Amazon

Exam Questions AWS-Certified-Security-Specialty

Amazon AWS Certified Security - Specialty

NEW QUESTION 1
A company wants to protect its website from man in-the-middle attacks by using Amazon CloudFront. Which solution will meet these requirements with the LEAST operational overhead?

A. Use the SimpleCORS managed response headers policy.
B. Use a Lambda@Edge function to add the Strict-Transport-Security response header.
C. Use the SecurityHeadersPolicy managed response headers policy.
D. Include the X-XSS-Protection header in a custom response headers policy.

Answer: C

Explanation:
https://docs.aws.amazon.com/AmazonCloudFront/latest/DeveloperGuide/using-managed-response-headers-poli The SecurityHeadersPolicy is a managed policy provided by Amazon CloudFront that includes a set of recommended security headers to enhance the security of your website. These headers help protect against various types of attacks, including man-in-the-middle attacks. By applying the SecurityHeadersPolicy to your CloudFront distribution, the necessary security headers will be automatically added to the responses sent by CloudFront. This reduces operational overhead because you don't have to manually configure or manage the headers yourself.

NEW QUESTION 2
A company wants to prevent SSH access through the use of SSH key pairs for any Amazon Linux 2 Amazon EC2 instances in its AWS account. However, a system administrator occasionally will need to access these EC2 instances through SSH in an emergency. For auditing purposes, the company needs to record any commands that a user runs in an EC2 instance.
What should a security engineer do to configure access to these EC2 instances to meet these requirements?

A. Use the EC2 serial console Configure the EC2 serial console to save all commands that are entered to an Amazon S3 bucke
B. Provide the EC2 instances with an IAM role that allows the EC2 serial console to access Amazon S3. Configure an IAM account for the system administrato
C. Provide an IAM policy that allows the IAM account to use the EC2 serial console.
D. Use EC2 Instance Connect Configure EC2 Instance Connect to save all commands that are entered to Amazon CloudWatch Log
E. Provide the EC2 instances with an IAM role that allows the EC2 instances to access CloudWatch Logs Configure an IAM account for the system administrato
F. Provide an IAM policy that allows the IAM account to use EC2 Instance Connect.
G. Use an EC2 key pair with an EC2 instance that needs SSH access Access the EC2 instance with this key pair by using SS
H. Configure the EC2 instance to save all commands that are entered to Amazon CloudWatch Log
I. Provide the EC2 instance with an IAM role that allows the EC2 instance to access Amazon S3 and CloudWatch Logs.
J. Use AWS Systems Manager Session Manager Configure Session Manager to save all commands that are entered in a session to an Amazon S3 bucke
K. Provide the EC2 instances with an IAM role that allows Systems Manager to manage the EC2 instance
L. Configure an IAM account for the system administrator Provide an IAM policy that allows the IAM account to use Session Manager.

Answer: D

Explanation:
Open the AWS Systems Manager console at https://console.aws.amazon.com/systems-manager/. In the navigation pane, choose Session Manager. Choose the Preferences tab, and then choose Edit. Select the check box next to Enable under S3 logging. (Recommended) Select the check box next to Allow only encrypted S3 buckets. With this option turned on, log data is encrypted using the server-side encryption key specified for the bucket. If you don't want to encrypt the log data that is sent to Amazon S3, clear the check box. You must also clear the check box if encryption isn't allowed on the S3 bucket.

NEW QUESTION 3
A company needs to improve its ability to identify and prevent IAM policies that grant public access or cross-account access to resources. The company has implemented AWS Organizations and has started using AWS Identity and Access Management Access Analyzer to refine overly broad access to accounts in the organization.
A security engineer must automate a response in the company's organization for any newly created policies that are overly permissive. The automation must remediate external access and must notify the company's security team.
Which combination of steps should the security engineer take to meet these requirements? (Select THREE.)

A. Create an AWS Step Functions state machine that checks the resource type in the finding and adds an explicit Deny statement in the trust policy for the IAM rol
B. Configure the state machine to publish a notification to an Amazon SimpleNotification Service (Amazon SNS) topic.
C. Create an AWS Batch job that forwards any resource type findings to an AWS Lambda function.Configure the Lambda function to add an explicit Deny statement in the trust policy for the IAM rol
D. Configure the AWS Batch job to publish a notification to an Amazon Simple Notification Service (Amazon SNS) topic.
E. In Amazon EventBridge, create an event rule that matches active IAM Access Analyzer findings and invokes AWS Step Functions for resolution.
F. In Amazon CloudWatch, create a metric filter that matches active IAM Access Analyzer findings and invokes AWS Batch for resolution.
G. Create an Amazon Simple Queue Service (Amazon SQS) queu
H. Configure the queue to forward a notification to the security team that an external principal has been granted access to the specific IAM role and has been blocked.
I. Create an Amazon Simple Notification Service (Amazon SNS) topic for external or cross-account access notice
J. Subscribe the security team's email addresses to the topic.

Answer: ACF

Explanation:
The correct answer is A, C, and F.
To automate a response for any newly created policies that are overly permissive, the security engineer needs to use a combination of services that can monitor, analyze, remediate, and notify the security incidents.
Option A is correct because creating an AWS Step Functions state machine that checks the resource type in the finding and adds an explicit Deny statement in the trust policy for the IAM role is a valid way to remediate external access. AWS Step Functions is a service that allows you to coordinate multiple AWS services into serverless workflows. You can use Step Functions to invoke AWS Lambda functions, which can modify the IAM policies programmatically. You can also use Step Functions to publish a notification to an Amazon SNS topic, which can send messages to subscribers such as email addresses.
Option B is incorrect because creating an AWS Batch job that forwards any resource type findings to an AWS Lambda function is not a suitable way to automate a response. AWS Batch is a service that enables you to run batch computing workloads on AWS. Batch is designed for large-scale and long-running jobs that can benefit from parallelization and dynamic provisioning of compute resources. Batch is not intended for event-driven and real-time workflows that require immediate

response.
Option C is correct because creating an Amazon EventBridge event rule that matches active IAM Access Analyzer findings and invokes AWS Step Functions for resolution is a valid way to monitor and analyze the security incidents. Amazon EventBridge is a serverless event bus service that allows you to connect your applications with data from various sources. EventBridge can use rules to match events and route them to targets for processing. You can use EventBridge to invoke AWS Step Functions state machines from the IAM Access Analyzer findings.
Option D is incorrect because creating an Amazon CloudWatch metric filter that matches active IAM Access Analyzer findings and invokes AWS Batch for resolution is not a suitable way to monitor and analyze the security incidents. Amazon CloudWatch is a service that provides monitoring and observability for your AWS resources and applications. CloudWatch can collect metrics, logs, and events from various sources and perform actions based on alarms or filters. However, CloudWatch cannot directly invoke AWS Batch jobs from the IAM Access Analyzer findings. You would need to use another service such as EventBridge or SNS to trigger the Batch job.
Option E is incorrect because creating an Amazon SQS queue that forwards a notification to the security team that an external principal has been granted access to the specific IAM role and has been blocked is not a valid way to notify the security incidents. Amazon SQS is a fully managed message queue service that enables you to decouple and scale microservices, distributed systems, and serverless applications. SQS can deliver messages to consumers that poll the queue for messages. However, SQS cannot directly forward a notification to the security team's email addresses. You would need to use another service such as SNS or SES to send email notifications.
Option F is correct because creating an Amazon SNS topic for external or cross-account access notices and subscribing the security team's email addresses to the topic is a valid way to notify the security incidents. 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 use SNS to send email notifications to the security team when a critical security finding is detected.
References:

- AWS Step Functions
- AWS Batch
- Amazon EventBridge
- Amazon CloudWatch
- Amazon SQS
- Amazon SNS

NEW QUESTION 4
A company deploys a set of standard IAM roles in AWS accounts. The IAM roles are based on job functions within the company. To balance operational efficiency and security, a security engineer implemented AWS Organizations SCPs to restrict access to critical security services in all company accounts.
All of the company's accounts and OUs within AWS Organizations have a default FullAWSAccess SCP that is attached. The security engineer needs to ensure that no one can disable Amazon GuardDuty and AWS Security Hub. The security engineer also must not override other permissions that are granted by IAM policies that are defined in the accounts.
Which SCP should the security engineer attach to the root of the organization to meet these requirements? A)

```
"Version": "2012-10-17",
"Statement"":[
  {
    "Effect": "Deny",
    "Action":[
      "guardduty:DeleteDetector",
      "guardduty:UpdateDetector",
      "securityhub:DisableSecurityHub"
    ],
    "Resource":[
    "*"
    ]
  }
 ]
}
```

B)

```
{
"Version": "2012-10-17",
"Statement"":[
  {
    "Effect": "Deny",
    "Action":"*",
    "Resource": "*"
  },
  {
    "Effect": "Allow",
    "NotAction": [
    "guardduty:DeleteDetector",
    "guardduty:UpdateDetector",
    "securityhub:DisableSecurityHub"
    ],
    "Resource":[
    "*"
    ]
  }
 ]
}
```

C)

```
{
 "Version": "2012-10-17",
 "Statement"":[
   {
      "Effect": "Allow",
      "Action":"*",
      "Resource": "*"
    },
    {
      "Effect": "Deny",
      "NotAction": [
      "guardduty:DeleteDetector",
      "guardduty:UpdateDetector",
      "securityhub:DisableSecurityHub"
    ],
    "Resource":[
    "*"
    ]
  }
 ]
}
```

D)

```
{
 "Version": "2012-10-17",
 "Statement"":[
   {
      "Effect": "Allow",
       "NotAction": [
      "guardduty:DeleteDetector",
      "guardduty:UpdateDetector",
      "securityhub:DisableSecurityHub"
    ],
    "Resource":[
    "*"
    ]
  }
 ]
}
```

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

Answer: A

NEW QUESTION 5
A large corporation is creating a multi-account strategy and needs to determine how its employees should access the IAM infrastructure.
Which of the following solutions would provide the MOST scalable solution?

