

Exam Questions SCS-C01

AWS Certified Security- Specialty

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NEW QUESTION 1

- (Exam Topic 1)

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

What should the company do to accomplish this?

A)

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

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

B)

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

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

C)

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

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

D)

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

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

A. Option A

B. Option B

C. Option C

D. Option D

Answer: A

NEW QUESTION 2

- (Exam Topic 1)

A company has an encrypted Amazon S3 bucket. An Application Developer has an IAM policy that allows access to the S3 bucket, but the Application Developer is unable to access objects within the bucket.

What is a possible cause of the issue?

A. The S3 ACL for the S3 bucket fails to explicitly grant access to the Application Developer

B. The AWS KMS key for the S3 bucket fails to list the Application Developer as an administrator

C. The S3 bucket policy fails to explicitly grant access to the Application Developer

D. The S3 bucket policy explicitly denies access to the Application Developer

Answer: C

NEW QUESTION 3

- (Exam Topic 1)

A company has several workloads running on AWS. Employees are required to authenticate using on-premises ADFS and SSO to access the AWS Management Console. Developers migrated an existing legacy web application to an Amazon EC2 instance. Employees need to access this application from anywhere on the internet but currently, there is no authentication system built into the application.

How should the Security Engineer implement employee-only access to this system without changing the application?

A. Place the application behind an Application Load Balancer (ALB). Use Amazon Cognito as authentication (or the ALB). Define a SAML-based Amazon Cognito user pool and connect it to ADFS. Implement AWS SSO in the master account and link it to ADFS as an identity provider. Define the EC2 instance as a managed resource, then apply an IAM policy on the resource.

B. Define an Amazon Cognito identity pool, then install the connector on the Active Directory server. Use the Amazon Cognito SDK on the application instance to authenticate the employees using their

C. Active Directory user names and passwords.

D. Create an AWS Lambda custom authorizer as the authenticator for a reverse proxy on Amazon EC2. Ensure the security group on Amazon EC2 only allows access from the Lambda function.

Answer: B

NEW QUESTION 4

- (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 5

- (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 6

- (Exam Topic 1)

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

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

Answer: A

NEW QUESTION 7

- (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 file from the identity service provider. Update the file in the AWS identity provider entity defined in AWS Identity and Access Management (IAM) by using the AWS CLI.
- D. Configure the AWS identity provider entity defined in AWS Identity and Access Management (IAM) to synchronously fetch the new public key by using the AWS Management Console.

Answer: C

NEW QUESTION 8

- (Exam Topic 1)

A company has a VPC with several Amazon EC2 instances behind a NAT gateway. The company's security policy states that all network traffic must be logged and must include the original source and destination IP addresses. The existing VPC Flow Logs do not include this information. A security engineer needs to recommend a solution.

Which combination of steps should the security engineer recommend? (Select TWO)

- A. Edit the existing VPC Flow Log.
- B. Change the log format of the VPC Flow Logs from the Amazon default format to a custom format.
- C. Delete and recreate the existing VPC Flow Log.
- D. Change the log format of the VPC Flow Logs from the Amazon default format to a custom format.
- E. Change the destination to Amazon CloudWatch Logs.
- F. Include the `pkt-srcaddr` and `pkt-dstaddr` fields in the log format.
- G. Include the `subnet-id` and `instance-id` fields in the log format.

Answer: AE

NEW QUESTION 9

- (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 10

- (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 10

- (Exam Topic 1)

A global company that deals with International finance is investing heavily in cryptocurrencies and wants to experiment with mining technologies using AWS. The company's security team has enabled Amazon

GuardDuty and is concerned by the number of findings being generated by the accounts. The security team wants to minimize the possibility of GuardDuty finding false negatives for compromised instances that are performing mining.

How can the security team continue using GuardDuty while meeting these requirements?

- A. In the GuardDuty console, select the CryptoCurrency:EC2/BitcoinTool B'DNS finding and use the suppress findings option.
- B. Create a custom AWS Lambda function to process newly detected GuardDuty alerts. Process the CryptoCurrency EC2/BitcoinTool BIDNS alert and filter out the high-severity finding types only.
- C. When creating a new Amazon EC2 Instance, provide the instance with a specific tag that indicates it is performing mining operations. Create a custom AWS Lambda function to process newly detected GuardDuty alerts and filter for the presence of this tag.
- D. When GuardDuty produces a cryptocurrency finding, process the finding with a custom AWS Lambda function to extract the instance ID from the finding. Then use the AWS Systems Manager Run Command to check for a running process performing mining operations.

Answer: A

NEW QUESTION 12

- (Exam Topic 1)

A Security Engineer is setting up an AWS CloudTrail trail for all regions in an AWS account. For added security, the logs are stored using server-side encryption with AWS KMS-managed keys (SSE-KMS) and have log integrity validation enabled.

While testing the solution, the Security Engineer discovers that the digest files are readable, but the log files are not. What is the MOST likely cause?

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

Answer: D

NEW QUESTION 16

- (Exam Topic 1)

A company has decided to use encryption in its AWS account to secure the objects in Amazon S3 using server-side encryption. Object sizes range from 16,000 B to 5 MB. The requirements are as follows:

- The key material must be generated and stored in a certified Federal Information Processing Standard (FIPS) 140-2 Level 3 machine.
- The key material must be available in multiple Regions. Which option meets these requirements?

