



Amazon

Exam Questions AWS-Certified-Security-Specialty

Amazon AWS Certified Security - Specialty

NEW QUESTION 1

- (Exam Topic 1)

A Security Engineer has been asked to troubleshoot inbound connectivity to a web server. This single web server is not receiving inbound connections from the internet, whereas all other web servers are functioning properly.

The architecture includes network ACLs, security groups, and a virtual security appliance. In addition, the Development team has implemented Application Load Balancers (ALBs) to distribute the load across all web servers. It is a requirement that traffic between the web servers and the internet flow through the virtual security appliance.

The Security Engineer has verified the following:

- * 1. The rule set in the Security Groups is correct
- * 2. The rule set in the network ACLs is correct
- * 3. The rule set in the virtual appliance is correct

Which of the following are other valid items to troubleshoot in this scenario? (Choose two.)

- A. Verify that the 0.0.0.0/0 route in the route table for the web server subnet points to a NAT gateway.
- B. Verify which Security Group is applied to the particular web server's elastic network interface (ENI).
- C. Verify that the 0.0.0.0/0 route in the route table for the web server subnet points to the virtual security appliance.
- D. Verify the registered targets in the ALB.
- E. Verify that the 0.0.0.0/0 route in the public subnet points to a NAT gateway.

Answer: CD

Explanation:

<https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/using-eni.html>

NEW QUESTION 2

- (Exam Topic 1)

A company has several critical applications running on a large fleet of Amazon EC2 instances. As part of a security operations review, the company needs to apply a critical operating system patch to EC2 instances within 24 hours of the patch becoming available from the operating system vendor. The company does not have a patching solution deployed on AWS, but does have AWS Systems Manager configured. The solution must also minimize administrative overhead.

What should a security engineer recommend to meet these requirements?

- A. Create an AWS Config rule defining the patch as a required configuration for EC2 instances.
- B. Use the AWS Systems Manager Run Command to patch affected instances.
- C. Use an AWS Systems Manager Patch Manager predefined baseline to patch affected instances.
- D. Use AWS Systems Manager Session Manager to log in to each affected instance and apply the patch.

Answer: B

NEW QUESTION 3

- (Exam Topic 1)

A security engineer has created an Amazon Cognito user pool. The engineer needs to manually verify the ID and access token sent by the application for troubleshooting purposes

What is the MOST secure way to accomplish this?

- A. Extract the subject (sub), audience (aud), and cognito:username from the ID token payload Manually check the subject and audience for the user name In the user pool
- B. Search for the public key with a key ID that matches the key ID In the header of the token
- C. Then use a JSON Web Token (JWT) library to validate the signature of the token and extract values, such as the expiry date
- D. Verify that the token is not expire
- E. Then use the token_use claim function In Amazon Cognito to validate the key IDs
- F. Copy the JSON Web Token (JWT) as a JSON document Obtain the public JSON Web Key (JWK) and convert It to a pem fil
- G. Then use the file to validate the original JWT.

Answer: A

NEW QUESTION 4

- (Exam Topic 1)

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

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

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

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

Answer: C

NEW QUESTION 5

- (Exam Topic 1)

A security engineer must develop an encryption tool for a company. The company requires a cryptographic solution that supports the ability to perform cryptographic erasure on all resources protected by the key material in 15 minutes or less
Which AWS Key Management Service (AWS KMS) key solution will allow the security engineer to meet these requirements?

- A. Use Imported key material with CMK
- B. Use an AWS KMS CMK
- C. Use an AWS managed CMK.
- D. Use an AWS KMS customer managed CMK

Answer: C

NEW QUESTION 6

- (Exam Topic 1)

A company uses HTTP Live Streaming (HLS) to stream live video content to paying subscribers by using Amazon CloudFront. HLS splits the video content into chunks so that the user can request the right chunk based on different conditions. Because the video events last for several hours, the total video is made up of thousands of chunks.

The origin URL is not disclosed and every user is forced to access the CloudFront URL. The company has a web application that authenticates the paying users against an internal repository and a CloudFront key pair that is already issued.

What is the simplest and MOST effective way to protect the content?

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

Answer: B

NEW QUESTION 7

- (Exam Topic 1)

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

Which solution will meet this requirement?

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

Answer: A

NEW QUESTION 8

- (Exam Topic 1)

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

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

Answer: BD

NEW QUESTION 9

- (Exam Topic 1)

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

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

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

Answer: BDF

NEW QUESTION 10

- (Exam Topic 1)

A Security Engineer is looking for a way to control access to data that is being encrypted under a CMK. The Engineer is also looking to use additional authenticated data (AAD) to prevent tampering with ciphertext.

Which action would provide the required functionality?

- A. Pass the key alias to AWS KMS when calling Encrypt and Decrypt API actions.
- B. Use IAM policies to restrict access to Encrypt and Decrypt API actions.

- C. Use kms:EncryptionContext as a condition when defining IAM policies for the CMK.
- D. Use key policies to restrict access to the appropriate IAM groups.

Answer: B

NEW QUESTION 10

- (Exam Topic 1)

A Solutions Architect is designing a web application that uses Amazon CloudFront, an Elastic Load Balancing Application Load Balancer, and an Auto Scaling group of Amazon EC2 instances. The load balancer and EC2 instances are in the US West (Oregon) region. It has been decided that encryption in transit is necessary by using a customer-branded domain name from the client to CloudFront and from CloudFront to the load balancer. Assuming that AWS Certificate Manager is used, how many certificates will need to be generated?

- A. One in the US West (Oregon) region and one in the US East (Virginia) region.
- B. Two in the US West (Oregon) region and none in the US East (Virginia) region.
- C. One in the US West (Oregon) region and none in the US East (Virginia) region.
- D. Two in the US East (Virginia) region and none in the US West (Oregon) region.

Answer: B

NEW QUESTION 13

- (Exam Topic 1)

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

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

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

Answer: A

NEW QUESTION 14

- (Exam Topic 1)

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

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

What should the security engineer do to resolve this issue?

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

Answer: D

NEW QUESTION 15

- (Exam Topic 1)

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

A

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

B

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

C

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


D

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

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

Answer: A

NEW QUESTION 16

- (Exam Topic 1)

A company has several production AWS accounts and a central security AWS account. The security account is used for centralized monitoring and has IAM privileges to all resources in every corporate account. All of the company's Amazon S3 buckets are tagged with a value denoting the data classification of their contents.

A Security Engineer is deploying a monitoring solution in the security account that will enforce bucket policy compliance. The system must monitor S3 buckets in all production accounts and confirm that any policy change is in accordance with the bucket's data classification. If any change is out of compliance; the Security team must be notified quickly.

Which combination of actions would build the required solution? (Choose three.)

- A. Configure Amazon CloudWatch Events in the production accounts to send all S3 events to the security account event bus.
- B. Enable Amazon GuardDuty in the security account
- C. and join the production accounts as members.
- D. Configure an Amazon CloudWatch Events rule in the security account to detect S3 bucket creation or modification events.
- E. Enable AWS Trusted Advisor and activate email notifications for an email address assigned to the security contact.
- F. Invoke an AWS Lambda function in the security account to analyze S3 bucket settings in response to S3 events, and send non-compliance notifications to the Security team.
- G. Configure event notifications on S3 buckets for PUT; POST, and DELETE events.

Answer: DEF

NEW QUESTION 21

- (Exam Topic 1)

An organization policy states that all encryption keys must be automatically rotated every 12 months. Which AWS Key Management Service (KMS) key type should be used to meet this requirement?

- A. AWS managed Customer Master Key (CMK)
- B. Customer managed CMK with AWS generated key material
- C. Customer managed CMK with imported key material
- D. AWS managed data key

Answer: B

NEW QUESTION 25

- (Exam Topic 1)

A company needs its Amazon Elastic Block Store (Amazon EBS) volumes to be encrypted at all times. During a security incident. EBS snapshots of suspicious instances are shared to a forensics account for analysis A security engineer attempting to share a suspicious EBS snapshot to the forensics account receives the following error

"Unable to share snapshot: An error occurred (OperationNotPermitted) when calling the ModifySnapshotAttribute operation: Encrypted snapshots with EBS default key cannot be shared.

Which combination of steps should the security engineer take in the incident account to complete the sharing operation? (Select THREE)

- A. Create a customer managed CMK Copy the EBS snapshot encrypting the destination snapshot using the new CMK.
- B. Allow forensics accounting principals to use the CMK by modifying its policy.
- C. Create an Amazon EC2 instance
- D. Attach the encrypted and suspicious EBS volume

- E. Copy data from the suspicious volume to an unencrypted volum
- F. Snapshot the unencrypted volume
- G. Copy the EBS snapshot to the new decrypted snapshot
- H. Restore a volume from the suspicious EBS snapsho
- I. Create an unencrypted EBS volume of the samesize.
- J. Share the target EBS snapshot with the forensics account.

Answer: ABF

NEW QUESTION 27

- (Exam Topic 1)

A company is operating an open-source software platform that is internet facing. The legacy software platform no longer receives security updates. The software platform operates using Amazon route 53 weighted load balancing to send traffic to two Amazon EC2 instances that connect to an Amazon POS cluster a recent report suggests this software platform is vulnerable to SQL injection attacks. with samples of attacks provided. The company's security engineer must secure this system against SQL injection attacks within 24 hours. The secure, engineer's solution involve the least amount of effort and maintain normal operations during implementation.

What should the security engineer do to meet these requirements?

