared file system

#### Replies:

**Comment:** Windows legacy application

**Comment:** This is what I was looking for - but not an option

#### Replies:

**Comment:** EFS would not have been an option. It does not work for Linux: <https://docs.aws.amazon.com/AWSEC2/latest/WindowsGuide/AmazonEFS.html>

**Comment:** it is best solution. But we can use S3 without EFS

**Comment:** 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.

**Comment:** i think EFS should be added to answer

**Comment:** C is the correct answer.

**Comment:** S3 mountpoint does not support editing files or deleting directories. So the answer is C

**Comment:** D since we have s3 mountpoint available now <https://aws.amazon.com/about-aws/whats-new/2023/03/mountpoint-amazon-s3/> <https://docs.aws.amazon.com/AmazonS3/latest/userguide/mountpoint.html>

**Comment:** 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.

**Comment:** 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>

#### Replies:

**Comment:** Your solution overcomplicates things.

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

**Comment:** 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

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

#### Replies:

**Comment:** C S3 Buckets can only be mounted directly to Linux EC2 instances

#### Replies:

**Comment:** 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>

**Comment:** Correct answer is C

**Comment:** In these options, this is more correct

**Comment:** C <https://docs.aws.amazon.com/AWSEC2/latest/WindowsGuide/AmazonS3.html> <https://docs.aws.amazon.com/AmazonS3/latest/userguide/UsingAWSSDK.html>

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

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## Discussion for Question 24

**Link:** <https://www.examtactics.com/discussions/amazon/view/103646-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 25 votes

### Discussion

**Comment:** 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.

#### Replies:

**Comment:** thanks a ton for all the explanations!

**Comment:** 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.

**Comment:** Amplify hosting provides a git based workflow for hosting full stack server less applications with continuous deployment.

**Comment:** A is the correct answer.

**Comment:** Amplify is the best option here to host website / static site as well with Hosting Environment option which can pull code from github, codecommit and bitbucket. Webapp Hosting can be for different envs like Prod, Dev etc. This gives serverless hosting option along with HTTPS. S3 static website hosting has no HTTPS and EB and EC2 are running instances.

**Comment:** Check About AWS Amplify Hosting

**Comment:** 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.

**Comment:** 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.

**Comment:** Static Website should be C ...using S3

#### Replies:

**Comment:** Sadly Static Web Hosting on S3 does not supports HTTPS . So Response is A :-> <https://docs.aws.amazon.com/AmazonS3/latest/userguide/WebsiteHosting.html>

#### Replies:

**Comment:** that is critical key !! thanks a lot.

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## Discussion for Question 25

**Link:** <https://www.examttopics.com/discussions/amazon/view/103510-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 33 votes

### Discussion

**Comment:** Option C provides the most straightforward and effective solution for improving read performance with minimal changes to the current application code and the least ongoing maintenance effort. Deploying read replicas allows for scaling read capacity and distributing read traffic efficiently.

**Comment:** Option C is wrong because deploying a read replica will be more effort then just enabling the multi-AZ with RDS and also the multi-AZ is meant for high availability that's why option B is correct.

**Comment:** C is the correct answer.

**Comment:** Option A and B are both talking about Multi AZ RDS instance which gives Primary and Secondary(Non Read Replica). This is good for high availability but will not help in reads. Read replica or Multi AZ Cluster deployment is the only option to achieve high reads.

**Comment:** C it is as it clearly mentions they want to achieve optimum read performance

**Comment:** C forever

**Comment:** C... No Question

**Comment:** C. El uso de replicas de lectura, aliviana las consultas intensivas sobre la BD principal

**Comment:** 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

#### Replies:

**Comment:** ni mada ra

**Comment:** Read heavy access need read replicas as the right solution.

**Comment:** Keyword: heavy read

**Comment:** Read Replicas for high performance read operations

**Comment:** Keyword: Achieve Optimum read performance for queries. Answer: Use Read Replicas and use that specific URL for read queries.

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

**Comment:** C answer

**Comment:** C answer

**Comment:** It's C.

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## Discussion for Question 26

**Link:** <https://www.examttopics.com/discussions/amazon/view/103656-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 42 votes

### Discussion

**Comment:** 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.

**Comment:** 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/>

**Comment:** Why not C? According to the question "During periods of request throttling, the application might need to retry requests", this indicate that lambda should returns client error, so the application can make another retry request to fix the problem

#### Replies:

**Comment:** because c don't mention about retry actions

**Comment:** same doubt

**Comment:** B is the correct answer.

**Comment:** Consistency: Memcached does not provide built-in support for atomic operations or conditional writes like DynamoDB does. Handling duplicate requests and ensuring consistency would require additional application logic and complexity.

**Comment:** 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 DynamoDB.

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## Discussion for Question 27

**Link:** <https://www.examttopics.com/discussions/amazon/view/102901-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 33 votes

### Discussion

**Comment:** 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.

**Comment:** 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.

**Comment:** Regarding B: Once an AMI is created, encryption configuration cannot be changed, you need to create a new one and enable encryption. Another point: if you are planning to share the AMI between accounts, you cannot use AWS managed keys.

**Comment:** Option A ensures all AMIs are encrypted before they are copied to the destination region, meeting the encryption requirement and providing a clear and compliant process for expanding the application to multiple AWS Regions.

**Comment:** A is the correct answer.

**Comment:** Encryption of an Amazon Machine Image (AMI) is typically tied to the underlying Amazon Elastic Block Store (EBS) snapshots that are associated with the AMI. When you create an AMI, you have the option to specify encryption parameters. If you choose to encrypt the root volume, the resulting AMI will be encrypted. This encryption setting applies to both the root volume and any additional EBS volumes attached to the instance. The encryption status of an EBS snapshot is determined at the time of snapshot creation. Once a snapshot is created, its encryption status remains constant. If you want to encrypt a snapshot, you typically need to create a new snapshot from an encrypted volume. Once an AMI is created, you generally cannot modify its encryption status directly. If you need to change the encryption status, you might need to create a new AMI from an encrypted snapshot.

**Comment:** 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.

**Comment:** C. ACM is about SSL/TLS. 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.

**Comment:** 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

### Replies:

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

**Comment:** kms keys are 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

**Comment:** 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.

**Comment:** Answer is B check this link <https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/CopyingAMIs.html#ami-copy-encryption>

### Replies:

**Comment:** 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.

**Comment:** 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.

**Comment:** 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>

**Comment:** Answer A. For any AMI copy to be encrypted the source AMI should be encrypted first. You can't encrypt the copy of the AMI if the source is not encrypted.

**Comment:** <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."

### Replies:

**Comment:** 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.

**Comment:** A. Is the correct answer.

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## Discussion for Question 28

**Link:** <https://www.examttopics.com/discussions/amazon/view/102902-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 11 votes

### Discussion

**Comment:** 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>

**Comment:** C. The question described is a classic case of Cross-Origin Resource Sharing (CORS) where the browser blocks resources (like JavaScript files and web fonts) that are loaded from a different origin (the central S3 bucket) than the web application. To resolve this, a CORS configuration needs to be added to the central S3 bucket to allow these resources to be accessed from the different origins of the web applications.

**Comment:** C is the correct answer.

**Comment:** The answer is C for cat

**Comment:** It is C

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

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## Discussion for Question 29

**Link:** <https://www.examtopycs.com/discussions/amazon/view/102903-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- AC: 14 votes

### Discussion

**Comment:** 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](https://docs.aws.amazon.com/kinesis/latest/APIReference/API_PutRecords.html)

**Comment:** AC is the correct answer.

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

**Comment:** 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.

### Replies:

**Comment:** 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>

**Comment:** 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.

**Comment:** A and C <https://aws.amazon.com/premiumsupport/knowledge-center/kinesis-data-stream-throttling-errors/>

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

### Replies:

**Comment:** thanks a lotttt!

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## Discussion for Question 30

**Link:** <https://www.examtopycs.com/discussions/amazon/view/102904-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 10 votes

### Discussion

**Comment:** 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.

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

**Comment:** B is the correct answer.

**Comment:** Amazon Cognito user pools integrate with API Gateway or ALB Process is: user authenticate with CUP, receive JWT (token), then pass to API Gateway API Gateway will evaluate JWT wwith CUP, if it is valid, allow access to Lambda (have a duty to send email)

### Replies:

**Comment:** sorry I change to B Because the question have the presence of MFA

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

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## Discussion for Question 31

**Link:** <https://www.examtopycs.com/discussions/amazon/view/103513-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 17 votes

### Discussion

**Comment:** 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.

### Replies:

**Comment:** Thank you! Setting the x-amz-server-side-encryption header to: - AES256 => SSE-S3 - AWS:KMS => SSE-KMS

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

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

**Comment:** B is the correct answer.

**Comment:** Answer is B

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

### Replies:

**Comment:** I misread the question. It's all good.

**Comment:** 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>

### Replies:

**Comment:** what is correct answer then?

#### Replies:

**Comment:** because it takes some time for exam questions to be updated

**Comment:** Header parameter "s3x-amz-server-side-encryption": "AES256"

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

**Comment:** 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.

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## Discussion for Question 32

**Link:** <https://www.examttopics.com/discussions/amazon/view/103515-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 22 votes

### Discussion

**Comment:** 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.

**Comment:** 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>

**Comment:** B according to chatgpt :)

**Comment:** B is the correct answer.

**Comment:** in desired Regions better than in each Region.

**Comment:** 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

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

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## Discussion for Question 33

**Link:** <https://www.examttopics.com/discussions/amazon/view/103664-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- D: 53 votes

### Discussion

**Comment:** 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>

**Comment:** 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>

**Comment:** D is the correct answer.

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

**Comment:** Import cert in the same region

**Comment:** 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.

**Comment:** 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).

**Comment:** 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

**Comment:** 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>

**Comment:** Selected Answer: D A is not right because for cloudfront you create a CNMA 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

**Comment:** 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 g Edge-Optimized endpoint, the certificate must be in us-east-1.

#### Replies:

**Comment:** 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)."

**Comment:** The ACM has to be implemented at US-East-1

**Comment:** 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.

**Comment:** 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.

**Comment:** 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.

**Comment:** I was thinking this answer would be C

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## Discussion for Question 34

**Link:** <https://www.examttopics.com/discussions/amazon/view/103517-exam-aws-certified-developer-associate-dva-c02-topic-1/>

## Most Voted

- C: 10 votes

## Discussion

**Comment:** 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.

### Replies:

**Comment:** your explanation helps me a lot !

**Comment:** C <https://aws.amazon.com/serverless/sam/>

**Comment:** C is the correct answer.

**Comment:** 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

**Comment:** C is the answer

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## Discussion for Question 35

**Link:** <https://www.examtopycs.com/discussions/amazon/view/103519-exam-aws-certified-developer-associate-dva-c02-topic-1/>

## Most Voted

- B: 10 votes

## Discussion

**Comment:** 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.

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

**Comment:** B is the correct answer.

**Comment:** 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.

**Comment:** It is B

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## Discussion for Question 36

**Link:** <https://www.examtopycs.com/discussions/amazon/view/103521-exam-aws-certified-developer-associate-dva-c02-topic-1/>

## Most Voted

- AB: 23 votes

## Discussion

**Comment:** 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.

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

**Comment:** AB is the correct answer.

**Comment:** A and B, A is straightforward. For B, within stack policy you can deny update to logical resource for RDS DB. This will prevent any updates to stack resource which could also erase and create new RDS instance.

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

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

**Comment:** D & A for me

**Comment:** A and B

**Comment:** A & B Correct Answer

**Comment:** D because grandma said?

**Comment:** A B CORRECT

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

### Replies:

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

**Comment:** 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>

**Comment:** I agree it is AB

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## Discussion for Question 37

**Link:** <https://www.examtopycs.com/discussions/amazon/view/103850-exam-aws-certified-developer-associate-dva-c02-topic-1/>

## Most Voted

- A: 16 votes



## Discussion

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

**Comment:** A is correct.

**Comment:** A is the correct answer.

**Comment:** A is correct.

**Comment:** Hesitate between A and D. Question is not clear on whether we want to block all the information or only the sensitive part.

**Replies:**

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

**Comment:** 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.

**Comment:** A is correct.

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## Discussion for Question 38

**Link:** <https://www.examttopics.com/discussions/amazon/view/103522-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 20 votes

## Discussion

**Comment:** 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.

**Replies:**

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

**Comment:** 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.

**Replies:**

**Comment:** Not true: [https://docs.aws.amazon.com/AmazonS3/latest/API/API\\_ListObjectsV2.html](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.

**Replies:**

**Comment:** Answer is A: The question is not stating the the list of buckets cannot be seen but the objects within the lists cannot be seen. Seems the dev already has the s3:ListBucket option its the objects part that is missing.

**Comment:** B is the correct answer.

**Comment:** B is correct, Question is asking for lists the objects that are stored in the S3 bucket. s3:ListBucket gives bucket level objects list.

**Comment:** The correct answer is B. Option A works as well but only listing the files is mentioned as requirement.

**Comment:** 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](https://docs.aws.amazon.com/AmazonS3/latest/API/API_ListObjectsV2.html)

**Comment:** Can someone email me a pdf of the questions (DVA-C02 & DVA-C01) at [email protected] Thanks in advance!

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

**Replies:**

**Comment:** 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" } ] }

**Comment:** A violated least privilege principle so B

**Comment:** 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>

**Comment:** 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>

**Comment:** It is B

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## Discussion for Question 39

**Link:** <https://www.examttopics.com/discussions/amazon/view/103913-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 10 votes

## Discussion

**Comment:** 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.

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

**Comment:** C is the correct answer.

**Comment:** It said 'one-time fixed license keys' and 'MOST cost-effectively', so C is better

**Comment:** C seems the best fit.

**Comment:** 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.

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

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## Discussion for Question 40

Link: <https://www.examtopycs.com/discussions/amazon/view/103523-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 35 votes

### Discussion

**Comment:** ooooh this one was rough. I am going with A --> <https://repost.aws/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 the 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..."

**Comment:** 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

**Comment:** this one is badly written hehe I would say A, but they missed to mention that this only works securely if the secgroup is listed as destination of the rules. B would also work, but you need to properly configure it....

**Comment:** Correction answer should be option C. Lambda function, configure VPC1 access, and assign separate security groups: Lambda Function: Associate the Lambda function with VPC1. Security Group (SG1): Assign SG1 to the Lambda function. Security Group (SG2): Assign a second security group (SG2) to the Aurora database. Inbound Rule: Add an inbound rule to SG1 to allow TCP traffic from Port 3306 (Aurora database port). This approach ensures proper separation of concerns and simplifies security group management.

**Comment:** This appear at 17 Jun exam

**Comment:** A is the correct answer.

**Comment:** A seems the answer, although a single SG for both the DB and Lambda is not a great practice. I would go with 2 SGs.

**Comment:** Security groups are statefull so you dont need to specify both inbound and outbound rules. However, you should have security groups on both resources as a best practice, and I dont think it is enough to have an inbound rule just on the lambda security group in this case. This would essentially give the DB access to send traffic to the lambda function, rather than the lambda function accessing data from the DB like we want. If the lambda function doesnt have a permission on its security group letting it access the DB, then it will never communicate with it unless the DB contacts it first. If C had placed the inbound permission on the DB, or if it had placed the outbound permission on the lambda then I think it would be right. So while the wording is a little confusing, I think A is correct

**Comment:** 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.

**Comment:** 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.

### Replies:

**Comment:** if it were private maybe... but public so this answer definitely wrong

**Comment:** B is correct?

**Comment:** C, need 2 SG

### Replies:

**Comment:** 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

**Comment:** Need two security groups. One is for Lambda function. The other one is for DB

### Replies:

**Comment:** nonsense why would anyone want sql application port access to lambda?? A is the only naswer

**Comment:** A. right B. public, unsecure C. excessive connections D. additional cost and complexity

**Comment:** 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.

**Comment:** 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

**Comment:** [https://www.youtube.com/watch?v=UgWjbSixRg4&ab\\_channel=DevProblems](https://www.youtube.com/watch?v=UgWjbSixRg4&ab_channel=DevProblems)

## Discussion for Question 41

Link: <https://www.examtopycs.com/discussions/amazon/view/103858-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- BD: 21 votes

### Discussion

**Comment:** 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>

**Comment:** <https://docs.aws.amazon.com/apigateway/latest/developerguide/monitoring-cloudwatch.html>

**Comment:** BD is the correct answer.

**Comment:** 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.

## Discussion for Question 42

Link: <https://www.examtopycs.com/discussions/amazon/view/103914-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 15 votes

### Discussion

**Comment:** C <https://aws.amazon.com/codecommit/>

**Comment:** C is the correct answer.

**Comment:** Simple answer: CodeCommit

#### Replies:

**Comment:** yep. I hope to get this one

**Comment:** C is the right answer

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## Discussion for Question 43

**Link:** <https://www.examttopics.com/discussions/amazon/view/103915-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 18 votes

### Discussion

**Comment:** 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>

**Comment:** A is the correct answer.

**Comment:** 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.

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## Discussion for Question 44

**Link:** <https://www.examttopics.com/discussions/amazon/view/103916-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 18 votes

### Discussion

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

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

**Comment:** B is the correct answer.

**Comment:** 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>

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

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## Discussion for Question 45

**Link:** <https://www.examttopics.com/discussions/amazon/view/103708-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 39 votes

### Discussion

**Comment:** 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](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

**Comment:** 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.

#### Replies:

**Comment:** • <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.

**Comment:** A is the correct answer.

**Comment:** A should work

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

**Comment:** 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.

**Comment:** I think it should be A. Also can anyone advise why the two answers are different ? <https://www.examttopics.com/discussions/amazon/view/29007-exam-aws-certified-developer-associate-topic-1-question-26/>

**Comment:** 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>

**Comment:** 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

**Comment:** 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>

**Comment:** 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 :)

**Comment:** 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.

**Comment:** 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.

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

**Comment:** [https://docs.aws.amazon.com/us\\_en/lambda/latest/dg/python-context.html](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](https://docs.aws.amazon.com/us_en/lambda/latest/dg/python-logging.html)

**Comment:** A it is

**Comment:** I think the answer is A

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## Discussion for Question 46

Link: <https://www.examt topics.com/discussions/amazon/view/103917-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 17 votes

### Discussion

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

**Comment:** C is the correct answer.

**Comment:** A should work as well. Why is it not A?

**Comment:** 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.

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

## Discussion for Question 47

Link: <https://www.examt topics.com/discussions/amazon/view/103721-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- AC: 49 votes
- AE: 47 votes

### Discussion

**Comment:** 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 UserData 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 I/not complementary with any other options; 2/CodeDeploy takes time to execute. Hope this helps somebody struggling with this question.

#### Replies:

**Comment:** thanksss a lotta!

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

#### Replies:

**Comment:** I agree I think between A and B.- answer is B

**Comment:** 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.

**Comment:** 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.

#### Replies:

**Comment:** well if u choose B and E then this will resolve as well

**Comment:** B. While similar to A, this option includes installing the latest version of the application in the AMI. This is not ideal because it would require creating a new AMI every time the application is updated, which doesn't align with the requirement to minimize the number of images created.

**Comment:** B would require new images for each new app version. Idea is to minimize image creation, so A is a better fit. E does speed up the process, BUT does not cover the app version requirement, nor the necessity to validate images, which codedeploy covers.

**Comment:** IMO the correct answer is A and C. Having a well set up AMI will reduce the need to run a long userData script. Why not using B? Because that would couple the image with the app version. It is better to trigger a Code deploy that will deploy the latest version of the app on the 'optimized' AMI. Regarding answer E, it would also be correct IMO but A and C seems to be the perfect matching scenario

**Comment:** The solution must make the most recent version of the application available at all times. B doesn't make sense because "latest version at the time AMI is created" becomes outdated when a newer one comes. C is obviously needed to make the actual "latest" version deploy.

**Comment:** BE is the correct answer.

**Comment:** I choose BE. Is better response

**Comment:** The requirements are: 1. Decreasing the time it takes for EC2 instances to become available during scale-out events. 2. Ensuring the most recent version of the application is available. 3. Applying all available security updates. 4. Minimising the number of images created. [A] will satisfy requirements 1, 3, 4 [B] is similar to A, but will involve more AMI images [C] Since the applications are on EC2 instances, CodeDeploy will do just fine to update the applications to the most recent version [E] Removing any command for updates will leave our instances susceptible to vulnerabilities. Some commands can be removed, leaving the essential ones

**Comment:** B is faster than A. E delegates all run time to AMI build time on B option.

**Comment:** A and E. A because number of images needs to be minimized. E to speed up the boot time.

**Comment:** The most practical answers

**Comment:** going with ac

**Comment:** B would need a new image every time the application is updated, so it doesnt meet requirements. Obviously you should remove the thing that is causing the problem in the first place with E

**Comment:** 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.

**Comment:** 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.

**Comment:** AE is correct.

## Discussion for Question 48

Link: <https://www.examt topics.com/discussions/amazon/view/103918-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 12 votes

### Discussion

**Comment:** 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/create_database_secret.html)  
[https://docs.aws.amazon.com/secretsmanager/latest/userguide/retrieving-secrets\\_lambda.html](https://docs.aws.amazon.com/secretsmanager/latest/userguide/retrieving-secrets_lambda.html)

#### Replies:

**Comment:** "automatic rotation" "cross region" - Security Manager

**Comment:** C is the correct answer.

**Comment:** C. "credential rotation" = Security Manager

**Comment:** Option C. Keyword: Implementing credential rotation and secure storage.

**Comment:** 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/create_database_secret.html)  
[https://docs.aws.amazon.com/secretsmanager/latest/userguide/retrieving-secrets\\_lambda.html](https://docs.aws.amazon.com/secretsmanager/latest/userguide/retrieving-secrets_lambda.html)

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## Discussion for Question 49

**Link:** <https://www.examtactics.com/discussions/amazon/view/103919-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- D: 15 votes

### Discussion

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

**Comment:** Me toco en el examen

**Comment:** D is the correct answer.

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

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## Discussion for Question 50

**Link:** <https://www.examtactics.com/discussions/amazon/view/103619-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- D: 24 votes

### Discussion

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

**Comment:** Chatgpt said D

**Comment:** This appear at 17 Jun exam

**Comment:** D is the correct answer.

**Comment:** 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.

**Comment:** without invoking backend service -> mock

**Comment:** D 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

**Comment:** it's D

**Comment:** I'm going with D as well.

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## Discussion for Question 51

**Link:** <https://www.examtactics.com/discussions/amazon/view/103772-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 23 votes

### Discussion

**Comment:** 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>

**Comment:** We need cloudwatchagent

**Comment:** B is the correct answer.

**Comment:** <https://docs.aws.amazon.com/AmazonCloudWatch/latest/monitoring/Install-CloudWatch-Agent.html>

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## Discussion for Question 52

**Link:** <https://www.examtactics.com/discussions/amazon/view/103922-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 19 votes

### Discussion

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

**Comment:** A is the correct answer.

**Comment:** It supports custom data transformation using AWS Lambda

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## Discussion for Question 53

**Link:** <https://www.examtopycs.com/discussions/amazon/view/103723-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 41 votes

### Discussion

**Comment:** Wouldn't A be the Least Effort

**Comment:** 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/>

**Comment:** I will go with A as it is the simplest solution among other three option

**Comment:** This seems to be a tricky one. It's true that you can set Lambda destination, but you better set SQS as destination, exactly what the article suggests, go check it. The correct one is B. <https://docs.aws.amazon.com/lambda/latest/dg/invoke-async.html#invoke-async-destinations>

**Comment:** A is the correct answer.

**Comment:** B is right. A.wrong because Lambda Function Chaining: While Lambda function chaining is possible, it would require modifying the avatar generation Lambda function to include the resize function as a destination for failed events. This might involve additional coding and potentially more complex error handling within the Lambda function.

### Replies:

**Comment:** With AWS Lambda destinations you don't need to interact with code to change this

**Comment:** Least development effort no emphasis on orchestration

### Replies:

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

### Replies:

**Comment:** The article says "For each execution status such as Success or Failure you can choose one of four destinations: another Lambda function, SNS, SQS, or EventBridge." It hink for this reason the correct one is B.

### Replies:

**Comment:** I mean, which destination other then SQS can you set in this case?

**Comment:** 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

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

**Comment:** A is the easiest option <https://docs.aws.amazon.com/lambda/latest/dg/invoke-async.html#invoke-async-destinations>

**Comment:** 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.

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

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

**Comment:** A is a simplest solution <https://aws.amazon.com/ru/blogs/compute/introducing-aws-lambda-destinations/> <https://docs.aws.amazon.com/lambda/latest/dg/invoke-async.html#invoke-async-destinations>

### Replies:

**Comment:** your explanation looks correct. Lambda "Destination" seems exact solution for this. it explains how to handle success, failed case.

**Comment:** 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.

**Comment:** 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.

**Comment:** 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.

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## Discussion for Question 54

**Link:** <https://www.examtopycs.com/discussions/amazon/view/103757-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 28 votes

### Discussion

**Comment:** B Session stores are easy to create with Amazon ElastiCache for Memcached. <https://aws.amazon.com/elasticache/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/>

**Comment:** Option B , how can you image using an EC2 as cache ....

**Comment:** B is the correct answer.

**Comment:** The additional requirement for the faster retrieval of data

**Comment:** B is correct

**Comment:** 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.

### Replies:

**Comment:** Session Store is one of the main use case for ElastiCache for Memcached as pwe AWS website <https://aws.amazon.com/elasticache/memcached/#:~:text=ElastiCache%20for%20Memcached,-,Session%20Store,-,Session%20stores%20are>

**Comment:** B it is

## Discussion for Question 55

Link: <https://www.examttopics.com/discussions/amazon/view/103931-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 10 votes

### Discussion

**Comment:** C <https://docs.aws.amazon.com/prescriptive-guidance/latest/implementing-logging-monitoring-cloudwatch/lambda-logging-metrics.html>

**Comment:** This appear at 17 Jun exam

**Comment:** C is the correct answer.

**Comment:** Answer is C

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## Discussion for Question 56

Link: <https://www.examttopics.com/discussions/amazon/view/103932-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- AC: 17 votes

### Discussion

**Comment:** A and C <https://repost.aws/knowledge-center/lambda-iterator-age>

**Comment:** AC is the correct answer.

**Comment:** As the lambda has no timing issue

**Comment:** CE Shards (option A) works on the parallelism part and not on the function's execution time.

#### Replies:

**Comment:** A and C. I would like to change my answer. More shards means more parallel processing.

---

## Discussion for Question 57

Link: <https://www.examttopics.com/discussions/amazon/view/104013-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 35 votes

### Discussion

**Comment:** 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/>

**Comment:** 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.

**Comment:** B is the correct answer.

**Comment:** 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

**Comment:** 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.

#### Replies:

**Comment:** The question states "A developer needs to place an analysis stage" therefore I'd go with B.

**Comment:** Chat GPT says D

#### Replies:

**Comment:** ChatGPT says option B

**Comment:** 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

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## Discussion for Question 58

Link: <https://www.examttopics.com/discussions/amazon/view/104014-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 18 votes

### Discussion

**Comment:** 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>

**Comment:** A is the correct answer.

**Comment:** 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.

**Comment:** D cloud front function acts as lamda function

**Comment:** 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 will get 403 Forbidden error and then redirected to the login page's S3 URL A is a workable approach in my opinion

**Comment:** Should it be D? In case s3 bucket restricts permissions, those should be open for login.

**Comment:** 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.

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## Discussion for Question 59

**Link:** <https://www.examtips.com/discussions/amazon/view/104015-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 26 votes

### Discussion

**Comment:** 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.

**Comment:** C <https://docs.aws.amazon.com/amplify/latest/userguide/running-tests.html>

#### Replies:

**Comment:** ton of thanks !! document commented 'End to End Test'

**Comment:** This appear at 17 Jun exam

**Comment:** C is the correct answer.

**Comment:** 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

**Comment:** I'LL GO WITH B

**Comment:** 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.

---

## Discussion for Question 60

**Link:** <https://www.examtips.com/discussions/amazon/view/103807-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 26 votes

### Discussion

**Comment:** B. Create and inspect the Lambda dead-letter queue. Troubleshoot the failed functions. Reprocess the events. When Lambda functions are invoked asynchronously, there is a possibility that the function fails without logging errors if there is no proper error handling. Configuring a dead-letter queue (DLQ) allows you to capture and review events that were not processed successfully. By creating and inspecting the DLQ, you can identify and troubleshoot the issues with the failed Lambda invocations and reprocess those events if needed. This will help ensure that no orders are missed without leaving any errors in the Lambda logs.

**Comment:** 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.

#### Replies:

**Comment:** 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.

#### Replies:

**Comment:** 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.

#### Replies:

**Comment:** 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.

**Comment:** B is the correct answer.

**Comment:** <https://aws.amazon.com/about-aws/whats-new/2016/12/aws-lambda-supports-dead-letter-queues/>

**Comment:** B. Crie e inspecione a fila de mensagens mortas do Lambda. Solucione os problemas das funções com falha. Reprocesse os eventos. Mais Votados

**Comment:** The Lambda application logs show no errors or failures. - So Lambda function was not invoked at all

#### Replies:

**Comment:** if the application code doesn't log errors and doesn't throw exceptions, no error or failure will be logged

**Comment:** 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.

**Comment:** 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

**Comment:** B <https://aws.amazon.com/what-is/dead-letter-queue/>

**Comment:** 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

**Comment:** 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.

**Comment:** 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.

#### Replies:

**Comment:** Caching is only for GET Requests not for POST Requests. Correct answer is B

**Comment:** Absolutely agree, D is the answer



**Comment:** <https://aws.amazon.com/about-aws/whats-new/2016/12/aws-lambda-supports-dead-letter-queues/>

**Comment:** 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.

#### Replies:

**Comment:** How can you tell from this context that the POST API call was successful?

**Comment:** 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.

**Comment:** 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.

#### Replies:

**Comment:** Read it carefully: "The Lambda application logs show no errors or failures" There are logs, so the lambda was called answer B

**Comment:** B is wrong, if send to DLQ, there should be failed and try logs for lambda before sending to DLQ

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## Discussion for Question 61

**Link:** <https://www.examtips.com/discussions/amazon/view/103904-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 34 votes

### Discussion

**Comment:** 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.

**Comment:** Presigned URL

**Comment:** C is the correct answer.

**Comment:** The 1MB condition denies the TTL option so C is best

**Comment:** C presigned and lifecycle rules to move

**Comment:** 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 doesn't 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 capabilities 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

**Comment:** 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.

**Comment:** 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>

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## Discussion for Question 62

**Link:** <https://www.examtips.com/discussions/amazon/view/104016-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 38 votes

### Discussion

**Comment:** 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.

**Comment:** 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.

**Comment:** C is the correct answer.

**Comment:** 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.

#### Replies:

**Comment:** the requirement is not to go below 4 instances. Option D specifies a batch size of 2 which would lead to 3 running instances. The correct option is C

**Comment:** <https://docs.aws.amazon.com/elasticbeanstalk/latest/dg/using-features.rolling-version-deploy.html>

**Comment:** The correct answer is: C

**Comment:** 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.

#### Replies:

**Comment:** 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.

**Comment:** 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.

#### Replies:

**Comment:** C: cost 1 additional EC2 D: degrade performance it looks exam gave key "2 batch" meaning - do not choose this answer.

**Comment:** C <https://docs.aws.amazon.com/elasticbeanstalk/latest/dg/using-features.rolling-version-deploy.html>

## Discussion for Question 63

Link: <https://www.examtopycs.com/discussions/amazon/view/103955-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 41 votes

### Discussion

**Comment:** 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.

**Comment:** 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>

**Comment:** A is the correct answer.

**Comment:** X-Ray auto-instrumentation agent itself does not inherently remove or redact Personally Identifiable Information (PII). The primary purpose of the auto-instrumentation agent is to automate the process of instrumenting supported frameworks and libraries for tracing with AWS X-Ray. When dealing with PII or any sensitive information, the responsibility for ensuring that such data is not exposed in traces lies with the application code and configuration, rather than the X-Ray auto-instrumentation agent. While the X-Ray auto-instrumentation agent simplifies the instrumentation process, the need for precise control over PII and the ability to implement custom security measures make manual instrumentation more suitable in this scenario.

**Comment:** 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.

**Comment:** 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.

**Comment:** 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.

**Comment:** 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.

### Replies:

**Comment:** 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.

### Replies:

**Comment:** 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.

**Comment:** 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.

**Comment:** Option "B": Because. Avoids human error.

**Comment:** 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.

**Comment:** 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

**Comment:** Its very clear from Macie definition that it also provides automated protection as well apart from findings the PII data

**Comment:** I think B is incorrect as the auto instrument cannot hide it, right?

**Comment:** C is wrong, Amazon Macie discover PII but dont hide it

**Comment:** c <https://docs.aws.amazon.com/macie/latest/user/data-classification.html>

**Comment:** 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](https://aws.amazon.com/macie/features/?nc1=h_ls)

### Replies:

**Comment:** exactly sayed there.

### Replies:

**Comment:** It is my understanding that Macie only supports S3

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## Discussion for Question 64

Link: <https://www.examtopycs.com/discussions/amazon/view/103687-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- D: 20 votes

### Discussion

**Comment:** 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.

**Comment:** 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.

**Comment:** D is the correct answer.

**Comment:** B <https://repost.aws/questions/QUXsqEPGbQx6qiyBa1D1Udg/lambda-to-db-connectivity-best-practices>

### Replies:

**Comment:** Actually Proxy should be on the same VPC as the database and since lambda is in another vpc it doesnt have access unless a connection happens between these two vpc or just option D

**Comment:** 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/>

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

### Replies:

**Comment:** After reading doc in the link that you mention, my conclusion is D NAT GW is required if Lambda in the user VPC need to access internet

**Comment:** D <https://docs.aws.amazon.com/lambda/latest/dg/foundation-networking.html>

**Comment:** D is correct, NATGateway is for when we want Lambda to access the public when it is in a private VPC

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## Discussion for Question 65

**Link:** <https://www.examttopics.com/discussions/amazon/view/103686-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 25 votes

### Discussion

**Comment:** You need to use environment variables

**Comment:** A <https://docs.aws.amazon.com/lambda/latest/dg/configuration-envvars.html>

**Comment:** A is the correct answer.

**Comment:** Why are some answers wrong on here?

**Comment:** 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.

**Comment:** 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.

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## Discussion for Question 66

**Link:** <https://www.examttopics.com/discussions/amazon/view/107437-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 22 votes

### Discussion

**Comment:** 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.

**Comment:** B is the correct answer.

**Comment:** 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.

**Comment:** B: RDS Proxy establishes and manages the necessary connection pools to your database so that your Lambda function creates fewer database connections<sup>1</sup>. 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.

**Comment:** 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.

**Comment:** I think D is incorrect because it increases the number of connections based on the CPU consumption not the number of connections.

**Comment:** <https://repost.aws/knowledge-center/rds-mysql-max-connections>

**Comment:** It's B. RDS proxy can handle many open connections to the database.

**Comment:** There should not be any downtime. Create an Event bridge rule to update the max\_connections parameter in Parameter group of DB instance.

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## Discussion for Question 67

**Link:** <https://www.examttopics.com/discussions/amazon/view/107439-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 18 votes

### Discussion

**Comment:** 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

**Comment:** B is the correct answer.

**Comment:** 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.

**Comment:** C is the right answer

**Comment:** Can Someone please explain why A isn't viable? Thanks

### Replies:

**Comment:** RDS is more expensive than DynamoDB and the question specified "MOST cost-effectively"

**Comment:** While talking about Databases, low-latency usually refers to DynamoDB.

**Comment:** Going with B. DynamoDB is the most cost-effective solution.

**Comment:** You need to use Athena as well to do partitioning

**Comment:** <https://docs.aws.amazon.com/amazondynamodb/latest/developerguide/bp-sort-keys.html>

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## Discussion for Question 68

Link: <https://www.examtopycs.com/discussions/amazon/view/106484-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 40 votes
- A: 9 votes

### Discussion

**Comment:** 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>

**Comment:** Since March of this year, this is now possible to share test events within the same account with different users.

**Comment:** <https://docs.aws.amazon.com/lambda/latest/dg/testing-functions.html>

**Comment:** B is the correct answer.

**Comment:** 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.

**Comment:** Answer: B <https://aws.amazon.com/about-aws/whats-new/2022/03/aws-lambda-console-test-events/>

**Comment:** 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.

**Comment:** 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

**Comment:** 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.

**Comment:** Based on ChatGPT:A

**Comment:** 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.

**Comment:** Would this not be C just because that's the only one that has the added security of the IAM roles?

**Comment:** there is an option in lambda console to share the event with other users

**Comment:** I meant to select A

**Comment:** 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.

**Comment:** Use roles. Not all IAM users

**Comment:** 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.

### Replies:

**Comment:** 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.

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## Discussion for Question 69

Link: <https://www.examtopycs.com/discussions/amazon/view/107440-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- BE: 21 votes

### Discussion

**Comment:** 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.

**Comment:** 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.

**Comment:** This appear at 17 Jun exam

**Comment:** BE is the correct answer.

**Comment:** 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.

**Comment:** Choosing D as that is the least overhead. There is already a stage and you need to add an action test

### Replies:

**Comment:** Sorry will go with BE after doing more research as unit tests cannot be run in source stage as an action

**Comment:** B e D. [https://docs.aws.amazon.com/pt\\_br/codebuild/latest/userguide/how-to-create-pipeline-add-test.html](https://docs.aws.amazon.com/pt_br/codebuild/latest/userguide/how-to-create-pipeline-add-test.html)

**Comment:** As MrTee says.

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## Discussion for Question 70

Link: <https://www.examtopycs.com/discussions/amazon/view/106488-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 27 votes

### Discussion

**Comment:** Overrides let you pre-define the variation for selected users. to always receive the editable variation. <https://aws.amazon.com/blogs/aws/cloudwatch-evidently/>

### Replies:

**Comment:** the key looks "override" and allow only "userID"

**Comment:** Check Bullet point 9 in the link below <https://docs.aws.amazon.com/AmazonCloudWatch/latest/monitoring/CloudWatch-Evidently-newfeature.html>

**Comment:** Therefore, option A is the best choice to meet the requirement of ensuring the engineer exclusively sees Variation A.

**Comment:** A is the correct answer.

**Comment:** By adding an override to the feature and setting the identifier to the engineer's user ID, the engineer ensures that only their requests are directed to Variation A. Setting the variation to Variation A explicitly assigns the desired variation to the engineer's requests, effectively ensuring they only experience Variation A. Therefore, the correct solution is Option A.

**Comment:** Set the variation to 0% or 100% makes no sense. Plus, the identifier should not be an account.

**Comment:** You have to give identifier

---

## Discussion for Question 71

**Link:** <https://www.examtopycs.com/discussions/amazon/view/106490-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 27 votes

### Discussion

**Comment:** reate 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.

**Comment:** 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.

**Comment:** A is the correct answer.

**Comment:** Option C improve more performance. The question didn't care about effort

**Comment:** 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.

**Comment:** LSI: different sort key but the same partition key GSI: different partition key and a different sort key

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## Discussion for Question 72

**Link:** <https://www.examtopycs.com/discussions/amazon/view/106491-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 51 votes

### Discussion

**Comment:** 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.

**Comment:** Redeploy

**Comment:** C would need a vpc peering, So B is the best option as we are redeploying to same subnet.

**Comment:** B is the correct answer.

**Comment:** they are in different VPC, hence C is not possible unless there is VPC Peering.

**Comment:** By deploying the Lambda function in the same subnet as the RDS instance (VPC-A), the Lambda function will have access to the resources within the same VPC, including the RDS database. Additionally, the RDS security group should be configured to allow inbound traffic from the Lambda function's security group. Therefore, the correct solution is Option B.

**Comment:** Redeploy as no access has been set up between VPCs

**Comment:** A and B wont work since lambda is on default vpc which is not vpc-a D won't work since since it's network access in the first place.

**Comment:** 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.

**Comment:** No need for redeploy. ChatGPT also says C.

### Replies:

**Comment:** ChatGPT don't know anything. It's only read data

**Comment:** 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.

**Comment:** 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.

**Comment:** Seems more efficient solution.

**Comment:** <https://docs.aws.amazon.com/vpc/latest/userguide/default-vpc.html> The default VPC is the public subnet, this is the main trick

### Replies:

**Comment:** 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.

**Comment:** 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>

**Comment:** 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.

**Comment:** 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

## Discussion for Question 73

Link: <https://www.examttopics.com/discussions/amazon/view/106708-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 18 votes

### Discussion

**Comment:** To monitor for custom DECRYPT\_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 DECRYPT\_ERROR. The developer should then create a CloudWatch alarm on this metric for a threshold  $\geq 1$  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.

**Comment:** C is the correct answer.

**Comment:** Options A, B, and D introduce additional complexity, operational overhead, and potential points of failure compared to Option C, which leverages native CloudWatch capabilities for log monitoring and alerting with minimal setup and maintenance overhead. Therefore, Option C is the most suitable choice for meeting the requirements with the least operational overhead.

**Comment:** This is a straightforward and effective solution. CloudWatch Logs allows you to create a metric filter for specific log patterns (such as DECRYPT\_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.

**Comment:** 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.

**Comment:** 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

## Discussion for Question 74

Link: <https://www.examttopics.com/discussions/amazon/view/106711-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 53 votes
- B: 42 votes

### Discussion

**Comment:** 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

#### Replies:

**Comment:** reserve concurrency 1 means poll in order. this looks answer.

**Comment:** 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.

**Comment:** Correct answer should be D. Storing values in the function's layers and using them during initialization is straightforward. This Approach avoids external services like Elasticache.

**Comment:** elasticache for keeping the values from previous invocation

**Comment:** A y C limitan mucho la capacidad de Lambda. Voy con B

**Comment:** A is the correct answer.

**Comment:** Selected Answer: B As per Gemini below is why A is incorrect A. Reserved concurrency: Setting reserved concurrency to 1 ensures only one instance of the function executes at a time. While this might prevent race conditions, it doesn't address the core issue of calculating the rolling average across multiple Lambda invocations.

**Comment:** While limiting concurrency (A or C) can help manage the function's execution rate and scale and prevent throttling, it is not directly related to ensuring the accuracy of calculating rolling average. Instead, focusing on proper state management and data consistency mechanisms (using ElastiCache) is key to achieving accurate results in this scenario.

#### Replies:

**Comment:** that's the correct way in real world but nothing about state management or data consistency is mentioned in B. But A has it although it's not the good real world to do so.

**Comment:** 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.

**Comment:** 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 ?

**Comment:** 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.

**Comment:** Using ElastiCache allows you to maintain a shared state across all instances of your Lambda function

**Comment:** 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.

**Comment:** 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.

**Comment:** A is correct

**Comment:** 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.

#### Replies:

**Comment:** Actually after reading the question more carefully... I change my answer to B

**Comment:** ChatGPT:B

#### Replies:

**Comment:** ChatGPT is not the bible for aws

## Discussion for Question 75

Link: <https://www.examttopics.com/discussions/amazon/view/106717-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 19 votes

## Discussion

**Comment:** It's definitely C. Events in answer D are not real. A & B are clearly wrong since two events are required.

**Comment:** C is the correct answer.

**Comment:** <https://aws.amazon.com/blogs/devops/automated-code-review-on-pull-requests-using-aws-codecommit-and-aws-codebuild/>

**Comment:** Answer is C. There's no event call pullRequestUpdated

**Comment:** 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)

**Comment:** its c ,Event mentioned in D not Exist

**Comment:** It's C. Any of the events mentioned on D exist. <https://docs.aws.amazon.com/codecommit/latest/userguide/monitoring-events.html#pullRequestSourceBranchUpdated>

**Comment:** It's C. Any of the events mentioned on D exist. <https://docs.aws.amazon.com/codecommit/latest/userguide/monitoring-events.html#pullRequestSourceBranchUpdated>

**Comment:** "detail": { "event": ["pullRequestCreated", "pullRequestSourceBranchUpdated"] }

**Replies:**

**Comment:** you create a pull request and update a branch so the answer is C

---

## Discussion for Question 76

**Link:** <https://www.examtactics.com/discussions/amazon/view/108728-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 16 votes

## Discussion

**Comment:** <https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/instancedata-data-retrieval.html>

**Comment:** 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.

**Comment:** A is the correct answer.

**Comment:** 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>

**Comment:** It's C. Any of the events mentioned on D exist. <https://docs.aws.amazon.com/codecommit/latest/userguide/monitoring-events.html#pullRequestSourceBranchUpdated>

**Replies:**

**Comment:** Please remove this comment @admin

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## Discussion for Question 77

**Link:** <https://www.examtactics.com/discussions/amazon/view/107443-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 16 votes

## Discussion

**Comment:** 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.

**Comment:** C is the correct answer.

**Comment:** 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.

**Comment:** Option C seems correct

**Comment:** 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.

---

## Discussion for Question 78

**Link:** <https://www.examtactics.com/discussions/amazon/view/107444-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 15 votes

## Discussion

**Comment:** 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.

**Comment:** A is the correct answer.

**Comment:** Option a

**Comment:** 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.

**Comment:** is A <https://docs.aws.amazon.com/elasticloadbalancing/latest/application/x-forwarded-headers.html> <https://aws.amazon.com/elasticloadbalancing/features/?nc=sn&doc=2>

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## Discussion for Question 79

**Link:** <https://www.examtactics.com/discussions/amazon/view/108734-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 20 votes

## Discussion

**Comment:** 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>

**Comment:** B is the correct answer.

**Comment:** 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.

**Comment:** 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.

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## Discussion for Question 80

**Link:** <https://www.examttopics.com/discussions/amazon/view/108735-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 18 votes

## Discussion

**Comment:** <https://docs.aws.amazon.com/codedeploy/latest/userguide/deployment-configurations.html>

**Comment:** A is the correct answer.

**Comment:** 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.

**Comment:** 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.

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## Discussion for Question 81

**Link:** <https://www.examttopics.com/discussions/amazon/view/106899-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 40 votes

## Discussion

**Comment:** Configure the Amazon CloudWatch agent to track the memory usage of the instances.

### Replies:

**Comment:** Using elastic beanstalk .ebextensions dir

**Comment:** for elastic beanstalk you make this configuration in the .ebextensions folder <https://repost.aws/knowledge-center/elastic-beanstalk-memory-metrics-windows>

### Replies:

**Comment:** But the question says Linux

### Replies:

**Comment:** Applies to Linux as well: <https://medium.com/tomincode/cloudwatch-memory-monitoring-for-elastic-beanstalk-1caa98d57d5c>

### Replies:

**Comment:** ebextensions is deprecated for linux newest version which is mentioned in the question

**Comment:** CloudWatch agent track the memory and any types of system component (hardware)

**Comment:** C is the correct answer.

**Comment:** Answer is : C from Gemini here is why B is incorrect B. .ebextensions directory: While .ebextensions can be used for configuration within Elastic Beanstalk, it's not designed to track memory usage directly.