A. Create dedicated IAM users within each IAM account that employees can assume through federationbased upon group membership in their existing identity provider
B. Use a centralized account with IAM roles that employees can assume through federation with their existing identity provider Use cross-account roles to allow the federated users to assume their target role in the resource accounts.
C. Configure the IAM Security Token Service to use Kerberos tokens so that users can use their existing corporate user names and passwords to access IAM resources directly
D. Configure the IAM trust policies within each account's role to set up a trust back to the corporation's existing identity provider allowing users to assume the role based off their SAML token

Answer: B

Explanation:
the most scalable solution for accessing the IAM infrastructure in a multi-account strategy. A multi-account strategy is a way of organizing your AWS resources into multiple IAM accounts for security, billing, and management purposes. Federation is a process that allows users to access AWS resources using credentials from an external identity provider such as Active Directory or SAML. IAM roles are sets of permissions that grant access to AWS resources. Cross-account roles are IAM roles that allow users in one account to access resources in another account. By using a centralized account with IAM roles that employees can assume through federation with their existing identity provider, you can simplify and streamline the access management process. By using cross-account roles to allow the federated users to assume their target role in the resource accounts, you can enable granular and flexible access control across multiple accounts. The other options are either less scalable or less secure for accessing the IAM infrastructure in a multi-account strategy.

NEW QUESTION 6
A company wants to migrate its static primary domain website to AWS. The company hosts the website and DNS servers internally. The company wants the website to enforce SSL/TLS encryption block IP addresses from outside the United States (US), and take advantage of managed services whenever possible.
Which solution will meet these requirements?

A. Migrate the website to Amazon S3 Import a public SSL certificate to an Application Loa
B. Balancer with rules to block traffic from outside the US Migrate DNS to Amazon Route 53.
C. Migrate the website to Amazon EC2 Import a public SSL certificate that is created by AWS Certificate Manager (ACM) to an Application Load Balancer with rules to block traffic from outside the US Update DNS accordingly.
D. Migrate the website to Amazon S3. Import a public SSL certificate to Amazon CloudFront Use AWS WAF rules to block traffic from outside the US Update DNS.accordingly
E. Migrate the website to Amazon S3 Import a public SSL certificate that is created by AWS Certificate Manager (ACM) to Amazo
F. CloudFront Configure CloudFront to block traffic from outside the U
G. Migrate DNS to Amazon Route 53.

Answer: D

Explanation:
To migrate the static website to AWS and meet the requirements, the following steps are required:

- Migrate the website to Amazon S3, which is a highly scalable and durable object storage service that can host static websites. To do this, create an S3 bucket with the same name as the domain name of the website, enable static website hosting for the bucket, upload the website files to the bucket, and configure the bucket policy to allow public read access to the objects. For more information, see Hosting a static website on Amazon S3.
- Import a public SSL certificate that is created by AWS Certificate Manager (ACM) to Amazon CloudFront, which is a global content delivery network (CDN) service that can improve the performance and security of web applications. To do this, request or import a public SSL certificate for the domain name of the website using ACM, create a CloudFront distribution with the S3 bucket as the origin, and associate the SSL certificate with the distribution. For more information, see Using alternate domain names and HTTPS.
- Configure CloudFront to block traffic from outside the US, which is one of the requirements. To do this, create a CloudFront web ACL using AWS WAF, which is a web application firewall service that lets you control access to your web applications. In the web ACL, create a rule that uses a geo match condition to block requests that originate from countries other than the US. Associate the web ACL with the CloudFront distribution. For more information, see How AWS WAF works with Amazon CloudFront features.
- Migrate DNS to Amazon Route 53, which is a highly available and scalable cloud DNS service that can route traffic to various AWS services. To do this, register or transfer your domain name to Route 53, create a hosted zone for your domain name, and create an alias record that points your domain name to your CloudFront distribution. For more information, see Routing traffic to an Amazon CloudFront web distribution by using your domain name.

The other options are incorrect because they either do not implement SSL/TLS encryption for the website (A), do not use managed services whenever possible (B), or do not block IP addresses from outside the US ©.Verified References:

- https://docs.aws.amazon.com/AmazonS3/latest/userguide/HostingWebsiteOnS3Setup.html
- https://docs.aws.amazon.com/waf/latest/developerguide/waf-cloudfront.html
- https://docs.aws.amazon.com/Route53/latest/DeveloperGuide/routing-to-cloudfront-distribution.html

NEW QUESTION 7
A company is using AWS Organizations to create OUs for its accounts. The company has more than 20 accounts that are all part of the OUs. A security engineer must implement a solution to ensure that no account can stop to file delivery to AWS CloudTrail.
Which solution will meet this requirement?

A. Use the --is-multi-region-trail option while running the create-trail command to ensure that logs are configured across all AWS Regions.
B. Create an SCP that includes a Deny rule tor the cloudtrai
C. StopLogging action Apply the SCP to all accounts in the OUs.
D. Create an SCP that includes an Allow rule for the cloudtrai
E. StopLogging action Apply the SCP to all accounts in the OUs.
F. Use AWS Systems Manager to ensure that CloudTrail is always turned on.

Answer: B

Explanation:
This SCP prevents users or roles in any affected account from disabling a CloudTrail log, either directly as a command or through the console.
https://asecure.cloud/a/scp_cloudtrail/

NEW QUESTION 8
A security engineer is creating an AWS Lambda function. The Lambda function needs to use a role that is named LambdaAuditRole to assume a role that is named AcmeAuditFactoryRole in a different AWS account.
When the code is processed, the following error message appears: "An error oc-curred (AccessDenied) when calling the AssumeRole operation."
Which combination of steps should the security engineer take to resolve this er-ror? (Select TWO.)

A. Ensure that LambdaAuditRole has the sts:AssumeRole permission for Ac-meAuditFactoryRole.
B. Ensure that LambdaAuditRole has the AWSLambdaBasicExecutionRole managed policy attached.
C. Ensure that the trust policy for AcmeAuditFactoryRole allows the sts:AssumeRole action from LambdaAuditRole.
D. Ensure that the trust policy for LambdaAuditRole allows the sts:AssumeRole action from the lambda.amazonaws.com service.
E. Ensure that the sts:AssumeRole API call is being issued to the us-east-I Region endpoint.

Answer: AC

NEW QUESTION 9
A company has an organization in AWS Organizations. The company wants to use AWS CloudFormation StackSets in the organization to deploy various AWS design patterns into environments. These patterns consist of Amazon EC2 instances, Elastic Load Balancing (ELB) load balancers, Amazon RDS databases, and Amazon Elastic Kubernetes Service (Amazon EKS) clusters or Amazon Elastic Container Service (Amazon ECS) clusters.
Currently, the company's developers can create their own CloudFormation stacks to increase the overall speed of delivery. A centralized CI/CD pipeline in a shared services AWS account deploys each CloudFormation stack.
The company's security team has already provided requirements for each service in accordance with internal standards. If there are any resources that do not comply with the internal standards, the security team must receive notification to take appropriate action. The security team must implement a notification solution that gives developers the ability to maintain the same overall delivery speed that they currently have.
Which solution will meet these requirements in the MOST operationally efficient way?

A. Create an Amazon Simple Notification Service (Amazon SNS) topi
B. Subscribe the security team's email addresses to the SNS topi
C. Create a custom AWS Lambda function that will run the aws cloudformation validate-template AWS CLI command on all CloudFormation templates before the build stage in the CI/CD pipelin
D. Configure the CI/CD pipeline to publish a notification to the SNS topic if any issues are found.
E. Create an Amazon Simple Notification Service (Amazon SNS) topi
F. Subscribe the security team's email addresses to the SNS topi
G. Create custom rules in CloudFormation Guard for each resource configuratio
H. In the CllCD pipeline, before the build stage, configure a Docker image to run the cfn-guard command on the CloudFormation templat
I. Configure the CI/CD pipeline to publish a notification to the SNS topic if any issues are found.
J. Create an Amazon Simple Notification Service (Amazon SNS) topic and an Am-azon Simple Queue Service (Amazon SQS) queu
K. Subscribe the security team's email addresses to the SNS topi
L. Create an Amazon S3 bucket in the shared services AWS accoun
M. Include an event notification to publish to the SQS queue when new objects are added to the S3 bucke
N. Require the de-velopers to put their CloudFormation templates in the S3 bucke
O. Launch EC2 instances that automatically scale based on the SQS queue dept
P. Con-figure the EC2 instances to use CloudFormation Guard to scan the templates and deploy the templates if there are no issue
Q. Configure the CllCD pipe-line to publish a notification to the SNS topic if any issues are found.
R. Create a centralized CloudFormation stack set that includes a standard set of resources that the developers can deploy in each AWS accoun
S. Configure each CloudFormation template to meet the security requirement
T. For any new resources or configurations, update the CloudFormation template and send the template to the security team for revie
. When the review is com-pleted, add the new CloudFormation stack to the repository for the devel-opers to use.

