Exam Questions SCS-C02

AWS Certified Security - Specialty

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NEW QUESTION 1
A company in France uses Amazon Cognito with the Cognito Hosted Ul as an identity broker for sign-in and sign-up processes. The company is marketing an application and expects that all the application's users will come from France.
When the company launches the application the company's security team observes fraudulent sign-ups for the application. Most of the fraudulent registrations are from users outside of France.
The security team needs a solution to perform custom validation at sign-up Based on the results of the validation the solution must accept or deny the registration request.
Which combination of steps will meet these requirements? (Select TWO.)

A. Create a pre sign-up AWS Lambda trigge
B. Associate the Amazon Cognito function with the Amazon Cognito user pool.
C. Use a geographic match rule statement to configure an AWS WAF web AC
D. Associate the web ACL with the Amazon Cognito user pool.
E. Configure an app client for the application's Amazon Cognito user poo
F. Use the app client ID to validate the requests in the hosted Ul.
G. Update the application's Amazon Cognito user pool to configure a geographic restriction setting.
H. Use Amazon Cognito to configure a social identity provider (IdP) to validate the requests on the hosted Ul.

Answer: B

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

NEW QUESTION 2
A company's security team is building a solution for logging and visualization. The solution will assist the company with the large variety and velocity of data that it receives from IAM across multiple accounts. The security team has enabled IAM CloudTrail and VPC Flow Logs in all of its accounts. In addition, the company has an organization in IAM Organizations and has an IAM Security Hub master account.
The security team wants to use Amazon Detective However the security team cannot enable Detective and is unsure why
What must the security team do to enable Detective?

A. Enable Amazon Macie so that Secunty H jb will allow Detective to process findings from Macie.
B. Disable IAM Key Management Service (IAM KMS) encryption on CtoudTrail logs in every member account of the organization
C. Enable Amazon GuardDuty on all member accounts Try to enable Detective in 48 hours
D. Ensure that the principal that launches Detective has the organizations ListAccounts permission

Answer: D

NEW QUESTION 3
A company hosts a public website on an Amazon EC2 instance. HTTPS traffic must be able to access the website. The company uses SSH for management of the web server.
The website is on the subnet 10.0.1.0/24. The management subnet is 192.168.100.0/24. A security engineer must create a security group for the EC2 instance.
Which combination of steps should the security engineer take to meet these requirements in the MOST secure manner? (Select TWO.)

A. Allow port 22 from source 0.0.0.0/0.
B. Allow port 443 from source 0.0.0.0/0.
C. Allow port 22 from 192.168.100.0/24.
D. Allow port 22 from 10.0.1.0/24.
E. Allow port 443 from 10.0.1.0/24.

Answer: BC

Explanation:
The correct answer is B and C.
* B. Allow port 443 from source 0.0.0.0/0.
This is correct because port 443 is used for HTTPS traffic, which must be able to access the website from any source IP address.
* C. Allow port 22 from 192.168.100.0/24.
This is correct because port 22 is used for SSH, which is the management protocol for the web server. The management subnet is 192.168.100.0/24, so only this subnet should be allowed to access port 22.
* A. Allow port 22 from source 0.0.0.0/0.
This is incorrect because it would allow anyone to access port 22, which is a security risk. SSH should be restricted to the management subnet only.
* D. Allow port 22 from 10.0.1.0/24.
This is incorrect because it would allow the website subnet to access port 22, which is unnecessary and a security risk. SSH should be restricted to the management subnet only.
* E. Allow port 443 from 10.0.1.0/24.
This is incorrect because it would limit the HTTPS traffic to the website subnet only, which defeats the purpose of having a public website.

NEW QUESTION 4
A company developed an application by using AWS Lambda, Amazon S3, Amazon Simple Notification Service (Amazon SNS), and Amazon DynamoDB. An external application puts objects into the company's S3 bucket and tags the objects with date and time. A Lambda function periodically pulls data from the company's S3 bucket based on date and time tags and inserts specific values into a DynamoDB table for further processing.
The data includes personally identifiable information (Pll). The company must remove data that is older than 30 days from the S3 bucket and the DynamoDB table.
Which solution will meet this requirement with the MOST operational efficiency?

A. Update the Lambda function to add a TTL S3 flag to S3 object
B. Create an S3 Lifecycle policy to expire objects that are older than 30 days by using the TTL S3 flag.
C. Create an S3 Lifecycle policy to expire objects that are older than 30 day
D. Update the Lambda function to add the TTL attribute in the DynamoDB tabl
E. Enable TTL on the DynamoDB table to expire entires that are older than 30 days based on the TTL attribute.

F. Create an S3 Lifecycle policy to expire objects that are older than 30 days and to add all prefixes to the S3 bucke
G. Update the Lambda function to delete entries that are older than 30 days.
H. Create an S3 Lifecycle policy to expire objects that are older than 30 days by using object tag
I. Update the Lambda function to delete entries that are older than 30 days.

Answer: B

NEW QUESTION 5
A company is hosting a web application on Amazon EC2 instances behind an Application Load Balancer (ALB). The application has become the target of a DoS attack. Application logging shows that requests are coming from small number of client IP addresses, but the addresses change regularly.
The company needs to block the malicious traffic with a solution that requires the least amount of ongoing effort.
Which solution meets these requirements?

A. Create an AWS WAF rate-based rule, and attach it to the ALB.
B. Update the security group that is attached to the ALB to block the attacking IP addresses.
C. Update the ALB subnet's network ACL to block the attacking client IP addresses.
D. Create a AWS WAF rate-based rule, and attach it to the security group of the EC2 instances.

Answer: A

NEW QUESTION 6
A Security Architect has been asked to review an existing security architecture and identify why the application servers cannot successfully initiate a connection to the database servers. The following summary describes the architecture:
* 1 An Application Load Balancer, an internet gateway, and a NAT gateway are configured in the public subnet
* 2. Database, application, and web servers are configured on three different private subnets.
* 3 The VPC has two route tables: one for the public subnet and one for all other subnets The route table for the public subnet has a 0 0 0 0/0 route to the internet gateway The route table for all other subnets has a 0 0.0.0/0 route to the NAT gateway. All private subnets can route to each other
* 4 Each subnet has a network ACL implemented that limits all inbound and outbound connectivity to only the required ports and protocols
* 5 There are 3 Security Groups (SGs) database application and web Each group limits all inbound and outbound connectivity to the minimum required
Which of the following accurately reflects the access control mechanisms the Architect should verify1?

A. Outbound SG configuration on database servers Inbound SG configuration on application servers inbound and outbound network ACL configuration on the database subnet Inbound and outbound network ACL configuration on the application server subnet
B. Inbound SG configuration on database servers Outbound SG configuration on application serversInbound and outbound network ACL configuration on the database subnetInbound and outbound network ACL configuration on the application server subnet
C. Inbound and outbound SG configuration on database servers Inbound and outbound SG configuration on application servers Inbound network ACL configuration on the database subnet Outbound network ACL configuration on the application server subnet
D. Inbound SG configuration on database servers Outbound SG configuration on application servers Inbound network ACL configuration on the database subnet Outbound network ACL configuration on the application server subnet.

Answer: A

Explanation:
this is the accurate reflection of the access control mechanisms that the Architect should verify. Access control mechanisms are methods that regulate who can access what resources and how. Security groups and network ACLs are two types of access control mechanisms that can be applied to EC2 instances and subnets. Security groups are stateful, meaning they remember and return traffic that was previously allowed. Network ACLs are stateless, meaning they do not remember or return traffic that was previously allowed. Security groups and network ACLs can have inbound and outbound rules that specify the source, destination, protocol, and port of the traffic. By verifying the outbound security group configuration on database servers, the inbound security group configuration on application servers, and the inbound and outbound network ACL configuration on both the database and application server subnets, the Architect can check if there are any misconfigurations or conflicts that prevent the application servers from initiating a connection to the database servers. The other options are either inaccurate or incomplete for verifying the access control mechanisms.

NEW QUESTION 7
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 min-imizes 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 ke
C. Upload the signature to the AWS identity provider entity defined in AWS Identity and Access Management (IAM) by using the AWS CU.
D. Download the updated SAML metadata file from the identity service provid-e
E. Update the file in the AWS identity provider entity defined in AWS Identity and Access Management (IAM) by using the AWS CLI.
F. Configure the AWS identity provider entity defined in AWS Identity and Ac-cess Management (IAM) to synchronously fetch the new public key by using the AWS Management Console.

Answer: C

Explanation:
This answer is correct because downloading the updated SAML metadata file from the identity service provider ensures that AWS has the latest information about the identity provider, including the new public key. Updating the file in the AWS identity provider entity defined in IAM by using the AWS CLI allows AWS to verify the signature of the SAML assertions sent by the identity provider. This solution also minimizes operational overhead because it can be automated with a script or a cron job.

NEW QUESTION 8
A security engineer wants to forward custom application-security logs from an Amazon EC2 instance to Amazon CloudWatch. The security engineer installs the CloudWatch agent on the EC2 instance and adds the path of the logs to the CloudWatch configuration file. However, CloudWatch does not receive the logs. The

security engineer verifies that the awslogs service is running on the EC2 instance.
What should the security engineer do next to resolve the issue?

A. Add AWS CloudTrail to the trust policy of the EC2 instanc
B. Send the custom logs to CloudTrail instead of CloudWatch.
C. Add Amazon S3 to the trust policy of the EC2 instanc
D. Configure the application to write the custom logs to an S3 bucket that CloudWatch can use to ingest the logs.
E. Add Amazon Inspector to the trust policy of the EC2 instanc
F. Use Amazon Inspector instead of the CloudWatch agent to collect the custom logs.
G. Attach the CloudWatchAgentServerPolicy AWS managed policy to the EC2 instance role.

Answer: D

Explanation:
The correct answer is D. Attach the CloudWatchAgentServerPolicy AWS managed policy to the EC2 instance role.
According to the AWS documentation1, the CloudWatch agent is a software agent that you can install on your EC2 instances to collect system-level metrics and logs. To use the CloudWatch agent, you need to attach an IAM role or user to the EC2 instance that grants permissions for the agent to perform actions on your behalf. The CloudWatchAgentServerPolicy is an AWS managed policy that provides the necessary permissions for the agent to write metrics and logs to CloudWatch2. By attaching this policy to the EC2 instance role, the security engineer can resolve the issue of CloudWatch not receiving the custom application-security logs.
The other options are incorrect for the following reasons:

- A. Adding AWS CloudTrail to the trust policy of the EC2 instance is not relevant, because CloudTrail is a service that records API activity in your AWS account, not custom application logs3. Sending the custom logs to CloudTrail instead of CloudWatch would not meet the requirement of forwarding them to CloudWatch.
- B. Adding Amazon S3 to the trust policy of the EC2 instance is not necessary, because S3 is a storage service that does not require any trust relationship with EC2 instances4. Configuring the application to write the custom logs to an S3 bucket that CloudWatch can use to ingest the logs would be an alternative solution, but it would be more complex and costly than using the CloudWatch agent directly.
- C. Adding Amazon Inspector to the trust policy of the EC2 instance is not helpful, because Inspector is a service that scans EC2 instances for software vulnerabilities and unintended network exposure, not custom application logs5. Using Amazon Inspector instead of the CloudWatch agent would not meet the requirement of forwarding them to CloudWatch.

References:
1: Collect metrics, logs, and traces with the CloudWatch agent - Amazon CloudWatch 2: CloudWatchAgentServerPolicy - AWS Managed Policy 3: What Is AWS CloudTrail? - AWS CloudTrail 4: Amazon S3 FAQs - Amazon Web Services 5: Automated Software Vulnerability Management - Amazon Inspector - AWS

NEW QUESTION 9
A company is using an AWS Key Management Service (AWS KMS) AWS owned key in its application to encrypt files in an AWS account The company's security team wants the ability to change to new key material for new files whenever a potential key breach occurs A security engineer must implement a solution that gives the security team the ability to change the key whenever the team wants to do so
Which solution will meet these requirements?

A. Create a new customer managed key Add a key rotation schedule to the key Invoke the key rotation schedule every time the security team requests a key change
B. Create a new AWS managed key Add a key rotation schedule to the key Invoke the key rotation schedule every time the security team requests a key change
C. Create a key alias Create a new customer managed key every time the security team requests a key change Associate the alias with the new key
D. Create a key alias Create a new AWS managed key every time the security team requests a key change Associate the alias with the new key

Answer: A

Explanation:
To meet the requirement of changing the key material for new files whenever a potential key breach occurs, the most appropriate solution would be to create a new customer managed key, add a key rotation schedule to the key, and invoke the key rotation schedule every time the security team requests a key change.
References: : Rotating AWS KMS keys - AWS Key Management Service

NEW QUESTION 10
A company plans to use AWS Key Management Service (AWS KMS) to implement an encryption strategy to protect data at rest. The company requires client-side encryption for company projects. The company is currently conducting multiple projects to test the company's use of AWS KMS. These tests have led to a sudden increase in the company's AWS resource consumption. The test projects include applications that issue multiple requests each second to KMS endpoints for encryption activities.
The company needs to develop a solution that does not throttle the company's ability to use AWS KMS. The solution must improve key usage for client-side encryption and must be cost optimized. Which solution will meet these requirements?