- A. Create an Application Load Balancer with the existing EC2 instances as a target group Create an AWS WAF web ACL containing rules mat protect the application from this attac
- B. then apply it to the ALB Test to ensure me vulnerability has been mitigated, then redirect thee Route 53 records to point to the ALB Update security groups on the EC 2 instances to prevent direct access from the internet
- C. Create an Amazon CloudFront distribution specifying one EC2 instance as an origin Create an AWS WAF web ACL containing rules that protect the application from this attack, then apply it to me distribution Test to ensure the vulnerability has mitigated, then redirect the Route 53 records to point toCloudFront
- D. Obtain me latest source code for the platform and make ire necessary updates Test me updated code to ensure that the vulnerability has been irrigated, then deploy me patched version of the platform to the EC2 instances
- E. Update the security group mat is attached to the EC2 instances, removing access from the internet to the TCP port used by the SQL database Create an AWS WAF web ACL containing rules mat protect me application from this attack, men apply it to the EC2 instances Test to ensure me vulnerability has been mitigate
- F. then restore the security group to me oniginal setting

Answer: A

NEW QUESTION 30

- (Exam Topic 1)

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

Which policy should the security engineer apply?

- A.
- ```
{
 "Version": "2012-10-17",
 "Statement": [
 {
 "Effect": "Allow",
 "Action": "secretsmanager:*",
 "Principal": {"AWS": "444455556666"},
 "Resource": "*"
 }
]
}
```
- B.
- ```
{
  "Version": "2012-10-17",
  "Statement": [
    {
      "Effect": "Allow",
      "Action": "secretsmanager:*",
      "Principal": {"AWS": "111122223333"},
      "Resource": "*"
    }
  ]
}
```
- C.
- ```
{
 "Version": "2012-10-17",
 "Statement": [
 {
 "Effect": "Allow",
 "Action": "secretsmanager:GetSecretValue",
 "Principal": {"AWS": "111122223333"},
 "Resource": "*"
 }
]
}
```

D. 

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

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

**Answer:** A

#### NEW QUESTION 31

- (Exam Topic 1)

A security engineer has noticed an unusually high amount of traffic coming from a single IP address. This was discovered by analyzing the Application Load Balancer's access logs. How can the security engineer limit the number of requests from a specific IP address without blocking the IP address?

- A. Add a rule to the Application Load Balancer to route the traffic originating from the IP address in question and show a static webpage.
- B. Implement a rate-based rule with AWS WAF
- C. Use AWS Shield to limit the originating traffic hit rate.
- D. Implement the GeoLocation feature in Amazon Route 53.

**Answer:** B

#### NEW QUESTION 34

- (Exam Topic 1)

A company has a VPC with an IPv6 address range and a public subnet with an IPv6 address block. The VPC currently hosts some public Amazon EC2 instances but a Security Engineer needs to migrate a second application into the VPC that also requires IPv6 connectivity.

This new application will occasionally make API requests to an external, internet-accessible endpoint to receive updates. However, the Security team does not want the application's EC2 instance exposed directly to the internet. The Security Engineer intends to create a private subnet with a custom route table and to associate the route table with the private subnet.

What else does the Security Engineer need to do to ensure the application will not be exposed directly to the internet, but can still communicate as required?

- A. Launch a NAT instance in the public subnet. Update the custom route table with a new route to the NAT instance.
- B. Remove the internet gateway, and add AWS PrivateLink to the VPC. Then update the custom route table with a new route to AWS PrivateLink.
- C. Add a managed NAT gateway to the VPC. Update the custom route table with a new route to the gateway.
- D. Add an egress-only internet gateway to the VPC.
- E. Update the custom route table with a new route to the gateway.

**Answer:** D

#### NEW QUESTION 39

- (Exam Topic 1)

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

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

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

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

**Answer:** A

#### NEW QUESTION 41

- (Exam Topic 1)



A company uses SAML federation with AWS Identity and Access Management (IAM) to provide internal users with SSO for their AWS accounts. The company's identity provider certificate was rotated as part of its normal lifecycle. Shortly after, users started receiving the following error when attempting to log in: "Error: Response Signature Invalid (Service: AWSSecuntyTokenService; Status Code: 400; Error Code: InvalidIdentityToken)"

A security engineer needs to address the immediate issue and ensure that it will not occur again. Which combination of steps should the security engineer take to accomplish this? (Select TWO.)

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

**Answer:** AD

#### NEW QUESTION 44

- (Exam Topic 1)

A company is outsourcing its operational support to an external company. The company's security officer must implement an access solution for delegating operational support that minimizes overhead.

Which approach should the security officer take to meet these requirements?

- A. implement Amazon Cognito identity pools with a role that uses a policy that denies the actions related to Amazon Cognito API management Allow the external company to federate through its identity provider
- B. Federate AWS identity and Access Management (IAM) with the external company's identity provider Create an IAM role and attach a policy with the necessary permissions
- C. Create an IAM group for the external company Add a policy to the group that denies IAM modifications Securely provide the credentials to the external company.
- D. Use AWS SSO with the external company's identity provide
- E. Create an IAM group to map to the identity provider user group, and attach a policy with the necessary permissions.

**Answer:** B

#### NEW QUESTION 48

- (Exam Topic 1)

A company has an application hosted in an Amazon EC2 instance and wants the application to access secure strings stored in AWS Systems Manager Parameter Store When the application tries to access the secure string key value, it fails.

Which factors could be the cause of this failure? (Select TWO.)

- A. The EC2 instance role does not have decrypt permissions on the AWS Key Management Service (AWS KMS) key used to encrypt the secret
- B. The EC2 instance role does not have read permissions to read the parameters in Parameter Store
- C. Parameter Store does not have permission to use AWS Key Management Service (AWS KMS) to decrypt the parameter
- D. The EC2 instance role does not have encrypt permissions on the AWS Key Management Service (AWS KMS) key associated with the secret
- E. The EC2 instance does not have any tags associated.

**Answer:** CE

#### NEW QUESTION 53

- (Exam Topic 1)

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

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

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

**Answer:** BD

#### NEW QUESTION 58

- (Exam Topic 1)

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

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

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

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

**Answer: B**

#### NEW QUESTION 63

- (Exam Topic 1)

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

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

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

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

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

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

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

**Answer: BEF**

#### NEW QUESTION 64

- (Exam Topic 1)

A Security Engineer for a large company is managing a data processing application used by 1,500 subsidiary companies. The parent and subsidiary companies all use AWS. The application uses TCP port 443 and runs on Amazon EC2 behind a Network Load Balancer (NLB). For compliance reasons, the application should only be accessible to the subsidiaries and should not be available on the public internet. To meet the compliance requirements for restricted access, the Engineer has received the public and private CIDR block ranges for each subsidiary

What solution should the Engineer use to implement the appropriate access restrictions for the application?

- A. Create a NACL to allow access on TCP port 443 from the 1,500 subsidiary CIDR block ranges. Associate the NACL to both the NLB and EC2 instances
- B. Create an AWS security group to allow access on TCP port 443 from the 1,500 subsidiary CIDR block range
- C. Associate the security group to the NL
- D. Create a second security group for EC2 instances with access on TCP port 443 from the NLB security group.

- E. Create an AWS PrivateLink endpoint service in the parent company account attached to the NL
- F. Create an AWS security group for the instances to allow access on TCP port 443 from the AWS PrivateLink endpoint
- G. Use AWS PrivateLink interface endpoints in the 1,500 subsidiary AWS accounts to connect to the data processing application.
- H. Create an AWS security group to allow access on TCP port 443 from the 1,500 subsidiary CIDR block range
- I. Associate the security group with EC2 instances.

**Answer:** D

#### NEW QUESTION 68

- (Exam Topic 1)

A company is collecting AWS CloudTrail log data from multiple AWS accounts by managing individual trails in each account and forwarding log data to a centralized Amazon S3 bucket residing in a log archive account. After CloudTrail introduced support for AWS Organizations trails, the company decided to further centralize management and automate deployment of the CloudTrail logging capability across all of its AWS accounts.

The company's security engineer created an AWS Organizations trail in the master account, enabled server-side encryption with AWS KMS managed keys (SSE-KMS) for the log files, and specified the same bucket as the storage location. However, the engineer noticed that logs recorded by the new trail were not delivered to the bucket.

Which factors could cause this issue? (Select TWO.)

- A. The CMK key policy does not allow CloudTrail to make encrypt and decrypt API calls against the key.
- B. The CMK key policy does not allow CloudTrail to make GenerateDataKey API calls against the key.
- C. The IAM role used by the CloudTrail trail does not have permissions to make PutObject API calls against a folder created for the Organizations trail.
- D. The S3 bucket policy does not allow CloudTrail to make PutObject API calls against a folder created for the Organizations trail.
- E. The CMK key policy does not allow the IAM role used by the CloudTrail trail to use the key for crypto graphical operations.

**Answer:** AD

#### NEW QUESTION 70

- (Exam Topic 1)

A company has recently recovered from a security incident that required the restoration of Amazon EC2 instances from snapshots.

After performing a gap analysis of its disaster recovery procedures and backup strategies, the company is concerned that, next time, it will not be able to recover the EC2 instances if the AWS account was compromised and Amazon EBS snapshots were deleted.

All EBS snapshots are encrypted using an AWS KMS CMK. Which solution would solve this problem?