Answer: B

NEW QUESTION 10
A company has a large fleet of Linux Amazon EC2 instances and Windows EC2 instances that run in private subnets. The company wants all remote administration to be performed as securely as possible in the AWS Cloud.
Which solution will meet these requirements?

A. Do not use SSH-RSA private keys during the launch of new instance
B. Implement AWS Systems Manager Session Manager.
C. Generate new SSH-RSA private keys for existing instance
D. Implement AWS Systems Manager Session Manager.
E. Do not use SSH-RSA private keys during the launch of new instance
F. Configure EC2 Instance Connect.
G. Generate new SSH-RSA private keys for existing instance
H. Configure EC2 Instance Connect.

Answer: A

Explanation:
AWS Systems Manager Session Manager is a fully managed service that allows you to securely and remotely administer your EC2 instances without the need to open inbound ports, maintain bastion hosts, or manage SSH keys. Session Manager provides an interactive browser-based shell or CLI access to your instances, as well as port forwarding and auditing capabilities. Session Manager works with both Linux and Windows instances, and supports hybrid environments and edge devices.
EC2 Instance Connect is a feature that allows you to use SSH to connect to your Linux instances using
short-lived keys that are generated on demand and delivered securely through the AWS metadata service. EC2 Instance Connect does not require any additional software installation or configuration on the instance, but it does require you to use SSH-RSA keys during the launch of new instances.
The correct answer is to use Session Manager, as it provides more security and flexibility than EC2 Instance Connect, and does not require SSH-RSA keys or inbound ports. Session Manager also works with Windows instances, while EC2 Instance Connect does not.
Verified References:
- https://docs.aws.amazon.com/systems-manager/latest/userguide/session-manager.html
- https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/Connect-using-EC2-Instance-Connect.html
- https://repost.aws/questions/QUnV4R9EoeSdW0GT3cKBUR7w/what-is-the-difference-between-ec-2-ins

NEW QUESTION 10
A recent security audit found that IAM CloudTrail logs are insufficiently protected from tampering and unauthorized access Which actions must the Security Engineer take to address these audit findings? (Select THREE)

A. Ensure CloudTrail log file validation is turned on
B. Configure an S3 lifecycle rule to periodically archive CloudTrail logs into Glacier for long-term storage
C. Use an S3 bucket with tight access controls that exists m a separate account
D. Use Amazon Inspector to monitor the file integrity of CloudTrail log files.
E. Request a certificate through ACM and use a generated certificate private key to encrypt CloudTrail log files
F. Encrypt the CloudTrail log files with server-side encryption with IAM KMS-managed keys (SSE-KMS)

Answer: ADE

NEW QUESTION 13
A company's engineering team is developing a new application that creates IAM Key Management Service (IAM KMS) CMK grants for users immediately after a grant IS created users must be able to use the CMK tu encrypt a 512-byte payload. During load testing, a bug appears |intermittently where AccessDeniedExceptions are occasionally triggered when a user rst attempts to encrypt using the CMK
Which solution should the c0mpany‘s security specialist recommend‘?

A. Instruct users to implement a retry mechanism every 2 minutes until the call succeeds.
B. Instruct the engineering team to consume a random grant token from users, and to call the CreateGrant operation, passing it the grant toke
C. Instruct use to use that grant token in their call to encrypt.
D. Instruct the engineering team to create a random name for the grant when calling the CreateGrant operatio

E. Return the name to the users and instruct them to provide the name as the grant token in the call to encrypt.
F. Instruct the engineering team to pass the grant token returned in the CreateGrant response to users.Instruct users to use that grant token in their call to encrypt.

Answer: D

Explanation:
To avoid AccessDeniedExceptions when users first attempt to encrypt using the CMK, the security specialist should recommend the following solution:

- Instruct the engineering team to pass the grant token returned in the CreateGrant response to users. This allows the engineering team to use the grant token as a form of temporary authorization for the grant.
- Instruct users to use that grant token in their call to encrypt. This allows the users to use the grant token as a proof that they have permission to use the CMK, and to avoid any eventual consistency issues with the grant creation.

NEW QUESTION 18
A company has a batch-processing system that uses Amazon S3, Amazon EC2, and AWS Key Management Service (AWS KMS). The system uses two AWS accounts: Account A and Account B.
Account A hosts an S3 bucket that stores the objects that will be processed. The S3 bucket also stores the results of the processing. All the S3 bucket objects are encrypted by a KMS key that is managed in
Account A.
Account B hosts a VPC that has a fleet of EC2 instances that access the S3 buck-et in Account A by using statements in the bucket policy. The VPC was created with DNS hostnames enabled and DNS resolution enabled.
A security engineer needs to update the design of the system without changing any of the system's code. No AWS API calls from the batch-processing EC2 in-stances can travel over the internet.
Which combination of steps will meet these requirements? (Select TWO.)

A. In the Account B VPC, create a gateway VPC endpoint for Amazon S3. For the gateway VPC endpoint,create a resource policy that allows the s3:GetObject, s3:ListBucket, s3:PutObject, and s3:PutObjectAcl actions for the S3 bucket.
B. In the Account B VPC, create an interface VPC endpoint for Amazon S3. For the interface VPC endpoint, create a resource policy that allows the s3:GetObject, s3:ListBucket, s3:PutObject, and s3:PutObjectAcl actions for the S3 bucket.
C. In the Account B VPC, create an interface VPC endpoint for AWS KM
D. For the interface VPC endpoint, create a resource policy that allows the kms:Encrypt, kms:Decrypt, and kms:GenerateDataKey actions for the KMS ke
E. Ensure that private DNS is turned on for the endpoint.
F. In the Account B VPC, create an interface VPC endpoint for AWS KM
G. For the interface VPC endpoint, create a resource policy that allows the kms:Encrypt, kms:Decrypt, and kms:GenerateDataKey actions for the KMS ke
H. Ensure that private DNS is turned off for the endpoint.
I. In the Account B VPC, verify that the S3 bucket policy allows the s3:PutObjectAcl action for cross-account us
J. In the Account B VPC, create a gateway VPC endpoint for Amazon S3. For the gateway VPC endpoint, create a resource policy that allows the s3:GetObject, s3:ListBucket, and s3:PutObject actions for the S3 bucket.

Answer: BC

NEW QUESTION 19
An organization has a multi-petabyte workload that it is moving to Amazon S3, but the CISO is concerned about cryptographic wear-out and the blast radius if a key is compromised. How can the CISO be assured that IAM KMS and Amazon S3 are addressing the concerns? (Select TWO)

A. There is no API operation to retrieve an S3 object in its encrypted form.
B. Encryption of S3 objects is performed within the secure boundary of the KMS service.
C. S3 uses KMS to generate a unique data key for each individual object.
D. Using a single master key to encrypt all data includes having a single place to perform audits and usage validation.
E. The KMS encryption envelope digitally signs the master key during encryption to prevent cryptographic wear-out

Answer: CE

Explanation:
because these are the features that can address the CISO's concerns about cryptographic wear-out and blast radius. Cryptographic wear-out is a phenomenon that occurs when a key is used too frequently or for too long, which increases the risk of compromise or degradation. Blast radius is a measure of how much damage a compromised key can cause to the encrypted data. S3 uses KMS to generate a unique data key for each individual object, which reduces both cryptographic wear-out and blast radius. The KMS encryption envelope digitally signs the master key during encryption, which prevents cryptographic wear-out by ensuring that only authorized parties can use the master key. The other options are either incorrect or irrelevant for addressing the CISO's concerns.

NEW QUESTION 21
A company's Security Engineer is copying all application logs to centralized Amazon S3 buckets. Currently, each of the company's applications is in its own IAM account, and logs are pushed into S3 buckets associated with each account. The Engineer will deploy an IAM Lambda function into each account that copies the relevant log files to the centralized S3 bucket.
The Security Engineer is unable to access the log files in the centralized S3 bucket. The Engineer's IAM user policy from the centralized account looks like this:

```
{
    "Version": "2012-10-17",
    "Statement": [
        {
            "Action": "s3:Put*",
            "Resource":"arn:aws:s3:::centralizedbucket/*",
            "Effect": "Deny"
        },
        {
            "Action": ["s3:Get*","s3:List*"],
            "Resource": [
                "arn:aws:s3:::centralizedbucket/*",
                "arn:aws:s3:::centralizedbucket/"
            ],
            "Effect": "Allow"
        }
    ]
}
```

The centralized S3 bucket policy looks like this:

```
{
    "Version": "2012-10-17",    "Statement": [
        {
            "Effect": "Allow",
            "Principal": {
                "AWS": [
                    "arn:aws:iam::111122223333:role/LogCopier",
                    "arn:aws:iam::444455556666:role/LogCopier"
                ]
            },
            "Action": ["s3:PutObject","s3:PutObjectAcl"],
            "Resource": "arn:aws:s3:::centralizedbucket/*"
        }
    ]
}
```

Why is the Security Engineer unable to access the log files?

A. The S3 bucket policy does not explicitly allow the Security Engineer access to the objects in the bucket.
B. The object ACLs are not being updated to allow the users within the centralized account to access the objects
C. The Security Engineers IAM policy does not grant permissions to read objects in the S3 bucket
D. The s3:PutObject and s3:PutObjectAcl permissions should be applied at the S3 bucket level

Answer: C

NEW QUESTION 24
A company has two AWS accounts. One account is for development workloads. The other account is for production workloads. For compliance reasons the production account contains all the AWS Key Management. Service (AWS KMS) keys that the company uses for encryption.
The company applies an IAM role to an AWS Lambda function in the development account to allow secure access to AWS resources. The Lambda function must access a specific KMS customer managed key that exists in the production account to encrypt the Lambda function's data.
Which combination of steps should a security engineer take to meet these requirements? (Select TWO.)