**Comment:** 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.

**Comment:** .....

**Comment:** 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.

**Comment:** The .ebextensions directory is used for customizing the environment (installing packages, running scripts...) it can't track memory usage alone.

**Comment:** No Discussion

**Comment:** We configure the agent not the directory itself.

**Comment:** 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.

**Comment:** it should be B: <https://docs.aws.amazon.com/elasticbeanstalk/latest/dg/customize-containers-cw.html#customize-containers-cw-update-roles>

**Comment:** Going with C after going through this link: <https://repost.aws/knowledge-center/elastic-beanstalk-memory-cpu-issues>

**Comment:** 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>

**Comment:** 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 .

**Comment:** I vote for B, since it is already available with .ebextensions and not required agent

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## Discussion for Question 82

**Link:** <https://www.examttopics.com/discussions/amazon/view/107445-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted



- B: 14 votes

## Discussion

**Comment:** B is the correct answer.

**Comment:** 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.

**Comment:** B is the solution

**Comment:** Go with B

**Comment:** B is the best solution

**Comment:** is the best solution for encrypting temporary data written to /tmp storage on an AWS Lambda function

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## Discussion for Question 83

**Link:** <https://www.examtopycs.com/discussions/amazon/view/109005-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 13 votes

## Discussion

**Comment:** 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

**Comment:** B is the correct answer.

**Comment:** Answer is A. The notification work normally. They should work for files up to 5TB but not once the dev uploads a file of 3000MB. Seems the dev did not set up the notification correctly for files of this size.

**Comment:** Why answer B while dev deployed and tested via CLI is ok, but the reason would be lack of resource policy?

### Replies:

**Comment:** The Lambda function, which reacts to an event and sends a message, can be invoked manually using the AWS CLI or other methods, even if there are issues with the S3 event triggering mechanism. This is because manual invocation typically bypasses the event source (S3 in this case) and directly triggers the Lambda function. While Lambda functions can be invoked manually, they also need the correct permissions to be triggered by specific event sources like S3. If the resource-based policy for the Lambda function does not have the necessary permissions, it may not be invoked by S3 events.

**Comment:** 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.

**Comment:** anser is B

**Comment:** Ansewer A

### Replies:

**Comment:** not A, answer is B

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## Discussion for Question 84

**Link:** <https://www.examtopycs.com/discussions/amazon/view/108737-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- D: 10 votes

## Discussion

**Comment:** 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.

**Comment:** <https://www.examtopycs.com/discussions/amazon/view/88659-exam-aws-certified-developer-associate-topic-1-question-197/>

**Comment:** D is the correct answer.

**Comment:** 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.

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## Discussion for Question 85

**Link:** <https://www.examtopycs.com/discussions/amazon/view/108738-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- BD: 18 votes

## Discussion

**Comment:** BD is the correct answer.

**Comment:** Not C, you can't use an unqualified ARN (SLATEST) 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>

**Comment:** I cannot find another choice that meets this requirement. "The developer must create a new development environment to test the code changes. "

**Comment:** The order is D and than B

**Comment:** 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.

**Comment:** 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.

**Comment:** 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.

**Comment:** 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 SLATEST is not sufficiently explicit when you troubleshoot.

**Comment:** <https://www.examtactics.com/discussions/amazon/view/89549-exam-aws-certified-developer-associate-topic-1-question-334/>

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## Discussion for Question 86

**Link:** <https://www.examtactics.com/discussions/amazon/view/106939-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 29 votes

### Discussion

**Comment:** 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 `awslocal invoke` command with the function construct identifier and the path to the synthesized CloudFormation template to test the Lambda function locally (option C).

**Comment:** 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 `awslocal invoke` to run the specific Lambda function locally, providing the function's logical identifier and the path to the synthesized CloudFormation template as arguments.

**Comment:** <https://docs.aws.amazon.com/serverless-application-model/latest/developerguide/serverless-cdk-testing.html>

**Comment:** C is the correct answer.

**Comment:** <https://docs.aws.amazon.com/serverless-application-model/latest/developerguide/serverless-sam-cli-using-invoke.html> `awslocal invoke`: Invoke Lambda locally `awslocal start-lambda`: Integrating with automated-tests

**Comment:** <https://docs.aws.amazon.com/serverless-application-model/latest/developerguide/serverless-cdk-testing.html> C

**Comment:** Use the AWS SAM CLI `awslocal 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>

**Comment:** Answer is clearly C. If you say it's not C, you are wrong.

**Comment:** `awslocal invoke` StackLogicalId/FunctionLogicalId <https://docs.aws.amazon.com/serverless-application-model/latest/developerguide/using-sam-cli-local-invoke.html>

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## Discussion for Question 87

**Link:** <https://www.examtactics.com/discussions/amazon/view/108739-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- D: 11 votes

### Discussion

**Comment:** <https://www.examtactics.com/discussions/amazon/view/51596-exam-aws-certified-developer-associate-topic-1-question-355/>

**Comment:** D is the correct answer.

**Comment:** 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.

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## Discussion for Question 88

**Link:** <https://www.examtactics.com/discussions/amazon/view/108740-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 10 votes

### Discussion

**Comment:** 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.

**Comment:** B is the correct answer.

**Comment:** [https://docs.aws.amazon.com/ko\\_kr/amazondynamodb/latest/developerguide/TTL.html](https://docs.aws.amazon.com/ko_kr/amazondynamodb/latest/developerguide/TTL.html)

**Comment:** <https://www.examtactics.com/discussions/amazon/view/7225-exam-aws-certified-developer-associate-topic-1-question-107/>

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## Discussion for Question 89

**Link:** <https://www.examtactics.com/discussions/amazon/view/111295-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 19 votes

### Discussion

**Comment:** 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>

**Comment:** C is the correct answer.

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## Discussion for Question 90

**Link:** <https://www.examtactics.com/discussions/amazon/view/109208-exam-aws-certified-developer-associate-dva-c02-topic-1/>

## Most Voted

- B: 67 votes
- A: 25 votes
- D: 20 votes

## Discussion

**Comment:** 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."

**Comment:** the key words are ability to log in and securely share the files. It is A

### Replies:

**Comment:** I agree 'log in' would go user pool.

**Comment:** But we need to answer a question not task condition

**Comment:** I had my doubt on this, but once more they are evaluating if you are reading with attention and not if you have knowledge hehe tricky question, but the punch line question is What feature would be used to share the files securely, ignoring the login part.

**Comment:** I'll go with B. The question is what the company should use to share and access the files securely. We can ignore the task condition

**Comment:** B is the correct answer.

**Comment:** 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.

**Comment:** in order to log in you need to use cognito user pools

**Comment:** 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

**Comment:** 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>

**Comment:** Which AWS feature should the company use to share and access the files securely? So, It's B. S3 Pre-signed URL can used to share S3 object to other people securely.

**Comment:** It's not A, Cognito user pool is not needed, only employees need ability to log in, they can be provided with IAM accounts.

**Comment:** 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.

**Comment:** I will go with B because its 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>

**Comment:** ChatGPT: B

**Comment:** 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>

**Comment:** 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.

### Replies:

**Comment:** 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).

**Comment:** Secure solution for sharing private s3 resource

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## Discussion for Question 91

**Link:** <https://www.examttopics.com/discussions/amazon/view/109210-exam-aws-certified-developer-associate-dva-c02-topic-1/>

## Most Voted

- B: 17 votes

## Discussion

**Comment:** AWS Lambda function absolutely ability to do the requirements.

### Replies:

**Comment:** Yes, Lambda very certain great.

**Comment:** B is the correct answer.

**Comment:** 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.

**Comment:** yes B is correct

**Comment:** B is the cost-effective one.

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## Discussion for Question 92

**Link:** <https://www.examttopics.com/discussions/amazon/view/108741-exam-aws-certified-developer-associate-dva-c02-topic-1/>

## Most Voted

- A: 17 votes

## Discussion

**Comment:** A is Correct, the store the session state is a key word

**Comment:** A is the correct answer.

**Comment:** 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.

**Comment:** I vote A <https://aws.amazon.com/blogs/developer/elasticache-as-an-asp-net-session-store/>

**Comment:** the answer came from the discussion at <https://www.examtopycs.com/discussions/amazon/view/8789-exam-aws-certified-developer-associate-topic-1-question-176/>

**Comment:** <https://www.examtopycs.com/discussions/amazon/view/8789-exam-aws-certified-developer-associate-topic-1-question-176/>

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## Discussion for Question 93

**Link:** <https://www.examtopycs.com/discussions/amazon/view/106941-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 26 votes

### Discussion

**Comment:** A Is the correct answer with the minimum impact on the database.

**Comment:** <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.>

### Replies:

**Comment:** 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

**Comment:** A key word is retrieve multiple specific items

**Comment:** A is the correct answer.

**Comment:** • GetItem: recupera um único item de uma tabela. • BatchGetItem: retorna até 100 itens de uma ou mais tabelas limitados a 16MB por chamada.

**Comment:** .....

**Comment:** D. "Query" allows you to use filter - multiple specific items and is less expensive than the Scan operation.

**Comment:** [https://docs.aws.amazon.com/amazondynamodb/latest/APIReference/API\\_BatchGetItem.html](https://docs.aws.amazon.com/amazondynamodb/latest/APIReference/API_BatchGetItem.html)

**Comment:** 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.

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## Discussion for Question 94

**Link:** <https://www.examtopycs.com/discussions/amazon/view/109241-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 12 votes

### Discussion

**Comment:** a is correct

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

**Comment:** A is the correct answer.

**Comment:** B: I Think B is better, because we need to use it on the instance session

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## Discussion for Question 95

**Link:** <https://www.examtopycs.com/discussions/amazon/view/108742-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 16 votes

### Discussion

**Comment:** 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.

**Comment:** C is the correct answer.

**Comment:** <https://docs.aws.amazon.com/vpc/latest/userguide/flow-logs.html>

**Comment:** <https://www.examtopycs.com/discussions/amazon/view/28802-exam-aws-certified-developer-associate-topic-1-question-219/>

**Comment:** <https://www.examtopycs.com/discussions/amazon/view/28802-exam-aws-certified-developer-associate-topic-1-question-219/>

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## Discussion for Question 96

**Link:** <https://www.examtopycs.com/discussions/amazon/view/106946-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 17 votes

### Discussion

**Comment:** 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.

### Replies:

**Comment:** greate !! send email do not need SQS.

**Comment:** Thanks. As mentioned Multiple subscription can be added for SNS

**Comment:** None of these is really an optimal solution to the problem, which is a little annoying really

**Comment:** A is the correct answer.

**Comment:** 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.

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## Discussion for Question 97

**Link:** <https://www.examtopycs.com/discussions/amazon/view/106947-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 54 votes
- D: 13 votes

### Discussion

**Comment:** 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.

**Comment:** 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.

#### Replies:

**Comment:** 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.

**Comment:** 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

**Comment:** I disagree... the order of the function with this option makes NO sense. I go with A

**Comment:** 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.

**Comment:** "A" would be optimal, but without backoff algorithm the lambda division and SQS won't affect the throttling. However Dynamo can autoscale  
<https://docs.aws.amazon.com/amazondynamodb/latest/developerguide/AutoScaling.html>

#### Replies:

**Comment:** Yes, but it asks to "load the data into the DynamoDB table more consistently." Therefore, option A will prevent unintentional data load into DynamoDB, it's the best option.

**Comment:** A is the correct answer.

**Comment:** we are trying to stop throttling..

**Comment:** 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.

**Comment:** 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.

**Comment:** 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.

**Comment:** Why not B? DynamoDB can autoscale the RCU and WCU

**Comment:** 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.

**Comment:** 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

**Comment:** Answer : A SQS can be configured to invoke Lambda. <https://docs.aws.amazon.com/AWSSimpleQueueService/latest/SQSDeveloperGuide/sqs-configure-lambda-function-trigger.html>

**Comment:** I think B

**Comment:** Lambda functions can be triggered by SQS: <https://docs.aws.amazon.com/AWSSimpleQueueService/latest/SQSDeveloperGuide/sqs-configure-lambda-function-trigger.html>

**Comment:** 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.

**Comment:** 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.

**Comment:** the requirement is Lambda function load data to DynamoDB. D is incorrect : "DynamoDB stream invoke Lambda" - the order is reversed.

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## Discussion for Question 98

**Link:** <https://www.examtopycs.com/discussions/amazon/view/109646-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 16 votes

### Discussion

**Comment:** 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.

**Comment:** Elastic File System file sharing

**Comment:** A is the correct answer.

**Comment:** 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/>

**Comment:** shared files == EFS

**Comment:** EFS is true

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## Discussion for Question 99

**Link:** <https://www.examtactics.com/discussions/amazon/view/109229-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 15 votes

### Discussion

**Comment:** the request is 'Which solution will meet these requirements with the LEAST "operational overhead"?', Therefore solution C is too crazy and the operation will be complex

**Comment:** A is the correct answer.

**Comment:** Option A requires creating a new stage on API Gateway, which might increase the operational overhead and complexity of managing multiple stages.

**Comment:** Why not B? There is canary testing in Lambda Functions

#### Replies:

**Comment:** Cuz of it -> new Lambda function for more testing by other developers with no impact to customers that use the API.

#### Replies:

**Comment:** Thank you for this... I too thought B --> definitely A then

**Comment:** 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.

#### Replies:

**Comment:** So A is the right option

**Comment:** A : create new API stage (add stage) - correct D: create new API Gateway (create new one) - incorrect

#### Replies:

**Comment:** yea D makes no sense. I think it was placed in there to throw people off.

**Comment:** A is correct. Why the "correct answer" is always wrong? What's the point?

#### Replies:

**Comment:** I agree, very stupid

**Comment:** A is ok according to my perspective.

**Comment:** A's true

**Comment:** A is true

**Comment:** 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.

**Comment:** The answer is A

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## Discussion for Question 100

**Link:** <https://www.examtactics.com/discussions/amazon/view/109246-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 38 votes
- C: 27 votes

### Discussion

**Comment:** 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.

#### Replies:

**Comment:** "The team must follow security best practices" Security best practices state that prod should be separated from non prod environments.

**Comment:** 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](https://wa.aws.amazon.com/wat/question/SEC_1.en.html)

#### Replies:

**Comment:** There is nowhere mentioned in the question that workload is the problem!

**Comment:** resource policy totally fulfill requirement

**Comment:** 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](https://wa.aws.amazon.com/wat/question/SEC_1.en.html)

**Comment:** Best practices is the key Word

**Comment:** Option D is correct. This approach ensures isolation while maintaining manageability

**Comment:** Option C is the simplest way to achieve this requirement.

**Comment:** 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

**Comment:** Asked 18 July 24 Without security best practices word. So C is correct answer for this.

**Comment:** B is the correct answer.

**Comment:** 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.

**Comment:** 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 set 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.

**Comment:** I initially thought C, but after going through the below, I don't think there is any scope for doubt. 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://docs.aws.amazon.com/en\\_us/wellarchitected/latest/framework/sec\\_securely\\_operate\\_multi\\_accounts.html](https://docs.aws.amazon.com/en_us/wellarchitected/latest/framework/sec_securely_operate_multi_accounts.html)

**Comment:** new accounts not necessary...

**Comment:** B - following best practices

**Comment:** OMG this questions can be very wordy... be careful and read carefully - Answer is C

#### Replies:

**Comment:** after reading this link --> [https://wa.aws.amazon.com/wat/question/SEC\\_1\\_en.html](https://wa.aws.amazon.com/wat/question/SEC_1_en.html) changing answer to B

**Comment:** Keeping the security best-practices.

**Comment:** ChatGPT: B

#### Replies:

**Comment:** ChatGPT is not always right. be careful

**Comment:** 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.

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## Discussion for Question 101

**Link:** <https://www.examtactics.com/discussions/amazon/view/106980-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 21 votes

### Discussion

**Comment:** <https://docs.aws.amazon.com/cognito/latest/developerguide/cognito-user-identity-pools.html>

**Comment:** 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.

#### Replies:

**Comment:** The big difference being users authenticates to applications (web and mobile) vs identity authenticates to AWS resources.

**Comment:** Does examtopic have exact replicas of actual exam questions

**Comment:** C is the correct answer.

**Comment:** B is the correct answer.

**Comment:** 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.

**Comment:** c Amazon Cognito user pools provide user identity management and authentication for your application.

**Comment:** 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.

**Comment:** 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.

**Comment:** 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.

**Comment:** You can't register using Identity Pool. It lets you authenticate with provided identification pools.

**Comment:** <https://medium.com/wolox/integrating-social-media-to-your-app-with-aws-cognito-8943329aa89b>

**Comment:** Key word is registration using their social media accounts

#### Replies:

**Comment:** B is incorrect. <https://www.youtube.com/watch?v=9pvvgKIuCpI>

**Comment:** 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.

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## Discussion for Question 102

**Link:** <https://www.examtactics.com/discussions/amazon/view/106981-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 28 votes

### Discussion

**Comment:** 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/>

**Comment:** A is the correct answer.

**Comment:** 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.

**Comment:** 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.

**Comment:** 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 Clouf front functions has no access to internet.

**Comment:** I will go for A, check the link below, Cloudfront functions are just within Cloudfront, hence, they DONT 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>

**Comment:** 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.

**Comment:** Option A.

**Comment:** <https://www.examtopycs.com/discussions/amazon/view/89838-exam-aws-certified-developer-associate-topic-1-question-361/>

**Comment:** Cloud front function doesn't have network access, it has to be lambda @ edge I I

**Comment:** 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.

#### Replies:

**Comment:** Now one problem is lambda function can not perform AWS STS command

#### Replies:

**Comment:** After rereading the last part of the question. It doesnt 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

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## Discussion for Question 103

**Link:** <https://www.examtopycs.com/discussions/amazon/view/106984-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 22 votes

### Discussion

**Comment:** Use an RDS Proxy instead of connecting directly to the DB cluster.

**Comment:** B <https://aws.amazon.com/blogs/compute/using-amazon-rds-proxy-with-aws-lambda/>

**Comment:** The key word is increase in the number of orders, so the proxy can help in this situation

**Comment:** B is the correct answer.

**Comment:** Option B only improve the execution time of lambda and decrease the delay from request to database. It might even worsen the situation because database can get more concurrent connection. RDS Proxy also doesn't limit the number of connections, even if so it will generate errors for lambda. The only way is to throttle the requests using SQS until a connection gets released. Why everyone thinks ChatGPT has the ultimate answer????!!!!

**Comment:** 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.

**Comment:** 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.

**Comment:** <https://repost.aws/questions/QUXLSqEPGibQx6qiyBa1D1Udg/lambda-to-db-connectivity-best-practices>

**Comment:** 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.

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## Discussion for Question 104

**Link:** <https://www.examtopycs.com/discussions/amazon/view/106987-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 33 votes

### Discussion

**Comment:** 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.

**Comment:** The Ans is B because the credit card is a sensitive Data and also it is a financial Data

**Comment:** B is the correct answer.

**Comment:** SensitiveData:S3Object/Financial only works with Macie?? so how can it be D?

**Comment:** 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.

**Comment:** <https://docs.aws.amazon.com/macie/latest/user/findings-types.html>

**Comment:** [https://docs.aws.amazon.com/zh\\_tw/macie/latest/user/findings-types.html](https://docs.aws.amazon.com/zh_tw/macie/latest/user/findings-types.html)

**Comment:** 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.

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## Discussion for Question 105

**Link:** <https://www.examtopycs.com/discussions/amazon/view/106989-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- BD: 34 votes



## Discussion

**Comment:** 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.

**Comment:** BD is the correct answer.

**Comment:** 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."

**Comment:** Covers Unauthenticated and authenticated users scenario

**Comment:** "who already created account" means User Pool not required. - NOT A

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## Discussion for Question 106

**Link:** <https://www.examtactics.com/discussions/amazon/view/106992-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 22 votes

## Discussion

**Comment:** 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.

**Comment:** B is the correct answer.

**Comment:** 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.

**Comment:** <https://docs.aws.amazon.com/lambda/latest/dg/lambda-intro-execution-role.html>

**Comment:** Answer : D

**Comment:** 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.

**Comment:** <https://docs.aws.amazon.com/lambda/latest/dg/lambda-intro-execution-role.html> <https://docs.aws.amazon.com/lambda/latest/dg/lambda-intro-execution-role.html>

**Comment:** 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.

### Replies:

**Comment:** I definitely agree. Lambda cannot be installed inside VPC, instead, AWSLambdaVPCAccessExecutionRole allow to connect via ENI.

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## Discussion for Question 107

**Link:** <https://www.examtactics.com/discussions/amazon/view/107007-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 13 votes

## Discussion

**Comment:** 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.

**Comment:** The Ans is B the keyword is operational overhead so from the choice the last overhead is copy

**Comment:** B is the correct answer.

**Comment:** <https://www.examtactics.com/discussions/amazon/view/78848-exam-aws-certified-developer-associate-topic-1-question-118/>

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## Discussion for Question 108

**Link:** <https://www.examtactics.com/discussions/amazon/view/107010-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 25 votes

## Discussion

**Comment:** 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.

**Comment:** C is the correct answer.

**Comment:** The Lambda layer of option C provides a simpler solution without the need to introduce an additional CodeArtifact service.

**Comment:** 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.

**Comment:** It should be Create a Lambda layer.

**Comment:** 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."

### Replies:

**Comment:** "LEAST development effort"

**Comment:** We are updating a Lambda function. Lambda layers are specifically used for situations mentioned in this question

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## Discussion for Question 109

Link: <https://www.examtopycs.com/discussions/amazon/view/109399-exam-aws-certified-developer-associate-dva-c02-topic-1/>

## Most Voted

- D: 15 votes

## Discussion

**Comment:** 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>

**Comment:** 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.

**Comment:** D is the correct answer.

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## Discussion for Question 110

Link: <https://www.examtopycs.com/discussions/amazon/view/107013-exam-aws-certified-developer-associate-dva-c02-topic-1/>

## Most Voted

- A: 26 votes

## Discussion

**Comment:** 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.

### Replies:

**Comment:** 'in transit' = SSL Secure Transport

**Comment:** A is the correct answer.

**Comment:** 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.

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

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## Discussion for Question 111

Link: <https://www.examtopycs.com/discussions/amazon/view/107028-exam-aws-certified-developer-associate-dva-c02-topic-1/>

## Most Voted

- A: 34 votes
- B: 26 votes

## Discussion

**Comment:** 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.

**Comment:** 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.

### Replies:

**Comment:** I will say that it is way simpler to create an ALB rule to a new tg and alter the beta app then create a new tg, a new alb and configure route 53 and then deploy the app

**Comment:** <https://aws.amazon.com/blogs/aws/new-advanced-request-routing-for-aws-application-load-balancers/>

**Comment:** A is the correct answer.

**Comment:** ChatGPT goes for D.

**Comment:** The solution that will meet the requirement with the least effort is: 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.

**Comment:** 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.

**Comment:** 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.

**Comment:** A is modifying the code for testing, not a good practice. D is the least effort compared to B and C

**Comment:** 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.

**Comment:** requirement with the LEAST effort

**Comment:** just using voting...explanation in a different thread

**Comment:** 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.

**Comment:** Considering Least effort

**Comment:** Agree that this is A

**Comment:** Option A serves the requirement with least efforts.

**Comment:** Which solution will meet this requirement with the LEAST effort? Updating code will be more effort, hence B is the correct answer.

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## Discussion for Question 112

Link: <https://www.examtopycs.com/discussions/amazon/view/107037-exam-aws-certified-developer-associate-dva-c02-topic-1/>

## Most Voted

- AB: 29 votes

## Discussion

**Comment:** 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.

**Comment:** AB is the correct answer.

**Comment:** AB is the correct answer.

**Comment:** 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.

**Comment:** 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.

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

**Comment:** 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.

**Comment:** 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.

**Comment:** Why not E ?

### Replies:

**Comment:** access to S3 is controlled by IAM, not security groups.

### Replies:

**Comment:** Security group is like a firewall, can block any inbound/outbound traffic.

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

**Comment:** 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.

**Comment:** A: Make sure EC2 instance profile has permission to access s3 B: Make sure S3 resource policy allows the access from instance

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## Discussion for Question 113

**Link:** <https://www.examttopics.com/discussions/amazon/view/107038-exam-aws-certified-developer-associate-dva-c02-topic-1/>

## Most Voted

- D: 19 votes

## Discussion

**Comment:** Option D is the best option because it requires minimum changes and leverages the existing infrastructure.

**Comment:** D is the correct answer.

**Comment:** 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.

**Comment:** 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.

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## Discussion for Question 114

**Link:** <https://www.examttopics.com/discussions/amazon/view/107039-exam-aws-certified-developer-associate-dva-c02-topic-1/>

## Most Voted

- AC: 23 votes

## Discussion

**Comment:** 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.

**Comment:** For the options given as answers, A and C is the viable option. But its a stupid solution... you can use s3 events to trigger it directly.

**Comment:** AC is the correct answer.

**Comment:** ChatGPT:AE

### Replies:

**Comment:** 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.

**Comment:** 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.

**Comment:** AC is combination of steps required

**Comment:** Why not just use the S3 event as the trigger directly.

### Replies:

**Comment:** I agree that in general this is a stupid question. But maybe company need's to use EB in application ☹️

**Comment:** A C for sure

**Comment:** A, B are correctly

---

## Discussion for Question 115

**Link:** <https://www.examttopics.com/discussions/amazon/view/107041-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 18 votes

### Discussion

**Comment:** A. Use the AWS::Region pseudo parameter.

**Comment:** A is the correct answer.

**Comment:** <https://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/pseudo-parameter-reference.html>

**Comment:** <https://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/pseudo-parameter-reference.html><https://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/pseudo-parameter-reference.html>

**Comment:** 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.

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## Discussion for Question 116

**Link:** <https://www.examttopics.com/discussions/amazon/view/107050-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 19 votes

### Discussion

**Comment:** Option A meets these requirements?

#### Replies:

**Comment:** <https://docs.aws.amazon.com/lambda/latest/dg/urls-auth.html>

**Comment:** create 'AWS\_IAM auth type' -> Attach the policy to the QA IAM group

**Comment:** Apologies again, please refer to the youtube link I shared earlier..correct ans is A

**Comment:** I think the answer is B here, reason being the function should be invoked using public urls

**Comment:** A is the correct answer.

**Comment:** 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.

**Comment:** I don't know why so much A, but ins't A giving the access to all the lambda?

**Comment:** 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.

**Comment:** 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. ChatGPT also says C.

**Comment:** 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.

#### Replies:

**Comment:** Why A grant excessive permissions? The policy will contain only the Lambda's ARNs wch the QA group should have access to.

**Comment:** 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

#### Replies:

**Comment:** good thought!

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## Discussion for Question 117

**Link:** <https://www.examttopics.com/discussions/amazon/view/107051-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 16 votes

### Discussion

**Comment:** 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.

**Comment:** B is the correct answer.

**Comment:** 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.

**Comment:** 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.

# Discussion for Question 118

**Link:** <https://www.examttopics.com/discussions/amazon/view/107052-exam-aws-certified-developer-associate-dva-c02-topic-1/>

## Most Voted

- C: 26 votes

## Discussion

**Comment:** 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.

**Comment:** Correct Answer should be A: This approach centralizes credential management and provides secure storage. Rotation can be scheduled weekly as required by the security team.

**Comment:** C is the correct answer.

**Comment:** 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.

**Comment:** rotation key & cross account key is feature of Secret Manager <https://tutorialdojo.com/aws-secrets-manager-vs-systems-manager-parameter-store/>

**Comment:** <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_turn-on-for-other.html) [https://docs.aws.amazon.com/secretsmanager/latest/userguide/rotate-secrets\\_schedule.html](https://docs.aws.amazon.com/secretsmanager/latest/userguide/rotate-secrets_schedule.html)

**Comment:** the keyword is "rotation"

# Discussion for Question 119

**Link:** <https://www.examttopics.com/discussions/amazon/view/107053-exam-aws-certified-developer-associate-dva-c02-topic-1/>

## Most Voted

- DE: 28 votes
- CE: 27 votes

## Discussion

**Comment:** 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.

## Replies:

**Comment:** How is D viable when the question doesn't mention Elasicache? You're making an assumption that adding a service/configuration is what's being asked

**Comment:** C => [https://docs.aws.amazon.com/ko\\_kr/apigateway/latest/developerguide/apigateway-how-to-call-websocket-api-connections.html](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](https://docs.aws.amazon.com/ko_kr/apigateway/latest/developerguide/apigateway-websocket-api-route-keys-connect-disconnect.html)

**Comment:** Option DE: Implement \$connect and \$disconnect Routes: Add \$connect and \$disconnect routes to your WebSocket API. These routes handle client connections and disconnections. When a client connects (\$connect), a Lambda function can add the connection ID to a data store (e.g., DynamoDB). When a client disconnects (\$disconnect), another Lambda function can remove the connection ID from the data store. Track Client Status: Use Amazon ElastiCache (e.g., Redis) to track client status. Store relevant information (e.g., client IDs, connection timestamps) in ElastiCache. This allows you to identify clients that connect and disconnect

**Comment:** Option D ----> CORRECT Because, tracking the client's connection status using ElastiCache could help in identifying clients with erratic connection patterns and managing stateful information in a distributed environment, which is useful for WebSocket applications. Also Option E CORRECT. These routes handle connection and disconnection events.

**Comment:** This appear at 17 Jun exam

## Replies:

**Comment:** Do you remember the answers?

**Comment:** DE is the correct answer.

**Comment:** E. Implement \$connect and \$disconnect routes in the backend service. By implementing \$connect and \$disconnect routes, the backend service can capture when clients connect and disconnect from the WebSocket connection. This allows the application to track client status effectively. D. Add code to track the client status in Amazon ElastiCache in the backend service.

**Comment:** Your backend service can use the following WebSocket connection HTTP requests to send a callback message to a connected client, get connection information, or disconnect the client <https://docs.aws.amazon.com/apigateway/latest/developerguide/apigateway-how-to-call-websocket-api-connections.html>

**Comment:** 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).

**Comment:** 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>

**Comment:** C: [https://docs.aws.amazon.com/ko\\_kr/apigateway/latest/developerguide/apigateway-how-to-call-websocket-api-connections.html](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

**Comment:** going with DE

**Comment:** 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.

**Comment:** 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.

**Comment:** <https://docs.aws.amazon.com/apigateway/latest/developerguide/apigateway-how-to-call-websocket-api-connections.html>

**Comment:** 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>

**Comment:** 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.

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## Discussion for Question 120

**Link:** <https://www.examtactics.com/discussions/amazon/view/107054-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 11 votes

### Discussion

**Comment:** option C, AWS CodeCommit.

**Comment:** C is the correct answer.

**Comment:** Code commit is a code source repository

**Comment:** must be C

**Comment:** it's C

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## Discussion for Question 121

**Link:** <https://www.examtactics.com/discussions/amazon/view/107055-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 21 votes

### Discussion

**Comment:** 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.

**Comment:** the key word is "rotation"

**Comment:** A is the correct answer.

**Comment:** 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.

**Comment:** Secrets manager for rotation

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## Discussion for Question 122

**Link:** <https://www.examtactics.com/discussions/amazon/view/107057-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- AD: 16 votes

### Discussion

**Comment:** the correct options are A and D.

**Comment:** 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

**Comment:** AD is the correct answer.

**Comment:** 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.

**Comment:** Option B,C And E are not correct;

**Comment:** https://docs.aws.amazon.com/IAM/latest/UserGuide/create-signed-request.html

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## Discussion for Question 123

**Link:** <https://www.examtactics.com/discussions/amazon/view/107059-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- D: 18 votes

### Discussion

**Comment:** 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.

**Comment:** Ans is B because the keyword is automatically generate passwords by secret manger by best effort

**Comment:** D is the correct answer.

**Comment:** Where is the automatic generating of the password in option D?

**Comment:** 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.

**Comment:** 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.

**Comment:** you can create secrets with AWS::SecretsManager::Secret so it is the correct answer.

**Comment:** 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](https://docs.aws.amazon.com/secretsmanager/latest/userguide/cfn-example_reference-secret.html)

**Comment:** 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](https://docs.aws.amazon.com/secretsmanager/latest/userguide/cfn-example_reference-secret.html)

**Comment:** 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.

**Comment:** The correct option is D. Create the password from secrets manager.

**Comment:** yes it's D

**Comment:** The answer is D This is a secretsmanager dynamic reference sample in cloud formation

**Comment:** I think answer is D <https://aws.amazon.com/about-aws/whats-new/2022/12/amazon-rds-integration-aws-secrets-manager/>

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## Discussion for Question 124

**Link:** <https://www.examtactics.com/discussions/amazon/view/107060-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 19 votes

### Discussion

**Comment:** 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.

**Comment:** This appear at 17 Jun exam

**Comment:** A is the correct answer.

**Comment:** 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.

**Comment:** 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.

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## Discussion for Question 125

**Link:** <https://www.examtactics.com/discussions/amazon/view/107062-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 24 votes

### Discussion

**Comment:** it must be deployed to a region where Lambda@Edge is supported, such as us-east-1.

**Comment:** <https://docs.aws.amazon.com/AmazonCloudFront/latest/DeveloperGuide/edge-functions-restrictions.html> The Lambda function must be in the US East (N. Virginia) Region.

**Comment:** B is the correct answer.

**Comment:** B is the only answer that makes sense

**Comment:** <https://docs.aws.amazon.com/AmazonCloudFront/latest/DeveloperGuide/lambda-edge-how-it-works-tutorial.html> clear mention

**Comment:** SAM can only specify one region Lambda@Edge only in us-east1 region <https://docs.aws.amazon.com/AmazonCloudFront/latest/DeveloperGuide/lambda-edge-how-it-works-tutorial.html>

**Comment:** 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.

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## Discussion for Question 126

**Link:** <https://www.examtactics.com/discussions/amazon/view/107063-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- D: 21 votes

### Discussion

**Comment:** 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.

**Comment:** When using a write-through cache strategy, the cache is updated in real-time alongside the database. This ensures that the cached data remains consistent with the underlying database. According to AWS best practices, this approach pushes data into the cache at the time it is written to the database, reducing the risk of serving stale data. In contrast, option A (a read-through cache strategy) may result in stale data, particularly if the cache has a time-to-live (TTL) setting that allows data to remain in the cache longer than it remains accurate in the database. This can be problematic for real-time dashboards that require up-to-date information. For these reasons, I opted for option D. <https://aws.amazon.com/caching/best-practices/#:~:text=Write%2Dthrough,also%20pushed%20into%20the%20cache>. Please correct me if my understanding is incorrect, as I am still learning.

**Comment:** D is the correct answer.

**Comment:** B. Write Behind Cache.

**Comment:** 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.

**Comment:** ChatGPT:C

**Comment:** 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.

### Replies:

**Comment:** 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

**Comment:** 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.

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## Discussion for Question 127

**Link:** <https://www.examtopycs.com/discussions/amazon/view/107064-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 21 votes

### Discussion

**Comment:** 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.

**Comment:** Option B is correct because it is straightforward with lesser operation overhead than managing layers. Option A and C are incorrect. While Option A approach allows you to separate library from your function code, it introduces some operational overhead in managing layers. Option C is simple but doesn't separate library from your function code.

**Comment:** This appear at 17 Jun exam

### Replies:

**Comment:** Do you remember the answer?

**Comment:** A is the correct answer.

**Comment:** 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.

**Comment:** 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.

**Comment:** 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.

**Comment:** 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:

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

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## Discussion for Question 128

**Link:** <https://www.examtopycs.com/discussions/amazon/view/107066-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 35 votes
- A: 25 votes

### Discussion

**Comment:** 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.

### Replies:

**Comment:** 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.

**Comment:** 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

**Comment:** 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.

**Comment:** Ans is c

**Comment:** C is the correct answer.

**Comment:** It is A: [https://docs.amazonaws.cn/en\\_us/elasticbeanstalk/latest/dg/using-features.platformupgrade.html#using-features.platformupgrade.config](https://docs.amazonaws.cn/en_us/elasticbeanstalk/latest/dg/using-features.platformupgrade.html#using-features.platformupgrade.config)

**Comment:** This question must be true for 2 options because C & D are both correct

**Comment:** [https://docs.amazonaws.cn/en\\_us/elasticbeanstalk/latest/dg/using-features.rolling-version-deploy.html](https://docs.amazonaws.cn/en_us/elasticbeanstalk/latest/dg/using-features.rolling-version-deploy.html)

**Comment:** 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.

**Comment:** 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 practise to have 2 separate environments for production and test and there is no mention of cost optimisation here.

**Comment:** ChatGPT:A

**Comment:** A & C both works for given scenario but C does it more feasibly for Elastic Beanstalk with zero downtime.

**Comment:** Key terminology in question is "Test". So it should be immutable for quick rollback in case of test not working.

### Replies:

**Comment:** 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

**Comment:** It's a downtime if test fails and rollback.

**Comment:** 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.

**Comment:** Screenshot of Step 4 of Method 1 in the link: [https://docs.amazonaws.cn/en\\_us/elasticbeanstalk/latest/dg/using-features.platformupgrade.html#using-features.platformupgrade.config](https://docs.amazonaws.cn/en_us/elasticbeanstalk/latest/dg/using-features.platformupgrade.html#using-features.platformupgrade.config) "...your application is unavailable during the update. To keep at least one instance in service during the update, enable rolling updates"

### Replies:

**Comment:** 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>

**Comment:** A is the answer. Sorry about the double post ... [https://docs.amazonaws.cn/en\\_us/elasticbeanstalk/latest/dg/using-features.platformupgrade.html#using-features.platformupgrade.config](https://docs.amazonaws.cn/en_us/elasticbeanstalk/latest/dg/using-features.platformupgrade.html#using-features.platformupgrade.config)

**Comment:** Can't be clearer than this ... [https://docs.amazonaws.cn/en\\_us/elasticbeanstalk/latest/dg/using-features.platformupgrade.html#using-features.platformupgrade.config](https://docs.amazonaws.cn/en_us/elasticbeanstalk/latest/dg/using-features.platformupgrade.html#using-features.platformupgrade.config)

**Comment:** 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.

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## Discussion for Question 129

**Link:** <https://www.examttopics.com/discussions/amazon/view/112424-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- D: 23 votes
- C: 21 votes

### Discussion

**Comment:** 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.

**Comment:** 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.

**Comment:** <https://docs.aws.amazon.com/lambda/latest/dg/testing-guide.html>

**Comment:** D is the correct answer.

**Comment:** In the case of unit tests, whose objective is to isolate the tested unit, option D is the one that most isolates the unit.

**Comment:** To unit test the AWS Lambda function that consumes messages from an Amazon SQS queue as part of the CI/CD process, the developer can follow option C: 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.

**Comment:** 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/>

**Comment:** 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.

**Comment:** 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?

**Comment:** C there should be a separate isolated test environment D will only invoke the lambda and not test SQS polling.

**Comment:** ChatGPT:D

**Comment:** 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.

**Comment:** Option D is the only true unit test.

**Comment:** 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.

**Comment:** 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.

**Comment:** D, from Google Bard

**Comment:** 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?

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## Discussion for Question 130

**Link:** <https://www.examttopics.com/discussions/amazon/view/111831-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 18 votes

### Discussion

**Comment:** 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](https://docs.aws.amazon.com/amazondynamodb/latest/APIReference/API_BatchGetItem.html)

**Comment:** A is the correct answer.

**Comment:** I would go for it because typically we are taking the advantage of key selection

### Replies:

**Comment:** (C) performs BatchGetItem operation twice; that's NOT optimal and above the minimal network traffic necessary. Amazon DynamoDB BatchGetItem - returns the attributes of one or more items from one or more tables. You identify requested items by primary key.

**Comment:** Sorry its Option A saying multiple songs so list will be right option

**Comment:** 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.

**Comment:** [https://docs.aws.amazon.com/amazondynamodb/latest/APIReference/API\\_BatchGetItem.html](https://docs.aws.amazon.com/amazondynamodb/latest/APIReference/API_BatchGetItem.html)

**Comment:** Agree 100% with Caiyi.

**Comment:** 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.

#### Replies:

**Comment:** You can't create a LSI on an existing DDB table

**Comment:** I don't agree, we need to create a global secondary index to use artistName as the partition key

**Comment:** [https://docs.aws.amazon.com/amazondynamodb/latest/APIReference/API\\_BatchGetItem.html](https://docs.aws.amazon.com/amazondynamodb/latest/APIReference/API_BatchGetItem.html)

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## Discussion for Question 131

**Link:** <https://www.examtactics.com/discussions/amazon/view/111832-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 18 votes

### Discussion

**Comment:** The answer is C - we should create multiple stages and different Lambdas that will be utilized based on API Gateway stage variables. <https://docs.aws.amazon.com/apigateway/latest/developerguide/amazon-api-gateway-using-stage-variables.html>

**Comment:** This appeared at 17 Jun exam

**Comment:** C is the correct answer.

**Comment:** 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.

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## Discussion for Question 132

**Link:** <https://www.examtactics.com/discussions/amazon/view/117336-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 13 votes

### Discussion

**Comment:** 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.

**Comment:** C is the correct answer.

**Comment:** 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.

**Comment:** NAT Gateway from a public subnet is required.

**Comment:** 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.

**Comment:** C is correct. With Lambda, you need an IP of NAT GW to be able to access public internet.

**Comment:** 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.

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## Discussion for Question 133

**Link:** <https://www.examtactics.com/discussions/amazon/view/117335-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 22 votes

### Discussion

**Comment:** 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.

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

**Comment:** C is the correct answer.

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

**Comment:** A is sufficient. C is abundant

**Comment:** Advanced Parameters: These offer more capabilities, such as adding policies for expiration and triggering notifications

**Comment:** Using Lambda function and SNS will address the requirement with least operational overhead.

#### Replies:

**Comment:** Changing my mind option A is correct here.

#### Replies:

**Comment:** It is C. standard tier does not have those features

**Comment:** A is the right answer

**Comment:** You can't set expiration policy on standard parameter

**Comment:** By creating a standard parameter, you can set an expiration date for the parameter

**Comment:** It leverages the advanced parameter tier and the parameter policies feature of Parameter Store, which meet the requirements with the least operational overhead.

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## Discussion for Question 134

**Link:** <https://www.examtactics.com/discussions/amazon/view/117334-exam-aws-certified-developer-associate-dva-c02-topic-1/>

## Most Voted

- D: 18 votes

## Discussion

**Comment:** D is the correct answer.

**Comment:** <https://docs.aws.amazon.com/whitepapers/latest/practicing-continuous-integration-continuous-delivery/deployment-methods.html#:~:text=A%20variation%20of,is%20gradually%20increased>.

