

# Amazon-Web-Services

## Exam Questions SCS-C01

AWS Certified Security- Specialty



### NEW QUESTION 1

- (Exam Topic 1)

A company has an AWS account and allows a third-party contractor who uses another AWS account, to assume certain IAM roles. The company wants to ensure that IAM roles can be assumed by the contractor only if the contractor has multi-factor authentication enabled on their IAM user accounts. What should the company do to accomplish this?

A)

Add the following condition to the IAM policy attached to all IAM roles.

```
"Effect" : "Deny",  
"Condition" : { "BoolIfExists" : { "aws:MultiFactorAuthPresent" : false } }
```

B)

Add the following condition to the IAM policy attached to all IAM roles.

```
"Effect" : "Deny",  
"Condition" : { "Bool" : { "aws:MultiFactorAuthPresent" : false } }
```

C)

Add the following condition to the IAM policy attached to all IAM roles.

```
"Effect" : "Allow",  
"Condition" : { "Null" : { "aws:MultiFactorAuthPresent" : false } }
```

D)

Add the following condition to the IAM policy attached to all IAM roles.

```
"Effect" : "Allow",  
"Condition" : { "BoolIfExists" : { "aws:MultiFactorAuthPresent" : false } }
```

- A. Option A
- B. Option B
- C. Option C
- D. Option D

**Answer: A**

### NEW QUESTION 2

- (Exam Topic 1)

A company wants to encrypt the private network between its on-premises environment and AWS. The company also wants a consistent network experience for its employees.

What should the company do to meet these requirements?

- A. Establish an AWS Direct Connect connection with AWS and set up a Direct Connect gateway
- B. In the Direct Connect gateway configuration, enable IPsec and BGP, and then leverage native AWS network encryption between Availability Zones and Regions,
- C. Establish an AWS Direct Connect connection with AWS and set up a Direct Connect gateway
- D. Using the Direct Connect gateway, create a private virtual interface and advertise the customer gateway private IP address
- E. Create a VPN connection using the customer gateway and the virtual private gateway
- F. Establish a VPN connection with the AWS virtual private cloud over the internet
- G. Establish an AWS Direct Connect connection with AWS and establish a public virtual interface
- H. For prefixes that need to be advertised, enter the customer gateway public IP address
- I. Create a VPN connection over Direct Connect using the customer gateway and the virtual private gateway.

**Answer: C**

### NEW QUESTION 3

- (Exam Topic 1)

Authorized Administrators are unable to connect to an Amazon EC2 Linux bastion host using SSH over the internet. The connection either fails to respond or generates the following error message:

Network error: Connection timed out.

What could be responsible for the connection failure? (Select THREE )

- A. The NAT gateway in the subnet where the EC2 instance is deployed has been misconfigured
- B. The internet gateway of the VPC has been reconfigured
- C. The security group denies outbound traffic on ephemeral ports
- D. The route table is missing a route to the internet gateway
- E. The NACL denies outbound traffic on ephemeral ports
- F. The host-based firewall is denying SSH traffic

**Answer: BDF**

### NEW QUESTION 4

- (Exam Topic 1)

A company has the software development teams that are creating applications that store sensitive data in Amazon S3. Each team's data must always be separate. The company's security team must design a data encryption strategy for both teams that provides the ability to audit key usage. The solution must also minimize operational overhead.

What should the security team recommend?

- A. Tell the application teams to use two different S3 buckets with separate AWS Key Management Service (AWS KMS) AWS managed CMKs. Limit the key process to allow encryption and decryption of the CMKs to their respective teams only.
- B. Force the teams to use encryption context to encrypt and decrypt.

- C. Tell the application teams to use two different S3 buckets with a single AWS Key Management Service (AWS KMS) AWS managed CMK Limit the key policy to allow encryption and decryption of the CMK onl
- D. Do not allow the teams to use encryption context to encrypt and decrypt
- E. Tell the application teams to use two different S3 buckets with separate AWS Key Management Service (AWS KMS) customer managed CMKs Limit the key policies to allow encryption and decryption of the CMKs to their respective teams only Force the teams to use encryption context to encrypt and decrypt
- F. Tell the application teams to use two different S3 buckets with a single AWS Key Management Service (AWS KMS) customer managed CMK Limit the key policy to allow encryption and decryption of the CMK only Do not allow the teams to use encryption context to encrypt and decrypt

**Answer: A**

#### NEW QUESTION 5

- (Exam Topic 1)

A company uses a third-party identity provider and SAML-based SSO for its AWS accounts After the third-party identity provider renewed an expired signing certificate users saw the following message when trying to log in:

```
Error: Response Signature Invalid (Service: AWSSecurityTokenService; Status Code: 400; Error Code: InvalidIdentityToken)
```

A security engineer needs to provide a solution that corrects the error and minimizes operational overhead Which solution meets these requirements?

- A. Upload the third-party signing certificate's new private key to the AWS identity provider entity defined in AWS identity and Access Management (IAM) by using the AWS Management Console
- B. Sign the identity provider's metadata file with the new public key Upload the signature to the AWS identity provider entity defined in AWS Identity and Access Management (IAM) by using the AWS CLI.
- C. Download the updated SAML metadata tile from the identity service provider Update the file in the AWS identity provider entity defined in AWS Identity and Access Management (IAM) by using the AWS CLI
- D. Configure the AWS identity provider entity defined in AWS Identity and Access Management (IAM) to synchronously fetch the new public key by using the AWS Management Console.

**Answer: C**

#### NEW QUESTION 6

- (Exam Topic 1)

An application running on Amazon EC2 instances generates log files in a folder on a Linux file system. The instances block access to the console and file transfer utilities, such as Secure Copy Protocol (SCP) and Secure File Transfer Protocol (SFTP). The Application Support team wants to automatically monitor the application log files so the team can set up notifications in the future.

A Security Engineer must design a solution that meets the following requirements:

- Make the log files available through an AWS managed service.
- Allow for automatic monitoring of the logs.
- Provide an Interlace for analyzing logs.
- Minimize effort.

Which approach meets these requirements^

- A. Modify the application to use the AWS SD
- B. Write the application logs lo an Amazon S3 bucket
- C. install the unified Amazon CloudWatch agent on the instances Configure the agent to collect the application log dies on the EC2 tile system and send them to Amazon CloudWatch Logs
- D. Install AWS Systems Manager Agent on the instances Configure an automation document to copy the application log files to AWS DeepLens
- E. Install Amazon Kinesis Agent on the instances Stream the application log files to Amazon Kinesis Data Firehose and sot the destination to Amazon Elasticsearch Service

**Answer: D**

#### NEW QUESTION 7

- (Exam Topic 1)

A Developer is building a serverless application that uses Amazon API Gateway as the front end. The application will not be publicly accessible. Other legacy applications running on Amazon EC2 will make calls to the application A Security Engineer Has been asked to review the security controls for authentication and authorization of the application

Which combination of actions would provide the MOST secure solution? (Select TWO )

- A. Configure an IAM policy that allows the least permissive actions to communicate with the API Gateway Attach the policy to the role used by the legacy EC2 instances
- B. Enable AWS WAF for API Gateway Configure rules to explicitly allow connections from the legacy EC2 instances
- C. Create a VPC endpoint for API Gateway Attach an IAM resource policy that allows the role of the legacy EC2 instances to call specific APIs
- D. Create a usage plan Generate a set of API keys for each application that needs to call the API.
- E. Configure cross-origin resource sharing (CORS) in each API Share the CORS information with the applications that call the API.

**Answer: AE**

#### NEW QUESTION 8

- (Exam Topic 1)

A Security Engineer is setting up a new AWS account. The Engineer has been asked to continuously monitor the company's AWS account using automated compliance checks based on AWS best practices and Center for Internet Security (CIS) AWS Foundations Benchmarks

How can the Security Engineer accomplish this using AWS services?

- A. Enable AWS Config and set it to record all resources in all Regions and global resource
- B. Then enable AWS Security Hub and confirm that the CIS AWS Foundations compliance standard is enabled
- C. Enable Amazon Inspector and configure it to scan all Regions for the CIS AWS Foundations Benchmark
- D. Then enable AWS Security Hub and configure it to ingest the Amazon Inspector findings
- E. Enable Amazon Inspector and configure it to scan all Regions for the CIS AWS Foundations Benchmark

- F. Then enable AWS Shield in all Regions to protect the account from DDoS attacks.
- G. Enable AWS Config and set it to record all resources in all Regions and global resources Then enable Amazon Inspector and configure it to enforce CIS AWS Foundations Benchmarks using AWS Config rules.

**Answer: B**

#### NEW QUESTION 9

- (Exam Topic 1)

A company uses Microsoft Active Directory for access management for on-premises resources and wants to use the same mechanism for accessing its AWS accounts. Additionally, the development team plans to launch a public-facing application for which they need a separate authentication solution. When come a nation of the following would satisfy these requirements? (Select TWO)

- A. Set up domain controllers on Amazon EC2 to extend the on-premises directory to AWS
- B. Establish network connectivity between on-premises and the user's VPC
- C. Use Amazon Cognito user pools for application authentication
- D. Use AD Connector for application authentication.
- E. Set up federated sign-in to AWS through ADFS and SAML.

**Answer: CD**

#### NEW QUESTION 10

- (Exam Topic 1)

A company had one of its Amazon EC2 key pairs compromised. A Security Engineer must identify which current Linux EC2 instances were deployed and used the compromised key pair. How can this task be accomplished?

- A. Obtain the list of instances by directly querying Amazon EC2 using: `aws ec2 describe-instances --filters "Name=key-name,Values=KEYNAMEHERE"`.
- B. Obtain the fingerprint for the key pair from the AWS Management Console, then search for the fingerprint in the Amazon Inspector logs.
- C. Obtain the output from the EC2 instance metadata using: `curl http://169.254.169.254/latest/meta-data/public-keys/0/`.
- D. Obtain the fingerprint for the key pair from the AWS Management Console, then search for the fingerprint in Amazon CloudWatch Logs using: `aws logs filter-log-events`.

**Answer: A**

#### NEW QUESTION 10

- (Exam Topic 1)

A company uses HTTP Live Streaming (HLS) to stream live video content to paying subscribers by using Amazon CloudFront. HLS splits the video content into chunks so that the user can request the right chunk based on different conditions Because the video events last for several hours, the total video is made up of thousands of chunks The origin URL is not disclosed and every user is forced to access the CloudFront URL The company has a web application that authenticates the paying users against an internal repository and a CloudFront key pair that is already issued. What is the simplest and MOST effective way to protect the content?

- A. Develop the application to use the CloudFront key pair to create signed URLs that users will use to access the content.
- B. Develop the application to use the CloudFront key pair to set the signed cookies that users will use to access the content.
- C. Develop the application to issue a security token that Lambda@Edge will receive to authenticate and authorize access to the content
- D. Keep the CloudFront URL encrypted inside the application, and use AWS KMS to resolve the URL on-the-fly after the user is authenticated.

**Answer: B**

#### NEW QUESTION 12

- (Exam Topic 1)

A security engineer is auditing a production system and discovers several additional IAM roles that are not required and were not previously documented during the last audit 90 days ago. The engineer is trying to find out who created these IAM roles and when they were created. The solution must have the lowest operational overhead. Which solution will meet this requirement?

- A. Import AWS CloudTrail logs from Amazon S3 into an Amazon Elasticsearch Service cluster, and search through the combined logs for CreateRole events.
- B. Create a table in Amazon Athena for AWS CloudTrail event
- C. Query the table in Amazon Athena for CreateRole events.
- D. Use AWS Config to look up the configuration timeline for the additional IAM roles and view the linked AWS CloudTrail event.
- E. Download the credentials report from the IAM console to view the details for each IAM entity, including the creation dates.

**Answer: A**

#### NEW QUESTION 14

- (Exam Topic 1)

A Security Engineer is setting up an AWS CloudTrail trail for all regions in an AWS account. For added security, the logs are stored using server-side encryption with AWS KMS-managed keys (SSE-KMS) and have log integrity validation enabled. While testing the solution, the Security Engineer discovers that the digest files are readable, but the log files are not. What is the MOST likely cause?

- A. The log files fail integrity validation and automatically are marked as unavailable.
- B. The KMS key policy does not grant the Security Engineer's IAM user or role permissions to decrypt with it.
- C. The bucket is set up to use server-side encryption with Amazon S3-managed keys (SSE-S3) as the default and does not allow SSE-KMS-encrypted files.
- D. An IAM policy applicable to the Security Engineer's IAM user or role denies access to the "CloudTrail/" prefix in the Amazon S3 bucket

**Answer: D**

### NEW QUESTION 18

- (Exam Topic 1)

Users report intermittent availability of a web application hosted on AWS. Monitoring systems report an excess of abnormal network traffic followed by high CPU utilization on the application web tier. Which of the following techniques will improve the availability of the application? (Select TWO.)

- A. Deploy AWS WAF to block all unsecured web applications from accessing the internet.
- B. Deploy an Intrusion Detection/Prevention System (IDS/IPS) to monitor or block unusual incoming network traffic.
- C. Configure security groups to allow outgoing network traffic only from hosts that are protected with up-to-date antivirus software.
- D. Create Amazon CloudFront distribution and configure AWS WAF rules to protect the web applications from malicious traffic.
- E. Use the default Amazon VPC for external-facing systems to allow AWS to actively block malicious network traffic affecting Amazon EC2 instances.

**Answer: BD**

### NEW QUESTION 21

- (Exam Topic 1)

A company's Security Officer is concerned about the risk of AWS account root user logins and has assigned a Security Engineer to implement a notification solution for near-real-time alerts upon account root user logins.

How should the Security Engineer meet these requirements?

- A. Create a cron job that runs a script to download the AWS IAM security credentials
- B. parse the file for account root user logins and email the Security team's distribution list
- C. Run AWS CloudTrail logs through Amazon CloudWatch Events to detect account root user logins and trigger an AWS Lambda function to send an Amazon SNS notification to the Security team's distribution list.
- D. Save AWS CloudTrail logs to an Amazon S3 bucket in the Security team's account Process the CloudTrail logs with the Security Engineer's logging solution for account root user logins Send an Amazon SNS notification to the Security team upon encountering the account root user login events
- E. Save VPC Flow Logs to an Amazon S3 bucket in the Security team's account and process the VPC Flow Logs with their logging solutions for account root user logins Send an Amazon SNS notification to the Security team upon encountering the account root user login events

**Answer: B**

### NEW QUESTION 24

- (Exam Topic 1)

A website currently runs on Amazon EC2 with mostly static content on the site. Recently, the site was subjected to a DDoS attack, and a Security Engineer was tasked with redesigning the edge security to help mitigate this risk in the future

What are some ways the Engineer could achieve this? (Select THREE )

- A. Use AWS X-Ray to inspect the traffic going to the EC2 instances
- B. Move the static content to Amazon S3 and host this with an Amazon CloudFront distribution
- C. Change the security group configuration to block the source of the attack traffic
- D. Use AWS WAF security rules to inspect the inbound traffic
- E. Use Amazon Inspector assessment templates to inspect the inbound traffic
- F. Use Amazon Route 53 to distribute traffic

**Answer: BDF**

### NEW QUESTION 29

- (Exam Topic 1)

A company's web application is hosted on Amazon EC2 instances running behind an Application Load Balancer (ALB) in an Auto Scaling group. An AWS WAF web ACL is associated with the ALB. AWS CloudTrail is enabled, and stores logs in Amazon S3 and Amazon CloudWatch Logs.

The operations team has observed some EC2 instances reboot at random. After rebooting, all access logs on the instances have been deleted. During an investigation, the operations team found that each reboot happened just after a PHP error occurred on the new-user-creation.php file. The operations team needs to view log information to determine if the company is being attacked.