A. Configure the key policy for the customer managed key in the production account to allow access to the Lambda service.
B. Configure the key policy for the customer managed key in the production account to allow access to the IAM role of the Lambda function in the development account.
C. Configure a new IAM policy in the production account with permissions to use the customer managed ke
D. Apply the IAM policy to the IAM role that the Lambda function in the development account uses.
E. Configure a new key policy in the development account with permissions to use the customer managed ke
F. Apply the key policy to the IAM role that the Lambda function in the development account uses.
G. Configure the IAM role for the Lambda function in the development account by attaching an IAM policy that allows access to the customer managed key in the production account.

Answer: BE

Explanation:
To allow a Lambda function in one AWS account to access a KMS customer managed key in another AWS account, the following steps are required:

- Configure the key policy for the customer managed key in the production account to allow access to the IAM role of the Lambda function in the development account. A key policy is a resource-based policy that defines who can use or manage a KMS key. To grant cross-account access to a KMS key, you must specify the AWS account ID and the IAM role ARN of the external principal in the key policy statement. For more information, see Allowing users in other accounts to use a KMS key.
- Configure the IAM role for the Lambda function in the development account by attaching an IAM policy that allows access to the customer managed key in the production account. An IAM policy is an identity-based policy that defines what actions an IAM entity can perform on which resources. To allow an IAM role to use a KMS key in another account, you must specify the KMS key ARN and the kms:Encrypt action (or any other action that requires access to the KMS key) in the IAM policy statement. For more information, see Using IAM policies with AWS KMS.

This solution will meet the requirements of allowing secure access to a KMS customer managed key across AWS accounts.
The other options are incorrect because they either do not grant cross-account access to the KMS key (A, C), or do not use a valid policy type for KMS keys (D).

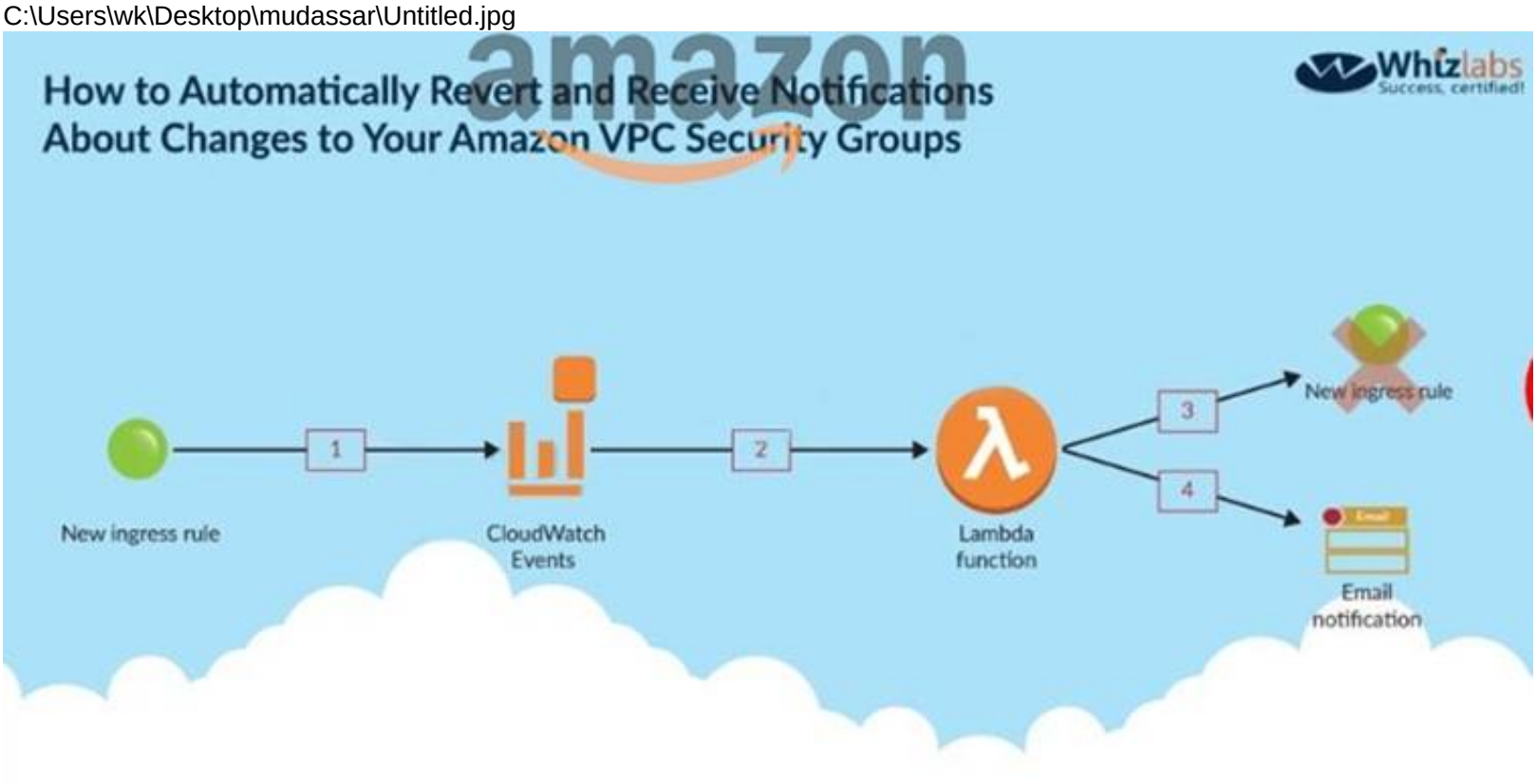
Verified References:
https://docs.aws.amazon.com/kms/latest/developerguide/iam-policies.html

NEW QUESTION 26
Your company has a set of EC2 Instances defined in IAM. These Ec2 Instances have strict security groups attached to them. You need to ensure that changes to the Security groups are noted and acted on accordingly. How can you achieve this?
Please select:

A. Use Cloudwatch logs to monitor the activity on the Security Group
B. Use filters to search for the changes and use SNS for the notification.
C. Use Cloudwatch metrics to monitor the activity on the Security Group
D. Use filters to search for the changes and use SNS for the notification.
E. Use IAM inspector to monitor the activity on the Security Group
F. Use filters to search for the changes and use SNS f the notification.
G. Use Cloudwatch events to be triggered for any changes to the Security Group
H. Configure the Lambda function for email notification as well.

Answer: D

Explanation:
The below diagram from an IAM blog shows how security groups can be monitored
C:\Users\wk\Desktop\mudassar\Untitled.jpg



Option A is invalid because you need to use Cloudwatch Events to check for chan, Option B is invalid because you need to use Cloudwatch Events to check for chang
Option C is invalid because IAM inspector is not used to monitor the activity on Security Groups For more information on monitoring security groups, please visit the below URL:
Ihttpsy/IAM.amazon.com/blogs/security/how-to-automatically-revert-and-receive-notifications-about-changes-t 'pc-security-groups/
The correct answer is: Use Cloudwatch events to be triggered for any changes to the Security Groups. Configure the Lambda function for email notification as well.
Submit your Feedback/Queries to our Experts

NEW QUESTION 28
While securing the connection between a company's VPC and its on-premises data center, a Security Engineer sent a ping command from an on-premises host (IP address 203.0.113.12) to an Amazon EC2 instance (IP address 172.31.16.139).
The ping command did not return a response. The flow log in the VPC showed the following:
2 123456789010 eni-1235b8ca 203.0.113.12 172.31.16.139 0 0 1 4 336 1432917027 1432917142 ACCEPT OK
2 123456789010 eni-1235b8ca 172.31.16.139 203.0.113.12 0 0 1 4 336 1432917094 1432917142 REJECT OK
What action should be performed to allow the ping to work?

A. In the security group of the EC2 instance, allow inbound ICMP traffic.
B. In the security group of the EC2 instance, allow outbound ICMP traffic.
C. In the VPC's NACL, allow inbound ICMP traffic.
D. In the VPC's NACL, allow outbound ICMP traffic.

Answer: D

NEW QUESTION 33
A company stores images for a website in an Amazon S3 bucket. The company is using Amazon CloudFront to serve the images to end users. The company recently discovered that the images are being accessed from countries where the company does not have a distribution license.
Which actions should the company take to secure the images to limit their distribution? (Select TWO.)

A. Update the S3 bucket policy to restrict access to a CloudFront origin access identity (OAI).
B. Update the website DNS record to use an Amazon Route 53 geolocation record deny list of countries where the company lacks a license.
C. Add a CloudFront geo restriction deny list of countries where the company lacks a license.
D. Update the S3 bucket policy with a deny list of countries where the company lacks a license.
E. Enable the Restrict Viewer Access option in CloudFront to create a deny list of countries where the company lacks a license.

Answer: AC

Explanation:
To secure the images to limit their distribution, the company should take the following actions:
- Update the S3 bucket policy to restrict access to a CloudFront origin access identity (OAI). This allows the company to use a special CloudFront user that can access objects in their S3 bucket, and prevent anyone else from accessing them directly.
- Add a CloudFront geo restriction deny list of countries where the company lacks a license. This allows the company to use a feature that controls access to their content based on the geographic location of their viewers, and block requests from countries where they do not have a distribution license.