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

**Answer:** A

#### NEW QUESTION 73

- (Exam Topic 1)

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

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

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

**Answer:** CD

#### NEW QUESTION 77

- (Exam Topic 1)

A company has implemented centralized logging and monitoring of AWS CloudTrail logs from all Regions in

an Amazon S3 bucket. The log files are encrypted using AWS KMS. A Security Engineer is attempting to review the log files using a third-party tool hosted on an Amazon EC2 instance The Security Engineer is unable to access the logs in the S3 bucket and receives an access denied error message

What should the Security Engineer do to fix this issue?

- A. Check that the role the Security Engineer uses grants permission to decrypt objects using the KMS CMK.
- B. Check that the role the Security Engineer uses grants permission to decrypt objects using the KMS CMK and gives access to the S3 bucket and objects
- C. Check that the role the EC2 instance profile uses grants permission to decrypt objects using the KMS CMK and gives access to the S3 bucket and objects
- D. Check that the role the EC2 instance profile uses grants permission to decrypt objects using the KMS CMK

**Answer:** C

#### NEW QUESTION 82

- (Exam Topic 1)

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



access denied error.

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

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

**Answer:** ABF

#### NEW QUESTION 83

- (Exam Topic 1)

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

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

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

**Answer:** B

#### NEW QUESTION 84

- (Exam Topic 1)

A security engineer is responsible for providing secure access to AWS resources for thousands of developers in a company's corporate identity provider (IdP). The developers access a set of AWS services from the corporate premises using IAM credentials. Due to the volume of requests for provisioning new IAM users, it is taking a long time to grant access permissions. The security engineer receives reports that developers are sharing their IAM credentials with others to avoid provisioning delays. The security engineer is concerned about overall security for the company.

Which actions will meet the program requirements that address security?

- A. Create an Amazon CloudWatch alarm for AWS CloudTrail Events Create a metric filter to send a notification when the same set of IAM credentials is used by multiple developers
- B. Create a federation between AWS and the existing corporate IdP Leverage IAM roles to provide federated access to AWS resources
- C. Create a VPN tunnel between the corporate premises and the VPC Allow permissions to all AWS services only if it originates from corporate premises.
- D. Create multiple IAM roles for each IAM user Ensure that users who use the same IAM credentials cannot assume the same IAM role at the same time.

**Answer:** B

#### NEW QUESTION 87

- (Exam Topic 1)

A city is implementing an election results reporting website that will use Amazon CloudFront. The website runs on a fleet of Amazon EC2 instances behind an Application Load Balancer (ALB) in an Auto Scaling group. Election results are updated hourly and are stored as .pdf files in an Amazon S3 bucket. A Security Engineer needs to ensure that all external access to the website goes through CloudFront.

Which solution meets these requirements?

- A. Create an IAM role that allows CloudFront to access the specific S3 bucket
- B. Modify the S3 bucket policy to allow only the new IAM role to access its content
- C. Create an interface VPC endpoint for CloudFront to securely communicate with the ALB.
- D. Create an IAM role that allows CloudFront to access the specific S3 bucket
- E. Modify the S3 bucket policy to allow only the new IAM role to access its content
- F. Associate the ALB with a security group that allows only incoming traffic from the CloudFront service to communicate with the ALB.
- G. Create an origin access identity (OAI) in CloudFront
- H. Modify the S3 bucket policy to allow only the new OAI to access the bucket content
- I. Create an interface VPC endpoint for CloudFront to securely communicate with the ALB.
- J. Create an origin access identity (OAI) in CloudFront
- K. Modify the S3 bucket policy to allow only the new OAI to access the bucket content
- L. Associate the ALB with a security group that allows only incoming traffic from the CloudFront service to communicate with the ALB.

**Answer:** C

#### NEW QUESTION 92

- (Exam Topic 1)

A company's Developers plan to migrate their on-premises applications to Amazon EC2 instances running Amazon Linux AMIs. The applications are accessed by a group of partner companies. The Security Engineer needs to implement the following host-based security measures for these instances:

- Block traffic from documented known bad IP addresses
- Detect known software vulnerabilities and CIS Benchmarks compliance. Which solution addresses these requirements?

- A. Launch the EC2 instances with an IAM role attached
- B. Include a user data script that uses the AWS CLI to retrieve the list of bad IP addresses from AWS Secrets Manager and uploads it as a threat list in Amazon GuardDuty Use Amazon Inspector to scan the instances for known software vulnerabilities and CIS Benchmarks compliance
- C. Launch the EC2 instances with an IAM role attached Include a user data script that uses the AWS CLI to create NACLs blocking ingress traffic from the known bad IP addresses in the EC2 instance's subnets Use AWS Systems Manager to scan the instances for known software vulnerabilities, and AWS Trusted Advisor to check instances for CIS Benchmarks compliance

D. Launch the EC2 instances with an IAM role attached Include a user data script that uses the AWS CLI to create and attach security groups that only allow an allow listed source IP address range inbound

E. Use Amazon Inspector to scan the instances for known software vulnerabilities, and AWS Trusted Advisor to check instances for CIS Benchmarks compliance

F. Launch the EC2 instances with an IAM role attached Include a user data script that creates a cron job to periodically retrieve the list of bad IP addresses from Amazon S3, and configures iptables on the instances blocking the list of bad IP addresses Use Amazon inspector to scan the instances for known software vulnerabilities and CIS Benchmarks compliance.

**Answer:** D

#### NEW QUESTION 93

- (Exam Topic 1)

A company is setting up products to deploy in AWS Service Catalog. Management is concerned that when users launch products, elevated IAM privileges will be required to create resources. How should the company mitigate this concern?

- A. Add a template constraint to each product in the portfolio.
- B. Add a launch constraint to each product in the portfolio.
- C. Define resource update constraints for each product in the portfolio.
- D. Update the AWS CloudFormation template backing the product to include a service role configuration.

**Answer:** C

#### NEW QUESTION 95

- (Exam Topic 1)

A company has a compliance requirement to rotate its encryption keys on an annual basis. A Security Engineer needs a process to rotate the KMS Customer Master Keys (CMKs) that were created using imported key material.

How can the Engineer perform the key rotation process MOST efficiently?

- A. Create a new CMK, and redirect the existing Key Alias to the new CMK
- B. Select the option to auto-rotate the key
- C. Upload new key material into the existing CMK.
- D. Create a new CMK, and change the application to point to the new CMK

**Answer:** A

#### NEW QUESTION 97

- (Exam Topic 1)

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

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

Which solution will meet these requirements?

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

**Answer:** A

#### NEW QUESTION 100

- (Exam Topic 1)

A company recently performed an annual security assessment of its AWS environment. The assessment showed that audit logs are not available beyond 90 days and that unauthorized changes to IAM policies are made without detection.

How should a security engineer resolve these issues?

- A. Create an Amazon S3 lifecycle policy that archives AWS CloudTrail trail logs to Amazon S3 Glacier after 90 day
- B. Configure Amazon Inspector to provide a notification when a policy change is made to resources.
- C. Configure AWS Artifact to archive AWS CloudTrail logs Configure AWS Trusted Advisor to provide a notification when a policy change is made to resources.
- D. Configure Amazon CloudWatch to export log groups to Amazon S3. Configure AWS CloudTrail to provide a notification when a policy change is made to resources.
- E. Create an AWS CloudTrail trail that stores audit logs in Amazon S3. Configure an AWS Config rule to provide a notification when a policy change is made to resources.

**Answer:** A

#### NEW QUESTION 104

- (Exam Topic 1)

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

Which of the following actions could fix this issue?

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



**Answer:** C

#### NEW QUESTION 109

- (Exam Topic 1)

A company's security information events management (SIEM) tool receives new AWS CloudTrail logs from an Amazon S3 bucket that is configured to send all object created event notification to an Amazon SNS topic. An Amazon SQS queue is subscribed to this SNS topic. The company's SEM tool then ports this SQS queue for new messages using an IAM role and fetches new log events from the S3 bucket based on the SQS messages.

After a recent security review that resulted in restricted permissions, the SEM tool has stopped receiving new CloudTrail logs.

Which of the following are possible causes of this issue? (Select THREE)

- A. The SQS queue does not allow the SQS SendMessage action from the SNS topic
- B. The SNS topic does not allow the SNS Publish action from Amazon S3
- C. The SNS topic is not delivering raw messages to the SQS queue
- D. The S3 bucket policy does not allow CloudTrail to perform the PutObject action
- E. The IAM role used by the SEM tool does not have permission to subscribe to the SNS topic
- F. The IAM role used by the SEM tool does not allow the SQS DeleteMessage action

**Answer:** ADF

#### NEW QUESTION 111

- (Exam Topic 2)

A company hosts a popular web application that connects to an Amazon RDS MySQL DB instance running in a private VPC subnet that was created with default ACL settings. The IT Security department has a suspicion that a DDoS attack is coming from a suspecting IP. How can you protect the subnets from this attack?

Please select:

- A. Change the Inbound Security Groups to deny access from the suspecting IP
- B. Change the Outbound Security Groups to deny access from the suspecting IP
- C. Change the Inbound NACL to deny access from the suspecting IP
- D. Change the Outbound NACL to deny access from the suspecting IP

**Answer:** C

#### Explanation:

Option A and B are invalid because by default the Security Groups already block traffic. You can use NACL's as an additional security layer for the subnet to deny traffic.

Option D is invalid since just changing the Inbound Rules is sufficient. The AWS Documentation mentions the following:

A network access control list (NACL) is an optional layer of security for your VPC that acts as a firewall for controlling traffic in and out of one or more subnets. You might set up network ACLs with rules similar to your security groups in order to add an additional layer of security to your VPC.