**Comment:** 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."

**Comment:** 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.

**Comment:** Lambda deploy supports just Linear or Canary. So answer is D. Linear or All

**Comment:** Answer A. <https://aws.amazon.com/blogs/containers/aws-codedeploy-now-supports-linear-and-canary-deployments-for-amazon-ecs/>

**Comment:** Canary deployment is supported: <https://aws.amazon.com/blogs/compute/implementing-safe-aws-lambda-deployments-with-aws-codedeploy/>

**Comment:** Canary is not supported in AWS CodeDeploy.

### Replies:

**Comment:** <https://aws.amazon.com/es/blogs/containers/aws-codedeploy-now-supports-linear-and-canary-deployments-for-amazon-ecs/>

**Comment:** Canary is not supported in AWS CodeDeploy.

### Replies:

**Comment:** Canary is supported by code deploy <https://docs.aws.amazon.com/codedeploy/latest/userguide/welcome.html>

**Comment:** Canary is faster than linear in this case.

**Comment:** 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.

### Replies:

**Comment:** Inplace deployment is not supported by ECS and Lambda

**Comment:** Canary deployment

**Comment:** 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.

**Comment:** 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

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## Discussion for Question 135

**Link:** <https://www.exantopics.com/discussions/amazon/view/117333-exam-aws-certified-developer-associate-dva-c02-topic-1/>

## Most Voted

- B: 15 votes

## Discussion

**Comment:** 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.

**Comment:** This appear at 17 Jun exam

**Comment:** B is the correct answer.

**Comment:** Secrets Manager supports auto rotation. Systems Manager does not do that.

**Comment:** B is correct. Keyword: "automatically change the database password every 30 days"

**Comment:** Secrets Manager supports automatic rotation of secrets by using either built-in or custom Lambda functions

### Replies:

**Comment:** Did you give your exam recently? If yes, how many questions were from here?

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## Discussion for Question 136

**Link:** <https://www.exantopics.com/discussions/amazon/view/117332-exam-aws-certified-developer-associate-dva-c02-topic-1/>

## Most Voted

- C: 12 votes

## Discussion

**Comment:** C is the correct answer.

**Comment:** Answer is C as CodeBuild already supports Secret Manager

**Comment:** c is the correct answer

**Comment:** Secure + Rotation are key words for Secrets Manager

**Comment:** 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.

**Comment:** Because configure Secrets Manager for automatic rotation

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## Discussion for Question 137

Link: <https://www.examtopycs.com/discussions/amazon/view/117331-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 16 votes

### Discussion

**Comment:** 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>

**Comment:** A is the correct answer.

**Comment:** 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.

**Comment:** The tests must cover both positive and negative scenarios, depending on success and error HTTP status codes.

**Comment:** A because set up a mock integration for API methods in API Gateway with the least effort.

## Discussion for Question 138

Link: <https://www.examtopycs.com/discussions/amazon/view/117795-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 6 votes

### Discussion

**Comment:** 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>

#### Replies:

**Comment:** 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.

**Comment:** I agree - AD <https://github.com/aws-samples/aws-xray-fargate>

**Comment:** 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. D. Instrument the application by using the AWS X-Ray SDK. Update the application to communicate with the X-Ray daemon.

**Comment:** AD is the correct answer.

**Comment:** ChatGPT: AE

**Comment:** CE 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. This step involves instrumenting the application code using the AWS X-Ray SDK to generate trace data and communicate it to the X-Ray service for analysis. 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.

**Comment:** AC Fargate cannot have daemon. This rules out B and C. D is distractor.

**Comment:** CHatGpt: AD

**Comment:** 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.

**Comment:** Instrument the application by using the AWS X-Ray SDK. Update the application to communicate with the X-Ray daemon

**Comment:** 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.

**Comment:** 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.

**Comment:** 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.

**Comment:** 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.

## Discussion for Question 139

Link: <https://www.examtopycs.com/discussions/amazon/view/117476-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 12 votes

### Discussion

**Comment:** Only read permission for the file

**Comment:** A is the correct answer.

**Comment:** Only allow to get this one file. A

## Discussion for Question 140

Link: <https://www.examtopycs.com/discussions/amazon/view/117574-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- D: 18 votes

## Discussion

**Comment:** 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.

**Comment:** D is the correct answer.

**Comment:** How on earth non-visualize way is easier? And I've never seen a rebase that happened commit-by-commit! Resolving the merge should happen in one go, merge or rebase. just rebase appear(!) more isolated. (which in practice it's not!). Also rebase is cleaner but the effort is even more since there is a level of isolation! The only point here is visualizing which makes it easier.

**Comment:** 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.

**Comment:** D D. Stop the pull from the main branch to the feature branch. **Rebase the feature branch from the main branch.**

**Comment:** D. Stop the pull from the main branch to the feature branch. **Rebase the feature branch from the main branch.**

**Comment:** 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.

**Comment:** Option D is the best approach for resolving the merge conflicts

**Comment:** 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>

**Comment:** 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

**Comment:** Answer D won't fix the problem

### Replies:

**Comment:** I think C would take huge development effort

### Replies:

**Comment:** because visualizing make it harder? You have to fix the conflict anyway! rebase or merge. in both resolve the conflict will happen 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!

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## Discussion for Question 141

**Link:** <https://www.examtactics.com/discussions/amazon/view/117797-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 16 votes

### Discussion

**Comment:** 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.

**Comment:** B is the correct answer.

**Comment:** 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.

**Comment:** It looks Correct

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## Discussion for Question 142

**Link:** <https://www.examtactics.com/discussions/amazon/view/117798-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 15 votes

### Discussion

**Comment:** 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.

**Comment:** C is the correct answer.

**Comment:** 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.

**Comment:** 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.

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## Discussion for Question 143

**Link:** <https://www.examtactics.com/discussions/amazon/view/122655-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- DE: 9 votes

### Discussion

**Comment:** DE is the correct answer.

**Comment:** 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.

**Comment:** 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.

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## Discussion for Question 144

**Link:** <https://www.examtactics.com/discussions/amazon/view/122562-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 9 votes

### Discussion

**Comment:** The answer is NOT B. The question states "limit the ABILITY TO DOWNLOAD a file in the S3 bucket to PAID SUBS ONLY" If you choose B, it means that a paid sub can request the URL and then SHARE IT with non-paying customers. This will mean non-paying customers can DOWNLOAD the file using the URL. The answer should be C - this enforces the user who downloads the file is a paying customer.

**Comment:** B is the correct answer.

**Comment:** 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.

**Comment:** 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.

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## Discussion for Question 145

**Link:** <https://www.examtactics.com/discussions/amazon/view/122563-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 11 votes

### Discussion

**Comment:** Option B (Global Secondary Index with email\_address as Partition Key): Add a global secondary index (GSI) to the DynamoDB table. Set email\_address as the partition key and customer\_type as the sort key for the GSI. Perform a query operation on the GSI using the begins\_with key condition expression with the email\_address property.

**Comment:** A is the correct answer.

**Comment:** Only global secondary indices can be added after a table has been created.

**Comment:** 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.

**Comment:** A is correct

**Comment:** A is correct

**Comment:** 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.

**Comment:** 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.

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## Discussion for Question 146

**Link:** <https://www.examtactics.com/discussions/amazon/view/122564-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- D: 11 votes

### Discussion

**Comment:** 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.

**Comment:** D is the correct answer.

**Comment:** 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.

**Comment:** 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.

**Comment:** D is correct

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## Discussion for Question 147

**Link:** <https://www.examtactics.com/discussions/amazon/view/122565-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 14 votes
- D: 11 votes

### Discussion

**Comment:** 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 unavailable to the template. D no echo is a attribute of cloud formation template.



**Comment:** B is the correct answer.

**Comment:** 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.

**Comment:** <https://docs.aws.amazon.com/kms/latest/developerguide/rotate-keys.html> Its a symmetric key rotation

**Comment:** <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.

**Comment:** 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.

**Comment:** B is correct, it must use KMS

**Comment:** 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.

**Comment:** Only this option supports AWS KMS with the key rotation

**Comment:** 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

**Comment:** A: <https://docs.aws.amazon.com/AmazonS3/latest/userguide/UsingServerSideEncryption.html>

**Comment:** A) Amazon S3 Managed Keys [https://docs.aws.amazon.com/pt\\_br/AmazonS3/latest/userguide/serv-side-encryption.html](https://docs.aws.amazon.com/pt_br/AmazonS3/latest/userguide/serv-side-encryption.html)

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## Discussion for Question 151

**Link:** <https://www.examtips.com/discussions/amazon/view/122569-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 12 votes

### Discussion

**Comment:** This is the most efficient and integrated approach. AWS CodeBuild is fully integrated with AWS CodePipeline and can be used to run unit tests as part of the CI/CD process. Placing the testing stage before deployment ensures that only tested code is deployed. The buildspec can be configured to fail the build if tests do not pass, and CodeBuild's test reports feature allows for easy viewing and analysis of test results.

**Comment:** C is the correct answer.

**Comment:** c is the correct answer

**Comment:** Correct answer: B

**Comment:** c is the correct answer

**Comment:** I think C is correct. Typical consists of stages are.. Build -> Test -> Deploy(test) -> Load Test -> and others

**Comment:** C should be correct.

**Comment:** The correct answer is (B). Solution (B) is the simplest and requires the least operational effort. It involves adding a new stage to the CodePipeline pipeline that uses AWS CodeBuild to run the unit tests. The CodeBuild stage can be configured to fail if any tests fail. The CodeBuild test report can be integrated into the CodeBuild console so that developers can view test results.

### Replies:

**Comment:** This does not make sense. Why run the tests after the deploy when you can choose option C, to run the tests before the deploy? C should be best practice and the same amount of effort as B.

### Replies:

**Comment:** funny ☹

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## Discussion for Question 152

**Link:** <https://www.examtips.com/discussions/amazon/view/122572-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- D: 17 votes

### Discussion

**Comment:** C works as well but It is a broad solution I think it's better practice to use D and specify the exact endpoints that the user can access from "aws:sourceVpce": ["\vpce-id1", "\vpce-id2", "..."]

**Comment:** I don't think any of the options is correct. Seriously StringNotEquals not StringEquals?

### Replies:

**Comment:** I think the same "A developer needs to configure an Amazon S3 bucket policy so users can access an S3 bucket only by using these VPC endpoints"

### Replies:

**Comment:** StringNotEqual is for the deny of outther that mentioned vpce. { "Version": "2012-10-17", "Id": "Policy1415115909152", "Statement": [ { "Sid": "Access-to-specific-VPCE-only", "Principal": "\*", "Action": "s3:\*", "Effect": "Deny", "Resource": ["amaws:s3::awsexamplebucket1", "amaws:s3::awsexamplebucket1/\*"], "Condition": { "StringNotEquals": { "aws:SourceVpce": "\vpce-1a2b3c4d" } } } ] }

### Replies:

**Comment:** for bucket policy, if vpce isnt explicitly allowed, it's by default denied anyway so it should have been allow string equal vpce?

**Comment:** D is the correct answer.

**Comment:** <https://docs.aws.amazon.com/AmazonS3/latest/userguide/example-bucket-policies-vpc-endpoint.html> typically explained the same scenario. D beyond doubt.

**Comment:** D is right answer Get up-to-date <https://www.pinterest.com/pin/937522847419120392>

**Comment:** D, based on the following documentation: <https://docs.aws.amazon.com/AmazonS3/latest/userguide/example-bucket-policies-vpc-endpoint.html#example-bucket-policies-restrict-access-vpc-endpoint>

**Comment:** Why it's StringNotEquals instead of StringEquals? Is the question wrong or my English is too bad to understand this?

### Replies:

**Comment:** It is StringNotEqual, means if source vpce is not this then deny access { "Version": "2012-10-17", "Id": "Policy1415115909152", "Statement": [ { "Sid": "Access-to-specific-VPCE-only", "Principal": "\*",



```
"Action": "s3:*", "Effect": "Deny", "Resource": ["arnaws:s3::awsexamplebucket1", "arnaws:s3::awsexamplebucket1/*"], "Condition": { "StringNotEquals": { "aws:SourceVpce": "vpce-1a2b3c4d" } } } }
```

**Comment:** This option is the closest to being correct, but it should use `StringEquals` instead of `StringNotEquals`. The correct approach is to use a single S3 bucket policy with a condition that includes `aws:SourceVpce` with `StringEquals` for the specific VPC endpoint IDs. This will ensure that access is allowed only from those specified endpoints.

**Comment:** <https://docs.aws.amazon.com/AmazonS3/latest/userguide/example-bucket-policies-vpc-endpoint.html#example-bucket-policies-restrict-access-vpc>

**Comment:** D is correct

**Comment:** in option C : Condition: { "StringNotEqualsIfExists": { "aws:sourceVpce": "vpce\*", } } it might Deny access from all VPC endpoints. so the ans is D

**Replies:**

**Comment:** D says "aws:sourceVpce value in the StringNotEquals condition". `StringNotEquals` won't work, it deny access for specified VPC ids

**Replies:**

**Comment:** Of course if we use "Effect": "Allow")

**Comment:** The correct answer is (C). Solution (C) is the simplest and will meet the company's requirements. It creates a single S3 bucket policy that has the value `aws:SourceVpce` and the `StringNotEquals` condition to use `vpce*`. This will only allow users who are using a VPC endpoint in the same VPC to access the S3 bucket.

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## Discussion for Question 153

**Link:** <https://www.examtopycs.com/discussions/amazon/view/122570-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- AE: 15 votes

### Discussion

**Comment:** The max size of storage in Secrets Manager is 10kb. For SSM Parameter store, it's 8Kb. Correct options are A and E.

**Replies:**

**Comment:** Secrets Manager is not cost-effective compared to option C - S3 bucket. Question clearly asks "MOST cost-effective" <https://www.examtopycs.com/discussions/amazon/view/96242-exam-aws-certified-developer-associate-topic-1-question-429/> So answer is CE

**Comment:** AE is the correct answer.

**Comment:** This solution will meet the requirements by storing the Root CA Cert as a Secure String parameter in AWS Systems Manager Parameter Store, which is a secure and scalable service for storing and managing configuration data and secrets. The resource-based policy will allow IAM users in different AWS accounts and environments to access the parameter without requiring cross-account roles or permissions. The Lambda code will be refactored to load the Root CA Cert from the parameter store and modify the runtime trust store outside the Lambda function handler, which will improve performance and reduce latency by avoiding repeated calls to Parameter Store and trust store modifications for each invocation of the Lambda function.

**Comment:** Cost effective, use S3 instead of Secrets Manager.

**Comment:** After going through the links : A : <https://aws.amazon.com/blogs/security/use-aws-secrets-manager-to-simplify-the-management-of-private-certificates/> E : <https://docs.aws.amazon.com/acm/latest/userguide/renew-private-cert.html>

**Comment:** C.E. Secrets Manager is the most expensive amongst all options. S3 seems more cost-effective. B. is incorrect, because at the end it states about accessing to the policy, not to the parameter itself

**Comment:** Also AE works, but BE is more cost effective.

**Replies:**

**Comment:** Pay attention on this part "Add IAM users to allow access to the policy." It should give an access to the parameter, not to the policy.

**Comment:** CE should be the answer. The string size is over 4/8 kb which the parameter store allows. So, the parameter store is out. Comparing the price, s3 is much cheaper than secrets manager.

**Comment:** <https://aws.amazon.com/blogs/security/use-aws-secrets-manager-to-simplify-the-management-of-private-certificates/>

**Comment:** can you do resource based policies for param store?

**Comment:** <https://www.examtopycs.com/discussions/amazon/view/96242-exam-aws-certified-developer-associate-topic-1-question-429/>

**Comment:** CHatGPT: BD

**Comment:** I can't see why using AWS Secrets Manager can be cost-effective, so I'm voting for C

**Comment:** Using Parameter store is more cost effective then secrets manager.

**Comment:** Secrets Manager is an additional cost over Parameter Store. So if you see a question that looks for the least amount of overhead, Secrets Manager is much more versatile. But for least amount of cost, Parameter Store is included with the service for no additional costs.

**Comment:** Why the remaining answers are not suitable: A. Storing the Root CA Cert in AWS Secrets Manager is a valid option, but Secrets Manager is typically used for managing sensitive information like database credentials. It might be overkill for just a certificate, and using Systems Manager Parameter Store or S3 is a more straightforward solution in this case. D. Refactoring the Lambda code to load the Root CA Cert from its location and modifying the runtime trust store inside the Lambda function handler would require code changes and rebuilding the Lambda functions, which contradicts the requirement of not updating all Lambda functions. E. Refactoring the Lambda code to load the Root CA Cert from its location and modifying the runtime trust store outside the Lambda function handler may still require code changes and may not be as scalable or easily manageable as using Systems Manager Parameter Store or S3.

**Comment:** B. AWS Systems Manager Parameter Store can store data both in plain text and encrypted format (using the `SecureString` type). It's a cost-effective solution for centralized configuration management across environments and accounts. E. Modifying the runtime trust store outside the Lambda function handler ensures that the trust store is modified only once when the Lambda container is initialized, making it a more efficient approach than option D where it's initialized in every lambda function.

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## Discussion for Question 154

**Link:** <https://www.examtopycs.com/discussions/amazon/view/122573-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 15 votes

### Discussion

**Comment:** I think B is correct <https://docs.aws.amazon.com/config/latest/developerguide/secretsmanager-secret-unused.html> A. could work but requires additional work to identify unused secrets. C. is too risky and could cause downtime. D. not the right use case

**Comment:** B is the correct answer.

**Comment:** We need "secrets that are still in use". "B" secretsmanager-secret-unused returns unused. So we can easily determine the used secrets if it is not falling under this scanner

**Comment:** My choice is "A". We need "secrets that are still in use". "B" secretsmanager-secret-unused returns unused.

**Comment:** A. Use an AWS Step Functions state machine to monitor API failures. Use the Wait state to delay calling the Lambda function: This is a viable and efficient solution. AWS Step Functions can orchestrate the Lambda function invocations and manage the workflow, including handling API call rate limits. The Wait state can be used to introduce delays between API calls to ensure compliance with the rate limits. This approach also allows for handling errors and retries effectively. B. Use an Amazon Simple Queue Service (Amazon SQS) queue to hold the API calls. Configure the Lambda function to poll the queue within the API threshold limits: While using SQS to queue API call requests is a good way to manage workload, it adds complexity to the solution. The Lambda function would need to be modified to manage the queue and ensure API calls are made within the threshold limits. This approach might not be as straightforward and efficient as using Step Functions.

**Comment:** ChatGPT:A

**Comment:** It's easier to use a built-in solution in AWS Config (check chris\_777 answer)

**Comment:** It's easier to use a default built-in solution in AWS Config (check chris\_777 answer)

**Comment:** I think A is a more direct way, while B needs an inference after receiving the notification for 'unused'.

**Comment:** B is correct for this one.

**Comment:** A is correct. . AWS CloudTrail can track API calls, including the GetSecretValue call for AWS Secrets Manager. By setting up CloudTrail log delivery to an S3 bucket, the developer can analyze which secrets are being accessed. Using CloudWatch to create an alarm for the GetSecretValue API call provides insight into which secrets are actively being retrieved, thus indicating which secrets are in use.

#### Replies:

**Comment:** I think i change my mind to B. B Must be correct..

#### Replies:

**Comment:** Why did you change your mind, please? A looks super correct to me.

**Comment:** The correct answer is (B). Solution (B) is the best option to meet the developer's requirements. It allows the developer to identify necessary secrets that are still in use without causing any application downtime.

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## Discussion for Question 155

**Link:** <https://www.examttopics.com/discussions/amazon/view/122574-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 9 votes

### Discussion

**Comment:** This appear at 17 Jun exam

**Comment:** C is the correct answer.

**Comment:** C. Create an Amazon EventBridge rule that runs on a regular schedule to invoke the Lambda function: This is the correct and most suitable option. Amazon EventBridge (formerly CloudWatch Events) allows you to set up rules that trigger on a schedule. You can create a rule with a cron or rate expression to invoke the Lambda function every 10 minutes. This approach is fully serverless and does not require managing any servers or additional infrastructure.

**Comment:** C is correct. Amazon EventBridge can be used to run Lambda functions on a regular schedule. You can set a cron or rate expression to define the schedule.

**Comment:** The correct answer is (C). Solution (C) is the best option to meet the developer's requirements. It allows the developer to invoke the Lambda function in an automated and serverless way.

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## Discussion for Question 156

**Link:** <https://www.examttopics.com/discussions/amazon/view/122575-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- D: 9 votes

### Discussion

**Comment:** D is the correct answer.

**Comment:** This approach is the most secure and aligns with best practices for managing secrets. The credentials are stored in AWS Secrets Manager, which is specifically designed for managing and protecting secrets. The credentials are retrieved dynamically at runtime by the Lambda function, and the use of IAM roles ensures that only the Lambda function has access to these secrets. This method also benefits from the security and rotation features of AWS Secrets Manager.

**Comment:** D is correct.

**Comment:** The correct answer is (D). Solution (D) is the most secure way to pass the credentials to the Lambda function because it uses AWS Secrets Manager to store the credentials in encrypted form.

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## Discussion for Question 157

**Link:** <https://www.examttopics.com/discussions/amazon/view/122576-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 10 votes

### Discussion

**Comment:** A is the correct answer.

**Comment:** Amazon ElastiCache provides a fast, in-memory data store or cache. It is often used for session management in distributed applications. Data stored in ElastiCache can be accessed quickly and reliably by any of the EC2 instances behind the ELB, making it an ideal choice for session data that needs to be shared across multiple servers.

**Comment:** A is correct. By storing session data in ElastiCache, you ensure that regardless of which EC2 instance handles a given request, the session data can be consistently and rapidly accessed.

**Comment:** The correct answer is (A). Amazon ElastiCache is a distributed memory caching solution that is ideal for session data. ElastiCache provides high-performance and durable session data storage that can be shared across multiple EC2 instances.

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## Discussion for Question 158

**Link:** <https://www.examttopics.com/discussions/amazon/view/122577-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 14 votes

## Discussion

**Comment:** C is correct. X-Forwarded-Proto: protocol (HTTP/HTTPS) X-Forwarded-Host: original Host header requested by the client X-Forwarded-For: original IP address of a client (CORRECT) X-Forwarded-Port header: original port that the client used to connect

**Comment:** C is the correct answer.

**Comment:** C is correct

**Comment:** C is correct

**Comment:** X-Forwarded-For HTTP header contains the IP address of the original client

**Comment:** The correct answer is (C). The X-Forwarded-For HTTP header contains the IP address of the original client that made the request. The developer can use this header to analyze patterns for the IP addresses of clients using the application.

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## Discussion for Question 159

**Link:** <https://www.examttopics.com/discussions/amazon/view/122578-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 21 votes
- B: 10 votes

## Discussion

**Comment:** B: I don't see how the Lambda function can be configured this way

**Comment:** This appear at 17 Jun exam

**Comment:** A is the correct answer.

**Comment:** I would go for option C because response value always contains the limit value and which can be retrieved into the cloudwatch and can be used to block the the lambda calls

### Replies:

**Comment:** Changing to A

**Comment:** The solution that will meet the requirements is to use an AWS Step Functions state machine to monitor API failures. Use the Wait state to delay calling the Lambda function. This way, the developer can refactor the serverless application to accommodate the change in a way that is automated and scalable. The developer can use Step Functions to orchestrate the Lambda function and handle any errors or retries. The developer can also use the Wait state to pause the execution for a specified duration or until a specified timestamp, which can help avoid exceeding the API limits. The other options either involve using additional services that are not necessary or appropriate for this scenario, or do not address the issue of API failures. <https://www.freecram.net/question/Amazon.DVA-C02.v2023-11-29.q68/a-developer-migrated-a-legacy-application-to-an-aws-lambda-function-the-function-uses-a-third-party-18#>

**Comment:** Who is going to orchestrate lambda invocation? SQS is for decoupling, not for scheduled invocations. A is the only option.

**Comment:** Option A with AWS Step Functions can handle the frequency of API calls by introducing a delay (Wait state) between retries after a failure due to rate limiting, it doesn't inherently solve the problem of the total number of calls per day. If the total number of necessary API calls exceeds the daily limit set by the third-party service, simply adding a delay between retries will not prevent the overall daily limit from being exceeded.

**Comment:** A. Use an AWS Step Functions state machine to monitor API failures. Use the Wait state to delay calling the Lambda function: This is a viable and efficient solution. AWS Step Functions can orchestrate the Lambda function invocations and manage the workflow, including handling API call rate limits. The Wait state can be used to introduce delays between API calls to ensure compliance with the rate limits. This approach also allows for handling errors and retries effectively. B. Use an Amazon Simple Queue Service (Amazon SQS) queue to hold the API calls. Configure the Lambda function to poll the queue within the API threshold limits: While using SQS to queue API call requests is a good way to manage workload, it adds complexity to the solution. The Lambda function would need to be modified to manage the queue and ensure API calls are made within the threshold limits. This approach might not be as straightforward and efficient as using Step Functions.

**Comment:** B is the most operationally efficient way

**Comment:** b is the answer

**Comment:** sqs decouples lambda from api service

**Comment:** While Step Functions can be used for workflow orchestration, it may not be the most straightforward solution for handling rate limits in this scenario.

**Comment:** ChatGPT: A

**Comment:** B. Option A (AWS Step Functions) might introduce unnecessary complexity and does not directly address the need to control the rate of API calls within the specified limits. Option C (CloudWatch Logs metric and alarm) provides monitoring capabilities but doesn't offer a direct mechanism to control the rate of API calls within the Lambda function. Option D (Kinesis Data Firehose) is designed for real-time streaming and might not be the most suitable option for this scenario, as it may not provide the fine-grained control needed to stay within the API call limits.

**Comment:** A is Correct. AWS Step Functions can be used to create a workflow to handle the API calls. You can make the Lambda function inspect the response headers from the third-party service to determine the current API call limits and then pass that to the Wait state of the state machine for proper delays.

**Comment:** The correct answer is (B). Solution (B) is the most operationally efficient way to refactor the serverless application to accommodate this change. This solution allows the Lambda function to continue executing API calls even if the API call limit is reached. The Amazon SQS queue will act as a buffer for API calls that exceed the limit. The Lambda function can then poll the queue within the API limits.

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## Discussion for Question 160

**Link:** <https://www.examttopics.com/discussions/amazon/view/122579-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 10 votes

## Discussion

**Comment:** The correct answer is (C). AWS X-Ray is the best tool for identifying and addressing the root cause of performance issues in distributed production applications. X-Ray provides an overview of the entire call stack, including the Lambda functions and other components they invoke.

**Comment:** C is the correct answer.

**Comment:** C is correct.

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## Discussion for Question 161

**Link:** <https://www.examttopics.com/discussions/amazon/view/122580-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 18 votes

## Discussion

**Comment:** B: Rolling with additional batch , considering "minimize the cost of additional resources" C costly than B, due to double capacity

**Comment:** D is the correct answer.

**Comment:** Ans-B: The immutable deployment method updates an application by launching new instances with the new version in a new Auto Scaling group, alongside the existing instances running the old version. This ensures that the application maintains full capacity during the deployment because the existing environment is unaffected until the new environment is fully deployed and verified. Once the deployment is successful, traffic is shifted to the new instances, and the old ones are terminated. This minimizes downtime and provides a quick rollback if needed. The cost of additional resources is limited to the duration of the deployment, after which the old resources are terminated.

**Comment:** [https://docs.aws.amazon.com/whitepapers/latest/practicing-continuous-integration-continuous-delivery/deployment-methods.html#:~:text=During%20the%20deployment%20process%20two%20software%20versions%2C%20new%20and%20old%2C%20are%20running%20on%20the%20same%20fleet.%20This%20method%20allows%20a%20](https://docs.aws.amazon.com/whitepapers/latest/practicing-continuous-integration-continuous-delivery/deployment-methods.html#:~:text=During%20the%20deployment%20process%20two%20software%20versions%2C%20new%20and%20old%2C%20are%20running%20on%20the%20same%20fleet.%20This%20method%20allows%20a%20It does not need a new instance)It does not need a new instance

**Comment:** D. Immutable The immutable method strikes a balance between maintaining service availability and controlling costs. It avoids the downtime associated with the all-at-once method and doesn't require the more extensive resource duplication of the blue/green method. While it does temporarily increase resource usage (similar to rolling with an additional batch), it's generally more efficient and less risky than updating instances in-place.

**Comment:** This method performs updates by launching a new set of instances in a new Auto Scaling group. Once the new instances pass health checks, they are moved into the existing Auto Scaling group, and the old instances are terminated. This method ensures full capacity, avoids downtime, and minimizes additional costs because it does not double the environment's running resources for an extended period. It adds resources temporarily and only in the amount necessary to maintain capacity.

**Comment:** Should be B "Ultimately, the choice between "Rolling with additional batch" and "Blue/green" deployments should depend on your specific requirements and constraints. If maintaining full capacity is a crucial factor, then "Rolling with additional batch" could be the better choice."

**Comment:** MS Bing answer: B vs Chag GPT answer: C Your choice?

### Replies:

**Comment:** ChatGPT4 changed its mind to select D today.

**Comment:** C and D are wrong, since they both require additional resources.

**Comment:** chat gpt replied

**Comment:** Answer is B One of requirement - the developer [must minimize the cost of additional resources] that support the deployment.

**Comment:** I vote for D since the requirement is to minimize the costs of resources. Blue/green is a good and safe way to solve this but it costs more resources than an Immutable rollout. Immutable: Launches a new set of instances in a new temporary environment to ensure that the new version works as expected. Once the new version is verified, traffic is rerouted to the new set of instances, and the old instances are terminated. This method maintains full capacity, avoids service interruptions, and minimizes the cost compared to blue/green deployments since the overlap in running resources is shorter.

**Comment:** The correct answer is (C). The blue/green deployment method is the best option to meet the developer's requirements. Blue/green allows the developer to deploy a new version of the application without service interruption. This is done by creating a blue production environment and a green production environment. The blue environment is the current production environment and the green environment is the new version of the application. The developer can then test the new version of the application in the green environment before putting it into production.

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## Discussion for Question 162

**Link:** <https://www.examtactics.com/discussions/amazon/view/122582-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 14 votes

### Discussion

**Comment:** C is the correct answer.

**Comment:** <https://docs.aws.amazon.com/serverless-application-model/latest/developerguide/using-sam-cli-local-generate-event.html>

**Comment:** This is the most suitable option. AWS SAM CLI is a tool designed for building, testing, and debugging serverless applications, and it includes the ability to locally test Lambda functions. The sam local invoke command allows you to invoke Lambda functions locally in a Docker container that simulates the Lambda execution environment. The sam local generate-event command can be used to generate sample events. This approach allows developers to run tests locally and can be integrated into CI/CD pipelines.

**Comment:** C should be correct

**Comment:** The correct answer is (C). Solution (C) is the best option to meet the developer's requirements. The AWS SAM CLI tool provides an easy way to generate sample events and invoke Lambda functions locally. The solution is also easy to document and integrate into the CI/CD pipeline.

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## Discussion for Question 163

**Link:** <https://www.examtactics.com/discussions/amazon/view/122581-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 11 votes

### Discussion

**Comment:** The most reasonable answer here is C. But I think the question is missing some information. <https://aws.amazon.com/blogs/security/how-to-use-trust-policies-with-iam-roles/>

### Replies:

**Comment:** What is a trust policy? I know trust relationship, not a trust policy.

**Comment:** Well, I will guess that this question is badly written on purpose. Anyway: C makes more sense since A and B are going against best practices of least privilege. D makes no sense since the role must trust the service that will use it rather than the service that will be accessed.

**Comment:** C is the correct answer.

**Comment:** D.Create a trust relationship between the role and dynamdb.amazonaws.com. Explanation: Trust Relationship: In AWS, a trust relationship defines who or what entity can assume a role. In this case, the role attached to the EC2 instance needs to trust DynamoDB. The trust relationship is specified in a JSON policy document. DynamoDB Service Principal: The correct service principal for DynamoDB is dynamdb.amazonaws.com. This is the entity that the role needs to trust to allow access to DynamoDB resources.

### Replies:

**Comment:** Complete nonsense. Role needs to trust EC2, since its the EC2 who is to assume the role.

**Comment:** <https://www.examtactics.com/discussions/amazon/view/96497-exam-aws-certified-developer-associate-topic-1-question-380/>

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## Discussion for Question 164

**Link:** <https://www.examtactics.com/discussions/amazon/view/122586-exam-aws-certified-developer-associate-dva-c02-topic-1/>

## Most Voted

- B: 16 votes

## Discussion

**Comment:** This appear at 17 Jun exam

### Replies:

**Comment:** What was the correct answer to it?

**Comment:** B is the correct answer.

**Comment:** <https://docs.aws.amazon.com/encryption-sdk/latest/developer-guide/concepts.html#:~:text=An%20encryption%20context%20is%20a,encrypted%20message%20that%20it%20returns.>

**Comment:** In the AWS Encryption SDK, data is encrypted using a DEK. This DEK is then encrypted with a Key Encryption Key (KEK), usually managed by AWS Key Management Service (AWS KMS) or another key management infrastructure. The encrypted DEK is stored alongside the encrypted data (ciphertext). This allows the SDK to manage the DEKs seamlessly.

**Comment:** When using the AWS Encryption SDK, it is a common practice to encrypt the data encryption key (DEK) along with the data. The DEK is used to encrypt the actual data, and it is itself encrypted using a key management system, often called a key encryption key (KEK). This encrypted DEK is then stored alongside the encrypted data.

**Comment:** B is correct

**Comment:** <https://www.examtopycs.com/discussions/amazon/view/96427-exam-aws-certified-developer-associate-topic-1-question-398/>

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## Discussion for Question 165

**Link:** <https://www.examtopycs.com/discussions/amazon/view/122585-exam-aws-certified-developer-associate-dva-c02-topic-1/>

## Most Voted

- C: 19 votes

## Discussion

**Comment:** C should be correct: <https://docs.aws.amazon.com/lambda/latest/operatorguide/least-privilege.html>

**Comment:** The correct answer is (B). Option (B) is the most secure way to configure S3 bucket access because the credentials are stored in a safe and secure location. AWS Secrets Manager uses public key cryptography to protect stored secrets.

### Replies:

**Comment:** B goes against the least privilege principle beacuse it gives access to the whole bucket

### Replies:

**Comment:** Store credentials in aws secret manager, it will be rotated => so it comply the least privilege principle!

**Comment:** C is the correct answer.

**Comment:** This is the most secure and recommended approach. By attaching an IAM policy to the Lambda execution role that grants access only to the specific S3 objects needed, you adhere to the principle of least privilege. This method also uses AWS's built-in mechanism for providing temporary credentials to the Lambda function, eliminating the need to manage access keys.

**Comment:** C. Create a Lambda function execution role. Attach a policy to the role that grants access to specific objects in the S3 bucket.

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## Discussion for Question 166

**Link:** <https://www.examtopycs.com/discussions/amazon/view/122584-exam-aws-certified-developer-associate-dva-c02-topic-1/>

## Most Voted

- A: 11 votes

## Discussion

**Comment:** (CD) eliminated. service-based link is not supported by Lambda. (A) S3 ListBucket permission violates the principle of least privilege and therefore is not the most secure. Bucket policy to list principles of multiple accounts requires additional overhead. The list can change. (B) allows the CloudFormation service role to access the S3 bucket from any account, as long as it has the S3 GetObject permission. The bucket policy grants access to any principal with the GetObject permission, which is the least privilege needed to deploy the Lambda code.

**Comment:** A is the correct answer.

**Comment:** This approach is secure and provides a granular level of control. By granting the CloudFormation service role in each account the necessary S3 permissions and specifying the account numbers in the S3 bucket policy, you ensure that only the specified accounts can access the Lambda code. However, the ListBucket permission is not necessary if the CloudFormation template already knows the exact S3 object key.

**Comment:** Following ChatGPT 3.5, Option A is the best choice. I guess. - Follows the principle of least privilege by granting only the necessary permissions (ListBucket and GetObject) to the CloudFormation service role. - Adding a bucket policy with the principal of "AWS": [account numbers] restricts access to only the specified AWS accounts, providing a more secure access control mechanism. - This ensures that only the CloudFormation service role in the specified AWS accounts can access the Lambda code in the S3 bucket.

**Comment:** The correct answer is (A). Option (A) is the safest way to allow CloudFormation to access the Lambda code in the S3 bucket because it limits access to the specific accounts that need to deploy the Lambda functions. The bucket policy grants S3 ListBucket and GetObject permissions to the CloudFormation service role only for the accounts specified in the principal.

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## Discussion for Question 167

**Link:** <https://www.examtopycs.com/discussions/amazon/view/122587-exam-aws-certified-developer-associate-dva-c02-topic-1/>

## Most Voted

- C: 9 votes

## Discussion

**Comment:** C is the correct answer.

**Comment:** <https://docs.aws.amazon.com/eventbridge/latest/userguide/eb-create-rule-schedule.html>

**Comment:** C is correct

**Comment:** <https://www.examtopycs.com/discussions/amazon/view/88703-exam-aws-certified-developer-associate-topic-1-question-229/>

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# Discussion for Question 168

Link: <https://www.examtactics.com/discussions/amazon/view/122588-exam-aws-certified-developer-associate-dva-c02-topic-1/>

## Most Voted

- B: 8 votes

## Discussion

**Comment:** This appear at 17 Jun exam

**Comment:** B is the correct answer.

**Comment:** B it is!

**Comment:** The correct answer is (B). Initializing the AWS SDK outside of the Lambda handler function takes advantage of runtime environment reuse. This means that the SDK only needs to be initialized once for all Lambda function invocations. This can improve application performance and efficiency.

# Discussion for Question 169

Link: <https://www.examtactics.com/discussions/amazon/view/122589-exam-aws-certified-developer-associate-dva-c02-topic-1/>

## Most Voted

- C: 16 votes

## Discussion

**Comment:** Should be C since ElastiCache for Redis supports encryption at rest and in transit. ElastiCache for Memcached does not support encryption at rest. DynamoDB Accelerator is for DynamoDB and does not fit this case.

**Comment:** C is the correct answer.

**Comment:** ElastiCache for Redis provides both encryption in transit and at rest. In cluster mode, it also offers high availability and scalability. This makes it well-suited for caching database queries while ensuring data security and high availability.

**Comment:** <https://www.examtactics.com/discussions/amazon/view/82917-exam-aws-certified-developer-associate-topic-1-question-95/>

# Discussion for Question 170

Link: <https://www.examtactics.com/discussions/amazon/view/122590-exam-aws-certified-developer-associate-dva-c02-topic-1/>

## Most Voted

- A: 17 votes

## Discussion

**Comment:** Change the API Gateway route to add an X-Amz-Invocation-Type header with a static value of 'Event' in the integration request: This is the correct approach. By setting the X-Amz-Invocation-Type header to Event in the API Gateway integration request, the API Gateway will invoke the Lambda function asynchronously. In asynchronous execution, the Lambda function returns an immediate response (202 or Accepted status) to API Gateway, which can then relay it back to the UI. Meanwhile, the Lambda function processes the file in the background.

**Comment:** According chatgpt correct is A. D is wrong because header value is set for Async and it should be set for Event This header is incorrect for this use case. The correct header for asynchronous invocation of Lambda is X-Amz-Invocation-Type with the value 'Event', not 'Async'.

**Comment:** By adding the X-Amz-Target header with a value of 'Async', the API Gateway will invoke the backend Lambda function asynchronously.

**Comment:** A is the correct answer.

**Comment:** <https://docs.aws.amazon.com/apigateway/latest/developerguide/set-up-lambda-integration-async.html>

**Comment:** <https://www.examtactics.com/discussions/amazon/view/82655-exam-aws-certified-developer-associate-topic-1-question-85/>

**Comment:** Option A is incorrect because the X-Amz-Invocation-Type header with a static value of 'Event' is used for the AWS Lambda asynchronous invocation, but it doesn't address the issue of providing an immediate response to the UI. Option D is the correct choice. By adding an X-Amz-Target header with a static value of 'Async' in the integration request, the API Gateway will immediately return a response to the UI, allowing it to display a message while the backend processing continues asynchronously. This ensures that the UI team does not encounter timeout errors due to long-running processes.

## Replies:

**Comment:** I miss something, Option D is undocumented. => A is the best choice

**Comment:** Reference: <https://docs.aws.amazon.com/apigateway/latest/developerguide/set-up-lambda-integration-async.html>

**Comment:** Option A involves changing the API Gateway route to add an X-Amz-Invocation-Type header with a static value of 'Event' in the integration request. This header is typically used when you want to invoke a Lambda function asynchronously, but it doesn't ensure that you get an immediate response. It essentially sends the request to a queue for asynchronous execution and doesn't wait for the processing to complete before providing a response. In contrast, option D suggests using the X-Amz-Target header with a static value of 'Async,' which is a more appropriate choice when you need to provide an immediate response to the client while offloading the processing for background execution. This approach better aligns with the requirement of displaying a message to the user while the files are being processed, which is typically achieved through asynchronous processing with notification upon completion.

**Comment:** A) <https://www.examtactics.com/discussions/amazon/view/82655-exam-aws-certified-developer-associate-topic-1-question-85/>

**Comment:** aaaaaaaaaaaaaaaaaaaaaaaaaa

# Discussion for Question 171

Link: <https://www.examtactics.com/discussions/amazon/view/122591-exam-aws-certified-developer-associate-dva-c02-topic-1/>

## Most Voted

- C: 7 votes

## Discussion

**Comment:** C is the correct answer.

**Comment:** To share dependencies across multiple functions. After you create a layer, you can apply it to any number of functions in your account. Without layers, you need to include the same dependencies in each individual deployment package. <https://docs.aws.amazon.com/lambda/latest/dg/chapter-layers.html>

**Comment:** C is correct.

## Discussion for Question 172

Link: <https://www.examttopics.com/discussions/amazon/view/122593-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- D: 10 votes

### Discussion

**Comment:** D is the correct answer.

**Comment:** This is the most cost-effective and efficient solution. The TTL feature allows DynamoDB to automatically delete items past a certain timestamp, which is perfect for this use case. By adding a TTL attribute to each item (set to 48 hours after the post creation time), DynamoDB will automatically delete the items when they expire, without any need for custom scripts, additional AWS services, or manual intervention.

**Comment:** D is correct. DynamoDB tables can clean up data itself based on provided configuration.

**Comment:** The correct answer is (D). Solution (D) is the most cost-effective because it uses DynamoDB's Time to Live (TTL) to automatically remove expired items. The TTL is an item attribute that specifies the duration of time that an item should remain in the table. When an item's TTL expires, the item is automatically deleted from the table.

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## Discussion for Question 173

Link: <https://www.examttopics.com/discussions/amazon/view/122592-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 10 votes

### Discussion

**Comment:** B is the correct answer.

**Comment:** AWS Secrets Manager is designed to handle sensitive information like database credentials and supports automatic rotation. Using SecureString parameters in Systems Manager Parameter Store for other parameters provides a secure and centralized way to manage them. This approach also enables reusability and easy updating without code modifications.

**Comment:** B is correct

**Comment:** B) <https://www.examttopics.com/discussions/amazon/view/88929-exam-aws-certified-developer-associate-topic-1-question-338/>

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## Discussion for Question 174

Link: <https://www.examttopics.com/discussions/amazon/view/122594-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 10 votes

### Discussion

**Comment:** A is the correct answer.

**Comment:** Take a look at CodeCommit API Operations and Required Permissions for Actions on Branches in <https://docs.aws.amazon.com/codecommit/latest/userguide/auth-and-access-control-permissions-reference.html#aa-branches> => A

**Comment:** A of course

**Comment:** A) <https://www.examttopics.com/discussions/amazon/view/4364-exam-aws-certified-developer-associate-topic-1-question-190/>

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## Discussion for Question 175

Link: <https://www.examttopics.com/discussions/amazon/view/122595-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- AB: 14 votes

### Discussion

**Comment:** A. Modify the application code to perform exponential backoff when the error is received: This is a cost-effective and recommended approach. Exponential backoff is a standard error-retry strategy where the time between retries gradually increases. This strategy helps to efficiently manage request retries without immediately consuming additional throughput, thus reducing the likelihood of repeatedly hitting the throughput limits. B. Modify the application to use the AWS SDKs for DynamoDB: The AWS SDKs implement best practices, including automatic retry logic with exponential backoff. Using an AWS SDK for DynamoDB can simplify the implementation and is more efficient than directly calling the DynamoDB REST API. This change can help mitigate throughput exceedance errors.

**Comment:** AB is the correct answer.

**Comment:** Following ChatGPT 3.5, Option A and C Option B (Modify the application to use the AWS SDKs for DynamoDB) is not directly related to resolving throughput issues. It's generally recommended to use the AWS SDKs as they provide more efficient and convenient ways to interact with AWS services, but it may not directly address the ProvisionedThroughputExceededException issue.

**Comment:** A and B. Exponential backoff is a standard error-handling strategy for network applications. The idea is to retry a failed request with increasing delays between each attempt. And the AWS SDKs have built-in support for handling these errors.