NEW QUESTION 35
There are currently multiple applications hosted in a VPC. During monitoring it has been noticed that multiple port scans are coming in from a specific IP Address block. The internal security team has requested that all offending IP Addresses be denied for the next 24 hours. Which of the following is the best method to quickly and temporarily deny access from the specified IP Address's.
Please select:

A. Create an AD policy to modify the Windows Firewall settings on all hosts in the VPC to deny access from the IP Address block.
B. Modify the Network ACLs associated with all public subnets in the VPC to deny access from the IP Address block.
C. Add a rule to all of the VPC Security Groups to deny access from the IP Address block.
D. Modify the Windows Firewall settings on all AMI'S that your organization uses in that VPC to deny access from the IP address block.

Answer: B

Explanation:
NACL acts as a firewall at the subnet level of the VPC and we can deny the offending IP address block at the subnet level using NACL rules to block the incoming traffic to the VPC instances. Since NACL rules are applied as per the Rule numbers make sure that this rule number should take precedence over other rule numbers if there are any such rules that will allow traffic from these IP ranges. The lowest rule number has more precedence over a rule that has a higher number.
The IAM Documentation mentions the following as a best practices for IAM users
For extra security, enable multi-factor authentication (MFA) for privileged IAM users (users who are allowed access to sensitive resources or APIs). With MFA, users have a device that generates a unique authentication code (a one-time password, or OTP). Users must provide both their normal credentials (like their user name and password) and the OTP. The MFA device can either be a special piece of hardware, or it can be a virtual device (for example, it can run in an app on a smartphone).
Options C is invalid because these options are not available Option D is invalid because there is not root access for users
For more information on IAM best practices, please visit the below URL: https://docs.IAM.amazon.com/IAM/latest/UserGuide/best-practices.html
The correct answer is: Modify the Network ACLs associated with all public subnets in the VPC to deny access from the IP Address block.
omit your Feedback/Queries to our Experts

NEW QUESTION 38
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 43
A company stores sensitive documents in Amazon S3 by using server-side encryption with an IAM Key Management Service (IAM KMS) CMK. A new requirement mandates that the CMK that is used for these documents can be used only for S3 actions.
Which statement should the company add to the key policy to meet this requirement?
A)

```
{
  "Effect": "Deny",
  "Principal": "*",
  "Action": "kms:*",
  "Resource": "*",
  "Condition": {
    "StringNotEquals": {
      "kms:CallerAccount": "s3.amazonaws.com"
    }
  }
}
```

B)

```
{
  "Effect": "Deny",
  "Principal": "*",
  "Action": "s3:*",
  "Resource": "*",
  "Condition": {
    "StringNotEquals": {
      "kms:ViaService": "kms.*amazonaws.com"
    }
  }
}
```

A. Option A
B. Option B

Answer: A

NEW QUESTION 48
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 53
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 58
A company is implementing new compliance requirements to meet customer needs. According to the new requirements the company must not use any Amazon RDS DB instances or DB clusters that lack encryption of the underlying storage. The company needs a solution that will generate an email alert when an unencrypted DB instance or DB cluster is created. The solution also must terminate the unencrypted DB instance or DB cluster.
Which solution will meet these requirements in the MOST operationally efficient manner?

A. Create an AWS Config managed rule to detect unencrypted ROS storag
B. Configure an automatic remediation action to publish messages to an Amazon Simple Notification Service (Amazon SNS) topic that includes an AWS Lambda function and an email delivery target as subscriber
C. Configure the Lambda function to delete the unencrypted resource.
D. Create an AWS Config managed rule to detect unencrypted RDS storag
E. Configure a manual remediation action to invoke an AWS Lambda functio
F. Configure the Lambda function to publish messages to an Amazon Simple Notification Service (Amazon SNS) topic and to delete the unencrypted resource.
G. Create an Amazon EventBridge rule that evaluates RDS event patterns and is initiated by the creation of DB instances or DB clusters Configure the rule to publish messages to an Amazon Simple Notification Service (Amazon SNS) topic that includes an AWS Lambda function and an email delivery target as subscriber
H. Configure the Lambda function to delete the unencrypted resource.
I. Create an Amazon EventBridge rule that evaluates RDS event patterns and is initiated by the creation of DB instances or DB cluster
J. Configure the rule to invoke an AWS Lambda functio
K. Configure the Lambda function to publish messages to an Amazon Simple Notification Service (Amazon SNS) topic and to delete the unencrypted resource.

Answer: A

Explanation:
https://docs.aws.amazon.com/config/latest/developerguide/rds-storage-encrypted.html

NEW QUESTION 62
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 67
A company uses an Amazon S3 bucket to store reports Management has mandated that all new objects stored in this bucket must be encrypted at rest using server-side encryption with a client-specified IAM Key Management Service (IAM KMS) CMK owned by the same account as the S3 bucket. The IAM account number is 111122223333, and the bucket name Is report bucket. The company's security specialist must write the S3 bucket policy to ensure the mandate can be Implemented
Which statement should the security specialist include in the policy?

A.
```
{
    "Effect": "Deny",
    "Principal": "*",
    "Action": "s3:PutObject",
    "Resource": "arn:aws:s3:::reportbucket/*",
    "Condition": {
        "StringEquals": {
            "s3:x-amz-server-side-encryption": "AES256"
        }
    }
}
```

B.
```
{
    "Effect": "Deny",
    "Principal": "*",
    "Action": "s3:PutObject",
    "Resource": "arn:aws:s3:::reportbucket/*",
    "Condition": {
        "StringNotLike": {
            "s3:x-amz-server-side-encryption-aws-kms-key-id": "arn:aws:kms:*:111122223333:key/*"
        }
    }
}
```

C.
```
{
    "Effect": "Deny",
    "Principal": "*",
    "Action": "s3:PutObject",
    "Resource": "arn:aws:s3:::reportbucket/*",
    "Condition": {
        "StringNotLike": {
            "s3:x-amz-server-side-encryption": "aws:kms"
        }
    }
}
```

D.
```
{
    "Effect": "Deny",
    "Principal": "*",
    "Action": "s3:PutObject",
    "Resource": "arn:aws:s3:::reportbucket/*",
    "Condition": {
        "StringNotLikeIfExists": {
            "s3:x-amz-server-side-encryption-aws-kms-key-id": "arn:aws:kms:*:111122223333:key/*"
        }
    }
}
```

E. Option A

F. Option B
G. Option C
H. Option D

Answer: D

NEW QUESTION 72
A company has AWS accounts in an organization in AWS Organizations. The organization includes a dedicated security account.
All AWS account activity across all member accounts must be logged and reported to the dedicated security account. The company must retain all the activity logs in a secure storage location within the dedicated security account for 2 years. No changes or deletions of the logs are allowed.
Which combination of steps will meet these requirements with the LEAST operational overhead? (Select TWO.)

A. In the dedicated security account, create an Amazon S3 bucke
B. Configure S3 Object Lock in compliance mode and a retention period of 2 years on the S3 bucke
C. Set the bucket policy to allow the organization's management account to write to the S3 bucket.
D. In the dedicated security account, create an Amazon S3 bucke
E. Configure S3 Object Lock in compliance mode and a retention period of 2 years on the S3 bucke
F. Set the bucket policy to allow the organization's member accounts to write to the S3 bucket.
G. In the dedicated security account, create an Amazon S3 bucket that has an S3 Lifecycle configuration that expires objects after 2 year
H. Set the bucket policy to allow the organization's member accounts to write to the S3 bucket.
I. Create an AWS Cloud Trail trail for the organizatio
J. Configure logs to be delivered to the logging Amazon S3 bucket in the dedicated security account.
K. Turn on AWS CloudTrail in each accoun
L. Configure logs to be delivered to an Amazon S3 bucket that is created in the organization's management accoun
M. Forward the logs to the S3 bucket in the dedicated security account by using AWS Lambda and Amazon Kinesis Data Firehose.