The correct answer is: Change the Inbound NACL to deny access from the suspecting IP

#### NEW QUESTION 115

- (Exam Topic 2)

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

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

What does the statement allow?

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

**Answer:** D

#### NEW QUESTION 120

- (Exam Topic 2)

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

What is the MOST efficient way to meet these requirements?

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

**Answer:** D

#### Explanation:

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

#### NEW QUESTION 124

- (Exam Topic 2)

You have a web site that is sitting behind AWS Cloudfront. You need to protect the web site against threats such as SQL injection and Cross site scripting attacks.

Which of the following service can help in such a scenario

Please select:

- A. AWS Trusted Advisor
- B. AWS WAF
- C. AWS Inspector
- D. AWS Config

**Answer:** B

#### Explanation:

The AWS Documentation mentions the following

AWS WAF is a web application firewall that helps detect and block malicious web requests targeted at your web applications. AWS WAF allows you to create rules that can help protect against common web exploits like SQL injection and cross-site scripting. With AWS WAF you first identify the resource (either an Amazon CloudFront distribution or an Application Load Balancer) that you need to protect.

Option A is invalid because this will only give advise on how you can better the security in your AWS account but not protect against threats mentioned in the question.

Option C is invalid because this can be used to scan EC2 Instances for vulnerabilities but not protect against threats mentioned in the question.

Option D is invalid because this can be used to check config changes but not protect against threats mentioned in the quest

For more information on AWS WAF, please visit the following URL: <https://aws.amazon.com/waf/details>;

The correct answer is: AWS WAF

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#### NEW QUESTION 125

- (Exam Topic 2)

A company's security policy requires that VPC Flow Logs are enabled on all VPCs. A Security Engineer is looking to automate the process of auditing the VPC resources for compliance.

What combination of actions should the Engineer take? (Choose two.)

- A. Create an AWS Lambda function that determines whether Flow Logs are enabled for a given VPC.
- B. Create an AWS Config configuration item for each VPC in the company AWS account.
- C. Create an AWS Config managed rule with a resource type of AWS::Lambda::Function.
- D. Create an Amazon CloudWatch Event rule that triggers on events emitted by AWS Config.
- E. Create an AWS Config custom rule, and associate it with an AWS Lambda function that contains the evaluating logic.

**Answer:** AE

#### Explanation:

<https://medium.com/mudita-misra/how-to-audit-your-aws-resources-for-security-compliance-by-using-custom-a>

#### NEW QUESTION 128

- (Exam Topic 2)

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

The security solution must meet all of the following requirements:

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

Which of the following meets these requirements?

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

**Answer:** A

#### Explanation:

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

#### NEW QUESTION 130

- (Exam Topic 2)

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

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

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

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

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

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

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

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



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

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

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

**Answer:** A

**Explanation:**

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

**NEW QUESTION 131**

- (Exam Topic 2)

A company has five AWS accounts and wants to use AWS CloudTrail to log API calls. The log files must be stored in an Amazon S3 bucket that resides in a new account specifically built for centralized services with a unique top-level prefix for each trail. The configuration must also enable detection of any modification to the logs.

Which of the following steps will implement these requirements? (Choose three.)

- A. Create a new S3 bucket in a separate AWS account for centralized storage of CloudTrail logs, and enable "Log File Validation" on all trails.  
B. Use an existing S3 bucket in one of the accounts, apply a bucket policy to the new centralized S3 bucket that permits the CloudTrail service to use the "s3: PutObject" action and the "s3 GetBucketACL" action, and specify the appropriate resource ARNs for the CloudTrail trails.  
C. Apply a bucket policy to the new centralized S3 bucket that permits the CloudTrail service to use the "s3 PutObject" action and the "s3 GetBucketACL" action, and specify the appropriate resource ARNs for the CloudTrail trails.  
D. Use unique log file prefixes for trails in each AWS account.  
E. Configure CloudTrail in the centralized account to log all accounts to the new centralized S3 bucket.  
F. Enable encryption of the log files by using AWS Key Management Service

**Answer:** ACE

**Explanation:**

<https://docs.aws.amazon.com/awscloudtrail/latest/userguide/best-practices-security.html>

If you have created an organization in AWS Organizations, you can create a trail that will log all events for all AWS accounts in that organization. This is sometimes referred to as an organization trail. You can also choose to edit an existing trail in the master account and apply it to an organization, making it an organization trail. Organization trails log events for the master account and all member accounts in the organization. For more information about AWS Organizations, see Organizations Terminology and Concepts. Note Reference: <https://docs.aws.amazon.com/awscloudtrail/latest/userguide/creating-trail-organization.html> You must be logged in with the master account for the organization in order to create an organization trail. You must also have sufficient permissions for the IAM user or role in the master account in order to successfully create an organization trail. If you do not have sufficient permissions, you will not see the option to apply a trail to an organization.

**NEW QUESTION 135**

- (Exam Topic 2)

An organization is using Amazon CloudWatch Logs with agents deployed on its Linux Amazon EC2 instances. The agent configuration files have been checked and the application log files to be pushed are configured correctly. A review has identified that logging from specific instances is missing.

Which steps should be taken to troubleshoot the issue? (Choose two.)

- A. Use an EC2 run command to confirm that the "awslogs" service is running on all instances.  
B. Verify that the permissions used by the agent allow creation of log groups/streams and to put log events.  
C. Check whether any application log entries were rejected because of invalid time stamps by reviewing `/var/cwlogs/rejects.log`.  
D. Check that the trust relationship grants the service "cwlogs.amazonaws.com" permission to write objects to the Amazon S3 staging bucket.  
E. Verify that the time zone on the application servers is in UTC.

**Answer:** AB

**Explanation:**

EC2 run command - can run scripts, install software, collect metrics and log files, manage patches and more. Bringing these two services together - can create CloudWatch Events rules that use EC2 Run Command to perform actions on EC2 instances or on-premises servers.

**NEW QUESTION 139**

- (Exam Topic 2)

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

How can this be accomplished?

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

**Answer:** A

**Explanation:**

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

**NEW QUESTION 140**

- (Exam Topic 2)

A company has Windows Amazon EC2 instances in a VPC that are joined to on-premises Active Directory servers for domain services. The security team has enabled Amazon GuardDuty on the AWS account to alert on issues with the instances.

During a weekly audit of network traffic, the Security Engineer notices that one of the EC2 instances is attempting to communicate with a known command-and-control server but failing. This alert does not show up in GuardDuty.

Why did GuardDuty fail to alert to this behavior?

- A. GuardDuty did not have the appropriate alerts activated.
- B. GuardDuty does not see these DNS requests.
- C. GuardDuty only monitors active network traffic flow for command-and-control activity.
- D. GuardDuty does not report on command-and-control activity.

**Answer:** B

**Explanation:**

[https://docs.aws.amazon.com/guardduty/latest/ug/guardduty\\_data-sources.html](https://docs.aws.amazon.com/guardduty/latest/ug/guardduty_data-sources.html) [https://docs.aws.amazon.com/guardduty/latest/ug/guardduty\\_backdoor.html](https://docs.aws.amazon.com/guardduty/latest/ug/guardduty_backdoor.html)

**NEW QUESTION 145**

- (Exam Topic 2)

A Security Engineer is trying to determine whether the encryption keys used in an AWS service are in compliance with certain regulatory standards.

Which of the following actions should the Engineer perform to get further guidance?

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

**Answer:** A

**Explanation:**

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

**NEW QUESTION 148**

- (Exam Topic 2)

The Information Technology department has stopped using Classic Load Balancers and switched to Application Load Balancers to save costs. After the switch, some users on older devices are no longer able to connect to the website.

What is causing this situation?

- A. Application Load Balancers do not support older web browsers.
- B. The Perfect Forward Secrecy settings are not configured correctly.
- C. The intermediate certificate is installed within the Application Load Balancer.
- D. The cipher suites on the Application Load Balancers are blocking connections.

**Answer:** D

**Explanation:**

<https://docs.aws.amazon.com/elasticloadbalancing/latest/application/create-https-listener.html>

**NEW QUESTION 151**

- (Exam Topic 2)

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

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



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

**Answer:** BCE

#### NEW QUESTION 154

- (Exam Topic 2)

A company is using CloudTrail to log all AWS API activity for all regions in all of its accounts. The CISO has asked that additional steps be taken to protect the integrity of the log files.

What combination of steps will protect the log files from intentional or unintentional alteration? Choose 2 answers from the options given below  
Please select:

- A. Create an S3 bucket in a dedicated log account and grant the other accounts write only access
- B. Deliver all log files from every account to this S3 bucket.
- C. Write a Lambda function that queries the Trusted Advisor Cloud Trail check
- D. Run the function every 10 minutes.
- E. Enable CloudTrail log file integrity validation
- F. Use Systems Manager Configuration Compliance to continually monitor the access policies of S3 buckets containing Cloud Trail logs.
- G. Create a Security Group that blocks all traffic except calls from the CloudTrail service
- H. Associate the security group with) all the Cloud Trail destination S3 buckets.

**Answer:** AC

#### Explanation:

The AWS Documentation mentions the following

To determine whether a log file was modified, deleted, or unchanged after CloudTrail delivered it you can use CloudTrail log file integrity validation. This feature is built using industry standard algorithms: SHA-256 for hashing and SHA-256 with RSA for digital signing. This makes it computationally infeasible to modify, delete or forge CloudTrail log files without detection.