Which set of actions will identify the suspect attacker's IP address for future occurrences?

- A. Configure VPC Flow Logs on the subnet where the ALB is located, and stream the data to CloudWatch. Search for the new-user-creation.php occurrences in CloudWatch.
- B. Configure the CloudWatch agent on the ALB Configure the agent to send application logs to CloudWatch Update the instance role to allow CloudWatch Logs access
- C. Export the logs to CloudWatch Search for the new-user-creation.php occurrences in CloudWatch.
- D. Configure the ALB to export access logs to an Amazon Elasticsearch Service cluster, and use the service to search for the new-user-creation.php occurrences.
- E. Configure the web ACL to send logs to Amazon Kinesis Data Firehose, which delivers the logs to an S3 bucket Use Amazon Athena to query the logs and find the new-user-creation.php occurrences.

**Answer: B**

### NEW QUESTION 33

- (Exam Topic 1)

A company requires that SSH commands used to access its AWS instance be traceable to the user who executed each command.

How should a Security Engineer accomplish this?

- A. Allow inbound access on port 22 at the security group attached to the instance Use AWS Systems Manager Session Manager for shell access to Amazon EC2 instances with the user tag defined Enable Amazon CloudWatch logging for Systems Manager sessions
- B. Use Amazon S3 to securely store one Privacy Enhanced Mail Certificate (PEM file) for each user Allow Amazon EC2 to read from Amazon S3 and import every user that wants to use SSH to access EC2 instances Allow inbound access on port 22 at the security group attached to the instance Install the Amazon CloudWatch agent on the EC2 instance and configure it to ingest audit logs for the instance
- C. Deny inbound access on port 22 at the security group attached to the instance Use AWS Systems Manager Session Manager for shell access to Amazon EC2 instances with the user tag defined Enable Amazon CloudWatch logging for Systems Manager sessions
- D. Use Amazon S3 to securely store one Privacy Enhanced Mail Certificate (PEM file) for each team or group Allow Amazon EC2 to read from Amazon S3 and import every user that wants to use SSH to access EC2 instances Allow inbound access on port 22 at the security group attached to the instance Install the

Amazon CloudWatch agent on the EC2 instance and configure it to ingest audit logs for the instance

**Answer: C**

**NEW QUESTION 37**

- (Exam Topic 1)

A company's on-premises data center forwards DNS logs to a third-party security incident events management (SIEM) solution that alerts on suspicious behavior. The company wants to introduce a similar capability to its AWS accounts that includes automatic remediation. The company expects to double in size within the next few months.

Which solution meets the company's current and future logging requirements?

- A. Enable Amazon GuardDuty and AWS Security Hub in all Regions and all account
- B. Designate a mastersecurity account to receive all alerts from the child account
- C. Set up specific rules within Amazon EventBridge to trigger an AWS Lambda function for remediation steps.
- D. Ingest all AWS CloudTrail logs, VPC Flow Logs, and DNS logs into a single Amazon S3 bucket in a designated security account
- E. Use the current on-premises SIEM to monitor the logs and send a notification to an Amazon SNS topic to alert the security team of remediation steps.
- F. Ingest all AWS CloudTrail logs, VPC Flow Logs, and DNS logs into a single Amazon S3 bucket in a designated security account
- G. Launch an Amazon EC2 instance and install the current SIEM to monitor the logs and send a notification to an Amazon SNS topic to alert the security team of remediation steps.
- H. Enable Amazon GuardDuty and AWS Security Hub in all Regions and all account
- I. Designate a master security account to receive all alerts from the child account
- J. Create an AWS Organizations SCP that denies access to certain API calls that are on an ignore list.

**Answer: A**

**NEW QUESTION 42**

- (Exam Topic 1)

A company is using AWS Organizations to manage multiple AWS member accounts. All of these accounts have Amazon GuardDuty enabled in all Regions. The company's AWS Security Operations Center has a centralized security account for logging and monitoring. One of the member accounts has received an excessively high bill. A security engineer discovers that a compromised Amazon EC2 instance is being used to mine crypto currency. The Security Operations Center did not receive a GuardDuty finding in the central security account.

but there was a GuardDuty finding in the account containing the compromised EC2 instance. The security engineer needs to ensure an GuardDuty finding are available in the security account.

What should the security engineer do to resolve this issue?

- A. Set up an Amazon CloudWatch Event rule to forward all GuardDuty findings to the security account Use an AWS Lambda function as a target to raise findings
- B. Set up an Amazon CloudWatch Events rule to forward all GuardDuty findings to the security account Use an AWS Lambda function as a target to raise findings in AWS Security Hub
- C. Check that GuardDuty in the security account is able to assume a role in the compromised account using the GuardDuty fast findings permission Schedule an Amazon CloudWatch Events rule and an AWS Lambda function to periodically check for GuardDuty findings
- D. Use the aws GuardDuty get-members AWS CLI command in the security account to see if the account is listed Send an invitation from GuardDuty in the security account to GuardDuty in the compromised account Accept the invitation to forward all future GuardDuty findings

**Answer: D**

**NEW QUESTION 47**

- (Exam Topic 1)

To meet regulatory requirements, a Security Engineer needs to implement an IAM policy that restricts the use of AWS services to the us-east-1 Region.

What policy should the Engineer implement?

```
A
{
  "Version": "2012-10-17",
  "Statement": [
    {
      "Effect": "Allow",
      "Action": "*",
      "Resource": "*",
      "Condition": {
        "StringEquals": {
          "aws:RequestedRegion": "us-east-1"
        }
      }
    }
  ]
}
```

B

```
{
  "Version": "2012-10-17",
  "Statement": [
    {
      "Effect": "Allow",
      "Action": "*",
      "Resource": "*",
      "Condition": {
        "StringEquals": {
          "ec2:Region": "us-east-1"
        }
      }
    }
  ]
}
```

C

```
{
  "Version": "2012-10-17",
  "Statement": [
    {
      "Effect": "Deny",
      "Action": "*",
      "Resource": "*",
      "Condition": {
        "StringNotEquals": {
          "aws:RequestedRegion": "us-east-1"
        }
      }
    }
  ]
}
```

D

```
{
  "Version": "2012-10-17",
  "Statement": [
    {
      "Effect": "Deny",
      "NotAction": "*",
      "Resource": "*",
      "Condition": {
        "StringEquals": {
          "aws:RequestedRegion": "us-east-1"
        }
      }
    }
  ]
}
```

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: A

**NEW QUESTION 50**

- (Exam Topic 1)

An company is using AWS Secrets Manager to store secrets that are encrypted using a CMK and are stored in the security account 111122223333. One of the company's production accounts, 444455556666, must to retrieve the secret values from the security account 111122223333. A security engineer needs to apply a policy to the secret in the security account based on least privilege access so the production account can retrieve the secret value only.

Which policy should the security engineer apply?

- A. 

```
{
  "Version": "2012-10-17",
  "Statement": [
    {
      "Effect": "Allow",
      "Action": "secretsmanager:*",
      "Principal": {"AWS": "444455556666"},
      "Resource": "*"
    }
  ]
}
```
- B. 

```
{
  "Version": "2012-10-17",
  "Statement": [
    {
      "Effect": "Allow",
      "Action": "secretsmanager:*",
      "Principal": {"AWS": "111122223333"},
      "Resource": "*"
    }
  ]
}
```
- C. 

```
{
  "Version": "2012-10-17",
  "Statement": [
    {
      "Effect": "Allow",
      "Action": "secretsmanager:GetSecretValue",
      "Principal": {"AWS": "111122223333"},
      "Resource": "*"
    }
  ]
}
```
- D. 

```
{
  "Version": "2012-10-17",
  "Statement": [
    {
      "Effect": "Allow",
      "Action": "secretsmanager:GetSecretValue",
      "Principal": {"AWS": "444455556666"},
      "Resource": "*"
    }
  ]
}
```

- A. Option A
- B. Option B
- C. Option C
- D. Option D

**Answer: A**

**NEW QUESTION 51**

- (Exam Topic 1)

After a recent security audit involving Amazon S3, a company has asked assistance reviewing its S3 buckets to determine whether data is properly secured. The first S3 bucket on the list has the following bucket policy.

```
{
  "Version": "2012-10-17",
  "Statement": [
    {
      "Effect": "Allow",
      "Principal": "*",
      "Action": "s3:*",
      "Resource": "arn:aws:s3:::examplebucket/*",
      "Condition": {
        "IpAddress": {
          "aws:SourceIp": [
            "10.10.10.0/24"
          ]
        }
      }
    }
  ]
}
```

Is this bucket policy sufficient to ensure that the data is not publicly accessible?

- A. Yes, the bucket policy makes the whole bucket publicly accessible despite now the S3 bucket ACL or object ACLs are configured.
- B. Yes, none of the data in the bucket is publicly accessible, regardless of how the S3 bucket ACL and object ACLs are configured.
- C. No, the IAM user policy would need to be examined first to determine whether any data is publicly accessible.
- D. No, the S3 bucket ACL and object ACLs need to be examined first to determine whether any data is publicly accessible.

**Answer:** A

#### NEW QUESTION 52

- (Exam Topic 1)

A company plans to use custom AMIs to launch Amazon EC2 instances across multiple AWS accounts in a single Region to perform security monitoring and analytics tasks. The EC2 instances are launched in EC2 Auto Scaling groups. To increase the security of the solution, a Security Engineer will manage the lifecycle of the custom AMIs in a centralized account and will encrypt them with a centrally managed AWS KMS CMK. The Security Engineer configured the KMS key policy to allow cross-account access. However, the EC2 instances are still not being properly launched by the EC2 Auto Scaling groups. Which combination of configuration steps should the Security Engineer take to ensure the EC2 Auto Scaling groups have been granted the proper permissions to execute tasks?

- A. Create a customer-managed CMK in the centralized account
- B. Allow other applicable accounts to use that key for cryptographic operations by applying proper cross-account permissions in the key policy. Create an IAM role in all applicable accounts and configure its access policy to allow the use of the centrally managed CMK for cryptographic operation
- C. Configure EC2 Auto Scaling groups within each applicable account to use the created IAM role to launch EC2 instances.
- D. Create a customer-managed CMK in the centralized account
- E. Allow other applicable accounts to use that key for cryptographic operations by applying proper cross-account permissions in the key policy
- F. Create an IAM role in all applicable accounts and configure its access policy with permissions to create grants for the centrally managed CMK
- G. Use this IAM role to create a grant for the centrally managed CMK with permissions to perform cryptographic operations and with the EC2 Auto Scaling service-linked role defined as the grantee principal.
- H. Create a customer-managed CMK or an AWS managed CMK in the centralized account
- I. Allow other applicable accounts to use that key for cryptographic operations by applying proper cross-account permissions in the key policy
- J. Use the CMK administrator to create a CMK grant that includes permissions to perform cryptographic operations that define EC2 Auto Scaling service-linked roles from all other accounts as the grantee principal.
- K. Create a customer-managed CMK or an AWS managed CMK in the centralized account
- L. Allow other applicable accounts to use that key for cryptographic operations by applying proper cross-account permissions in the key policy
- M. Modify the access policy for the EC2 Auto Scaling roles to perform cryptographic operations against the centrally managed CMK.

**Answer:** B

#### NEW QUESTION 54

- (Exam Topic 1)

A company uses SAML federation with AWS Identity and Access Management (IAM) to provide internal users with SSO for their AWS accounts. The company's identity provider certificate was rotated as part of its normal lifecycle. Shortly after, users started receiving the following error when attempting to log in: "Error: Response Signature Invalid (Service: AWSSecurityTokenService; Status Code: 400; Error Code: InvalidIdentityToken)" A security engineer needs to address the immediate issue and ensure that it will not occur again. Which combination of steps should the security engineer take to accomplish this? (Select TWO.)

- A. Download a new copy of the SAML metadata file from the identity provider Create a new IAM identity provider entity
- B. Upload the new metadata file to the new IAM identity provider entity.
- C. During the next certificate rotation period and before the current certificate expires, add a new certificate as the secondary to the identity provider
- D. Generate a new metadata file and upload it to the IAM identity provider entity
- E. Perform automated or manual rotation of the certificate when required.
- F. Download a new copy of the SAML metadata file from the identity provider Upload the new metadata to the IAM identity provider entity configured for the SAML integration in question.
- G. During the next certificate rotation period and before the current certificate expires, add a new certificate as the secondary to the identity provider
- H. Generate a new copy of the metadata file and create a new IAM identity provider entity
- I. Upload the metadata file to the new IAM identity provider entity
- J. Perform automated or manual rotation of the certificate when required.
- K. Download a new copy of the SAML metadata file from the identity provider Create a new IAM identity provider entity
- L. Upload the new metadata file to the new IAM identity provider entity
- M. Update the identity provider configurations to pass a new IAM identity provider entity name in the SAML assertion.

**Answer:** AD

#### NEW QUESTION 56

- (Exam Topic 1)

After multiple compromises of its Amazon EC2 instances, a company's Security Officer is mandating that memory dumps of compromised instances be captured for further analysis. A Security Engineer just received an EC2 abuse notification report from AWS stating that an EC2 instance running the most recent Windows Server 2019 Base AMI is compromised. How should the Security Engineer collect a memory dump of the EC2 instance for forensic analysis?

- A. Give consent to the AWS Security team to dump the memory core on the compromised instance and provide it to AWS Support for analysis.
- B. Review memory dump data that the AWS Systems Manager Agent sent to Amazon CloudWatch Logs.
- C. Download and run the EC2Rescue for Windows Server utility from AWS.
- D. Reboot the EC2 Windows Server, enter safe mode, and select memory dump.

**Answer:** B

#### NEW QUESTION 57

- (Exam Topic 1)

A company has decided to migrate sensitive documents from on-premises data centers to Amazon S3. Currently, the hard drives are encrypted to meet a compliance requirement regarding data encryption. The CISO wants to improve security by encrypting each file using a different key instead of a single key. Using a different key would limit the security impact of a single exposed key.

Which of the following requires the LEAST amount of configuration when implementing this approach?

- A. Place each file into a different S3 bucket
- B. Set the default encryption of each bucket to use a different AWS KMS customer managed key.
- C. Put all the files in the same S3 bucket
- D. Using S3 events as a trigger, write an AWS Lambda function to encrypt each file as it is added using different AWS KMS data keys.
- E. Use the S3 encryption client to encrypt each file individually using S3-generated data keys
- F. Place all the files in the same S3 bucket
- G. Use server-side encryption with AWS KMS-managed keys (SSE-KMS) to encrypt the data

**Answer: C**

#### NEW QUESTION 62

- (Exam Topic 1)

The Development team receives an error message each time the team members attempt to encrypt or decrypt a Secure String parameter from the SSM Parameter Store by using an AWS KMS customer managed key (CMK).

Which CMK-related issues could be responsible? (Choose two.)

- A. The CMK specified in the application does not exist.
- B. The CMK specified in the application is currently in use.
- C. The CMK specified in the application is using the CMK KeyID instead of CMK Amazon Resource Name.
- D. The CMK specified in the application is not enabled.
- E. The CMK specified in the application is using an alias.

**Answer: AD**

#### Explanation:

[https://docs.amazonaws.cn/en\\_us/kms/latest/developerguide/services-parameter-store.html](https://docs.amazonaws.cn/en_us/kms/latest/developerguide/services-parameter-store.html)

#### NEW QUESTION 67

- (Exam Topic 1)

A company's Security Engineer has been asked to monitor and report all AWS account root user activities. Which of the following would enable the Security Engineer to monitor and report all root user activities?