Answer: BD

Explanation:
The correct answer is B and D. In the dedicated security account, create an Amazon S3 bucket. Configure S3 Object Lock in compliance mode and a retention period of 2 years on the S3 bucket. Set the bucket policy to allow the organization’s member accounts to write to the S3 bucket. Create an AWS CloudTrail trail for the organization. Configure logs to be delivered to the logging Amazon S3 bucket in the dedicated security account.
According to the AWS documentation, AWS CloudTrail is a service that enables governance, compliance, operational auditing, and risk auditing of your AWS account. With CloudTrail, you can log, continuously monitor, and retain account activity related to actions across your AWS infrastructure. CloudTrail provides event history of your AWS account activity, including actions taken through the AWS Management Console, AWS SDKs, command line tools, and other AWS services.
To use CloudTrail with multiple AWS accounts and regions, you need to enable AWS Organizations with all features enabled. This allows you to centrally manage your accounts and apply policies across your organization. You can also use CloudTrail as a service principal for AWS Organizations, which lets you create an organization trail that applies to all accounts in your organization. An organization trail logs events for all AWS Regions and delivers the log files to an S3 bucket that you specify.
To create an organization trail, you need to use an administrator account, such as the organization’s management account or a delegated administrator account. You can then configure the trail to deliver logs to an S3 bucket in the dedicated security account. This will ensure that all account activity across all member accounts and regions is logged and reported to the security account.
According to the AWS documentation, Amazon S3 is an object storage service that offers scalability, data availability, security, and performance. You can use S3 to store and retrieve any amount of data from anywhere on the web. You can also use S3 features such as lifecycle management, encryption, versioning, and replication to optimize your storage.
To use S3 with CloudTrail logs, you need to create an S3 bucket in the dedicated security account that will store the logs from the organization trail. You can then configure S3 Object Lock on the bucket to prevent objects from being deleted or overwritten for a fixed amount of time or indefinitely. You can also enable compliance mode on the bucket, which prevents any user, including the root user in your account, from deleting or modifying a locked object until it reaches its retention date.
To set a retention period of 2 years on the S3 bucket, you need to create a default retention configuration for the bucket that specifies a retention mode (either governance or compliance) and a retention period (either a number of days or a date). You can then set the bucket policy to allow the organization’s member accounts to write to the S3 bucket. This will ensure that all logs are retained in a secure storage location within the security account for 2 years and no changes or deletions are allowed.
Option A is incorrect because setting the bucket policy to allow the organization’s management account to write to the S3 bucket is not sufficient, as it will not grant access to the other member accounts in the organization.
Option C is incorrect because using an S3 Lifecycle configuration that expires objects after 2 years is not secure, as it will allow users to delete or modify objects before they expire.
Option E is incorrect because using Lambda and Kinesis Data Firehose to forward logs from one S3 bucket to another is not necessary, as CloudTrail can directly deliver logs to an S3 bucket in another account. It also introduces additional operational overhead and complexity.

NEW QUESTION 73
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 77
A company uses SAML federation to grant users access to AWS accounts. A company workload that is in an isolated AWS account runs on immutable infrastructure with no human access to Amazon EC2. The company requires a specialized user known as a break glass user to have access to the workload AWS account and instances in the case of SAML errors. A recent audit discovered that the company did not create the break glass user for the AWS account that contains the workload.
The company must create the break glass user. The company must log any activities of the break glass user and send the logs to a security team.
Which combination of solutions will meet these requirements? (Select TWO.)

A. Create a local individual break glass IAM user for the security tea
B. Create a trail in AWS CloudTrail that has Amazon CloudWatch Logs turned o
C. Use Amazon EventBridge to monitor local user activities.
D. Create a break glass EC2 key pair for the AWS accoun
E. Provide the key pair to the security tea
F. Use AWS CloudTrail to monitor key pair activit
G. Send notifications to the security team by using Amazon Simple Notification Service (Amazon SNS).
H. Create a break glass IAM role for the accoun
I. Allow security team members to perform the AssumeRoleWithSAML operatio
J. Create an AWS Cloud Trail trail that has Amazon CloudWatch Logs turned o
K. Use Amazon EventBridge to monitor security team activities.
L. Create a local individual break glass IAM user on the operating system level of each workload instance.Configure unrestricted security groups on the instances to grant access to the break glass IAM users.
M. Configure AWS Systems Manager Session Manager for Amazon EC2. Configure an AWS Cloud Trail filter based on Session Manage
N. Send the results to an Amazon Simple Notification Service (Amazon SNS) topic.

Answer: AE

Explanation:
The combination of solutions that will meet the requirements are:

A. Create a local individual break glass IAM user for the security team. Create a trail in AWS CloudTrail that has Amazon CloudWatch Logs turned on. Use Amazon EventBridge to monitor local user activities. This is a valid solution because it allows the security team to access the workload AWS account and instances using a local IAM user that does not depend on SAML federation. It also enables logging and monitoring of the break glass user activities using AWS CloudTrail, Amazon CloudWatch Logs, and Amazon EventBridge123.

E. Configure AWS Systems Manager Session Manager for Amazon EC2. Configure an AWS CloudTrail filter based on Session Manager. Send the results to an Amazon Simple Notification Service (Amazon SNS) topic. This is a valid solution because it allows the security team to access the workload instances without opening any inbound ports or managing SSH keys or bastion hosts. It also enables logging and notification of the break glass user activities using AWS CloudTrail, Session Manager, and Amazon SNS456.
The other options are incorrect because:

B. Creating a break glass EC2 key pair for the AWS account and providing it to the security team is not a valid solution, because it requires opening inbound ports on the instances and managing SSH keys, which increases the security risk and complexity7.

C. Creating a break glass IAM role for the account and allowing security team members to perform the AssumeRoleWithSAML operation is not a valid solution, because it still depends on SAML federation, which might not work in case of SAML errors8.

D. Creating a local individual break glass IAM user on the operating system level of each workload instance and configuring unrestricted security groups on the instances to grant access to the break glass IAM users is not a valid solution, because it requires opening inbound ports on the instances and managing multiple local users, which increases the security risk and complexity9.
References:
1: Creating an IAM User in Your AWS Account 2: Creating a Trail - AWS CloudTrail 3: Using Amazon EventBridge with AWS CloudTrail 4: Setting up Session Manager - AWS Systems Manager 5: Logging Session Manager sessions - AWS Systems Manager 6: Amazon Simple Notification Service 7: Connecting to your Linux instance using SSH - Amazon Elastic Compute Cloud 8: AssumeRoleWithSAML - AWS Security Token Service 9: IAM Users - AWS Identity and Access Management

NEW QUESTION 78
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 80

A security team is developing an application on an Amazon EC2 instance to get objects from an Amazon S3 bucket. All objects in the S3 bucket are encrypted with an AWS Key Management Service (AWS KMS) customer managed key. All network traffic for requests that are made within the VPC is restricted to the AWS infrastructure. This traffic does not traverse the public internet.
The security team is unable to get objects from the S3 bucket Which factors could cause this issue? (Select THREE.)

A. The IAM instance profile that is attached to the EC2 instance does not allow the s3 ListBucket action to the S3: bucket in the AWS accounts.
B. The I AM instance profile that is attached to the EC2 instance does not allow the s3 ListParts action to the S3; bucket in the AWS accounts.
C. The KMS key policy that encrypts the object in the S3 bucket does not allow the kms; ListKeys action to the EC2 instance profile ARN.
D. The KMS key policy that encrypts the object in the S3 bucket does not allow the kms Decrypt action to the EC2 instance profile ARN.
E. The security group that is attached to the EC2 instance is missing an outbound rule to the S3 managed prefix list over port 443.
F. The security group that is attached to the EC2 instance is missing an inbound rule from the S3 managed prefix list over port 443.

Answer: ADE

Explanation:
https://docs.aws.amazon.com/vpc/latest/userguide/security-group-rules.html
To get objects from an S3 bucket that are encrypted with a KMS customer managed key, the security team needs to have the following factors in place:

- The IAM instance profile that is attached to the EC2 instance must allow the s3:GetObject action to the S3 bucket or object in the AWS account. This permission is required to read the object from S3. Option A is incorrect because it specifies the s3:ListBucket action, which is only required to list the objects in the bucket, not to get them.
- The KMS key policy that encrypts the object in the S3 bucket must allow the kms:Decrypt action to the EC2 instance profile ARN. This permission is required to decrypt the object using the KMS key. Option D is correct.
- The security group that is attached to the EC2 instance must have an outbound rule to the S3 managed prefix list over port 443. This rule is required to allow HTTPS traffic from the EC2 instance to S3 within the AWS infrastructure. Option E is correct. Option B is incorrect because it specifies the s3:ListParts action, which is only required for multipart uploads, not for getting objects. Option C is incorrect because it specifies the kms:ListKeys action, which is not required for getting objects. Option F is incorrect because it specifies an inbound rule from the S3 managed prefix list, which is not required for getting objects. Verified References:
- https://docs.aws.amazon.com/kms/latest/developerguide/control-access.html
- https://docs.aws.amazon.com/vpc/latest/userguide/vpc-endpoints-s3.html

NEW QUESTION 83
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 84
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 86
A company uses AWS Organizations to manage a multi-accountAWS environment in a single AWS Region. The organization's management account is named management-01. The company has turned on AWS Config in all accounts in the organization. The company has designated an account named security-01 as the delegated administra-tor for AWS Config.
All accounts report the compliance status of each account's rules to the AWS Config delegated administrator account by using an AWS Config aggregator. Each account administrator can configure and manage the account's own AWS Config rules to handle each account's unique compliance requirements.
A security engineer needs to implement a solution to automatically deploy a set of 10 AWS Config rules to all existing and future AWS accounts in the organiza-tion. The solution must turn on AWS Config automatically during account crea-tion.
Which combination of steps will meet these requirements? (Select TWO.)

A. Create an AWS CloudFormation template that contains the 1 0 required AVVS Config rule
B. Deploy the template by using CloudFormation StackSets in the security-01 account.
C. Create a conformance pack that contains the 10 required AWS Config rule
D. Deploy the conformance pack from the security-01 account.
E. Create a conformance pack that contains the 10 required AWS Config rule
F. Deploy the conformance pack from the management-01 account.
G. Create an AWS CloudFormation template that will activate AWS Confi
H. De-ploy the template by using CloudFormation StackSets in the security-01 ac-count.
I. Create an AWS CloudFormation template that will activate AWS Confi
J. De-ploy the template by using CloudFormation StackSets in the management-01 account.

Answer: BE

NEW QUESTION 88
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 90
A company used a lift-and-shift approach to migrate from its on-premises data centers to the AWS Cloud. The company migrated on-premises VMS to Amazon EC2 in-stances. Now the company wants to replace some of components that are running on the EC2 instances with managed AWS services that provide similar functionality.
Initially, the company will transition from load balancer software that runs on EC2 instances to AWS Elastic Load Balancers. A security engineer must ensure that after this transition, all the load balancer logs are centralized and searchable for auditing. The security engineer must also ensure that metrics are generated to show which ciphers are in use.
Which solution will meet these requirements?