**Comment:** A and B: <https://www.examttopics.com/discussions/amazon/view/69199-exam-aws-certified-developer-associate-topic-1-question-385/>

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## Discussion for Question 176

Link: <https://www.examttopics.com/discussions/amazon/view/122596-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- D: 10 votes

### Discussion

**Comment:** D is the correct answer.

**Comment:** AWS Systems Manager Parameter Store is specifically designed for managing configuration data and secrets. It can store large numbers of parameters, including environment variables, and makes them easily accessible and manageable. It also provides features like versioning, fine-grained access control, and integration with AWS Identity and Access Management (IAM).

**Comment:** Best solution is D

**Comment:** D) <https://docs.aws.amazon.com/codebuild/latest/userguide/troubleshooting.html>

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## Discussion for Question 177

**Link:** <https://www.examtactics.com/discussions/amazon/view/122597-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- D: 16 votes

### Discussion

**Comment:** This appear at 17 Jun exam

**Comment:** D is the correct answer.

**Comment:** C I dont see any aws docs about Cloudfront cache=> so maybe it is cost-effective

**Comment:** <https://aws.amazon.com/blogs/networking-and-content-delivery/resizing-images-with-amazon-cloudfront-lambdaedge-aws-cdn-blog/>

**Comment:** This solution is the most cost-effective. Lambda@Edge processes the photos dynamically based on the device's requirements, which means no pre-generation of multiple variants is required. Processed photos are stored on S3, ensuring that subsequent requests for the same photo variant are served directly from S3, reducing Lambda@Edge invocations and further optimizing costs.

**Comment:** <https://aws.amazon.com/es/blogs/networking-and-content-delivery/image-optimization-using-amazon-cloudfront-and-aws-lambda/>

**Comment:** According to <https://aws.amazon.com/blogs/networking-and-content-delivery/resizing-images-with-amazon-cloudfront-lambdaedge-aws-cdn-blog/>, "static resources like images should have a long Time to Live (TTL) as possible to improve cache-hit ratios.". The photo cache here is likely to be static and should be preserved forever.

### Replies:

**Comment:** CloudFront has a Maximum TTL of 365 days. Would it not be cheaper to store the images in the CloudFront cache, instead of storing it in S3 which would incur costs? We may need to assume it would be unlikely the users would access the same photo more than a year after the initial access.

**Comment:** Why not B? The developer can use S3 Batch Operations to create new variants of the photos with the required dimensions and resolutions.

**Comment:** You only want to convert the pictures that get requests. If you convert them all through batch processing, you have wasted time and expense on any possible photo that never gets viewed. The Minimum TTL is set to 60 seconds, the Default TTL is set to 300 seconds, and the Maximum TTL is set to 3600 seconds. S3 is the way to go.

### Replies:

**Comment:** CloudFront cache has a Maximum TTL of 365 days. Would it not be cheaper to store the images in the CloudFront cache, instead of storing it in S3 which would incur costs? We may need to assume it would be unlikely the users would access the same photo more than a year after the initial access.

**Comment:** D is correct

**Comment:** D) <https://www.examtactics.com/discussions/amazon/view/89564-exam-aws-certified-developer-associate-topic-1-question-320/>

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## Discussion for Question 178

**Link:** <https://www.examtactics.com/discussions/amazon/view/122598-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- D: 17 votes

### Discussion

**Comment:** D is the correct answer.

**Comment:** <https://aws.amazon.com/dynamodb/dax/>

**Comment:** DAX is an in-memory cache for DynamoDB that delivers fast read performance for your tables at scale by enabling you to get sub-millisecond response times for accessing your data. DAX is particularly beneficial for read-heavy and bursty workloads. Since it reduces the time to retrieve data, it's the most appropriate solution for achieving sub-millisecond latency in data retrieval.

**Comment:** Use DynamoDB Accelerator (DAX)

**Comment:** <https://aws.amazon.com/dynamodb/dax/> DAX delivers up to a 10 times performance improvement—from milliseconds to microseconds—even at millions of requests per second. only pay for the capacity you provision.

**Comment:** This is a perfect scenario for DAX so correct answer is D

**Comment:** D) <https://www.examtactics.com/discussions/amazon/view/4971-exam-aws-certified-developer-associate-topic-1-question-14/>

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## Discussion for Question 179

**Link:** <https://www.examtactics.com/discussions/amazon/view/122600-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- BE: 16 votes

### Discussion

**Comment:** The correct answers are (E) and (B). (E) is the most important action to enable application request tracking using AWS X-Ray. The AWS X-Ray SDK for Python provides a set of APIs that a developer can use to instrument their application code for tracing. (B) is the second most important action. The AWS X-Ray daemon runs on each EC2 instance and collects application trace data

**Comment:** BE is the correct answer.

**Comment:** B. Install the AWS X-Ray daemon on the EC2 instances: This is a required step for enabling AWS X-Ray tracing. The X-Ray daemon listens for traffic on UDP port 2000, gathers raw segment data, and relays it to the AWS X-Ray API. This is necessary for collecting and sending trace data from the application to X-Ray. E. Install and configure the AWS X-Ray SDK for Python in the application: This is a critical step for enabling X-Ray tracing in your Python application. The X-Ray SDK for Python provides classes and methods to collect data about the requests that your application serves, and sends this data to the X-Ray daemon.

**Comment:** Answer: E,B

**Comment:** B and E

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## Discussion for Question 180

Link: <https://www.examttopics.com/discussions/amazon/view/122601-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 17 votes

### Discussion

**Comment:** C. AWS Systems Manager Parameter Store offers a more centralized way to manage encrypted secrets across multiple services than Lambda environment variables, making it a better fit for this scenario.

**Comment:** C. Option A (IAM database authentication) may provide secure authentication, but it doesn't directly address the storage and retrieval of the connection string. Option B (storing credentials in an encrypted RDS DB instance) might introduce unnecessary complexity and potential security risks. Option D (Lambda environment variables with a shared AWS KMS key) is a viable option, but using Parameter Store is generally considered a more centralized and managed approach for storing and retrieving sensitive data in AWS. Therefore, option C is the most appropriate choice for securely managing the database connection string in this scenario.

**Comment:** C is the best choice. For those that chose A: simply enabling the DB IAM auth does not address the need to use a single secure string. It would require more steps to make this work regarding lambda execution role, iam policies and etc.

**Comment:** This appear at 17 Jun exam

**Comment:** C is the correct answer.

**Comment:** <https://aws.amazon.com/blogs/database/iam-role-based-authentication-to-amazon-aurora-from-serverless-applications/>

**Comment:** The developer can create an IAM role with permission to connect to Aurora DB instance and attach it to each Lambda function. The developer can also configure Aurora DB instance to use IAM database authentication and enable encryption in transit using SSL certificates. <https://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/UsingWithRDS.IAMDBAuth.html>

**Comment:** The answer is A. <https://aws.amazon.com/ru/blogs/database/iam-role-based-authentication-to-amazon-aurora-from-serverless-applications/>

### Replies:

**Comment:** In Amazon Aurora, you can associate the database users with the IAM user and roles.

**Comment:** C. Store the credentials in AWS Systems Manager Parameter Store as a secure string parameter: This is a strong option. Systems Manager Parameter Store provides secure, hierarchical storage for configuration data and secrets. It can store data such as passwords and database connection strings securely, and it integrates with AWS Key Management Service (AWS KMS) for encryption. Lambda functions can then retrieve the connection string securely at runtime. D. Use Lambda environment variables with a shared AWS Key Management Service (AWS KMS) key for encryption: While Lambda environment variables can be encrypted with AWS KMS and used to store sensitive information like database connection strings, they are not as centrally manageable as Parameter Store. Each Lambda function's environment variables would need to be updated individually if the connection string changes, which is less efficient and more prone to error.

**Comment:** <https://aws.amazon.com/blogs/database/iam-role-based-authentication-to-amazon-aurora-from-serverless-applications/>

**Comment:** The correct answer is (D). Solution (D) is the best option because it uses Lambda environment variables with an AWS Key Management Service (AWS KMS) shared key for encryption.

## Discussion for Question 181

Link: <https://www.examttopics.com/discussions/amazon/view/122602-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- D: 13 votes

### Discussion

**Comment:** why not C,X-Ray is more focused on the internal workings and performance of the API rather than the validity or structure of incoming requests. according to the error 400, it should be the client side error like incorrect request syntax, invalid request message framing, or deceptive request routing

**Comment:** D is the correct answer.

**Comment:** Changing answer to D: CloudTrail records API-level events, but it may not capture the payloads, headers, or other details of the requests and responses that are essential for understanding the cause of HTTP 400 response errors.

**Comment:** Logging events of API -> AWS CloudTrail

**Comment:** Cloud Trail logs

### Replies:

**Comment:** Switching my vote to D

**Comment:** Always the rule of thumb is Cloud trail to trace the logging events of API's. <https://docs.aws.amazon.com/awscloudtrail/latest/userguide/logging-insights-events-with-cloudtrail.html#:~:text=AWS%20CloudTrail%20Insights,write%20management%20APIs.>

### Replies:

**Comment:** Sorry its not C its B

**Comment:** D according to <https://docs.aws.amazon.com/apigateway/latest/developerguide/set-up-logging.html>

**Comment:** D should be correct

**Comment:** D) <https://www.examttopics.com/discussions/amazon/view/88807-exam-aws-certified-developer-associate-topic-1-question-264/>

## Discussion for Question 182

Link: <https://www.examttopics.com/discussions/amazon/view/122604-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 22 votes

### Discussion

**Comment:** A is incorrect, because of CloudFront always caches responses to GET and HEAD requests. You can also configure CloudFront to cache responses to OPTIONS requests. CloudFront does not cache responses to requests that use the other methods. (<https://docs.aws.amazon.com/AmazonCloudFront/latest/DeveloperGuide/RequestAndResponseBehaviorCustomOrigin.html>)

### Replies:

**Comment:** I agree, I think B is correct as well looking into it more.

**Comment:** Why A is not correct Amazon CloudFront does not cache the responses to POST, PUT, DELETE, and PATCH requests – these requests are proxied back to the origin server. You may enable caching for the responses to OPTIONS requests.

**Comment:** <https://docs.aws.amazon.com/apigateway/latest/developerguide/api-gateway-caching.html#override-api-gateway-stage-cache-for-method-cache>

**Comment:** B is the correct answer.

**Comment:** <https://docs.aws.amazon.com/apigateway/latest/developerguide/api-gateway-caching.html#:~:text=When%20you%20enable,caching%20is%20disabled.>

**Comment:** API Gateway allows caching of responses, and you can enable caching for specific methods, including POST. This option is a viable solution as it leverages the built-in capabilities of API Gateway to cache responses. By configuring caching at the API Gateway stage level, the developer can cache responses to POST requests based on defined parameters.

**Comment:** A is the correct answer here. CloudFront can be configured to cache based on request headers, query strings, and POST request bodies. Option B might work but it does not work by default and it's not an effective way to solve this.

**Comment:** The correct answer is (B). Solution (B) is the best option because it uses the Amazon API Gateway cache to cache POST requests.

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## Discussion for Question 183

**Link:** <https://www.examttopics.com/discussions/amazon/view/122606-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- CD: 14 votes

### Discussion

**Comment:** C and D should be correct. Given that "The development team plans to test a small percentage of traffic that is directed to new updates before the team commits to a full deployment of the application." then Option D makes more sense than Option E.

**Comment:** <https://docs.aws.amazon.com/serverless-application-model/latest/developerguide/automating-updates-to-serverless-apps.html> You need to enable the gradual deployment first then only codeDeploy will invoke lambda function

**Comment:** CD is the correct answer.

**Comment:** For A - <https://docs.aws.amazon.com/serverless-application-model/latest/developerguide/serverless-sam-cli-using-automated-tests.html#:~:text=Y ou%20can%20use%20the%20sam%20local%20invoke%20command%20to%20manually%20test%20your%20code%20by%20running%20Lambda%20functions%20locally.%20With%20the%20AWS%20SA>  
C - <https://docs.aws.amazon.com/serverless-application-model/latest/developerguide/automating-updates-to-serverless-apps.html>

**Comment:** <https://docs.aws.amazon.com/serverless-application-model/latest/developerguide/automating-updates-to-serverless-apps.html>

**Comment:** I will got A & D D is nice and clear no debates For A - <https://docs.aws.amazon.com/serverless-application-model/latest/developerguide/serverless-sam-cli-using-automated-tests.html#:~:text=Y ou%20can%20use%20the%20sam%20local%20invoke%20command%20to%20manually%20test%20your%20code%20by%20running%20Lambda%20functions%20locally.%20With%20the%20AWS%20SA>

### Replies:

**Comment:** changing the option to C, D

**Comment:** C. Enable gradual deployments through AWS SAM templates: Gradual deployments allow you to safely deploy your application while exposing new versions to only a portion of your traffic. This approach is ideal for testing new updates in a production environment without impacting all users. AWS SAM supports the configuration of deployment preferences directly within the SAM template. D. Set the deployment preference type to Canary10Percent30Minutes. Use hooks to test the deployment: The Canary deployment type is suitable for gradually introducing a new version of the Lambda function. In this case, "Canary10Percent30Minutes" means that 10% of the traffic will be directed to the new version for 30 minutes. If no issues are detected, the rest of the traffic is shifted to the new version. The use of hooks allows for automated tests to run against the new deployment, ensuring its stability before full traffic shift.

**Comment:** A: test code during deploy <https://docs.aws.amazon.com/serverless-application-model/latest/developerguide/serverless-sam-cli-using-automated-tests.html> D: Canary, to deploy a small percentage

**Comment:** C. Enable gradual deployments through AWS SAM templates. D. Set the deployment preference type to Canary10Percent30Minutes. Use hooks to test the deployment.

**Comment:** The correct answers are (C) and (E). (C) is the most important step because it allows you to deploy new Lambda function updates to a small percentage of your traffic. (E) is the second most important step because it allows you to test new Lambda function updates using hooks.

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## Discussion for Question 184

**Link:** <https://www.examttopics.com/discussions/amazon/view/122605-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- D: 12 votes

### Discussion

**Comment:** D is correct

**Comment:** D is the correct answer.

**Comment:** D) <https://www.examttopics.com/discussions/amazon/view/88814-exam-aws-certified-developer-associate-topic-1-question-270/>

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## Discussion for Question 185

**Link:** <https://www.examttopics.com/discussions/amazon/view/122607-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 11 votes

### Discussion

**Comment:** B is the correct answer.

**Comment:** <https://docs.aws.amazon.com/lambda/latest/dg/with-ddb.html>

**Comment:** Configure event source mapping for the Lambda function after enabling Streams

**Comment:** B is the only option that makes sense here

**Comment:** B) <https://www.examttopics.com/discussions/amazon/view/4365-exam-aws-certified-developer-associate-topic-1-question-35/#>

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## Discussion for Question 186

**Link:** <https://www.examttopics.com/discussions/amazon/view/122608-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 18 votes

## Discussion

**Comment:** B) <https://www.examtactics.com/discussions/amazon/view/28795-exam-aws-certified-developer-associate-topic-1-question-108/>

**Comment:** B is the correct answer.

**Comment:** <https://docs.aws.amazon.com/AmazonECS/latest/developerguide/taskdef-envfiles.html>

**Comment:** Following ChatGPT 3.5, The correct option is B When using Amazon ECS, the task definition is where you define parameters for your containers, including environment variables. The environment parameter within the task definition allows you to specify environment variables for your containers. This approach provides a clear separation of concerns, allowing you to define the environment variables at the task definition level, which is then used by the service when running tasks. Option A is incorrect because the environment variables are typically defined in the task definition rather than the service definition. Options C and D are incorrect because the entryPoint parameter is used for specifying the entry point (command) for the container, not for defining environment variables.

**Comment:** B is correct

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## Discussion for Question 187

**Link:** <https://www.examtactics.com/discussions/amazon/view/122609-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- AB: 12 votes

## Discussion

**Comment:** AB is the correct answer.

**Comment:** <https://repost.aws/knowledge-center/cloudformation-accidental-updates>

**Comment:** A. Add a CloudFormation DeletionPolicy attribute with the Retain value to the database resource. The DeletionPolicy attribute can be used in the CloudFormation template to protect a resource from being accidentally deleted. By setting the DeletionPolicy to Retain, the resource is retained when the stack is deleted, thus preventing accidental data loss. This should be applied directly to the database resource in the CloudFormation template. B. Update the CloudFormation stack policy to prevent updates to the database. A stack policy can be used to prevent changes to certain resources during stack updates. By defining a stack policy that prohibits actions on the database resource, the team can prevent accidental modifications or deletions of the database during stack updates.

**Comment:** The answer is A and D

**Comment:** A and B) <https://www.examtactics.com/discussions/amazon/view/103521-exam-aws-certified-developer-associate-dva-c02-topic-1/#>

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## Discussion for Question 188

**Link:** <https://www.examtactics.com/discussions/amazon/view/122610-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 12 votes

## Discussion

**Comment:** This appear at 17 Jun exam

**Comment:** B is the correct answer.

**Comment:** SSE-KMS provides an additional layer of security by requiring separate permissions for the use of an encryption key to the bucket. This option also provides an audit trail by logging the use of the key in AWS CloudTrail, which is a requirement according to the company policy. The audit trail includes information about who used the key and when it was used, which fulfills the requirement for auditing.

**Comment:** B, since we need an audit trail of the AWK KMS key then this is the one to use.

**Comment:** B) <https://www.examtactics.com/discussions/amazon/view/28801-exam-aws-certified-developer-associate-topic-1-question-217/>

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## Discussion for Question 189

**Link:** <https://www.examtactics.com/discussions/amazon/view/122611-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 12 votes

## Discussion

**Comment:** A is the correct answer.

**Comment:** Rating for a product these two are essential and already ReviewID has partitions

**Comment:** This GSI allows for queries that are based on Product ID, efficiently narrowing down the reviews for a specific product. The Product Rating as the sort key enables sorting the reviews by their rating, which directly supports the need to find the top 10 reviews. GSIs also support a different partition key than the base table, which is necessary in this case since the base table's partition key is Review ID.

**Comment:** A should be correct

**Comment:** A) <https://www.examtactics.com/discussions/amazon/view/88995-exam-aws-certified-developer-associate-topic-1-question-362/>

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## Discussion for Question 190

**Link:** <https://www.examtactics.com/discussions/amazon/view/122612-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 18 votes

## Discussion

**Comment:** A is the correct answer.

**Comment:** Amazon CloudFront is a content delivery network (CDN) service that can efficiently distribute files globally. Using signed URLs provides a secure method to control access to the firmware updates. Only users with valid signed URLs can download the files, ensuring controlled access. This approach is cost-effective as it leverages CloudFront's caching capabilities to reduce load on the origin (Amazon S3) and reduces data transfer costs.

**Comment:** option B, for each customer, will bring high costs

**Comment:** A. Use Amazon CloudFront with signed URLs for Amazon S3. Using Amazon CloudFront with signed URLs is a secure and cost-effective way to control access to downloads. With signed URLs, you can generate URLs with limited time validity, ensuring that only users with the correct URL and during the specified time window can access the firmware updates. This provides both security and control over access. Option B (Create a dedicated Amazon CloudFront Distribution for each customer) may result in higher costs and increased complexity. Option C (Use Amazon CloudFront with AWS Lambda@Edge) is more focused on customization and additional processing at the edge locations, which may not be necessary for simple access control. Option D (Use Amazon API Gateway and AWS Lambda) is more suited for managing APIs and might be an overkill for a straightforward firmware update distribution scenario.

**Comment:** A is correct

**Comment:** A) <https://www.examtactics.com/discussions/amazon/view/8792-exam-aws-certified-developer-associate-topic-1-question-179/#>

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## Discussion for Question 191

**Link:** <https://www.examtactics.com/discussions/amazon/view/122613-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 13 votes

### Discussion

**Comment:** In AWS Lambda, you can use Dead Letter Queues (DLQ) to capture and retain events that couldn't be processed successfully after a specified number of retries. By configuring a DLQ, the failed events are sent to an Amazon SQS queue, allowing you to investigate and analyze the reasons for the failures.

**Comment:** B is the correct answer.

**Comment:** Dead Letter Queues (DLQ) can be configured for Lambda functions to capture failed asynchronous invocations. Events that cannot be processed will be sent to an SQS queue (or an SNS topic) you specify, allowing for further investigation and reprocessing.

**Comment:** B) <https://www.examtactics.com/discussions/amazon/view/28638-exam-aws-certified-developer-associate-topic-1-question-317/#>

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## Discussion for Question 192

**Link:** <https://www.examtactics.com/discussions/amazon/view/122615-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 10 votes

### Discussion

**Comment:** B) The correct answer is (B). Solution (B) is the best option because it meets all the requirements: Using a database that secures and regularly changes database credentials: Amazon Aurora PostgreSQL offers built-in credential rotation, which allows you to change database credentials at regular intervals. Solution that requires no additional programming overhead: Amazon Aurora PostgreSQL credential rotation is fully automated, so it requires no additional programming overhead.

**Comment:** B is the correct answer.

**Comment:** AWS Secrets Manager is a service designed to rotate, manage, and retrieve database credentials, API keys, and other secrets. In this scenario, storing the database credentials in AWS Secrets Manager and enabling rotation ensures that your database credentials are regularly rotated without requiring additional programming overhead. Option B is the most suitable because it specifically addresses the need for securing and regularly rotating database credentials in the AWS Cloud. Amazon Aurora PostgreSQL is a fully managed relational database service, and AWS Secrets Manager seamlessly integrates with it for secure credential management.

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## Discussion for Question 193

**Link:** <https://www.examtactics.com/discussions/amazon/view/122614-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- D: 13 votes

### Discussion

**Comment:** D) <https://www.examtactics.com/discussions/amazon/view/4245-exam-aws-certified-developer-associate-topic-1-question-79/>

**Comment:** D is the correct answer.

**Comment:** Amazon Cognito allows you to create unique identities for users of your application and assign permissions to these identities using IAM roles. By using Cognito's unauthenticated identities (also known as guest users), you can grant limited AWS resource access to users without requiring them to log in. This approach is secure, scalable, and does not require managing user credentials.

**Comment:** Amazon Cognito is designed to handle user identity and access management for mobile and web applications

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## Discussion for Question 194

**Link:** <https://www.examtactics.com/discussions/amazon/view/122616-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 12 votes

### Discussion

**Comment:** C is the correct answer.

**Comment:** Using sam package (or aws cloudformation package) command, the developer can package the Lambda functions, along with any dependencies and resources defined in the SAM template, into a deployment package. This command uploads local artifacts (like Lambda function code and Swagger files) to an S3 bucket and produces a modified SAM template file, formatted for deployment.

**Comment:** C. Bundle the serverless application using a SAM package. Before deploying a serverless application using the AWS Serverless Application Model (AWS SAM) CLI, the developer should bundle the application using the sam package command. This command packages and uploads the local artifacts of your serverless application to Amazon S3, and it produces a packaged AWS SAM template file that you can deploy with the sam deploy command.

**Comment:** C is correct

**Comment:** C) <https://www.examtactics.com/discussions/amazon/view/28650-exam-aws-certified-developer-associate-topic-1-question-312/>

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## Discussion for Question 195

**Link:** <https://www.examtactics.com/discussions/amazon/view/122617-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 9 votes

## Discussion

**Comment:** This appear at 17 Jun exam

**Comment:** B is the correct answer.

**Comment:** This approach integrates directly into the existing AWS CDK deployment process. By writing a handler function within the CDK application, the developer can leverage the AWS SDK to programmatically identify and delete unused resources. The AWS CDK custom resource can then be used to invoke this function as part of the deployment process. This solution is efficient as it keeps everything within the CDK ecosystem and minimizes additional external configurations.

**Comment:** B. In the central AWS CDK application, write a handler function in the code that uses AWS SDK calls to check for and delete unused resources. Create an AWS CDK custom resource. Use the custom resource to attach the function code to an AWS Lambda function and to invoke the Lambda function when the deployment stack runs.

**Comment:** The correct answer is (B). Solution (B) is the best option because: Requires the LEAST amount of configuration: Solution (B) uses an AWS CDK custom resource, which is a type of resource that can be defined in AWS CDK code. Custom resources are a convenient way to add custom functionality to your AWS CloudFormation stacks. Integrates seamlessly into the current deployment process: Solution (B) uses the AWS CDK custom resource to attach function code to an AWS Lambda function and to invoke the Lambda function when the deployment stack runs. This means that the solution does not require any changes to the existing AWS CDK code.

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## Discussion for Question 196

**Link:** <https://www.examttopics.com/discussions/amazon/view/122618-exam-aws-certified-developer-associate-dva-c02-topic-1/>

## Most Voted

- C: 15 votes

## Discussion

**Comment:** The correct answer is (C). Solution (C) is the best option because: It's the most secure solution: Sensitive data is stored in AWS Systems Manager Parameter Store, which is a secret management service managed by AWS. Secure string parameters in AWS Systems Manager Parameter Store are encrypted with an AWS KMS key. It's integrated with CloudFormation: Secure string parameters can be referenced in CloudFormation templates using dynamic references. This means that sensitive data does not need to be stored in CloudFormation code.

**Comment:** C is the correct answer.

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

**Comment:** AWS Systems Manager Parameter Store is a secure and scalable solution for storing configuration data, including sensitive information. In this case, using a secure string parameter allows you to store the sensitive data in Parameter Store in an encrypted form. Option C is the most secure because it leverages AWS Systems Manager Parameter Store's capabilities for securely storing sensitive data, and dynamic references allow you to directly reference the parameter values in CloudFormation templates. This approach avoids exposing sensitive data in the templates themselves and provides a central and secure storage solution for sensitive configuration information.

**Comment:** A option leverages CloudFormation parameters, which can securely store sensitive data. By using an AWS KMS key to encrypt the CloudFormation templates, you ensure that the sensitive data is protected. It follows the principle of least privilege and provides secure access to sensitive information directly within CloudFormation. Option B is less secure because it involves storing sensitive data in an S3 bucket, which could be compromised. Option C suggests using AWS Systems Manager Parameter Store, which is secure, but using CloudFormation parameters and KMS keys provides an integrated solution directly within CloudFormation. Option D involves Amazon EFS, which is typically used for file storage and is not designed for securely storing sensitive data directly within CloudFormation.

**Comment:** C is the correct choice. Parameter Store's secure string parameter encrypts the data using AWS KMS

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## Discussion for Question 197

**Link:** <https://www.examttopics.com/discussions/amazon/view/122619-exam-aws-certified-developer-associate-dva-c02-topic-1/>

## Most Voted

- D: 12 votes

## Discussion

**Comment:** I love how they added the lambda b\*\*k\*\*t just to confuse who's doing the test.

**Comment:** D is the correct answer.

**Comment:** Rotate auto SecretsManager

**Comment:** <https://aws.amazon.com/blogs/security/rotate-amazon-rds-database-credentials-automatically-with-aws-secrets-manager/>

**Comment:** the best and most secure option is: D. Create an AWS Lambda function by using the SecretsManagerRotationTemplate template in the AWS Secrets Manager console.

**Comment:** The correct answer is (D). Solution (D) is the best option because: It's the most secure solution: AWS Secrets Manager is an AWS-managed secrets management service that provides encryption at rest and automatic secret rotation. Meets the company's security requirements: The solution meets the company's security requirements because: Database credentials are encrypted at rest using AWS Key Management Service (AWS KMS). Database credentials are automatically rotated at regular intervals.

**Comment:** DDDDDDD

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## Discussion for Question 198

**Link:** <https://www.examttopics.com/discussions/amazon/view/122620-exam-aws-certified-developer-associate-dva-c02-topic-1/>

## Most Voted

- D: 8 votes

## Discussion

**Comment:** D is the correct answer.

**Comment:** Too many Connections = Proxy

**Comment:** Selected Answer : D

**Comment:** too many connections => proxy

**Comment:** D. RDS Proxy sits between the application and the database to manage and pool connections, reducing the chance of exhausting database connections when many Lambda functions try to connect simultaneously.

**Comment:** D) <https://www.examttopics.com/discussions/amazon/view/88969-exam-aws-certified-developer-associate-topic-1-question-358/>

**Comment:** DDDDDDDDDDD

## Discussion for Question 199

Link: <https://www.examttopics.com/discussions/amazon/view/122621-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- D: 14 votes

### Discussion

**Comment:** The correct answer is (D). The AWS SAM CLI sam local start-api subcommand is used to start a local API Gateway instance. This allows you to test your REST API locally before deploying it to the production environment. The other subcommands will not meet the developer's requirements: Local invocation of Sam is used to invoke a Lambda function locally. Sam's local event generation is used to generate a local event file to be used to invoke a Lambda function locally. Sam local start-lambda is used to start a local instance of a Lambda function.

**Comment:** D is the correct answer.

**Comment:** <https://docs.aws.amazon.com/serverless-application-model/latest/developerguide/sam-cli-command-reference-sam-local-start-api.html>

**Comment:** D is correct

**Comment:** DDDDDDDDDDD

## Discussion for Question 200

Link: <https://www.examttopics.com/discussions/amazon/view/122622-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 11 votes

### Discussion

**Comment:** The correct answer is (A). Weighted aliases allow you to route traffic to different versions of a function based on weights that you assign. This allows you to implement a canary deployment, where you initially route a small percentage of your traffic to the new version of the function, and then gradually increase the percentage as you gain confidence in the new version.

#### Replies:

**Comment:** If we need Canary deployment, then why not B ? How you will use A in automated deployment?

#### Replies:

**Comment:** the key word is "fixed percentage"

**Comment:** A is the correct answer.

**Comment:** I am struggling to see how the correct answer isn't canary. please feel free to enlighten me as I am at a loss how this question description is anything but canary

#### Replies:

**Comment:** is this question a case of what naming convention is used within Lambda service. i.e. Canary deployments via Weighted Aliases.

#### Replies:

**Comment:** Still very on the fence with this one. My key take aways are that the question says an in house deployment solution and not "codedeploy." By using weighted aliases we are in fact performing a canary deployments. Bitch of a question.

#### Replies:

**Comment:** My thought process is this. They can't use Canary Deployment because that is specifically for AWS CodeDeploy. <https://docs.aws.amazon.com/codedeploy/latest/userguide/deployment-configurations.html> They are using an in-house deployment method, so AWS canary deployments aren't applicable. They can, however, use routing configuration on an alias to send a portion of traffic to a second function version. For example, you can reduce the risk of deploying a new version by configuring the alias to send most of the traffic to the existing version, and only a small percentage of traffic to the new version. <https://docs.aws.amazon.com/lambda/latest/dg/configuration-aliases.html#configuring-alias-routing>

**Comment:** <https://docs.aws.amazon.com/lambda/latest/dg/configuration-aliases.html#configuring-alias-routing>~:text=function%20version.%20For%20example%2C%20you%20can%20reduce%20the%20risk%20of%20deploying%20a%20new%20version%20by%20configuring%20the%20alias%20to%20send%20most%20of%20th

**Comment:** Answer is A. weighted aliases offer fixed, predefined percentages

**Comment:** AAAAAAAAAA

## Discussion for Question 201

Link: <https://www.examttopics.com/discussions/amazon/view/122623-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 16 votes

### Discussion

**Comment:** When deciding between Memcached and Redis, here are a few questions to consider: Is object caching your primary goal, for example to offload your database? If so, use Memcached. <https://docs.aws.amazon.com/whitepapers/latest/scale-performance-elasticache/memcached-vs.-redis.html>

**Comment:** A is the correct answer.

**Comment:** A. If you're looking for a multi-threaded solution, then ElastiCache for Memcached (not Redis) is the solution.

**Comment:** A. Use Amazon ElastiCache for Memcached to offload read requests from the main database. ElastiCache for Memcached is a good fit for this scenario. It's a high-performance, distributed, in-memory caching system that can easily scale to manage surges in read traffic. It's simple to set up and integrate with an existing RDS instance. D. Use Amazon ElastiCache for Redis to offload read requests from the main database. ElastiCache for Redis also offers high performance and is capable of handling surges in read traffic. Redis provides more advanced data structures and features compared to Memcached, like persistence, built-in replication, and support for complex data types. However, it might be more complex to set up and manage than Memcached, depending on the use case.

**Comment:** The correct answer is (A). Amazon ElastiCache for Memcached is a scalable, multithreaded caching solution that can be used to offload heavy read traffic from Amazon RDS instances. ElastiCache for Memcached is easy to configure and manage, making it a low-effort solution to meet technical lead requirements.

**Comment:** AAAAAAAAAA

## Discussion for Question 202

Link: <https://www.examttopics.com/discussions/amazon/view/122624-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 12 votes

### Discussion

**Comment:** The correct answer is (A). Storing the API key as a Lambda environment variable using an AWS Key Management Service (AWS KMS) customer-managed key is the most secure solution. AWS KMS is a managed encryption service that provides customer-managed keys. Customer-managed keys are encrypted with an AWS KMS master key, which is stored in an AWS KMS vault.

**Comment:** A is the correct answer.

**Comment:** Lambda environment variables can be encrypted using a customer managed key in AWS KMS. This approach ensures that the API key is encrypted at rest and seamlessly integrated into the Lambda function. When the function is executed, it can access the decrypted value of the API key for authenticating with the third-party system.

**Comment:** AAAAAAAAAA

## Discussion for Question 203

Link: <https://www.examttopics.com/discussions/amazon/view/122625-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 13 votes

### Discussion

**Comment:** A is correct. The requirement of maximizing resiliency rules out One Zone. Standard recover is within 12 hours, which fits the requirement of within 24 hours. <https://docs.aws.amazon.com/AmazonS3/latest/userguide/restoring-objects-retrieval-options.html>

**Comment:** MOST cost-effective solution is: B. Use S3 Standard-Infrequent Access (S3 Standard-IA) to store the images. Use S3 Glacier Deep Archive with bulk retrieval to store and retrieve archived images. Here's why: S3 Standard-Infrequent Access (S3 Standard-IA): Provides a balance between cost and retrieval speed. Suitable for long-lived, less frequently accessed data. Accessible within hours.

**Comment:** <https://docs.aws.amazon.com/AmazonS3/latest/userguide/glacier-storage-classes.html#archival-storage>

**Comment:** A is the correct answer.

**Comment:** <https://docs.aws.amazon.com/AmazonS3/latest/userguide/restoring-objects-retrieval-options.html#:~:text=Deep%20Archive%20or-,S3%20Intelligent%2DTiering%20Deep%20Archive%20Access,-Not%20available>

#### Replies:

**Comment:** Initially I thought C also. However, lifecycle policies seem to be better for this use case. S3-IT will start at standard pricing, after 30 days > IA, after 90 days > archive instant retrieval. None of these are the most cost effective. S3-IT works well for use cases where there is no defined policy in place, i.e. after 1 year move to archive. reqs state archive after 365 days. s3-IT will action this after 90 days depending on access patterns.

**Comment:** S3 Standard-IA is designed for data that is accessed less frequently but requires rapid access when needed. It offers a lower storage cost while still providing high durability, availability, and performance. S3 Glacier Deep Archive is the most cost-effective option for archival storage in AWS and is designed for data that is accessed very rarely. The standard retrieval option in Glacier Deep Archive typically returns data within 12 hours, meeting the requirement of access within 24 hours.

**Comment:** ChatGPT goes with B

#### Replies:

**Comment:** As a society we need to learn to challenge AI models. [https://aws.amazon.com/s3/faqs/#Amazon\\_S3\\_Glacier\\_Deep\\_Archive](https://aws.amazon.com/s3/faqs/#Amazon_S3_Glacier_Deep_Archive) When restoring an archived object, you can specify one of the following options in the Tier element of the request body: Standard is the default tier and lets you access any of your archived objects within 12 hours, with retrievals typically starting within 9 hours when initiated using S3 Batch Operations. Bulk lets you retrieve large amounts of data, even petabytes of data, inexpensively and typically completes within 48 hours.

**Comment:** AAAAAAAAAA

**Comment:** A is correct -Bulk retrieval is 48hours

**Comment:** With Option A: Standard retrieval would provide faster access to the archived images (typically within 3-5 hours), it is more expensive than Bulk retrieval. Since the company has indicated they can wait up to 24 hours for access, the slower but cheaper => Option B is the best choice.

**Comment:** C. Use S3 Intelligent-Tiering to store the images. Use S3 Glacier Deep Archive with standard retrieval to store and retrieve archived images.

**Comment:** GPT: B. Use S3 Standard-Infrequent Access (S3 Standard-IA) to store the images. Use S3 Glacier Deep Archive and select Batch Retrieval to store and retrieve archived images.

**Comment:** A : Glacier Deep Archive is cheaper than Standard-IA. C : Standard archival is 12h. B : bulk retrieval is 48h D : S3 One Zone-IA - cross-out due to "maximizes resiliency"

#### Replies:

**Comment:** Check the requirement : The IT department needs access to the images that have been moved to archival storage within 24 hours.

**Comment:** It is A

**Comment:** A) Correct A) because the standard recovery is carried out within 12 hours and the requirement says that it must be recovered within 24 hours. Bulk recovery takes up to 48 hours

**Comment:** BBBBBBBBBB

## Discussion for Question 204

Link: <https://www.examttopics.com/discussions/amazon/view/122626-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 24 votes
- C: 12 votes

### Discussion

**Comment:** To set up deployments to multiple environments with the least development effort in a serverless application using the AWS Serverless Application Model (AWS SAM), the developer can utilize a configuration file in TOML format with grouped configuration entries for each environment. This approach allows for easy management of different environment configurations and streamlines the deployment process. The specific steps would include: Creating a configuration file in TOML format: This file will include a table for each testing and staging environment, where each table contains the specific configuration for that environment. Using the sam deploy command with the --config-env flag: This flag allows specifying which environment configuration to use for the deployment, corresponding to the tables defined in the configuration file. This solution aligns with Option A:

**Comment:** A should be correct reference this stackoverflow post <https://stackoverflow.com/questions/68826108/how-to-deploy-to-different-environments-with-aws-sam>

**Comment:** AWS SAM supports configuration files in TOML format, which allows you to define multiple environments in a single file.

**Comment:** <https://docs.aws.amazon.com/serverless-application-model/latest/developerguide/serverless-sam-cli-config.html#serverless-sam-cli-config-default>

**Comment:** C is the correct answer.

**Comment:** C. Create one AWS SAM configuration file that has default parameters. Perform updates to the testing and staging environments by using the --parameter-overrides flag in the AWS SAM CLI and the parameters that the updates will override.

**Comment:** <https://docs.aws.amazon.com/serverless-application-model/latest/developerguide/serverless-sam-cli-config.html>

**Comment:** C with least development overhead

**Comment:** With at LEAST development effort, Option C is better than A While this approach may work, it introduces additional complexity with the need for a separate configuration file, and it may not be as straightforward as using parameter overrides, as suggested in option C. The use of TOML format might be more suited for certain scenarios, but in the context of AWS SAM, which commonly relies on YAML or JSON configurations, it might be an extra layer of complexity that isn't necessary. Option C, on the other hand, recommends using a single AWS SAM configuration file with default parameters and updating testing and staging environments using the --parameter-overrides flag. This approach is more aligned with typical AWS SAM practices and is simpler and more straightforward than managing multiple configuration files.

**Comment:** With at LEAST development effort, Option C is better than A While this approach may work, it introduces additional complexity with the need for a separate configuration file, and it may not be as straightforward as using parameter overrides, as suggested in option C. The use of TOML format might be more suited for certain scenarios, but in the context of AWS SAM, which commonly relies on YAML or JSON configurations, it might be an extra layer of complexity that isn't necessary. Option C, on the other hand, recommends using a single AWS SAM configuration file with default parameters and updating testing and staging environments using the --parameter-overrides flag. This approach is more aligned with typical AWS SAM practices and is simpler and more straightforward than managing multiple configuration files.

**Comment:** C. Create one AWS SAM configuration file that has default parameters. Perform updates to the testing and staging environments by using the --parameter-overrides flag in the AWS SAM CLI and the parameters that the updates will override.

**Comment:** Correct Answer: C, You can create a single AWS SAM configuration file with default parameters and then use the --parameter-overrides flag with the AWS SAM CLI to specify parameters that override the defaults for each testing and staging environment. This approach keeps the AWS SAM template file (the infrastructure-as-code) consistent and minimizes duplication. It's a clean and simple way to manage multiple environments without having to create separate templates or custom scripts.

**Comment:** Here all the options can do the Job but option C does it with least effort.

**Comment:** Options A and B introduce additional complexities such as configuration files in TOML format or writing custom shell scripts. These might require more effort and maintenance. Option D involves adding additional parameters to the existing AWS SAM template, which can work but may lead to a more complex and less maintainable template as the number of environments grows. Therefore, option C is a straightforward and efficient solution for deploying to multiple environments with AWS SAM.

**Comment:** A is correct

**Comment:** The correct answer is (D). Using the existing AWS SAM template is the option that requires the LEAST development effort. To configure deployments across multiple environments, you can add additional parameters to your AWS SAM template to configure specific attributes for the serverless function and database table resources that are in each environment.

**Comment:** AAAAAAAAAA

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## Discussion for Question 205

**Link:** <https://www.examtopycs.com/discussions/amazon/view/122627-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 15 votes

### Discussion

**Comment:** The correct answer is (C). Adding a trigger to your Lambda function is the solution that will meet these requirements. A trigger is an event that can invoke a Lambda function. In the case of this issue, the trigger must be an Amazon S3 event that fires when a new file is uploaded to the bucket.

**Comment:** Option B is quicker than Option C, because S3 bucket trigger does not guarantee immediate invocation. It relies on event notification from S3.

**Comment:** You cannot add a Trigger directly to Lambda. If you want to choose C, then the answer should state: "Add a trigger to S3, select Lambda as the destination" Since C states "Add trigger to Lambda" (which isn't possible), I will select answer B. See <https://docs.aws.amazon.com/lambda/latest/dg/lambda-services.html> "The trigger is actually stored and managed by the service that generates the events, not by Lambda."

**Comment:** <https://docs.aws.amazon.com/lambda/latest/dg/with-s3-example.html>

**Comment:** C is the correct answer.

**Comment:** sure that B, give me a link why everyone want C.

### Replies:

**Comment:** <https://docs.aws.amazon.com/lambda/latest/dg/with-s3-example.html>

### Replies:

**Comment:** From what I've read, you do not add a trigger to a lambda, you add it else-where (in this case, you add the trigger to S3). The answer says "Add a trigger to Lambda" - this isn't possible! Read: <https://docs.aws.amazon.com/lambda/latest/dg/lambda-services.html> "The trigger is actually stored and managed by the service that generates the events, not by Lambda." The answer should be B then, since EventBridge can monitor S3 bucket and invoke Lambda with the new data.

**Comment:** To meet the requirement of processing data files immediately after they are uploaded to an Amazon S3 bucket, the best solution is to add a trigger to the AWS Lambda function with the S3 bucket as the source. This will configure the Lambda function to be automatically invoked when a new file is uploaded to the specified S3 bucket.

**Comment:** C using S3 Events, no need for EventBridge here.

**Comment:** EventBridge can be employed to collect real-time data streams from various sources like IoT devices, mobile apps, or web applications. Lambda functions can then process this data to perform analytics, generate alerts, or update dashboards.

### Replies:

**Comment:** You can use Amazon EventBridge to monitor an S3 bucket for new image uploads. When a new image is detected, EventBridge triggers a Lambda function that processes the image, applies filters, and generates thumbnails, all without manual intervention

**Comment:** C is correct

**Comment:** CCCCCCCCCCCCCC

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## Discussion for Question 206

**Link:** <https://www.examtopycs.com/discussions/amazon/view/122628-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 22 votes

### Discussion

**Comment:** The correct answer is (B). The --disable-rollback command-line option will prevent CloudFormation from rolling back the stack to the previous state if an error occurs. This will ensure that successfully provisioned resources are preserved.

**Comment:** B is the correct answer.

**Comment:** <https://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/stack-failure-options.html>



**Comment:** It should look like this: `aws cloudformation create-stack --stack-name myteststack --template-body file://DOC-EXAMPLE-BUCKET.json --disable-rollback https://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/stack-failure-options.html#stack-failure-options-cli`

**Comment:** "Specify the disable-rollback option or on-failure DO\_NOTHING enumeration during a create-stack operation" <https://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/stack-failure-options.html>

**Comment:** B is correct

**Comment:** <https://www.cloudhervive.com/blog-posts/cloudformation-disable-rollback/>

**Comment:** BBBBBBBBBBBBBBBBBB

## Discussion for Question 207

**Link:** <https://www.examtopycs.com/discussions/amazon/view/122629-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 13 votes

### Discussion

**Comment:** C: Amazon RDS Proxy is designed to improve application scalability and resilience by pooling and reusing database connections. This can significantly reduce the number of connections each Lambda function has to establish

**Comment:** C is the correct answer.

**Comment:** The correct answer is (C). Amazon RDS Proxy is a solution that allows you to create a connection pool to manage database connections. This can help reduce the number of connections made to the database.