Option B is invalid because there is no such thing as Trusted Advisor Cloud Trail checks Option D is invalid because Systems Manager cannot be used for this purpose.

Option E is invalid because Security Groups cannot be used to block calls from other services For more information on Cloudtrail log file validation, please visit the below URL:

<https://docs.aws.amazon.com/awscloudtrail/latest/userguide/cloudtrail-loc-file-validation-intro.html> For more information on delivering Cloudtrail logs from multiple accounts, please visit the below URL:

<https://docs.aws.amazon.com/awscloudtrail/latest/userguide/cloudtrail-receive-logs-from-multiple-accounts.htm>

The correct answers are: Create an S3 bucket in a dedicated log account and grant the other accounts write only access. Deliver all log files from every account to this S3 bucket, Enable Cloud Trail log file integrity validation

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#### NEW QUESTION 155

- (Exam Topic 2)

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

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

**Answer:** CE

#### NEW QUESTION 160

- (Exam Topic 2)

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

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

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

**Answer:** C

#### NEW QUESTION 165

- (Exam Topic 2)

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

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

- A. Change the volume encryption on the EBS volume to use a different encryption mechanism
- B. Then, release the EBS volumes back to AWS.
- C. Release the volumes back to AWS

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

**Answer:** D

**Explanation:**

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

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

**NEW QUESTION 166**

- (Exam Topic 2)

You have a vendor that needs access to an AWS resource. You create an AWS user account. You want to restrict access to the resource using a policy for just that user over a brief period. Which of the following would be an ideal policy to use?

Please select:

- A. An AWS Managed Policy
- B. An Inline Policy
- C. A Bucket Policy
- D. A bucket ACL

**Answer:** B

**Explanation:**

The AWS Documentation gives an example on such a case

Inline policies are useful if you want to maintain a strict one-to-one relationship between a policy and the principal entity that it's applied to. For example, you want to be sure that the permissions in a policy are not inadvertently assigned to a principal entity other than the one they're intended for. When you use an inline policy, the permissions in the policy cannot be inadvertently attached to the wrong principal entity. In addition, when you use the AWS Management Console to delete that principal entity the policies embedded in the principal entity are deleted as well. That's because they are part of the principal entity.

Option A is invalid because AWS Managed Policies are ok for a group of users, but for individual users, inline policies are better.

Option C and D are invalid because they are specifically meant for access to S3 buckets. For more information on policies, please visit the following URL:

<https://docs.aws.amazon.com/IAM/latest/UserGuide/access-managed-vs-inline>

The correct answer is: An Inline Policy. Submit your Feedback/Queries to our Experts

**NEW QUESTION 169**

- (Exam Topic 2)

The Accounting department at Example Corp. has made a decision to hire a third-party firm, AnyCompany, to monitor Example Corp.'s AWS account to help optimize costs.

The Security Engineer for Example Corp. has been tasked with providing AnyCompany with access to the required Example Corp. AWS resources. The Engineer has created an IAM role and granted permission to AnyCompany's AWS account to assume this role.

When customers contact AnyCompany, they provide their role ARN for validation. The Engineer is concerned that one of AnyCompany's other customers might deduce Example Corp.'s role ARN and potentially compromise the company's account.

What steps should the Engineer perform to prevent this outcome?

- A. Create an IAM user and generate a set of long-term credentials
- B. Provide the credentials to AnyCompany. Monitor access in IAM access advisor and plan to rotate credentials on a recurring basis.
- C. Request an external ID from AnyCompany and add a condition with `sts:ExternalId` to the role's trust policy.
- D. Require two-factor authentication by adding a condition to the role's trust policy with `aws:MultiFactorAuthPresent`.
- E. Request an IP range from AnyCompany and add a condition with `aws:SourceIp` to the role's trust policy.

**Answer:** B

**NEW QUESTION 174**

- (Exam Topic 2)

The InfoSec team has mandated that in the future only approved Amazon Machine Images (AMIs) can be used.

How can the InfoSec team ensure compliance with this mandate?

- A. Terminate all Amazon EC2 instances and relaunch them with approved AMIs.
- B. Patch all running instances by using AWS Systems Manager.
- C. Deploy AWS Config rules and check all running instances for compliance.
- D. Define a metric filter in Amazon CloudWatch Logs to verify compliance.

**Answer:** C

**Explanation:**

<https://docs.aws.amazon.com/config/latest/developerguide/approved-amis-by-id.html>

**NEW QUESTION 178**

- (Exam Topic 2)

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

- A. Enable logging on the KMS service
- B. Enable a trail in Cloudtrail
- C. Enable Cloudwatch logs

D. Use Cloudwatch metrics

**Answer:** B

**Explanation:**

The AWS Documentation states the following

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

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

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

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

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**NEW QUESTION 180**

- (Exam Topic 2)

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

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

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

**Answer:** D

**Explanation:**

AWS Region that You Request a Certificate In (for AWS Certificate Manager) If you want to require HTTPS between viewers and CloudFront, you must change the AWS region to US East (N. Virginia) in the AWS Certificate Manager console before you request or import a certificate. If you want to require HTTPS between CloudFront and your origin, and you're using an ELB load balancer as your origin, you can request or import a certificate in any region.

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

**NEW QUESTION 184**

- (Exam Topic 2)

A company plans to move most of its IT infrastructure to AWS. The company wants to leverage its existing on-premises Active Directory as an identity provider for AWS.

Which steps should be taken to authenticate to AWS services using the company's on-premises Active Directory? (Choose three).

- A. Create IAM roles with permissions corresponding to each Active Directory group.
- B. Create IAM groups with permissions corresponding to each Active Directory group.
- C. Create a SAML provider with IAM.
- D. Create a SAML provider with Amazon Cloud Directory.
- E. Configure AWS as a trusted relying party for the Active Directory
- F. Configure IAM as a trusted relying party for Amazon Cloud Directory.

**Answer:** ACE

**Explanation:**

<https://aws.amazon.com/blogs/security/aws-federated-authentication-with-active-directory-federation-services-a>

**NEW QUESTION 189**

- (Exam Topic 2)

A Development team has asked for help configuring the IAM roles and policies in a new AWS account. The team using the account expects to have hundreds of master keys and therefore does not want to manage access control for customer master keys (CMKs).

Which of the following will allow the team to manage AWS KMS permissions in IAM without the complexity of editing individual key policies?

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

**Answer:** B

**Explanation:**

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

**NEW QUESTION 193**

- (Exam Topic 2)

A Security Engineer must implement mutually authenticated TLS connections between containers that communicate inside a VPC.

Which solution would be MOST secure and easy to maintain?

- A. Use AWS Certificate Manager to generate certificates from a public certificate authority and deploy them to all the containers.
- B. Create a self-signed certificate in one container and use AWS Secrets Manager to distribute the certificate to the other containers to establish trust.
- C. Use AWS Certificate Manager Private Certificate Authority (ACM PCA) to create a subordinate certificate authority, then create the private keys in the



containers and sign them using the ACM PCA API.

D. Use AWS Certificate Manager Private Certificate Authority (ACM PCA) to create a subordinate certificate authority, then use AWS Certificate Manager to generate the private certificates and deploy them to all the containers.

**Answer:** D

#### NEW QUESTION 194

- (Exam Topic 2)

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

How can the Security Engineer further protect currently running instances?

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

**Answer:** C

#### NEW QUESTION 198

- (Exam Topic 2)

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

What would resolve the connectivity issue?

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

**Answer:** C

#### Explanation:

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

#### NEW QUESTION 200

- (Exam Topic 2)

Your IT Security team has advised to carry out a penetration test on the resources in their company's AWS Account. This is as part of their capability to analyze the security of the Infrastructure. What should be done first in this regard?

Please select:

- A. Turn on Cloud trail and carry out the penetration test
- B. Turn on VPC Flow Logs and carry out the penetration test
- C. Submit a request to AWS Support
- D. Use a custom AWS Marketplace solution for conducting the penetration test

**Answer:** C

#### Explanation:

This concept is given in the AWS Documentation

How do I submit a penetration testing request for my AWS resources? Issue

I want to run a penetration test or other simulated event on my AWS architecture. How do I get permission from AWS to do that?

Resolution

Before performing security testing on AWS resources, you must obtain approval from AWS. After you submit your request AWS will reply in about two business days.

AWS might have additional questions about your test which can extend the approval process, so plan accordingly and be sure that your initial request is as detailed as possible.

If your request is approved, you'll receive an authorization number.

Option A,B and D are all invalid because the first step is to get prior authorization from AWS for penetration tests

For more information on penetration testing, please visit the below URL

\* <https://aws.amazon.com/security/penetration-testing/>

\* <https://aws.amazon.com/premiumsupport/knowledge-center/penetration-testing/> (

The correct answer is: Submit a request to AWS Support Submit your Feedback/Queries to our Experts

#### NEW QUESTION 203

- (Exam Topic 2)

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

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

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

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

- A. Bypass the proxy and use an S3 VPC endpoint with a policy that whitelists only certain S3 buckets within Account 1.
- B. Block outbound access to public S3 endpoints on the proxy server.
- C. Configure Network ACLs on Server X to deny access to S3 endpoints.
- D. Modify the S3 bucket policy for the legitimate bucket to allow access only from the public IP addresses associated with the application server.

E. Remove the IAM instance role from the application server and save API access keys in a trusted and encrypted application config file.