A. Create an Amazon CloudWatch Logs log grou
B. Configure the load balancers to send logs to the log grou
C. Use the CloudWatch Logs console to search the log
D. Create CloudWatch Logs filters on the logs for the required met-rics.
E. Create an Amazon S3 bucke
F. Configure the load balancers to send logs to the S3 bucke
G. Use Amazon Athena to search the logs that are in the S3 bucke
H. Create Amazon CloudWatch filters on the S3 log files for the re-quired metrics.
I. Create an Amazon S3 bucke
J. Configure the load balancers to send logs to the S3 bucke
K. Use Amazon Athena to search the logs that are in the S3 bucke
L. Create Athena queries for the required metric
M. Publish the metrics to Amazon CloudWatch.
N. Create an Amazon CloudWatch Logs log grou
O. Configure the load balancers to send logs to the log grou
P. Use the AWS Management Console to search the log
Q. Create Amazon Athena queries for the required metric
R. Publish the metrics to Amazon CloudWatch.

Answer: C

Explanation:

- Amazon S3 is a service that provides scalable, durable, and secure object storage. You can use Amazon S3 to store and retrieve any amount of data from anywhere on the web1
- AWS Elastic Load Balancing is a service that distributes incoming application or network traffic across multiple targets, such as EC2 instances, containers, or IP addresses. You can use Elastic Load Balancing to increase the availability and fault tolerance of your applications2
- Elastic Load Balancing supports access logging, which captures detailed information about requests sent to your load balancer. Each log contains information such as the time the request was received, the client's IP address, latencies, request paths, and server responses. You can use access logs to analyze traffic patterns and troubleshoot issues3
- You can configure your load balancer to store access logs in an Amazon S3 bucket that you specify.

You can also specify the interval for publishing the logs, which can be 5 or 60 minutes. The logs are stored in a hierarchical folder structure by load balancer name, IP address, year, month, day, and time.

- Amazon Athena is a service that allows you to analyze data in Amazon S3 using standard SQL. You can use Athena to run ad-hoc queries and get results in seconds. Athena is serverless, so there is no infrastructure to manage and you pay only for the queries that you run.
- You can use Athena to search the access logs that are stored in your S3 bucket. You can create a table in Athena that maps to your S3 bucket and then run SQL queries on the table. You can also use the Athena console or API to view and download the query results.
- You can also use Athena to create queries for the required metrics, such as the number of requests per cipher or protocol. You can then publish the metrics to Amazon CloudWatch, which is a service that monitors and manages your AWS resources and applications. You can use CloudWatch to collect and track metrics, create alarms, and automate actions based on the state of your resources.
- By using this solution, you can meet the requirements of ensuring that all the load balancer logs are centralized and searchable for auditing and that metrics are generated to show which ciphers are in use.

NEW QUESTION 93
A company that uses AWS Organizations wants to see AWS Security Hub findings for many AWS accounts and AWS Regions. Some of the accounts are in the company's organization, and some accounts are in organizations that the company manages for customers. Although the company can see findings in the Security Hub administrator account for accounts in the company's organization, there are no findings from accounts in other organizations.
Which combination of steps should the company take to see findings from accounts that are outside the organization that includes the Security Hub administrator account? (Select TWO.)

A. Use a designated administration account to automatically set up member accounts.
B. Create the AWS Service Role ForSecurrty Hub service-linked rote for Security Hub.
C. Send an administration request from the member accounts.
D. Enable Security Hub for all member accounts.
E. Send invitations to accounts that are outside the company's organization from the Security Hub administrator account.

Answer: CE

Explanation:
To see Security Hub findings for accounts that are outside the organization that includes the Security Hub administrator account, the following steps are required:

- Send invitations to accounts that are outside the company's organization from the Security Hub administrator account. This will allow the administrator account to view and manage findings from those accounts. The administrator account can send invitations by using the Security Hub console, API, or CLI. For more information, see Sending invitations to member accounts.
- Send an administration request from the member accounts. This will allow the member accounts to accept the invitation from the administrator account and establish a relationship with it. The member accounts can send administration requests by using the Security Hub console, API, or CLI. For more information, see Sending administration requests.

This solution will enable the company to see Security Hub findings for many AWS accounts and AWS Regions, including accounts that are outside its own organization.
The other options are incorrect because they either do not establish a relationship between the administrator and member accounts (A, B), do not enable Security Hub for all member accounts (D), or do not use a valid service for Security Hub (F).
Verified References:

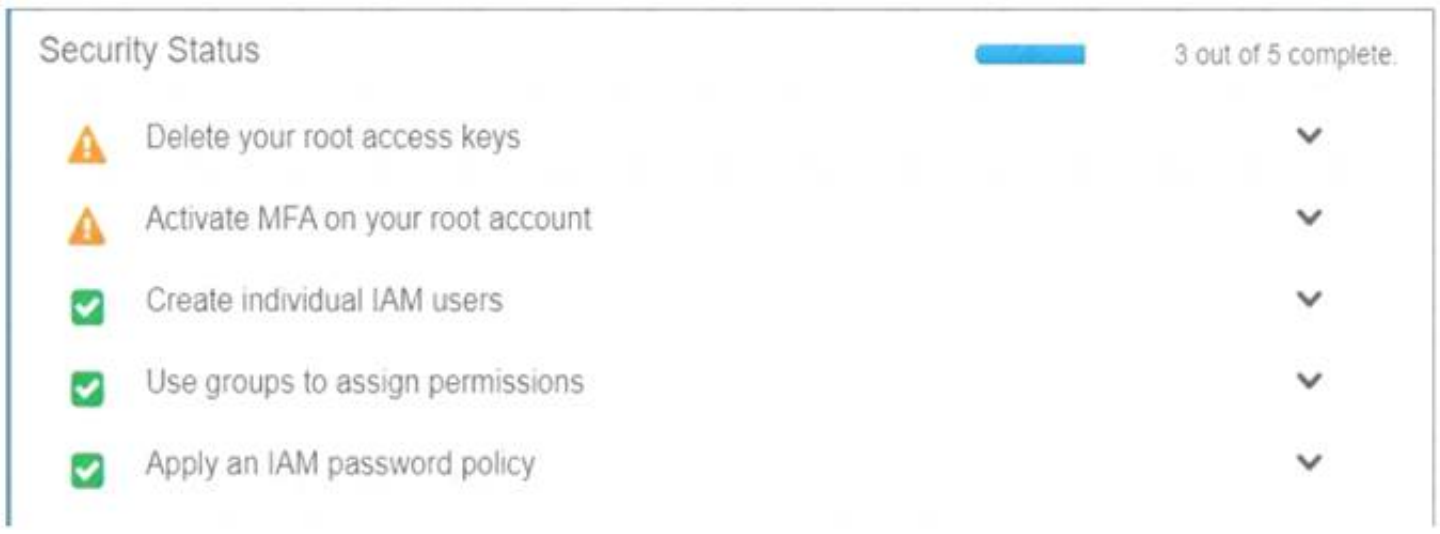
- https://docs.aws.amazon.com/securityhub/latest/userguide/securityhub-member-accounts.html

NEW QUESTION 95
Your CTO is very worried about the security of your IAM account. How best can you prevent hackers from completely hijacking your account?
Please select:

A. Use short but complex password on the root account and any administrators.
B. Use IAM IAM Geo-Lock and disallow anyone from logging in except for in your city.
C. Use MFA on all users and accounts, especially on the root account.
D. Don't write down or remember the root account password after creating the IAM account.

Answer: C

Explanation:
Multi-factor authentication can add one more layer of security to your IAM account Even when you go to your Security Credentials dashboard one of the items is to enable MFA on your root account
C:\Users\wk\Desktop\mudassar\Untitled.jpg



Option A is invalid because you need to have a good password policy Option B is invalid because there is no IAM Geo-Lock Option D is invalid because this is not a recommended practices For more information on MFA, please visit the below URL
http://docs.IAM.amazon.com/IAM/latest/UserGuide/id
credentials mfa.htmll
The correct answer is: Use MFA on all users and accounts, especially on the root account. Submit your Feedback/Queries to our Experts

NEW QUESTION 96
A security engineer needs to implement a write-once-read-many (WORM) model for data that a company will store in Amazon S3 buckets. The company uses the S3 Standard storage class for all of its S3 buckets. The security engineer must en-sure that objects cannot be overwritten or deleted by any user, including the AWS account root user.
Which solution will meet these requirements?

A. Create new S3 buckets with S3 Object Lock enabled in compliance mod
B. Place objects in the S3 buckets.
C. Use S3 Glacier Vault Lock to attach a Vault Lock policy to new S3 bucket
D. Wait 24 hours to complete the Vault Lock proces
E. Place objects in the S3 buckets.
F. Create new S3 buckets with S3 Object Lock enabled in governance mod
G. Place objects in the S3 buckets.
H. Create new S3 buckets with S3 Object Lock enabled in governance mod
I. Add a legal hold to the S3 bucket
J. Place objects in the S3 buckets.

Answer: A

NEW QUESTION 101
A security engineer needs to build a solution to turn IAM CloudTrail back on in multiple IAM Regions in case it is ever turned off.
What is the MOST efficient way to implement this solution?