(Select TWO)

- A. Configuring AWS Organizations to monitor root user API calls on the paying account
- B. Creating an Amazon CloudWatch Events rule that will trigger when any API call from the root user is reported
- C. Configuring Amazon Inspector to scan the AWS account for any root user activity
- D. Configuring AWS Trusted Advisor to send an email to the Security team when the root user logs in to the console
- E. Using Amazon SNS to notify the target group

**Answer: BE**

#### NEW QUESTION 69

- (Exam Topic 1)

The Security Engineer is managing a traditional three-tier web application that is running on Amazon EC2 instances. The application has become the target of increasing numbers of malicious attacks from the Internet.

What steps should the Security Engineer take to check for known vulnerabilities and limit the attack surface? (Choose two.)

- A. Use AWS Certificate Manager to encrypt all traffic between the client and application servers.
- B. Review the application security groups to ensure that only the necessary ports are open.
- C. Use Elastic Load Balancing to offload Secure Sockets Layer encryption.
- D. Use Amazon Inspector to periodically scan the backend instances.
- E. Use AWS Key Management Services to encrypt all the traffic between the client and application servers.

**Answer: BD**

#### NEW QUESTION 70

- (Exam Topic 1)

Unapproved changes were previously made to a company's Amazon S3 bucket. A security engineer configured AWS Config to record configuration changes made to the company's S3 buckets. The engineer discovers there are S3 configuration changes being made, but no Amazon SNS notifications are being sent. The engineer has already checked the configuration of the SNS topic and has confirmed the configuration is valid.

Which combination of steps should the security engineer take to resolve the issue? (Select TWO.)

- A. Configure the S3 bucket ACLs to allow AWS Config to record changes to the buckets.
- B. Configure policies attached to S3 buckets to allow AWS Config to record changes to the buckets.
- C. Attach the AmazonS3ReadOnlyAccess managed policy to the IAM user.
- D. Verify the security engineer's IAM user has an attached policy that allows all AWS Config actions.
- E. Assign the AWSConfigRole managed policy to the AWS Config role

**Answer: BE**

#### NEW QUESTION 71

- (Exam Topic 1)

An AWS account administrator created an IAM group and applied the following managed policy to require that each individual user authenticate using multi-factor authentication:

```
{
  "Version": "2012-10-17",
  "Statement": [
    {
      "Effect": "Allow",
      "Action": "ec2:*",
      "Resource": "*"
    },
    {
      "Sid": "BlockAnyAccessUnlessSignedInWithMFA",
      "Effect": "Deny",
      "Action": "ec2:*",
      "Resource": "*",
      "Condition": {
        "BoolIfExists": {
          "aws:MultiFactorAuthPresent": false
        }
      }
    }
  ]
}
```

After implementing the policy, the administrator receives reports that users are unable to perform Amazon EC2 commands using the AWS CLI. What should the administrator do to resolve this problem while still enforcing multi-factor authentication?

- A. Change the value of aws MultiFactorAuthPresent to true.
- B. Instruct users to run the `aws sts get-session-token` CLI command and pass the multi-factor authentication—`serial-number` and `token-code` parameter
- C. Use these resulting values to make API/CLI calls
- D. Implement federated API/CLI access using SAML 2.0, then configure the identity provider to enforce multi-factor authentication.
- E. Create a role and enforce multi-factor authentication in the role trust policy Instruct users to run the `sts assume-role` CLI command and pass `--serial-number` and `--token-code` parameters Store the resulting values in environment variable
- F. Add `sts:AssumeRole` to `NotAction` in the policy.

**Answer: B**

### NEW QUESTION 73

- (Exam Topic 1)

A recent security audit identified that a company's application team injects database credentials into the environment variables of an AWS Fargate task. The company's security policy mandates that all sensitive data be encrypted at rest and in transit.

When combination of actions should the security team take to make the application compliant within the security policy? (Select THREE)

- A. Store the credentials securely in a file in an Amazon S3 bucket with restricted access to the application team IAM role Ask the application team to read the credentials from the S3 object instead
- B. Create an AWS Secrets Manager secret and specify the key/value pairs to be stored in this secret
- C. Modify the application to pull credentials from the AWS Secrets Manager secret instead of the environment variables.
- D. Add the following statement to the container instance IAM role policy

```
{
  "Effect": "Allow",
  "Action": [
    "ssm:GetParameters",
    "secretsmanager:GetSecretValue",
    "kms:Decrypt"
  ],
  "Resource": [
    "arn:aws:secretsmanager:<region>:<aws_account_id>:secret:secret_name",
    "arn:aws:kms:<region>:<aws_account_id>:key/key_id"
  ]
}
```

- E. Add the following statement to the execution role policy.

```
{
  "Effect": "Allow",
  "Action": [
    "ssm:GetParameters",
    "secretsmanager:GetSecretValue",
    "kms:Decrypt"
  ],
  "Resource": [
    "arn:aws:secretsmanager:<region>:<aws_account_id>:secret:secret_name",
    "arn:aws:kms:<region>:<aws_account_id>:key/key_id"
  ]
}
```

- F. Log in to the AWS Fargate instance, create a script to read the secret value from AWS Secret Manager, and inject the environment variable
- G. Ask the application team to redeploy the application.

**Answer: BEF**

### NEW QUESTION 75

- (Exam Topic 1)

A company's development team is designing an application using AWS Lambda and Amazon Elastic Container Service (Amazon ECS). The development team needs to create IAM roles to support these systems. The company's security team wants to allow the developers to build IAM roles directly, but the security team wants to retain control over the permissions the developers can delegate to those roles. The development team needs access to more permissions than those required for the application's AWS services. The solution must minimize management overhead.

How should the security team prevent privilege escalation for both teams?

- A. Enable AWS CloudTrail
- B. Create a Lambda function that monitors the event history for privilege escalation events and notifies the security team.
- C. Create a managed IAM policy for the permissions require
- D. Reference the IAM policy as a permissions boundary within the development team's IAM role.

- E. Enable AWS Organizations Create an SCP that allows the IAM CreateUser action but that has a condition that prevents API calls other than those required by the development team
- F. Create an IAM policy with a deny on the IAMCreateUser action and assign the policy to the development team
- G. Use a ticket system to allow the developers to request new IAM roles for their application
- H. The IAM roles will then be created by the security team.

**Answer:** A

#### NEW QUESTION 80

- (Exam Topic 1)

A company has recently recovered from a security incident that required the restoration of Amazon EC2 instances from snapshots. After performing a gap analysis of its disaster recovery procedures and backup strategies, the company is concerned that, next time, it will not be able to recover the EC2 instances if the AWS account was compromised and Amazon EBS snapshots were deleted. All EBS snapshots are encrypted using an AWS KMS CMK. Which solution would solve this problem?

- A. Create a new Amazon S3 bucket Use EBS lifecycle policies to move EBS snapshots to the new S3 bucket
- B. Move snapshots to Amazon S3 Glacier using lifecycle policies, and apply Glacier Vault Lock policies to prevent deletion
- C. Use AWS Systems Manager to distribute a configuration that performs local backups of all attached disks to Amazon S3.
- D. Create a new AWS account with limited privilege
- E. Allow the new account to access the AWS KMS key used to encrypt the EBS snapshots, and copy the encrypted snapshots to the new account on a recurring basis
- F. Use AWS Backup to copy EBS snapshots to Amazon S3.

**Answer:** A

#### NEW QUESTION 84

- (Exam Topic 1)

A Security Engineer has several thousand Amazon EC2 instances split across production and development environments. Each instance is tagged with its environment. The Engineer needs to analyze and patch all the development EC2 instances to ensure they are not currently exposed to any common vulnerabilities or exposures (CVEs)

Which combination of steps is the MOST efficient way for the Engineer to meet these requirements? (Select TWO.)

- A. Log on to each EC2 instance, check and export the different software versions installed, and verify this against a list of current CVEs.
- B. Install the Amazon Inspector agent on all development instances Build a custom rule package, and configure Inspector to perform a scan using this custom rule on all instances tagged as being in the development environment.
- C. Install the Amazon Inspector agent on all development instances Configure Inspector to perform a scan using the CVE rule package on all instances tagged as being in the development environment.
- D. Install the Amazon EC2 System Manager agent on all development instances Issue the Run command to EC2 System Manager to update all instances
- E. Use AWS Trusted Advisor to check that all EC2 instances have been patched to the most recent version of operating system and installed software.

**Answer:** CD

#### NEW QUESTION 86

- (Exam Topic 1)

A security engineer needs to ensure their company's uses of AWS meets AWS security best practices. As part of this, the AWS account root user must not be used for daily work. The root user must be monitored for use, and the Security team must be alerted as quickly as possible if the root user is used. Which solution meets these requirements?

- A. Set up an Amazon CloudWatch Events rule that triggers an Amazon SNS notification.
- B. Set up an Amazon CloudWatch Events rule that triggers an Amazon SNS notification logs from S3 and generate notifications using Amazon SNS.
- C. Set up a rule in AWS config to trigger root user event
- D. Trigger an AWS Lambda function and generate notifications using Amazon SNS.
- E. Use Amazon Inspector to monitor the usage of the root user and generate notifications using Amazon SNS

**Answer:** A

#### NEW QUESTION 91

- (Exam Topic 1)

A security engineer is designing a solution that will provide end-to-end encryption between clients and Docker containers running in Amazon Elastic Container Service (Amazon ECS). This solution will also handle volatile traffic patterns

Which solution would have the MOST scalability and LOWEST latency?

- A. Configure a Network Load Balancer to terminate the TLS traffic and then re-encrypt the traffic to the containers
- B. Configure an Application Load Balancer to terminate the TLS traffic and then re-encrypt the traffic to the containers
- C. Configure a Network Load Balancer with a TCP listener to pass through TLS traffic to the containers
- D. Configure Amazon Route 53 to use multivalued answer routing to send traffic to the containers

**Answer:** A

#### NEW QUESTION 94

- (Exam Topic 1)

An external Auditor finds that a company's user passwords have no minimum length. The company is currently using two identity providers:

- AWS IAM federated with on-premises Active Directory
- Amazon Cognito user pools to accessing an AWS Cloud application developed by the company Which combination of actions should the Security Engineer take to solve this issue? (Select TWO.)

- A. Update the password length policy in the on-premises Active Directory configuration.
- B. Update the password length policy in the IAM configuration.

- C. Enforce an IAM policy in Amazon Cognito and AWS IAM with a minimum password length condition.
- D. Update the password length policy in the Amazon Cognito configuration.
- E. Create an SCP with AWS Organizations that enforces a minimum password length for AWS IAM and Amazon Cognito.

**Answer:** AD

#### NEW QUESTION 98

- (Exam Topic 1)

A company uses multiple AWS accounts managed with AWS Organizations. Security engineers have created a standard set of security groups for all these accounts. The security policy requires that these security groups be used for all applications and delegates modification authority to the security team only. A recent security audit found that the security groups are inconsistently implemented across accounts and that unauthorized changes have been made to the security groups. A security engineer needs to recommend a solution to improve consistency and to prevent unauthorized changes in the individual accounts in the future.

Which solution should the security engineer recommend?

- A. Use AWS Resource Access Manager to create shared resources for each required security group and apply an IAM policy that permits read-only access to the security groups only.
- B. Create an AWS CloudFormation template that creates the required security groups. Execute the template as part of configuring new accounts. Enable Amazon Simple Notification Service (Amazon SNS) notifications when changes occur.
- C. Use AWS Firewall Manager to create a security group policy, enable the policy feature to identify and revert local changes, and enable automatic remediation.
- D. Use AWS Control Tower to edit the account factory template to enable the shared security groups option. Apply an SCP to the OU or individual accounts that prohibits security group modifications from local account users.

**Answer:** B

#### NEW QUESTION 99

- (Exam Topic 1)

A company is building a data lake on Amazon S3. The data consists of millions of small files containing sensitive information. The security team has the following requirements for the architecture:

- Data must be encrypted in transit.
- Data must be encrypted at rest.
- The bucket must be private, but if the bucket is accidentally made public, the data must remain confidential. Which combination of steps would meet the requirements? (Select THREE.)

- A. Enable AES-256 encryption using server-side encryption with Amazon S3-managed encryption keys (SSE-S3) on the S3 bucket.
- B. Enable default encryption with server-side encryption with AWS KMS-managed keys (SSE-KMS) on the S3 bucket.
- C. Add a bucket policy that includes a deny if a PutObject request does not include `aws:SecureTransport`.
- D. Add a bucket policy with `aws:SourceIp` to allow uploads and downloads from the corporate intranet only.
- E. Add a bucket policy that includes a deny if a PutObject request does not include `s3:x-amz-side-encryption: "aws:kms"`.
- F. Enable Amazon Macie to monitor and act on changes to the data lake's S3 bucket.

**Answer:** BDF

#### NEW QUESTION 102

- (Exam Topic 1)

A company is using AWS Organizations to manage multiple AWS accounts. The company has an application that allows users to assume the AppUser IAM role to download files from an Amazon S3 bucket that is encrypted with an AWS KMS CMK. However, when users try to access the files in the S3 bucket, they get an access denied error.

What should a Security Engineer do to troubleshoot this error? (Select THREE.)

- A. Ensure the KMS policy allows the AppUser role to have permission to decrypt for the CMK.
- B. Ensure the S3 bucket policy allows the AppUser role to have permission to get objects for the S3 bucket.
- C. Ensure the CMK was created before the S3 bucket.
- D. Ensure the S3 block public access feature is enabled for the S3 bucket.
- E. Ensure that automatic key rotation is disabled for the CMK.
- F. Ensure the SCPs within Organizations allow access to the S3 bucket.

**Answer:** ABF

#### NEW QUESTION 107

- (Exam Topic 1)

A security engineer has noticed that VPC Flow Logs are getting a lot of REJECT traffic originating from a single Amazon EC2 instance in an Auto Scaling group. The security engineer is concerned that this EC2 instance may be compromised.

What immediate action should the security engineer take? What immediate action should the security engineer take?

- A. Remove the instance from the Auto Scaling group. Close the security group ingress only from a single forensic IP address to perform an analysis.
- B. Remove the instance from the Auto Scaling group. Change the network ACL rules to allow traffic only from a single forensic IP address to perform an analysis. Add a rule to deny all other traffic.
- C. Remove the instance from the Auto Scaling group. Enable Amazon GuardDuty in that AWS account. Install the Amazon Inspector agent on the suspicious EC2 instance to perform a scan.
- D. Take a snapshot of the suspicious EC2 instance.
- E. Create a new EC2 instance from the snapshot in a closed security group with ingress only from a single forensic IP address to perform an analysis.

**Answer:** B

#### NEW QUESTION 112

- (Exam Topic 1)

A security engineer has been tasked with implementing a solution that allows the company's development team to have interactive command line access to

Amazon EC2 Linux instances using the AWS Management Console.

Which steps should the security engineer take to satisfy this requirement while maintaining least privilege?

- A. Enable AWS Systems Manager in the AWS Management Console and configure for access to EC2 instances using the default AmazonEC2RoleforSSM role
- B. Install the Systems Manager Agent on all EC2 Linux instances that need interactive access
- C. Configure IAM user policies to allow development team access to the Systems Manager Session Manager and attach to the team's IAM users.
- D. Enable console SSH access in the EC2 console
- E. Configure IAM user policies to allow development team access to the AWS Systems Manager Session Manager and attach to the development team's IAM users.
- F. Enable AWS Systems Manager in the AWS Management Console and configure to access EC2 instances using the default AmazonEC2RoleforSSM role
- G. Install the Systems Manager Agent on all EC2 Linux instances that need interactive access
- H. Configure a security group that allows SSH port 22 from all published IP addresses
- I. Configure IAM user policies to allow development team access to the AWS Systems Manager Session Manager and attach to the team's IAM users.
- J. Enable AWS Systems Manager in the AWS Management Console and configure to access EC2 instances using the default AmazonEC2RoleforSSM role. Install the Systems Manager Agent on all EC2 Linux instances that need interactive access
- K. Configure IAM policies to allow development team access to the EC2 console and attach to the team's IAM users.