A. Use keyrings with the AWS Encryption SD
B. Use each keyring individually or combine keyrings into amulti-keyrin
C. Decrypt the data by using a keyring that has the primary key in the multi-keyring.
D. Use data key cachin
E. Use the local cache that the AWS Encryption SDK provides with a caching cryptographic materials manager.
F. Use KMS key rotatio
G. Use a local cache in the AWS Encryption SDK with a caching cryptographic materials manager.
H. Use keyrings with the AWS Encryption SD
I. Use each keyring individually or combine keyrings into a multi-keyrin
J. Use any of the wrapping keys in the multi-keyring to decrypt the data.

Answer: B

Explanation:
The correct answer is B. Use data key caching. Use the local cache that the AWS Encryption SDK provides with a caching cryptographic materials manager.
This answer is correct because data key caching can improve performance, reduce cost, and help the company stay within the service limits of AWS KMS. Data key caching stores data keys and related cryptographic material in a cache, and reuses them for encryption and decryption operations. This reduces the number of requests to AWS KMS endpoints and avoids throttling. The AWS Encryption SDK provides a local cache and a caching cryptographic materials manager (caching CMM) that interacts with the cache and enforces security thresholds that the company can set1.

The other options are incorrect because:

- A. Using keyrings with the AWS Encryption SDK does not address the problem of throttling or cost optimization. Keyrings are used to generate, encrypt, and decrypt data keys, but they do not cache or reuse them. Using each keyring individually or combining them into a multi-keyring does not reduce the number of requests to AWS KMS endpoints2.
- C. Using KMS key rotation does not address the problem of throttling or cost optimization. Key rotation is a security practice that creates new cryptographic material for a KMS key every year, but it does not affect the data that the KMS key protects. Key rotation does not reduce the number of requests to AWS KMS endpoints, and it might incur additional costs for storing multiple versions of key material3.
- D. Using keyrings with the AWS Encryption SDK does not address the problem of throttling or cost optimization, as explained in option A. Moreover, using any of the wrapping keys in the multi-keyring to decrypt the data is not a valid option, because only one of the wrapping keys can decrypt a given data key. The wrapping key that encrypts a data key is stored in the encrypted data key structure, and only that wrapping key can decrypt it4.

References:
1: Data key caching - AWS Encryption SDK 2: Using keyrings - AWS Encryption SDK 3: Rotating AWS KMS keys - AWS Key Management Service 4: How keyrings work - AWS Encryption SDK

NEW QUESTION 10
A company has several workloads running on AWS. Employees are required to authenticate using on-premises ADFS and SSO to access the AWS Management Console. Developers migrated an existing legacy web application to an Amazon EC2 instance. Employees need to access this application from anywhere on the internet, but currently, there is no authentication system built into the application.
How should the Security Engineer implement employee-only access to this system without changing the application?

A. Place the application behind an Application Load Balancer (ALB). Use Amazon Cognito as authentication for the AL
B. Define a SAML-based Amazon Cognito user pool and connect it to ADFS.
C. Implement AWS SSO in the master account and link it to ADFS as an identity provide
D. Define the EC2 instance as a managed resource, then apply an IAM policy on the resource.
E. Define an Amazon Cognito identity pool, then install the connector on the Active Directory serve
F. Use the Amazon Cognito SDK on the application instance to authenticate the employees using their Active Directory user names and passwords.
G. Create an AWS Lambda custom authorizer as the authenticator for a reverse proxy on Amazon EC2.Ensure the security group on Amazon EC2 only allows access from the Lambda function.

Answer: A

Explanation:
https://docs.aws.amazon.com/elasticloadbalancing/latest/application/listener-authenticate-users.html

NEW QUESTION 15
A company is running workloads in a single IAM account on Amazon EC2 instances and Amazon EMR clusters a recent security audit revealed that multiple Amazon Elastic Block Store (Amazon EBS) volumes and snapshots are not encrypted
The company's security engineer is working on a solution that will allow users to deploy EC2 Instances and EMR clusters while ensuring that all new EBS volumes and EBS snapshots are encrypted at rest. The solution must also minimize operational overhead
Which steps should the security engineer take to meet these requirements?

A. Create an Amazon Event Bridge (Amazon Cloud watch Events) event with an EC2 instance as the source and create volume as the event trigge
B. When the event is triggered invoke an IAM Lambda function to evaluate and notify the security engineer if the EBS volume that was created is not encrypted.
C. Use a customer managed IAM policy that will verify that the encryption ag of the Createvolume context is set to tru
D. Apply this rule to all users.
E. Create an IAM Config rule to evaluate the conguration of each EC2 instance on creation or modication.Have the IAM Cong rule trigger an IAM Lambdafunction to alert the security team and terminate the instance it the EBS volume is not encrypte
F. 5
G. Use the IAM Management Console or IAM CLi to enable encryption by default for EBS volumes in each IAM Region where the company operates.

Answer: D

Explanation:
To ensure that all new EBS volumes and EBS snapshots are encrypted at rest and minimize operational overhead, the security engineer should do the following:

- Use the AWS Management Console or AWS CLI to enable encryption by default for EBS volumes in each AWS Region where the company operates. This allows the security engineer to automatically encrypt any new EBS volumes and snapshots created from those volumes, without requiring any additional actions from users.

NEW QUESTION 20
A company's Chief Security Officer has requested that a Security Analyst review and improve the security posture of each company IAM account The Security Analyst decides to do this by Improving IAM account root user security.
Which actions should the Security Analyst take to meet these requirements? (Select THREE.)

A. Delete the access keys for the account root user in every account.
B. Create an admin IAM user with administrative privileges and delete the account root user in every account.
C. Implement a strong password to help protect account-level access to the IAM Management Console by the account root user.
D. Enable multi-factor authentication (MFA) on every account root user in all accounts.
E. Create a custom IAM policy to limit permissions to required actions for the account root user and attach the policy to the account root user.
F. Attach an IAM role to the account root user to make use of the automated credential rotation in IAM STS.

Answer: ADE

Explanation:
because these are the actions that can improve IAM account root user security. IAM account root user is a user that has complete access to all AWS resources and services in an account. IAM account root user security is a set of best practices that help protect the account root user from unauthorized or accidental use. Deleting the access keys for the account root user in every account can help prevent programmatic access by the account root user, which reduces the risk of compromise or misuse. Enabling MFA on every account root user in all accounts can help add an extra layer of security for console access by requiring a verification code in addition to a password. Creating a custom IAM policy to limit permissions to required actions for the account root user and attaching the policy

to the account root user can help enforce the principle of least privilege and restrict the account root user from performing unnecessary or dangerous actions. The other options are either invalid or ineffective for improving IAM account root user security.

NEW QUESTION 24
An Incident Response team is investigating an IAM access key leak that resulted in Amazon EC2 instances being launched. The company did not discover the incident until many months later The Director of Information Security wants to implement new controls that will alert when similar incidents happen in the future Which controls should the company implement to achieve this? {Select TWO.)

A. Enable VPC Flow Logs in all VPCs Create a scheduled IAM Lambda function that downloads and parses the logs, and sends an Amazon SNS notification for violations.
B. Use IAM CloudTrail to make a trail, and apply it to all Regions Specify an Amazon S3 bucket to receive all the CloudTrail log files
C. Add the following bucket policy to the company's IAM CloudTrail bucket to prevent log tampering{"Version": "2012-10-17-,"Statement": { "Effect": "Deny","Action": "s3:PutObject", "Principal": "-","Resource": "arn:IAM:s3:::cloudtrail/IAMLogs/111122223333/*"}}Create an Amazon S3 data event for an PutObject attempts, which sends notifications to an Amazon SNS topic.
D. Create a Security Auditor role with permissions to access Amazon CloudWatch Logs m all Regions Ship the logs to an Amazon S3 bucket and make a lifecycle policy to ship the logs to Amazon S3 Glacier.
E. Verify that Amazon GuardDuty is enabled in all Regions, and create an Amazon CloudWatch Events rule for Amazon GuardDuty findings Add an Amazon SNS topic as the rule's target

Answer: AE

NEW QUESTION 28
A company is building an application on AWS that will store sensitive information. The company has a support team with access to the IT infrastructure, including databases. The company's security engineer must introduce measures to protect the sensitive data against any data breach while minimizing management overhead. The credentials must be regularly rotated.
What should the security engineer recommend?

A. Enable Amazon RDS encryption to encrypt the database and snapshot
B. Enable Amazon Elastic Block Store (Amazon EBS) encryption on Amazon EC2 instance
C. Include the database credential in the EC2 user data fiel
D. Use an AWS Lambda function to rotate database credential
E. Set up TLS for the connection to the database.
F. Install a database on an Amazon EC2 instanc
G. Enable third-party disk encryption to encrypt Amazon Elastic Block Store (Amazon EBS) volum
H. Store the database credentials in AWS CloudHSM with automatic rotatio
I. Set up TLS for the connection to the database.
J. Enable Amazon RDS encryption to encrypt the database and snapshot
K. Enable Amazon Elastic Block Store (Amazon EBS) encryption on Amazon EC2 instance
L. Store the database credentials in AWS Secrets Manager with automatic rotatio
M. Set up TLS for the connection to the RDS hosted database.
N. Set up an AWS CloudHSM cluster with AWS Key Management Service (AWS KMS) to store KMS key
O. Set up Amazon RDS encryption using AWS KSM to encrypt the databas
P. Store the database credentials in AWS Systems Manager Parameter Store with automatic rotatio
Q. Set up TLS for the connection to the RDS hosted database.

Answer: C

NEW QUESTION 32
A company hosts business-critical applications on Amazon EC2 instances in a VPC. The VPC uses default DHCP options sets. A security engineer needs to log all DNS queries that internal resources make in the VPC. The security engineer also must create a list of the most common DNS queries over time.
Which solution will meet these requirements?

A. Install the Amazon CloudWatch agent on each EC2 instance in the VP
B. Use the CloudWatch agent to stream the DNS query logs to an Amazon CloudWatch Logs log grou
C. Use CloudWatch metric filters to automatically generate metrics that list the most common ONS queries.
D. Install a BIND DNS server in the VP
E. Create a bash script to list the DNS request number of common DNS queries from the BIND logs.
F. Create VPC flow logs for all subnets in the VP
G. Stream the flow logs to an Amazon CloudWatch Logs log grou
H. Use CloudWatch Logs Insights to list the most common DNS queries for the log group in a custom dashboard.
I. Configure Amazon Route 53 Resolver query loggin
J. Add an Amazon CloudWatch Logs log group as the destinatio
K. Use Amazon CloudWatch Contributor Insights to analyze the data and create time series that display the most common DNS queries.

Answer: D

Explanation:
https://aws.amazon.com/blogs/aws/log-your-vpc-dns-queries-with-route-53-resolver-query-logs/

NEW QUESTION 34
A company has a legacy application that runs on a single Amazon EC2 instance. A security audit shows that the application has been using an IAM access key within its code to access an Amazon S3 bucket that is named DOC-EXAMPLE-BUCKET1 in the same AWS account. This access key pair has the s3:GetObject permission to all objects in only this S3 bucket. The company takes the application offline because the application is not compliant with the company's security policies for accessing other AWS resources from Amazon EC2.
A security engineer validates that AWS CloudTrail is turned on in all AWS Regions. CloudTrail is sending logs to an S3 bucket that is named DOC-EXAMPLE-BUCKET2. This S3 bucket is in the same AWS account as DOC-EXAMPLE-BUCKET1. However, CloudTrail has not been configured to send logs to Amazon CloudWatch Logs.
The company wants to know if any objects in DOC-EXAMPLE-BUCKET1 were accessed with the IAM access key in the past 60 days. If any objects were accessed, the company wants to know if any of the objects that are text files (.txt extension) contained personally identifiable information (PII).

Which combination of steps should the security engineer take to gather this information? (Choose two.)

A. Configure Amazon Macie to identify any objects in DOC-EXAMPLE-BUCKET1 that contain PII and that were available to the access key.
B. Use Amazon CloudWatch Logs Insights to identify any objects in DOC-EXAMPLE-BUCKET1 that contain PII and that were available to the access key.
C. Use Amazon OpenSearch Service (Amazon Elasticsearch Service) to query the CloudTrail logs in DOC-EXAMPLE-BUCKET2 for API calls that used the access key to access an object that contained PII.
D. Use Amazon Athena to query the CloudTrail logs in DOC-EXAMPLE-BUCKET2 for any API calls that used the access key to access an object that contained PII.
E. Use AWS Identity and Access Management Access Analyzer to identify any API calls that used the access key to access objects that contained PII in DOC-EXAMPLE-BUCKET1.