A. Use IAM Config with a managed rule to trigger the IAM-EnableCloudTrail remediation.
B. Create an Amazon EventBridge (Amazon CloudWatch Events) event with a cloudtrail.amazonIAM.com event source and a StartLogging event name to trigger an IAM Lambda function to call the StartLogging API.
C. Create an Amazon CloudWatch alarm with a cloudtrail.amazonIAM.com event source and a StopLogging event name to trigger an IAM Lambda function to call the StartLogging API.
D. Monitor IAM Trusted Advisor to ensure CloudTrail logging is enabled.

Answer: B

NEW QUESTION 106
A company is implementing a new application in a new IAM account. A VPC and subnets have been created for the application. The application has been peered to an existing VPC in another account in the same IAM Region for database access. Amazon EC2 instances will regularly be created and terminated in the application VPC, but only some of them will need access to the databases in the peered VPC over TCP port 1521. A security engineer must ensure that only the EC2 instances that need access to the databases can access them through the network.
How can the security engineer implement this solution?

A. Create a new security group in the database VPC and create an inbound rule that allows all traffic from the IP address range of the application VP
B. Add a new network ACL rule on the database subnet
C. Configure the rule to TCP port 1521 from the IP address range of the application VP
D. Attach the new security group to the database instances that the application instances need to access.
E. Create a new security group in the application VPC with an inbound rule that allows the IP address range of the database VPC over TCP port 1521. Create a new security group in the database VPC with an inbound rule that allows the IP address range of the application VPC over port 1521. Attach the new security group to the database instances and the application instances that need database access.
F. Create a new security group in the application VPC with no inbound rule
G. Create a new security group in the database VPC with an inbound rule that allows TCP port 1521 from the new application security group in the application VP
H. Attach the application security group to the application instances that need database access, and attach the database security group to the database instances.
I. Create a new security group in the application VPC with an inbound rule that allows the IP address range of the database VPC over TCP port 1521. Add a new network ACL rule on the database subnet
J. Configure the rule to allow all traffic from the IP address range of the application VP
K. Attach the new security group to the application instances that need database access.

Answer: C

NEW QUESTION 110

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 113
A company wants to remove all SSH keys permanently from a specific subset of its Amazon Linux 2 Amazon EC2 instances that are using the same 1AM instance profile However three individuals who have IAM user accounts will need to access these instances by using an SSH session to perform critical duties
How can a security engineer provide the access to meet these requirements'?

A. Assign an 1AM policy to the instance profile to allow the EC2 instances to be managed by AWS Systems Manager Provide the 1AM user accounts with permission to use Systems Manager Remove the SSH keys from the EC2 instances Use Systems Manager Inventory to select the EC2 instance and connect
B. Assign an 1AM policy to the 1AM user accounts to provide permission to use AWS Systems Manager Run Command Remove the SSH keys from the EC2 instances Use Run Command to open an SSH connection to the EC2 instance
C. Assign an 1AM policy to the instance profile to allow the EC2 instances to be managed by AWS Systems Manager Provide the 1AM user accounts with permission to use Systems Manager Remove the SSH keys from the EC2 instances Use Systems Manager Session Manager to select the EC2 instance and connect
D. Assign an 1AM policy to the 1AM user accounts to provide permission to use the EC2 service in the AWS Management Console Remove the SSH keys from the EC2 instances Connect to the EC2 instance as the ec2-user through the AWS Management Console's EC2 SSH client method

Answer: C

Explanation:
To provide access to the three individuals who have IAM user accounts to access the Amazon Linux 2 Amazon EC2 instances that are using the same IAM instance profile, the most appropriate solution would be to assign an IAM policy to the instance profile to allow the EC2 instances to be managed by AWS Systems Manager, provide the IAM user accounts with permission to use Systems Manager, remove the SSH keys from the EC2 instances, and use Systems Manager Session Manager to select the EC2 instance and connect.
References: : AWS Systems Manager Session Manager - AWS Systems Manager : AWS Systems Manage AWS Management Console : AWS Identity and Access Management - AWS Management Console : Am Elastic Compute Cloud - Amazon Web Services : Amazon Linux 2 - Amazon Web Services : AWS Syst Manager - AWS Management Console : AWS Systems Manager - AWS Management Console : AWS Systems Manager - AWS Management Console

NEW QUESTION 118
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 119

A startup company is using a single AWS account that has resources in a single AWS Region. A security engineer configures an AWS Cloud Trail trail in the same Region to deliver log files to an Amazon S3 bucket by using the AWS CLI.
Because of expansion, the company adds resources in multiple Regions. The secu-rity engineer notices that the logs from the new Regions are not reaching the S3 bucket.
What should the security engineer do to fix this issue with the LEAST amount of operational overhead?

A. Create a new CloudTrail trai
B. Select the new Regions where the company added resources.
C. Change the S3 bucket to receive notifications to track all actions from all Regions.
D. Create a new CloudTrail trail that applies to all Regions.
E. Change the existing CloudTrail trail so that it applies to all Regions.

Answer: D

Explanation:
The correct answer is D. Change the existing CloudTrail trail so that it applies to all Regions.
According to the AWS documentation1, you can configure CloudTrail to deliver log files from multiple Regions to a single S3 bucket for a single account. To change an existing single-Region trail to log in all Regions, you must use the AWS CLI and add the --is-multi-region-trail option to the update-trail command2. This will ensure that you log global service events and capture all management event activity in your account.
Option A is incorrect because creating a new CloudTrail trail for each Region will incur additional costs and increase operational overhead. Option B is incorrect because changing the S3 bucket to receive notifications will not affect the delivery of log files from other Regions. Option C is incorrect because creating a new CloudTrail trail that applies to all Regions will result in duplicate log files for the original Region and also incur additional costs.

NEW QUESTION 124
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 127
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 128
A company's security engineer is developing an incident response plan to detect suspicious activity in an AWS account for VPC hosted resources. The security engineer needs to provide visibility for as many AWS Regions as possible.
Which combination of steps will meet these requirements MOST cost-effectively? (Select TWO.)

A. Turn on VPC Flow Logs for all VPCs in the account.
B. Activate Amazon GuardDuty across all AWS Regions.
C. Activate Amazon Detective across all AWS Regions.
D. Create an Amazon Simple Notification Service (Amazon SNS) topi
E. Create an Amazon EventBridge rule that responds to findings and publishes the find-ings to the SNS topic.
F. Create an AWS Lambda functio
G. Create an Amazon EventBridge rule that in-vokes the Lambda function to publish findings to Amazon Simple Email Ser-vice (Amazon SES).

Answer: BD

Explanation:
To detect suspicious activity in an AWS account for VPC hosted resources, the security engineer needs to use a service that can monitor network traffic and API calls across all AWS Regions. Amazon GuardDuty is a threat detection service that can do this by analyzing VPC Flow Logs, AWS CloudTrail event logs, and DNS logs. By activating GuardDuty across all AWS Regions, the security engineer can provide visibility for as many regions as possible. GuardDuty generates findings that contain details about the potential threats detected in the account. To respond to these findings, the security engineer needs to create a mechanism that can notify the relevant stakeholders or take remedial actions. One way to do this is to use Amazon EventBridge, which is a serverless event bus service that can connect AWS services and third-party applications. By creating an EventBridge rule that responds to GuardDuty findings and publishes them to an Amazon Simple Notification Service (Amazon SNS) topic, the security engineer can enable subscribers of the topic to receive notifications via email, SMS, or other methods. This is a cost-effective solution that does not require any additional infrastructure or code.

NEW QUESTION 129
A company is using AWS Organizations to manage multiple accounts. The company needs to allow an IAM user to use a role to access resources that are in another organization's AWS account.
Which combination of steps must the company perform to meet this requirement? (Select TWO.)

A. Create an identity policy that allows the sts: AssumeRole action in the AWS account that contains the resource
B. Attach the identity policy to the IAM user.
C. Ensure that the sts: AssumeRole action is allowed by the SCPs of the organization that owns the resources that the IAM user needs to access.
D. Create a role in the AWS account that contains the resource
E. Create an entry in the role's trust policy that allows the IAM user to assume the rol

F. Attach the trust policy to the role.
G. Establish a trust relationship between the IAM user and the AWS account that contains the resources.
H. Create a role in the IAM user's AWS accoun
I. Create an identity policy that allows the sts: AssumeRole actio
J. Attach the identity policy to the role.

Answer: BC

Explanation:
To allow cross-account access to resources using IAM roles, the following steps are required:

- Create a role in the AWS account that contains the resources (the trusting account) and specify the AWS account that contains the IAM user (the trusted account) as a trusted entity in the role's trust policy. This allows users from the trusted account to assume the role and access resources in the trusting account.
- Ensure that the IAM user has permission to assume the role in their own AWS account. This can be done by creating an identity policy that allows the sts:AssumeRole action and attaching it to the IAM user or their group.
- Ensure that there are no service control policies (SCPs) in the organization that owns the resources that deny or restrict access to the sts:AssumeRole action or the role itself. SCPs are applied to all accounts in an organization and can override any permissions granted by IAM policies.

Verified References:

- https://repost.aws/knowledge-center/cross-account-access-iam
- https://docs.aws.amazon.com/organizations/latest/userguide/orgs_manage_accounts_access.html
- https://docs.aws.amazon.com/IAM/latest/UserGuide/tutorial_cross-account-with-roles.html

NEW QUESTION 131
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 136
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 137
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 141
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 143
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 145
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 147
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