**Answer:** AB

#### NEW QUESTION 208

- (Exam Topic 2)

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

Which of the following mitigations should be recommended?

- A. Use AWS Config to detect whether an Internet Gateway is added and use an AWS Lambda function to provide auto-remediation.
- B. Within the Amazon VPC configuration, mark the VPC as private and disable Elastic IP addresses.
- C. Use IPv6 addressing exclusively on the EC2 hosts, as this prevents the hosts from being accessed from the internet.
- D. Move the workload to a Dedicated Host, as this provides additional network security controls and monitoring.

**Answer:** A

#### Explanation:

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

#### NEW QUESTION 211

- (Exam Topic 2)

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

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

**Answer:** C

#### Explanation:

Each EC2 instance performs source/destination checks by default. This means that the instance must be the source or destination of any traffic it sends or receives. In this case virtual security appliance instance must be able to send and receive traffic when the source or destination is not itself. Therefore, you must disable source/destination checks on the NAT instance."

#### NEW QUESTION 216

- (Exam Topic 2)

A Security Administrator is performing a log analysis as a result of a suspected AWS account compromise. The Administrator wants to analyze suspicious AWS CloudTrail log files but is overwhelmed by the volume of audit logs being generated.

What approach enables the Administrator to search through the logs MOST efficiently?

- A. Implement a "write-only" CloudTrail event filter to detect any modifications to the AWS account resources.
- B. Configure Amazon Macie to classify and discover sensitive data in the Amazon S3 bucket that contains the CloudTrail audit logs.
- C. Configure Amazon Athena to read from the CloudTrail S3 bucket and query the logs to examine account activities.
- D. Enable Amazon S3 event notifications to trigger an AWS Lambda function that sends an email alarm when there are new CloudTrail API entries.

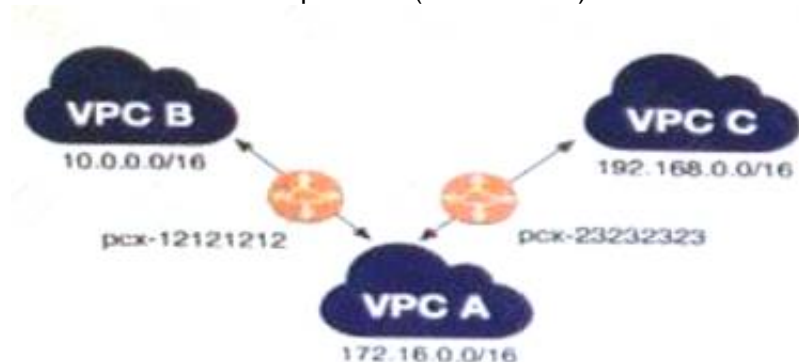
**Answer:** C

#### NEW QUESTION 221

- (Exam Topic 2)

A company has multiple VPCs in their account that are peered, as shown in the diagram. A Security Engineer wants to perform penetration tests of the Amazon EC2 instances in all three VPCs.

How can this be accomplished? (Choose two.)



- A. Deploy a pre-authorized scanning engine from the AWS Marketplace into VPC B, and use it to scan instances in all three VPC
- B. Do not complete the penetration test request form.
- C. Deploy a pre-authorized scanning engine from the Marketplace into each VPC, and scan instances in each VPC from the scanning engine in that VP
- D. Do not complete the penetration test request form.
- E. Create a VPN connection from the data center to VPC



- F. Use an on-premises scanning engine to scan the instances in all three VPC
- G. Complete the penetration test request form for all three VPCs.
- H. Create a VPN connection from the data center to each of the three VPC
- I. Use an on-premises scanning engine to scan the instances in each VP
- J. Do not complete the penetration test request form.
- K. Create a VPN connection from the data center to each of the three VPC
- L. Use an on-premises scanning engine to scan the instances in each VP
- M. Complete the penetration test request form for all three VPCs.

**Answer:** BD

**Explanation:**

<https://aws.amazon.com/security/penetration-testing/>

#### NEW QUESTION 222

- (Exam Topic 2)

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

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

**Answer:** D

**Explanation:**

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

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

#### NEW QUESTION 226

- (Exam Topic 2)

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

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

**Answer:** C

**Explanation:**

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

#### NEW QUESTION 227

- (Exam Topic 2)

A company plans to migrate a sensitive dataset to Amazon S3. A Security Engineer must ensure that the data is encrypted at rest. The encryption solution must enable the company to generate its own keys without needing to manage key storage or the encryption process. What should the Security Engineer use to accomplish this?

- A. Server-side encryption with Amazon S3-managed keys (SSE-S3)
- B. Server-side encryption with AWS KMS-managed keys (SSE-KMS)
- C. Server-side encryption with customer-provided keys (SSE-C)
- D. Client-side encryption with an AWS KMS-managed CMK

**Answer:** B

**Explanation:**

Reference <https://aws.amazon.com/s3/faqs/>

#### NEW QUESTION 229

- (Exam Topic 2)

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

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

**Answer:** B

**Explanation:**

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

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

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

The AWS Documentation mentions the following

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

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

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

**NEW QUESTION 232**

- (Exam Topic 2)

A Security Administrator has a website hosted in Amazon S3. The Administrator has been given the following requirements:

- Users may access the website by using an Amazon CloudFront distribution.
- Users may not access the website directly by using an Amazon S3 URL.

Which configurations will support these requirements? (Choose two.)

- A. Associate an origin access identity with the CloudFront distribution.
- B. Implement a "Principal": "cloudfront.amazonaws.com" condition in the S3 bucket policy.
- C. Modify the S3 bucket permissions so that only the origin access identity can access the bucket contents.
- D. Implement security groups so that the S3 bucket can be accessed only by using the intended CloudFront distribution.
- E. Configure the S3 bucket policy so that it is accessible only through VPC endpoints, and place the CloudFront distribution into the specified VPC.

**Answer:** AC

**NEW QUESTION 237**

- (Exam Topic 2)

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

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

Which of the following services meets these requirements?

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

**Answer:** B

**NEW QUESTION 242**

- (Exam Topic 2)

A company requires that IP packet data be inspected for invalid or malicious content. Which of the following approaches achieve this requirement? (Choose two.)

- A. Configure a proxy solution on Amazon EC2 and route all outbound VPC traffic through i
- B. Perform inspection within proxy software on the EC2 instance.
- C. Configure the host-based agent on each EC2 instance within the VP
- D. Perform inspection within the host-based agent.
- E. Enable VPC Flow Logs for all subnets in the VP
- F. Perform inspection from the Flow Log data within Amazon CloudWatch Logs.
- G. Configure Elastic Load Balancing (ELB) access log
- H. Perform inspection from the log data within the ELB access log files.
- I. Configure the CloudWatch Logs agent on each EC2 instance within the VP
- J. Perform inspection from the log data within CloudWatch Logs.

**Answer:** AB

**Explanation:**

"EC2 Instance IDS/IPS solutions offer key features to help protect your EC2 instances. This includes alerting administrators of malicious activity and policy violations, as well as identifying and taking action against attacks. You can use AWS services and third party IDS/IPS solutions offered in AWS Marketplace to stay one step ahead of potential attackers."

**NEW QUESTION 243**

- (Exam Topic 2)

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

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

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

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

**Answer: D**

**Explanation:**

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

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

**NEW QUESTION 248**

- (Exam Topic 2)

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

Which of the following troubleshooting steps should the Analyst perform?

- A. Ensure that CloudTrail and S3 bucket access logging is enabled for the Analyst's AWS account
- B. Verify that a metric filter was created and then mapped to an alarm
- C. Check the alarm notification action.
- D. Check the CloudWatch dashboards to ensure that there is a metric configured with an appropriate dimension for security group changes.
- E. Verify that the Analyst's account is mapped to an IAM policy that includes permissions for cloudwatch: GetMetricStatistics and Cloudwatch: ListMetrics.

**Answer: B**

**Explanation:**

MetricFilter:

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

LogGroupName: " FilterPattern: >

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

MetricTransformations:

- MetricValue: '1'

MetricNamespace: CloudTrailMetrics MetricName: SecurityGroupEventCount

**NEW QUESTION 252**

- (Exam Topic 2)

A distributed web application is installed across several EC2 instances in public subnets residing in two Availability Zones. Apache logs show several intermittent brute-force attacks from hundreds of IP addresses at the layer 7 level over the past six months.

What would be the BEST way to reduce the potential impact of these attacks in the future?

- A. Use custom route tables to prevent malicious traffic from routing to the instances.
- B. Update security groups to deny traffic from the originating source IP addresses.
- C. Use network ACLs.
- D. Install intrusion prevention software (IPS) on each instance.