- A. Use an AWS KMS customer managed key and store the key material in AWS with replication across Regions.
- B. Use an AWS customer managed key, import the key material into AWS KMS using in-house AWS CloudHSM.
- C. and store the key material securely in Amazon S3.
- D. Use an AWS KMS custom key store backed by AWS CloudHSM clusters, and copy backups across Regions.
- E. Use AWS CloudHSM to generate the key material and backup keys across Regions. Use the Java Cryptography Extension (JCE) and Public Key Cryptography Standards #11 (PKCS #11) encryption libraries to encrypt and decrypt the data.

Answer: D

NEW QUESTION 18

- (Exam Topic 1)

A website currently runs on Amazon EC2 with mostly static content on the site. Recently, the site was subjected to a ODoS 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 23

- (Exam Topic 1)

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

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

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

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

Answer: B

NEW QUESTION 24

- (Exam Topic 1)

A company's Director of Information Security wants a daily email report from AWS that contains recommendations for each company account to meet AWS Security best practices.

Which solution would meet these requirements?

- A. In every AWS account, configure AWS Lambda to query the AWS Support API for AWS Trusted Advisor security checks. Send the results from Lambda to an Amazon SNS topic to send reports.
- B. Configure Amazon GuardDuty in a master account and invite all other accounts to be managed by the master account. Use GuardDuty's integration with Amazon SNS to report on findings.
- C. Use Amazon Athena and Amazon QuickSight to build reports off of AWS CloudTrail. Create a daily Amazon CloudWatch trigger to run the report daily and email it using Amazon SNS.
- D. Use AWS Artifact's prebuilt reports and subscriptions. Subscribe the Director of Information Security to the reports by adding the Director as the security alternate contact for each account.

Answer: A

NEW QUESTION 27

- (Exam Topic 1)

An application developer is using an AWS Lambda function that must use AWS KMS to perform encrypt and decrypt operations for API keys that are less than 2 KB. Which key policy would allow the application to do this while granting least privilege?

- A.
- ```
{
 "Sid": "AllowUseOfTheKey",
 "Effect": "Allow",
 "Principal": {"AWS": "arn:aws:iam::444455556666:role/EncryptionApp"},
 "Action": [
 "kms:*"
],
 "Resource": "*"
}
```
- B.
- ```
{
  "Sid": "AllowUseOfTheKey",
  "Effect": "Allow",
  "Principal": {"AWS": "arn:aws:iam::444455556666:role/EncryptionApp"},
  "Action": [
    "kms:Encrypt",
    "kms:Decrypt"
  ],
  "Resource": "*"
}
```

- C. {
 "Sid": "AllowUseOfTheKey",
 "Effect": "Allow",
 "Principal": {"AWS": "arn:aws:iam::444455556666:role/EncryptionApp"},
 "Action": [
 "kms:DescribeKey",
 "kms:GenerateDataKey*",
 "kms:Encrypt",
 "kms:ReEncrypt*",
 "kms:Decrypt"
],
- D. {
 "Sid": "AllowUseOfTheKey",
 "Effect": "Allow",
 "Principal": {"AWS": "arn:aws:iam::444455556666:role/EncryptionApp"},
 "Action": [
 "kms:DescribeKey",
 "kms:GenerateDataKey*",
 "kms:Encrypt",
 "kms:ReEncrypt*",
 "kms:Disable*",
 "kms:Decrypt"
],

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

Answer: B

NEW QUESTION 31

- (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 35

- (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 40

- (Exam Topic 1)

A company's data lake uses Amazon S3 and Amazon Athena. The company's security engineer has been asked to design an encryption solution that meets the company's data protection requirements. The encryption solution must work with Amazon S3 and keys managed by the company. The encryption solution must be protected in a hardware security module that is validated to Federal Information Processing Standards (FIPS) 140-2 Level 3.

Which solution meets these requirements?

- A. Use client-side encryption with an AWS KMS customer-managed key implemented with the AWS Encryption SDK
- B. Use AWS CloudHSM to store the keys and perform cryptographic operations. Save the encrypted text in Amazon S3
- C. Use an AWS KMS customer-managed key that is backed by a custom key store using AWS CloudHSM
- D. Use an AWS KMS customer-managed key with the bring your own key (BYOK) feature to import a key stored in AWS CloudHSM

Answer: B

NEW QUESTION 45

- (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 RDS database. 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 involves 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 that protect the application from this attack.
- B. then apply it to the ALB. Test to ensure the vulnerability has been mitigated, then redirect the Route 53 records to point to the ALB. Update security groups on the EC2 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 the distribution. Test to ensure the vulnerability has been mitigated, then redirect the Route 53 records to point to CloudFront.
- D. Obtain the latest source code for the platform and make the necessary updates. Test the updated code to ensure that the vulnerability has been mitigated, then deploy the patched version of the platform to the EC2 instances.
- E. Update the security group that 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 that protect the application from this attack, then apply it to the EC2 instances. Test to ensure the vulnerability has been mitigated.
- F. then restore the security group to the original setting.