**Comment:** CCCCCCCCCCCCCC

## Discussion for Question 208

**Link:** <https://www.examtopycs.com/discussions/amazon/view/122630-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 9 votes

### Discussion

**Comment:** A is the correct answer.

**Comment:** The best option here is: A. From the main branch, create a feature branch for production bug fixes. Create a second feature branch from the main branch for development of the new version. Here's why this solution is the most suitable: Separation of Concerns: Creating separate branches for bug fixes and new feature development ensures that changes made for the current production version and the new version do not interfere with each other. This separation is crucial to avoid introducing new bugs into the production version from the development version. Continuous Integration and Delivery (CI/CD): This approach supports CI/CD practices. Bug fixes can be developed, tested, and merged into the main branch and deployed without impacting the ongoing development of the new version.

**Comment:** A is a common code version control strategy

**Comment:** A resposta correta é (A). Criar uma ramificação de recursos para correções de bugs de produção e uma segunda ramificação de recursos para desenvolvimento da nova versão é a solução que atenderá a esses requisitos. A primeira ramificação de recursos pode ser usada para corrigir bugs ou implementar atualizações para a versão atual do aplicativo. A segunda ramificação de recursos pode ser usada para desenvolver a nova versão do aplicativo.

**Comment:** AAAAAAAAAAAAAA

## Discussion for Question 209

**Link:** <https://www.examtopycs.com/discussions/amazon/view/122631-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- D: 15 votes

### Discussion

**Comment:** The correct answer is (D). To deploy IAM resources with custom names, you must specify the CAPABILITY\_NAMED\_IAM resource in the CloudFormation stack. The CAPABILITY\_IAM resource allows CloudFormation to create and modify IAM resources. The CAPABILITY\_NAMED\_IAM resource allows CloudFormation to create IAM resources with custom names. To resolve the issue, the developer must specify the CAPABILITY\_NAMED\_IAM resource in the CloudFormation stack.

**Comment:** D. If you have IAM resources with custom names, you must specify CAPABILITY\_NAMED\_IAM. See more details in this link [https://docs.aws.amazon.com/AWSCloudFormation/latest/APIReference/API\\_CreateStack.html](https://docs.aws.amazon.com/AWSCloudFormation/latest/APIReference/API_CreateStack.html)

**Comment:** D is the correct answer.

**Comment:** This capability is required when you are deploying IAM resources with custom names using CloudFormation, as it acknowledges that you're creating IAM resources that might affect permissions in your AWS environment.

**Comment:** D is correct

**Comment:** CCC ccccccc

**Comment:** DDDDDDDDD

## Discussion for Question 210

**Link:** <https://www.examtopycs.com/discussions/amazon/view/122632-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 14 votes

### Discussion

**Comment:** B) <https://www.examtopycs.com/discussions/amazon/view/4166-exam-aws-certified-developer-associate-topic-1-question-69/>

**Comment:** B is the correct answer.

**Comment:** <https://docs.aws.amazon.com/apigateway/latest/developerguide/api-gateway-caching.html#:~:text=A%20client%20of,the%20integration%20endpoint.>

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

**Comment:** invalidate an API Gateway cache entry A client of your API can invalidate an existing cache entry and reload it from the integration endpoint for individual requests. The client must send a request that contains the Cache-Control: max-age=0 header. The client receives the response directly from the integration endpoint instead of the cache, provided that the client is authorized to do so. This replaces the existing cache entry with the new response, which is fetched from the integration endpoint. <https://docs.aws.amazon.com/apigateway/latest/developerguide/api-gateway-caching.html>

**Comment:** Seems to be B but policies/roles have nothing to do with cache

**Comment:** it is DDDDDD

**Replies:**

**Comment:** why? because chatGPDUMP said that? all your answers are wrong.

**Comment:** BBBB BBBB BBBB

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## Discussion for Question 211

**Link:** <https://www.examtactics.com/discussions/amazon/view/124750-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 8 votes

### Discussion

**Comment:** This appear at 17 Jun exam

**Comment:** C is the correct answer.

**Comment:** C is the correct answer

**Comment:** This is the most efficient and straightforward option. AWS Lambda provides a /tmp directory in its execution environment with a storage limit of 512 MB. This space can be used for temporary storage during the function execution. Since the requirement is 100 MB, it falls well within the limits of the /tmp directory.

**Comment:** C is the correct answer

**Comment:** Starting March 2022, Lambda now supports increasing /tmp directory's maximum size limit up to 10,240MB. More information available. <https://aws.amazon.com/blogs/aws/aws-lambda-now-supports-up-to-10-gb-ephemeral-storage/>

**Comment:** C. Store the files in the /tmp directory and delete the files at the end of the Lambda function. The /tmp directory is a dedicated temporary storage location provided by AWS Lambda for storing temporary files during the execution of the function. It's cost-effective and efficient because it doesn't involve additional AWS services or storage costs. AWS Lambda automatically manages the /tmp directory for you, including clearing its contents after the function execution is complete. You don't need to explicitly delete the files; Lambda takes care of it.

**Comment:** Option C is the best choice for efficient handling of temporary files within an AWS Lambda function.

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## Discussion for Question 212

**Link:** <https://www.examtactics.com/discussions/amazon/view/124765-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 12 votes

### Discussion

**Comment:** D is invalid. There are no such custom metrics: <https://docs.aws.amazon.com/amazondynamodb/latest/developerguide/metrics-dimensions.html> A is the right choice

**Comment:** A is the correct answer.

**Comment:** This approach involves enhancing the existing Lambda function to log relevant information about orders (especially those with order quantity 0) to CloudWatch Logs. The developer can then use CloudWatch Logs Insights to query these logs for unique customer counts and visualize this data on a CloudWatch dashboard. This solution is feasible and effective, as it leverages the existing Lambda function and CloudWatch capabilities.

**Comment:** <https://www.examtactics.com/discussions/amazon/view/96212-exam-aws-certified-developer-associate-dva-c02-topic-1-question-402/>

**Comment:** Choose D Option A is more suitable for log analysis, but in this case, the issue is related to DynamoDB data, and CloudWatch Logs may not be the most efficient way to track it.

**Comment:** I choose A

**Comment:** <https://www.examtactics.com/discussions/amazon/view/96212-exam-aws-certified-developer-associate-dva-c02-topic-1-question-402/>

**Comment:** Option A suggests using CloudWatch Logs Insights, which is typically used for analyzing log data. However, in this scenario, the issue is related to metrics (order quantity), and using CloudWatch Metrics and Alarms is a more suitable approach. I'd go with option D. It seems like a more direct and efficient approach. By using custom CloudWatch metrics for the DynamoDB stream, you can specifically track the relevant data without the need for additional CloudWatch Logs Insights queries. The alarm will then allow you to easily visualize and monitor the number of unique customers affected by the issue each day on the CloudWatch dashboard.

**Comment:** A. Grant the Lambda function's execution role permissions to upload logs to Amazon CloudWatch Logs. Implement a CloudWatch Logs Insights query that selects the number of unique customers for orders with order quantity equal to 0 and groups the results in 1-day periods. Add the CloudWatch Logs Insights query to a CloudWatch dashboard. Here's why this option is the best choice: CloudWatch Logs Insights is designed for querying and analyzing log data, making it well-suited for this task. By configuring the Lambda function's execution role to upload logs to CloudWatch Logs, you ensure that the log data is available for analysis. You can use a CloudWatch Logs Insights query to identify unique customers for orders with a quantity of 0 and group the results by day, providing the desired daily count of affected customers. The results of the query can be added to a CloudWatch dashboard, making it easily accessible for monitoring.

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## Discussion for Question 213

**Link:** <https://www.examtactics.com/discussions/amazon/view/124780-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- AE: 19 votes
- AD: 7 votes

### Discussion

**Comment:** - A: The function needs outbound access to DB and the DB needs to allow inbound access from the function - E: The function needs AWSLambdaVPCLocalAccessExecutionRole role to work correctly in the VPC (<https://docs.aws.amazon.com/lambda/latest/dg/configuration-vpc.html#vpc-permissions>) D is incorrect as the function's execution role does not need to make any of those DB actions: Describe Modify and DescribeDB security groups!

**Comment:** I believe It's A and D. Unsure on A, but D seems to be confirmed by this link: <https://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/lambda-rds-connect.html>

**Comment:** AE is the correct answer.

**Comment:** A. Check that the function's security group has outbound access on port 1433 to the DB instance's security group. Ensure that the DB instance's security group has inbound access on port 1433 from the function's security group. This setup allows the Lambda function to initiate a connection to the DB instance through the specified port. E. Check that the function's execution role permissions include ec2:CreateNetworkInterface, ec2:DescribeNetworkInterfaces, and ec2:DeleteNetworkInterface. These permissions are necessary for the Lambda function to create, manage, and clean up the network interfaces that allow it to connect to resources within a VPC,

including the RDS instance.

**Comment:** <https://docs.aws.amazon.com/lambda/latest/dg/configuration-vpc.html#vpc-permissions>

**Comment:** AE This is a network issue, not a governance issue, hence D is invalid. Between A and B its an obvious choice. C is invalid - DB is in a private subnet

**Comment:** ChatGPT goes with A and D

**Comment:** inbound and outbound connection between Lambda and the RDS should be set properly.

**Comment:** <https://docs.aws.amazon.com/lambda/latest/dg/configuration-vpc.html#vpc-permissions>

**Comment:** Agree with Kaes - A: The function needs outbound access to DB and the DB needs to allow inbound access from the function - E: The function needs AWSLambdaVPCEAccessExecutionRole role to work correctly in the VPC (<https://docs.aws.amazon.com/lambda/latest/dg/configuration-vpc.html#vpc-permissions>) D is incorrect as the function's execution role does not need to make any of those DB actions: Describe Modify and DescribeDB security groups!

**Replies:**

**Comment:** This is excellent. Thanks for the link. Makes it very clear.

**Comment:** We need connection between lambda and RDS, not to VPC. So, option E is unsuitable. We can choose the related remain option like D About option A, it's already correct.

**Comment:** A and D

**Comment:** A and B

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## Discussion for Question 214

**Link:** <https://www.examtactics.com/discussions/amazon/view/124777-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- D: 8 votes

### Discussion

**Comment:** D. aws ec2 run-instances So, to create a new EC2 instance using the AWS CLI, you would typically use the aws ec2 run-instances command, providing the necessary parameters such as the AMI ID, instance type, security groups, and key pair, among others.

**Comment:** D. aws ec2 run-instances Note: B aws ec2 start-instances is used to "start an instance that you've previously stopped"

**Comment:** D is the correct answer.

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## Discussion for Question 215

**Link:** <https://www.examtactics.com/discussions/amazon/view/124776-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- D: 12 votes

### Discussion

**Comment:** this is the only option mentioning infra as code.

**Comment:** D. Use AWS CloudFormation and AWS CodeCommit to deploy and manage the infrastructure. Here's why this is the most appropriate choice: AWS CloudFormation: It allows you to define your infrastructure as code using templates, which can be version-controlled. You can create, update, and delete stacks of AWS resources in a controlled and predictable manner. This aligns with the requirement to deploy multiple identical copies of the infrastructure, stage changes, and revert to previous versions. AWS CodeCommit: It provides a fully managed source control service, allowing you to store and version-control your CloudFormation templates. This ensures that you can manage and track changes to your infrastructure configurations.

**Comment:** D is the correct answer.

**Comment:** Here's why this option is the most suitable: AWS CloudFormation: This service allows you to model your entire infrastructure in a text file (either JSON or YAML). This infrastructure as code approach enables you to create and manage AWS resources efficiently, consistently, and repeatably. It's ideal for deploying multiple identical copies of the same infrastructure (like staging, production environments), and the text file can be version-controlled, allowing you to stage changes and revert to previous versions. AWS CodeCommit: This is a managed source control service that hosts private Git repositories. Integrating AWS CodeCommit with CloudFormation enables version control of your infrastructure templates. This supports staging changes and reverting to previous versions, enhancing collaboration among team members.

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## Discussion for Question 216

**Link:** <https://www.examtactics.com/discussions/amazon/view/124769-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- D: 10 votes

### Discussion

**Comment:** D. dynamodb:UpdateItem, dynamodb:GetItem, and dynamodb:PutItem Here's why: dynamodb:GetItem: This permission allows the Lambda function to retrieve an item from DynamoDB. dynamodb:UpdateItem: This permission allows the Lambda function to update the attributes of an item in DynamoDB. dynamodb:PutItem: This permission allows the Lambda function to create a new item if it doesn't already exist in the DynamoDB table.

**Comment:** D is the correct answer.

**Comment:** D is correct

**Comment:** x A: as delete is not required. Plus Put item is not required, update lets you create a new item if it doesn't already exist B: meets requirements. DescribeTable helps provide a list of attributes that can be used to update. x C: put not required; getrecords does not exist x D: put not required.

**Comment:** UpdateItem: Edits an existing item's attributes [https://docs.aws.amazon.com/amazondynamodb/latest/APIReference/API\\_UpdateItem.html](https://docs.aws.amazon.com/amazondynamodb/latest/APIReference/API_UpdateItem.html) GetItem: retrieves attributes from the Thread table [https://docs.aws.amazon.com/amazondynamodb/latest/APIReference/API\\_GetItem.html#API\\_GetItem\\_Examples](https://docs.aws.amazon.com/amazondynamodb/latest/APIReference/API_GetItem.html#API_GetItem_Examples) PutItem: Creates a new item, or replaces an old item with a new item [https://docs.aws.amazon.com/amazondynamodb/latest/APIReference/API\\_PutItem.html](https://docs.aws.amazon.com/amazondynamodb/latest/APIReference/API_PutItem.html)

**Comment:** PutItem is to CREATE new item or replace old item with new item GetItem is to retrieve an item UpdateItem so to update the attributes Hence answer D

---

## Discussion for Question 217

**Link:** <https://www.examtactics.com/discussions/amazon/view/124781-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 7 votes

## Discussion

**Comment:** A is the correct answer.

**Comment:** A is correct

**Comment:** ANS: A The cache needs to be invalidated. The write-through approach could be helpful here

**Comment:** A. The cache is not being invalidated when the price of the item is changed. In a caching setup using Amazon ElastiCache in front of Amazon DynamoDB, if the cache is not being invalidated or updated when data in DynamoDB is changed, it can result in stale data being served from the cache, leading to the observed behavior. To resolve this issue, you should implement a mechanism to invalidate or update the cache whenever the price of an item is changed in DynamoDB to ensure that the most up-to-date data is retrieved from the cache or DynamoDB.

---

## Discussion for Question 218

**Link:** <https://www.examttopics.com/discussions/amazon/view/124770-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 8 votes

## Discussion

**Comment:** B is the only viable answer.

**Comment:** B is the only one that make sense, although more steps would be needed then just configuring the app.

**Comment:** B is corect

**Comment:** B is the correct answer.

**Comment:** B. Disabled environment variable credentials are still being used by the application.

---

## Discussion for Question 219

**Link:** <https://www.examttopics.com/discussions/amazon/view/124771-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 15 votes

## Discussion

**Comment:** <https://docs.aws.amazon.com/secretsmanager/latest/userguide/create-manage-multi-region-secrets.html>

**Comment:** Must be A. The Secret Manager supports region replication out-of-the-box in contrast to the Paranter Store which doesn't support it.

**Comment:** B is the correct answer.

**Comment:** B. Store credentials in AWS Systems Manager Parameter Store in the primary Region. Enable parameter replication to the secondary Region. Update the application to use the Amazon Resource Name (ARN) based on the Region.

---

## Discussion for Question 220

**Link:** <https://www.examttopics.com/discussions/amazon/view/124772-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- D: 11 votes

## Discussion

**Comment:** Because examttopic won't allow me to modify my previous answer to use the correct option. Exponential Backoff is D

**Comment:** D is the correct answer.

**Comment:** D. Retry the call with exponential backoff is the recommended best practice in this scenario. Exponential backoff is a standard error-handling strategy for network applications in which the client progressively increases the wait time between retries, up to a maximum number of retries, when a request fails due to server-side throttling. This approach helps to smooth out the rate of API calls, reducing the likelihood of hitting the rate limit.

**Comment:** D. Retries with exponential backoff; operation with an exponentially increasing wait time

**Comment:** D. Retry the call with exponential backoff.

**Comment:** You are doing too many requests. Try less frequent with exponential backoff.

---

## Discussion for Question 221

**Link:** <https://www.examttopics.com/discussions/amazon/view/124773-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 8 votes

## Discussion

**Comment:** C is the correct answer.

**Comment:** Use a Classic Load Balancer with HTTP protocol: While a Classic Load Balancer would also add the X-Forwarded-For header, there's no significant benefit in switching from an Application Load Balancer (ALB) to a Classic Load Balancer for this purpose. ALBs are generally preferred for application layer (HTTP/HTTPS) load balancing due to their advanced routing capabilities and other features.

### Replies:

**Comment:** C. Inspect the X-Forwarded-For header: This is the most appropriate solution. The X-Forwarded-For header is added by ALBs (and other types of load balancers) to HTTP requests and contains the original IP address of the client. Modifying the application to use this header allows it to obtain the client's IP address without removing the benefits of load balancing.

**Comment:** C. Alter the application code to inspect the X-Forwarded-For header. Ensure that the code can work properly if a list of IP addresses is passed in the header.

**Comment:** If you need to see external IP address and your app is behind ALB, always use x-forwarded-for <https://docs.aws.amazon.com/elasticloadbalancing/latest/application/x-forwarded-headers.html>

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## Discussion for Question 222

**Link:** <https://www.examttopics.com/discussions/amazon/view/124805-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 18 votes

### Discussion

**Comment:** A. The only viable solution

**Comment:** Here's why this solution is most appropriate: SNS FIFO Topic: A First-In-First-Out (FIFO) SNS topic ensures that messages are delivered in the exact order they are sent. This is critical for maintaining the order of ticket requests. SQS FIFO Queues: By having two separate FIFO queues for inventory management and payment processing, the application can process these aspects in parallel while still maintaining the order integrity. The FIFO nature of the queues ensures that if a seat is sold more than once, the first order received is processed first. Order Processing Logic: With this setup, if the first order is rejected during payment processing, the second order can be processed next. The sequential processing inherent in FIFO queues ensures that this logic can be correctly implemented.

**Comment:** None of these answers are correct. People say it is A - well then what prevents payment processing for order #1 if the inventory lambda failed to allocate a seat for order #1? The correct answer should be for the order processing lambda to place orders into a queue (e.g. FIFO SQS) and then seat allocation lambda should poll this queue, check if seating is available and if so it should then invoke the payment processing lambda. This option isn't available. The next best option would be Option B. Better than A, since you won't be charged for an order where seating isn't available. If I am wrong, please explain it. Would love to hear. Thanks

**Comment:** A is the correct answer.

**Comment:** FIFO is the only option that maintains ordering.

**Comment:** D. Deliver the order ID to an Amazon Simple Queue Service (Amazon SQS) queue. Configure the Lambda functions for inventory management and payment processing to poll the queue.

**Comment:** D. Deliver the order ID to an Amazon Simple Queue Service (Amazon SQS) queue. Configure the Lambda functions for inventory management and payment processing to poll the queue.

---

## Discussion for Question 223

**Link:** <https://www.examttopics.com/discussions/amazon/view/124806-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 15 votes

### Discussion

**Comment:** A is the correct answer.

**Comment:** <https://docs.aws.amazon.com/xray/latest/devguide/xray-sdk-java-segment.html#:~:text=Annotations%20are%20key%2Dvalue%20pairs%20with%20string%2C%20number%2C%20or%20Boolean%20values.%20Annotations%20are%20indexed%20for%20use%20with%20filter%20expressions.%20>

**Comment:** Annotations in AWS X-Ray are key-value pairs that are indexed for use with filter expressions. This means that you can use annotations to add custom attributes to your trace data, which can then be queried using X-Ray filter expressions. Annotations are used for values that you want to use for searching, filtering, or creating groups. By adding these custom attributes as annotations, the developer can effectively use filter expressions to limit the returned results based on these attributes.

**Comment:** <https://docs.aws.amazon.com/xray/latest/devguide/xray-sdk-java-segment.html> filter expressions => annotations

**Comment:** Annotations are indexed, used for filtering, unlike metadata

**Comment:** If you add annotations with the X-Ray SDK, you can also filter based on the presence of an annotation key or the value of a key. <https://docs.aws.amazon.com/xray/latest/devguide/xray-console-filters.html>

**Comment:** To filter the results in AWS X-Ray using custom attributes, the developer should add custom attributes as annotations in the segment document.

**Comment:** B. Add custom attributes as metadata in the segment document. Custom attributes are best added as metadata in the segment document because X-Ray filter expressions can use metadata to filter traces. Annotations and new segment fields are not typically used for filtering traces in this context.

**Comment:** B. Add custom attributes as metadata in the segment document. Custom attributes are best added as metadata in the segment document because X-Ray filter expressions can use metadata to filter traces. Annotations and new segment fields are not typically used for filtering traces in this context.

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## Discussion for Question 224

**Link:** <https://www.examttopics.com/discussions/amazon/view/124774-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- D: 15 votes

### Discussion

**Comment:** <https://docs.aws.amazon.com/streams/latest/dev/server-side-encryption.html>

**Comment:** D is the correct answer.

**Comment:** <https://docs.aws.amazon.com/streams/latest/dev/what-is-sse.html#:~:text=Server%2Dside%20encryption%20is,security%20of%20your%20data.>

**Comment:** D. Enable server-side encryption in Kinesis Data Streams. Amazon Kinesis Data Streams allows you to enable server-side encryption, which encrypts data at rest. This ensures that data stored within the Kinesis Data Streams is protected with encryption.

**Comment:** D. Enable server-side encryption in Kinesis Data Streams. Amazon Kinesis Data Streams allows you to enable server-side encryption, which encrypts data at rest. This ensures that data stored within the Kinesis Data Streams is protected with encryption.

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## Discussion for Question 225

**Link:** <https://www.examttopics.com/discussions/amazon/view/124775-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- D: 10 votes

### Discussion

**Comment:** D is the correct answer.

**Comment:** This service is specifically designed for real-time processing of large-scale streaming data. Kinesis Data Streams allows multiple consumers to process the same stream concurrently, making it highly suitable for scenarios

where you have high-volume data streams that need to be processed in real-time by various applications. It offers high throughput, scalability, and durability for streaming data, and enables multiple applications to process the same stream concurrently, making it the most cost-effective and efficient choice for this scenario.

**Comment:** D. Amazon Kinesis Data Streams. Amazon Kinesis Data Streams is designed for real-time data streaming and allows multiple consumers to process data concurrently and in real-time. It can handle millions of events and provides a scalable and cost-effective solution for handling high-throughput data streams.

**Comment:** Real-time data processing is KDS

---

## Discussion for Question 226

**Link:** <https://www.examtips.com/discussions/amazon/view/124817-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 10 votes

### Discussion

**Comment:** A. Add an Export declaration to the Outputs section of the original template and use ImportValue in other templates.

**Comment:** A is the correct answer.

**Comment:** <https://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/walkthrough-crossstackref.html>

**Comment:** A. Add an Export declaration to the Outputs section of the original template and use ImportValue in other templates.

#### Replies:

**Comment:** By adding an Export declaration to the Outputs section of the original CloudFormation template, you can make the bucket name available for other templates to import and use. This allows you to reference the bucket name directly in other templates without the need for additional resources or custom logic.

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## Discussion for Question 227

**Link:** <https://www.examtips.com/discussions/amazon/view/124816-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- CE: 17 votes

### Discussion

**Comment:** C. Reduce the frequency of requests to DynamoDB by implementing exponential backoff. E. Change the capacity mode of the DynamoDB table from provisioned to on-demand.

**Comment:** Answer is C & E: <https://docs.aws.amazon.com/amazondynamodb/latest/developerguide/ProgrammingErrors.html> ProvisionedThroughputExceededException Message: You exceeded your maximum allowed provisioned throughput for a table or for one or more global secondary indexes. To view performance metrics for provisioned throughput vs. consumed throughput, open the Amazon CloudWatch console. Example: Your request rate is too high. The AWS SDKs for DynamoDB automatically retry requests that receive this exception. Your request is eventually successful, unless your retry queue is too large to finish. Reduce the frequency of requests using Error retries and exponential backoff.

**Comment:** CE is the correct answer.

**Comment:** <https://docs.aws.amazon.com/amazondynamodb/latest/developerguide/HowItWorks.ReadWriteCapacityMode.html>

**Comment:** What the question said is insert data...so B increase read capacity is not correct.Hence C and E.

**Comment:** <https://docs.aws.amazon.com/amazondynamodb/latest/developerguide/ProvisionedThroughput.html#:~:text=The%20DynamoDB%20console%20displays%20Amazon%20CloudWatch%20metrics%20for%20your%20tables%2C%20>

#### Replies:

**Comment:** choosing C & E after going through <https://docs.aws.amazon.com/amazondynamodb/latest/developerguide/HowItWorks.ReadWriteCapacityMode.html>

**Comment:** B. This error indicates that the application's request rate is exceeding the throughput that has been provisioned for the table. Increasing the provisioned read capacity units (RCUs) and/or write capacity units (WCUs) for the DynamoDB table will allow it to handle a higher request rate, thereby reducing the likelihood of encountering this error. However, this approach requires careful capacity planning and may increase costs. C. Exponential backoff is a standard error retry strategy that involves progressively increasing the delay between retries when there is a ProvisionedThroughputExceededException. This approach helps to smooth out the rate of requests, giving the table time to accommodate bursts of read or write requests. Implementing exponential backoff in the application will help to effectively manage request retries and reduce the chance of continually hitting the provisioned throughput limit.

**Comment:** C & E correct

**Comment:** Based on ChatGPT: BC

**Comment:** B. Increase the number of read capacity units (RCUs) that are provisioned for the DynamoDB table. OR E. Change the capacity mode of the DynamoDB table from provisioned to on-demand. C. Reduce the frequency of requests to DynamoDB by implementing exponential backoff.

#### Replies:

**Comment:** It 'inserts' data, so it needs WCUs and not RCUs. So option B is invalid too. C and E are the correct options.

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## Discussion for Question 228

**Link:** <https://www.examtips.com/discussions/amazon/view/124778-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 9 votes

### Discussion

**Comment:** This appear at 17 Jun exam

**Comment:** A is the correct answer.

**Comment:** Presigned URLs are a secure way to provide temporary access to specific objects in an S3 bucket. By generating a presigned URL, you grant time-limited access to the files without having to alter the underlying permissions of the S3 bucket or objects. You can set an expiration time for the URL, ensuring that access to the document is automatically revoked after 7 days. This method is straightforward and does not require the management of user identities or permissions beyond the scope of the shared objects.

**Comment:** A. Use S3 presigned URLs to share the documents with the external users. Set an expiration time of 7 days.

**Comment:** Temporary access to S3 object to external users is Pre-signed URL

---

## Discussion for Question 229

Link: <https://www.examttopics.com/discussions/amazon/view/124815-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 13 votes

### Discussion

**Comment:** This approach involves creating a single API Gateway and a single Lambda function. Within the API Gateway, you can create multiple stages, each corresponding to a different environment (development, test, production). Similarly, for the Lambda function, you can create multiple aliases, each pointing to a different version of the Lambda function that corresponds to each environment. This setup allows for clear separation of environments within the same set of resources. It simplifies deployment and management by reducing the number of resources and also provides an easy way to promote changes from one environment to another.

**Comment:** C is the correct answer.

**Comment:** API Gateway A stage in API Gateway represents a deployment of your API. You can have separate stages for development, test, and production. Each stage can have its own settings, such as stage variables, custom domains, and caching configurations. Lambda function Each alias can point to a specific version of your Lambda function. This allows you to promote versions through different environments without changing the function's Amazon Resource Name (ARN) in your API Gateway.

**Comment:** C. Create one API Gateway with multiple stages with one Lambda function with multiple aliases.

**Comment:** C. Create one API Gateway with multiple stages with one Lambda function with multiple aliases.

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## Discussion for Question 230

Link: <https://www.examttopics.com/discussions/amazon/view/124818-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 12 votes

### Discussion

**Comment:** To allow an ALB to invoke a Lambda function, you need to grant the ALB permission to invoke the Lambda. This is typically done by adding a resource-based policy to the Lambda function, granting invoke permission to the ALB. If this permission is not set, the ALB will not be able to trigger the Lambda function in response to incoming requests.

**Comment:** C is the correct answer.

**Comment:** The Lambda function must have the lambda:InvokeFunction permission for the ALB to successfully invoke it.

**Comment:** ANS: C

**Comment:** C. The permissions to invoke the Lambda function are missing.

---

## Discussion for Question 231

Link: <https://www.examttopics.com/discussions/amazon/view/124819-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 10 votes

### Discussion

**Comment:** B. Store the database credentials in AWS Secrets Manager. Set up managed rotation on the database credentials.

**Comment:** automatically rotated => AWS Secrets Manager

**Comment:** B is the correct answer.

**Comment:** BBBBBBBBBBBB

---

## Discussion for Question 232

Link: <https://www.examttopics.com/discussions/amazon/view/124820-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 11 votes

### Discussion

**Comment:** B is the correct answer.

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

**Comment:** This approach is more efficient and cost-effective than other options such as configuring a weighted routing policy in Amazon Route 53, creating an Application Load Balancer (ALB) that uses the Lambda function as a target, or creating the new version of the Lambda function as a Lambda layer on the existing version

**Comment:** <https://www.examttopics.com/discussions/amazon/view/88419-exam-aws-certified-developer-associate-topic-1-question-350/>

**Comment:** B. Create a function alias. Configure the alias to split the traffic between the two versions of the Lambda function.

---

## Discussion for Question 233

Link: <https://www.examttopics.com/discussions/amazon/view/126181-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- CE: 10 votes

### Discussion

**Comment:** CE is the correct answer.

**Comment:** in this case quota cannot be increased <https://docs.aws.amazon.com/lambda/latest/dg/gettingstarted->

limits.html#:~:text=The%20following%20quotas%20apply%20to%20function%20configuration%2C%20deployment%2C%20and%20execution.%20Except%20as%20noted%2C%20they%20can%27t%20be%20changed.

**Comment:** C. Break up the function into multiple smaller functions. If the size of the Lambda function is too large, breaking it into smaller, more modular functions can help. Each function can be responsible for a specific part of the application's logic. This approach not only helps with deployment but also aligns with microservices best practices, potentially improving the maintainability and scalability of the application. E. Move common libraries, function dependencies, and custom runtimes into Lambda layers. Lambda layers are a way to manage and share common components across multiple Lambda functions. By moving libraries, dependencies, and runtimes into layers, you reduce the size of the Lambda function's deployment package. Layers can be shared across multiple functions, leading to more efficient use of storage and easier management of common code.

**Comment:** C and E

**Comment:** A E no discussion

**Comment:** C and E <https://www.examtactics.com/discussions/amazon/view/5330-exam-aws-certified-developer-associate-topic-1-question-17/>

**Comment:** A & E is correct

**Comment:** Following anasbakla document, we can see the default storage of Quota is 75 GB for uploaded functions (.zip file archives) and layers.

**Comment:** A and E <https://docs.aws.amazon.com/lambda/latest/dg/gettingstarted-limits.html>

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## Discussion for Question 234

**Link:** <https://www.examtactics.com/discussions/amazon/view/124821-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- D: 19 votes

### Discussion

**Comment:** <https://aws.amazon.com/about-aws/whats-new/2023/01/aws-lambda-maximum-concurrency-amazon-sqs-event-source/>

**Comment:** At first i also thought of B, but D is more ideal for this scenario. "Restricting" the lambda executions will boost the SQS queue size, its better to put the "restriction" to the SQS itself

**Comment:** It has to be Option B because that is the only correct answer in Q311. Here is the correct answer for Q311, there is no option there for SQS concurrency: B. Configure the REST API in API Gateway to write the requests directly into an Amazon Simple Queue Service (Amazon SQS) queue. \*\*Configure the Lambda function with a reserved concurrency equal to the third-party stock application's threshold.\*\* Set Lambda function to process the messages from the SQS queue.

**Comment:** D is the correct answer.

**Comment:** this should bring the API in sync with the 3rd part service.

**Comment:** Configuring maximum concurrency on the SQS event source does not directly address the issue of the Lambda function making excessive requests to the third-party service (while it may help indirectly). While Option B: configuring provisioned concurrency for the Lambda function, directly addresses the issue by ensuring that the function scales in a controlled manner based on the third-party API's documented rate limits.

**Comment:** By setting the maximum concurrency on the SQS event source, the developer can control the number of Lambda functions executing concurrently. This approach ensures that the rate of API calls does not exceed the rate limits set by the third-party service, thereby reducing the likelihood of encountering the HTTP 429 error. Adjusting the concurrency settings allows for better control of the throughput to match the API's capacity.

**Comment:** The developer can configure provisioned concurrency for the Lambda function based on the third-party API's documented rate limits. This can help to ensure that the function has sufficient concurrency to handle the incoming messages and make API calls without exceeding the rate limits of the third-party service

**Comment:** Provisioned concurrency will not solve the problem as the number of instances can increase till it reaches the max number of unreserved limit (this is not reserved concurrency).

**Comment:** Option B addresses the issue by configuring provisioned concurrency for the Lambda function. Provisioned concurrency ensures that a specified number of concurrent executions of the Lambda function are always available. This can help in managing the third-party API rate limits by controlling the number of simultaneous requests made to the API. By setting the provisioned concurrency to a value that aligns with the third-party API's rate limits, you can avoid exceeding those limits and reduce the occurrence of HTTP 429 errors.

**Comment:** A. increase the batch size does not change how many items being processed. C is from Configuring error handling for asynchronous invocation — You can set it up when creating the lambda. Maximum age of event — The maximum amount of time Lambda retains an event in the asynchronous event queue, up to 6 hours. Retry attempts — The number of times Lambda retries when the function returns an error, between 0 and 2.

**Comment:** B. Configure provisioned concurrency for the Lambda function based on the third-party API's documented rate limits.

---

## Discussion for Question 235

**Link:** <https://www.examtactics.com/discussions/amazon/view/124822-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 10 votes

### Discussion

**Comment:** Amazon ElastiCache can significantly enhance the read performance of the application by caching frequently accessed data. This reduces the load on the RDS database by serving repeated read requests from the cache rather than querying the database each time. This is particularly effective for applications with a high read-to-write ratio and can lead to a substantial reduction in the ReadLatency metric of the database.

**Comment:** A is the correct answer.

**Comment:** ANS: A

**Comment:** A. Use Amazon ElastiCache to cache query results.

---

## Discussion for Question 236

**Link:** <https://www.examtactics.com/discussions/amazon/view/124825-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 8 votes

### Discussion

**Comment:** A is the correct answer.

**Comment:** A is the correct answer

**Comment:** ANS: A

**Comment:** A is the correct answer.

---

## Discussion for Question 237



**Link:** <https://www.examttopics.com/discussions/amazon/view/124824-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 11 votes

### Discussion

**Comment:** A is the correct answer.

**Comment:** This option aligns with the requirements. AWS KMS allows the creation of symmetric data keys which can be used for encryption outside of AWS. The AWS Encryption SDK is designed to simplify encryption and decryption operations, making it a suitable choice for implementing encryption within the application. The developer can use the data key obtained from AWS KMS for the encryption process.

**Comment:** AAAAAA

**Comment:** C and D cannot make it within the application.

**Comment:** A. Create a data key in AWS Key Management Service (AWS KMS). Use the AWS Encryption SDK to encrypt the files.

---

## Discussion for Question 238

**Link:** <https://www.examttopics.com/discussions/amazon/view/124783-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 19 votes

### Discussion

**Comment:** C. Create an IAM role. Configure the IAM role to access the specific Amazon S3 API calls the application requires. Associate the IAM role with the EC2 instance.

**Comment:** This approach follows AWS best practices. An IAM role can be created with the necessary permissions to access the S3 bucket. Then, this role can be associated with the EC2 instance. Applications running on the instance can then use the role's permissions to access S3 securely, without needing to manage access keys. This method leverages AWS's built-in security mechanisms and avoids the risks associated with managing static credentials.

**Comment:** C is the correct answer.

**Comment:** c!!!!!!!!!!!!!!

**Comment:** C is the correct answer

**Comment:** Create role with required permissions. Attach it to IAM as instance profile.

---

## Discussion for Question 239

**Link:** <https://www.examttopics.com/discussions/amazon/view/124826-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 22 votes

### Discussion

**Comment:** This approach uses the built-in capabilities of the ALB to authenticate requests with Amazon Cognito. By configuring a rule action to authenticate with a Cognito user pool, the ALB can handle authentication before the request is forwarded to the target group. The OnUnauthenticatedRequest setting of "deny" ensures that unauthenticated requests are not allowed access, which aligns with the requirement to authenticate every request.

**Comment:** <https://docs.aws.amazon.com/elasticloadbalancing/latest/application/listener-authenticate-users.html#configure-user-authentication>

**Comment:** <https://docs.aws.amazon.com/elasticloadbalancing/latest/application/listener-authenticate-users.html> [https://docs.aws.amazon.com/elasticloadbalancing/latest/APIReference/API\\_AuthenticateCognitoActionConfig.html](https://docs.aws.amazon.com/elasticloadbalancing/latest/APIReference/API_AuthenticateCognitoActionConfig.html)

**Comment:** This appear at 17 Jun exam

**Comment:** B is the correct answer.

**Comment:** <https://docs.aws.amazon.com/apigateway/latest/developerguide/apigateway-enable-cognito-user-pool.html>

**Comment:** <https://docs.aws.amazon.com/elasticloadbalancing/latest/application/listener-authenticate-users.html#configure-user-authentication>

**Comment:** <https://docs.aws.amazon.com/apigateway/latest/developerguide/apigateway-integrate-with-cognito.html>

**Comment:** <https://www.examttopics.com/discussions/amazon/view/88889-exam-aws-certified-developer-associate-topic-1-question-332/>

**Comment:** I think its C - API G would work better ?

**Comment:** B. Create an authentication action for the listener rules of the ALSet the rule action type to authenticate-cognito. Set the OnUnauthenticatedRequest field to "deny."

---

## Discussion for Question 240

**Link:** <https://www.examttopics.com/discussions/amazon/view/124827-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- CE: 12 votes

### Discussion

**Comment:** C. Increase the function's reserved concurrency. Reserved concurrency is a feature in AWS Lambda that allows you to allocate a specific amount of concurrency to a particular function. This ensures that the function has a dedicated amount of concurrency and is not affected by throttling due to high usage of other functions in your account. Increasing the reserved concurrency can help mitigate throttling issues, especially if the throttling is due to reaching account-level concurrency limits. E. Request a service quota change for increased concurrency. AWS Lambda has default service quotas (formerly known as limits) for the maximum number of concurrent executions across all functions in your account. If your Lambda function is experiencing throttling due to reaching these account-level concurrency limits, requesting an increase in the service quota for Lambda concurrency can provide a solution.

**Comment:** CE is the correct answer.

**Comment:** <https://docs.aws.amazon.com/lambda/latest/dg/gettingstarted-limits.html#compute-and-storage> <https://docs.aws.amazon.com/lambda/latest/dg/monitoring-metrics.html>

**Comment:** Following issue throttling, C and E is suitable

**Comment:** The correct answer is C&E.

**Comment:** C. Increase the function's reserved concurrency: Reserved concurrency ensures that a specific number of concurrent executions are always available for your function. E. Request a service quota change for increased concurrency: If your application is experiencing throttling and the reserved concurrency isn't sufficient, you can request a service quota increase for additional concurrency.

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### Discussion for Question 241

**Link:** <https://www.examtips.com/discussions/amazon/view/124828-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- D: 12 votes

## Discussion

**Comment:** Creating unique stages for different versions is a common practice for managing and deploying different versions of REST APIs. => D

**Comment:** D is the correct answer.

**Comment:** <https://docs.aws.amazon.com/apigateway/latest/developerguide/stage-variables.html#:~:text=With%20deployment%20stages%20in%20API%20Gateway%2C%20you%20can%20manage%20multiple%20release%20stages%20for%20each%20API%2C%20such%20as%20alpha%2C%20beta%2C%20>

**Comment:** API Gateway allows you to create different stages for your API, each with its own configuration. These stages can represent different versions of your API (like development, test, and production). You can deploy your API to these stages and have different configurations for each stage, such as different Lambda functions, stage variables, or settings. This approach is straightforward and aligns with best practices for managing different environments in API Gateway.

**Comment:** D. Deploy the API versions as unique stages with unique endpoints and use stage variables to provide further context.

### Discussion for Question 242

**Link:** <https://www.examttopics.com/discussions/amazon/view/124830-exam-aws-certified-developer-associate-dva-c02-topic-1/>

## Most Voted

- AB: 16 votes

## Discussion

**Comment:** A. The change was not made in the main branch if the AWS CodeCommit repository: In this pipeline setup, if the change was made in a branch other than the main branch, it would not trigger the pipeline, and therefore, AWS CodeDeploy wouldn't deploy the updated application. B. One of the earlier stages in the pipeline failed and the pipeline has terminated: If one of the preceding stages in the pipeline failed, it would prevent the subsequent stages, including AWS CodeDeploy, from being executed.

**Comment:** AB is the correct answer.

**Comment:** A. The change was not made in the main branch of the AWS CodeCommit repository. If the change to the application's source code was not made in the main branch (or the branch that triggers the pipeline), AWS CodePipeline would not detect the change and therefore would not initiate the deployment process. It's crucial that changes are made in the correct branch that is configured to trigger the pipeline. B. One of the earlier stages in the pipeline failed and the pipeline has terminated. If any stage in AWS CodePipeline fails (such as a failure in the test or build stages in AWS CodeBuild), the pipeline stops and does not proceed to the deployment stage. It is common for pipelines to be configured to halt on failure to prevent the deployment of potentially faulty code.

**Comment:** AB is correct - there have been no changes, so someone either merged code into the wrong branch (not triggering the pipeline) or it failed at an earlier stage. Other options dont make sense given the scenario

**Comment:** The delivery pipeline is triggered by changes to the main branch - so new code change should have triggered this but this cause errors for some reasons and option C

**Comment:** AB the key word is "The pipeline has been operating successfully for several months and there have been no modifications." So the "D. The codePipeline is incorrectly configured" is incorrect, because if the configuration is incorrect, it won't have been operating successfully for several months.

**Comment:** B. One of the earlier stages in the pipeline failed and the pipeline has terminated. D. The AWS CodePipeline is incorrectly configured and is not invoking AWS CodeDeploy.

**Comment:** B. One of the earlier stages in the pipeline failed and the pipeline has terminated. D. The AWS CodePipeline is incorrectly configured and is not invoking AWS CodeDeploy.

### Discussion for Question 243

**Link:** <https://www.examttopics.com/discussions/amazon/view/124747-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 25 votes
- C: 11 votes

## Discussion

**Comment:** C should be it. Shift traffic in two batches is Canary Validation is done with hooks <https://docs.aws.amazon.com/serverless-application-model/latest/developerguide/automating-updates-to-serverless-apps.html>

**Comment:** I will go with A since the question only mentions switch traffic gradually. Ideally A and C should be used as a combination.

**Comment:** I feel it should be C. <https://docs.aws.amazon.com/serverless-application-model/latest/developerguide/automating-updates-to-serverless-apps.html>

**Comment:** Answer is A: <https://docs.aws.amazon.com/serverless-application-model/latest/developerguide/automating-updates-to-serverless-apps.html> When deploying a Lambda function gradually, CodeDeploy requires a previously deployed function version to shift traffic from. Therefore, your first deployment should be accomplished in two steps: Step 1: Deploy your Lambda function and automatically create aliases with `AutoPublishAlias`. Step 2: Perform your gradual deployment with `DeploymentPreference`.

**Comment:** A is the correct answer.

**Comment:** This configuration specifies a canary deployment strategy where 10% of the traffic is directed to the new deployment for the first 10 minutes after deployment. If there are no issues, all traffic will automatically switch over to the new version. Setting the `AutoPublishAlias` property to the Lambda alias ensures that the specified alias is automatically updated after the canary period.

**Comment:** I am going with C

**Replies:**

**Comment:** change to A

**Comment:** <https://docs.aws.amazon.com/serverless-application-model/latest/developerguide/automating-updates-to-serverless-apps.html> The success or failure of the deployment is determined by hooks

**Comment:** I go with A!

**Comment:** AutoPublishAlias is a requirement. Pre and Post traffic handlers are nice to have

**Comment:** This configuration will ensure that during deployment, 10% of the traffic is shifted to the new version for 10 minutes as a "canary" release. If no issues are detected during this period, AWS SAM will automatically shift the rest of the traffic to the new version. The `AutoPublishAlias` property is used to specify the alias that the AWS SAM deployment process will update to point to the new version of the function.

**Comment:** set the Deployment Preference Type to Canary10Percent10Minutes and set the AutoPublishAlias property to the Lambda alias.

**Comment:** <https://docs.aws.amazon.com/serverless-application-model/latest/developerguide/automating-updates-to-serverless-apps.html>

**Comment:** Hooks as post v pre are not obligatory required

**Comment:** Based on ChatGPT: A. PostTraffic properties are not necessary.

**Comment:** <https://docs.aws.amazon.com/serverless-application-model/latest/developerguide/sam-resource-function.html> property to the Lambda alias.