**Answer: A**

#### NEW QUESTION 114

- (Exam Topic 1)

A company hosts its public website on Amazon EC2 instances behind an Application Load Balancer (ALB). The instances are in an EC2 Auto Scaling group across multiple Availability Zones. The website is under a DDoS attack by a specific IoT device brand that is visible in the user agent. A security engineer needs to mitigate the attack without impacting the availability of the public website.

What should the security engineer do to accomplish this?

- A. Configure a web ACL rule for AWS WAF to block requests with a string match condition for the user agent of the IoT device
- B. Associate the web ACL with the ALB.
- C. Configure an Amazon CloudFront distribution to use the ALB as an origin
- D. Configure a web ACL rule for AWS WAF to block requests with a string match condition for the user agent of the IoT device
- E. Associate the web ACL with the ALB. Change the public DNS entry of the website to point to the CloudFront distribution.
- F. Configure an Amazon CloudFront distribution to use a new ALB as an origin
- G. Configure a web ACL rule for AWS WAF to block requests with a string match condition for the user agent of the IoT device
- H. Change the ALB security group to allow access from CloudFront IP address ranges only. Change the public DNS entry of the website to point to the CloudFront distribution.
- I. Activate AWS Shield Advanced to enable DDoS protection
- J. Apply an AWS WAF ACL to the ALB
- K. and configure a listener rule on the ALB to block IoT devices based on the user agent.

**Answer: D**

#### NEW QUESTION 118

- (Exam Topic 1)

A Web Administrator for the website example.com has created an Amazon CloudFront distribution for dev.example.com, with a requirement to configure HTTPS using a custom TLS certificate imported to AWS Certificate Manager.

Which combination of steps is required to ensure availability of the certificate in the CloudFront console? (Choose two.)

- A. Call UploadServerCertificate with /cloudfront/dev/ in the path parameter.
- B. Import the certificate with a 4,096-bit RSA public key.
- C. Ensure that the certificate, private key, and certificate chain are PKCS #12-encoded.
- D. Import the certificate in the us-east-1 (
- E. Virginia) Region.
- F. Ensure that the certificate, private key, and certificate chain are PEM-encoded.

**Answer: DE**

#### NEW QUESTION 121

- (Exam Topic 1)

A Security Engineer creates an Amazon S3 bucket policy that denies access to all users. A few days later, the Security Engineer adds an additional statement to the bucket policy to allow read-only access to one other employee. Even after updating the policy the employee still receives an access denied message.

What is the likely cause of this access denial?

- A. The ACL in the bucket needs to be updated.
- B. The IAM policy does not allow the user to access the bucket
- C. It takes a few minutes for a bucket policy to take effect
- D. The allow permission is being overridden by the deny.

**Answer: D**

#### NEW QUESTION 122

- (Exam Topic 1)

A company is developing a new mobile app for social media sharing. The company's development team has decided to use Amazon S3 to store media files generated by mobile app users. The company wants to allow users to control whether their own files are public, private, or shared with other users in their social network. What should the development team do to implement the type of access control with the LEAST administrative effort?

- A. Use individual ACLs on each S3 object.
- B. Use IAM groups for sharing files between application social network users
- C. Store each user's files in a separate S3 bucket and apply a bucket policy based on the user's sharing settings
- D. Generate presigned URLs for each file access

**Answer:** A

**NEW QUESTION 125**

- (Exam Topic 1)

A large government organization is moving to the cloud and has specific encryption requirements. The first workload to move requires that a customer's data be immediately destroyed when the customer makes that request.

Management has asked the security team to provide a solution that will securely store the data, allow only authorized applications to perform encryption and decryption and allow for immediate destruction of the data

Which solution will meet these requirements?

- A. Use AWS Secrets Manager and an AWS SDK to create a unique secret for the customer-specific data
- B. Use AWS Key Management Service (AWS KMS) and the AWS Encryption SDK to generate and store a data encryption key for each customer.
- C. Use AWS Key Management Service (AWS KMS) with service-managed keys to generate and store customer-specific data encryption keys
- D. Use AWS Key Management Service (AWS KMS) and create an AWS CloudHSM custom key store Use CloudHSM to generate and store a new CMK for each customer.

**Answer:** A

**NEW QUESTION 127**

- (Exam Topic 1)

A Security Administrator at a university is configuring a fleet of Amazon EC2 instances. The EC2 instances are shared among students, and non-root SSH access is allowed. The Administrator is concerned about students attacking other AWS account resources by using the EC2 instance metadata service.

What can the Administrator do to protect against this potential attack?

- A. Disable the EC2 instance metadata service.
- B. Log all student SSH interactive session activity.
- C. Implement ip tables-based restrictions on the instances.
- D. Install the Amazon Inspector agent on the instances.

**Answer:** A

**Explanation:**

"To turn off access to instance metadata on an existing instance....." <https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/configuring-instance-metadata-service.html> You can disable the service for existing (running or stopped) ec2 instances. <https://docs.aws.amazon.com/cli/latest/reference/ec2/modify-instance-metadata-options.html>

**NEW QUESTION 132**

- (Exam Topic 1)

A Security Engineer is troubleshooting a connectivity issue between a web server that is writing log files to the logging server in another VPC. The Engineer has confirmed that a peering relationship exists between the two VPCs. VPC flow logs show that requests sent from the web server are accepted by the logging server but the web server never receives a reply

Which of the following actions could fix this issue?

- A. Add an inbound rule to the security group associated with the logging server that allows requests from the web server
- B. Add an outbound rule to the security group associated with the web server that allows requests to the logging server.
- C. Add a route to the route table associated with the subnet that hosts the logging server that targets the peering connection
- D. Add a route to the route table associated with the subnet that hosts the web server that targets the peering connection

**Answer:** C

**NEW QUESTION 134**

- (Exam Topic 1)

A Security Engineer has discovered that, although encryption was enabled on the Amazon S3 bucket example bucket, anyone who has access to the bucket has the ability to retrieve the files. The Engineer wants to limit access to each IAM user can access an assigned folder only.

What should the Security Engineer do to achieve this?

- A. Use envelope encryption with the AWS-managed CMK aws/s3.
- B. Create a customer-managed CMK with a key policy granting "kms:Decrypt" based on the "\${aws:username}" variable.
- C. Create a customer-managed CMK for each use
- D. Add each user as a key user in their corresponding key policy.
- E. Change the applicable IAM policy to grant S3 access to "Resource": "arn:aws:s3:::examplebucket/\${aws:username}/\*"

**Answer:** B

**Explanation:**

Reference: <https://aws.amazon.com/premiumsupport/knowledge-center/iam-s3-user-specific-folder/>

**NEW QUESTION 139**

- (Exam Topic 2)

A Security Engineer who was reviewing AWS Key Management Service (AWS KMS) key policies found this statement in each key policy in the company AWS account.

```
{
  "Sid": "Enable IAM User Permissions",
  "Effect": "Allow",
  "Principal": {
    "AWS": "arn:aws:iam::111122223333:root"
  },
  "Action": "kms:*",
  "Resource": "*"
}
```

What does the statement allow?

- A. All principals from all AWS accounts to use the key.
- B. Only the root user from account 111122223333 to use the key.
- C. All principals from account 111122223333 to use the key but only on Amazon S3.
- D. Only principals from account 111122223333 that have an IAM policy applied that grants access to this key to use the key.

**Answer: D**

#### NEW QUESTION 142

- (Exam Topic 2)

A Software Engineer wrote a customized reporting service that will run on a fleet of Amazon EC2 instances. The company security policy states that application logs for the reporting service must be centrally collected.

What is the MOST efficient way to meet these requirements?

- A. Write an AWS Lambda function that logs into the EC2 instance to pull the application logs from the EC2 instance and persists them into an Amazon S3 bucket.
- B. Enable AWS CloudTrail logging for the AWS account, create a new Amazon S3 bucket, and then configure Amazon CloudWatch Logs to receive the application logs from CloudTrail.
- C. Create a simple cron job on the EC2 instances that synchronizes the application logs to an Amazon S3 bucket by using rsync.
- D. Install the Amazon CloudWatch Logs Agent on the EC2 instances, and configure it to send the application logs to CloudWatch Logs.

**Answer: D**

#### Explanation:

<https://aws.amazon.com/blogs/aws/cloudwatch-log-service/>

#### NEW QUESTION 144

- (Exam Topic 2)

You are devising a policy to allow users to have the ability to access objects in a bucket called appbucket. You define the below custom bucket policy

```
{ "ID": "Policy1502987489630",
  "Version": "2012-10-17",
  "Statement": [
    {
      "Sid": "Stmnt1502987487640",
      "Action": [
        "s3:GetObject",
        "s3:GetObjectVersion"
      ],
      "Effect": "Allow",
      "Resource": "arn:aws:s3:::appbucket",
      "Principal": "*"
    }
  ]
}
```

But when you try to apply the policy you get the error "Action does not apply to any resource(s) in statement." What should be done to rectify the error Please select:

- A. Change the IAM permissions by applying PutBucketPolicy permissions.
- B. Verify that the policy has the same name as the bucket nam
- C. If no
- D. make it the same.
- E. Change the Resource section to "arn:aws:s3:::appbucket/\*".
- F. Create the bucket "appbucket" and then apply the policy.

**Answer: C**

#### Explanation:

When you define access to objects in a bucket you need to ensure that you specify to which objects in the bucket access needs to be given to. In this case, the \*

can be used to assign the permission to all objects in the bucket

Option A is invalid because the right permissions are already provided as per the question requirement Option B is invalid because it is not necessary that the policy has the same name as the bucket

Option D is invalid because this should be the default flow for applying the policy For more information on bucket policies please visit the below URL:

<https://docs.aws.amazon.com/AmazonS3/latest/dev/example-bucket-policies.html>

The correct answer is: Change the Resource section to "arn:aws:s3:::appbucket/" Submit your Feedback/Queries to our Experts

#### NEW QUESTION 149

- (Exam Topic 2)

An organization is using AWS CloudTrail, Amazon CloudWatch Logs, and Amazon CloudWatch to send alerts when new access keys are created. However, the alerts are no longer appearing in the Security Operations mail box.

Which of the following actions would resolve this issue?

- A. In CloudTrail, verify that the trail logging bucket has a log prefix configured.
- B. In Amazon SNS, determine whether the "Account spend limit" has been reached for this alert.
- C. In SNS, ensure that the subscription used by these alerts has not been deleted.
- D. In CloudWatch, verify that the alarm threshold "consecutive periods" value is equal to, or greater than 1.

**Answer: C**

#### NEW QUESTION 154

- (Exam Topic 2)

A company will store sensitive documents in three Amazon S3 buckets based on a data classification scheme of "Sensitive," "Confidential," and "Restricted."

The security solution must meet all of the following requirements:

- > Each object must be encrypted using a unique key.
- > Items that are stored in the "Restricted" bucket require two-factor authentication for decryption.
- > AWS KMS must automatically rotate encryption keys annually.

Which of the following meets these requirements?

- A. Create a Customer Master Key (CMK) for each data classification type, and enable the rotation of it annual
- B. For the "Restricted" CMK, define the MFA policy within the key polic
- C. Use S3 SSE-KMS to encrypt the objects.
- D. Create a CMK grant for each data classification type with EnableKeyRotation and MultiFactorAuthPresent set to tru
- E. S3 can then use the grants to encrypt each object with a unique CMK.
- F. Create a CMK for each data classification type, and within the CMK policy, enable rotation of it annually, and define the MFA polic
- G. S3 can then create DEK grants to uniquely encrypt each object within the S3 bucket.
- H. Create a CMK with unique imported key material for each data classification type, and rotate them annual
- I. For the "Restricted" key material, define the MFA policy in the key polic
- J. Use S3 SSE-KMS to encrypt the objects.

**Answer: A**

#### Explanation:

CMKs that are not eligible for automatic key rotation, including asymmetric CMKs, CMKs in custom key stores, and CMKs with imported key material.

#### NEW QUESTION 159

- (Exam Topic 2)

A Security Engineer must enforce the use of only Amazon EC2, Amazon S3, Amazon RDS, Amazon DynamoDB, and AWS STS in specific accounts.

What is a scalable and efficient approach to meet this requirement?

- A Set up an AWS Organizations hierarchy, and replace the FullAWSAccess policy with the following Service Control Policy for the governed organization units:

```
{
  "Version": "2012-10-17",
  "Statement": [
    {
      "Action": [
        "dynamodb:*", "rds:*", "ec2:*",
        "s3:*", "sts:*"
      ],
      "Effect": "Allow",
      "Resource": "*"
    }
  ]
}
```

B Create multiple IAM users for the regulated accounts, and attach the following policy statement to restrict services as required:

```
{
  "Version": "2012-10-17",
  "Statement": [
    {
      "Action": *
      "Effect": "Allow",
      "Resource": "*"
    }
    {
      "NotAction": [
        "dynamodb:*", "rds:*", "ec2:*",
"s3:*", "sts:*"
      ],
      "Effect": "Deny ",
      "Resource": "*"
    }
  ]
}
```

C Set up an Organizations hierarchy, replace the global FullAWSAccess with the following Service Control Policy at the top level:

```
{
  "Version": "2012-10-17",
  "Statement": [
    {
      "Action": [
        "dynamodb:*", "rds:*", "ec2:*",
"s3:*", "sts:*"
      ],
      "Effect": "Allow",
      "Resource": "*"
    }
  ]
}
```

D Set up all users in the Active Directory for federated access to all accounts in the company. Associate Active Directory groups with IAM groups, and attach the following policy statement to restrict services as required:

```
{
  "Version": "2012-10-17",
  "Statement": [
    {
      "Action": *
      "Effect": "Allow",
      "Resource": "*"
    }
    {
      "NotAction": [
        "dynamodb:*", "rds:*", "ec2:*",
"s3:*", "sts:*"
      ],
      "Effect": "Deny ",
      "Resource": "*"
    }
  ]
}
```

- A. Option A
- B. Option B
- C. Option C

D. Option D

**Answer:** A

**Explanation:**

It says specific accounts which mean specific governed OUs under your organization and you apply specific service control policy to these OUs.

**NEW QUESTION 162**

- (Exam Topic 2)

A Systems Administrator has written the following Amazon S3 bucket policy designed to allow access to an S3 bucket for only an authorized AWS IAM user from the IP address range 10.10.10.0/24:

```
{
  "Version": "2012-10-17",
  "Id": "S3Policy1",
  "Statement": [
    {
      "Sid": ["OfficeAllowIP"],
      "Effect": ["Allow"],
      "Principal": ["*"],
      "Action": ["s3:*"],
      "Resource": ["arn:aws:s3:::Bucket"],
      "Condition": {
        "IpAddress": [
          {"aws: SourceIp": "10.10.10.0/24"}
        ]
      }
    }
  ]
}
```

When trying to download an object from the S3 bucket from 10.10.10.40, the IAM user receives an access denied message. What does the Administrator need to change to grant access to the user?