Answer: AD

NEW QUESTION 37
A company is attempting to conduct forensic analysis on an Amazon EC2 instance, but the company is unable to connect to the instance by using AWS Systems Manager Session Manager. The company has installed AWS Systems Manager Agent (SSM Agent) on the EC2 instance.
The EC2 instance is in a subnet in a VPC that does not have an internet gateway attached. The company has associated a security group with the EC2 instance. The security group does not have inbound or outbound rules. The subnet's network ACL allows all inbound and outbound traffic.
Which combination of actions will allow the company to conduct forensic analysis on the EC2 instance without compromising forensic data? (Select THREE.)

A. Update the EC2 instance security group to add a rule that allows outbound traffic on port 443 for 0.0.0.0/0.
B. Update the EC2 instance security group to add a rule that allows inbound traffic on port 443 to the VPC's CIDR range.
C. Create an EC2 key pai
D. Associate the key pair with the EC2 instance.
E. Create a VPC interface endpoint for Systems Manager in the VPC where the EC2 instance is located.
F. Attach a security group to the VPC interface endpoin
G. Allow inbound traffic on port 443 to the VPC's CIDR range.
H. Create a VPC interface endpoint for the EC2 instance in the VPC where the EC2 instance is located.

Answer: BCF

NEW QUESTION 40
A company uses AWS Organizations to manage several AWs accounts. The company processes a large volume of sensitive data. The company uses a serverless approach to microservices. The company stores all the data in either Amazon S3 or Amazon DynamoDB. The company reads the data by using either AWS lambda functions or container-based services that the company hosts on Amazon Elastic Kubernetes Service (Amazon EKS) on AWS Fargate.
The company must implement a solution to encrypt all the data at rest and enforce least privilege data access controls. The company creates an AWS Key Management Service (AWS KMS) customer managed key.
What should the company do next to meet these requirements?

A. Create a key policy that allows the kms:Decrypt action only for Amazon S3 and DynamoD
B. Create an SCP that denies the creation of S3 buckets and DynamoDB tables that are not encrypted with the key.
C. Create an 1AM policy that denies the kms:Decrypt action for the ke
D. Create a Lambda function than runs on a schedule to attach the policy to any new role
E. Create an AWS Config rule to send alerts for resources that are not encrypted with the key.
F. Create a key policy that allows the kms:Decrypt action only for Amazon S3, DynamoDB, Lambda, and Amazon EK
G. Create an SCP that denies the creation of S3 buckets and DynamoDB tables that are not encrypted with the key.
H. Create a key policy that allows the kms:Decrypt action only for Amazon S3, DynamoDB, Lambda, and Amazon EK
I. Create an AWS Config rule to send alerts for resources that are not encrypted with the key.

Answer: B

NEW QUESTION 43
A security engineer must troubleshoot an administrator's inability to make an existing Amazon S3 bucket public in an account that is part of an organization n IAM Organizations. The administrator switched the role from the master account to a member account and then attempted to make one S3 bucket public. This action was immediately denied
Which actions should the security engineer take to troubleshoot the permissions issue? (Select TWO.)

A. Review the cross-account role permissions and the S3 bucket policy Verify that the Amazon S3 block public access option in the member account is deactivated.
B. Review the role permissions m the master account and ensure it has sufficient privileges to perform S3 operations
C. Filter IAM CloudTrail logs for the master account to find the original deny event and update the cross-account role m the member account accordingly Verify that the Amazon S3 block public access option in the master account is deactivated.
D. Evaluate the SCPs covering the member account and the permissions boundary of the role in the member account for missing permissions and explicit denies.
E. Ensure the S3 bucket policy explicitly allows the s3 PutBucketPublicAccess action for the role m the member account

Answer: DE

Explanation:
A is incorrect because reviewing the cross-account role permissions and the S3 bucket policy is not enough to troubleshoot the permissions issue. You also need to verify that the Amazon S3 block public access option in the member account is deactivated, as well as the permissions boundary and the SCPs of the role in the member account.
D is correct because evaluating the SCPs and the permissions boundary of the role in the member account can help you identify any missing permissions or explicit denies that could prevent the administrator from making the S3 bucket public.
E is correct because ensuring that the S3 bucket policy explicitly allows the s3 PutBucketPublicAccess action for the role in the member account can help you override any block public access settings that could prevent the administrator from making the S3 bucket public.

NEW QUESTION 46
A company uses AWS Organizations to manage a small number of AWS accounts. However, the company plans to add 1 000 more accounts soon. The company

allows only a centralized security team to create IAM roles for all AWS accounts and teams. Application teams submit requests for IAM roles to the security team. The security team has a backlog of IAM role requests and cannot review and provision the IAM roles quickly.
The security team must create a process that will allow application teams to provision their own IAM roles. The process must also limit the scope of IAM roles and prevent privilege escalation.
Which solution will meet these requirements with the LEAST operational overhead?

A. Create an IAM group for each application tea
B. Associate policies with each IAM grou
C. Provision IAM users for each application team membe
D. Add the new IAM users to the appropriate IAM group by using role-based access control (RBAC).
E. Delegate application team leads to provision IAM rotes for each tea
F. Conduct a quarterly review of the IAM rotes the team leads have provisione
G. Ensure that the application team leads have the appropriate training to review IAM roles.
H. Put each AWS account in its own O
I. Add an SCP to each OU to grant access to only the AWS services that the teams plan to us
J. Include conditions tn the AWS account of each team.
K. Create an SCP and a permissions boundary for IAM role
L. Add the SCP to the root OU so that only roles that have the permissions boundary attached can create any new IAM roles.

Answer: D

Explanation:
To create a process that will allow application teams to provision their own IAM roles, while limiting the scope of IAM roles and preventing privilege escalation, the following steps are required:

- Create a service control policy (SCP) that defines the maximum permissions that can be granted to any IAM role in the organization. An SCP is a type of policy that you can use with AWS Organizations to manage permissions for all accounts in your organization. SCPs restrict permissions for entities in member accounts, including each AWS account root user, IAM users, and roles. For more information, see Service control policies overview.
- Create a permissions boundary for IAM roles that matches the SCP. A permissions boundary is an advanced feature for using a managed policy to set the maximum permissions that an identity-based policy can grant to an IAM entity. A permissions boundary allows an entity to perform only the actions that are allowed by both its identity-based policies and its permissions boundaries. For more information, see Permissions boundaries for IAM entities.
- Add the SCP to the root organizational unit (OU) so that it applies to all accounts in the organization.

This will ensure that no IAM role can exceed the permissions defined by the SCP, regardless of how it is created or modified.

- Instruct the application teams to attach the permissions boundary to any IAM role they create. This will prevent them from creating IAM roles that can escalate their own privileges or access resources they are not authorized to access.

This solution will meet the requirements with the least operational overhead, as it leverages AWS Organizations and IAM features to delegate and limit IAM role creation without requiring manual reviews or approvals.
The other options are incorrect because they either do not allow application teams to provision their own IAM roles (A), do not limit the scope of IAM roles or prevent privilege escalation (B), or do not take advantage of managed services whenever possible ©.
Verified References:

- https://docs.aws.amazon.com/IAM/latest/UserGuide/access_policies_boundaries.html

NEW QUESTION 50
A security engineer is using AWS Organizations and wants to optimize SCPs. The security engineer needs to ensure that the SCPs conform to best practices.
Which approach should the security engineer take to meet this requirement?

A. Use AWS IAM Access Analyzer to analyze the policie
B. View the findings from policy validation checks.
C. Review AWS Trusted Advisor checks for all accounts in the organization.
D. Set up AWS Audit Manage
E. Run an assessment for all AWS Regions for all accounts.
F. Ensure that Amazon Inspector agents are installed on all Amazon EC2 in-stances in all accounts.

Answer: A

NEW QUESTION 55
A company created an IAM account for its developers to use for testing and learning purposes Because MM account will be shared among multiple teams of developers, the company wants to restrict the ability to stop and terminate Amazon EC2 instances so that a team can perform these actions only on the instances it owns.
Developers were Instructed to tag al their instances with a Team tag key and use the team name in the tag value One of the first teams to use this account is Business Intelligence A security engineer needs to develop a highly scalable solution for providing developers with access to the appropriate resources within the account The security engineer has already created individual IAM roles for each team.
Which additional configuration steps should the security engineer take to complete the task?

A. For each team, create an AM policy similar to the one that fellows Populate the ec2: ResourceTag/Team condition key with a proper team name Attach resulting policies to the corresponding IAM roles.

```
{
    "Version": "2012-10-17",
    "Statement": [
        {
            "Effect": "Allow",
            "NotAction": [
                "ec2:StopInstances",
                "ec2:TerminateInstances"
            ]
            "Resource": "*"
        },
        {
            "Effect": "Allow",
            "Action": [
                "ec2:StopInstances",
                "ec2:TerminateInstances"
            ],
            "Resource": "*",
            "Condition": {
                "StringEquals": {
                    "ec2:ResourceTag/Team": "BusinessIntelligence"
                }
            }
        }
    ]
}
```

B. For each team create an IAM policy similar to the one that follows Populate the IAM TagKeys/Team condition key with a proper team nam
C. Attach the resuming policies to the corresponding IAM roles.

```
{
    "Version": "2012-10-17",
    "Statement": [
        {
            "Effect": "Allow",
            "NotAction": [
                "ec2:StopInstances",
                "ec2:TerminateInstances"
            ],
            "Resource": "*"
        },
        {
            "Effect": "Allow",
            "Action": [
                "ec2:StopInstances",
                "ec2:TerminateInstances"
            ],
            "Resource": "*",
            "Condition": {
                "ForAnyValue:StringEquals": {
                    "aws:TagKeys/Team": "BusinessIntelligence"
                }
            }
        }
    ]
}
```

D. Tag each IAM role with a Team lag ke
E. and use the team name in the tag valu
F. Create an IAM policy similar to the one that follows, and attach 4 to all the IAM roles used by developers.

```
{
    "Version": "2012-10-17",
    "Statement": [
        {
            "Effect": "Allow",
            "NotAction": [
                "ec2:StopInstances",
                "ec2:TerminateInstances"
            ],
            "Resource": "*"
        },
        {
            "Effect": "Allow",
            "Action": [
                "ec2:StopInstances",
                "ec2:TerminateInstances"
            ],
            "Resource": "*",
            "Condition": {
                "StringEquals": {
                    "ec2:ResourceTag/Team": "${aws:PrincipalTag/Team}"
                }
            }
        }
    ]
}
```

G. Tag each IAM role with the Team key, and use the team name in the tag valu
H. Create an IAM policy similar to the one that follows, and it to all the IAM roles used by developers.

Answer: A

NEW QUESTION 60
A security engineer is designing an IAM policy to protect AWS API operations. The policy must enforce multi-factor authentication (MFA) for IAM users to access certain services in the AWS production account. Each session must remain valid for only 2 hours. The current version of the IAM policy is as follows:

```
{
    "Version": "2012-10-17",
    "Statement": [{
        "Effect": "Allow",
        "Action": [
            "ec2:DescribeInstances",
            "ec2:StopInstances",
            "ec2:TerminateInstances"
        ],
        "Resource": ["*"]
    }]
}
```

Which combination of conditions must the security engineer add to the IAM policy to meet these requirements? (Select TWO.)

A. "Bool " : " aws : Multi FactorAuthPresent": "true" }
B. "B001 " : " aws : MultiFactorAuthPresent": "false" }
C. "NumericLessThan" : { " aws : Multi FactorAuthAge" : "7200"}
D. "NumericGreaterThan" : { " aws : MultiFactorAuthAge " : "7200"
E. "NumericLessThan" : { "MaxSessionDuration " : "7200"}

Answer: AC

Explanation:
The correct combination of conditions to add to the IAM policy is A and C. These conditions will ensure that IAM users must use MFA to access certain services in the AWS production account, and that each session will expire after 2 hours.

- Option A: “Bool” : { “aws:MultiFactorAuthPresent” : “true” } is a valid condition that checks if the principal (the IAM user) has authenticated with MFA before making the request. This condition will enforce MFA for the IAM users to access the specified services. This condition key is supported by all AWS services that support IAM policies1.
- Option B: “Bool” : { “aws:MultiFactorAuthPresent” : “false” } is the opposite of option A. This condition will allow access only if the principal has not authenticated with MFA, which is not the desired requirement. This condition key is supported by all AWS services that support IAM policies1.
- Option C: “NumericLessThan” : { “aws:MultiFactorAuthAge” : “7200” } is a valid condition that checks if the time since the principal authenticated with MFA is less than 7200 seconds (2 hours). This condition will enforce the session duration limit for the IAM users. This condition key is supported by all AWS services that support IAM policies1.
- Option D: “NumericGreaterThan” : { “aws:MultiFactorAuthAge” : “7200” } is the opposite of option C. This condition will allow access only if the time since the principal authenticated with MFA is more than 7200 seconds (2 hours), which is not the desired requirement. This condition key is supported by all AWS services that support IAM policies1.
- Option E: “NumericLessThan” : { “MaxSessionDuration” : “7200” } is not a valid condition key.