**Comment:** Answer: A! Option B, which uses the "Linear" deployment type, gradually shifts traffic, and doesn't fully meet the requirement of immediately switching all traffic if there are no issues within the first 10 minutes.

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## Discussion for Question 244

**Link:** <https://www.examtactics.com/discussions/amazon/view/124787-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 11 votes

### Discussion

**Comment:** Create an IAM role in the development accounts. Add the `ec2:DescribeInstances` permission to the role. Establish a trust relationship with the shared account for this role. Update the Lambda function IAM role in the shared account by adding the `iam:AssumeRole` permissions.

**Comment:** B is the correct answer.

**Comment:** Establish a trust relationship with the shared account for this role. Update the Lambda function IAM role in the shared account by adding the `iam:AssumeRole` permissions.

**Comment:** Classic case of cross account access (CAA)

**Comment:** By using `iam:AssumeRole`, AWS allows you to implement the principle of least privilege, which means entities have only the permissions they require to perform specific tasks and nothing more.

**Comment:** `iam:AssumeRole` doesn't exist it is `sts:AssumeRole` & creating IAM roles within development accounts is unnecessary work

**Comment:** B. Create an IAM role in the development accounts. Add the `ec2:DescribeInstances` permission to the role. Establish a trust relationship with the shared account for this role. Update the Lambda function IAM role in the shared account by adding the `iam:AssumeRole` permissions.

**Comment:** B To enable cross account AWS service actions, create role with required permissions in account which holds the resource. Enable trust relationship with account that will access the resource. Allow accessing account to assume the role.

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## Discussion for Question 245

**Link:** <https://www.examtactics.com/discussions/amazon/view/124831-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- BE: 8 votes

### Discussion

**Comment:** BE is the correct answer.

**Comment:** B. The AWS CDK assertions library provides a convenient way to write unit tests for CDK applications. It allows developers to assert various aspects of the CDK constructs, such as properties and resource counts. Integrating these unit tests into the CI/CD pipeline ensures that they are automatically run after any commit, providing continuous validation of the infrastructure code. E. Aspects in AWS CDK are a way to apply operations to all constructs in a CDK app or a part of the app. By using the Aspects class, the developer can create custom rules (like security configuration checks) and apply them across all constructs in the CDK application. If these rules find any violations, the stack synthesis can be set to fail, ensuring that the application adheres to critical security configurations.

**Comment:** B: <https://docs.aws.amazon.com/cdk/v2/guide/testing.html> fine-grained assertions E: <https://docs.aws.amazon.com/cdk/v2/guide/aspects.html>

**Comment:** Option B: The standard approach to testing AWS CDK apps uses the AWS CDK's assertions module <https://docs.aws.amazon.com/cdk/v2/guide/testing.html> Option E: By using the CDK Aspects class to create custom rules, you can enforce specific conditions or checks on your CDK application, including security configurations. Failing the stack synthesis if any violations are present ensures that deployments do not proceed if critical security configurations are not met. CHATGPT 3.5

**Comment:** Option B allows writing unit tests for the infrastructure code using the built-in CDK assertions. Running them in a CI/CD pipeline on commits provides automated testing. Option E lets you define security validation rules as Aspects, which run on synth to catch issues early.

**Comment:** B. Use the CDK assertions module to integrate unit tests with the application. Run the unit tests in a continuous integration and continuous delivery (CI/CD) pipeline that is invoked after any commit to the repository. E. Use the CDK Aspects class to create custom rules to apply to the CDK application. Fail the stack synthesis if any violations are present.

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## Discussion for Question 246

**Link:** <https://www.examtactics.com/discussions/amazon/view/124748-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 13 votes

### Discussion

**Comment:** A is the correct answer.

**Comment:** Amazon EventBridge (formerly known as CloudWatch Events) allows you to set up a rule with a specific schedule using cron or rate expressions. In this case, a rate expression of `rate(15 minutes)` can be used. EventBridge rules can directly target a Lambda function, making this a straightforward and low-effort solution to execute the function at regular intervals.

**Comment:** A. Create an Amazon EventBridge rule that has a rate expression that will run the rule every 15 minutes. Add the Lambda function as the target of the EventBridge rule.

**Comment:** Run Lambda as cron = Event Bridge

**Comment:** option A is the most efficient and least development effort option for invoking the Lambda function every 15 minutes, as it leverages Amazon EventBridge's built-in scheduling capabilities and is fully serverless.

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## Discussion for Question 247

**Link:** <https://www.examtactics.com/discussions/amazon/view/124858-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 11 votes

### Discussion

**Comment:** <https://www.examtactics.com/discussions/amazon/view/88805-exam-aws-certified-developer-associate-topic-1-question-263/>

**Comment:** A is the correct answer.

**Comment:** The value exceeds then changes the alarm from OK to Alarm  
<https://docs.aws.amazon.com/AmazonCloudWatch/latest/monitoring/AlarmThatSendsEmail.html#:~:text=A%20metric%20alarm%20has,determine%20the%20alarm%20state.>

**Comment:** This approach directly leverages AWS services for monitoring and notification with minimal setup and maintenance. CloudWatch custom metrics can be used to track the processing time for each photo. A CloudWatch alarm can then be configured to trigger when any metric value exceeds the threshold of 5 seconds, sending a notification to the development team via an SNS topic.

**Comment:** A. Create an Amazon CloudWatch custom metric. Each time a photo is processed, publish the processing time as a metric value. Create a CloudWatch alarm that is based on a static threshold of 5 seconds. Notify the development team by using an Amazon Simple Notification Service (Amazon SNS) topic.

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## Discussion for Question 248

**Link:** <https://www.examtactics.com/discussions/amazon/view/124859-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- BD: 15 votes

### Discussion

**Comment:** <https://www.examtactics.com/discussions/amazon/view/88855-exam-aws-certified-developer-associate-topic-1-question-289/>

**Comment:** Immutable: An immutable deployment launches a full set of new instances running the updated version of the application alongside the existing instances. It ensures that the old instances remain untouched until the new ones pass health checks. Once validated, the old instances are terminated, resulting in minimal downtime. Rolling with additional batch: In a rolling deployment with an additional batch, Elastic Beanstalk launches a new batch of instances before taking any existing instances out of service. This maintains full capacity during deployments. After successful deployment, the additional batch of instances is terminated.

**Comment:** BD is the correct answer.

**Comment:** B. Immutable: In an immutable deployment, AWS Elastic Beanstalk deploys the application version to a fresh group of instances in a new Auto Scaling group. Once the new instances pass health checks, they are moved to the existing Auto Scaling group, and the old instances are terminated. This approach ensures that new instances are used for the deployment, minimizing the impact on the existing environment. D. Blue/Green: Blue/green deployment involves deploying the new version of the application to a separate environment (the "green" environment). Once the new environment is ready and tested, the traffic is switched from the old environment (the "blue" environment) to the new one. This type of deployment is effective for ensuring that the new version is deployed on new instances and provides a straightforward way to rollback if needed.

**Comment:** BD - <https://www.examtactics.com/discussions/amazon/view/88855-exam-aws-certified-developer-associate-topic-1-question-289/>

**Comment:** B. Immutable D. Blue/green

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## Discussion for Question 249

**Link:** <https://www.examtactics.com/discussions/amazon/view/124860-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 10 votes

### Discussion

**Comment:** B is the correct answer.

**Comment:** <https://aws.amazon.com/blogs/database/bring-your-own-encryption-keys-to-amazon-dynamodb/>

**Comment:** This option allows the developer to use a customer-managed key in AWS KMS for encryption at rest in DynamoDB. The customer-managed key offers more flexibility and control over the key management compared to AWS managed keys. When creating the DynamoDB table, the developer can specify the KMS key to be used for encryption.

**Comment:** <https://www.examtactics.com/discussions/amazon/view/78943-exam-aws-certified-developer-associate-topic-1-question-23/>

**Comment:** B. Store the key by using AWS Key Management Service (AWS KMS). Choose an AWS KMS customer managed key during the creation of the DynamoDB table. Provide the Amazon Resource Name (ARN) of the AWS KMS key.

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## Discussion for Question 250

**Link:** <https://www.examtactics.com/discussions/amazon/view/124861-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- D: 8 votes

### Discussion

**Comment:** D is the correct answer.

**Comment:** Amazon API Gateway supports canary release deployments, which are specifically designed for this type of scenario. By configuring canary settings, the developer can gradually roll out changes to a small percentage of users (20% in this case) while still serving the majority of users (80%) with the current production stage. This approach helps in minimizing the impact of potential issues with new deployments.

**Comment:** D is correct

**Comment:** D. Configure canary settings for the production stage API. Change the percentage of traffic directed to canary deployment to 20%. Make the planned updates to the production stage. Deploy the changes

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## Discussion for Question 251

**Link:** <https://www.examtactics.com/discussions/amazon/view/124862-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 15 votes

### Discussion

**Comment:** Option B involves setting up a WebSocket server on an EC2 instance, which is more manual and may require additional management overhead. Option C relies on email notifications, which might introduce delays and may not provide the desired real-time updates. Option D involves DynamoDB and SNS, which may add complexity without the direct support for real-time updates that WebSocket provides. So, Option A

**Comment:** A is the correct answer.

**Comment:** <https://docs.aws.amazon.com/apigateway/latest/developerguide/apigateway-websocket-api.html> The use case says the option

**Comment:** This approach leverages the real-time capabilities of WebSocket connections managed by Amazon API Gateway. When a user uploads a file, the application can associate the file with the user's WebSocket connection ID. Once the file validation process completes, the application can send the status directly to the connected client, allowing immediate updates to the dashboard without the need for manual refreshes.

**Comment:** Based on ChatGPT: D.

**Comment:** A. Integrate the client with an API Gateway WebSocket API. Save the user-uploaded files with the WebSocket connection ID. Push the validation status to the connection ID when the processing is complete to initiate an update of the user interface.

**Comment:** B. Launch an Amazon EC2 micro instance, and set up a WebSocket server. Send the user-uploaded file and user detail to the EC2 instance after the user uploads the file. Use the WebSocket server to send updates to the user interface when the uploaded file is processed. OR D. Save the user-uploaded file and user detail to Amazon DynamoDB. Use Amazon DynamoDB Streams with Amazon Simple Notification Service (Amazon SNS) push notifications to send updates to the browser to update the user interface.

**Link:** <https://www.examttopics.com/discussions/amazon/view/124863-exam-aws-certified-developer-associate-dva-c02-topic-1/>

- A: 19 votes

**Comment:** <https://www.examttopics.com/discussions/amazon/view/88914-exam-aws-certified-developer-associate-topic-1-question-294/>

**Comment:** A is the correct answer.

**Comment:** A is correct

**Comment:** <https://docs.aws.amazon.com/apigateway/latest/developerguide/apigateway-use-lambda-authorizer.html#:~:text=If%20access%20is%20allowed%2C%20API%20Gateway%20invokes%20the%20method.%20If%20caching%20is%20enabled%20in%20the%20authorizer%20settings%2C%20API%20Gateway%20also>

**Comment:** <https://docs.aws.amazon.com/apigateway/latest/developerguide/configure-api-gateway-lambda-authorization-with-console.html>

**Comment:** This approach leverages the real-time capabilities of WebSocket connections managed by Amazon API Gateway. When a user uploads a file, the application can associate the file with the user's WebSocket connection ID. Once the file validation process completes, the application can send the status directly to the connected client, allowing immediate updates to the dashboard without the need for manual refreshes.

**Comment:** wrongly added here, please delete

**Comment:** Based on ChatGPT:D

**Comment:** A is Correct

**Comment:** Options A, C, and D do not directly address the caching of user attributes in the context of Amazon Cognito. Option A refers to caching in the custom Lambda authorizer, but the issue seems more likely to be related to the Cognito user pool's caching mechanism. Options C and D mention IAM roles and tags, which may be relevant for other aspects of access control but are not the primary cause of the reported department value in this scenario.

**Comment:** B. Authorization caching is enabled on the Amazon Cognito user pool.

**Link:** <https://www.examttopics.com/discussions/amazon/view/124864-exam-aws-certified-developer-associate-dva-c02-topic-1/>

- D: 10 votes

**Comment:** This appear at 17 Jun exam

**Comment:** D is the correct answer.

**Comment:** <https://docs.aws.amazon.com/AWSSimpleQueueService/latest/SQSDeveloperGuide/FIFO-queues-exactly-once-processing.html>  
<https://docs.aws.amazon.com/AWSSimpleQueueService/latest/SQSDeveloperGuide/FIFO-queues-message-order.html>

**Comment:** Amazon SQS FIFO (First-In-First-Out) queues are designed to ensure that messages are processed exactly once and in the exact order that they are sent. This characteristic makes FIFO queues suitable for scenarios where order and uniqueness are critical. By integrating the FIFO queue with an AWS Lambda function, the developer can automate the processing of the shipping requests as they arrive in the queue.

**Comment:** <https://www.examttopics.com/discussions/amazon/view/88667-exam-aws-certified-developer-associate-topic-1-question-209/>

**Comment:** D. Create an AWS Lambda function to process the requests. Create an Amazon Simple Queue Service (Amazon SQS) FIFO queue. Set the SQS queue as an event source for the Lambda function. Modify the application to write the requests to the SQS queue.

**Link:** <https://www.examtopycs.com/discussions/amazon/view/124865-exam-aws-certified-developer-associate-dva-c02-topic-1/>

- D: 11 votes

**Comment:** <https://docs.aws.amazon.com/step-functions/latest/dg/sfn-local-test-sm-exec.html>

**Comment:** This appear at 17 Jun exam

**Comment:** D is the correct answer.

**Comment:** <https://docs.aws.amazon.com/step-functions/latest/dg/sfn-local-test-sm-exec.html>

**Comment:** AWS Step Functions Local allows developers to test Step Functions workflows on their local machines, without the need to deploy them to AWS. By using Step Functions Local, developers can simulate Step Functions and mock the integration with AWS services such as Amazon SQS and Amazon S3. This approach is ideal for testing the flow of the ML pipeline, including the interaction of Lambda functions, without actually triggering external AWS services.

**Comment:** Step Functions Local, specifically allows mocking AWS services like SQS and S3. This enables end-to-end local testing of the state machine while simulating external calls. Therefore, AWS Step Functions Local with mocked integrations meets the requirements to test the pipeline offline without relying on live AWS services. This is the simplest way to achieve local testing.

**Comment:** D. Use AWS Step Functions Local with mocked service integrations. Hide Solution

**Comment:** D. Use AWS Step Functions Local with mocked service integrations.

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## Discussion for Question 255

**Link:** <https://www.examtopycs.com/discussions/amazon/view/134248-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 7 votes

### Discussion

- Comment:** B is the correct answer.
- Comment:** <https://docs.aws.amazon.com/apigateway/latest/developerguide/amazon-api-gateway-using-stage-variables.html>
- Comment:** You.com y chatGpt
- Comment:** You.com y chatGpt
- Comment:** D: additional complex C: this is typically used to send data to the end point. Not to configure the endpoint itself. Less secure.
- 

## Discussion for Question 256

**Link:** <https://www.examtopycs.com/discussions/amazon/view/134067-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 10 votes

### Discussion

- Comment:** A is the correct answer.
- Comment:** <https://aws.amazon.com/blogs/compute/speeding-up-incremental-changes-with-aws-sam-accelerate-and-nested-stacks/#:~:text=AWS%20SAM%20Accelerate%20enhances%20the%20development%20experience.%20It%20automatically%20observes%20local%20code%20changes%20and%20synchronizes%20them%20to%20AWS%20wi>
- Comment:** You.com
- Comment:** Serverless cdk synth command is not used for deploying changes. Instead, cdk synth generates an AWS CloudFormation template from the CDK app's code, which describes the cloud resources that need to be created or updated. It does not actually deploy those changes to AWS.
- Comment:** Here the answer is A - sam sync. According to my research: - cdk synth: only constructs your CloudFormation template. It does not deploy (create actual resources) it to AWS. You can take the template constructed, deploy it manually in CFN console, edit or inspect. - sam init: used to initialize a new serverless application - cdk bootstrap: the main purpose of cdk bootstrap is to provision a set of resources required to support the deployment of AWS CDK applications
- 

## Discussion for Question 257

**Link:** <https://www.examtopycs.com/discussions/amazon/view/134068-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 9 votes

### Discussion

- Comment:** B is the correct answer.
- Comment:** <https://docs.aws.amazon.com/apigateway/latest/developerguide/api-gateway-api-integration-types.html#:~:text=MOCK%3A%20This%20type,of%20an%20API>
- Comment:** You.com
- Comment:** the correct answer is B
- 

## Discussion for Question 258

**Link:** <https://www.examtopycs.com/discussions/amazon/view/134259-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 7 votes

### Discussion

- Comment:** C is the correct answer.
- Comment:** <https://docs.aws.amazon.com/AmazonECR/latest/userguide/docker-push-ecr-image.html#:~:text=You%20can%20identify%20an%20image%20with%20the%20repository%3Atag%20value%20or%20the%20image%20ID%20in%20the%20resulting%20command%20output>
- Comment:** B probably intended to say 'a wrong tag' but not as clear as C.
- 

## Discussion for Question 259

**Link:** <https://www.examtopycs.com/discussions/amazon/view/134260-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 5 votes

### Discussion

- Comment:** B is the correct answer.
- Comment:** Habla de varios depositos S3 por eso la opcion correcta es la B ya que C no especifica cada deposito, habla de solo uno.
- Comment:** B is correct.

---

## Discussion for Question 260

**Link:** <https://www.examttopics.com/discussions/amazon/view/134261-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 9 votes

### Discussion

**Comment:** Using the KMS Encrypt API to encrypt large amounts of data, such as a PDF file that could be more than 1 MB, is not efficient and can be costly. AWS KMS is designed for encrypting small amounts of data, such as encryption keys or short strings. For larger data, it's recommended to use a client-side encryption library with a data key generated by KMS.

**Comment:** Where is the KMS key element on A?

**Comment:** The question clearly says using KMS so why would you even consider A and B

**Comment:** A is the correct answer.

**Comment:** Going with my gut.

**Comment:** Option A is the most appropriate method for encrypting a PDF file using AWS KMS, where the plaintext key is used for encryption operations, and the encrypted key (not the plaintext key) is stored or managed externally for later decryption use.

**Comment:** going with C

**Comment:** [https://docs.aws.amazon.com/kms/latest/APIReference/API\\_GenerateDataKey.html](https://docs.aws.amazon.com/kms/latest/APIReference/API_GenerateDataKey.html)

### Replies:

**Comment:** Sorry changing it to A as C is not about saying using plain text data as customized. Though the algorithm word is confusing

### Replies:

**Comment:** C is the option final decision

**Comment:** Según la documentación de AWS, cuando se utiliza la API GenerateDataKey, se obtiene una clave de texto sin formato y una clave cifrada. La clave de texto sin formato se puede escribir en el disco para su uso posterior, mientras que la clave cifrada se utiliza para cifrar los datos. En este caso, el desarrollador debe escribir la clave de texto sin formato en el disco para su uso posterior y utilizar la clave cifrada para cifrar el archivo PDF mediante la API de cifrado KMS.

---

## Discussion for Question 261

**Link:** <https://www.examttopics.com/discussions/amazon/view/133069-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 6 votes

### Discussion

**Comment:** B is the only one that makes sense, but it is not practical at all.

**Comment:** B is the correct answer.

**Comment:** B is correct

**Comment:** rotation --> Secrets Manager

**Comment:** The ans is B

---

## Discussion for Question 262

**Link:** <https://www.examttopics.com/discussions/amazon/view/134262-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 8 votes

### Discussion

**Comment:** B is the correct answer. Here's why: It uses EventBridge to capture CloudFormation stack events. It allows filtering based on the CloudFormation service and the specific stack ARN, which can be used to identify the pre-production environment. The Lambda function can be customized to send notifications to the QA team in any desired format (email, Slack, etc.). This setup will automatically trigger for new deployments in the specified environment.

**Comment:** A is the correct answer.

**Comment:** Answer: A So I was also confused about this. But you can add an SNS topic to cloud formation: <https://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/aws-resource-sns-topic.html> (The AWS::SNS::Topic resource creates a topic to which notifications can be published.) <https://stackoverflow.com/questions/34792724/adding-cloudformation-stack-events-to-sns>

**Comment:** A. This option involves creating an SNS topic to which the QA team subscribes. CloudFormation can indeed integrate with SNS to send notifications about stack events, making this a viable way to notify the QA team of deployment updates specifically in the pre-production environment if the CloudFormation stack in that environment is configured to publish events to this SNS topic. Based on these considerations, options A and B are the most directly relevant and practical solutions for the given requirements, with option A (SNS topic for direct CloudFormation notifications) being the most straightforward to implement for notifying the QA team of new deployments in the pre-production environment, and option B (Lambda and EventBridge) offering a more customizable solution that can filter and handle notifications based on specific criteria related to CloudFormation events.

**Comment:** <https://aws.amazon.com/about-aws/whats-new/2022/07/aws-cloudformation-event-notifications-amazon-eventbridge-event-driven-applications/>

**Comment:** A is correct.

---

## Discussion for Question 263

**Link:** <https://www.examttopics.com/discussions/amazon/view/134263-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 8 votes

### Discussion

**Comment:** B is the correct answer.

**Comment:** <https://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/template-custom-resources.html#:~:text=For%20example%2C%20you%20might%20want%20to%20include%20resources%20that%20aren't%27r%20available%20as%20AWS%20CloudFormation%20resource%20types.%20You%20can%20inclu>

**Comment:** CloudFormation itself does not natively manage database users within RDS. You would need a custom resource or some additional automation to create users within the RDS instance.

### Discussion for Question 264

**Link:** <https://www.examttopics.com/discussions/amazon/view/134264-exam-aws-certified-developer-associate-dva-c02-topic-1/>

## Most Voted

- A: 8 votes

## Discussion

**Comment:** A is the correct answer.

**Comment:** Al crear recursos de API Gateway y establecer el tipo de integración en MOCK, se puede simular la respuesta de la API sin necesidad de un backend real. Esto permite que los equipos de desarrollo trabajen en paralelo en componentes separados de la aplicación y continúen el trabajo de desarrollo antes de que se complete el backend de la API.

**Comment:** Duplicated question.

### Discussion for Question 265

**Link:** <https://www.examttopics.com/discussions/amazon/view/134265-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 10 votes

## Discussion

**Comment:** A is the correct answer.

**Comment:** Emphasizes on the order so A is best

**Comment:** Al utilizar una cola SQS FIFO, se garantiza que los mensajes se procesen en el orden en que se reciben. Esto evita actualizaciones desordenadas en el sistema heredado y asegura la coherencia en el procesamiento de los datos de transacciones. Además, al configurar el valor del tiempo de espera de visibilidad, se puede controlar el tiempo durante el cual un mensaje permanece invisible para otros consumidores después de que un consumidor lo recibe. Esto permite que el sistema heredado tenga hasta 5 minutos para procesar algunos datos de transacciones antes de que estén disponibles para otros consumidores.

**Comment:** A is correct

### Discussion for Question 266

**Link:** <https://www.examttopics.com/discussions/amazon/view/134266-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 9 votes

## Discussion

**Comment:** Option B is not ideal because writing all data to an S3 bucket would introduce network latency and might impact performance. By default, Amazon EBS volumes can only be attached to one EC2 instance at a time, and they cannot be mounted to multiple instances simultaneously. However, AWS does offer a feature called Amazon EBS Multi-Attach, which allows you to attach a Provisioned IOPS SSD (io1 or io2) EBS volume to up to 16 Nitro-based EC2 instances within the same Availability Zone. This feature is designed for applications that require concurrent access to the same data from multiple instances, such as clustered databases or parallel file systems.

**Comment:** A is the correct answer.

**Comment:** This approach directly meets the requirement for encryption without impacting performance significantly. AWS EBS encryption offers encryption at rest and integrates with AWS Key Management Service (AWS KMS) for managing encryption keys. This encryption happens transparently to the applications using the EBS volumes, thus not affecting performance in a manner that would be significant for most compute-intensive applications.

### Discussion for Question 267

**Link:** <https://www.examttopics.com/discussions/amazon/view/134267-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- D: 8 votes

## Discussion

**Comment:** D is the correct answer.

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

**Comment:** answer is D

**Comment:** D is correct.

### Discussion for Question 268

**Link:** <https://www.examtips.com/discussions/amazon/view/134268-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 10 votes

## Discussion

**Comment:** The problem is the Lambda processes the message multiple times. This is due to Lambda concurrency mixed with VisibilityTimeout of the SQS queue. VisibilityTimeout defaults to 30 seconds. Using this default, if the Lambda takes longer than 30 seconds to process the message, then the message will become available again in the Queue for consumers. This means a second Lambda can come along and dequeue the same message - leading to duplicate processing. This problem can be solved with A or C However - the question is asking for MOST cost effective. The answer MUST be C then: using Lambda Reserved Concurrency (totally free).



**Comment:** A is the correct answer.

**Comment:** The actual answers are not mentioned into the options as most cost effective remedy <https://docs.aws.amazon.com/lambda/latest/dg/with-sqs.html#services-sqs-batchfailurereporting>:-text=To%20prevent%20Lambda,successfully%20processes%20them

**Comment:** B is correct Because of Cost

**Comment:** Given this, based on AWS best practices, changing the Amazon SQS standard queue to an Amazon SQS FIFO (First-In, First-Out) queue using the Amazon SQS message deduplication ID (Option A) is the most effective way to ensure messages are processed once and in the order they are sent. FIFO queues are designed to prevent duplicate processing and maintain the order of messages, which aligns with the requirement to resolve the issue of Lambda functions processing some messages multiple times.

**Comment:** In this case most cost effective option

#### Replies:

**Comment:** Changing it to A after consulting <https://docs.aws.amazon.com/lambda/latest/dg/with-sqs.html#~:text=To%20prevent%20Lambda,successfully%20processes%20them>

#### Replies:

**Comment:** Ideally none of the options are correct based on the documentaion

**Comment:** A is correct.

---

## Discussion for Question 269

**Link:** <https://www.examttopics.com/discussions/amazon/view/134269-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 11 votes

### Discussion

**Comment:** C is the correct answer.

**Comment:** C looks more perfect

**Comment:** Al definir un alias en la versión \$LATEST de la función Lambda, el desarrollador puede referenciar este alias en el punto final de API Gateway. Luego, al cargar y publicar el código de función Lambda optimizado, se asegura de que la API Gateway haga referencia al nuevo alias de la función Lambda. Después, en la etapa de producción de API Gateway, se puede definir una versión canary y establecer el porcentaje de tráfico que se dirigirá a la versión canary. Esto permite probar los cambios en producción en un pequeño porcentaje del tráfico sin cambiar la URL de API Gateway.

**Comment:** A also looks good, C has an alias created and more like a practical way.

---

## Discussion for Question 270

**Link:** <https://www.examttopics.com/discussions/amazon/view/134270-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 5 votes

### Discussion

**Comment:** C is the correct answer.

**Comment:** answer C

**Comment:** A too much effort.

---

## Discussion for Question 271

**Link:** <https://www.examttopics.com/discussions/amazon/view/134271-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- AC: 12 votes

### Discussion

**Comment:** A. Creating an EC2 instance profile and role with an appropriate policy and associating the role with the EC2 instances follows the principle of least privilege. The EC2 instances will have temporary security credentials provided by the role, and the permissions granted to the role can be tightly controlled using IAM policies. This approach eliminates the need to manage and store long-term access keys on the EC2 instances, which can be a security risk. C. Using the S3 GeneratePresignedUrl API call allows the application to generate time-limited URLs that provide temporary access to objects in the S3 bucket. These pre-signed URLs can be generated for authenticated users, ensuring that only authorized users can access the objects. This approach ensures that the objects in the S3 bucket remain private and are not publicly accessible.

**Comment:** A is correct. No doubt about it. My problem with C is this: ok, ive generated the presigned URL... now what? You need to update the app to USE de generated url, and there is no mention of that. Im going with E.

**Comment:** Option C: Modify the application to use the S3 GeneratePresignedUrl API call: Generate a pre-signed URL for each object in the S3 bucket. Provide the pre-signed URL to authenticated users. Users can use the pre-signed URL to download objects directly from S3 without exposing the bucket publicly. Option E: Modify the application to delegate requests to the S3 bucket: Ensure that the application handles authentication and authorization. When a user requests an object, the application verifies their credentials and then retrieves the object from S3. This approach allows fine-grained control over access.

**Comment:** AC is the correct answer.

**Comment:** Presigned Url and appropriate policy

#### Replies:

**Comment:** Key ID and secret key id is the not the best of options

**Comment:** Cree un usuario de IAM con una política adecuada (opción B): El desarrollador debe crear un usuario de IAM en AWS con una política que permita el acceso a los objetos del depósito S3 solo a los usuarios autenticados en la aplicación. Esta política debe tener permisos adecuados para acceder y descargar objetos del depósito S3. Modifique la aplicación para utilizar la llamada API S3 GeneratePresignedUrl (opción C): El desarrollador debe modificar la aplicación para utilizar la llamada API S3 GeneratePresignedUrl. Esta llamada generará una URL prefirmada que contiene una firma de seguridad y un tiempo de expiración. Solo los usuarios autenticados que tengan acceso a esta URL prefirmada podrán descargar los objetos del depósito S3.

**Comment:** Option E: Modifying the application to delegate requests to the S3 bucket is less secure than using pre-signed URLs. If the application acts as a proxy for S3 requests, it would need to handle the data transfer from S3 to the user, which can increase the load on the application and potentially expose the application to additional security risks.

---

## Discussion for Question 272

**Link:** <https://www.examttopics.com/discussions/amazon/view/134272-exam-aws-certified-developer-associate-dva-c02-topic-1/>

## Most Voted

- A: 15 votes

## Discussion

**Comment:** "Without any additional code changes."

**Comment:** A is the correct answer.

**Comment:** B. Increase the visibility timeout on the SQS queue. Increasing the visibility timeout on the SQS queue is the most direct way to ensure that messages corresponding to longer video files are not prematurely made available for processing by another instance of the Lambda function or returned to the queue due to processing timeouts. This approach, however, does not directly address the Lambda function's timeout issue but rather helps manage the reprocessing of message

**Comment:** changing memory configuration

**Comment:** Increasing memory will also increase CPU, thereby optimizing performance of Lambda function

---

## Discussion for Question 273

**Link:** <https://www.examtactics.com/discussions/amazon/view/134273-exam-aws-certified-developer-associate-dva-c02-topic-1/>

## Most Voted

- A: 9 votes

## Discussion

**Comment:** A. Configure mock integrations for API Gateway API methods. Mock integrations in Amazon API Gateway allow you to return a fixed response without sending the request further to the backend. This approach enables frontend developers to work with a predetermined response structure and data, facilitating parallel development without waiting for the backend services to be fully implemented. This solution does not require additional code changes or the deployment of placeholder backend services, making it operationally efficient and straightforward to implement for temporary use during the development phase.

**Comment:** A is the correct answer.

**Comment:** Mock integration

**Comment:** mock integration

**Comment:** Duplicated questions.

---

## Discussion for Question 274

**Link:** <https://www.examtactics.com/discussions/amazon/view/134274-exam-aws-certified-developer-associate-dva-c02-topic-1/>

## Most Voted

- BE: 12 votes

## Discussion

**Comment:** BE is the correct answer.

**Comment:** B&D Using EKS is least operational overhead

**Replies:**

**Comment:** No, its not. You are assuming the developer have intermediate to advanced knowledge on kubernetes. ECS is way easier if you are at a starting point from containers and it is going cloud native. Plus the only valid packaging options is the ECR one, that is WAY MORE easy to integrate to ECS then EKS...

**Comment:** ECR -> ECS

**Comment:** BE - ecs much easier than eks .

**Comment:** <https://aws.amazon.com/getting-started/hands-on/deploy-docker-containers/>

**Comment:** E corresponds to actions in B

**Comment:** Why D? Is EKS necessary?

---

## Discussion for Question 275

**Link:** <https://www.examtactics.com/discussions/amazon/view/134275-exam-aws-certified-developer-associate-dva-c02-topic-1/>

## Most Voted

- A: 10 votes

## Discussion

**Comment:** A is the correct answer.

**Comment:** A. Enable TTL (Time to Live) on the expirationDate attribute in the table. Create a DynamoDB stream. Create an AWS Lambda function to process the deleted items. Create a DynamoDB trigger for the Lambda function. This approach leverages DynamoDB's TTL feature to automatically delete items past their expiration date, minimizing the need for custom code to manage this process. The use of a DynamoDB stream and a Lambda function triggered by this stream allows for processing or archiving the items just before they are deleted, without the need to manually scan and delete expired items, thereby significantly reducing operational complexity and code maintenance.

**Comment:** going with A

**Comment:** It is TTL and stream combination. It will be utilized by the Lambda

**Comment:** Not sure why C. A can totally handle this.

---

## Discussion for Question 276

**Link:** <https://www.examtactics.com/discussions/amazon/view/134276-exam-aws-certified-developer-associate-dva-c02-topic-1/>

## Most Voted

- D: 19 votes

- A: 8 votes

## Discussion

**Comment:** Quick google will tell you the max size of a lambda layer is 250mb.

**Comment:** D is the correct answer.

**Comment:** I've been going back and forward on this one for a few days. I have settled for EFS primarily based off a blog I read from an AWS community builder who specializes in lambda. [https://betterdev.blog/serverless-ml-on-aws-lambda/#overcoming\\_lambda\\_size\\_limitations~-text=the%20DynamoDB%20table.-.Overcoming%20Lambda%20size%20limitations,-1f%20we%20package](https://betterdev.blog/serverless-ml-on-aws-lambda/#overcoming_lambda_size_limitations~-text=the%20DynamoDB%20table.-.Overcoming%20Lambda%20size%20limitations,-1f%20we%20package) 250mb limit per lambda, although the layers capacity is 75gb this covers your whole environment and breaches the single lambda limit. The blog uses a container solution, the limit here is 10GB which is still to small for our use case. EFS fits this use case even though it is a tad more troublesome to implement. Granted the blog is 2 years old, I'm hoping not much has changed since.

**Comment:** D. Save the library in an Amazon Elastic File System (Amazon EFS) file system. Mount the EFS file system in all the Lambda functions. This approach allows Lambda functions to access large libraries or datasets that exceed the size limits of Lambda's deployment package. By using Amazon EFS, a fully managed elastic file storage, the library can be stored once and mounted onto multiple Lambda functions simultaneously. This eliminates the need to package the library with each Lambda function, which would not be feasible given the size constraints of Lambda layers and deployment packages. Additionally, this method requires minimal code changes, focusing only on configuring the Lambda functions to mount the EFS file system, providing a scalable and efficient solution for making large libraries available to serverless applications.

**Comment:** just the layer limitation 250 mb .

**Comment:** Upto 75 GB can be accommodated. <https://docs.aws.amazon.com/lambda/latest/dg/gettingstarted-limits.html>

**Comment:** La solución recomendada para este caso es guardar la biblioteca en capas Lambda y adjuntar esas capas a todas las funciones Lambda. Esto permitirá que todas las funciones Lambda tengan acceso a la biblioteca sin necesidad de duplicarla en cada función. Las capas Lambda son una forma de compartir código y bibliotecas comunes entre varias funciones Lambda. Puedes crear una capa Lambda que contenga la biblioteca de aprendizaje automático y luego adjuntar esa capa a todas las funciones Lambda que necesiten acceder a ella. Al utilizar capas Lambda, puedes reducir el tamaño de las funciones Lambda y simplificar su mantenimiento. Además, si el tamaño de la biblioteca está aumentando, puedes actualizar la capa Lambda sin tener que modificar y volver a implementar todas las funciones Lambda.

**Comment:** S3 takes too long.

---

## Discussion for Question 277

**Link:** <https://www.examttopics.com/discussions/amazon/view/134277-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 14 votes

## Discussion

**Comment:** A is the correct answer.

**Comment:** Cognito is the option

**Comment:** Amazon Cognito es un servicio de AWS que permite agregar fácilmente la funcionalidad de registro e inicio de sesión a las aplicaciones. Puedes utilizar proveedores de identidades sociales externos, como Google, Facebook o Amazon, para permitir que los usuarios se registren e inicien sesión en tu aplicación. Al crear grupos de usuarios en Amazon Cognito y asignar roles de IAM a esos grupos, puedes gestionar de manera eficiente los permisos y accesos de los usuarios a los recursos backend en AWS. Esto te permite minimizar los gastos operativos y la gestión continua de las identidades de los usuarios.

**Comment:** Cognito is the answer

**Comment:** Anybody has an idea why it is C?

---

## Discussion for Question 278

**Link:** <https://www.examttopics.com/discussions/amazon/view/133406-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- D: 12 votes

## Discussion

**Comment:** Correct Answer is D

**Comment:** Should be D

**Comment:** This appear at 17 Jun exam

**Comment:** D is the correct answer.

**Comment:** D is the option

**Comment:** Should be D

---

## Discussion for Question 279

**Link:** <https://www.examttopics.com/discussions/amazon/view/134278-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 14 votes
- C: 11 votes

## Discussion

**Comment:** Images are first uploaded to S3 bucket. Then, manual audit is performed that lasts 1-24 hours. Only after the audit of the image is finished we can run our Lambda function. If we run event at regular intervals (what does it mean?) should we run it every hour and then we would have bunch of untagged objects that haven't been audited and we would add a tag to them which doesn't make sense. - In option B they explicitly mention that the Wait period will be 24 hours thus insuring that the audit of those objects has been completed. Only then we run the Lambda function.

**Comment:** This solution leverages AWS Lambda, which is a serverless compute service that runs your code in response to events and automatically manages the underlying compute resources for you. By using Lambda in conjunction with Amazon EventBridge, which can trigger events at regular intervals, you can create a system that periodically checks for new audit results and applies tags to S3 objects without the need for managing server instances or handling queue visibility timeouts. This approach is not only operationally efficient but also cost-effective, as you pay only for the compute time you consume with Lambda21.

**Comment:** B is the correct answer.

**Comment:** I'm still not sure if B is correct. However, I think this use case is very similar to a feature that exists in step functions. Although the wording doesn't answer the question directly and I think waiting 24 hours is the opposite of operationally efficient. The GetTaskToken feature that is part of service integration in step functions would be a perfect match for this scenario, removing the 24 hour wait while maintaining operational efficiency using AWS Step functions. I can only hope this is what they are getting at when I answer this on the exam. <https://docs.aws.amazon.com/step-functions/latest/dg/connect-to-resource.html>

**Comment:** Best option considering the question conditions. Reading from Rest API

**Comment:** C. Create an AWS Lambda function to load all untagged S3 objects. Retrieve the results for each item from the REST API and tag each S3 object accordingly. Create and configure an Amazon EventBridge rule to run at

regular intervals. Set the Lambda function as a target for the EventBridge rule. This solution leverages AWS Lambda for processing and tagging S3 objects based on the audit results available through the REST API. By using Amazon EventBridge to trigger the Lambda function at regular intervals, the developer ensures that the process runs automatically without manual intervention, efficiently handling the tagging of S3 objects once the audit results are available. This approach minimizes operational effort and does not require the continuous monitoring of S3 object creation or the management of complex workflows.

**Comment:** Should be A

**Comment:** I may choose B.

**Comment:** A does not make any sense.

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## Discussion for Question 280

**Link:** <https://www.examttopics.com/discussions/amazon/view/134279-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 9 votes

### Discussion

**Comment:** B is the correct answer.

**Comment:** B. Use Lambda layers to package and load dependencies. Lambda layers are a way to manage your function's dependencies separately, reducing the size of the deployment package that needs to be uploaded when the function's code changes. By moving the large module or other dependencies to a Lambda layer, only changes to the function's own code need to be uploaded during deployment, which can significantly speed up the deployment process. This approach allows for more efficient management of libraries and dependencies, making deployments quicker and more streamlined without altering the function's memory size, which would not directly impact deployment speed, or relying on external services like Amazon S3 or AWS CodeDeploy in a way that doesn't specifically address deployment speed for large dependencies.

**Comment:** Lambda layers allow packaging shared dependencies outside the function code, resulting in smaller deployment packages for subsequent updates. This significantly reduces the time required to upload the code to AWS during deployment.

**Comment:** Its a lambda layer scenario

**Comment:** Must be B

---

## Discussion for Question 281

**Link:** <https://www.examttopics.com/discussions/amazon/view/134280-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 9 votes

### Discussion

**Comment:** Enable static website hosting on the S3 bucket. Specify index.html as the Index document. Update the S3 bucket policy to allow access. Configure the CloudFront distribution's origin to use the S3 website endpoint. Pros: Handles both root and subdirectories. Keeps the S3 bucket private. Cons: Requires S3 bucket policy adjustments.

**Comment:** C is the correct answer.

**Comment:** <https://aws.amazon.com/blogs/networking-and-content-delivery/implementing-default-directory-indexes-in-amazon-s3-backed-amazon-cloudfront-origins-using-cloudfront-functions/>

**Comment:** going with B.

**Comment:** This solution allows for the dynamic handling of requests to directories by automatically appending index.html to the path when a directory is requested. This approach does not require exposing the S3 bucket publicly or modifying S3 bucket settings for static website hosting. It leverages CloudFront's capabilities to manipulate the request at the edge location before it reaches the origin, ensuring that users can access directories without specifying a file name in the most secure and efficient manner.

**Comment:** C is the right option

**Comment:** Al habilitar el alojamiento de sitios web estáticos en el depósito de Amazon S3 y especificar index.html como documento de índice, se permite el acceso a los directorios sin especificar un nombre de archivo. Al mismo tiempo, al actualizar la política del depósito S3 para habilitar el acceso y el origen de la distribución de CloudFront para utilizar el punto final del sitio web de S3, se garantiza que el acceso se gestione de manera segura sin exponer públicamente el depósito de S3.

**Comment:** When you enable static website hosting on an S3 bucket, you can specify an index document, which S3 automatically returns when a user requests a directory. However, changing the CloudFront origin to the S3 website endpoint would expose the S3 bucket publicly, which contradicts the requirement to keep the S3 bucket private.

### Replies:

**Comment:** C correct

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## Discussion for Question 282

**Link:** <https://www.examttopics.com/discussions/amazon/view/134281-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 10 votes

### Discussion

**Comment:** C. HTTP 503: Service Unavailable - This status code indicates that the server is not ready to handle the request. It is usually a temporary state, often due to maintenance or overloading. D. HTTP 505: HTTP Version Not Supported - This status code means that the server does not support the HTTP protocol version used in the request. It is a rare occurrence and typically indicates that the client is using an outdated or unsupported version of HTTP.

**Comment:** A is the correct answer.

**Comment:** <https://docs.aws.amazon.com/AmazonS3/latest/API/ErrorResponses.html>

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## Discussion for Question 283

**Link:** <https://www.examttopics.com/discussions/amazon/view/134282-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- D: 12 votes

### Discussion

**Comment:** D is the correct answer.

**Comment:** answer D

**Comment:** Using MFA with AssumeRole (Optional) You can include multi-factor authentication (MFA) information when you call AssumeRole. This is useful for cross-account scenarios to ensure that the user that assumes the role has been authenticated with an AWS MFA device. In that scenario, the trust policy of the role being assumed includes a condition that tests for MFA authentication. If the caller does not include valid MFA information, the request to assume the role is denied.

**Comment:** [https://docs.aws.amazon.com/IAM/latest/UserGuide/id\\_credentials\\_mfa\\_configure-api-require.htm#:~:text=Call%20API%20operations%20that%20access%20resources%20in%20the%20same%20or,to%20restrict%20access%20to%20resources%20protected%20by%20resource%2Dbased%20policies.](https://docs.aws.amazon.com/IAM/latest/UserGuide/id_credentials_mfa_configure-api-require.htm#:~:text=Call%20API%20operations%20that%20access%20resources%20in%20the%20same%20or,to%20restrict%20access%20to%20resources%20protected%20by%20resource%2Dbased%20policies.)