- A. Change the "Resource" from "arn: aws:s3:::Bucket" to "arn:aws:s3:::Bucket/\*".
- B. Change the "Principal" from "\*" to {"AWS:"arn:aws:iam: : account-number: user/username"}
- C. Change the "Version" from "2012-10-17" to the last revised date of the policy
- D. Change the "Action" from ["s3:\*"] to ["s3:GetObject", "s3:ListBucket"]

**Answer:** A

**NEW QUESTION 165**

- (Exam Topic 2)

A Security Engineer must design a solution that enables the Incident Response team to audit for changes to a user's IAM permissions in the case of a security incident.

How can this be accomplished?

- A. Use AWS Config to review the IAM policy assigned to users before and after the incident.
- B. Run the GenerateCredentialReport via the AWS CLI, and copy the output to Amazon S3 daily for auditing purposes.
- C. Copy AWS CloudFormation templates to S3, and audit for changes from the template.
- D. Use Amazon EC2 Systems Manager to deploy images, and review AWS CloudTrail logs for changes.

**Answer:** A

**Explanation:**

<https://aws.amazon.com/blogs/security/how-to-record-and-govern-your-iam-resource-configurations-using-aws>

**NEW QUESTION 170**

- (Exam Topic 2)

A Security Engineer is trying to determine whether the encryption keys used in an AWS service are in compliance with certain regulatory standards. Which of the following actions should the Engineer perform to get further guidance?

- A. Read the AWS Customer Agreement.

- B. Use AWS Artifact to access AWS compliance reports.
- C. Post the question on the AWS Discussion Forums.
- D. Run AWS Config and evaluate the configuration outputs.

**Answer:** A

**Explanation:**

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

**NEW QUESTION 172**

- (Exam Topic 2)

A company has a few dozen application servers in private subnets behind an Elastic Load Balancer (ELB) in an AWS Auto Scaling group. The application is accessed from the web over HTTPS. The data must always be encrypted in transit. The Security Engineer is worried about potential key exposure due to vulnerabilities in the application software.

Which approach will meet these requirements while protecting the external certificate during a breach?

- A. Use a Network Load Balancer (NLB) to pass through traffic on port 443 from the internet to port 443 on the instances.
- B. Purchase an external certificate, and upload it to the AWS Certificate Manager (for use with the ELB) and to the instance
- C. Have the ELB decrypt traffic, and route and re-encrypt with the same certificate.
- D. Generate an internal self-signed certificate and apply it to the instance
- E. Use AWS Certificate Manager to generate a new external certificate for the EL
- F. Have the ELB decrypt traffic, and route and re-encrypt with the internal certificate.
- G. Upload a new external certificate to the load balance
- H. Have the ELB decrypt the traffic and forward it on port 80 to the instances.

**Answer:** C

**NEW QUESTION 173**

- (Exam Topic 2)

A security alert has been raised for an Amazon EC2 instance in a customer account that is exhibiting strange behavior. The Security Engineer must first isolate the EC2 instance and then use tools for further investigation.

What should the Security Engineer use to isolate and research this event? (Choose three.)

- A. AWS CloudTrail
- B. Amazon Athena
- C. AWS Key Management Service (AWS KMS)
- D. VPC Flow Logs
- E. AWS Firewall Manager
- F. Security groups

**Answer:** ADF

**Explanation:**

[https://github.com/awslabs/aws-well-architected-labs/blob/master/Security/300\\_Incident\\_Response\\_with\\_AWS](https://github.com/awslabs/aws-well-architected-labs/blob/master/Security/300_Incident_Response_with_AWS)

**NEW QUESTION 175**

- (Exam Topic 2)

An application makes calls to AWS services using the AWS SDK. The application runs on Amazon EC2 instances with an associated IAM role. When the application attempts to access an object within an Amazon S3 bucket; the Administrator receives the following error message: HTTP 403: Access Denied.

Which combination of steps should the Administrator take to troubleshoot this issue? (Select three.)

- A. Confirm that the EC2 instance's security group authorizes S3 access.
- B. Verify that the KMS key policy allows decrypt access for the KMS key for this IAM principle.
- C. Check the S3 bucket policy for statements that deny access to objects.
- D. Confirm that the EC2 instance is using the correct key pair.
- E. Confirm that the IAM role associated with the EC2 instance has the proper privileges.
- F. Confirm that the instance and the S3 bucket are in the same Region.

**Answer:** BCE

**NEW QUESTION 176**

- (Exam Topic 2)

What are the MOST secure ways to protect the AWS account root user of a recently opened AWS account? (Choose two.)

- A. Use the AWS account root user access keys instead of the AWS Management Console
- B. Enable multi-factor authentication for the AWS IAM users with the AdministratorAccess managed policy attached to them
- C. Enable multi-factor authentication for the AWS account root user
- D. Use AWS KMS to encrypt all AWS account root user and AWS IAM access keys and set automatic rotation to 30 days
- E. Do not create access keys for the AWS account root user; instead, create AWS IAM users

**Answer:** CE

**NEW QUESTION 178**

- (Exam Topic 2)

A company stores data on an Amazon EBS volume attached to an Amazon EC2 instance. The data is asynchronously replicated to an Amazon S3 bucket. Both the EBS volume and the S3 bucket are encrypted with the same AWS KMS Customer Master Key (CMK). A former employee scheduled a deletion of that CMK before leaving the company.

The company's Developer Operations department learns about this only after the CMK has been deleted. Which steps must be taken to address this situation?

- A. Copy the data directly from the EBS encrypted volume before the volume is detached from the EC2 instance.
- B. Recover the data from the EBS encrypted volume using an earlier version of the KMS backing key.
- C. Make a request to AWS Support to recover the S3 encrypted data.
- D. Make a request to AWS Support to restore the deleted CMK, and use it to recover the data.

**Answer: C**

#### NEW QUESTION 182

- (Exam Topic 2)

Example.com hosts its internal document repository on Amazon EC2 instances. The application runs on EC2 instances and previously stored the documents on encrypted Amazon EBS volumes. To optimize the application for scale, example.com has moved the files to Amazon S3. The security team has mandated that all the files are securely deleted from the EBS volume, and it must certify that the data is unreadable before releasing the underlying disks.

Which of the following methods will ensure that the data is unreadable by anyone else?

- A. Change the volume encryption on the EBS volume to use a different encryption mechanism.
- B. Then, release the EBS volumes back to AWS.
- C. Release the volumes back to AWS.
- D. AWS immediately wipes the disk after it is deprovisioned.
- E. Delete the encryption key used to encrypt the EBS volume.
- F. Then, release the EBS volumes back to AWS.
- G. Delete the data by using the operating system delete command.
- H. Run Quick Format on the drive and then release the EBS volumes back to AWS.

**Answer: D**

#### Explanation:

Amazon EBS volumes are presented to you as raw unformatted block devices that have been wiped prior to being made available for use. Wiping occurs immediately before reuse so that you can be assured that the wipe process completed. If you have procedures requiring that all data be wiped via a specific method, such as those detailed in NIST 800-88 ("Guidelines for Media Sanitization"), you have the ability to do so on Amazon EBS. You should conduct a specialized wipe procedure prior to deleting the volume for compliance with your established requirements.

<https://d0.awsstatic.com/whitepapers/aws-security-whitepaper.pdf>

#### NEW QUESTION 185

- (Exam Topic 2)

While analyzing a company's security solution, a Security Engineer wants to secure the AWS account root user.

What should the Security Engineer do to provide the highest level of security for the account?

- A. Create a new IAM user that has administrator permissions in the AWS account.
- B. Delete the password for the AWS account root user.
- C. Create a new IAM user that has administrator permissions in the AWS account.
- D. Modify the permissions for the existing IAM users.
- E. Replace the access key for the AWS account root user.
- F. Delete the password for the AWS account root user.
- G. Create a new IAM user that has administrator permissions in the AWS account.
- H. Enable multi-factor authentication for the AWS account root user.

**Answer: D**

#### Explanation:

If you continue to use the root user credentials, we recommend that you follow the security best practice to enable multi-factor authentication (MFA) for your account. Because your root user can perform sensitive operations in your account, adding an additional layer of authentication helps you to better secure your account. Multiple types of MFA are available.

#### NEW QUESTION 190

- (Exam Topic 2)

The Security Engineer implemented a new vault lock policy for 10TB of data and called initiate-vault-lock 12 hours ago. The Audit team identified a typo that is allowing incorrect access to the vault.

What is the MOST cost-effective way to correct this?

- A. Call the abort-vault-lock operation, fix the typo, and call the initiate-vault-lock again.
- B. Copy the vault data to Amazon S3, delete the vault, and create a new vault with the data.
- C. Update the policy, keeping the vault lock in place.
- D. Update the policy and call initiate-vault-lock again to apply the new policy.

**Answer: A**

#### Explanation:

Initiate the lock by attaching a vault lock policy to your vault, which sets the lock to an in-progress state and returns a lock ID. While in the in-progress state, you have 24 hours to validate your vault lock policy before the lock ID expires. Use the lock ID to complete the lock process. If the vault lock policy doesn't work as expected, you can abort the lock and restart from the beginning. For information on how to use the S3 Glacier API to lock a vault, see Locking a Vault by Using the Amazon S3 Glacier API. <https://docs.aws.amazon.com/amazonglacier/latest/dev/vault-lock-policy.html>

#### NEW QUESTION 193

- (Exam Topic 2)

An organization receives an alert that indicates that an EC2 instance behind an ELB Classic Load Balancer has been compromised.

What techniques will limit lateral movement and allow evidence gathering?

- A. Remove the instance from the load balancer and terminate it.
- B. Remove the instance from the load balancer, and shut down access to the instance by tightening the security group.

- C. Reboot the instance and check for any Amazon CloudWatch alarms.
- D. Stop the instance and make a snapshot of the root EBS volume.

**Answer:** B

**Explanation:**

[https://d1.awsstatic.com/whitepapers/aws\\_security\\_incident\\_response.pdf](https://d1.awsstatic.com/whitepapers/aws_security_incident_response.pdf)

**NEW QUESTION 194**

- (Exam Topic 2)

A Security Engineer is building a Java application that is running on Amazon EC2. The application communicates with an Amazon RDS instance and authenticates with a user name and password.

Which combination of steps can the Engineer take to protect the credentials and minimize downtime when the credentials are rotated? (Choose two.)

- A. Have a Database Administrator encrypt the credentials and store the ciphertext in Amazon S3. Grant permission to the instance role associated with the EC2 instance to read the object and decrypt the ciphertext.
- B. Configure a scheduled job that updates the credential in AWS Systems Manager Parameter Store and notifies the Engineer that the application needs to be restarted.
- C. Configure automatic rotation of credentials in AWS Secrets Manager.
- D. Store the credential in an encrypted string parameter in AWS Systems Manager Parameter Store.
- E. Grant permission to the instance role associated with the EC2 instance to access the parameter and the AWS KMS key that is used to encrypt it.
- F. Configure the Java application to catch a connection failure and make a call to AWS Secrets Manager to retrieve updated credentials when the password is rotated.
- G. Grant permission to the instance role associated with the EC2 instance to access Secrets Manager.

**Answer:** CE

**NEW QUESTION 199**

- (Exam Topic 2)

Your company has mandated that all calls to the AWS KMS service be recorded. How can this be achieved? Please select:

- A. Enable logging on the KMS service
- B. Enable a trail in CloudTrail
- C. Enable Cloudwatch logs
- D. Use Cloudwatch metrics

**Answer:** B

**Explanation:**

The AWS Documentation states the following

AWS KMS is integrated with CloudTrail, a service that captures API calls made by or on behalf of AWS KMS in your AWS account and delivers the log files to an Amazon S3 bucket that you specify. CloudTrail captures API calls from the AWS KMS console or from the AWS KMS API. Using the information collected by CloudTrail, you can determine what request was made, the source IP address from which the request was made, who made the request when it was made, and so on.

Option A is invalid because logging is not possible in the KMS service

Option C and D are invalid because Cloudwatch cannot be used to monitor API calls For more information on logging using Cloudtrail please visit the below URL

<https://docs.aws.amazon.com/kms/latest/developerguide/loeeing-usine-cloudtrail.html> The correct answer is: Enable a trail in Cloudtrail

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**NEW QUESTION 202**

- (Exam Topic 2)

An application has been built with Amazon EC2 instances that retrieve messages from Amazon SQS. Recently, IAM changes were made and the instances can no longer retrieve messages.

What actions should be taken to troubleshoot the issue while maintaining least privilege. (Select two.)

- A. Configure and assign an MFA device to the role used by the instances.
- B. Verify that the SQS resource policy does not explicitly deny access to the role used by the instances.
- C. Verify that the access key attached to the role used by the instances is active.
- D. Attach the AmazonSQSFullAccess managed policy to the role used by the instances.
- E. Verify that the role attached to the instances contains policies that allow access to the queue.

**Answer:** BE

**NEW QUESTION 205**

- (Exam Topic 2)

A company uses AWS Organization to manage 50 AWS accounts. The finance staff members log in as AWS IAM users in the FinanceDept AWS account. The staff members need to read the consolidated billing information in the MasterPayer AWS account. They should not be able to view any other resources in the MasterPayer AWS account. IAM access to billing has been enabled in the MasterPayer account.

Which of the following approaches grants the finance staff the permissions they require without granting any unnecessary permissions?

- A. Create an IAM group for the finance users in the FinanceDept account, then attach the AWS managed ReadOnlyAccess IAM policy to the group.
- B. Create an IAM group for the finance users in the MasterPayer account, then attach the AWS managed ReadOnlyAccess IAM policy to the group.
- C. Create an AWS IAM role in the FinanceDept account with the ViewBilling permission, then grant the finance users in the MasterPayer account the permission to assume that role.
- D. Create an AWS IAM role in the MasterPayer account with the ViewBilling permission, then grant the finance users in the FinanceDept account the permission to assume that role.

**Answer:** D

**Explanation:**

AWS Region that You Request a Certificate In (for AWS Certificate Manager) If you want to require HTTPS between viewers and CloudFront, you must change the AWS region to US East (N. Virginia) in the AWS Certificate Manager console before you request or import a certificate. If you want to require HTTPS between CloudFront and your origin, and you're using an ELB load balancer as your origin, you can request or import a certificate in any region.  
<https://docs.aws.amazon.com/AmazonCloudFront/latest/DeveloperGuide/cnames-and-https-requirements.html>

**NEW QUESTION 209**

- (Exam Topic 2)

A Development team has asked for help configuring the IAM roles and policies in a new AWS account. The team using the account expects to have hundreds of master keys and therefore does not want to manage access control for customer master keys (CMKs). Which of the following will allow the team to manage AWS KMS permissions in IAM without the complexity of editing individual key policies?

- A. The account's CMK key policy must allow the account's IAM roles to perform KMS EnableKey.
- B. Newly created CMKs must have a key policy that allows the root principal to perform all actions.
- C. Newly created CMKs must allow the root principal to perform the kms CreateGrant API operation.
- D. Newly created CMKs must mirror the IAM policy of the KMS key administrator.

**Answer: B**

**Explanation:**

<https://docs.aws.amazon.com/kms/latest/developerguide/key-policies.html#key-policy-default-allow-root-enable>

**NEW QUESTION 212**

- (Exam Topic 2)

A Developer's laptop was stolen. The laptop was not encrypted, and it contained the SSH key used to access multiple Amazon EC2 instances. A Security Engineer has verified that the key has not been used, and has blocked port 22 to all EC2 instances while developing a response plan. How can the Security Engineer further protect currently running instances?

- A. Delete the key-pair key from the EC2 console, then create a new key pair.
- B. Use the modify-instance-attribute API to change the key on any EC2 instance that is using the key.
- C. Use the EC2 RunCommand to modify the authorized\_keys file on any EC2 instance that is using the key.
- D. Update the key pair in any AMI used to launch the EC2 instances, then restart the EC2 instances.