MaxSessionDuration is a property of an IAM role, not a condition key. It specifies the maximum session duration (in seconds) for the role, which can be between 3600 and 43200 seconds (1 to 12 hours). This property can be set when creating or modifying a role, but it cannot be used as a condition in a policy2.

NEW QUESTION 63
A Network Load Balancer (NLB) target instance is not entering the InService state. A security engineer determines that health checks are failing.
Which factors could cause the health check failures? (Select THREE.)

A. The target instance's security group does not allow traffic from the NLB.
B. The target instance's security group is not attached to the NLB.
C. The NLB's security group is not attached to the target instance.
D. The target instance's subnet network ACL does not allow traffic from the NLB.
E. The target instance's security group is not using IP addresses to allow traffic from the NLB.
F. The target network ACL is not attached to the NLB.

Answer: ACD

NEW QUESTION 65
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"
               }
          }
        }
    ]
}
```

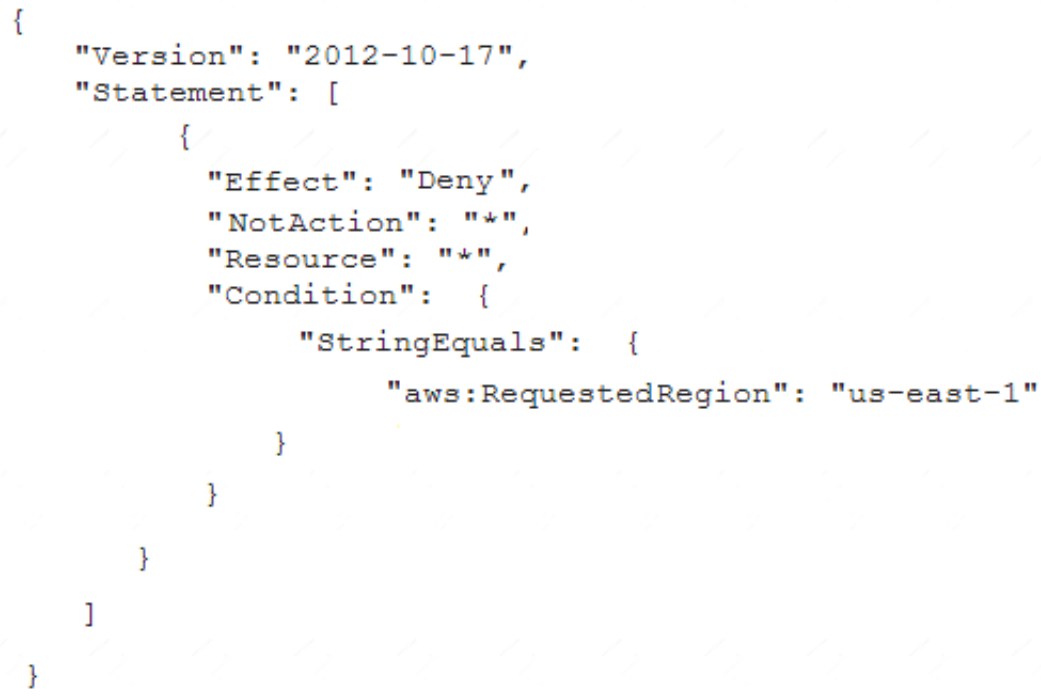
B. A computer code with black text Description automatically generated

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

C. A computer code with black text Description automatically generated

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

D. A computer code with text Description automatically generated



Answer: C

Explanation:
https://docs.aws.amazon.com/IAM/latest/UserGuide/reference_policies_examples_aws_deny-requested-region.h

NEW QUESTION 66
A developer is building a serverless application hosted on AWS that uses Amazon Redshift as a data store The application has separate modules for readwrite and read-only functionality The modules need their own database users for compliance reasons
Which combination of steps should a security engineer implement to grant appropriate access? (Select TWO.)

A. Configure cluster security groups for each application module to control access to database users that are required for read-only and readwrite
B. Configure a VPC endpoint for Amazon Redshift Configure an endpoint policy that maps database users to each application module, and allow access to the tables that are required for read-only and read/write
C. Configure an 1AM policy for each module Specify the ARN of an Amazon Redshift database user that allows the GetClusterCredentials API call
D. Create local database users for each module
E. Configure an 1AM policy for each module Specify the ARN of an 1AM user that allows the GetClusterCredentials API call

Answer: A

Explanation:
To grant appropriate access to separate modules for read-write and read-only functionality in a serverless
application hosted on AWS that uses Amazon Redshift as a data store, a security engineer should configure cluster security groups for each application module to control access to database users that are required for read-only and readwrite, and configure an IAM policy for each module specifying the ARN of an IAM user that allows the GetClusterCredentials API call.
References: : Amazon Redshift - Amazon Web Services : Amazon Redshift - Amazon Web Services : Identity and Access Management - AWS Management Console : AWS Identity and Access Management - AWS Management Console

NEW QUESTION 67
A company uses Amazon GuardDuty. The company's security team wants all High severity findings to automatically generate a ticket in a third-party ticketing system through email integration.
Which solution will meet this requirement?

A. Create a verified identity for the third-party ticketing email system in Amazon Simple Email Service (Amazon SES). Create an Amazon EventBridge rule that includes an event pattern that matches High severity GuardDuty finding
B. Specify the SES identity as the target for the EventBridge rule.
C. Create an Amazon Simple Notification Service (Amazon SNS) topi
D. Subscribe the third-party ticketing email system to the SNS topi
E. Create an Amazon EventBridge rule that includes an event pattern that matches High severity GuardDuty finding
F. Specify the SNS topic as the target for the EventBridge rule.
G. Use the GuardDuty CreateFilter API operation to build a filter in GuardDuty to monitor for High severity finding
H. Export the results of the filter to an Amazon Simple Notification Service (Amazon SNS) topi
I. Subscribe the third-party ticketing email system to the SNS topic.
J. Use the GuardDuty CreateFilter API operation to build a filter in GuardDuty to monitor for High severity finding
K. Create an Amazon Simple Notification Service (Amazon SNS) topi
L. Subscribe the third-party ticketing email system to the SNS topi
M. Create an Amazon EventBridge rule that includes an event pattern that matches GuardDuty findings that are selected by the filte
N. Specify the SNS topic as the target for the EventBridge rule.

Answer: B

Explanation:
The correct answer is B. Create an Amazon Simple Notification Service (Amazon SNS) topic. Subscribe the third-party ticketing email system to the SNS topic. Create an Amazon EventBridge rule that includes an event pattern that matches High severity GuardDuty findings. Specify the SNS topic as the target for the Event-Bridge rule.
According to the AWS documentation1, you can use Amazon EventBridge to create rules that match events from GuardDuty and route them to targets such as Amazon SNS topics. You can use event patterns to filter events based on criteria such as severity, type, or resource. For example, you can create a rule that matches only High severity findings and sends them to an SNS topic that is subscribed by a third-party ticketing email system. This way, you can automate the

creation of tickets for High severity findings and notify the security team.

NEW QUESTION 70
A company has a single AWS account and uses an Amazon EC2 instance to test application code. The company recently discovered that the instance was compromised. The instance was serving up malware. The analysis of the instance showed that the instance was compromised 35 days ago.
A security engineer must implement a continuous monitoring solution that automatically notifies the company's security team about compromised instances through an email distribution list for high severity findings. The security engineer must implement the solution as soon as possible.
Which combination of steps should the security engineer take to meet these requirements? (Choose three.)

A. Enable AWS Security Hub in the AWS account.
B. Enable Amazon GuardDuty in the AWS account.
C. Create an Amazon Simple Notification Service (Amazon SNS) topi
D. Subscribe the security team's email distribution list to the topic.
E. Create an Amazon Simple Queue Service (Amazon SQS) queu
F. Subscribe the security team's email distribution list to the queue.
G. Create an Amazon EventBridge (Amazon CloudWatch Events) rule for GuardDuty findings of high severit
H. Configure the rule to publish a message to the topic.
I. Create an Amazon EventBridge (Amazon CloudWatch Events) rule for Security Hub findings of high severit
J. Configure the rule to publish a message to the queue.

Answer: BCE

NEW QUESTION 72
A company deployed Amazon GuardDuty In the us-east-1 Region. The company wants all DNS logs that relate to the company's Amazon EC2 instances to be inspected. What should a security engineer do to ensure that the EC2 instances are logged?

A. Use IPv6 addresses that are configured for hostnames.
B. Configure external DNS resolvers as internal resolvers that are visible only to IAM.
C. Use IAM DNS resolvers for all EC2 instances.
D. Configure a third-party DNS resolver with logging for all EC2 instances.

Answer: C

Explanation:
To ensure that the EC2 instances are logged, the security engineer should do the following:
Use AWS DNS resolvers for all EC2 instances. This allows the security engineer to use Amazon-provided DNS servers that resolve public DNS hostnames to private IP addresses within their VPC, and that log DNS queries in Amazon CloudWatch Logs.

NEW QUESTION 73
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 bucke
B. Use EBS lifecycle policies to move EBS snapshots to the new S3 bucke
C. Move snapshots to Amazon S3 Glacier using lifecycle policies, and apply Glacier Vault Lock policies to prevent deletion.
D. Use AWS Systems Manager to distribute a configuration that performs local backups of all attached disks to Amazon S3.
E. Create a new AWS account with limited privilege
F. 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.
G. Use AWS Backup to copy EBS snapshots to Amazon S3.

Answer: C

Explanation:
This answer is correct because creating a new AWS account with limited privileges would provide an isolated and secure backup destination for the EBS snapshots. Allowing the new account to access the AWS KMS key used to encrypt the EBS snapshots would enable cross-account snapshot sharing without requiring re-encryption. Copying the encrypted snapshots to the new account on a recurring basis would ensure that the backups are up-to-date and consistent.

NEW QUESTION 78
Your CTO thinks your IAM account was hacked. What is the only way to know for certain if there was unauthorized access and what they did, assuming your hackers are very sophisticated IAM engineers and doing everything they can to cover their tracks?
Please select:

A. Use CloudTrail Log File Integrity Validation.
B. Use IAM Config SNS Subscriptions and process events in real time.
C. Use CloudTrail backed up to IAM S3 and Glacier.
D. Use IAM Config Timeline forensics.

Answer: A

Explanation:
The IAM Documentation mentions the following
To determine whether a log file was modified, deleted, or unchanged after CloudTrail delivered it you can use CloudTrail log file integrity validation. This feature is built using industry standard algorithms: SHA-256 for hashing and SHA-256 with RSA for digital signing. This makes it computationally infeasible to modify, delete or forge CloudTrail log files without detection. You can use the IAM CLI to validate the files in the location where CloudTrail delivered them

Validated log files are invaluable in security and forensic investigations. For example, a validated log file enables you to assert positively that the log file itself has not changed, or that particular user credentials performed specific API activity. The CloudTrail log file integrity validation process also lets you know if a log file has been deleted or changed, or assert positively that no log files were delivered to your account during a given period of time.
Options B.C and D is invalid because you need to check for log File Integrity Validation for cloudtrail logs For more information on Cloudtrail log file validation, please visit the below URL: http://docs.IAM.amazon.com/IAMcloudtrail/latest/userguide/cloudtrail-log-file-validation-intro.html