**Comment:** answer Is D

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## Discussion for Question 284

**Link:** <https://www.examttopics.com/discussions/amazon/view/134283-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- BC: 5 votes

### Discussion

**Comment:** Option B (Amazon S3 Static Website Hosting): Enable static website hosting on the S3 bucket. Specify index.html as the Index document. Update the S3 bucket policy to allow access. Configure the CloudFront distribution's origin to use the S3 website endpoint. Pros: Handles both root and subdirectories. Keeps the S3 bucket private. Cons: Requires S3 bucket policy adjustments. Verdict: Recommended solution. Option C (CloudFront Function for Directory Indexes): Create a CloudFront function that appends index.html to request URLs for directories. Add this function as a viewer request CloudFront function. Pros: Customizable behavior. Works for subdirectories. Cons: Adds complexity. Verdict: Suitable if you need custom logic

**Comment:** BC is the correct answer.

**Comment:** BC is correct

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## Discussion for Question 285

**Link:** <https://www.examttopics.com/discussions/amazon/view/134284-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 5 votes

### Discussion

**Comment:** B is the correct answer.

**Comment:** must be b

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## Discussion for Question 286

**Link:** <https://www.examttopics.com/discussions/amazon/view/134285-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 8 votes

### Discussion

**Comment:** C is the correct answer.

**Comment:** <https://docs.aws.amazon.com/step-functions/latest/dg/concepts-error-handling.html#:~:text=Task%2C%20Parallel,the%20Retry%20field.>

**Comment:** Should be C

**Comment:** Should be C

---

## Discussion for Question 287

**Link:** <https://www.examttopics.com/discussions/amazon/view/134286-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- D: 11 votes

### Discussion

**Comment:** D is the correct answer.

**Comment:** Explanation of why other options are less suitable: A. AWS::Include transform: While the AWS::Include transform allows importing values from other templates, it's generally used for larger configurations and not ideal for this specific purpose of passing a single value to the application. B. User data: The user data section in CloudFormation is typically used for one-time configuration scripts and not intended for passing sensitive information like log group names or ARNs, raising security concerns. C. CloudFormation Mappings: While mappings can store key-value pairs within the template, they are not directly accessible as environment variables within the application code.

**Comment:** By specifying the log group's ARN as an environment variable in the CloudFormation template for the Lambda function, the developer can easily access this information within the application code at runtime. This method provides a straightforward way to pass dynamic configuration or resource references to AWS Lambda functions without hardcoding values, thereby maintaining flexibility and ensuring that the application can utilize the correct resources after deployment.

**Comment:** Very nice question totally confusing. D is correct

**Comment:** User data is typically used to pass startup scripts to EC2 instances, not Lambda functions. This would not be the appropriate mechanism for a serverless application using Lambda. The Mappings section in a CloudFormation template is used to define sets of key-value pairs that can be used to specify conditional parameter values based on region or other criteria. It doesn't provide a direct way to make the log group's name available to the Lambda function at runtime.

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## Discussion for Question 288

**Link:** <https://www.examttopics.com/discussions/amazon/view/134287-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- D: 10 votes

**Comment:** <https://docs.aws.amazon.com/amazondynamodb/latest/developerguide/EncryptionAtRest.html> You can switch between key types at any time

**Comment:** D is the correct answer.

**Comment:** When creating a DynamoDB table, if no specific encryption options are provided, it uses the default encryption setting which is server-side encryption with AWS managed keys (SSE with AWS owned key). This option does not require specifying a key ARN in the creation process, making it the simplest and most straightforward way to ensure data at rest is encrypted using keys managed by AWS.

**Comment:** <https://docs.aws.amazon.com/amazondynamodb/latest/developerguide/EncryptionAtRest.html>

**Comment:** D is good enough to meet the requirement.

**Link:** <https://www.examttopics.com/discussions/amazon/view/134288-exam-aws-certified-developer-associate-dva-c02-topic-1/>

- B: 8 votes

**Comment:** B is the correct answer.

**Comment:** User-defined services: Developed by users: These services are applications, microservices, or any software components specifically built and deployed by the user or organization using AWS. They can be written in any programming language and deployed on various platforms, including EC2 instances, Lambda functions, or containers on platforms like Amazon ECS or EKS.

**Comment:**  
[https://aws.amazon.com/xray/faqs/#:~:text=Region%20annotation%20for%20AWS%20services%20will%20be%20added%20automatically%2C%20however%2C%20customers%20will%20need%20to%20instrument%20custom%20code%20to%20capture%20traces](https://aws.amazon.com/xray/faqs/#:~:text=Region%20annotation%20for%20AWS%20services%20will%20be%20added%20automatically%2C%20however%2C%20customers%20will%20need%20to%20instrument%20custom%20code%20to%20capture%20traces,Region%20annotation%20for%20AWS%20services%20will%20be%20added%20automatically%2C%20however%2C%20customers%20will%20need%20to%20instrument%20custom%20code%20to%20capture%20traces)

**Comment:** User defined has to be in sdk.

**Link:** <https://www.examttopics.com/discussions/amazon/view/134289-exam-aws-certified-developer-associate-dva-c02-topic-1/>

- C: 7 votes

**Comment:** C is the correct answer.

**Comment:** <https://docs.aws.amazon.com/lambda/latest/dg/with-sqs.html#events-sqs-max-concurrency>

**Comment:** Should be C

**Comment:** None of them seems to be guarantee the requirement. Set the reserved concurrency on the Lambda function to 100 to limit the total invocations across all triggers. Configure the event source mapping for the high priority queue to use a maximum concurrency that ensures its messages are processed first. This could be most of the reserved concurrency (but not all, to allow for some processing of the low priority queue). Configure the event source mapping for the low priority queue with a smaller maximum concurrency to ensure it doesn't starve the high priority queue of Lambda resources.

**Link:** <https://www.examtips.com/discussions/amazon/view/134290-exam-aws-certified-developer-associate-dva-c02-topic-1>

- D: 8 votes

**Comment:** D is the correct answer.

**Comment:** A comprehensive guide to help you navigate the landscape and find the perfect [data visualization agencies in India](#) for your business

**Comment:** D. Configure AWS Secrets Manager to create a new secret for each environment type. Store the environment-specific credentials in the secret. AWS Secrets Manager supports the encryption of secrets (including sensitive credentials) and allows for automatic rotation of these secrets. By creating a new secret for each environment (development, staging, pre-production, and production), you can manage and access the environment-specific credentials securely. This approach facilitates operational efficiency by leveraging AWS Secrets Manager's built-in capabilities for encryption and rotation, without the need for manual intervention or complex configurations. Secrets Manager also provides a straightforward way to retrieve the correct version of the credentials for each specific environment, simplifying the management of sensitive data across different stages of application deployment.

**Comment:** Different credentials

**Comment:** Should be D

**Comment:** C does not make sense.

**Link:** <https://www.examtopycs.com/discussions/amazon/view/134291-exam-aws-certified-developer-associate-dva-c02-topic-1>

- AD: 10 votes

**Comment:** AD is correct.

**Comment:** AD for sure

**Comment:** AD is the correct answer.

**Comment:** <https://docs.aws.amazon.com/lambda/latest/dg/with-sqs.html>

## Discussion for Question 293

Link: <https://www.examttopics.com/discussions/amazon/view/134292-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 9 votes

### Discussion

**Comment:** A is the correct answer.

**Comment:** <https://aws.amazon.com/s3/storage-classes/>

**Comment:** Should be A

**Comment:** Must be A

## Discussion for Question 294

Link: <https://www.examttopics.com/discussions/amazon/view/134293-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 14 votes
- D: 8 votes

### Discussion

**Comment:** Option B (Use Amazon DynamoDB for Configuration Data): Create a DynamoDB table as a resource in the CloudFormation stack. Migrate the parameters from Parameter Store to the DynamoDB table. Allows the application to modify parameter values without affecting the stack.

**Comment:** There is no evidence from the wording in question that resources have been deleted from outside. Also, resetting the values does not mean factory reset wherein, somebody deleted the resource from outside and recreated it with default values. There is no evidence of that either. So, as per <https://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/protect-stack-resources.html#stack-policy-reference> I would choose D

#### Replies:

**Comment:** The stack deletes resources on updates. See <https://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/aws-attribute-deletionpolicy.html> The wording in the question states "The application can modify the parameter values" Given this, it is unlikely that Option D would be suitable. It would prevent the application from making updates to the parameter store, leading to potential errors. Option D is also unsuitable as it as it would mean the parameter store would still be reset for any future stack updates - which is precisely the root cause of the original issue stated in this question. D does not solve the problem here. A does.

**Comment:** I don't understand why it would be A. Reading the question again, "The developer "updated the stack to create additional resources with tags...noted that the parameter values were reset". A deletion policy only protects resources when a stack is deleted or "This capability also applies to stack update operations that lead to resources being deleted from stacks." (<https://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/aws-attribute-deletionpolicy.html>) The parameters aren't being deleted but simply overwritten. In this case, to prevent the parameter store values from being overwritten, we can use a stack policy to prevent updates to a stack resource. "You can prevent stack resources from being unintentionally updated or deleted during a stack update by using a stack policy." (<https://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/protect-stack-resources.html#stack-policy-intro-example>)

**Comment:** A is the correct answer.

**Comment:** Option A is the most straightforward approach to ensure that the parameters are not deleted or reset to their original values when the stack is deleted or updated. Option D Modifying the stack policy to deny updates on Parameter Store parameters could prevent necessary updates and is not recommended as it could lead to stack update failures.

**Comment:** This solution allows the developer to avoid resetting the parameter values stored in AWS Systems Manager Parameter Store when updating the CloudFormation stack. By setting the deletion policy to Retain for those parameters, CloudFormation will preserve their values during stack updates instead of deleting and recreating them.

**Comment:** A. Modify the CloudFormation stack to set the deletion policy to Retain for the Parameter Store parameters. This solution allows the developer to avoid resetting the parameter values stored in AWS Systems Manager Parameter Store when updating the CloudFormation stack. By setting the deletion policy to Retain for those parameters, CloudFormation will preserve their values during stack updates instead of deleting and recreating them. It changes the way the company deploys the CloudFormation stack by modifying the deletion policy for the relevant parameters. It avoids resetting the parameter values outside the stack, as the values modified by the application will be retained during stack updates.

**Comment:** I am going with D.

**Comment:** Should be A. As the developer also needs to avoid resetting the parameter values outside the stack.

**Comment:** It is D

## Discussion for Question 295

Link: <https://www.examttopics.com/discussions/amazon/view/134294-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- D: 10 votes

### Discussion

**Comment:** D is the correct answer.

**Comment:** D Cloud Front is generally used to distribute static content such as images, stylesheets, and scripts. CloudFront is not typically used for caching database queries or dynamic data directly from databases like RDS.

**Comment:** D is generally used to distribute static content such as images, stylesheets, and scripts. CloudFront is not typically used for caching database queries or dynamic data directly from databases like RDS.

**Comment:** cash , complex = redis

**Comment:** This option is the most suitable for the described scenario. Amazon ElastiCache for Redis can act as a high-performance, in-memory data store and cache, which is ideal for applications that require fast access to data. Implementing a write-through caching strategy ensures that data is written to the cache and the primary data store (RDS) simultaneously, keeping the cache up to date. Reading data from the cache can significantly reduce latency and the load on the RDS database, making it an optimal solution for applications with high read demand.

**Comment:** going with cash D

**Comment:** <https://docs.aws.amazon.com/whitepapers/latest/database-caching-strategies-using-redis/caching-patterns.html>

**Comment:** R. Utilice Amazon DynamoDB Accelerator (DAX) frente a la base de datos RDS para proporcionar una capa de almacenamiento en caché para el gran volumen de datos que cambian rápidamente. Al utilizar Amazon DynamoDB Accelerator (DAX) frente a la base de datos RDS, se puede proporcionar una capa de almacenamiento en caché para el gran volumen de datos que cambian rápidamente. DAX mejora el rendimiento de las consultas de lectura al almacenar en caché los resultados de las consultas más frecuentes, lo que reduce la latencia y mejora la capacidad de respuesta de la aplicación. Es importante tener en cuenta que DynamoDB Accelerator (DAX) es una opción eficiente para mejorar el rendimiento de aplicaciones que requieren un acceso rápido a datos que cambian con frecuencia, como en el caso de una aplicación de redes sociales.

**Comment:** Should be D

**Comment:** hesitate between C and D.

## Discussion for Question 296

Link: <https://www.examttopics.com/discussions/amazon/view/134295-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 13 votes

### Discussion

**Comment:** A is the correct answer.

**Comment:** X ray option

**Comment:** Should be A

**Comment:** A. Enable AWS X-Ray active tracing in the Lambda function. Review the logs in X-Ray. X-Ray provides insights into the duration and performance of each component, helping you identify the root cause of performance issues without modifying the function code.

**Comment:** between the services

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## Discussion for Question 297

Link: <https://www.examttopics.com/discussions/amazon/view/134296-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- BE: 12 votes

### Discussion

**Comment:** BE is the correct answer.

**Comment:** <https://docs.aws.amazon.com/efs/latest/ug/efs-onpremises.html> for NFS to EFS mounting and the question itself demands EKS.

**Comment:** EFS is the key here

**Comment:** Amazon Elastic File System (Amazon EFS) volume and Amazon Elastic Kubernetes Service (Amazon EKS)

**Comment:** EBS cannot be multi mounted.

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## Discussion for Question 298

Link: <https://www.examttopics.com/discussions/amazon/view/134297-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 8 votes

### Discussion

**Comment:** A is the correct answer.

**Comment:** Lambda destinations allow you to configure what happens to Lambda function invocation records when an invocation is successful or, in this case, when it fails. By setting a destination for failed invocations, you can specify another Lambda function to handle errors. This setup enables automatic error handling without requiring changes to the application code or the use of additional services for monitoring and triggering error-handling mechanisms. The error-handling Lambda function can then log details, send notifications, or take corrective actions as needed.

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

**Comment:** Should be A since Trigger is before execution

**Comment:** is not a valid approach because Lambda does not have a direct configuration for triggers based on failure conditions in the way described. The concept of a trigger is generally used for starting an invocation, not handling failures.

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## Discussion for Question 299

Link: <https://www.examttopics.com/discussions/amazon/view/134298-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 9 votes

### Discussion

**Comment:** A is the correct answer.

**Comment:** AWS AppConfig is part of AWS Systems Manager and is designed specifically for managing application configurations and feature toggles in a safe and controlled manner. It allows developers to validate changes before deployment, minimizing the risk of impacting application stability and user experience. Using feature flags with AppConfig enables the developer to turn features on or off without deploying new code, making it an ideal solution for controlling access to new features based on various criteria, including user groups or performance metrics. This method provides a quick and non-disruptive way to manage application features.

**Comment:** <https://docs.aws.amazon.com/appconfig/latest/userguide/what-is-appconfig.html>

**Comment:** App COnfig is the one

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## Discussion for Question 300

Link: <https://www.examttopics.com/discussions/amazon/view/134336-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 9 votes

### Discussion

**Comment:** A is the correct answer.

**Comment:** This solution directly integrates a manual approval process into the CI/CD pipeline. By adding a specific stage for manual approval before the deployment can proceed to production, it ensures that no changes are



deployed without explicit consent. The integration of Amazon SNS for notifications automates the communication process, informing the product owner when their input is needed. This setup not only enforces a governance check but also streamlines the approval process, making it both efficient and auditable.

**Comment:** should be A

**Comment:** Adding a manual approval action to a pipeline stage, which is necessary for halting the pipeline to wait for approval.

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## Discussion for Question 301

**Link:** <https://www.examttopics.com/discussions/amazon/view/134337-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 13 votes

### Discussion

**Comment:** A is the correct answer.

**Comment:** <https://docs.aws.amazon.com/step-functions/latest/dg/concepts-error-handling.html#:~:text=Task%2C%20Parallel%2C%20and%20Map%20states%20can%20have%20a%20field%20named%20Retry%2C%20whose%20value%20must%20be%20an%20array%20of%20objects%20known%20as%20>

**Comment:** AWS Step Functions allows you to handle errors and automate retry policies directly within your state machine definition. By adding a Retry field to the state definition of the Lambda function within the Step Functions state machine, you can specify the error types for which retries should occur, including timeout errors. You can also configure the maximum number of retry attempts, the interval between retries, backoff rate, and more. This solution directly addresses the need for automatic retry in case of specific errors such as timeouts, making it an efficient way to enhance the resilience of serverless workflows.

**Comment:** A is correct.

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## Discussion for Question 302

**Link:** <https://www.examttopics.com/discussions/amazon/view/134124-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- D: 16 votes

### Discussion

**Comment:** Managed rotation vs. automatic rotation: Managed rotation requires manual intervention to specify when a secret should be rotated. This doesn't meet the requirement of automated password rotation on a regular basis. Automatic rotation automatically rotates secrets based on a defined schedule, meeting the requirement for regular password changes. Single user vs. alternating users: Single user rotation means there is only one set of credentials. Rotating this would cause downtime as the application needs to update its connection information. Alternating users rotation uses two sets of credentials. Only one is active at a time. When it's time to rotate, the inactive set is rotated, and then the application switches to using that set, avoiding downtime

**Comment:** Automatic rotation does not address the high availability requirement. If the rotation process causes downtime, it could impact our application's stability

**Comment:** B. Configure managed rotation with the alternating users rotation strategy.

**Comment:** D is the correct answer.

**Comment:** Automatic Rotation We strongly recommend that you use automatic rotation instead of managed rotation. Automatic rotation simplifies the rotation process and offers several advantages over managed rotation, including: It eliminates the need to create and manage Lambda functions to update the secret in AWS Secrets Manager or the database. It supports the alternating users rotation strategy, which is no longer supported for managed rotation. (Source: AWS Secrets Manager documentation: <https://docs.aws.amazon.com/secretsmanager/latest/userguide/rotating-secrets.html>)

**Comment:** Using AWS Secrets Manager's managed rotation with the alternating users rotation strategy is ideal for databases like Amazon RDS for PostgreSQL. This strategy involves creating a second user in the database with the same permissions as the original user. During rotation, Secrets Manager switches between these two users, updating the credentials for the inactive user and then making it the active user for subsequent connections. This approach minimizes the risk of downtime because the application can continue to use the currently active credentials while the other set is being rotated. It also ensures that credentials are regularly updated, enhancing security without disrupting database access.

**Comment:** [https://docs.aws.amazon.com/secretsmanager/latest/userguide/tutorials\\_rotating-alternating.html#:~:text=This%20strategy%20is%20a%20good%20choice%20if%20you%20need%20high%20availability%20for%20your%20secret%2C%20because%20one%20of%20the%20alternating%20users%20has%20curr](https://docs.aws.amazon.com/secretsmanager/latest/userguide/tutorials_rotating-alternating.html#:~:text=This%20strategy%20is%20a%20good%20choice%20if%20you%20need%20high%20availability%20for%20your%20secret%2C%20because%20one%20of%20the%20alternating%20users%20has%20curr)

**Comment:** Both B and D options involve using the alternating users rotation strategy, which is suitable for ensuring high availability and no downtime during secret rotation. The difference between "managed rotation" and "automatic rotation" is mostly semantic in this context, as both terms refer to the capability of AWS Secrets Manager to automatically rotate the secret. The more common terminology used in the context of AWS Secrets Manager is "managed rotation," so option B is often preferred.

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## Discussion for Question 303

**Link:** <https://www.examttopics.com/discussions/amazon/view/134339-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 11 votes

### Discussion

**Comment:** X-ray will provide better insights for performance

**Comment:** I think the answer is A The goal is to analysis past executions of the Lambda functions, to isolate and identify the slow Lambda functions. This can be done with option A. Option D does not retroactively analyse past executions of Lambda functions - therefore it's not as effective as option A ~~~

**Comment:** C is the correct answer.

**Comment:** <https://docs.aws.amazon.com/lambda/latest/operatorguide/general-approach.html#:~:text=Use%20X%20Ray%20to%20find%20all%20the%20services%20involved%20in%20a%20request.%20For%20larger%20serverless%20applications%2C%20this%20is%20the%20fastest%20way%20to%20> If clearly an interaction issues among the services no failure has occurred

**Comment:** not sure between A and C but going with C.

**Comment:** A. Perform a query across all the Lambda function log groups by using Amazon CloudWatch Logs Insights. Filter on type of report and sort descending by Lambda function execution duration. Here's why this approach is most efficient: Centralized Logs: CloudWatch Logs Insights allows you to query logs across all your Lambda function log groups in a single location. Targeted Filtering: You can filter the query to focus on specific time periods of high traffic, pinpointing anomalies during those times. Sorting by Duration: By sorting the results descending by execution duration, you can easily identify Lambda functions with the slowest execution times. Fast Insights: CloudWatch Logs Insights offers near real-time analysis, enabling you to quickly identify performance bottlenecks.

### Replies:

**Comment:** You can only select upto 50 logs. Cant query against all. It's C

**Comment:** Hesitate. A or C?

## Discussion for Question 304

Link: <https://www.examtactics.com/discussions/amazon/view/134340-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 14 votes

### Discussion

**Comment:** This approach allows for easy management of multiple environments within the same AWS infrastructure. API Gateway stage variables can be used to manage configurations that differ between environments, such as endpoint URLs or configuration settings. Similarly, Lambda aliases can point to different versions of Lambda functions, making it possible to deploy different versions of the codebase to different environments (e.g., development, test, production) without duplicating the code. This solution is both efficient and scalable, enabling quick updates and minimal overhead in managing environment-specific configurations.

**Comment:** A is the correct answer.

**Comment:** going with A

**Comment:** D: not for serverless.

## Discussion for Question 305

Link: <https://www.examtactics.com/discussions/amazon/view/134341-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 10 votes

### Discussion

**Comment:** This approach is cost-effective

**Comment:** Step Functions does not have a Definitions substitution property or feature, so that throws A out. The most cost effective has to be B

**Comment:** A is the correct answer.

**Comment:** [https://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/aws-resource-stepfunctions-statemachine.html#:~:text=A%20map%20\(string,key%20Dvalue%20map](https://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/aws-resource-stepfunctions-statemachine.html#:~:text=A%20map%20(string,key%20Dvalue%20map).

**Comment:** going with A.

**Comment:** This approach leverages CloudFormation's ability to dynamically substitute values within the definition of AWS resources. By using the DefinitionSubstitutions property for the AWS::StepFunctions::StateMachine resource, you can directly insert the API Gateway endpoint or other necessary parameters into the state machine's definition. This enables the state machine to reference the API Gateway API without hard-coding values, allowing for flexibility and reusability of the CloudFormation template across different deployments. It's also a cost-effective solution because it uses native CloudFormation capabilities without the need for additional resources or services.

**Comment:** The other options (B, C, and D) involve using additional resources or services that are not necessary for this requirement and would therefore be less cost-effective.

## Discussion for Question 306

Link: <https://www.examtactics.com/discussions/amazon/view/134125-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 9 votes

### Discussion

**Comment:** Always DLQ for checking failed processed messages in Lambda.

**Comment:** C is the correct answer.

**Comment:** B, the question is asking how the developer can figure out the issue. it is not asking about where to put the failed messages to.

**Comment:** <https://aws.amazon.com/blogs/compute/implementing-aws-lambda-error-handling-patterns/>

## Discussion for Question 307

Link: <https://www.examtactics.com/discussions/amazon/view/134126-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 13 votes

### Discussion

**Comment:** Regional Certificates: ACM certificates are regional resources. They cannot be shared across different Regions. Creating a certificate in each Region ensures proper certificate management and association with the ALBs. CloudFormation Integration: CloudFormation allows you to define resources and their configurations for individual Regions. Creating certificates within the template for each Region aligns well with this approach.

**Comment:** Given the requirements and cost-effectiveness, I recommend Option D—create a certificate in ACM in the us-east-1 Region and update the CloudFormation template to deploy the certificate to each ALB. This way, you maintain consistency while minimizing certificate management overhead.

**Comment:** C is the correct answer.

**Comment:** <https://docs.aws.amazon.com/elasticloadbalancing/latest/application/create-https-listener.html>

**Comment:** 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.

**Comment:** The correct solution is to create a certificate in each Region and to assign it to each ALB.

## Discussion for Question 308

Link: <https://www.examtactics.com/discussions/amazon/view/134342-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- D: 12 votes

## Discussion

**Comment:** (ABC) eliminated. every 15 minutes is not immediate notification. (D) is correct. Amazon EventBridge rule - specifies what EventBridge does with the events delivered to each event bus. A rule specifies which events to send to which targets for processing. A single rule can send an event to multiple targets, which then run in parallel. There are two types of rules: rules that match on event data as events are delivered, and rules that run on a defined schedule. In addition, certain AWS services may create and manage rules in your account as well. Amazon EventBridge rule that match on event data - match against incoming events based on event data criteria, an event pattern. An event pattern defines the event structure and the fields that a rule matches. If an event matches the criteria defined in the event pattern, EventBridge sends it to the target(s) you specify.

**Comment:** D is the correct answer.

**Comment:** [https://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/aws-resource-events-rule.html#:~:text=ENABLED\\_WITH\\_ALL\\_CLOUDTRAIL\\_MANAGEMENT\\_EVENTS%3A%20The%20rule,User%20Guide.](https://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/aws-resource-events-rule.html#:~:text=ENABLED_WITH_ALL_CLOUDTRAIL_MANAGEMENT_EVENTS%3A%20The%20rule,User%20Guide.)

**Comment:** going with D

**Comment:** El desarrollador debe crear una regla de Amazon EventBridge para filtrar eventos de CloudTrail si se crea un rol sin el uso de CloudFormation. Luego, debe especificar el tema de SNS como destino de la regla de EventBridge. Esto permitirá que el equipo de seguridad reciba una notificación inmediata a través del tema de SNS cuando se cree una función de IAM sin el uso de CloudFormation.

---

## Discussion for Question 309

**Link:** <https://www.examtopycs.com/discussions/amazon/view/133607-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 16 votes

## Discussion

**Comment:** C is the correct answer.

**Comment:** <https://docs.aws.amazon.com/codecatalyst/latest/userguide/deploy-tut-lambda.html#:~:text=AWSTemplateFormatVersion%3A%20%272010%2D09%2D09%27%40ATransform%3A%20AWS%3A%3AServerless%2D2016%2D10%2D31>

**Comment:** it will be C

**Comment:** Using SAM to define the CF templates

**Comment:** Should be C

**Comment:** Got this question in exam.

**Comment:** the correct answer is C

---

## Discussion for Question 310

**Link:** <https://www.examtopycs.com/discussions/amazon/view/133608-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 10 votes

## Discussion

**Comment:** The standard SQS dead-letter queue should capture the failed events and let the developer debug them, so C is the right solution. B - There's no such thing as a DLQ in Kinesis. D - SQS FIFO DLQ would be too much overkill for this task because you don't need ordering or deduplication. A - This would involve additional costs and too much complexity to use a DynamoDB table for this.

**Comment:** C is the correct answer.

**Comment:** <https://docs.aws.amazon.com/lambda/latest/dg/invocation-retries.html#:~:text=You%20can%20configure%20a%20dead%2Dletter%20queue%20on%20the%20function%20to%20capture%20events%20that%20weren%27t%20successfully%20processed.>

**Comment:** going with C

**Comment:** Using an SQS queue for a DLQ is simpler than using Amazon Kinesis. Kinesis is a more complex service designed for real-time data streaming, which might be overkill for simply capturing failed Lambda events.

---

## Discussion for Question 311

**Link:** <https://www.examtopycs.com/discussions/amazon/view/133609-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 8 votes

## Discussion

**Comment:** B should do it: API Gateway --> SQS <-- Lambda poll

**Comment:** no doubt.

**Comment:** B is the correct answer.

**Comment:** B is right

---

## Discussion for Question 312

**Link:** <https://www.examtopycs.com/discussions/amazon/view/133610-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- D: 14 votes

## Discussion

**Comment:** D is the correct answer.

**Comment:** Always secrets manager for credential

**Replies:**

**Comment:** Not always. Depends on cost. SSM PS is cheaper.

**Comment:** If it's secrets manager its for db

**Comment:** Secrets Manager

**Comment:** C is not correct.

**Comment:** the most secure + secrets rotation --> Secrets Manager

---

## Discussion for Question 313

**Link:** <https://www.examtactics.com/discussions/amazon/view/133611-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 20 votes
- A: 14 votes

### Discussion

**Comment:** This is the least amount of effort. I originally thought answer A but then you will have more effort because will have to update API Gateway configuration to use new ARN etc. Unless there are other thoughts on this?

**Comment:** The wording is screaming out weighted alias. During a canary deployment, we are moving code from testing to prod. We can define a subset of users i.e. 10% for a set period of time. After this the other users will be impacted as the percentage will increment or the deployment will push new code to 100% of users. With a weighted alias we can define a subset of users and use this as our guinea pigs to test new code. As this isn't a canary deployment we have no risk of more users becoming impacted. Operational overhead is minimal as we only need to point to a new alias. With weighted alias we can deploy for testing purposes. From my understanding lambda proxy is grouping lambda functions, the traffic splitting would need to be set at the lambda level as this is testing prior to deployment.

### Replies:

**Comment:** 1. create new version aws lambda publish-version --function-name MyFunction 2. create weighted alias aws lambda create-alias --function-name MyFunction \ --name MyAlias \ --function-version 1 \ --routing-config '{"AdditionalVersionWeights": {"2": 0.1}}'

**Comment:** I am going with A, not sure if creating a new rest api is less effort then just managing the existing API config for the weight.

**Comment:** Option A is typically the most straightforward and requires the least operational effort while providing high control over traffic distribution directly from the Lambda configuration. This method avoids the overhead of managing additional services or creating new APIs and is directly supported by AWS services for testing purposes with actual users.

**Comment:** A is the correct answer.

**Comment:** It says: with the LEAST amount of operational effort B --- NEVER A!!!

**Comment:** Prefer A, because creating a new REST API (B) involves more operational overhead and complexity compared to using weighted aliases. Moreover, setting up a Lambda proxy integration to connect to multiple Lambda functions can increase complexity, especially when handling different versions for canary testing.

**Comment:** <https://docs.aws.amazon.com/apigateway/latest/developerguide/set-up-lambda-proxy-integrations.html>

### Replies:

**Comment:** This is possible but the question stated less operational effort.

**Comment:** } El desarrollador debe crear una nueva API REST en Amazon API Gateway y configurar una integración Lambda sin proxy para conectarse a múltiples funciones Lambda. Luego, debe especificar los parámetros y propiedades necesarios en API Gateway y habilitar la configuración canary en la etapa de implementación. Especifique un porcentaje menor de tráfico API para ir a la nueva versión de la función Lambda. Al utilizar una nueva API REST en API Gateway con una configuración canary, el desarrollador puede probar las funciones Lambda actualizadas con nuevas características con un subconjunto de usuarios antes de la implementación completa. Esto permite realizar pruebas sin afectar a otros usuarios de la aplicación y con un menor esfuerzo operativo.

**Comment:** Should be B

**Comment:** Option A involves using weighted aliases for Lambda functions, which is a valid approach but requires more effort to manage and update the aliases in the API Gateway configuration.

**Comment:** Lambda with weighted alias with weight configured for each version of the function. The canary situation is much suitable for deployments.

**Comment:** Opção A

---

## Discussion for Question 314

**Link:** <https://www.examtactics.com/discussions/amazon/view/133612-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 10 votes

### Discussion

**Comment:** This option meets the requirements by deploying the changes to a completely separate AWS account, ensuring that the pre-production application is not impacted. This approach allows the developer to test the changes in isolation.

**Comment:** I recommend Option B—create a change set in a separate development environment. This way, you can test your changes without affecting other team members.

**Comment:** C is the correct answer.

**Comment:** <https://docs.aws.amazon.com/serverless-application-model/latest/developerguide/using-sam-cli-deploy.html> B option seems to be by default

**Comment:** C is correct.

**Comment:** best practice here is to sam pack and sam deploy to a new AWS account dedicated to development so in this case the developer wouldn't impact whatsoever the existing pre-prod application. option C

---

## Discussion for Question 315

**Link:** <https://www.examtactics.com/discussions/amazon/view/134133-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 12 votes

### Discussion

**Comment:** Always consider TTL when trying to ditch from DynamoDB.

**Comment:** Time To Live

**Comment:** A is the correct answer.

**Comment:** It should be TTL enabled

**Comment:** A is right

---

## Discussion for Question 316

**Link:** <https://www.examtactics.com/discussions/amazon/view/134135-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- D: 20 votes

### Discussion

**Comment:** Should be D. Source: <https://aws.amazon.com/blogs/compute/introducing-maximum-concurrency-of-aws-lambda-functions-when-using-amazon-sqs-as-an-event-source/>

**Comment:** Didn't like the wording. A - provisioned concurrency keeps 2 functions on warm standby for critical work. this is a minimum. question is asking about a maximum of 2. B - Batch of 2 is fine. latency could see this fall flat on it's face though. lambda invocations between function and SQS are limited to 2, not strictly between lambda and vendor API. C - event filtering is completely irrelevant here. D - Maximum is what the question is asking for. this will limit the amount of requests made to the vendor API. I would much prefer to set the reserved concurrency at the lambda level but this can be overridden at the SQS event source mapping level so I guess this is the best answer.

#### Replies:

**Comment:** `aws lambda create-event-source-mapping --function-name YourLambdaFunctionName --batch-size 2 --maximum-batching-window-in-seconds 5 --event-source-arn arn:aws:sqs:region:account-id:queue-name --maximum-concurrency 2`

**Comment:** D is the correct answer.

**Comment:** going with D

**Comment:** Controlled Execution: Provisioned concurrency ensures that a minimum number of Lambda execution environments are always available. Setting it to two guarantees that only two Lambda function instances can process messages from the SQS queue concurrently. Independent of Message Batch Size: Even if the SQS event source mapping delivers a batch of messages exceeding two, the provisioned concurrency limits the number of Lambda invocations happening simultaneously.

**Comment:** configuring a maximum concurrency of two on the SQS event source mapping, is not a valid option. The concept of maximum concurrency is not directly applicable to SQS event source mappings. Concurrency in the context of Lambda functions and SQS is controlled by the batch size and the function's reserved concurrency settings.

**Comment:** Correct answer is D. The maximum concurrency setting on the Amazon SQS event source mapping for the Lambda function controls how many messages are sent to the Lambda function concurrently. By setting it to two, you ensure that only two messages are processed concurrently, preventing the Lambda function from overwhelming the third-party API with more than two concurrent requests.

---

## Discussion for Question 317

**Link:** <https://www.examtactics.com/discussions/amazon/view/134136-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 9 votes

### Discussion

**Comment:** The mock integration should do it here

**Comment:** A is the correct answer.

---

## Discussion for Question 318

**Link:** <https://www.examtactics.com/discussions/amazon/view/134343-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 10 votes

### Discussion

**Comment:** The submission date could be a good choice if it has high cardinality (many distinct values). However, if multiple requests occur simultaneously (e.g., during the surge), it might still lead to hot partitions

**Comment:** A is the correct answer.

**Comment:** It's A of course. This question got me wondering, who chooses default right answers here

**Comment:** Username beyond doubt

**Comment:** Username avoids a hot partition key

**Comment:** rest is not even distributed.

---

## Discussion for Question 319

**Link:** <https://www.examtactics.com/discussions/amazon/view/134344-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 11 votes

### Discussion

**Comment:** A is the correct answer.

**Comment:** Think back to every beginner cloud project you have completed/read about/ignored.

**Comment:** why not B

#### Replies:

**Comment:** changing to A. Origin access identity is now considered a legacy solution. The official AWS documentation now recommends that Origin Access Control is used instead.

**Comment:** <https://docs.aws.amazon.com/AmazonCloudFront/latest/DeveloperGuide/private-content-restricting-access-to-s3.html>

**Comment:** We don't want to provide write access to CloudFront since it's a static website. S3 should suffice

#### Replies:

**Comment:** Option C requires public access to the bucket to be allowed. "The users of this application must not be able to access the application content directly from an S3 bucket. All content must be served through the Amazon CloudFront distribution." OAC allows us to turn this feature off and still access the bucket contents via CloudFront.

**Comment:** While enabling the block all public access setting in Amazon S3 is a good security practice and necessary for this scenario, simply allowing CloudFront "write access" is not relevant since the scenario involves serving static assets, not writing to the S3 bucket. This option also doesn't specify using an OAC or a similar method to ensure exclusive access through CloudFront.

---

## Discussion for Question 320

**Link:** <https://www.examtactics.com/discussions/amazon/view/134139-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 16 votes

### Discussion

**Comment:** Always ECS with Fargate for the least management.

**Comment:** C is the correct answer.

**Comment:** [https://docs.aws.amazon.com/AmazonECS/latest/developerguide/launch\\_types.html](https://docs.aws.amazon.com/AmazonECS/latest/developerguide/launch_types.html)

**Comment:** El desarrollador debe definir una definición de tarea con un tipo de lanzamiento de AWS Fargate. Al utilizar AWS Fargate, el desarrollador puede ejecutar la aplicación en un clúster de Amazon ECS sin tener que administrar la infraestructura subyacente. Fargate se encarga de aprovisionar y escalar automáticamente los recursos necesarios para ejecutar la tarea de la aplicación, lo que reduce la carga operativa y los gastos generales de administración. Al ejecutar la aplicación en AWS Fargate, el desarrollador puede aprovechar los recursos mínimos de CPU y RAM necesarios para la aplicación, lo que garantiza un uso eficiente de los recursos y minimiza los costos.

---

## Discussion for Question 321

**Link:** <https://www.examtactics.com/discussions/amazon/view/133631-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- D: 9 votes

### Discussion

**Comment:** 1. enable ttl aws dynamodb update-time-to-live \--table-name \--time-to-live-specification "Enabled=true, AttributeName=expiration\_date" 2.Set TTL aws dynamodb describe-time-to-live --table-name

**Comment:** To deploy an AWS Lambda function using AWS CloudFormation, especially when the function code is stored in an Amazon S3 bucket, the developer should reference the S3 location directly in the CloudFormation template. The best option to achieve this with the least development effort is: Option D directly links the Lambda function's deployment package stored in S3 to the CloudFormation template, which automates the deployment process without requiring additional steps for handling the function code.

**Comment:** D is the correct answer.

**Comment:** Always TTL

**Comment:** It's D.

**Comment:** Opção A

#### Replies:

**Comment:** it says "the least development effort". in this case the TTL would be best practice

---

## Discussion for Question 322

**Link:** <https://www.examtactics.com/discussions/amazon/view/133632-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- D: 15 votes

### Discussion

**Comment:** The correct solution would be D, to add the S3Bucket and S3Key properties in the CloudFormation template.

**Comment:** AWSTemplateFormatVersion: '2010-09-09' Resources: MyLambdaFunction: Type: 'AWS::Lambda::Function' Properties: FunctionName: MyLambdaFunction Handler: index.handler Role: amazaws:iam:123456789012:role/execution\_role Code: S3Bucket: my-lambda-functions-bucket S3Key: path/to/my-deployment-package.zip Runtime: python3.8 Timeout: 300 MemorySize: 128

**Comment:** D is the correct answer.

**Comment:** <https://aws.amazon.com/blogs/infrasturcture-and-automation/deploying-aws-lambda-functions-using-aws-cloudformation-the-portable-way/>

---

## Discussion for Question 323

**Link:** <https://www.examtactics.com/discussions/amazon/view/133633-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 8 votes

### Discussion

**Comment:** Instrument the application by using the X-Ray SDK for Python

**Comment:** Opção B

**Comment:** B ---->>> To ensure that all services appear in the AWS X-Ray service map, it's essential that each component of the application is properly instrumented to send data to X-Ray. The X-Ray SDK must be used within the application to capture and send the necessary telemetry data to X-Ray.

**Comment:** B is the correct answer.

---

## Discussion for Question 324

**Link:** <https://www.examttopics.com/discussions/amazon/view/133634-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- AE: 9 votes

### Discussion

**Comment:** AE is the correct answer.

**Comment:** <https://docs.aws.amazon.com/AmazonECS/latest/bestpracticesguide/security-secrets-management.html#:~:text=Use%20AWS%20Secrets%20Manager%20or%20Amazon%20EC2%20Systems%20Manager%20Parameter%20Store%20for%20storing%20secret%20materials>

**Comment:** I have used Secrets Manager to store API Key

**Comment:** C is not right.

**Comment:** A and E would be correct in this case.

---

## Discussion for Question 325

**Link:** <https://www.examttopics.com/discussions/amazon/view/134141-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 13 votes

### Discussion

**Comment:** Creating a GSI would be more cost efficient than increasing the RCU in this case.

**Comment:** To improve the performance of queries that involve an attribute that is neither the table's partition key nor sort key, and anticipating an increase in data volume, the most effective solution is to utilize a global secondary index (GSI). This allows for efficient querying based on different attributes that are critical for performance but not originally designed as keys in the main table structure.

**Comment:** B is the correct answer.

**Comment:** B Parallel scan operations can be useful for scanning large tables, but they may not necessarily improve performance for specific queries involving non-key attributes.

**Comment:** GSI :)

---

## Discussion for Question 326

**Link:** <https://www.examttopics.com/discussions/amazon/view/133636-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- D: 9 votes

### Discussion

**Comment:** D is right

**Comment:** rotation --> AWS Secrets Manager

**Comment:** D is the correct answer.

**Comment:** D is right

---

## Discussion for Question 327

**Link:** <https://www.examttopics.com/discussions/amazon/view/134142-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- D: 18 votes

### Discussion

**Comment:** Use an API Gateway stage variable to configure the Lambda function alias.

**Comment:** D is the correct answer.

**Comment:** <https://datanextsolutions.com/blog/managing-in-production-aws-lambda-functions-with-api-gateway/>

**Comment:** stage variable in API Gateway

---

## Discussion for Question 328

**Link:** <https://www.examttopics.com/discussions/amazon/view/134345-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- D: 9 votes

### Discussion

**Comment:** D is the correct answer.

**Comment:** anyone know way the questions end by this question which is 328 and there is no rest of the 337 questions?

**Comment:** A. Response Templates for Status Code 200: While API Gateway supports response templates, simply configuring a 200 status code doesn't simulate the specific responses expected from the third-party APIs. The developer needs to define more detailed response structures to effectively test the integration logic.

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

**Comment:** A. Configure una API REST de Amazon API Gateway con una respuesta de puerta de enlace configurada para el código de estado 200. Agregue plantillas de respuesta que contengan respuestas de muestra capturadas de la API real de terceros. Al configurar una API REST de Amazon API Gateway con una respuesta de puerta de enlace configurada para el código de estado 200, el desarrollador puede simular las respuestas de las API de procesamiento de pagos de terceros sin invocar realmente las API reales. Al agregar plantillas de respuesta que contengan respuestas de muestra capturadas de la API real de terceros, el desarrollador puede validar la integración de

la plataforma de comercio electrónico con las API de procesamiento de pagos de terceros sin tener que interactuar directamente con las API reales.

**Comment:** D is right

---

## Discussion for Question 329

**Link:** <https://www.examtactics.com/discussions/amazon/view/136628-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 6 votes

### Discussion

**Comment:** By distributing object key names across multiple prefixes, you can ensure that the load is spread across many partitions.

**Comment:** C is the correct answer.

**Comment:** <https://docs.aws.amazon.com/AmazonS3/latest/userguide/optimizing-performance.html>

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## Discussion for Question 330

**Link:** <https://www.examtactics.com/discussions/amazon/view/136632-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 10 votes

### Discussion

**Comment:** Just clicked through the console to achieve this. C. SNS subscription filtering is not supported on cloudwatch log groups. B. Log insights lets me jump into the logs and not create a metric that can be pushed to SNS. D. Cloudwatch alarm works off a predefined metric and not a pattern such as ERROR. We need to create the metric to create the alarm

**Comment:** A is the correct answer.

**Comment:** <https://docs.aws.amazon.com/sns/latest/dg/sns-monitoring-using-cloudwatch.html>

---

## Discussion for Question 331

**Link:** <https://www.examtactics.com/discussions/amazon/view/136633-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 8 votes

### Discussion

**Comment:** A is the correct answer.

**Comment:** It's A it's a valid option to enable. C, D is related to in transit

**Comment:** <https://docs.aws.amazon.com/AWSSimpleQueueService/latest/SQSDeveloperGuide/sqs-server-side-encryption.html>

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## Discussion for Question 332

**Link:** <https://www.examtactics.com/discussions/amazon/view/136634-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 7 votes

### Discussion

**Comment:** B is the correct answer.

**Comment:** I have to agree B for this one and not because chatGPT told me so. upon research the canary seems to be the best option to capture issues before your customer sees them. As we already have reports of performance issues here I think the more long winded canary option is less feasible. the canary checks for broken links and compares screenshots to baseline images, it also checks for heart beats and whether API's read/write functionality is working. I feel like Xray would be the better tool as the SDK with provide higher quality metrics and highlight latency, bottlenecks or other performance issues at any point in the service map. It is a single tool as opposed to option D's needing two tools and ultimately if option D requires X-ray to add granularity to canary results why not just start with X-ray.

**Comment:** X-Ray for investigating performance issues.

**Comment:** gpt & makes sense

**Comment:** [https://docs.aws.amazon.com/AmazonCloudWatch/latest/monitoring/CloudWatch\\_Synthetics\\_Canaries.html](https://docs.aws.amazon.com/AmazonCloudWatch/latest/monitoring/CloudWatch_Synthetics_Canaries.html)

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## Discussion for Question 333

**Link:** <https://www.examtactics.com/discussions/amazon/view/136958-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 5 votes

### Discussion

**Comment:** C is the correct answer.

**Comment:** C you use IAM roles on the sender event bus to give the sender event bus permission to send events to the receiver event bus. You use Resource-based policies on the receiver event bus to give the receiver event bus permission to receive events from the sender event bus. <https://docs.aws.amazon.com/eventbridge/latest/userguide/eb-bus-to-bus.html>

### Replies:

**Comment:** `{ "Version": "2012-10-17", "Statement": [ { "Effect": "Allow", "Action": "events:PutEvents", "Resource": "*" } ] }`



**Comment:** As lambda is initiating the action (push), permission must be attached the the execution role.

**Comment:** Lambda Execution Role (IAM Role) • Grants the Lambda function permissions to AWS services / resources

**Comment:** <https://docs.aws.amazon.com/eventbridge/latest/userguide/eb-event-bus-perms.html>

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## Discussion for Question 334

**Link:** <https://www.examtopycs.com/discussions/amazon/view/136640-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 9 votes

### Discussion

**Comment:** C is the correct answer.

**Comment:** Because this requirement provides its own definition of how throughput is measured, you must use custom metrics.