**Answer: C**

**NEW QUESTION 215**

- (Exam Topic 2)

A Software Engineer is trying to figure out why network connectivity to an Amazon EC2 instance does not appear to be working correctly. Its security group allows inbound HTTP traffic from 0.0.0.0/0, and the outbound rules have not been modified from the default. A custom network ACL associated with its subnet allows inbound HTTP traffic from 0.0.0.0/0 and has no outbound rules. What would resolve the connectivity issue?

- A. The outbound rules on the security group do not allow the response to be sent to the client on the ephemeral port range.
- B. The outbound rules on the security group do not allow the response to be sent to the client on the HTTP port.
- C. An outbound rule must be added to the network ACL to allow the response to be sent to the client on the ephemeral port range.
- D. An outbound rule must be added to the network ACL to allow the response to be sent to the client on the HTTP port.

**Answer: C**

**Explanation:**

<https://docs.aws.amazon.com/vpc/latest/userguide/vpc-network-acls.html>

**NEW QUESTION 216**

- (Exam Topic 2)

A threat assessment has identified a risk whereby an internal employee could exfiltrate sensitive data from production host running inside AWS (Account 1). The threat was documented as follows:

Threat description: A malicious actor could upload sensitive data from Server X by configuring credentials for an AWS account (Account 2) they control and uploading data to an Amazon S3 bucket within their control.

Server X has outbound internet access configured via a proxy server. Legitimate access to S3 is required so that the application can upload encrypted files to an S3 bucket. Server X is currently using an IAM instance role. The proxy server is not able to inspect any of the server communication due to TLS encryption.

Which of the following options will mitigate the threat? (Choose two.)

- A. Bypass the proxy and use an S3 VPC endpoint with a policy that whitelists only certain S3 buckets within Account 1.
- B. Block outbound access to public S3 endpoints on the proxy server.
- C. Configure Network ACLs on Server X to deny access to S3 endpoints.
- D. Modify the S3 bucket policy for the legitimate bucket to allow access only from the public IP addresses associated with the application server.
- E. Remove the IAM instance role from the application server and save API access keys in a trusted and encrypted application config file.

**Answer: AB**

**NEW QUESTION 217**

- (Exam Topic 2)

Some highly sensitive analytics workloads are to be moved to Amazon EC2 hosts. Threat modeling has found that a risk exists where a subnet could be maliciously or accidentally exposed to the internet.

Which of the following mitigations should be recommended?

- A. Use AWS Config to detect whether an Internet Gateway is added and use an AWS Lambda function to provide auto-remediation.
- B. Within the Amazon VPC configuration, mark the VPC as private and disable Elastic IP addresses.

- C. Use IPv6 addressing exclusively on the EC2 hosts, as this prevents the hosts from being accessed from the internet.
- D. Move the workload to a Dedicated Host, as this provides additional network security controls and monitoring.

**Answer:** A

**Explanation:**

By default, Private instance has a private IP address, but no public IP address. These instances can communicate with each other, but can't access the Internet. You can enable Internet access for an instance launched into a nondefault subnet by attaching an Internet gateway to its VPC (if its VPC is not a default VPC) and associating an Elastic IP address with the instance. Alternatively, to allow an instance in your VPC to initiate outbound connections to the Internet but prevent unsolicited inbound connections from the Internet, you can use a network address translation (NAT) instance. NAT maps multiple private IP addresses to a single public IP address. A NAT instance has an Elastic IP address and is connected to the Internet through an Internet gateway. You can connect an instance in a private subnet to the Internet through the NAT instance, which routes traffic from the instance to the Internet gateway, and routes any responses to the instance.

**NEW QUESTION 218**

- (Exam Topic 2)

An application outputs logs to a text file. The logs must be continuously monitored for security incidents. Which design will meet the requirements with MINIMUM effort?

- A. Create a scheduled process to copy the component's logs into Amazon S3. Use S3 events to trigger a Lambda function that updates Amazon CloudWatch metrics with the log data
- B. Set up CloudWatch alerts based on the metrics.
- C. Install and configure the Amazon CloudWatch Logs agent on the application's EC2 instance
- D. Create a CloudWatch metric filter to monitor the application log
- E. Set up CloudWatch alerts based on the metrics.
- F. Create a scheduled process to copy the application log files to AWS CloudTrail
- G. Use S3 events to trigger Lambda functions that update CloudWatch metrics with the log data
- H. Set up CloudWatch alerts based on the metrics.
- I. Create a file watcher that copies data to Amazon Kinesis when the application writes to the log file. Have Kinesis trigger a Lambda function to update Amazon CloudWatch metrics with the log data
- J. Set up CloudWatch alerts based on the metrics.

**Answer:** B

**Explanation:**

<https://docs.aws.amazon.com/AmazonCloudWatch/latest/logs/QuickStartEC2Instance.html>

**NEW QUESTION 221**

- (Exam Topic 2)

A company uses user data scripts that contain sensitive information to bootstrap Amazon EC2 instances. A Security Engineer discovers that this sensitive information is viewable by people who should not have access to it. What is the MOST secure way to protect the sensitive information used to bootstrap the instances?

- A. Store the scripts in the AMI and encrypt the sensitive data using AWS KMS. Use the instance role profile to control access to the KMS keys needed to decrypt the data.
- B. Store the sensitive data in AWS Systems Manager Parameter Store using the encrypted string parameter and assign the GetParameters permission to the EC2 instance role.
- C. Externalize the bootstrap scripts in Amazon S3 and encrypt them using AWS KMS
- D. Remove the scripts from the instance and clear the logs after the instance is configured.
- E. Block user access of the EC2 instance's metadata service using IAM policies
- F. Remove all scripts and clear the logs after execution.

**Answer:** B

**NEW QUESTION 224**

- (Exam Topic 2)

A security team is creating a response plan in the event an employee executes unauthorized actions on AWS infrastructure. They want to include steps to determine if the employee's IAM permissions changed as part of the incident. What steps should the team document in the plan? Please select:

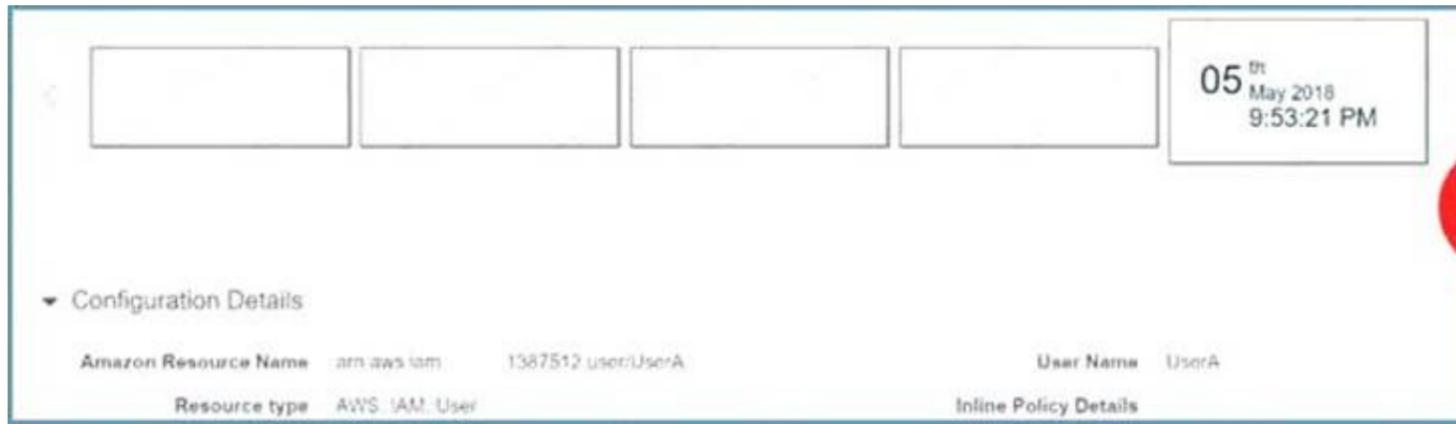
- A. Use AWS Config to examine the employee's IAM permissions prior to the incident and compare them to the employee's current IAM permissions.
- B. Use Made to examine the employee's IAM permissions prior to the incident and compare them to the employee's A current IAM permissions.
- C. Use CloudTrail to examine the employee's IAM permissions prior to the incident and compare them to the employee's current IAM permissions.
- D. Use Trusted Advisor to examine the employee's IAM permissions prior to the incident and compare them to the employee's current IAM permissions.

**Answer:** A

**Explanation:**

You can use the AWSConfig history to see the history of a particular item.

The below snapshot shows an example configuration for a user in AWS Config C:\Users\wk\Desktop\mudassar\Untitled.jpg



Option B,C and D are all invalid because these services cannot be used to see the history of a particular configuration item. This can only be accomplished by AWS Config.

For more information on tracking changes in AWS Config, please visit the below URL:

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

The correct answer is: Use AWS Config to examine the employee's IAM permissions prior to the incident and compare them the employee's current IAM permissions.

Submit your Feedback/Queries to our Experts

#### NEW QUESTION 226

- (Exam Topic 2)

An AWS Lambda function was misused to alter data, and a Security Engineer must identify who invoked the function and what output was produced. The Engineer cannot find any logs created by the Lambda function in Amazon CloudWatch Logs.

Which of the following explains why the logs are not available?

- A. The execution role for the Lambda function did not grant permissions to write log data to CloudWatch Logs.
- B. The Lambda function was executed by using Amazon API Gateway, so the logs are not stored in CloudWatch Logs.
- C. The execution role for the Lambda function did not grant permissions to write to the Amazon S3 bucket where CloudWatch Logs stores the logs.
- D. The version of the Lambda function that was executed was not current.

**Answer: A**

#### NEW QUESTION 228

- (Exam Topic 2)

The Security Engineer is given the following requirements for an application that is running on Amazon EC2 and managed by using AWS CloudFormation templates with EC2 Auto Scaling groups:

- Have the EC2 instances bootstrapped to connect to a backend database.
- Ensure that the database credentials are handled securely.
- Ensure that retrievals of database credentials are logged.

Which of the following is the MOST efficient way to meet these requirements?

- A. Pass databases credentials to EC2 by using CloudFormation stack parameters with the property set to tru
- B. Ensure that the instance is configured to log to Amazon CloudWatch Logs.
- C. Store database passwords in AWS Systems Manager Parameter Store by using SecureString parameters.Set the IAM role for the EC2 instance profile to allow access to the parameters.
- D. Create an AWS Lambda that ingests the database password and persists it to Amazon S3 with server-side encryptio
- E. Have the EC2 instances retrieve the S3 object on startup, and log all script invocations to syslog.
- F. Write a script that is passed in as UserData so that it is executed upon launch of the EC2 instance.Ensure that the instance is configured to log to Amazon CloudWatch Logs.

**Answer: B**

#### NEW QUESTION 232

- (Exam Topic 2)

During a recent security audit, it was discovered that multiple teams in a large organization have placed restricted data in multiple Amazon S3 buckets, and the data may have been exposed. The auditor has requested that the organization identify all possible objects that contain personally identifiable information (PII) and then determine whether this information has been accessed.

What solution will allow the Security team to complete this request?

- A. Using Amazon Athena, query the impacted S3 buckets by using the PII query identifier functio
- B. Then, create a new Amazon CloudWatch metric for Amazon S3 object access to alert when the objects are accessed.
- C. Enable Amazon Macie on the S3 buckets that were impacted, then perform data classificatio
- D. For identified objects that contain PII, use the research function for auditing AWS CloudTrail logs and S3 bucket logs for GET operations.
- E. Enable Amazon GuardDuty and enable the PII rule set on the S3 buckets that were impacted, then perform data classificatio
- F. Using the PII findings report from GuardDuty, query the S3 bucket logs by using Athena for GET operations.
- G. Enable Amazon Inspector on the S3 buckets that were impacted, then perform data classificatio
- H. For identified objects that contain PII, query the S3 bucket logs by using Athena for GET operations.

**Answer: B**

#### NEW QUESTION 235

- (Exam Topic 2)

An organization has three applications running on AWS, each accessing the same data on Amazon S3. The data on Amazon S3 is server-side encrypted by using an AWS KMS Customer Master Key (CMK).

What is the recommended method to ensure that each application has its own programmatic access control permissions on the KMS CMK?

- A. Change the key policy permissions associated with the KMS CMK for each application when it must access the data in Amazon S3.
- B. Have each application assume an IAM role that provides permissions to use the AWS Certificate Manager CMK.
- C. Have each application use a grant on the KMS CMK to add or remove specific access controls on the KMS CMK.
- D. Have each application use an IAM policy in a user context to have specific access permissions on the KMS CMK.

**Answer:** C

#### NEW QUESTION 237

- (Exam Topic 2)

A Developer who is following AWS best practices for secure code development requires an application to encrypt sensitive data to be stored at rest, locally in the application, using AWS KMS. What is the simplest and MOST secure way to decrypt this data when required?

- A. Request KMS to provide the stored unencrypted data key and then use the retrieved data key to decrypt the data.
- B. Keep the plaintext data key stored in Amazon DynamoDB protected with IAM policie
- C. Query DynamoDB to retrieve the data key to decrypt the data
- D. Use the Encrypt API to store an encrypted version of the data key with another customer managed key. Decrypt the data key and use it to decrypt the data when required.
- E. Store the encrypted data key alongside the encrypted dat
- F. Use the Decrypt API to retrieve the data key to decrypt the data when required.

**Answer:** D

#### Explanation:

We recommend that you use the following pattern to locally encrypt data: call the GenerateDataKey API, use the key returned in the Plaintext response field to locally encrypt data, and then erase the plaintext data key from memory. Store the encrypted data key (contained in the CiphertextBlob field) alongside of the locally encrypted data. The Decrypt API returns the plaintext key from the encrypted key.

<https://docs.aws.amazon.com/sdkfornet/latest/apidocs/items/MKeyManagementServiceKeyManagementService>

#### NEW QUESTION 239

- (Exam Topic 2)

A Security Engineer is implementing a solution to allow users to seamlessly encrypt Amazon S3 objects without having to touch the keys directly. The solution must be highly scalable without requiring continual management. Additionally, the organization must be able to immediately delete the encryption keys. Which solution meets these requirements?

- A. Use AWS KMS with AWS managed keys and the ScheduleKeyDeletion API with a PendingWindowInDays set to 0 to remove the keys if necessary.
- B. Use KMS with AWS imported key material and then use the DeleteImportedKeyMaterial API to remove the key material if necessary.
- C. Use AWS CloudHSM to store the keys and then use the CloudHSM API or the PKCS11 library to delete the keys if necessary.
- D. Use the Systems Manager Parameter Store to store the keys and then use the service API operations to delete the key if necessary.

**Answer:** C

#### Explanation:

<https://docs.aws.amazon.com/kms/latest/developerguide/importing-keys-delete-key-material.html>

#### NEW QUESTION 243

- (Exam Topic 2)

For compliance reasons, an organization limits the use of resources to three specific AWS regions. It wants to be alerted when any resources are launched in unapproved regions.

Which of the following approaches will provide alerts on any resources launched in an unapproved region?

- A. Develop an alerting mechanism based on processing AWS CloudTrail logs.
- B. Monitor Amazon S3 Event Notifications for objects stored in buckets in unapproved regions.
- C. Analyze Amazon CloudWatch Logs for activities in unapproved regions.
- D. Use AWS Trusted Advisor to alert on all resources being created.