The correct answer is: Use CloudTrail Log File Integrity Validation. omit your Feedback/Queries to our Expert

NEW QUESTION 81
A company uses AWS Organizations and has production workloads across multiple AWS accounts. A security engineer needs to design a solution that will proactively monitor for suspicious behavior across all the accounts that contain production workloads.
The solution must automate remediation of incidents across the production accounts. The solution also must publish a notification to an Amazon Simple Notification Service (Amazon SNS) topic when a critical security finding is detected. In addition, the solution must send all security incident logs to a dedicated account.
Which solution will meet these requirements?

A. Activate Amazon GuardDuty in each production accoun
B. In a dedicated logging accoun
C. aggregate all GuardDuty logs from each production accoun
D. Remediate incidents by configuring GuardDuty to directly invoke an AWS Lambda functio
E. Configure the Lambda function to also publish notifications to the SNS topic.
F. Activate AWS security Hub in each production accoun
G. In a dedicated logging accoun
H. aggregate all security Hub findings from each production accoun
I. Remediate incidents by ustng AWS Config and AWS Systems Manage
J. Configure Systems Manager to also pub11Sh notifications to the SNS topic.
K. Activate Amazon GuardDuty in each production accoun
L. In a dedicated logging accoun
M. aggregate all GuardDuty logs from each production account Remediate incidents by using Amazon EventBridge to invoke a custom AWS Lambda function from the GuardDuty finding
N. Configure the Lambda function to also publish notifications to the SNS topic.
O. Activate AWS Security Hub in each production accoun
P. In a dedicated logging accoun
Q. aggregate all Security Hub findings from each production accoun
R. Remediate incidents by using Amazon EventBridge to invoke a custom AWS Lambda function from the Security Hub finding
S. Configure the Lambda function to also publish notifications to the SNS topic.

Answer: D

Explanation:
The correct answer is D.
To design a solution that will proactively monitor for suspicious behavior across all the accounts that contain production workloads, the security engineer needs to use a service that can aggregate and analyze security findings from multiple sources. AWS Security Hub is a service that provides a comprehensive view of your security posture across your AWS accounts and enables you to check your environment against security standards and best practices. Security Hub also integrates with other AWS services, such as Amazon GuardDuty, AWS Config, and AWS Systems Manager, to collect and correlate security findings.
To automate remediation of incidents across the production accounts, the security engineer needs to use a service that can trigger actions based on events. Amazon EventBridge is a serverless event bus service that allows you to connect your applications with data from a variety of sources. EventBridge can use rules to match events and route them to targets for processing. You can use EventBridge to invoke a custom AWS Lambda function from the Security Hub findings. Lambda is a serverless compute service that lets you run code without provisioning or managing servers.
To publish a notification to an Amazon SNS topic when a critical security finding is detected, the security engineer needs to use a service that can send messages to subscribers. Amazon SNS is a fully managed messaging service that enables you to decouple and scale microservices, distributed systems, and serverless applications. SNS can deliver messages to a variety of endpoints, such as email, SMS, or HTTP. You can configure the Lambda function to also publish notifications to the SNS topic.
To send all security incident logs to a dedicated account, the security engineer needs to use a service that can aggregate and store log data from multiple sources. AWS Security Hub allows you to aggregate security findings from multiple accounts into a single account using the delegated administrator feature. This feature enables you to designate an AWS account as the administrator for Security Hub in an organization. The administrator account can then view and manage Security Hub findings from all member accounts.
Therefore, option D is correct because it meets all the requirements of the solution. Option A is incorrect because GuardDuty does not provide a comprehensive view of your security posture across your AWS accounts. GuardDuty is primarily a threat detection service that monitors for malicious or unauthorized behavior.
Option B is incorrect because Config and Systems Manager are not designed to automate remediation of incidents based on Security Hub findings. Config is a service that enables you to assess, audit, and evaluate the configurations of your AWS resources, while Systems Manager is a service that allows you to manage your infrastructure on AWS at scale. Option C is incorrect because GuardDuty does not provide a comprehensive view of your security posture across your AWS accounts.
References:
- AWS Security Hub
- Amazon EventBridge
- AWS Lambda
- Amazon SNS
- Aggregating Security Hub findings across accounts

NEW QUESTION 86
Within a VPC, a corporation runs an Amazon RDS Multi-AZ DB instance. The database instance is connected to the internet through a NAT gateway via two subnets.
Additionally, the organization has application servers that are hosted on Amazon EC2 instances and use the RDS database. These EC2 instances have been deployed onto two more private subnets inside the same VPC. These EC2 instances connect to the internet through a default route via the same NAT gateway. Each VPC subnet has its own route table.
The organization implemented a new security requirement after a recent security examination. Never allow the database instance to connect to the internet. A security engineer must perform this update promptly without interfering with the network traffic of the application servers.
How will the security engineer be able to comply with these requirements?

A. Remove the existing NAT gatewa
B. Create a new NAT gateway that only the application server subnets can use.
C. Configure the DB instance€™s inbound network ACL to deny traffic from the security group ID of the NAT gateway.
D. Modify the route tables of the DB instance subnets to remove the default route to the NAT gateway.
E. Configure the route table of the NAT gateway to deny connections to the DB instance subnets.

Answer: C

Explanation:
Each subnet has a route table, so modify the routing associated with DB instance subnets to prevent internet access.

NEW QUESTION 87
A security engineer must use AWS Key Management Service (AWS KMS) to design a key management solution for a set of Amazon Elastic Block Store (Amazon EBS) volumes that contain sensitive data. The solution needs to ensure that the key material automatically expires in 90 days.
Which solution meets these criteria?

A. A customer managed CMK that uses customer provided key material
B. A customer managed CMK that uses AWS provided key material
C. An AWS managed CMK
D. Operation system-native encryption that uses GnuPG

Answer: A

Explanation:
https://awscli.amazonaws.com/v2/documentation/api/latest/reference/kms/import-key-material.html aws kms import-key-material \
--key-id 1234abcd-12ab-34cd-56ef-1234567890ab \
--encrypted-key-material fileb://EncryptedKeyMaterial.bin \
--import-token fileb://ImportToken.bin \
--expiration-model KEY_MATERIAL_EXPIRES \
--valid-to 2021-09-21T19:00:00Z
The correct answer is A. A customer managed CMK that uses customer provided key material.
A customer managed CMK is a KMS key that you create, own, and manage in your AWS account. You have full control over the key configuration, permissions, rotation, and deletion. You can use a customer managed CMK to encrypt and decrypt data in AWS services that are integrated with AWS KMS, such as Amazon EBS1.
A customer managed CMK can use either AWS provided key material or customer provided key material. AWS provided key material is generated by AWS KMS and never leaves the service unencrypted. Customer provided key material is generated outside of AWS KMS and imported into a customer managed CMK. You can specify an expiration date for the imported key material, after which the CMK becomes unusable until you reimport new key material2.
To meet the criteria of automatically expiring the key material in 90 days, you need to use customer provided key material and set the expiration date accordingly. This way, you can ensure that the data encrypted with the CMK will not be accessible after 90 days unless you reimport new key material and re-encrypt the data.
The other options are incorrect for the following reasons:
* B. A customer managed CMK that uses AWS provided key material does not expire automatically. You can enable automatic rotation of the key material every year, but this does not prevent access to the data encrypted with the previous key material. You would need to manually delete the CMK and its backing key material to make the data inaccessible3.
* C. An AWS managed CMK is a KMS key that is created, owned, and managed by an AWS service on your behalf. You have limited control over the key configuration, permissions, rotation, and deletion. You cannot use an AWS managed CMK to encrypt data in other AWS services or applications. You also cannot set an expiration date for the key material of an AWS managed CMK4.
* D. Operation system-native encryption that uses GnuPG is not a solution that uses AWS KMS. GnuPG is a command line tool that implements the OpenPGP standard for encrypting and signing data. It does not integrate with Amazon EBS or other AWS services. It also does not provide a way to automatically expire the key material used for encryption5.
References:
1: Customer Managed Keys - AWS Key Management Service 2: [Importing Key Material in AWS Key Management Service (AWS KMS) - AWS Key Management Service] 3: [Rotating Customer Master Keys - AWS Key Management Service] 4: [AWS Managed Keys - AWS Key Management Service] 5: The GNU Privacy Guard

NEW QUESTION 88
A Security Engineer is troubleshooting an issue with a company's custom logging application. The application logs are written to an Amazon S3 bucket with event notifications enabled to send events lo an Amazon SNS topic. All logs are encrypted at rest using an IAM KMS CMK. The SNS topic is subscribed to an encrypted Amazon SQS queue. The logging application polls the queue for new messages that contain metadata about the S3 object. The application then reads the content of the object from the S3 bucket for indexing.
The Logging team reported that Amazon CloudWatch metrics for the number of messages sent or received is showing zero. No togs are being received.
What should the Security Engineer do to troubleshoot this issue?
A) Add the following statement to the IAM managed CMKs:

```
{
    "Sid": "Allow Amazon SNS to use this key",
    "Effect": "Allow",
    "Principal": {
        "Service": ["sns.amazonaws.com", "sqs.amazonaws.com", "s3.amazonaws.com"]
    },
    "Action": [
        "kms:Decrypt",
        "kms:GenerateDataKey*"
    ],
    "Resource": "*"
}
```

B)
Add the following statement to the CMK key policy:

```
{
    "Sid": "Allow Amazon SNS to use this key",
    "Effect": "Allow",
    "Principal": {
        "Service": "sns.amazonaws.com"
    },
    "Action": [
        "kms:Decrypt",
        "kms:GenerateDataKey*"
    ],
    "Resource": "*"
}
```

C)
Add the following statement to the CMK key policy:

```
{
    "Sid": "Allow Amazon SNS to use this key",
    "Effect": "Allow",
    "Principal": {
        "Service": "sqs.amazonaws.com"
    },
    "Action": [
        "kms:Decrypt",
        "kms:GenerateDataKey*"
    ],
    "Resource": "*"
}
```

D)
Add the following statement to the CMK key policy:

```
{
    "Sid": "Allow Amazon SNS to use this key",
    "Effect": "Allow",
    "Principal": {
        "Service": "s3.amazonaws.com"
    },
    "Action": [
        "kms:Decrypt",
        "kms:GenerateDataKey*"
    ],
    "Resource": "*"
}
```

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

Answer: D

NEW QUESTION 93
A security engineer has enabled IAM Security Hub in their IAM account, and has enabled the Center for internet Security (CIS) IAM Foundations compliance standard. No evaluation results on compliance are returned in the Security Hub console after several hours. The engineer wants to ensure that Security Hub can evaluate their resources for CIS IAM Foundations compliance.
Which steps should the security engineer take to meet these requirements?

A. Add full Amazon Inspector IAM permissions to the Security Hub service role to allow it to perform the CIS compliance evaluation
B. Ensure that IAM Trusted Advisor Is enabled in the account and that the Security Hub service role has permissions to retrieve the Trusted Advisor security-related recommended actions
C. Ensure that IAM Confi
D. is enabled in the account, and that the required IAM Config rules have been created for the CIS compliance evaluation
E. Ensure that the correct trail in IAM CloudTrail has been configured for monitoring by Security Hub and that the Security Hub service role has permissions to perform the GetObject operation on CloudTrails Amazon S3 bucket

Answer: C

Explanation:
To ensure that Security Hub can evaluate their resources for CIS AWS Foundations compliance, the security engineer should do the following:

- Ensure that AWS Config is enabled in the account. This is a service that enables continuous assessment and audit of your AWS resources for compliance.
- Ensure that the required AWS Config rules have been created for the CIS compliance evaluation. These are rules that represent your desired configuration settings for specific AWS resources or for an entire AWS account.

NEW QUESTION 95
A security engineer receives a notice from the AWS Abuse team about suspicious activity from a Linux-based Amazon EC2 instance that uses Amazon Elastic Block Store (Amazon EBS>-based storage The instance is making connections to known malicious addresses
The instance is in a development account within a VPC that is in the us-east-1 Region The VPC contains an internet gateway and has a subnet in us-east-1a and us-easMb Each subnet is associate with a route table that uses the internet gateway as a default route Each subnet also uses the default network ACL The suspicious EC2 instance runs within the us-east-1 b subnet. During an initial investigation a security engineer discovers that the suspicious instance is the only

instance that runs in the subnet
Which response will immediately mitigate the attack and help investigate the root cause?

A. Log in to the suspicious instance and use the netstat command to identify remote connections Use the IP addresses from these remote connections to create deny rules in the security group of the instance Install diagnostic tools on the instance for investigation Update the outbound network ACL for the subnet inus-east-lb to explicitly deny all connections as the first rule during the investigation of the instance
B. Update the outbound network ACL for the subnet in us-east-1b to explicitly deny all connections as the first rule Replace the security group with a new security group that allows connections only from a diagnostics security group Update the outbound network ACL for the us-east-1b subnet to remove the deny all rule Launch a new EC2 instance that has diagnostic tools Assign the new security group to the new EC2 instance Use the new EC2 instance to investigate the suspicious instance
C. Ensure that the Amazon Elastic Block Store (Amazon EBS) volumes that are attached to the suspicious EC2 instance will not delete upon termination Terminate the instance Launch a new EC2 instance inus-east-1a that has diagnostic tools Mount the EBS volumes from the terminated instance for investigation
D. Create an AWS WAF web ACL that denies traffic to and from the suspicious instance Attach the AWS WAF web ACL to the instance to mitigate the attack Log in to the instance and install diagnostic tools to investigate the instance

Answer: B

Explanation:
This option suggests updating the outbound network ACL for the subnet in us-east-1b to explicitly deny all connections as the first rule, replacing the security group with a new one that only allows connections from a diagnostics security group, and launching a new EC2 instance with diagnostic tools to investigate the suspicious instance. This option will immediately mitigate the attack and provide the necessary tools for investigation.

NEW QUESTION 97
A company is undergoing a layer 3 and layer 4 DDoS attack on its web servers running on IAM.
Which combination of IAM services and features will provide protection in this scenario? (Select THREE).

A. Amazon Route 53
B. IAM Certificate Manager (ACM)
C. Amazon S3
D. IAM Shield
E. Elastic Load Balancer
F. Amazon GuardDuty

Answer: DEF

NEW QUESTION 98
A Systems Engineer is troubleshooting the connectivity of a test environment that includes a virtual security appliance deployed inline. In addition to using the virtual security appliance, the Development team wants to use security groups and network ACLs to accomplish various security requirements in the environment.
What configuration is necessary to allow the virtual security appliance to route the traffic?

A. Disable network ACLs.
B. Configure the security appliance's elastic network interface for promiscuous mode.
C. Disable the Network Source/Destination check on the security appliance's elastic network interface
D. Place the security appliance in the public subnet with the internet gateway

Answer: C

Explanation:
https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/using-eni.html#eni-basics Source/destination checking "You must disable source/destination checks if the instance runs services such as network address translation, routing, or firewalls."
The correct answer is C. Disable the Network Source/Destination check on the security appliance’s elastic network interface.
This answer is correct because disabling the Network Source/Destination check allows the virtual security appliance to route traffic that is not addressed to or from itself. By default, this check is enabled on all EC2 instances, and it prevents them from forwarding traffic that does not match their own IP or MAC addresses. However, for a virtual security appliance that acts as a router or a firewall, this check needs to be disabled, otherwise it will drop the traffic that it is supposed to route12.
The other options are incorrect because:

- A. Disabling network ACLs is not a solution, because network ACLs are optional layers of security for the subnets in a VPC. They can be used to allow or deny traffic based on IP addresses and ports, but they do not affect the routing behavior of the virtual security appliance3.
- B. Configuring the security appliance’s elastic network interface for promiscuous mode is not a solution, because promiscuous mode is a mode for a network interface that causes it to pass all traffic it receives to the CPU, rather than passing only the frames that it is programmed to receive. Promiscuous mode is normally used for packet sniffing or monitoring, but it does not enable the network interface to route traffic4.
- D. Placing the security appliance in the public subnet with the internet gateway is not a solution, because it does not address the routing issue of the virtual security appliance. The security appliance can be placed in either a public or a private subnet, depending on the network design and security requirements, but it still needs to have the Network Source/Destination check disabled to route traffic properly5.

References:
1: Enabling or disabling source/destination checks - Amazon Elastic Compute Cloud 2: Virtual security appliance - Wikipedia 3: Network ACLs - Amazon Virtual Private Cloud 4: Promiscuous mode - Wikipedia 5: NAT instances - Amazon Virtual Private Cloud

NEW QUESTION 103
A company deploys a distributed web application on a fleet of Amazon EC2 instances. The fleet is behind an Application Load Balancer (ALB) that will be configured to terminate the TLS connection. All TLS traffic to the ALB must stay secure, even if the certificate private key is compromised.
How can a security engineer meet this requirement?

A. Create an HTTPS listener that uses a certificate that is managed by IAM Certificate Manager (ACM).
B. Create an HTTPS listener that uses a security policy that uses a cipher suite with perfect toward secrecy (PFS).
C. Create an HTTPS listener that uses the Server Order Preference security feature.
D. Create a TCP listener that uses a custom security policy that allows only cipher suites with perfect forward secrecy (PFS).

Answer: A

NEW QUESTION 104
A business requires a forensic logging solution for hundreds of Docker-based apps running on Amazon EC2. The solution must analyze logs in real time, provide message replay, and persist logs.
Which Amazon Web Offerings (IAM) services should be employed to satisfy these requirements? (Select two.)

A. Amazon Athena
B. Amazon Kinesis
C. Amazon SQS
D. Amazon Elasticsearch
E. Amazon EMR

Answer: BD

NEW QUESTION 107
What are the MOST secure ways to protect the AWS account root user of a recently opened AWS account? (Select 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 Adminis-tratorAccess 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 112
A security engineer needs to see up an Amazon CloudFront distribution for an Amazon S3 bucket that hosts a static website. The security engineer must allow only specified IP addresses to access the website. The security engineer also must prevent users from accessing the website directly by using S3 URLs.
Which solution will meet these requirements?

A. Generate an S3 bucket polic
B. Specify cloudfront amazonaws com as the principa
C. Use the aws Sourcelp condition key to allow access only if the request conies from the specified IP addresses.
D. Create a CloudFront origin access identity (OAl). Create the S3 bucket policy so that only the OAl has acces
E. Create an AWS WAF web ACL and add an IP set rul
F. Associate the web ACL with the CloudFront distribution.
G. Implement security groups to allow only the specified IP addresses access and to restrict S3 bucket access by using the CloudFront distribution.
H. Create an S3 bucket access point to allow access from only the CloudFront distributio
I. Create an AWS WAF web ACL and add an IP set rul
J. Associate the web ACL with the CloudFront distribution.

Answer: B

NEW QUESTION 113
A company needs to follow security best practices to deploy resources from an AWS CloudFormation template. The CloudFormation template must be able to configure sensitive database credentials.
The company already uses AWS Key Management Service (AWS KMS) and AWS Secrets Manager. Which solution will meet the requirements?

A. Use a dynamic reference in the CloudFormation template to reference the database credentials in Secrets Manager.
B. Use a parameter in the CloudFormation template to reference the database credential
C. Encrypt the CloudFormation template by using AWS KMS.
D. Use a SecureString parameter in the CloudFormation template to reference the database credentials in Secrets Manager.
E. Use a SecureString parameter in the CloudFormation template to reference an encrypted value in AWS KMS

Answer: A

Explanation:
Option A: This option meets the requirements of following security best practices and configuring sensitive database credentials in the CloudFormation template. A dynamic reference is a way to specify external values that are stored and managed in other services, such as Secrets Manager, in the stack templates1. When using a dynamic reference, CloudFormation retrieves the value of the specified reference when necessary during stack and change set operations1. Dynamic references can be used for certain resources that support them, such as AWS::RDS::DBInstance1. By using a dynamic reference to reference the database credentials in Secrets Manager, the company can leverage the existing integration between these services and avoid hardcoding the secret information in the template. Secrets Manager is a service that helps you protect secrets needed to access your applications, services, and IT resources2. Secrets Manager enables you to rotate, manage, and retrieve database credentials, API keys, and other secrets throughout their lifecycle2.

NEW QUESTION 118
A company has hundreds of AWS accounts in an organization in AWS Organizations. The company operates out of a single AWS Region. The company has a dedicated security tooling AWS account in the organization. The security tooling account is configured as the organization's delegated administrator for Amazon GuardDuty and AWS Security Hub. The company has configured the environment to automatically enable GuardDuty and Security Hub for existing AWS accounts and new AWS accounts.
The company is performing control tests on specific GuardDuty findings to make sure that the company's security team can detect and respond to security events. The security team launched an Amazon EC2 instance and attempted to run DNS requests against a test domain, example.com, to generate a DNS finding. However, the GuardDuty finding was never created in the Security Hub delegated administrator account.
Why was the finding was not created in the Security Hub delegated administrator account?

A. VPC flow logs were not turned on for the VPC where the EC2 instance was launched.
B. The VPC where the EC2 instance was launched had the DHCP option configured for a custom OpenDNS resolver.
C. The GuardDuty integration with Security Hub was never activated in the AWS account where the finding was generated.

D. Cross-Region aggregation in Security Hub was not configured.

Answer: C

Explanation:
The correct answer is C. The GuardDuty integration with Security Hub was never activated in the AWS account where the finding was generated.
According to the AWS documentation1, GuardDuty findings are automatically sent to Security Hub only if the GuardDuty integration with Security Hub is enabled in the same account and Region. This means that the security tooling account, which is the delegated administrator for both GuardDuty and Security Hub, must enable the GuardDuty integration with Security Hub in each member account and Region where GuardDuty is enabled. Otherwise, the findings from GuardDuty will not be visible in Security Hub.
The other options are incorrect because:

- VPC flow logs are not required for GuardDuty to generate DNS findings. GuardDuty uses VPC DNS logs, which are automatically enabled for all VPCs, to detect malicious or unauthorized DNS activity.
- The DHCP option configured for a custom OpenDNS resolver does not affect GuardDuty's ability to generate DNS findings. GuardDuty uses its own threat intelligence sources to identify malicious domains, regardless of the DNS resolver used by the EC2 instance.
- Cross-Region aggregation in Security Hub is not relevant for this scenario, because the company operates out of a single AWS Region. Cross-Region aggregation allows Security Hub to aggregate findings from multiple Regions into a single Region.

References:
1: Managing GuardDuty accounts with AWS Organizations : Amazon GuardDuty Findings : How Amazon GuardDuty Works : Cross-Region aggregation in AWS Security Hub

NEW QUESTION 119
A company's Security Team received an email notification from the Amazon EC2 Abuse team that one or more of the company's Amazon EC2 instances may have been compromised
Which combination of actions should the Security team take to respond to (be current modem? (Select TWO.)

A. Open a support case with the IAM Security team and ask them to remove the malicious code from the affected instance
B. Respond to the notification and list the actions that have been taken to address the incident
C. Delete all IAM users and resources in the account
D. Detach the internet gateway from the VPC remove aft rules that contain 0.0.0.0V0 from the security groups, and create a NACL rule to deny all traffic Inbound from the internet
E. Delete the identified compromised instances and delete any associated resources that the Security team did not create.

Answer: DE

Explanation:
these are the recommended actions to take when you receive an abuse notice from AWS8. You should review the abuse notice to see what content or activity was reported and detach the internet gateway from the VPC to isolate the affected instances from the internet. You should also remove any rules that allow inbound traffic from 0.0.0.0/0 from the security groups and create a network access control list (NACL) rule to deny all traffic inbound from the internet. You should then delete the compromised instances and any associated resources
that you did not create. The other options are either inappropriate or unnecessary for responding to the abuse notice.

NEW QUESTION 120
During a manual review of system logs from an Amazon Linux EC2 instance, a Security Engineer noticed that there are sudo commands that were never properly alerted or reported on the Amazon CloudWatch Logs agent
Why were there no alerts on the sudo commands?

A. There is a security group blocking outbound port 80 traffic that is preventing the agent from sending the logs
B. The IAM instance profile on the EC2 instance was not properly configured to allow the CloudWatchLogs agent to push the logs to CloudWatch
C. CloudWatch Logs status is set to ON versus SECURE, which prevents it from pulling in OS security event logs
D. The VPC requires that all traffic go through a proxy, and the CloudWatch Logs agent does not support a proxy configuration.

Answer: B

Explanation:
the reason why there were no alerts on the sudo commands. Sudo commands are commands that allow a user to execute commands as another user, usually the superuser or root. CloudWatch Logs agent is a software agent that can send log data from an EC2 instance to CloudWatch Logs, a service that monitors and stores log data. The CloudWatch Logs agent needs an IAM instance profile, which is a container for an IAM role that allows applications running on an EC2 instance to make API requests to AWS services. If the IAM instance profile on the EC2 instance was not properly configured to allow the CloudWatch Logs agent to push the logs to CloudWatch, then there would be no alerts on the sudo commands. The other options are either irrelevant or invalid for explaining why there were no alerts on the sudo commands.

NEW QUESTION 124