**Answer: D**

**Explanation:**

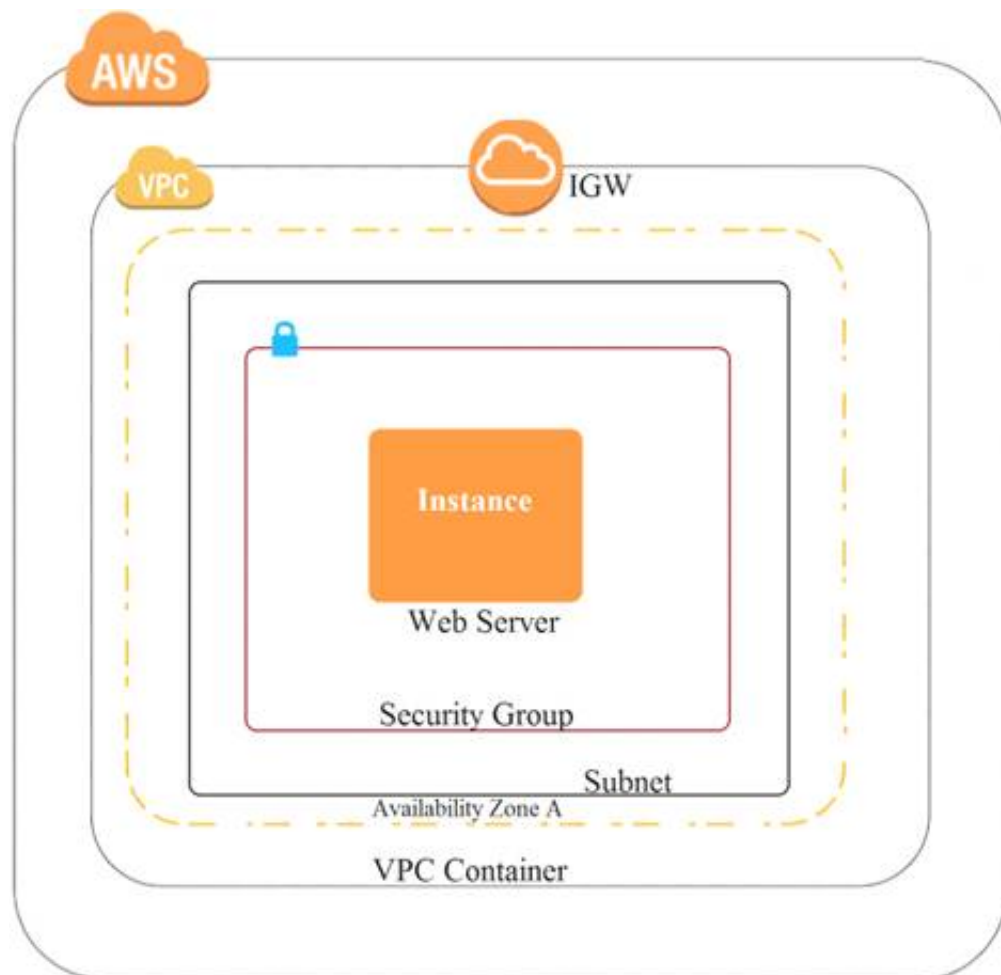
<https://docs.aws.amazon.com/vpc/latest/userguide/amazon-vpc-limits.html> NACL has limit 20 (can increase to maximum 40 rule), and more rule will make more low-latency

**NEW QUESTION 254**

- (Exam Topic 2)

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

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



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

**Answer: D**

**Explanation:**

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

**NEW QUESTION 258**

- (Exam Topic 2)

A Security Engineer must add additional protection to a legacy web application by adding the following HTTP security headers:

- Content Security-Policy
- X-Frame-Options
- X-XSS-Protection

The Engineer does not have access to the source code of the legacy web application. Which of the following approaches would meet this requirement?

- A. Configure an Amazon Route 53 routing policy to send all web traffic that does not include the required headers to a black hole.
- B. Implement an AWS Lambda@Edge origin response function that inserts the required headers.
- C. Migrate the legacy application to an Amazon S3 static website and front it with an Amazon CloudFront distribution.
- D. Construct an AWS WAF rule to replace existing HTTP headers with the required security headers by using regular expressions.

**Answer: B**

**NEW QUESTION 262**

- (Exam Topic 2)

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

Please select:

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








**Answer: D**

**Explanation:**

The most feasible option is to use AWS Config. When you turn on AWS Config, you will get a list of resources defined in your AWS Account.

A sample snapshot of the resources dashboard in AWS Config is shown below C:\Users\wk\Desktop\mudassar\Untitled.jpg



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

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

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

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

#### NEW QUESTION 267

- (Exam Topic 2)

A company plans to move most of its IT infrastructure to AWS. They want to leverage their existing on-premises Active Directory as an identity provider for AWS. Which combination of steps should a Security Engineer take to federate the company's on-premises Active Directory with AWS? (Choose two.)

- A. Create IAM roles with permissions corresponding to each Active Directory group.
- B. Create IAM groups with permissions corresponding to each Active Directory group.
- C. Configure Amazon Cloud Directory to support a SAML provider.
- D. Configure Active Directory to add relying party trust between Active Directory and AWS.
- E. Configure Amazon Cognito to add relying party trust between Active Directory and AWS.

**Answer:** AD

#### Explanation:

<https://aws.amazon.com/blogs/security/how-to-establish-federated-access-to-your-aws-resources-by-using-activ>

#### NEW QUESTION 270

- (Exam Topic 2)

You have an instance setup in a test environment in AWS. You installed the required application and the promoted the server to a production environment. Your IT Security team has advised that there maybe traffic flowing in from an unknown IP address to port 22. How can this be mitigated immediately? Please select:

- A. Shutdown the instance
- B. Remove the rule for incoming traffic on port 22 for the Security Group
- C. Change the AMI for the instance
- D. Change the Instance type for the instance

**Answer:** B

#### Explanation:

In the test environment the security groups might have been opened to all IP addresses for testing purpose. Always to ensure to remove this rule once all testing is completed.

Option A, C and D are all invalid because this would affect the application running on the server. The easiest way is just to remove the rule for access on port 22. For more information on authorizing access to an instance, please visit the below URL: <https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/authorizing-access-to-an-instance.html>

The correct answer is: Remove the rule for incoming traffic on port 22 for the Security Group Submit your Feedback/Queries to our Experts

#### NEW QUESTION 274

- (Exam Topic 2)

Which approach will generate automated security alerts should too many unauthorized AWS API requests be identified?

- A. Create an Amazon CloudWatch metric filter that looks for API call error codes and then implement an alarm based on that metric's rate.
- B. Configure AWS CloudTrail to stream event data to Amazon Kinesi
- C. Configure an AWS Lambda function on the stream to alarm when the threshold has been exceeded.
- D. Run an Amazon Athena SQL query against CloudTrail log file



- E. Use Amazon QuickSight to create an operational dashboard.  
 F. Use the Amazon Personal Health Dashboard to monitor the account's use of AWS services, and raise an alert if service error rates increase.

**Answer:** A

**Explanation:**

<https://docs.aws.amazon.com/awscloudtrail/latest/userguide/cloudwatch-alarms-for-cloudtrail.html#cloudwatch>- Open the CloudWatch console at <https://console.aws.amazon.com/cloudwatch/>. In the navigation pane, choose Logs. In the list of log groups, select the check box next to the log group that you created for CloudTrail log events. Choose Create Metric Filter. On the Define Logs Metric Filter screen, choose Filter Pattern and then type the following: { (\$errorCode = "\*UnauthorizedOperation") || (\$errorCode = "AccessDenied")} Choose Assign Metric. For Filter Name, type AuthorizationFailures. For Metric Namespace, type CloudTrailMetrics. For Metric Name, type AuthorizationFailureCount.

**NEW QUESTION 276**

- (Exam Topic 2)

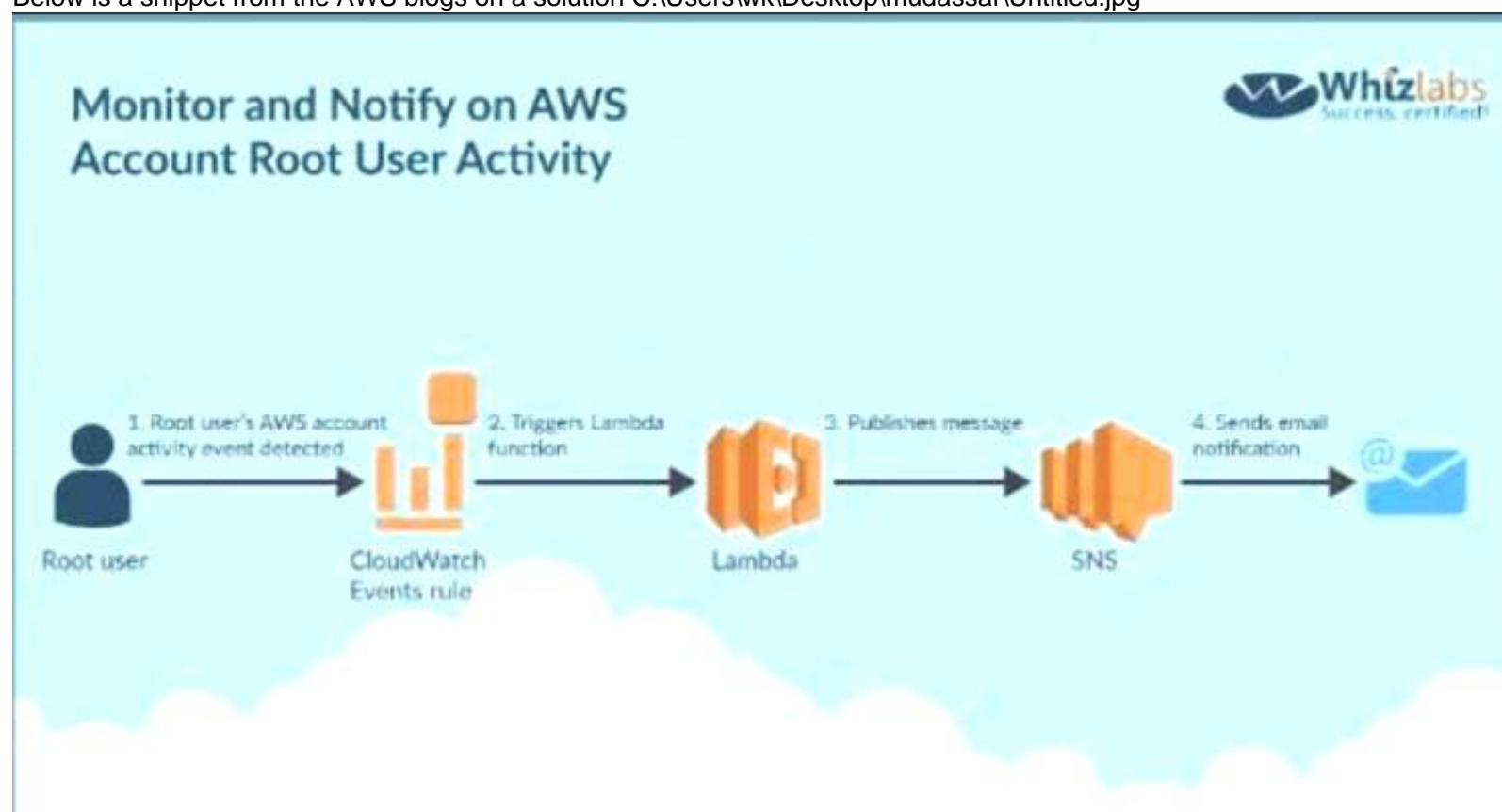
Your company has a requirement to monitor all root user activity by notification. How can this best be achieved? Choose 2 answers from the options given below. Each answer forms part of the solution  
 Please select:

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

**Answer:** AC

**Explanation:**

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



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

**NEW QUESTION 280**

- (Exam Topic 2)

A Security Engineer has been asked to create an automated process to disable IAM user access keys that are more than three months old. Which of the following options should the Security Engineer use?

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

**Answer:** C

**Explanation:**

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

**NEW QUESTION 285**

- (Exam Topic 2)

A Systems Engineer has been tasked with configuring outbound mail through Simple Email Service (SES) and requires compliance with current TLS standards. The mail application should be configured to connect to which of the following endpoints and corresponding ports?

- A. email.us-east-1.amazonaws.com over port 8080

- B. email-pop3.us-east-1.amazonaws.com over port 995
- C. email-smtp.us-east-1.amazonaws.com over port 587
- D. email-imap.us-east-1.amazonaws.com over port 993

**Answer:** C

**Explanation:**

<https://docs.aws.amazon.com/ses/latest/DeveloperGuide/smtp-connect.html>

**NEW QUESTION 288**

- (Exam Topic 2)

A company has enabled Amazon GuardDuty in all Regions as part of its security monitoring strategy. In one of the VPCs, the company hosts an Amazon EC2 instance working as an FTP server that is contacted by a high number of clients from multiple locations. This is identified by GuardDuty as a brute force attack due to the high number of connections that happen every hour.

The finding has been flagged as a false positive. However, GuardDuty keeps raising the issue. A Security Engineer has been asked to improve the signal-to-noise ratio. The Engineer needs to ensure that changes do not compromise the visibility of potential anomalous behavior.

How can the Security Engineer address the issue?

- A. Disable the FTP rule in GuardDuty in the Region where the FTP server is deployed
- B. Add the FTP server to a trusted IP list and deploy it to GuardDuty to stop receiving the notifications
- C. Use GuardDuty filters with auto archiving enabled to close the findings
- D. Create an AWS Lambda function that closes the finding whenever a new occurrence is reported

**Answer:** B

**Explanation:**

Trusted IP lists consist of IP addresses that you have whitelisted for secure communication with your AWS infrastructure and applications. GuardDuty does not generate findings for IP addresses on trusted IP lists. At any given time, you can have only one uploaded trusted IP list per AWS account per region.

References:

**NEW QUESTION 289**

- (Exam Topic 2)

You have just received an email from AWS Support stating that your AWS account might have been compromised. Which of the following steps would you look to carry out immediately. Choose 3 answers from the options below.

Please select:

- A. Change the root account password.
- B. Rotate all IAM access keys
- C. Keep all resources running to avoid disruption
- D. Change the password for all IAM users.

**Answer:** ABD

**Explanation:**

One of the articles from AWS mentions what should be done in such a scenario

If you suspect that your account has been compromised, or if you have received a notification from AWS that the account has been compromised, perform the following tasks:

Change your AWS root account password and the passwords of any IAM users.

Delete or rotate all root and AWS Identity and Access Management (IAM) access keys.

Delete any resources on your account you didn't create, especially running EC2 instances, EC2 spot bids, or IAM users.

Respond to any notifications you received from AWS Support through the AWS Support Center.

Option C is invalid because there could be compromised instances or resources running on your environment. They should be shutdown or stopped immediately.

For more information on the article, please visit the below URL: <https://aws.amazon.com/premiumsupport/knowledge-center/potential-account-compromise>

The correct answers are: Change the root account password. Rotate all IAM access keys. Change the password for all IAM users. Submit your Feedback/Queries to our Experts

**NEW QUESTION 292**

- (Exam Topic 2)

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

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

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

**Answer:** BDE

**NEW QUESTION 295**

- (Exam Topic 2)

An application running on EC2 instances must use a username and password to access a database. The developer has stored those secrets in the SSM

Parameter Store with type SecureString using the default KMS CMK. Which combination of configuration steps will allow the application to access the secrets via the API? Select 2 answers from the options below

Please select:

- A. Add the EC2 instance role as a trusted service to the SSM service role.
- B. Add permission to use the KMS key to decrypt to the SSM service role.
- C. Add permission to read the SSM parameter to the EC2 instance role
- D. .
- E. Add permission to use the KMS key to decrypt to the EC2 instance role
- F. Add the SSM service role as a trusted service to the EC2 instance role.

**Answer:** CD

**Explanation:**

The below example policy from the AWS Documentation is required to be given to the EC2 Instance in order to read a secure string from AWS KMS. Permissions need to be given to the Get Parameter API and the KMS API call to decrypt the secret.

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

```
{
 "Version": "2012-10-17",
 "Statement": [
 {
 "Effect": "Allow",
 "Action": [
 "ssm:GetParameter*"
],
 "Resource": "arn:aws:ssm:us-west-2:111122223333:parameter/ReadableParameters/*"
 },
 {
 "Effect": "Allow",
 "Action": [
 "kms:Decrypt"
],
 "Resource": "arn:aws:kms:us-west-2:111122223333:key/1234abcd-12ab-34cd-56ef-1234567890ab"
 }
]
}
```

Option A is invalid because roles can be attached to EC2 and not EC2 roles to SSM Option B is invalid because the KMS key does not need to decrypt the SSM service role.

Option E is invalid because this configuration is valid For more information on the parameter store, please visit the below URL:

<https://docs.aws.amazon.com/kms/latest/developerguide/services-parameter-store.html>

The correct answers are: Add permission to read the SSM parameter to the EC2 instance role., Add permission to use the KMS key to decrypt to the EC2 instance role

Submit your Feedback/Queries to our Experts

**NEW QUESTION 297**

- (Exam Topic 2)

An organization has a system in AWS that allows a large number of remote workers to submit data files. File sizes vary from a few kilobytes to several megabytes.

A recent audit highlighted a concern that data files are not encrypted while in transit over untrusted networks.

Which solution would remediate the audit finding while minimizing the effort required?

- A. Upload an SSL certificate to IAM, and configure Amazon CloudFront with the passphrase for the private key.
- B. Call KMS.Encrypt() in the client, passing in the data file contents, and call KMS.Decrypt() server-side.
- C. Use AWS Certificate Manager to provision a certificate on an Elastic Load Balancing in front of the web service's servers.
- D. Create a new VPC with an Amazon VPC VPN endpoint, and update the web service's DNS record.

**Answer:** C

**NEW QUESTION 302**

- (Exam Topic 2)

Your company has an EC2 Instance that is hosted in an AWS VPC. There is a requirement to ensure that logs files from the EC2 Instance are stored accordingly.

The access should also be limited for the destination of the log files. How can this be accomplished? Choose 2 answers from the options given below. Each answer forms part of the solution

Please select:

- A. Stream the log files to a separate Cloudtrail trail
- B. Stream the log files to a separate Cloudwatch Log group
- C. Create an IAM policy that gives the desired level of access to the Cloudtrail trail
- D. Create an IAM policy that gives the desired level of access to the Cloudwatch Log group

**Answer:** BD

**Explanation:**

You can create a Log group and send all logs from the EC2 Instance to that group. You can then limit the access to the Log groups via an IAM policy.

Option A is invalid because Cloudtrail is used to record API activity and not for storing log files Option C is invalid because Cloudtrail is the wrong service to be used for this requirement

For more information on Log Groups and Log Streams, please visit the following URL:

\* <https://docs.aws.amazon.com/AmazonCloudWatch/latest/logs/Working>

For more information on Access to Cloudwatch logs, please visit the following URL:

\* <https://docs.aws.amazon.com/AmazonCloudWatch/latest/logs/auth-and-access-control-cwl.html>

The correct answers are: Stream the log files to a separate Cloudwatch Log group. Create an IAM policy that gives the desired level of access to the Cloudwatch Log group

Submit your Feedback/Queries to our Experts

**NEW QUESTION 307**

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