**Comment:** I think C

**Comment:** Use the metrics to calculate the throughput. This is because custom metrics can provide a more accurate measure of throughput, as they can be configured to only increment when a message is received and processed by the Lambda function. This would exclude the time spent on initialization and post-processing, which are not part of the throughput measurement.

**Comment:** <https://aws.amazon.com/blogs/compute/understanding-aws-lambda-scaling-and-throughput/>

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## Discussion for Question 335

**Link:** <https://www.examtopycs.com/discussions/amazon/view/136644-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- D: 8 votes

### Discussion

**Comment:** <https://docs.aws.amazon.com/codeartifact/latest/ug/configure-service-events-codepipeline.html>

**Comment:** D is correct Keyword for using CodeArtifact is Dependency

**Comment:** D is the correct answer.

**Comment:** AWS CodeArtifact is a managed artifact repository service that lets you securely store, publish, and share software packages.

**Comment:** <https://docs.aws.amazon.com/codeartifact/latest/ug/configure-service-events-codepipeline.html#configure-service-events-codepipeline-create-rule>

---

## Discussion for Question 336

**Link:** <https://www.examtopycs.com/discussions/amazon/view/136959-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- D: 10 votes

### Discussion

**Comment:** D is the correct answer.

**Comment:** Best practice for cronjob in Lamda

**Comment:** D is right

**Comment:** A - This does not meet the criteria. it will trigger with every report upload which is multiple invocations. the requirement is a single invocation that analyses all reports at a predefined time. these invocations will be firing off all over the place as every report comes in. B - Step functions is over the top for this use case. C - lambda to run continuously... D - This is a single invocation that triggers the lambda function at a predefined time using CRON. Eventbridge was developed for this use case.

**Comment:** Least cost involved and simple

#### Replies:

**Comment:** analyzes the reports from all branch offices in a single pass

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## Discussion for Question 337

**Link:** <https://www.examtopycs.com/discussions/amazon/view/136961-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 9 votes

### Discussion

**Comment:** C is the correct answer.

**Comment:** C is correct

**Comment:** Async allows DLQ to be created from lambda function Sync requires DLQ to be created by SQS.

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

---

## Discussion for Question 338

**Link:** <https://www.examtopycs.com/discussions/amazon/view/136645-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 7 votes

## Discussion

**Comment:** A is correct

**Comment:** A is the correct answer.

**Comment:** <https://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/using-cfn-updating-stacks-changesets.html>

---

## Discussion for Question 339

**Link:** <https://www.examtactics.com/discussions/amazon/view/136962-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- AD: 7 votes

## Discussion

**Comment:** AD is the correct answer.

**Comment:** AssumeRole -- Returns a set of temporary security credentials that you can use to access AWS resources. -- These temporary credentials consist of an access key ID, a secret access key, and a security token. -- Typically, you use AssumeRole within your account or for cross-account access. [https://docs.aws.amazon.com/STS/latest/APIReference/API\\_AssumeRole.html](https://docs.aws.amazon.com/STS/latest/APIReference/API_AssumeRole.html)

**Comment:** <https://www.examtactics.com/discussions/amazon/view/96243-exam-aws-certified-developer-associate-topic-1-question-434/>

**Comment:** a d answer

**Comment:** The correct answer to ChetGPT is B, D

---

## Discussion for Question 340

**Link:** <https://www.examtactics.com/discussions/amazon/view/136964-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

## Discussion

**Comment:** CD is the correct answer.

**Comment:** CD is right

**Comment:** <https://docs.aws.amazon.com/amazondynamodb/latest/developerguide/transaction-apis.html>

---

## Discussion for Question 341

**Link:** <https://www.examtactics.com/discussions/amazon/view/136965-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 8 votes

## Discussion

**Comment:** As it is the DB hostname and not sensitive credentials I think ssm dynamic is the correct answer. Option D - is for secure string whereas this parameter is currently stored in plain text. For option C, I opted against this because for an import value, I believe there needs to be an export value from another template. The question didn't state that anything else was created via CF template. Option B - I understand to be used to reference another resource block that is in the same YAML template.

**Comment:** <https://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/dynamic-references.html>

**Comment:** A is the correct answer.

**Comment:** A since the question stated that the value is just plain text, not a secureString type

**Comment:** <https://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/dynamic-references.html#dynamic-references-ssm-secure-strings>

---

## Discussion for Question 342

**Link:** <https://www.examtactics.com/discussions/amazon/view/136966-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 13 votes

## Discussion

**Comment:** Correct answer is A. This will limit the lambda function to a defined concurrency which can be set to match the third party vendor limits. B - will lower the cpu of the function, not limit the invocations. C - Provisioned concurrency is a minimum value to keep lambda function execution environments on warm standby for critical workloads. D - Issue isn't with timeouts or lack of processing power

**Comment:** <https://docs.aws.amazon.com/lambda/latest/dg/provisioned-concurrency.html>

**Comment:** A is the correct answer.

**Comment:** <https://docs.aws.amazon.com/lambda/latest/dg/provisioned-concurrency.html>

---

## Discussion for Question 343

**Link:** <https://www.examtactics.com/discussions/amazon/view/136967-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 5 votes

## Discussion

**Comment:** Both A and C work, the key word is efficiency. C is the most efficient way.

**Comment:** A is the correct answer.

**Comment:** Per Chatgpt

**Comment:** C ,,,,,,,,,,,,,,,,,,,,,,

**Comment:** <https://ecsworkshop.com/microservices/frontend/#deploy-frontend-0--text-onf%20the%20pipeline--Creating%20the%20Pipeline--Generally%20C%20when%20we> This workshop is linked from AWS docs @ <https://docs.aws.amazon.com/AmazonECS/latest/developerguide/getting-started-aws-copilot-cli.html#:~:text=Step%206.%20Learn%20to%20create%20a%20CLICD%20Pipeline> Co-pilot CLI is a substitute for AWS console. As the question states the dev is using co-pilot I think this is the best answer, although option A is more suitable to my experience.

**Comment:** The correct answer to ChetGPT is A

### Discussion for Question 344

**Link:** <https://www.examttopics.com/discussions/amazon/view/136968-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 6 votes

## Discussion

**Comment:** A is the correct answer.

**Comment:** Think of it as CustomerID

**Comment:** This is the only feasible option for a partition key.. B - Two John Smith's sign up for the programme C - Both John Smith's signed up on the same day D - Both John Smith's signed up on the same day with a poodle called Betsy May. Cant rule it out.

**Comment:** The start date for the rewards program

**Replies:**

**Comment:** Based on my understanding, using the start date as a Partition Key could result in partition overload if a large number of sign-ups occur on the same date. In contrast, choosing a randomly generated UUID as a Partition Key would prevent this issue, as each ID is unique, ensuring even distribution and eliminating the risk of creating a hot partition. Please correct me if my understanding is incorrect, as I am still learning.

### Discussion for Question 345

**Link:** <https://www.examtips.com/discussions/amazon/view/136969-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 7 votes

## Discussion

**Comment:** AWS SSO credentials are temporary and typically have an expiration time.

**Comment:** C is the correct answer.

**Comment:** <https://docs.aws.amazon.com/IAM/latest/UserGuide/security-creds.html>

### Discussion for Question 346

**Link:** <https://www.examtips.com/discussions/amazon/view/136970-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 9 votes

## Discussion

**Comment:** <https://docs.aws.amazon.com/lambda/latest/dg/configuration-envvars.html#configuration-envvars-encryption:~:text=If%20you%20prefer,on%20the%20function.>

**Comment:** B is the correct answer.

**Comment:** By creating a customer managed key in AWS Key Management Service (KMS), you gain full control over the encryption process.

### Discussion for Question 347

**Link:** <https://www.examtactics.com/discussions/amazon/view/136971-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- D: 6 votes

## Discussion

**Comment:** X-Forwarded-For: This header helps you accurately determine the public IP address of the client

**Comment:** D is the correct answer.

**Comment:** D. Add an X-Forwarded-For header to the HTTP server log configuration file. The 'X-Forwarded-For' header is used to capture the original client IP address when requests are routed through a load balancer like the ALB.

### Discussion for Question 348

**Link:** <https://www.examtactics.com/discussions/amazon/view/141193-exam-aws-certified-developer-associate-dva-c02-tonic-1/>

### Most Voted

- D: 5 votes

## Discussion

**Comment:** D is the correct answer.

---

## Discussion for Question 349

**Link:** <https://www.examtips.com/discussions/amazon/view/137947-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 9 votes

## Discussion

**Comment:** C is the correct answer.

**Comment:** C. Create a cross-account access role, and use sts:AssumeRole API to get short-lived credentials. This method provides temporary, limited access to the necessary resources in the second account without sharing long-term credentials, ensuring security and adherence to best practices.

**Comment:** Here's how it works: 1. Create an IAM Role in the Second Account: The administrator of the second account creates an IAM role and attaches policies that grant permissions to the resources that the developer needs to access. The trust policy of the role allows the first account (the developer's account) to assume this role. 2. Assume the IAM Role: The developer in the first account can then call the sts:AssumeRole API operation, passing the ARN of the role to assume in the second account. If the request is successful, the response includes temporary security credentials that the developer can use to access resources in the second account.

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## Discussion for Question 350

**Link:** <https://www.examtips.com/discussions/amazon/view/141194-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 5 votes

## Discussion

**Comment:** C is the correct answer.

**Comment:** C is the correct answer.

---

## Discussion for Question 351

**Link:** <https://www.examtips.com/discussions/amazon/view/136972-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- BC: 6 votes

## Discussion

**Comment:** BC is the correct answer.

**Comment:** BC. Since website contains sensitive data, I would use HTTPS port 433, instead of HTTP port 80.

**Comment:** BD, The company wants to make the application public so we using HTTP will allow it to be public.

**Comment:** BC is correct

**Comment:** The correct answer to ChatGPT is B, C

---

## Discussion for Question 352

**Link:** <https://www.examtips.com/discussions/amazon/view/136973-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 7 votes

## Discussion

**Comment:** <https://aws.amazon.com/blogs/mt/using-aws-appconfig-feature-flags/>

**Comment:** create a Configuration Profile, then edit feature flags { "featureA": true, "featureB": false, "featureC": true }

**Comment:** C is the correct answer.

---

## Discussion for Question 353

**Link:** <https://www.examtips.com/discussions/amazon/view/140014-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- BD: 8 votes

## Discussion

**Comment:** B. When referencing resources from another stack, the Import/Value function should be used. If the developer didn't use this, it would cause a failure when trying to reference the subnets. D. For a resource to be imported by another stack, it needs to be exported in the Outputs section of the original stack. If the network team didn't export the subnets, they can't be imported by the developer's stack.

**Comment:** BD is the correct answer.

**Comment:** <https://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/intrinsic-function-reference.html>

**Comment:** ChatGPT: BD

---

## Discussion for Question 354

**Link:** <https://www.examtactics.com/discussions/amazon/view/140015-exam-aws-certified-developer-associate-dva-c02-topic-1/>

**Most Voted**

- B: 9 votes

**Discussion**

**Comment:** When you modify an IAM role's permissions, the changes take effect almost immediately (typically within a few minutes) without requiring any instance restart or replacement.

**Comment:** B is the correct answer.

**Comment:** ChatGPT: B

---

**Discussion for Question 355**

**Link:** <https://www.examtactics.com/discussions/amazon/view/136974-exam-aws-certified-developer-associate-dva-c02-topic-1/>

**Most Voted**

- BE: 9 votes

**Discussion**

**Comment:** <https://docs.aws.amazon.com/AmazonCloudFront/latest/DeveloperGuide/using-https-cloudfront-to-custom-origin.html>

**Comment:** B. Set the Origin Protocol Policy setting to Match Viewer. then if it is HTTP, Viewer Protocol Policy setting can Redirect HTTP to HTTPS (Option E).

**Comment:** BE is the correct answer.

**Comment:** <https://www.examtactics.com/discussions/amazon/view/88225-exam-aws-certified-developer-associate-topic-1-question-171/>

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**Discussion for Question 356**

**Link:** <https://www.examtactics.com/discussions/amazon/view/139677-exam-aws-certified-developer-associate-dva-c02-topic-1/>

**Most Voted**

- C: 5 votes

**Discussion**

**Comment:** sam local start-lambda sam local generate-event s3 put > event.json sam local invoke -e event.json

**Comment:** C is the correct answer.

**Comment:** <https://www.examtactics.com/discussions/amazon/view/96490-exam-aws-certified-developer-associate-topic-1-question-395/>

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**Discussion for Question 357**

**Link:** <https://www.examtactics.com/discussions/amazon/view/136975-exam-aws-certified-developer-associate-dva-c02-topic-1/>

**Most Voted**

- D: 9 votes

**Discussion**

**Comment:** aws logs associate-kms-key --log-group-name --kms-key-id

**Comment:** associate-kms-key command. This command specifically associates a KMS key with an existing log group, which is exactly what the developer needs to do.

**Comment:** D is the correct answer.

**Comment:** <https://docs.aws.amazon.com/cli/latest/reference/logs/associate-kms-key.html>

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**Discussion for Question 358**

**Link:** <https://www.examtactics.com/discussions/amazon/view/143129-exam-aws-certified-developer-associate-dva-c02-topic-1/>

**Most Voted**

**Discussion**

**Comment:** Answer : D

**Comment:** Going for B, feel free to comment. I think these comments sections help me a lot!

**Replies:**

**Comment:** LSI can not be added to existing table. You have to create a new GSI and use OrderSource as partition key

---

**Discussion for Question 359**

**Link:** <https://www.examtactics.com/discussions/amazon/view/143121-exam-aws-certified-developer-associate-dva-c02-topic-1/>

**Most Voted**

- D: 8 votes

**Discussion**

**Comment:** Considering "API keys, that is stored in the application". D is the most direct approach. Lambda supports encrypting environment variables with a KMS key, eliminating the need for additional services or layers.

**Comment:** OPTION B ---CORRECT . To meet the requirement of encrypting sensitive configuration data in transit while using it within an AWS Lambda function, the developer should leverage AWS Secrets Manager. Secrets Manager is specifically designed for handling and securing sensitive information like API keys, database credentials, and similar data, making it suitable for this scenario.

**Comment:** D is the correct answer

---

## Discussion for Question 360

**Link:** <https://www.examttopics.com/discussions/amazon/view/143366-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

#### Discussion

**Comment:** 1. create sns topic aws sns create-topic --name SaleEvents 2. create three lambda function to subscribe sns topic aws sns subscribe --topic-arn amaws:sns:regionaccount-id:SaleEvents --protocol lambda --notification-endpoint amaws:lambda:regionaccount-id:function:Function1 aws sns subscribe --topic-arn amaws:sns:regionaccount-id:SaleEvents --protocol lambda --notification-endpoint amaws:lambda:regionaccount-id:function:Function2 aws sns subscribe --topic-arn amaws:sns:regionaccount-id:SaleEvents --protocol lambda --notification-endpoint amaws:lambda:regionaccount-id:function:Function3

**Comment:** Definitely B

**Comment:** B Given the requirements to concurrently call three independent third-party systems when there is a sale event, and ensuring that each Lambda function runs regardless of the success or failure of the others, the best solution is to use Amazon Simple Notification Service (SNS).

**Comment:** D is the correct answer

---

## Discussion for Question 361

**Link:** <https://www.examttopics.com/discussions/amazon/view/143107-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 6 votes

#### Discussion

**Comment:** GSI - diff part key and sort key | LSI - same part key and diff sort key Strongly consistent - most recent data

**Comment:** The correct answer is: B. Local Secondary Index (LSI): An LSI allows you to create an index with a different sort key for the same partition key as the base table. This lets you query the table using the same partition key but with a different sort key. LSIs are created at the same time as the table and cannot be added to an existing table. Strongly consistent reads ensure that you always receive the most up-to-date data after all previous write operations are acknowledged. This is important when the developer needs to ensure they are getting the latest data, as stated in the question.

**Comment:** Considering developer wants to query by using the same partition key and a different sort key value, so B it's the correct answer

**Comment:** ANSWER IS D

#### Replies:

**Comment:** ANSWER IS B... NOT D

**Comment:** Strongly Consistent Reads

---

## Discussion for Question 362

**Link:** <https://www.examttopics.com/discussions/amazon/view/143367-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

#### Discussion

**Comment:** C is correct

**Comment:** C is the correct answer

**Comment:** C Global Secondary Index (GSI) allows you to specify a completely different partition key and potentially a different sort key from those on the main table. This flexibility is crucial when you need to support additional access patterns that aren't directly supported by the existing table's key structure. In this scenario, specifying order\_date as the new partition key and order\_id as the sort key in a GSI will enable efficient querying based on these attributes. Lambda Function Querying GSI: Once the GSI is set up, the Lambda function can perform efficient query operations directly on this index to fetch records based on order\_date and order\_id, which is much more efficient than scanning the entire table.

**Comment:** C is the correct answer

---

## Discussion for Question 363

**Link:** <https://www.examttopics.com/discussions/amazon/view/143747-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

#### Discussion

**Comment:** GSI - diff part key and sort key | LSI - same part key and diff sort key

---

## Discussion for Question 364

**Link:** <https://www.examttopics.com/discussions/amazon/view/143369-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

#### Discussion

**Comment:** C is the correct answer

---

## Discussion for Question 365

**Link:** <https://www.examttopics.com/discussions/amazon/view/143748-exam-aws-certified-developer-associate-dva-c02-topic-1/>

## Most Voted

- B: 5 votes

## Discussion

**Comment:** For A, Lambda event filtering does not support SNS

**Comment:** SNS filter policies are designed specifically for this purpose and require the least development effort. They allow you to filter messages at the SNS level before they reach the Lambda function.

**Comment:** SNS filter policies allow you to specify criteria that messages must meet to be delivered to a particular subscriber.

---

## Discussion for Question 366

**Link:** <https://www.examtactics.com/discussions/amazon/view/143749-exam-aws-certified-developer-associate-dva-c02-topic-1/>

## Most Voted

## Discussion

**Comment:** Sticky sessions ensure that all requests from a particular client are sent to the same EC2 instance. While this can be useful for maintaining session state, it doesn't protect against data loss if an instance fails. If the instance holding a client's session fails, that session data would be lost. C is Correct: Use Amazon DynamoDB to perform scalable session handling. If an EC2 instance fails, the session data stored in DynamoDB remains intact and can be accessed by other instances.

**Comment:** A : Sticky sessions — also known as session persistence — is the method that makes it possible for the load balancer to identify requests coming from the same client and to always send those requests to the same server.

**Comment:** C is the best of the options provided

---

## Discussion for Question 367

**Link:** <https://www.examtactics.com/discussions/amazon/view/143750-exam-aws-certified-developer-associate-dva-c02-topic-1/>

## Most Voted

## Discussion

**Comment:** option A leverages the AWS::CodeDeploy::BlueGreen transform hook in the CloudFormation template. This hook allows the developer to specify blue/green deployment strategies directly in the CloudFormation template. It facilitates deploying new versions to a subset of users (canary or linear deployments) before fully rolling out to all users. This approach is designed for seamless and automated deployments using AWS CodeDeploy and ECS.

---

## Discussion for Question 368

**Link:** <https://www.examtactics.com/discussions/amazon/view/143751-exam-aws-certified-developer-associate-dva-c02-topic-1/>

## Most Voted

## Discussion

**Comment:** A. The X-Ray daemon is necessary for collecting trace data from the EC2 instances running the microservices. It needs to be installed on each EC2 instance, and UDP port 2000 should be open for the daemon to communicate with the X-Ray service. D. Adding the X-Ray SDK to the microservices allows you to instrument your application code to send trace data to X-Ray. This is crucial for tracing requests across different microservices.

**Comment:** AD are the best of the options provided

---

## Discussion for Question 369

**Link:** <https://www.examtactics.com/discussions/amazon/view/143752-exam-aws-certified-developer-associate-dva-c02-topic-1/>

## Most Voted

## Discussion

**Comment:** B is the best of the options provided

---

## Discussion for Question 370

**Link:** <https://www.examtactics.com/discussions/amazon/view/143753-exam-aws-certified-developer-associate-dva-c02-topic-1/>

## Most Voted

- A: 5 votes

## Discussion

**Comment:** A, event driven

---

## Discussion for Question 371

**Link:** <https://www.examtactics.com/discussions/amazon/view/143754-exam-aws-certified-developer-associate-dva-c02-topic-1/>

## Most Voted

- A: 7 votes

## Discussion

**Comment:** A - AWS Secrets Manager provides a built-in feature for cross-region replication of secrets. By configuring secret replication, you can add the us-east-1 Region as a replication destination. This ensures that the secrets are automatically and securely replicated from us-west-1 to us-east-1. You also have the option to specify an AWS KMS key in the destination region (us-east-1) to encrypt the replicated secrets, ensuring they are protected by encryption keys in the appropriate region.

**Comment:** D has operational overhead so is A

---

## Discussion for Question 372

Link: <https://www.examtactics.com/discussions/amazon/view/143755-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

#### Discussion

**Comment:** Write-Through Caching (Option B): With a write-through caching strategy, every time an item is written to the database, it is also written to the cache. This ensures that the cache is always updated with the most recent value immediately after any write operation. Consequently, any read operation can fetch the most recent value directly from the cache, ensuring data consistency between the cache and the database.

---

## Discussion for Question 373

Link: <https://www.examtactics.com/discussions/amazon/view/143069-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

#### Discussion

**Comment:** Integration Request Mapping Template: { "statusCode": 200 } Integration Response Mapping Template:

### Welcome to our API Gateway!

Here are our APIs:

- [API 1](#)
- [API 2](#)
- [API 3](#)

**Comment:** By configuring the integration request and response mapping templates as described, you ensure that the mock integration correctly serves the HTML landing page, meeting the requirement of providing an overview and navigation to the backend APIs.

---

## Discussion for Question 374

Link: <https://www.examtactics.com/discussions/amazon/view/143756-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

#### Discussion

**Comment:** Tracing = XRAY

---

## Discussion for Question 375

Link: <https://www.examtactics.com/discussions/amazon/view/143757-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

#### Discussion

**Comment:** Option A (Amazon Cognito Identity Pool): An Amazon Cognito Identity Pool provides temporary AWS credentials for users but is typically used in conjunction with user pools for unauthenticated access and to interact with AWS services. It does not handle user authentication and token expiration directly as needed for API access.

---

## Discussion for Question 376

Link: <https://www.examtactics.com/discussions/amazon/view/143758-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

#### Discussion

**Comment:** A Xray

---

## Discussion for Question 377

Link: <https://www.examtactics.com/discussions/amazon/view/143759-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

#### Discussion

**Comment:** function urls and apigw

---

## Discussion for Question 378

Link: <https://www.examtactics.com/discussions/amazon/view/143767-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

#### Discussion

**Comment:** B is correct. Why? All others make no sense. But using /tmp to cache this content is far from being optimal. AWS itself proposes using S3 or dynamo for caching of this kind: <https://aws.amazon.com/pt/blogs/machine-learning/maximize-your-amazon-translate-architecture-using-strategic-caching-layers/> <https://aws.amazon.com/pt/blogs/machine-learning/translating-your-website-or-application-automatically-with-amazon-translate-in-your-ci-cd-pipeline/> Using lambda's /tmp will solve the DB overload but create problems of performance by its own, AND probably increase costs.

**Comment:** B is correct. Caching the translated newsletters in the Lambda /tmp directory would significantly improve response times and reduce the load on the database. C is Wrong as Amazon Translate doesn't offer an API-level caching feature.



**Comment:** B. Cache the translated newsletters in the Lambda/tmp directory.

**Replies:**

**Comment:** No. Tmp directory is TEMPORAL and ephemeral

---

## Discussion for Question 379

**Link:** <https://www.examtactics.com/discussions/amazon/view/143760-exam-aws-certified-developer-associate-dva-c02-topic-1/>

**Most Voted**

**Discussion**

**Comment:** A is correct

**Comment:** A. Configure a high-resolution CloudWatch alarm

---

## Discussion for Question 380

**Link:** <https://www.examtactics.com/discussions/amazon/view/143761-exam-aws-certified-developer-associate-dva-c02-topic-1/>

**Most Voted**

**Discussion**

**Comment:** create a buildspec.yml version: 0.2 phases: build: commands: - aws apigateway create-deployment --rest-api-id --stage-name

**Comment:** to ensure that new resources and methods are properly deployed and available in API Gateway, you need to create a new deployment of the API configuration. Adding an AWS CodeBuild stage to your CodePipeline to run the aws apigateway create-deployment command (Option C) is the correct approach to accomplish this.

---

## Discussion for Question 381

**Link:** <https://www.examtactics.com/discussions/amazon/view/143721-exam-aws-certified-developer-associate-dva-c02-topic-1/>

**Most Voted**

**Discussion**

**Comment:** creating a new test API stage in API Gateway and deploying the updated Lambda function to this stage (Option C) is the most efficient and least disruptive way to test the function while ensuring that no changes affect the production environment.

**Comment:** C is correct

---

## Discussion for Question 382

**Link:** <https://www.examtactics.com/discussions/amazon/view/143722-exam-aws-certified-developer-associate-dva-c02-topic-1/>

**Most Voted**

- B: 6 votes

**Discussion**

**Comment:** For people voting A: you have no idea what is the traffic load to the application. Using the method described on A will affect 100% of all users all at once until you are able to rollback. B divertes 10% of traffic only than can be easily switched back and would impact only 10% of users

**Comment:** B Update the alias to direct 10% of users to the newly deployed version -> minimal impact

**Comment:** B is best

**Comment:** B looks better

**Comment:** Option B is the best choice for achieving the objective with minimal impact on users. It uses a canary deployment strategy, which allows for testing the new version on a smaller scale before a full rollout. This method provides a balance between risk management and operational simplicity, ensuring that any potential negative impacts of the new deployment are contained and easily reversible.

**Comment:** VOTE A

**Comment:** SHOULD BE A

**Comment:** Minimal impact

**Comment:** A is correct

---

## Discussion for Question 383

**Link:** <https://www.examtactics.com/discussions/amazon/view/143762-exam-aws-certified-developer-associate-dva-c02-topic-1/>

**Most Voted**

**Discussion**

**Comment:** import boto3 client = boto3.client('apigateway') # Create API Key response = client.create\_api\_key( name='NewUserKey', enabled=True ) api\_key\_id = response['id'] # Associate API Key and usage plan client.create\_usage\_plan\_key( usagePlanId='YOUR\_USAGE\_PLAN\_ID', keyId=api\_key\_id, keyType='API\_KEY' )

**Comment:** D chatgpt

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## Discussion for Question 384

**Link:** <https://www.examtactics.com/discussions/amazon/view/144606-exam-aws-certified-developer-associate-dva-c02-topic-1/>

**Most Voted**

## Discussion

**Comment:** <https://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/using-cfn-stack-drift.html>

**Comment:** Detect drift

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## Discussion for Question 385

**Link:** <https://www.examtactics.com/discussions/amazon/view/143353-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

## Discussion

**Comment:** D Explicit deny policies in IAM take precedence over any allow policies. If the IAM role attached to the EC2 instance explicitly denies access to S3, this deny will apply regardless of any other credentials or policies that might grant access. Even though the EC2 instance's credentials file specifies keys with full administrative access, the explicit deny in the IAM role will override these permissions for S3 actions.

**Comment:** [https://docs.aws.amazon.com/IAM/latest/UserGuide/reference\\_policies\\_evaluation-logic.html](https://docs.aws.amazon.com/IAM/latest/UserGuide/reference_policies_evaluation-logic.html)

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## Discussion for Question 386

**Link:** <https://www.examtactics.com/discussions/amazon/view/143763-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

## Discussion

**Comment:** D is only answer that clearly encrypts the credentials.

**Comment:** Answer: D The question explicitly states that the credentials must be encrypted. AWS Systems Manager Parameter does not encrypt the parameters by default, so B does not work as it doesn't state that encryption has been enabled.

**Comment:** parameter store is the most suitable option

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## Discussion for Question 387

**Link:** <https://www.examtactics.com/discussions/amazon/view/143764-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

## Discussion

**Comment:** using an IAM role attached to an EC2 instance profile with the appropriate IAM policy for S3 read access is the best practice. This approach ensures that the EC2 instance has the necessary permissions without embedding credentials or using less appropriate methods.

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## Discussion for Question 388

**Link:** <https://www.examtactics.com/discussions/amazon/view/143799-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

## Discussion

**Comment:** AC metric + alarm

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## Discussion for Question 389

**Link:** <https://www.examtactics.com/discussions/amazon/view/143067-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 8 votes

## Discussion

**Comment:** The most likely cause of the ProvisionedThroughputExceededException error message is: A. The data in the table's partition key column is not evenly distributed. Explanation In DynamoDB, the provisioned throughput capacity is distributed across all the partitions in the table. If the data in the partition key column is not evenly distributed, some partitions may receive more traffic than others. This can lead to hot partitions, which consume more read/write capacity units than others, resulting in ProvisionedThroughputExceededException errors even if the overall request rate is within the table's provisioned throughput limits.

**Comment:** hot partition problem

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## Discussion for Question 390

**Link:** <https://www.examtactics.com/discussions/amazon/view/143800-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

## Discussion

**Comment:** aws cloudfront create-invalidation --distribution-id EXAMPLE\_DIST\_ID --paths "/\*"

**Comment:** C. Set CloudFront to invalidate the cache after the artifacts have been deployed to Amazon S3.

**Comment:** By invalidating the CloudFront cache, you ensure that the latest artifacts in your S3 bucket are delivered to users, resolving the issue of outdated content being displayed.

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## Discussion for Question 391

**Link:** <https://www.examtactics.com/discussions/amazon/view/143081-exam-aws-certified-developer-associate-dva-c02-topic-1/>

Most Voted

- B: 8 votes

Discussion

**Comment:** B. Configure permission sets in AWS IAM Identity Center to grant access to the accounts.

**Comment:** B is best. AWS IAM Identity Center (formerly AWS Single Sign-On) provides a centralized way to manage access across multiple AWS accounts. A could work but it's not the most operationally efficient, especially for a growing team across multiple AWS accounts.

Discussion for Question 392

**Link:** <https://www.examtactics.com/discussions/amazon/view/143082-exam-aws-certified-developer-associate-dva-c02-topic-1/>

Most Voted

Discussion

**Comment:** Manually delete the ASGInstanceRole12345678 resource if it is no longer needed.

Discussion for Question 393

**Link:** <https://www.examtactics.com/discussions/amazon/view/143072-exam-aws-certified-developer-associate-dva-c02-topic-1/>

Most Voted

- A: 5 votes

Discussion

**Comment:** 1. Provision with PutClusterCapacityProviders API `aws ecs put-cluster-capacity-providers --cluster your-cluster-name --capacity-providers FARGATE FARGATE_SPOT --default-capacity-provider-strategy capacityProvider=FARGATE,base=1,weight=1 capacityProvider=FARGATE_SPOT,weight=1` 2. Update ECS `aws ecs update-service --cluster your-cluster-name --service your-service-name --force-new-deployment`

**Comment:** By following Option A, you ensure that your ECS tasks are reliably running on Fargate, with minimal downtime during the migration process. This strategy leverages the reliability of Fargate and the cost-effectiveness of Fargate Spot for non-critical workloads.

Discussion for Question 394

**Link:** <https://www.examtactics.com/discussions/amazon/view/143083-exam-aws-certified-developer-associate-dva-c02-topic-1/>

Most Voted

Discussion

**Comment:** <https://docs.aws.amazon.com/opensearch-service/latest/developerguide/integrations.html#integrations-kinesis> You can use OpenSearch Ingestion to directly load streaming data into your Amazon OpenSearch Service domain, without needing to use third-party solutions. You can load streaming data from Kinesis Data Streams to OpenSearch Service. New data that arrives in the data stream triggers an event notification to Lambda, which then runs your custom code to perform the indexing. Once the Lambda function is configured with Kinesis DataStreams, you can use OpenSearch Dashboards to create visualizations.

**Comment:** real-time logs + Kinesis Data Streams

Discussion for Question 395

**Link:** <https://www.examtactics.com/discussions/amazon/view/143801-exam-aws-certified-developer-associate-dva-c02-topic-1/>

Most Voted

Discussion

**Comment:** `import boto3 dynamodb = boto3.resource('dynamodb') table = dynamodb.Table('YourTableName') response = table.query( KeyConditionExpression=boto3.dynamodb.conditions.Key('OrderID').eq(123), ScanIndexForward=False # decending ) items = response['Items'] for item in items: print(item)`

**Comment:** This question was on my exam, July 23rd, 2024. Answer is C.

**Comment:** C. In the Query operation, set the ScanIndexForward parameter to false.

**Comment:** This approach directly addresses the requirement without the need for creating additional indexes or modifying the table schema. It leverages the existing sorting capabilities of DynamoDB and provides a straightforward solution.

Discussion for Question 396

**Link:** <https://www.examtactics.com/discussions/amazon/view/144607-exam-aws-certified-developer-associate-dva-c02-topic-1/>

Most Voted

Discussion

**Comment:** C is best

**Comment:** Answer is C

Discussion for Question 397

**Link:** <https://www.examtactics.com/discussions/amazon/view/143073-exam-aws-certified-developer-associate-dva-c02-topic-1/>

Most Voted

- C: 9 votes

Discussion

**Comment:** Explanation Using a local cache in CodeBuild allows you to cache dependencies locally on the build host, which can significantly reduce the time it takes to retrieve dependencies during subsequent builds.

**Comment:** version: 0.2 phases: install: Anyone want cheaper contributor PDF then check certificationtest[.]net Using a local cache in CodeBuild allows you to cache dependencies locally on the build host, which can significantly reduce the time it takes to retrieve dependencies during subsequent builds.

**Comment:** update buildspec.yaml version: 0.2 phases: install: commands: - echo Installing dependencies... - pip install -r requirements.txt build: commands: - echo Build started on `date` - echo Compiling the Python code... - python setup.py build cache: paths: - /root/.cache/pip/\*\*/\* # dependencies cache

**Comment:** C does not specify how to integrate it with CodeArtifact

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## Discussion for Question 398

**Link:** <https://www.examt topics.com/discussions/amazon/view/143357-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 9 votes

### Discussion

**Comment:** Correction, answer should be A <https://docs.aws.amazon.com/lambda/latest/dg/invoke-eventfiltering.html#filtering-ddb>

**Comment:** DynamoDB Streams cannot be directly mapped to SNS. This option is not feasible as described. So C is wrong.

**Comment:** definitely A

**Comment:** A By using event filtering, the Lambda function will only be triggered if the conditions (TransactionStatus is 'failed' and Price is above the specified threshold) are met. This reduces unnecessary executions and simplifies the logic within the function.

**Comment:** dynamodb can be mapped as an event source to SNS. While creating the table, we can turn the stream on. We can push events to SNS topic and apply filter policy

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## Discussion for Question 399

**Link:** <https://www.examt topics.com/discussions/amazon/view/143802-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

### Discussion

**Comment:** C. Add a dead-letter queue to send messages to an Amazon Simple Queue Service (Amazon SQS) standard queue.

**Comment:** A dlq in SQS

---

## Discussion for Question 400

**Link:** <https://www.examt topics.com/discussions/amazon/view/143803-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

### Discussion

**Comment:** C. Configure the application to encrypt the objects by using an AWS KMS customer managed key before uploading the objects containing personal data to Amazon S3. D. Write an S3 bucket policy to allow only encrypted connections over HTTPS by using the aws:SecureTransport condition.

**Comment:** To achieve the requirements of ensuring encryption in transit and at rest for the S3 bucket with AWS KMS keys, the most suitable steps are: D: Enforce HTTPS connections to ensure encryption in transit. C: Configure encryption with AWS KMS for encryption at rest.

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## Discussion for Question 401

**Link:** <https://www.examt topics.com/discussions/amazon/view/143029-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 6 votes

### Discussion

**Comment:** By increasing the memory allocation, you leverage more CPU power for your Lambda function, which is likely to reduce the processing time and meet your performance requirements.

**Comment:** memory

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## Discussion for Question 402

**Link:** <https://www.examt topics.com/discussions/amazon/view/143030-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 5 votes

### Discussion

**Comment:** When CloudFormation encounters an issue during the stack update process, it attempts to roll back to the previous state. If resources have been modified or deleted outside of CloudFormation, the rollback process can fail, resulting in the UPDATE\_ROLLBACK\_FAILED state.

**Comment:** <https://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/using-cfn-updating-stacks-continueupdaterollback.html>

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## Discussion for Question 403

**Link:** <https://www.examt topics.com/discussions/amazon/view/144455-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

## Discussion

**Comment:** This question was on my exam, July 23rd, 2024. Answer is A.

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## Discussion for Question 404

**Link:** <https://www.examttopics.com/discussions/amazon/view/144274-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

#### Discussion

**Comment:** 1. Ensures all important user interactions and transactions are traced (by disabling sampling for these). 2. Reduces the sampling rate for high-volume background tasks, which helps avoid wasting resources on less important requests.

**Comment:** C: trace everything, not sample it.

**Comment:** It's C

**Comment:** D is correct Chatgpt explanation Focus on Important Traces: By disabling sampling for high-volume read-only requests such as health checks, polling, and connection maintenance, you can prevent these low-priority requests from overwhelming the tracing system. This ensures that the system resources are conserved for more critical user interactions and transactions. Higher Sampling Rate for User Interactions: By sampling at a higher rate for requests that handle user interactions or transactions, you can ensure that these important requests are traced more comprehensively. This allows for better monitoring and troubleshooting of the application where it matters most. Selective Tracing: This approach allows you to selectively trace and monitor requests based on their importance and volume. High-volume background tasks are sampled minimally or not at all, while low-volume but critical user interactions and transactions are sampled more frequently.

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## Discussion for Question 405

**Link:** <https://www.examttopics.com/discussions/amazon/view/144673-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

#### Discussion

**Comment:** A. Publish a version of the original Lambda function. Make the necessary changes to the Lambda code. Publish a new version of the Lambda function. D. Create an alias that points to the original version of the Lambda function. Configure the alias to be a weighted alias that also includes the new version of the Lambda function. Divide traffic between the two versions.

**Comment:** AD is best

---

## Discussion for Question 406

**Link:** <https://www.examttopics.com/discussions/amazon/view/144456-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 5 votes

#### Discussion

**Comment:** The DeleteDBInstance is the API call that would be made when deleting an RDS instance. By retrieving and inspecting these events, you can find out who initiated the deletion.

**Comment:** This question was on my exam, July 23rd, 2024. Answer is A.

---

## Discussion for Question 407

**Link:** <https://www.examttopics.com/discussions/amazon/view/144295-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 6 votes
- B: 5 votes

#### Discussion

**Comment:** B. "The developer's solution must not use long term credentials" implies that the credentials will be rotated, which SecretsManager supports.

##### Replies:

**Comment:** No, it does not imply that. "needs the credentials to be rotated every X period of time" would imply that. The question Implies that you need to use something like a auth token, which is exactly what IAM db authentication does.

**Comment:** User/pass is a long term credential. IAM db auth allows connection to the database without user/pass, which solves the problem.

**Comment:** VOTE A

**Comment:** A. "Amazon RDS for MySQL can use AWS Identity and Access Management (IAM) database authentication to allow users to connect to a DB instance without a password. Instead, users can use an authentication token, which is a unique string of characters generated by Amazon RDS on request. Each token is valid for 15 minutes and is generated using AWS Signature Version 4."

**Comment:** A. Enable IAM database authentication on the RDS for MySQL DB instance. Create an IAM role that has the minimum required permissions. Assign the role to the application.

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## Discussion for Question 408

**Link:** <https://www.examttopics.com/discussions/amazon/view/143936-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 6 votes

#### Discussion

**Comment:** Answer is B

**Comment:** B looks good to me

**Comment:** Correct answer is B

**Comment:** B is correct

**Comment:** B is best

**Comment:** It's B

**Comment:** Answer is B

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## Discussion for Question 409

**Link:** <https://www.examttopics.com/discussions/amazon/view/144297-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

#### Discussion

**Comment:** Answers A,C

**Replies:**

**Comment:** <https://docs.aws.amazon.com/apigateway/latest/developerguide/apigateway-use-lambda-authorizer.html> <https://docs.aws.amazon.com/apigateway/latest/developerguide/api-gateway-mapping-template-reference.html>

**Comment:** It's A C.

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## Discussion for Question 410

**Link:** <https://www.examttopics.com/discussions/amazon/view/143937-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- D: 8 votes

#### Discussion

**Comment:** <https://docs.aws.amazon.com/lambda/latest/dg/monitoring-cloudwatchlogs.html>

**Comment:** Minimal Operational Overhead: Uses built-in AWS services with minimal configuration. Centralized Log Analysis: CloudWatch Logs Insights provides a powerful, interactive query interface to analyze logs. Cost-Efficient: Utilizing existing AWS services like CloudWatch and Route 53 reduces the need for additional third-party tools or infrastructure.

**Comment:** It's D-

**Comment:** Answer is D

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## Discussion for Question 411

**Link:** <https://www.examttopics.com/discussions/amazon/view/144464-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- A: 5 votes

#### Discussion

**Comment:** Create a release branch from the latest Git commit that will be in the release. Apply fixes to the release branch. Continue developing new features, and merge the features into the main branch. Merge the release branch into the main branch after the release.

**Comment:** It's C

---

## Discussion for Question 412

**Link:** <https://www.examttopics.com/discussions/amazon/view/144608-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

#### Discussion

**Comment:** Answer is A

**Comment:** version: 0.2 phases: install: runtime-versions: nodejs: 12 build: commands: - echo Running tests... - npm install - npm test artifacts: files: - '\*\*/\*' base-directory: build reports: my-test-report: files: - '\*\*/\*' base-directory: test-results discard-paths: no

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## Discussion for Question 413

**Link:** <https://www.examttopics.com/discussions/amazon/view/144609-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- B: 6 votes

#### Discussion

**Comment:** The AWS AppConfig Agent Lambda extension is specifically designed to provide easy access to AppConfig configurations from Lambda functions. It allows for dynamic updates without redeployment and requires minimal development effort.

**Comment:** <https://docs.aws.amazon.com/appconfig/latest/userguide/appconfig-integration-lambda-extensions.html>

**Comment:** Answer is B

**Comment:** Environment variables have a size limit of 4 KB, which is insufficient for a 6 KB document.

---

## Discussion for Question 414

**Link:** <https://www.examttopics.com/discussions/amazon/view/144610-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

- C: 6 votes

### Discussion

**Comment:** Can't use EBS volumes with Lambda, used with EC2 only.

**Comment:** Configure a function to mount an Amazon Elastic File System (Amazon EFS) file system to a local directory <https://docs.aws.amazon.com/lambda/latest/dg/configuration-filesystem.html>

**Comment:** Ansswer is c

**Comment:** C. Set up an Amazon Elastic File System (Amazon EFS) file system with mount targets in the central VPCConfigure the Lambda functions to mount the EFS file system. Update the Lambda function execution roles to give the functions to access the EFS file system

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## Discussion for Question 421

**Link:** <https://www.examttopics.com/discussions/amazon/view/146859-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

### Discussion

**Comment:** B. cdk bootstrap

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## Discussion for Question 423

**Link:** <https://www.examttopics.com/discussions/amazon/view/146861-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

### Discussion

**Comment:** Answer is AC

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## Discussion for Question 428

**Link:** <https://www.examttopics.com/discussions/amazon/view/146862-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

### Discussion

**Comment:** <https://aws.amazon.com/blogs/security/how-to-use-trust-policies-with-iam-roles>

**Comment:** C: This action involves cross-account role assumption, but for Kinesis access, you would typically use resource-based policies rather than cross-account role assumption unless the use case specifically involves assuming roles across accounts.

**Comment:** Answer is BC

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## Discussion for Question 430

**Link:** <https://www.examttopics.com/discussions/amazon/view/146863-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

### Discussion

**Comment:** Answer is C

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## Discussion for Question 432

**Link:** <https://www.examttopics.com/discussions/amazon/view/147042-exam-aws-certified-developer-associate-dva-c02-topic-1/>

### Most Voted

### Discussion

**Comment:** D <https://docs.aws.amazon.com/lambda/latest/dg/invocation-async-error-handling.html#:~:text=Lambda%20manages%20your%20function's%20asynchronous,the%20second%20and%20third%20attempts.>

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