Answer: A

NEW QUESTION 50

- (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 53

- (Exam Topic 1)

Which of the following are valid configurations for using SSL certificates with Amazon CloudFront? (Select THREE)

- A. Default AWS Certificate Manager certificate
- B. Custom SSL certificate stored in AWS KMS
- C. Default CloudFront certificate
- D. Custom SSL certificate stored in AWS Certificate Manager
- E. Default SSL certificate stored in AWS Secrets Manager
- F. Custom SSL certificate stored in AWS IAM

Answer: ACD

NEW QUESTION 57

- (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 62

- (Exam Topic 1)

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

How should the Security Engineer collect a memory dump of the EC2 instance for forensic analysis?

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

Answer: B

NEW QUESTION 64

- (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 69

- (Exam Topic 1)

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

(Select TWO)

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

Answer: BE

NEW QUESTION 71

- (Exam Topic 1)

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

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

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

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

Answer: B

NEW QUESTION 75

- (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 77

- (Exam Topic 1)

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

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

Answer: A

NEW QUESTION 79

- (Exam Topic 1)

A company uses multiple AWS accounts managed with AWS Organizations Security engineers have created a standard set of security groups for all these accounts. The security policy requires that these security groups be used for all applications and delegates modification authority to the security team only.

A recent security audit found that the security groups are inconsistency implemented across accounts and that unauthorized changes have been made to the security groups. A security engineer needs to recommend a solution to improve consistency and to prevent unauthorized changes in the individual accounts in the future.

Which solution should the security engineer recommend?

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

Answer: B

NEW QUESTION 84

- (Exam Topic 1)

An employee accidentally exposed an AWS access key and secret access key during a public presentation. The company Security Engineer immediately disabled the key.

How can the Engineer assess the impact of the key exposure and ensure that the credentials were not misused? (Choose two.)

- A. Analyze AWS CloudTrail for activity.
- B. Analyze Amazon CloudWatch Logs for activity.
- C. Download and analyze the IAM Use report from AWS Trusted Advisor.
- D. Analyze the resource inventory in AWS Config for IAM user activity.
- E. Download and analyze a credential report from IAM.

Answer: AD

Explanation:

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

NEW QUESTION 87

- (Exam Topic 1)

A company has a serverless application for internal users deployed on AWS. The application uses AWS Lambda for the front end and for business logic. The Lambda function accesses an Amazon RDS database inside a VPC The company uses AWS Systems Manager Parameter Store for storing database credentials. A recent security review highlighted the following issues

- The Lambda function has internet access.
- The relational database is publicly accessible.
- The database credentials are not stored in an encrypted state.

Which combination of steps should the company take to resolve these security issues? (Select THREE)

- A. Disable public access to the RDS database inside the VPC
- B. Move all the Lambda functions inside the VPC.
- C. Edit the IAM role used by Lambda to restrict internet access.
- D. Create a VPC endpoint for Systems Manage
- E. Store the credentials as a string paramete
- F. Change the parameter type to an advanced parameter.
- G. Edit the IAM role used by RDS to restrict internet access.
- H. Create a VPC endpoint for Systems Manage
- I. Store the credentials as a SecureString parameter.

Answer: ABE

NEW QUESTION 90

- (Exam Topic 1)

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

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

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

Answer: BDF

NEW QUESTION 94

- (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 95

- (Exam Topic 1)

A company is designing the securely architecture (or a global latency-sensitive web application it plans to deploy to AWS. A Security Engineer needs to configure a highly available and secure two-tier architecture. The security design must include controls to prevent common attacks such as DDoS, cross-site scripting, and SQL injection.

Which solution meets these requirements?

- A. Create an Application Load Balancer (ALB) that uses public subnets across multiple Availability Zones within a single Region
- B. Point the ALB to an Auto Scaling group with Amazon EC2 instances in private subnets across multiple Availability Zones within the same Region
- C. Create an AmazonCloudFront distribution that uses the ALB as its origin
- D. Create appropriate AWS WAF ACLs and enable them on the CloudFront distribution.
- E. Create an Application Load Balancer (ALB) that uses private subnets across multiple Availability Zones within a single Region
- F. Point the ALB to an Auto Scaling group with Amazon EC2 instances in private subnets across multiple Availability Zones within the same Region
- G. Create an Amazon CloudFront distribution that uses the ALB as its origin
- H. Create appropriate AWS WAF ACLs and enable them on the CloudFront distribution.
- I. Create an Application Load Balancer (ALB) that uses public subnets across multiple Availability Zones within a single Region
- J. Point the ALB to an Auto Scaling group with Amazon EC2 instances in private subnets across multiple Availability Zones within the same Region
- K. Create appropriate AWS WAF ACLs and enable them on the ALB.
- L. Create an Application Load Balancer (ALB) that uses private subnets across multiple Availability Zones within a single Region
- M. Point the ALB to an Auto Scaling group with Amazon EC2 instances in private subnets across multiple Availability Zones within the same Region
- N. Create appropriate AWS WAF ACLs and enable them on the ALB.

Answer: A

NEW QUESTION 98

- (Exam Topic 1)

A security engineer is responsible for providing secure access to AWS resources for thousands of developer in a company's corporate identity provider (idp). The developers access a set of AWS services from the corporate premises using IAM credential. 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 developer are sharing their IAM credentials with others to avoid provisioning delays. The causes concern about overall security for the security engineer.

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 developer
- 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 102

- (Exam Topic 1)

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

What should the security engineer do to accomplish this?