A security engineer is designing an IAM policy for a script that will use the AWS CLI. The script currently assumes an IAM role that is attached to three AWS managed IAM policies: AmazonEC2FullAccess, AmazonDynamoDBFullAccess, and Ama-zonVPCFullAccess.
The security engineer needs to construct a least privilege IAM policy that will replace the AWS managed IAM policies that are attached to this role.
Which solution will meet these requirements in the MOST operationally efficient way?

A. In AWS CloudTrail, create a trail for management event
B. Run the script with the existing AWS managed IAM policie
C. Use IAM Access Analyzer to generate a new IAM policy that is based on access activity in the trai
D. Replace the existing AWS managed IAM policies with the generated IAM poli-cy for the role.
E. Remove the existing AWS managed IAM policies from the rol
F. Attach the IAM Access Analyzer Role Policy Generator to the rol
G. Run the scrip
H. Return to IAM Access Analyzer and generate a least privilege IAM polic
I. Attach the new IAM policy to the role.
J. Create an account analyzer in IAM Access Analyze
K. Create an archive rule that has a filter that checks whether the PrincipalArn value matches the ARN of the rol

L. Run the scrip
M. Remove the existing AWS managed IAM poli-cies from the role.
N. In AWS CloudTrail, create a trail for management event
O. Remove the exist-ing AWS managed IAM policies from the rol
P. Run the scrip
Q. Find the au-thorization failure in the trail event that is associated with the scrip
R. Create a new IAM policy that includes the action and resource that caused the authorization failur
S. Repeat the process until the script succeed
T. Attach the new IAM policy to the role.

Answer: A

NEW QUESTION 126
A company has thousands of AWS Lambda functions. While reviewing the Lambda functions, a security engineer discovers that sensitive information is being stored in environment variables and is viewable as plaintext in the Lambda console. The values of the sensitive information are only a few characters long.
What is the MOST cost-effective way to address this security issue?

A. Set up IAM policies from the Lambda console to hide access to the environment variables.
B. Use AWS Step Functions to store the environment variable
C. Access the environment variables at runtim
D. Use IAM permissions to restrict access to the environment variables to only the Lambda functions that require access.
E. Store the environment variables in AWS Secrets Manager, and access them at runtim
F. Use IAM permissions to restrict access to the secrets to only the Lambda functions that require access.
G. Store the environment variables in AWS Systems Manager Parameter Store as secure string parameters, and access them at runtim
H. Use IAM permissions to restrict access to the parameters to only the Lambda functions that require access.

Answer: D

Explanation:
Storing sensitive information in environment variables is not a secure practice, as anyone who has access to the Lambda console or the Lambda function code can view them as plaintext. To address this security issue, the security engineer needs to use a service that can store and encrypt the environment variables, and access them at runtime using IAM permissions. The most cost-effective way to do this is to use AWS Systems Manager Parameter Store, which is a service that provides secure, hierarchical storage for configuration data management and secrets management. Parameter Store allows you to store values as standard parameters (plaintext) or secure string parameters (encrypted). Secure string parameters use a AWS Key Management Service (AWS KMS) customer master key (CMK) to encrypt the parameter value. To access the parameter value at runtime, the Lambda function needs to have IAM permissions to decrypt the parameter using the KMS CMK.
The other options are incorrect because:
- Option A is incorrect because setting up IAM policies from the Lambda console to hide access to the environment variables will not prevent someone who has access to the Lambda function code from viewing them as plaintext. IAM policies can only control who can perform actions on AWS resources, not what they can see in the code or the console.
- Option B is incorrect because using AWS Step Functions to store the environment variables is not a secure or cost-effective solution. AWS Step Functions is a service that lets you coordinate multiple AWS services into serverless workflows. Step Functions does not provide any encryption or secrets management capabilities, and it will incur additional charges for each state transition in the workflow. Moreover, storing environment variables in Step Functions will make them visible in the execution history of the workflow, which can be accessed by anyone who has permission to view the Step Functions console or API.
- Option C is incorrect because storing the environment variables in AWS Secrets Manager and accessing them at runtime is not a cost-effective solution. AWS Secrets Manager is a service that helps you protect secrets needed to access your applications, services, and IT resources. Secrets Manager enables you to rotate, manage, and retrieve secrets throughout their lifecycle. While Secrets Manager can securely store and encrypt environment variables using KMS CMKs, it will incur higher charges than Parameter Store for storing and retrieving secrets. Unless the security engineer needs the advanced features of Secrets Manager, such as automatic rotation of secrets or integration with other AWS services, Parameter Store is a cheaper and simpler option.

NEW QUESTION 129
A company needs a forensic-logging solution for hundreds of applications running in Docker on Amazon EC2 The solution must perform real-time analytics on the togs must support the replay of messages and must persist the logs.
Which IAM services should be used to meet these requirements? (Select TWO)

A. Amazon Athena
B. Amazon Kinesis
C. Amazon SQS
D. Amazon Elasticsearch
E. Amazon EMR

Answer: BD

Explanation:
Amazon Kinesis and Amazon Elasticsearch are both suitable for forensic-logging solutions. Amazon Kinesis can collect, process, and analyze streaming data in real time3. Amazon Elasticsearch can store, search, and analyze log data using the popular open-source tool Elasticsearch. The other options are not designed for forensic-logging purposes. Amazon Athena is a query service that can analyze data in S3, Amazon SQS is a message queue service that can decouple and scale microservices, and Amazon EMR is a big data platform that can run Apache Spark and Hadoop clusters.

NEW QUESTION 131
A company needs to store multiple years of financial records. The company wants to use Amazon S3 to store copies of these documents. The company must implement a solution to prevent the documents from being edited, replaced, or deleted for 7 years after the documents are stored in Amazon S3. The solution must also encrypt the documents at rest.
A security engineer creates a new S3 bucket to store the documents. What should the security engineer do next to meet these requirements?

A. Configure S3 server-side encryptio
B. Create an S3 bucket policy that has an explicit deny rule for all users for s3:DeleteObject and s3:PutObject API call
C. Configure S3 Object Lock to use governance mode with a retention period of 7 years.
D. Configure S3 server-side encryptio

E. Configure S3 Versioning on the S3 bucke
F. Configure S3 ObjectLock to use compliance mode with a retention period of 7 years.
G. Configure S3 Versionin
H. Configure S3 Intelligent-Tiering on the S3 bucket to move the documents to S3 Glacier Deep Archive storag
I. Use S3 server-side encryption immediatel
J. Expire the objects after 7 years.
K. Set up S3 Event Notifications and use S3 server-side encryptio
L. Configure S3 Event Notifications to target an AWS Lambda function that will review any S3 API call to the S3 bucket and deny the s3:DeleteObject and s3:PutObject API call
M. Remove the S3 event notification after 7 years.

Answer: B

NEW QUESTION 134
A company is using AWS Organizations to manage multiple AWS accounts for its hu-man resources, finance, software development, and production departments. All the company's developers are part of the software development AWS account.
The company discovers that developers have launched Amazon EC2 instances that were preconfigured with software that the company has not approved for use.
The company wants to implement a solution to ensure that developers can launch EC2 instances with only approved software applications and only in the software de-velopment AWS account.
Which solution will meet these requirements?

A. In the software development account, create AMIS of preconfigured instanc-es that include only approved softwar
B. Include the AMI IDs in the condi-tion section of an AWS CloudFormation template to launch the appropriate AMI based on the AWS Regio
C. Provide the developers with theCloudFor-mation template to launch EC2 instances in the software development ac-count.
D. Create an Amazon EventBridge rule that runs when any EC2 RunInstances API event occurs in the software development accoun
E. Specify AWS Systems Man-ager Run Command as a target of the rul
F. Configure Run Command to run a script that will install all approved software onto the instances that the developers launch.
G. Use an AWS Service Catalog portfolio that contains EC2 products with ap-propriate AMIS that include only approved softwar
H. Grant the developers permission to portfolio access only the Service Catalog to launch a prod-uct in the software development account.
I. In the management account, create AMIS of preconfigured instances that in-clude only approved softwar
J. Use AWS CloudFormation StackSets to launch the AMIS across any AWS account in the organizatio
K. Grant the developers permission to launch the stack sets within the management account.

Answer: C

NEW QUESTION 139
A company has launched an Amazon EC2 instance with an Amazon Elastic Block Store (Amazon EBS) volume in the us-east-1 Region The volume is encrypted with an AWS Key Management Service (AWS KMS) customer managed key that the company's security team created The security team has created an 1AM key policy and has assigned the policy to the key The security team has also created an 1AM instance profile and has assigned the profile to the instance
The EC2 instance will not start and transitions from the pending state to the shutting-down state to the terminated state
Which combination of steps should a security engineer take to troubleshoot this issue? (Select TWO)

A. Verify that the KMS key policy specifies a deny statement that prevents access to the key by using the aws SourceIP condition key Check that the range includes the EC2 instance IP address that is associated with the EBS volume
B. Verify that the KMS key that is associated with the EBS volume is set to the Symmetric key type
C. Verify that the KMS key that is associated with the EBS volume is in the Enabled state
D. Verify that the EC2 role that is associated with the instance profile has the correct 1AM instance policy to launch an EC2 instance with the EBS volume
E. Verify that the key that is associated with the EBS volume has not expired and needs to be rotated

Answer: CD

Explanation:
To troubleshoot the issue of an EC2 instance failing to start and transitioning to a terminated state when it has an EBS volume encrypted with an AWS KMS customer managed key, a security engineer should take the following steps:
* C. Verify that the KMS key that is associated with the EBS volume is in the Enabled state. If the key is not enabled, it will not function properly and could cause the EC2 instance to fail.
* D. Verify that the EC2 role that is associated with the instance profile has the correct IAM instance policy to launch an EC2 instance with the EBS volume. If the instance does not have the necessary permissions, it may not be able to mount the volume and could cause the instance to fail.
Therefore, options C and D are the correct answers.

NEW QUESTION 141
A company has a web server in the AWS Cloud. The company will store the content for the web server in an Amazon S3 bucket. A security engineer must use an Amazon CloudFront distribution to speed up delivery of the content. None of the files can be publicly accessible from the S3 bucket direct.
Which solution will meet these requirements?

A. Configure the permissions on the individual files in the S3 bucket so that only the CloudFront distribution has access to them.
B. Create an origin access identity (OAI). Associate the OAI with the CloudFront distributio
C. Configure the S3 bucket permissions so that only the OAI can access the files in the S3 bucket.
D. Create an S3 role in AWS Identity and Access Management (IAM). Allow only the CloudFront distribution to assume the role to access the files in the S3 bucket.
E. Create an S3 bucket policy that uses only the CloudFront distribution ID as the principal and the Amazon Resource Name (ARN) as the target.

Answer: B

NEW QUESTION 143
A development team is using an IAM Key Management Service (IAM KMS) CMK to try to encrypt and decrypt a secure string parameter from IAM Systems Manager Parameter Store. However, the development team receives an error message on each attempt.
Which issues that are related to the CMK could be reasons for the error? (Select TWO.)

A. The CMK that is used in the attempt does not exist.

B. The CMK that is used in the attempt needs to be rotated.
C. The CMK that is used in the attempt is using the CMK's key ID instead of the CMK ARN.
D. The CMK that is used in the attempt is not enabled.
E. The CMK that is used in the attempt is using an alias.

Answer: AD

NEW QUESTION 144
An IAM user receives an Access Denied message when the user attempts to access objects in an Amazon S3 bucket. The user and the S3 bucket are in the same AWS account. The S3 bucket is configured to use server-side encryption with AWS KMS keys (SSE-KMS) to encrypt all of its objects at rest by using a customer managed key from the same AWS account. The S3 bucket has no bucket policy defined. The IAM user has been granted permissions through an IAM policy that allows the kms:Decrypt permission to the customer managed key. The IAM policy also allows the s3:List* and s3:Get* permissions for the S3 bucket and its objects.
Which of the following is a possible reason that the IAM user cannot access the objects in the S3 bucket?

A. The IAM policy needs to allow the kms:DescribeKey permission.
B. The S3 bucket has been changed to use the AWS managed key to encrypt objects at rest.
C. An S3 bucket policy needs to be added to allow the IAM user to access the objects.
D. The KMS key policy has been edited to remove the ability for the AWS account to have full access to the key.

Answer: D

Explanation:
The possible reason that the IAM user cannot access the objects in the S3 bucket is D. The KMS key policy has been edited to remove the ability for the AWS account to have full access to the key.
This answer is correct because the KMS key policy is the primary way to control access to the KMS key, and it must explicitly allow the AWS account to have full access to the key. If the KMS key policy has been edited to remove this permission, then the IAM policy that grants kms:Decrypt permission to the IAM user has no effect, and the IAM user cannot decrypt the objects in the S3 bucket12.
The other options are incorrect because:

- A. The IAM policy does not need to allow the kms:DescribeKey permission, because this permission is not required for decrypting objects in S3 using SSE-KMS. The kms:DescribeKey permission allows getting information about a KMS key, such as its creation date, description, and key state3.
- B. The S3 bucket has not been changed to use the AWS managed key to encrypt objects at rest, because this would not cause an Access Denied message for the IAM user. The AWS managed key is a default KMS key that is created and managed by AWS for each AWS account and Region. The IAM user does not need any permissions on this key to use it for SSE-KMS4.
- C. An S3 bucket policy does not need to be added to allow the IAM user to access the objects, because the IAM user already has s3:List* and s3:Get* permissions for the S3 bucket and its objects through an IAM policy. An S3 bucket policy is an optional way to grant cross-account access or public access to an S3 bucket5.

References:
1: Key policies in AWS KMS 2: Using server-side encryption with AWS KMS keys (SSE-KMS) 3: AWS KMS API Permissions Reference 4: Using server-side encryption with Amazon S3 managed keys (SSE-S3) 5: Bucket policy examples

NEW QUESTION 146
A company usesAWS Organizations to run workloads in multiple AWS accounts Currently the individual team members at the company access all Amazon EC2 instances remotely by using SSH or Remote Desktop Protocol (RDP) The company does not have any audit trails and security groups are occasionally open The company must secure access management and implement a centralized togging solution
Which solution will meet these requirements MOST securely?

A. Configure trusted access for AWS System Manager in Organizations Configure a bastion host from the management account Replace SSH and RDP by using Systems Manager Session Manager from the management account Configure Session Manager logging to Amazon CloudWatch Logs
B. Replace SSH and RDP with AWS Systems Manager Session Manager Install Systems Manager Agent (SSM Agent) on the instances Attach the
C. AmazonSSMManagedInstanceCore role to the instances Configure session data streaming to Amazon CloudWatch Logs Create a separate logging account that has appropriate cross-account permissions to audit the log data
D. Install a bastion host in the management account Reconfigure all SSH and RDP to allow access only from the bastion host Install AWS Systems Manager Agent (SSM Agent) on the bastion host Attach the AmazonSSMManagedInstanceCore role to the bastion host Configure session data streaming to Amazon CloudWatch Logs in a separate logging account to audit log data
E. Replace SSH and RDP with AWS Systems Manager State Manager Install Systems Manager Agent (SSM Agent) on the instances Attach theAmazonSSMManagedInstanceCore role to the instances Configure session data streaming to AmazonCloudTrail Use CloudTrail Insights to analyze the trail data

Answer: C

Explanation:
To meet the requirements of securing access management and implementing a centralized logging solution, the most secure solution would be to:

- Install a bastion host in the management account.
- Reconfigure all SSH and RDP to allow access only from the bastion host.
- Install AWS Systems Manager Agent (SSM Agent) on the bastion host.
- Attach the AmazonSSMManagedInstanceCore role to the bastion host.
- Configure session data streaming to Amazon CloudWatch Logs in a separate logging account to audit log data

This solution provides the following security benefits:

- It uses AWS Systems Manager Session Manager instead of traditional SSH and RDP protocols, which provides a secure method for accessing EC2 instances without requiring inbound firewall rules or open ports.
- It provides audit trails by configuring Session Manager logging to Amazon CloudWatch Logs and creating a separate logging account to audit the log data.
- It uses the AWS Systems Manager Agent to automate common administrative tasks and improve the security posture of the instances.
- The separate logging account with cross-account permissions provides better data separation and improves security posture.

https://aws.amazon.com/solutions/implementations/centralized-logging/

NEW QUESTION 149
Which of the following bucket policies will ensure that objects being uploaded to a bucket called 'demo' are encrypted.
Please select:

A. C:\Users\wk\Desktop\mudassar\Untitled.jpg