**Answer:** A

#### Explanation:

<https://stackoverflow.com/questions/45449053/cloudwatch-alert-on-any-instance-creation>

#### NEW QUESTION 246

- (Exam Topic 2)

You have just recently set up a web and database tier in a VPC and hosted the application. When testing the app, you are not able to reach the home page for the app. You have verified the security groups. What can help you diagnose the issue.

Please select:

- A. Use the AWS Trusted Advisor to see what can be done.
- B. Use VPC Flow logs to diagnose the traffic
- C. Use AWS WAF to analyze the traffic
- D. Use AWS Guard Duty to analyze the traffic

**Answer:** B

#### Explanation:

Option A is invalid because this can be used to check for security issues in your account, but not verify as to why you cannot reach the home page for your application

Option C is invalid because this used to protect your app against application layer attacks, but not verify as to why you cannot reach the home page for your application

Option D is invalid because this used to protect your instance against attacks, but not verify as to why you cannot reach the home page for your application

The AWS Documentation mentions the following

VPC Flow Logs capture network flow information for a VPC, subnet or network interface and stores it in Amazon CloudWatch Logs. Flow log data can help customers troubleshoot network issues; for example, to diagnose why specific traffic is not reaching an instance, which might be a result of overly restrictive security group rules. Customers can also use flow logs as a security tool to monitor the traffic that reaches their instances, to profile network traffic, and to look for abnormal traffic behaviors.

For more information on AWS Security, please visit the following URL: <https://aws.amazon.com/answers/networking/vpc-security-capabilities>

The correct answer is: Use VPC Flow logs to diagnose the traffic Submit your Feedback/Queries to our Experts

#### NEW QUESTION 248

- (Exam Topic 2)

A Security Architect is evaluating managed solutions for storage of encryption keys. The requirements are:

- Storage is accessible by using only VPCs.
- Service has tamper-evident controls.
- Access logging is enabled.
- Storage has high availability.

Which of the following services meets these requirements?

- A. Amazon S3 with default encryption
- B. AWS CloudHSM
- C. Amazon DynamoDB with server-side encryption
- D. AWS Systems Manager Parameter Store

**Answer: B**

#### NEW QUESTION 249

- (Exam Topic 2)

The Security Engineer is managing a web application that processes highly sensitive personal information. The application runs on Amazon EC2. The application has strict compliance requirements, which instruct that all incoming traffic to the application is protected from common web exploits and that all outgoing traffic from the EC2 instances is restricted to specific whitelisted URLs.

Which architecture should the Security Engineer use to meet these requirements?

- A. Use AWS Shield to scan inbound traffic for web exploit
- B. Use VPC Flow Logs and AWS Lambda to restrict egress traffic to specific whitelisted URLs.
- C. Use AWS Shield to scan inbound traffic for web exploit
- D. Use a third-party AWS Marketplace solution to restrict egress traffic to specific whitelisted URLs.
- E. Use AWS WAF to scan inbound traffic for web exploit
- F. Use VPC Flow Logs and AWS Lambda to restrict egress traffic to specific whitelisted URLs.
- G. Use AWS WAF to scan inbound traffic for web exploit
- H. Use a third-party AWS Marketplace solution to restrict egress traffic to specific whitelisted URLs.

**Answer: D**

#### Explanation:

AWS Shield is mainly for DDos Attacks. AWS WAF is mainly for some other types of attacks like Injection and XSS etc. In this scenario, it seems it is WAF functionality that is needed. VPC logs do show the source and destination IP and Port, they never show any URL.. because URL are level 7 while VPC are concerned about lower network levels.

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

#### NEW QUESTION 254

- (Exam Topic 2)

Due to new compliance requirements, a Security Engineer must enable encryption with customer-provided keys on corporate data that is stored in DynamoDB. The company wants to retain full control of the encryption keys.

Which DynamoDB feature should the Engineer use to achieve compliance?

- A. Use AWS Certificate Manager to request a certificate
- B. Use that certificate to encrypt data prior to uploading it to DynamoDB.
- C. Enable S3 server-side encryption with the customer-provided key
- D. Upload the data to Amazon S3, and then use S3Copy to move all data to DynamoDB
- E. Create a KMS master key
- F. Generate per-record data keys and use them to encrypt data prior to uploading it to DynamoDB
- G. Dispose of the cleartext and encrypted data keys after encryption without storing.
- H. Use the DynamoDB Java encryption client to encrypt data prior to uploading it to DynamoDB.

**Answer: D**

#### Explanation:

Follow the link:

<https://docs.aws.amazon.com/dynamodb-encryption-client/latest/devguide/what-is-ddb-encrypt.html>

#### NEW QUESTION 259

- (Exam Topic 2)

A Security Analyst attempted to troubleshoot the monitoring of suspicious security group changes. The Analyst was told that there is an Amazon CloudWatch alarm in place for these AWS CloudTrail log events. The Analyst tested the monitoring setup by making a configuration change to the security group but did not receive any alerts.

Which of the following troubleshooting steps should the Analyst perform?

- A. Ensure that CloudTrail and S3 bucket access logging is enabled for the Analyst's AWS account
- B. Verify that a metric filter was created and then mapped to an alarm
- C. Check the alarm notification action.

- D. Check the CloudWatch dashboards to ensure that there is a metric configured with an appropriate dimension for security group changes.
- E. Verify that the Analyst's account is mapped to an IAM policy that includes permissions for cloudwatch: GetMetricStatistics and Cloudwatch: ListMetrics.

**Answer: B**

**Explanation:**

MetricFilter:

Type: 'AWS::Logs::MetricFilter' Properties:

LogGroupName: " FilterPattern: >

```
{ ($.eventName = AuthorizeSecurityGroupIngress) || ($.eventName = AuthorizeSecurityGroupEgress) || ($.eventName = RevokeSecurityGroupIngress) ||
 ($.eventName = RevokeSecurityGroupEgress)
 || ($.eventName = CreateSecurityGroup) || ($.eventName = DeleteSecurityGroup) }
```

MetricTransformations:

- MetricValue: '1'

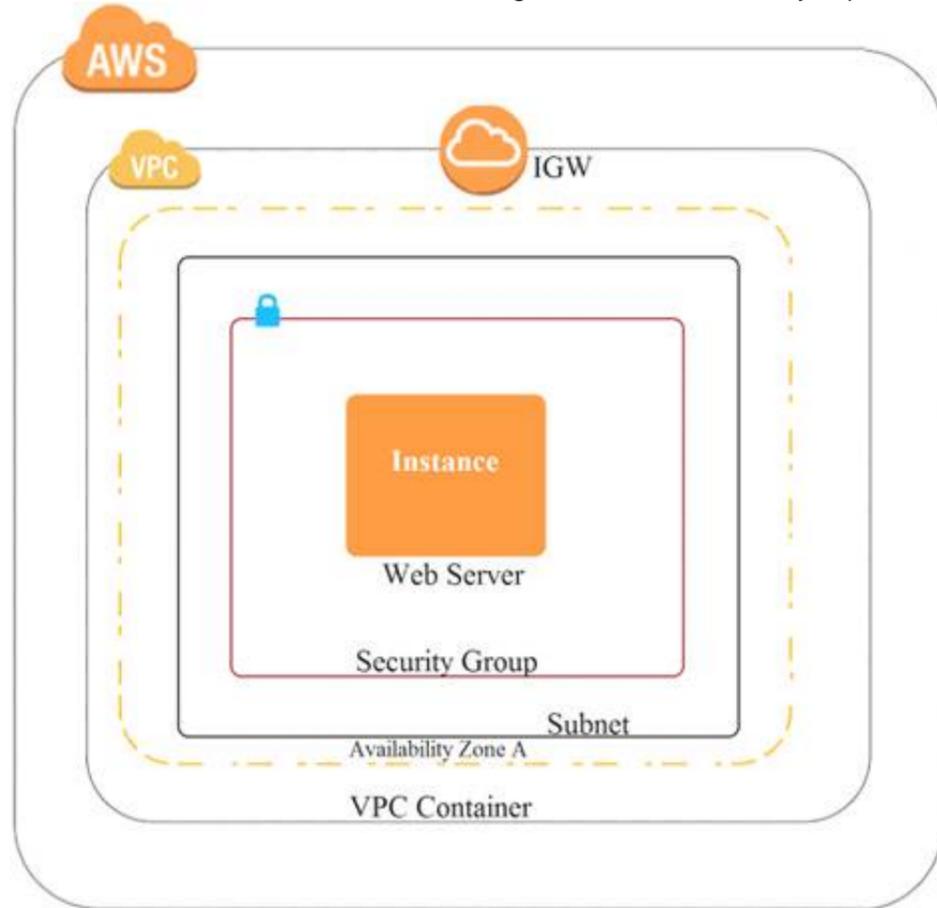
MetricNamespace: CloudTrailMetrics MetricName: SecurityGroupEventCount

**NEW QUESTION 263**

- (Exam Topic 2)

A company recently experienced a DDoS attack that prevented its web server from serving content. The website is static and hosts only HTML, CSS, and PDF files that users download.

Based on the architecture shown in the image, what is the BEST way to protect the site against future attacks while minimizing the ongoing operational overhead?



- A. Move all the files to an Amazon S3 bucket
- B. Have the web server serve the files from the S3 bucket.
- C. Launch a second Amazon EC2 instance in a new subne
- D. Launch an Application Load Balancer in front of both instances.
- E. Launch an Application Load Balancer in front of the EC2 instanc
- F. Create an Amazon CloudFront distribution in front of the Application Load Balancer.
- G. Move all the files to an Amazon S3 bucke
- H. Create a CloudFront distribution in front of the bucket and terminate the web server.

**Answer: D**

**Explanation:**

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

**NEW QUESTION 268**

- (Exam Topic 2)

Your company has a set of resources defined in the AWS Cloud. Their IT audit department has requested to get a list of resources that have been defined across the account. How can this be achieved in the easiest manner?

Please select:

- A. Create a powershell script using the AWS CL
- B. Query for all resources with the tag of production.
- C. Create a bash shell script with the AWS CL
- D. Query for all resources in all region
- E. Store the results in an S3 bucket.
- F. Use Cloud Trail to get the list of all resources
- G. Use AWS Config to get the list of all resources

**Answer: D**

**Explanation:**

The most feasible option is to use AWS Config. When you turn on AWS Config, you will get a list of resources defined in your AWS Account. A sample snapshot of the resources dashboard in AWS Config is shown below C:\Users\wk\Desktop\mudassar\Untitled.jpg



Resources	
Total resource count	131
Top 10 resource types	Total
 IAM Policy	45
 IAM Role	40
 EC2 Subnet	7
 EC2 SecurityGroup	6
 EC2 RouteTable	6
 EC2 VPC	4
 EC2 NetworkAcl	4

Option A is incorrect because this would give the list of production based resources and now all resources Option B is partially correct But this will just add more maintenance overhead.

Option C is incorrect because this can be used to log API activities but not give an account of all resou For more information on AWS Config, please visit the below URL: <https://docs.aws.amazon.com/config/latest/developereuide/how-does-confie-work.html>

The correct answer is: Use AWS Config to get the list of all resources Submit your Feedback/Queries to our Experts

**NEW QUESTION 269**

- (Exam Topic 2)

A security team is responsible for reviewing AWS API call activity in the cloud environment for security violations. These events must be recorded and retained in a centralized location for both current and future AWS regions.

What is the SIMPLEST way to meet these requirements?

- A. Enable AWS Trusted Advisor security checks in the AWS Console, and report all security incidents for all regions.
- B. Enable AWS CloudTrail by creating individual trails for each region, and specify a single Amazon S3 bucket to receive log files for later analysis.
- C. Enable AWS CloudTrail by creating a new trail and applying the trail to all region
- D. Specify a single Amazon S3 bucket as the storage location.
- E. Enable Amazon CloudWatch logging for all AWS services across all regions, and aggregate them to a single Amazon S3 bucket for later analysis.

**Answer: C**

**NEW QUESTION 270**

- (Exam Topic 2)

Your company has a requirement to monitor all root user activity by notification. How can this best be achieved? Choose 2 answers from the options given below. Each answer forms part of the solution

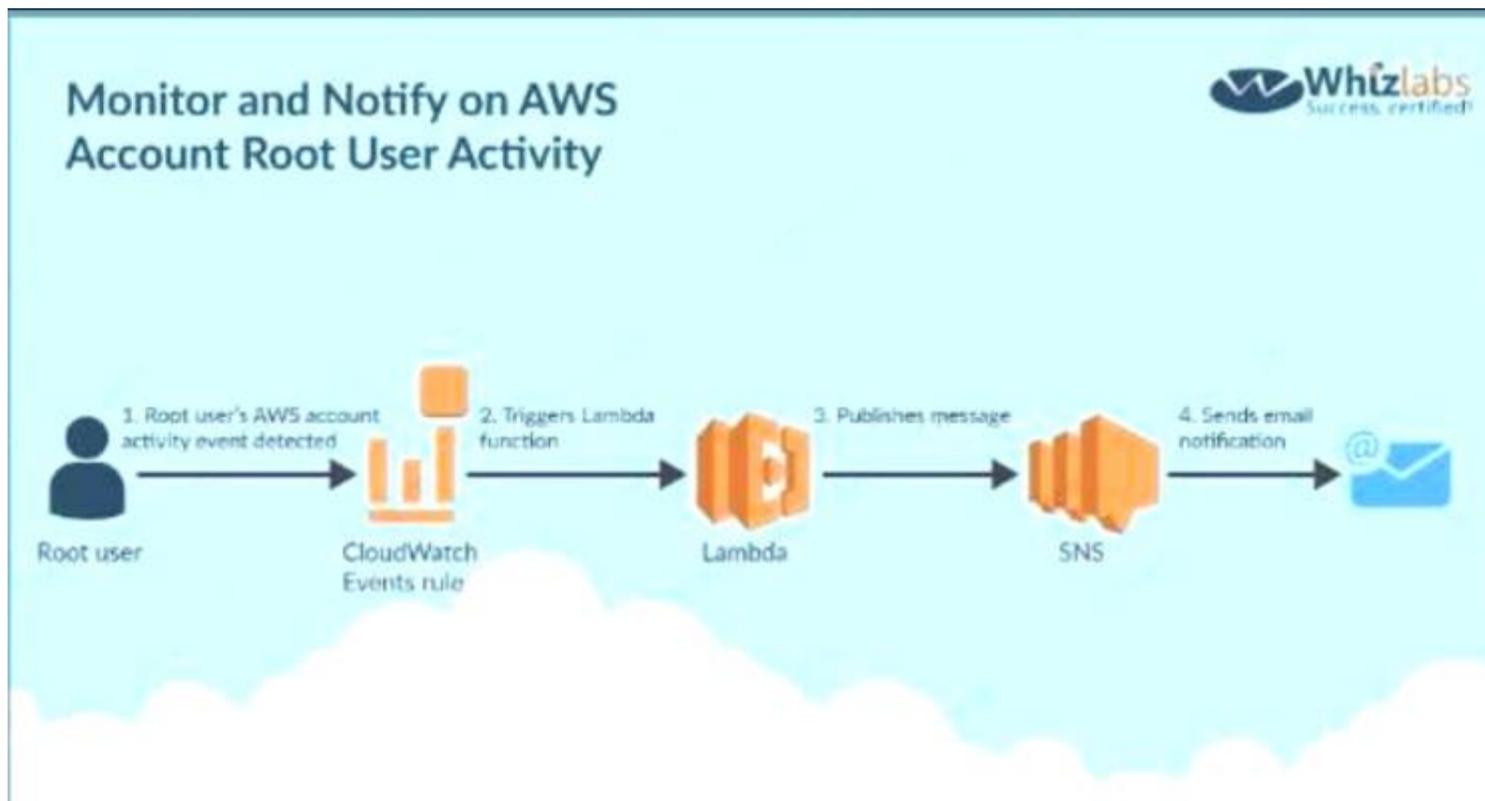
Please select:

- A. Create a Cloudwatch Events Rule s
- B. Create a Cloudwatch Logs Rule
- C. Use a Lambda function
- D. Use Cloudtrail API call

**Answer: AC**

**Explanation:**

Below is a snippet from the AWS blogs on a solution C:\Users\wk\Desktop\mudassar\Untitled.jpg



Option B is invalid because you need to create a Cloudwatch Events Rule and there is such thing as a Cloudwatch Logs Rule Option D is invalid because Cloud Trail API calls can be recorded but cannot be used to send across notifications For more information on this blog article, please visit the following URL: <https://aws.amazon.com/blogs/mt/monitor-and-notify-on-aws-account-root-user-activity> The correct answers are: Create a Cloudwatch Events Rule, Use a Lambda function Submit your Feedback/Queries to our Experts

**NEW QUESTION 272**

- (Exam Topic 2)

You have enabled Cloudtrail logs for your company's AWS account. In addition, the IT Security department has mentioned that the logs need to be encrypted. How can this be achieved?