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

Answer: D

NEW QUESTION 107

- (Exam Topic 1)

A security engineer needs to configure monitoring and auditing for AWS Lambda.

Which combination of actions using AWS services should the security engineer take to accomplish this goal? (Select TWO.)

- A. Use AWS Config to track configuration changes to Lambda functions, runtime environments, tags, handler names, code sizes, memory allocation, timeout settings, and concurrency settings, along with Lambda IAM execution role, subnet, and security group associations.
- B. Use AWS CloudTrail to implement governance, compliance, operational, and risk auditing for Lambda.
- C. Use Amazon Inspector to automatically monitor for vulnerabilities and perform governance, compliance, operational, and risk auditing for Lambda.
- D. Use AWS Resource Access Manager to track configuration changes to Lambda functions, runtime environments, tags, handler names, code sizes, memory allocation, timeout settings, and concurrency settings, along with Lambda IAM execution role, subnet, and security group associations.
- E. Use Amazon Macie to discover, classify, and protect sensitive data being executed inside the Lambda function.

Answer: AB

NEW QUESTION 108

- (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: C

NEW QUESTION 113

- (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 117

- (Exam Topic 1)

Two Amazon EC2 instances in different subnets should be able to connect to each other but cannot. It has been confirmed that other hosts in the same subnets are able to communicate successfully, and that security groups have valid ALLOW rules in place to permit this traffic. Which of the following troubleshooting steps should be performed?

- A. Check inbound and outbound security groups, looking for DENY rules.
- B. Check inbound and outbound Network ACL rules, looking for DENY rules.
- C. Review the rejected packet reason codes in the VPC Flow Logs.
- D. Use AWS X-Ray to trace the end-to-end application flow

Answer: C

NEW QUESTION 121

- (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 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 services 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 129

- (Exam Topic 2)

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

```
{ "ID": "Policy1502987489630",
  "Version": "2012-10-17",
  "Statement": [
    {
      "Sid": "Stmt1502987487640",
      "Action": [
        "s3:GetObject",
        "s3:GetObjectVersion"
      ],
      "Effect": "Allow",
      "Resource": "arn:aws:s3:::appbucket",
      "Principal": "*"
    }
  ]
}
```

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

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

Answer: C

Explanation:

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

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

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

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

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

NEW QUESTION 132

- (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 137

- (Exam Topic 2)

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

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

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

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

Answer: A

NEW QUESTION 142

- (Exam Topic 2)

An organization wants to deploy a three-tier web application whereby the application servers run on Amazon EC2 instances. These EC2 instances need access to credentials that they will use to authenticate their SQL connections to an Amazon RDS DB instance. Also, AWS Lambda functions must issue queries to the RDS database by using the same database credentials.

The credentials must be stored so that the EC2 instances and the Lambda functions can access them. No other access is allowed. The access logs must record when the credentials were accessed and by whom.

What should the Security Engineer do to meet these requirements?

- A. Store the database credentials in AWS Key Management Service (AWS KMS). Create an IAM role with access to AWS KMS by using the EC2 and Lambda service principals in the role's trust polic
- B. Add the role to an EC2 instance profil
- C. Attach the instance profile to the EC2 instance
- D. Set up Lambda to use the new role for execution.
- E. Store the database credentials in AWS KM
- F. Create an IAM role with access to KMS by using the EC2 and Lambda service principals in the role's trust polic
- G. Add the role to an EC2 instance profil
- H. Attach the instance profile to the EC2 instances and the Lambda function.
- I. Store the database credentials in AWS Secrets Manage
- J. Create an IAM role with access to Secrets Manager by using the EC2 and Lambda service principals in the role's trust polic
- K. Add the role to an EC2 instance profil
- L. Attach the instance profile to the EC2 instances and the Lambda function.
- M. Store the database credentials in AWS Secrets Manage

- N. Create an IAM role with access to Secrets Manager by using the EC2 and Lambda service principals in the role's trust policy
- O. Add the role to an EC2 instance profile
- P. Attach the instance profile to the EC2 instance
- Q. Set up Lambda to use the new role for execution.

Answer: D

NEW QUESTION 143

- (Exam Topic 2)

A Security Engineer received an AWS Abuse Notice listing EC2 instance IDs that are reportedly abusing other hosts. Which action should the Engineer take based on this situation? (Choose three.)

- A. Use AWS Artifact to capture an exact image of the state of each instance.
- B. Create EBS Snapshots of each of the volumes attached to the compromised instances.
- C. Capture a memory dump.
- D. Log in to each instance with administrative credentials to restart the instance.
- E. Revoke all network ingress and egress except for to/from a forensics workstation.
- F. Run Auto Recovery for Amazon EC2.

Answer: BEF

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)

A company wants to have a secure way of generating, storing and managing cryptographic exclusive access for the keys. Which of the following can be used for this purpose?

Please select:

- A. Use KMS and the normal KMS encryption keys
- B. Use KMS and use an external key material
- C. Use S3 Server Side encryption
- D. Use Cloud HSM

Answer: D

Explanation:

The AWS Documentation mentions the following

The AWS CloudHSM service helps you meet corporate, contractual and regulatory compliance requirements for data security by using dedicated Hardware Security Module (HSM) instances within the AWS cloud. AWS and AWS Marketplace partners offer a variety of solutions for protecting sensitive data within the AWS platform, but for some applications and data subject to contractual or regulatory mandates for managing cryptographic keys, additional protection may be necessary. CloudHSM complements existing data protection solutions and allows you to protect your encryption keys within HSMs that are designed and validated to government standards for secure key management. CloudHSM allows you to securely generate, store and manage cryptographic keys used for data encryption in a way that keys are accessible only by you.