```
"Version":"2012-10-17",
"Id":"PutObj",
"Statement":[{
"Sid":"DenyUploads",
"Effect":"Deny",
"Principal":"*",
"Action":"s3:PutObject",
"Resource":"arn:aws:s3:::demo/*",
"Condition":{
"StringNotEquals":{
"s3:x-amz-server-side-encryption":"aws:kms"
}
}
}
]
}
```

B. C:\Users\wk\Desktop\mudassar\Untitled.jpg

```
"Version":"2012-10-17",
"Id":"PutObj",
"Statement":[{
"Sid":"DenyUploads",
"Effect":"Deny",
"Principal":"*",
"Action":"s3:PutObject",
"Resource":"arn:aws:s3:::demo/*",
"Condition":{
"StringEquals":{
"s3:x-amz-server-side-encryption":"aws:kms"
}
}
}
]
}
```

C. C:\Users\wk\Desktop\mudassar\Untitled.jpg

```
"Version":"2012-10-17",
"Id":"PutObj",
"Statement":[{
"Sid":"DenyUploads",
"Effect":"Deny",
"Principal":"*",
"Action":"s3:PutObject",
"Resource":"arn:aws:s3:::demo/*"
}
}
]
}
```

D. C:\Users\wk\Desktop\mudassar\Untitled.jpg

```
"Version":"2012-10-17",
"Id":"PutObj",
"Statement":[{
"Sid":"DenyUploads",
"Effect":"Deny",
"Principal":"*",
"Action":"s3:PutObjectEncrypted",
"Resource":"arn:aws:s3:::demo/*"
}
}
]
}
```

Answer: A

Explanation:
The condition of "s3:x-amz-server-side-encryption":"IAM:kms" ensures that objects uploaded need to be encrypted.
Options B,C and D are invalid because you have to ensure the condition of ns3:x-amz-server-side-encryption":"IAM:kms" is present
For more information on IAM KMS best practices, just browse to the below URL: https://dl.IAMstatic.com/whitepapers/IAM-kms-best-praaices.pdf
Submit your Feedback/Queries to our Expert

NEW QUESTION 154
A company is using AWS WAF to protect a customized public API service that is based on Amazon EC2 instances. The API uses an Application Load Balancer. The AWS WAF web ACL is configured with an AWS Managed Rules rule group. After a software upgrade to the API and the client application, some types of requests are no longer working and are causing application stability issues. A security engineer discovers that AWS WAF logging is not turned on for the web ACL. The security engineer needs to immediately return the application to service, resolve the issue, and ensure that logging is not turned off in the future. The security engineer turns on logging for the web ACL and specifies Amazon Cloud-Watch Logs as the destination.
Which additional set of steps should the security engineer take to meet the re-quirements?

A. Edit the rules in the web ACL to include rules with Count action
B. Review the logs to determine which rule is blocking the reques
C. Modify the IAM policy of all AWS WAF administrators so that they cannot remove the log-ging configuration for any AWS WAF web ACLs.
D. Edit the rules in the web ACL to include rules with Count action
E. Review the logs to determine which rule is blocking the reques
F. Modify the AWS WAF resource policy so that AWS WAF administrators cannot remove the log-ging configuration for any AWS WAF web ACLs.
G. Edit the rules in the web ACL to include rules with Count and Challenge action
H. Review the logs to determine which rule is blocking the reques
I. Modify the AWS WAF resource policy so that AWS WAF administrators cannot remove the logging configuration for any AWS WAF web ACLs.
J. Edit the rules in the web ACL to include rules with Count and Challenge action
K. Review the logs to determine which rule is blocking the reques
L. Modify the IAM policy of all AWS WAF administrators so that they cannot remove the logging configuration for any AWS WAF web ACLs.

Answer: A

Explanation:
This answer is correct because it meets the requirements of returning the application to service, resolving the issue, and ensuring that logging is not turned off in the future. By editing the rules in the web ACL to include rules with Count actions, the security engineer can test the effect of each rule without blocking or allowing requests. By reviewing the logs, the security engineer can identify which rule is causing the problem and modify or delete it accordingly. By modifying the IAM policy of all AWS WAF administrators, the security engineer can restrict their permissions to prevent them from removing the logging configuration for any AWS WAF web ACLs.

NEW QUESTION 155
A security engineer needs to create an IAM Key Management Service <IAM KMS) key that will De used to encrypt all data stored in a company's Amazon S3 Buckets in the us-west-1 Region. The key will use
server-side encryption. Usage of the key must be limited to requests coming from Amazon S3 within the company's account.
Which statement in the KMS key policy will meet these requirements?
A)

```
{
    "Effect": "Allow",
    "Principal": {
        "AWS": "*"
    },
    "Action": [
        "kms:Encrypt",
        "kms:Decrypt",
        "kms:ReEncrypt*",
        "kms:GenerateDataKey*",
        "kms:DescribeKey"
    ],
    "Resource": "*",
    "Condition": {
        "StringEquals": {
            "kms:ViaService": "s3.us-west-1.amazonaws.com",
            "kms:CallerAccount": "<CustomerAccountID>"
        }
    }
}
```

B)

```
{
    "Effect": "Allow",
    "Principal": {
        "AWS": "s3.us-west-1.amazonaws.com"
    },
    "Action": [
        "kms:Encrypt",
        "kms:Decrypt",
        "kms:ReEncrypt*",
        "kms:GenerateDataKey*",
        "kms:DescribeKey"
    ],
    "Resource": "*",
    "Condition": {
        "StringEquals": {
            "kms:CallerAccount": "<CustomerAccountID>"
        }
    }
}
```

C)

```
{
    "Effect": "Allow",
    "Principal": {
        "AWS": "*"
    },
    "Action": [
        "kms:Encrypt",
        "kms:Decrypt",
        "kms:ReEncrypt*",
        "kms:GenerateDataKey*",
        "kms:DescribeKey"
    ],
    "Resource": "*",
    "Condition": {
        "StringEquals": {
            "kms:EncryptionContext:aws:s3:arn": [
                "arn:aws:s3:::*"
            ],
```

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

Answer: A

NEW QUESTION 157
A company is running its workloads in a single AWS Region and uses AWS Organizations. A security engineer must implement a solution to prevent users from launching resources in other Regions.
Which solution will meet these requirements with the LEAST operational overhead?

A. Create an IAM policy that has an aws RequestedRegion condition that allows actions only in the designated Region Attach the policy to all users.
B. Create an I AM policy that has an aws RequestedRegion condition that denies actions that are not in the designated Region Attach the policy to the AWS account in AWS Organizations.
C. Create an IAM policy that has an aws RequestedRegion condition that allows the desired actions Attach the policy only to the users who are in the designated Region.
D. Create an SCP that has an aws RequestedRegion condition that denies actions that are not in the designated Regio
E. Attach the SCP to the AWS account in AWS Organizations.

Answer: D

Explanation:
Although you can use a IAM policy to prevent users launching resources in other regions. The best practice is to use SCP when using AWS organizations.
https://docs.aws.amazon.com/organizations/latest/userguide/orgs_manage_policies_scps_examples_general.htm

NEW QUESTION 162
A company uses Amazon EC2 Linux instances in the AWS Cloud. A member of the company's security team recently received a report about common vulnerability identifiers on the instances.
A security engineer needs to verify patching and perform remediation if the instances do not have the correct patches installed. The security engineer must determine which EC2 instances are at risk and must implement a solution to automatically update those instances with the applicable patches.
What should the security engineer do to meet these requirements?

A. Use AWS Systems Manager Patch Manager to view vulnerability identifiers for missing patches on the instance
B. Use Patch Manager also to automate the patching process.
C. Use AWS Shield Advanced to view vulnerability identifiers for missing patches on the instance

D. Use AWS Systems Manager Patch Manager to automate the patching process.
E. Use Amazon GuardDuty to view vulnerability identifiers for missing patches on the instance
F. Use Amazon Inspector to automate the patching process.
G. Use Amazon Inspector to view vulnerability identifiers for missing patches on the instance
H. Use Amazon Inspector also to automate the patching process.

Answer: A

Explanation:
https://aws.amazon.com/about-aws/whats-new/2020/10/now-use-aws-systems-manager-to-view-vulnerability-id

NEW QUESTION 165
A company hosts multiple externally facing applications, each isolated in its own IAM account The company'B Security team has enabled IAM WAF. IAM Config. and Amazon GuardDuty on all accounts. The company's Operations team has also joined all of the accounts to IAM Organizations and established centralized logging for CloudTrail. IAM Config, and GuardDuty. The company wants the Security team to take a reactive remediation in one account, and automate implementing this remediation as proactive prevention in all the other accounts.
How should the Security team accomplish this?

A. Update the IAM WAF rules in the affected account and use IAM Firewall Manager to push updated IAM WAF rules across all other accounts.
B. Use GuardDuty centralized logging and Amazon SNS to set up alerts to notify all application teams of security incidents.
C. Use GuardDuty alerts to write an IAM Lambda function that updates all accounts by adding additional NACLs on the Amazon EC2 instances to block known malicious IP addresses.
D. Use IAM Shield Advanced to identify threats in each individual account and then apply the account-based protections to all other accounts through Organizations.

Answer: C

NEW QUESTION 166
A company's security engineer is designing an isolation procedure for Amazon EC2 instances as part of an incident response plan. The security engineer needs to isolate a target instance to block any traffic to and from the target instance, except for traffic from the company's forensics team. Each of the company's EC2 instances has its own dedicated security group. The EC2 instances are deployed in subnets of a VPC. A subnet can contain multiple instances.
The security engineer is testing the procedure for EC2 isolation and opens an SSH session to the target instance. The procedure starts to simulate access to the target instance by an attacker. The security engineer removes the existing security group rules and adds security group rules to give the forensics team access to the target instance on port 22.
After these changes, the security engineer notices that the SSH connection is still active and usable. When the security engineer runs a ping command to the public IP address of the target instance, the ping command is blocked.
What should the security engineer do to isolate the target instance?

A. Add an inbound rule to the security group to allow traffic from 0.0.0.0/0 for all port
B. Add an outbound rule to the security group to allow traffic to 0.0.0.0/0 for all port
C. Then immediately delete these rules.
D. Remove the port 22 security group rul
E. Attach an instance role policy that allows AWS Systems Manager Session Manager connections so that the forensics team can access the target instance.
F. Create a network ACL that is associated with the target instance's subne
G. Add a rule at the top of the inbound rule set to deny all traffic from 0.0.0.0/0. Add a rule at the top of the outbound rule set to deny all traffic to 0.0.0.0/0.
H. Create an AWS Systems Manager document that adds a host-level firewall rule to block all inbound traffic and outbound traffi
I. Run the document on the target instance.

Answer: C

NEW QUESTION 169
A company has implemented IAM WAF and Amazon CloudFront for an application. The application runs on Amazon EC2 instances that are part of an Auto Scaling group. The Auto Scaling group is behind an Application Load Balancer (ALB).
The IAM WAF web ACL uses an IAM Managed Rules rule group and is associated with the CloudFront distribution. CloudFront receives the request from IAM WAF and then uses the ALB as the distribution's origin.
During a security review, a security engineer discovers that the infrastructure is susceptible to a large, layer 7 DDoS attack.
How can the security engineer improve the security at the edge of the solution to defend against this type of attack?

A. Configure the CloudFront distribution to use the Lambda@Edge featur
B. Create an IAM Lambda function that imposes a rate limit on CloudFront viewer request
C. Block the request if the rate limit is exceeded.
D. Configure the IAM WAF web ACL so that the web ACL has more capacity units to process all IAM WAF rules faster.
E. Configure IAM WAF with a rate-based rule that imposes a rate limit that automatically blocks requests when the rate limit is exceeded.
F. Configure the CloudFront distribution to use IAM WAF as its origin instead of the ALB.

Answer: C

Explanation:
To improve the security at the edge of the solution to defend against a large, layer 7 DDoS attack, the security engineer should do the following:
> Configure AWS WAF with a rate-based rule that imposes a rate limit that automatically blocks requests when the rate limit is exceeded. This allows the security engineer to use a rule that tracks the number of requests from a single IP address and blocks subsequent requests if they exceed a specified threshold within a specified time period.

NEW QUESTION 173
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