Please select:

- A. Enable SSL certificates for the Cloudtrail logs
- B. There is no need to do anything since the logs will already be encrypted
- C. Enable Server side encryption for the trail
- D. Enable Server side encryption for the destination S3 bucket

**Answer: B**

**Explanation:**

The AWS Documentation mentions the following.

By default CloudTrail event log files are encrypted using Amazon S3 server-side encryption (SSE). You can also choose to encryption your log files with an AWS Key Management Service (AWS KMS) key. You can store your log files in your bucket for as long as you want. You can also define Amazon S3 lifecycle rules to archive or delete log files automatically. If you want notifications about lo file delivery and validation, you can set up Amazon SNS notifications.

Option A.C and D are not valid since logs will already be encrypted

For more information on how Cloudtrail works, please visit the following URL: <https://docs.aws.amazon.com/awsccloudtrail/latest/userguide/how-cloudtrail-works.html>

The correct answer is: There is no need to do anything since the logs will already be encrypted Submit your Feedback/Queries to our Experts

**NEW QUESTION 277**

- (Exam Topic 2)

During a recent internal investigation, it was discovered that all API logging was disabled in a production account, and the root user had created new API keys that appear to have been used several times.

What could have been done to detect and automatically remediate the incident?

- A. Using Amazon Inspector, review all of the API calls and configure the inspector agent to leverage SNS topics to notify security of the change to AWS CloudTrail, and revoke the new API keys for the root user.
- B. Using AWS Config, create a config rule that detects when AWS CloudTrail is disabled, as well as any calls to the root user create-api-ke
- C. Then use a Lambda function to re-enable CloudTrail logs and deactivate the root API keys.
- D. Using Amazon CloudWatch, create a CloudWatch event that detects AWS CloudTrail deactivation and a separate Amazon Trusted Advisor check to automatically detect the creation of root API key
- E. Then use a Lambda function to enable AWS CloudTrail and deactivate the root API keys.
- F. Using Amazon CloudTrail, create a new CloudTrail event that detects the deactivation of CloudTrail logs, and a separate CloudTrail event that detects the creation of root API key
- G. Then use a Lambda function to enable CloudTrail and deactivate the root API keys.

**Answer: B**

**Explanation:**

<https://docs.aws.amazon.com/config/latest/developerguide/cloudtrail-enabled.html> <https://docs.aws.amazon.com/config/latest/developerguide/iam-root-access-key-check.html>

**NEW QUESTION 280**

- (Exam Topic 2)

A Security Engineer has been asked to create an automated process to disable IAM user access keys that are more than three months old.

Which of the following options should the Security Engineer use?

- A. In the AWS Console, choose the IAM service and select "Users". Review the "Access Key Age" column.
- B. Define an IAM policy that denies access if the key age is more than three months and apply to all users.
- C. Write a script that uses the GenerateCredentialReport, GetCredentialReport, and UpdateAccessKey APIs.
- D. Create an Amazon CloudWatch alarm to detect aged access keys and use an AWS Lambda function to disable the keys older than 90 days.

**Answer: C**

**Explanation:**

[https://docs.aws.amazon.com/IAM/latest/APIReference/API\\_UpdateAccessKey.html](https://docs.aws.amazon.com/IAM/latest/APIReference/API_UpdateAccessKey.html)  
[https://docs.aws.amazon.com/IAM/latest/APIReference/API\\_GenerateCredentialReport.html](https://docs.aws.amazon.com/IAM/latest/APIReference/API_GenerateCredentialReport.html)  
[https://docs.aws.amazon.com/IAM/latest/APIReference/API\\_GetCredentialReport.html](https://docs.aws.amazon.com/IAM/latest/APIReference/API_GetCredentialReport.html)

**NEW QUESTION 284**

- (Exam Topic 2)

When you enable automatic key rotation for an existing CMK key where the backing key is managed by AWS, after how long is the key rotated?  
 Please select:

- A. After 30 days
- B. After 128 days
- C. After 365 days
- D. After 3 years

**Answer: D**

**Explanation:**

The AWS Documentation states the following

- AWS managed CM Ks: You cannot manage key rotation for AWS managed CMKs. AWS KMS automatically rotates AWS managed keys every three years (1095 days).

Note: AWS-managed CMKs are rotated every 3yrs, Customer-Managed CMKs are rotated every 365-days from when rotation is enabled.

Option A, B, C are invalid because the settings for automatic key rotation is not changeable. For more information on key rotation please visit the below URL

<https://docs.aws.amazon.com/kms/latest/developerguide/rotate-keys.html>

AWS managed CMKs are CMKs in your account that are created, managed, and used on your behalf by an AWS service that is integrated with AWS KMS. This CMK is unique to your AWS account and region. Only the service that created the AWS managed CMK can use it

You can login to you IAM dashbaord . Click on "Encryption Keys" You will find the list based on the services you are using as follows:

- aws/elasticfilesystem 1 aws/lightsail
- aws/s3

- aws/rds and many more Detailed Guide: KMS

You can recognize AWS managed CMKs because their aliases have the format aws/service-name, such as aws/redshift. Typically, a service creates its AWS managed CMK in your account when you set up the service or the first time you use the CMfC

The AWS services that integrate with AWS KMS can use it in many different ways. Some services create AWS managed CMKs in your account. Other services require that you specify a customer managed CMK that you have created. And, others support both types of CMKs to allow you the ease of an AWS managed CMK or the control of a customer-managed CMK

Rotation period for CMKs is as follows:

- AWS managed CMKs: 1095 days
- Customer managed CMKs: 365 days

Since question mentions about "CMK where backing keys is managed by AWS", its Amazon(AWS) managed and its rotation period turns out to be 1095 days{every 3 years}

For more details, please check below AWS Docs: <https://docs.aws.amazon.com/kms/latest/developerguide/concepts.html> The correct answer is: After 3 years

Submit your Feedback/Queries to our Experts

**NEW QUESTION 288**

- (Exam Topic 2)

A Security Engineer is working with a Product team building a web application on AWS. The application uses Amazon S3 to host the static content, Amazon API Gateway to provide RESTful services; and Amazon DynamoDB as the backend data store. The users already exist in a directory that is exposed through a SAML identity provider.

Which combination of the following actions should the Engineer take to enable users to be authenticated into the web application and call APIs? (Choose three.)

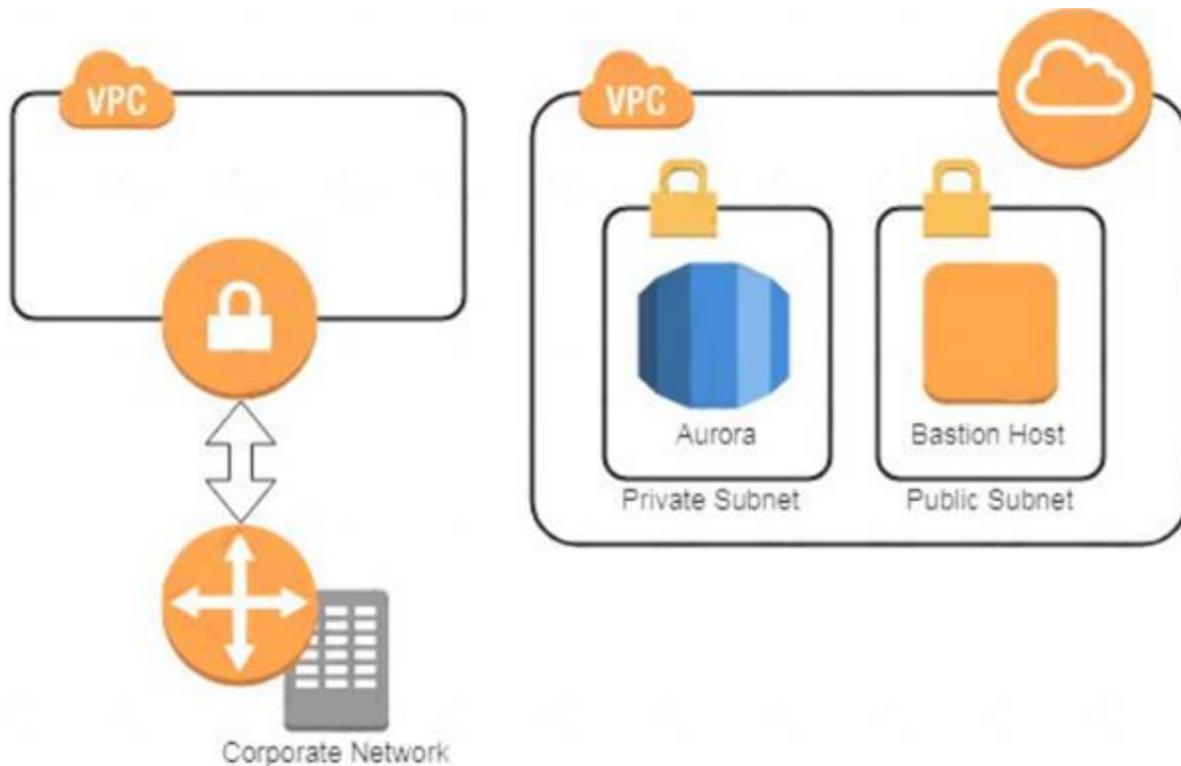
- A. Create a custom authorization service using AWS Lambda.
- B. Configure a SAML identity provider in Amazon Cognito to map attributes to the Amazon Cognito user pool attributes.
- C. Configure the SAML identity provider to add the Amazon Cognito user pool as a relying party.
- D. Configure an Amazon Cognito identity pool to integrate with social login providers.
- E. Update DynamoDB to store the user email addresses and passwords.
- F. Update API Gateway to use a COGNITO\_USER\_POOLS authorizer.

**Answer: BDE**

**NEW QUESTION 292**

- (Exam Topic 2)

A company has two AWS accounts, each containing one VPC. The first VPC has a VPN connection with its corporate network. The second VPC, without a VPN, hosts an Amazon Aurora database cluster in private subnets. Developers manage the Aurora database from a bastion host in a public subnet as shown in the image.



A security review has flagged this architecture as vulnerable, and a Security Engineer has been asked to make this design more secure. The company has a short deadline and a second VPN connection to the Aurora account is not possible. How can a Security Engineer securely set up the bastion host?

- A. Move the bastion host to the VPC with VPN connectivity
- B. Create a VPC peering relationship between the bastion host VPC and Aurora VPC.
- C. Create a SSH port forwarding tunnel on the Developer's workstation to the bastion host to ensure that only authorized SSH clients can access the bastion host.
- D. Move the bastion host to the VPC with VPN connectivity
- E. Create a cross-account trust relationship between the bastion VPC and Aurora VPC, and update the Aurora security group for the relationship.
- F. Create an AWS Direct Connect connection between the corporate network and the Aurora account, and adjust the Aurora security group for this connection.

**Answer:** A

**NEW QUESTION 297**

- (Exam Topic 2)

Compliance requirements state that all communications between company on-premises hosts and EC2 instances be encrypted in transit. Hosts use custom proprietary protocols for their communication, and EC2 instances need to be fronted by a load balancer for increased availability. Which of the following solutions will meet these requirements?

- A. Offload SSL termination onto an SSL listener on a Classic Load Balancer, and use a TCP connection between the load balancer and the EC2 instances.
- B. Route all traffic through a TCP listener on a Classic Load Balancer, and terminate the TLS connection on the EC2 instances.
- C. Create an HTTPS listener using an Application Load Balancer, and route all of the communication through that load balancer.
- D. Offload SSL termination onto an SSL listener using an Application Load Balancer, and re-spawn and SSL connection between the load balancer and the EC2 instances.

**Answer:** B

**Explanation:**

<https://aws.amazon.com/blogs/compute/maintaining-transport-layer-security-all-the-way-to-your-container-usin>

**NEW QUESTION 302**

- (Exam Topic 2)

A company has a forensic logging use case whereby several hundred applications running on Docker on EC2 need to send logs to a central location. The Security Engineer must create a logging solution that is able to perform real-time analytics on the log files, grants the ability to replay events, and persists data. Which AWS Services, together, can satisfy this use case? (Select two.)

- A. Amazon Elasticsearch
- B. Amazon Kinesis
- C. Amazon SQS
- D. Amazon CloudWatch
- E. Amazon Athena

**Answer:** AB

**Explanation:**

<https://docs.aws.amazon.com/whitepapers/latest/aws-overview/analytics.html#amazon-athena>

**NEW QUESTION 306**

- (Exam Topic 2)

A company uses identity federation to authenticate users into an identity account (987654321987) where the users assume an IAM role named IdentityRole. The users then assume an IAM role named JobFunctionRole in the target AWS account (123456789123) to perform their job functions. A user is unable to assume the IAM role in the target account. The policy attached to the role in the identity account is:

```
{
  "Version": "2012-10-17",
  "Statement": [
    {
      "Action": [
        "sts:AssumeRole"
      ],
      "Resource": [
        "arn:aws:iam::*:role/JobFunctionRole"
      ],
      "Effect": "Allow"
    }
  ]
}
```

What should be done to enable the user to assume the appropriate role in the target account?

A Update the IAM policy attached to the role in the identity account to be:

```
{
  "Version": "2012-10-17",
  "Statement": [
    {
      "Action": [
        "sts:AssumeRole"
      ],
      "Resource": [
        "arn:aws:iam::123456789123:role/JobFunctionRole"
      ],
      "Effect": "Allow"
    }
  ]
}
```

B Update the trust policy on the role in the target account to be:

```
{
  "Version": "2012-10-17",
  "Statement": [
    {
      "Effect": "Allow",
      "Principal": {
        "AWS": "arn:aws:iam::987654321987:role/IdentityRole"
      },
      "Action": "sts:AssumeRole"
    }
  ]
}
```

C Update the trust policy on the role in the identity account to be:

```
{
  "Version": "2012-10-17",
  "Statement": [
    {
      "Effect": "Allow",
      "Principal": { "AWS": "arn:aws:iam::987654321987:root" },
      "Action": "sts:AssumeRole"
    }
  ]
}
```

D Update the IAM policy attached to the role in the target account to be:

```
{
  "Version": "2012-10-17",
  "Statement": [
    {
      "Sid": "Stmt1502946463000",
      "Effect": "Allow",
      "Action": "sts:AssumeRole",
      "Resource": "arn:aws:iam::123456789123:role/JobFunctionRole"
    }
  ]
}
```

- A. Option A
- B. Option B
- C. Option C
- D. Option D

**Answer:** A

**NEW QUESTION 308**

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