Option A,B and C are invalid because in all of these cases, the management of the key will be with AWS. Here the question specifically mentions that you want to have exclusive access over the keys. This can be achieved with Cloud HSM

For more information on CloudHSM, please visit the following URL: <https://aws.amazon.com/cloudhsm/faq>:

The correct answer is: Use Cloud HSM Submit your Feedback/Queries to our Experts

NEW QUESTION 149

- (Exam Topic 2)

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

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

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

Answer: ADF

Explanation:

https://github.com/awslabs/aws-well-architected-labs/blob/master/Security/300_Incident_Response_with_AWS

NEW QUESTION 151

- (Exam Topic 2)

While analyzing a company's security solution, a Security Engineer wants to secure the AWS account root user. What should the Security Engineer do to provide the highest level of security for the account?

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

Answer: D

Explanation:

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

NEW QUESTION 152

- (Exam Topic 2)

A company is hosting a website that must be accessible to users for HTTPS traffic. Also port 22 should be open for administrative purposes. The administrator's workstation has a static IP address of 203.0.113.1/32. Which of the following security group configurations are the MOST secure but still functional to support these requirements? Choose 2 answers from the options given below

Please select:

- A. Port 443 coming from 0.0.0.0/0
- B. Port 443 coming from 10.0.0.0/16
- C. Port 22 coming from 0.0.0.0/0
- D. Port 22 coming from 203.0.113.1/32

Answer: AD

Explanation:

Since HTTPS traffic is required for all users on the Internet, Port 443 should be open on all IP addresses. For port 22, the traffic should be restricted to an internal subnet.

Option B is invalid, because this only allow traffic from a particular CIDR block and not from the internet Option C is invalid because allowing port 22 from the internet is a security risk

For more information on AWS Security Groups, please visit the following URL <https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/usins-network-security.html>

The correct answers are: Port 443 coming from 0.0.0.0/0, Port 22 coming from 203.0.113.1 /32 Submit your Feedback/Queries to our Experts

NEW QUESTION 155

- (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 160

- (Exam Topic 2)

A security team must present a daily briefing to the CISO that includes a report of which of the company's thousands of EC2 instances and on-premises servers are missing the latest security patches. All instances/servers must be brought into compliance within 24 hours so they do not show up on the next day's report.

How can the security team fulfill these requirements?

Please select:

- A. Use Amazon QuickSight and Cloud Trail to generate the report of out of compliance instances/servers. Redeploy all out of compliance instances/servers using an AMI with the latest patches.
- B. Use Systems Manager Patch Manager to generate the report of out of compliance instances/ server
- C. Use Systems Manager Patch Manager to install the missing patches.
- D. Use Systems Manager Patch Manager to generate the report of out of compliance instances/ servers. Redeploy all out of1 compliance instances/servers using an AMI with the latest patches.
- E. Use Trusted Advisor to generate the report of out of compliance instances/server
- F. Use Systems Manager Patch Manager to install the missing patches.

Answer: B

Explanation:

Use the Systems Manager Patch Manager to generate the report and also install the missing patches The AWS Documentation mentions the following AWS Systems Manager Patch Manager automates the process of patching managed instances with

security-related updates. For Linux-based instances, you can also install patches for non-security updates. You can patch fleets of Amazon EC2 instances or your on-premises servers and virtual machines (VMs) by operating system type. This includes supported versions of Windows, Ubuntu Server, Red Hat Enterprise Linux (RHEL), SUSE Linux Enterprise Server (SLES), and Amazon Linux. You can scan instances to see only a report of missing patches, or you can scan and automatically install all missing patches.

Option A is invalid because Amazon QuickSight and Cloud Trail cannot be used to generate the list of servers that don't meet compliance needs.

Option C is wrong because deploying instances via new AMI'S would impact the applications hosted on these servers

Option D is invalid because Amazon Trusted Advisor cannot be used to generate the list of servers that don't meet compliance needs.

For more information on the AWS Patch Manager, please visit the below URL:

<https://docs.aws.amazon.com/systems-manager/latest/userguide/systems-manager-patch.html> (

The correct answer is: Use Systems Manger Patch Manger to generate the report of out of compliance instances/ servers. Use Systems Manager Patch Manger to install the missing patches.

Submit your Feedback/Queries to our Experts

NEW QUESTION 164

- (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 166

- (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 168

- (Exam Topic 2)

The AWS Systems Manager Parameter Store is being used to store database passwords used by an AWS Lambda function. Because this is sensitive data, the parameters are stored as type SecureString and protected by an AWS KMS key that allows access through IAM. When the function executes, this parameter cannot be retrieved as the result of an access denied error.

Which of the following actions will resolve the access denied error?

- A. Update the ssm.amazonaws.com principal in the KMS key policy to allow kms: Decrypt.
- B. Update the Lambda configuration to launch the function in a VPC.
- C. Add a policy to the role that the Lambda function uses, allowing kms: Decrypt for the KMS key.
- D. Add lambda.amazonaws.com as a trusted entity on the IAM role that the Lambda function uses.

Answer: C

Explanation:

https://docs.amazonaws.cn/en_us/AmazonRDS/latest/AuroraUserGuide/AuroraMySQL.Integrating.Authorizing

NEW QUESTION 170

- (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 174

- (Exam Topic 2)

Amazon CloudWatch Logs agent is successfully delivering logs to the CloudWatch Logs service. However, logs stop being delivered after the associated log stream has been active for a specific number of hours.

What steps are necessary to identify the cause of this phenomenon? (Choose two.)

A. Ensure that file permissions for monitored files that allow the CloudWatch Logs agent to read the file have not been modified.

B. Verify that the OS Log rotation rules are compatible with the configuration requirements for agent streaming.

C. Configure an Amazon Kinesis producer to first put the logs into Amazon Kinesis Streams.

D. Create a CloudWatch Logs metric to isolate a value that changes at least once during the period before logging stops.

E. Use AWS CloudFormation to dynamically create and maintain the configuration file for the CloudWatch Logs agent.

Answer: AB

Explanation:

[https://acloud.guru/forums/aws-certified-security-specialty/discussion/-Lm5A3w6_NybQPhh6tRP/Cloudwatch%](https://acloud.guru/forums/aws-certified-security-specialty/discussion/-Lm5A3w6_NybQPhh6tRP/Cloudwatch%20agent%20logs%20stop%20being%20delivered%20after%20a%20specific%20number%20of%20hours)

NEW QUESTION 175

- (Exam Topic 2)

A company uses user data scripts that contain sensitive information to bootstrap Amazon EC2 instances. A Security Engineer discovers that this sensitive information is viewable by people who should not have access to it.

What is the MOST secure way to protect the sensitive information used to bootstrap the instances?

A. Store the scripts in the AMI and encrypt the sensitive data using AWS KMS Use the instance role profile to control access to the KMS keys needed to decrypt the data.

B. Store the sensitive data in AWS Systems Manager Parameter Store using the encrypted string parameter and assign the GetParameters permission to the EC2 instance role.

C. Externalize the bootstrap scripts in Amazon S3 and encrypt them using AWS KM

D. Remove the scripts from the instance and clear the logs after the instance is configured.

E. Block user access of the EC2 instance's metadata service using IAM policie

F. Remove all scripts and clear the logs after execution.

Answer: B

NEW QUESTION 180

- (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 185

- (Exam Topic 2)

The Security Engineer has discovered that a new application that deals with highly sensitive data is storing Amazon S3 objects with the following key pattern, which itself contains highly sensitive data.

Pattern: "randomID_datestamp_PII.csv" Example:

"1234567_12302017_000-00-0000 csv"

The bucket where these objects are being stored is using server-side encryption (SSE). Which solution is the most secure and cost-effective option to protect the sensitive data?

A. Remove the sensitive data from the object name, and store the sensitive data using S3 user-defined metadata.

B. Add an S3 bucket policy that denies the action s3:GetObject

C. Use a random and unique S3 object key, and create an S3 metadata index in Amazon DynamoDB using client-side encrypted attributes.

D. Store all sensitive objects in Binary Large Objects (BLOBS) in an encrypted Amazon RDS instance.

Answer: C

Explanation:

<https://docs.aws.amazon.com/AmazonS3/latest/dev/UsingMetadata.html> <https://aws.amazon.com/blogs/database/best-practices-for-securing-sensitive-data-in-aws-data-stores/>

NEW QUESTION 187

- (Exam Topic 2)

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

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

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

Answer: C

NEW QUESTION 188

- (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 policies
- 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 data
- 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 193

- (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 198

- (Exam Topic 2)

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

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

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

Answer: A

Explanation:

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

NEW QUESTION 203

- (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 207

- (Exam Topic 2)

A corporate cloud security policy states that communications between the company's VPC and KMS must travel entirely within the AWS network and not use public service endpoints.

Which combination of the following actions MOST satisfies this requirement? (Choose two.)

- A. Add the aws:sourceVpce condition to the AWS KMS key policy referencing the company's VPC endpoint ID.
- B. Remove the VPC internet gateway from the VPC and add a virtual private gateway to the VPC to prevent direct, public internet connectivity.
- C. Create a VPC endpoint for AWS KMS with private DNS enabled.
- D. Use the KMS Import Key feature to securely transfer the AWS KMS key over a VPN.
- E. Add the following condition to the AWS KMS key policy: "aws:SourceIp": "10.0.0.0/16".

Answer: AC

Explanation:

An IAM policy can deny access to KMS except through your VPC endpoint with the following condition statement:

```
"Condition": { "StringNotEquals": {
"aws:sourceVpce": "vpce-0295a3caf8414c94a"
}
}
```

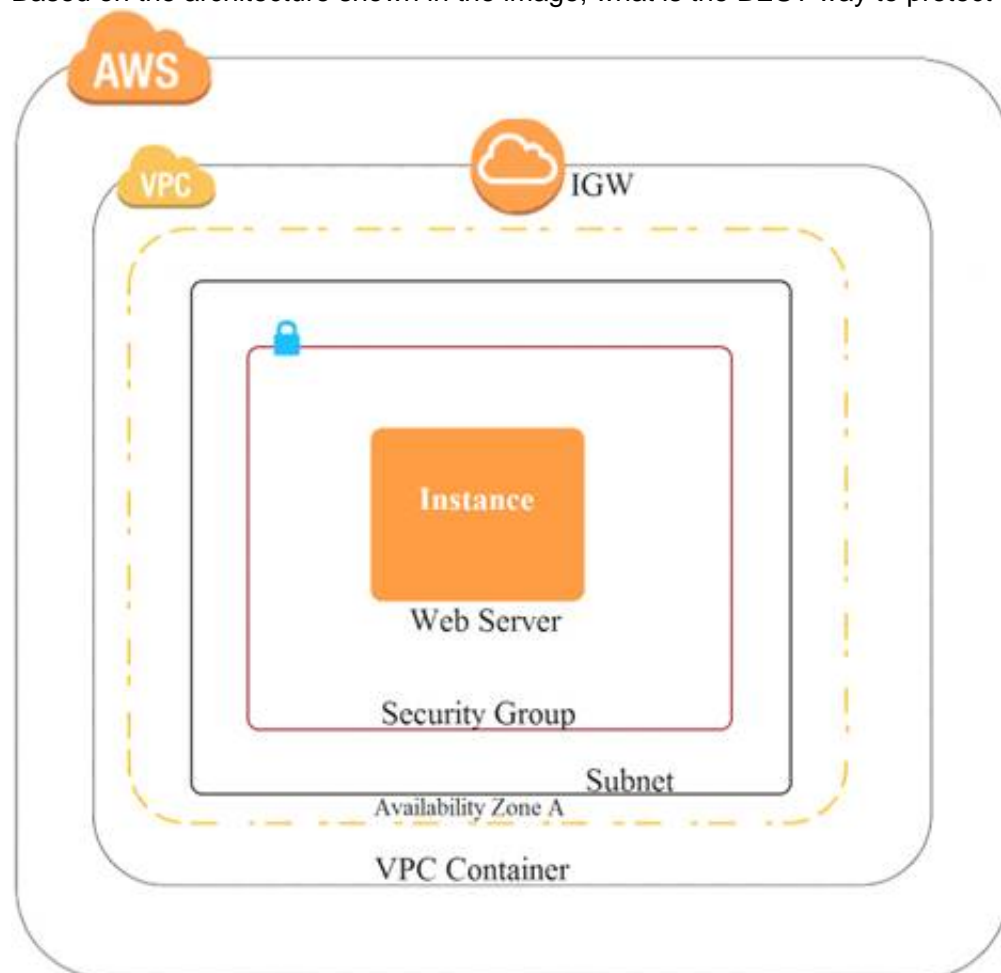
If you select the Enable Private DNS Name option, the standard AWS KMS DNS hostname (<https://kms.<region>.amazonaws.com>) resolves to your VPC endpoint.

NEW QUESTION 212

- (Exam Topic 2)

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

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



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

Answer: D

Explanation:

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

NEW QUESTION 214

- (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 219

- (Exam Topic 2)

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

What is the SIMPLEST way to meet these requirements?

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

Answer: C

NEW QUESTION 222

- (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_GenerateCredentialReport.html

https://docs.aws.amazon.com/IAM/latest/APIReference/API_GetCredentialReport.html

NEW QUESTION 224

- (Exam Topic 2)

You have a 2 tier application hosted in AWS. It consists of a web server and database server (SQL Server) hosted on separate EC2 Instances. You are devising the security groups for these EC2 Instances. The Web tier needs to be accessed by users across the Internet. You have created a web security group(wg-123) and database security group(db-345). Which combination of the following security group rules will allow the application to be secure and functional. Choose 2 answers from the options given below.

Please select:

- A. wg-123 -Allow ports 80 and 443 from 0.0.0.0/0
- B. db-345 - Allow port 1433 from wg-123
- C. wg-123 - Allow port 1433 from wg-123
- D. db-345 -Allow ports 1433 from 0.0.0.0/0

Answer: AB

Explanation:

The Web security groups should allow access for ports 80 and 443 for HTTP and HTTPS traffic to all users from the internet.

The database security group should just allow access from the web security group from port 1433. Option C is invalid because this is not a valid configuration

Option D is invalid because database security should not be allowed on the internet For more information on Security Groups please visit the below URL:

<https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/usins-network-security.html>

The correct answers are: wg-123 - Allow ports 80 and 443 from 0.0.0.0/0, db-345 - Allow port 1433 from wg-123

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NEW QUESTION 228

- (Exam Topic 2)

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

Please select:

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

Answer: D

Explanation:

The AWS Documentation states the following

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

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

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

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

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

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

- aws/elasticfilesystem 1 aws/lightsail
- aws/s3
- aws/rds and many more Detailed Guide: KMS

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

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

Rotation period for CMKs is as follows:

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

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

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

Submit your Feedback/Queries to our Experts

NEW QUESTION 233

- (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 238

- (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 239

- (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 243

- (Exam Topic 2)

A company has complex connectivity rules governing ingress, egress, and communications between Amazon EC2 instances. The rules are so complex that they cannot be implemented within the limits of the maximum number of security groups and network access control lists (network ACLs).

What mechanism will allow the company to implement all required network rules without incurring additional cost?

- A. Configure AWS WAF rules to implement the required rules.
- B. Use the operating system built-in, host-based firewall to implement the required rules.
- C. Use a NAT gateway to control ingress and egress according to the requirements.
- D. Launch an EC2-based firewall product from the AWS Marketplace, and implement the required rules in that product.

Answer: B

NEW QUESTION 247

- (Exam Topic 2)

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

Which of the following solutions will meet these requirements?

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

Answer: B

Explanation:

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

NEW QUESTION 250

- (Exam Topic 2)

A water utility company uses a number of Amazon EC2 instances to manage updates to a fleet of 2,000 Internet of Things (IoT) field devices that monitor water quality. These devices each have unique access credentials.

An operational safety policy requires that access to specific credentials is independently auditable. What is the MOST cost-effective way to manage the storage of credentials?

- A. Use AWS Systems Manager to store the credentials as Secure Strings Parameter
- B. Secure by using an AWS KMS key.
- C. Use AWS Key Management System to store a master key, which is used to encrypt the credential
- D. The encrypted credentials are stored in an Amazon RDS instance.
- E. Use AWS Secrets Manager to store the credentials.
- F. Store the credentials in a JSON file on Amazon S3 with server-side encryption.

Answer: A

Explanation:

<https://docs.aws.amazon.com/systems-manager/latest/userguide/parameter-store-advanced-parameters.html>

NEW QUESTION 251

- (Exam Topic 2)

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

A user is unable to assume the IAM role in the target account. The policy attached to the role in the identity account is:


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

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

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

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

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

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

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

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

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

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

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

Answer: A

NEW QUESTION 256

- (Exam Topic 2)

A company has deployed a custom DNS server in AWS. The Security Engineer wants to ensure that Amazon EC2 instances cannot use the Amazon-provided DNS.

How can the Security Engineer block access to the Amazon-provided DNS in the VPC?

- A. Deny access to the Amazon DNS IP within all security groups.
- B. Add a rule to all network access control lists that deny access to the Amazon DNS IP.
- C. Add a route to all route tables that black holes traffic to the Amazon DNS IP.
- D. Disable DNS resolution within the VPC configuration.

Answer: D

Explanation:

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

NEW QUESTION 260

- (Exam Topic 2)

A Security Engineer discovers that developers have been adding rules to security groups that allow SSH and RDP traffic from 0.0.0.0/0 instead of the organization firewall IP.

What is the most efficient way to remediate the risk of this activity?

- A. Delete the internet gateway associated with the VPC.
- B. Use network access control lists to block source IP addresses matching 0.0.0.0/0.
- C. Use a host-based firewall to prevent access from all but the organization's firewall IP.
- D. Use AWS Config rules to detect 0.0.0.0/0 and invoke an AWS Lambda function to update the security group with the organization's firewall IP.

Answer: D

NEW QUESTION 261

- (Exam Topic 2)

A Security Engineer is working with the development team to design a supply chain application that stores sensitive inventory data in an Amazon S3 bucket. The application will use an AWS KMS customer master key (CMK) to encrypt the data on Amazon S3. The inventory data on Amazon S3 will be shared of vendors. All vendors will use AWS principals from their own AWS accounts to access the data on Amazon S3. The vendor list may change weekly, and the solution must support cross-account access.

What is the MOST efficient way to manage access control for the KMS CMK?

- A. Use KMS grants to manage key acces
- B. Programmatically create and revoke grants to manage vendor access.
- C. Use an IAM role to manage key acces
- D. Programmatically update the IAM role policies to manage vendor access.
- E. Use KMS key policies to manage key acces
- F. Programmatically update the KMS key policies to manage vendor access.
- G. Use delegated access across AWS accounts by using IAM roles to manage key access. Programmatically update the IAM trust policy to manage cross-account vendor access.

Answer: A

NEW QUESTION 262

- (Exam Topic 2)

The Security team believes that a former employee may have gained unauthorized access to AWS resources sometime in the past 3 months by using an identified access key.

What approach would enable the Security team to find out what the former employee may have done within AWS?

- A. Use the AWS CloudTrail console to search for user activity.

- B. Use the Amazon CloudWatch Logs console to filter CloudTrail data by user.
- C. Use AWS Config to see what actions were taken by the user.
- D. Use Amazon Athena to query CloudTrail logs stored in Amazon S3.

Answer: A

Explanation:

You can use CloudTrail to search event history for the last 90 days. You can use CloudWatch queries to search API history beyond the last 90 days. You can use Athena to query CloudTrail logs over the last 90 days. <https://aws.amazon.com/premiumsupport/knowledge-center/view-iam-history/>

NEW QUESTION 266

- (Exam Topic 2)

Which of the following minimizes the potential attack surface for applications?

- A. Use security groups to provide stateful firewalls for Amazon EC2 instances at the hypervisor level.
- B. Use network ACLs to provide stateful firewalls at the VPC level to prevent access to any specific AWS resource.
- C. Use AWS Direct Connect for secure trusted connections between EC2 instances within private subnets.
- D. Design network security in a single layer within the perimeter network (also known as DMZ, demilitarized zone, and screened subnet) to facilitate quicker responses to threats.

Answer: A

Explanation:

<https://aws.amazon.com/answers/networking/vpc-security-capabilities/> Security Group is stateful and hypervisor level.

NEW QUESTION 269

- (Exam Topic 3)

Every application in a company's portfolio has a separate AWS account for development and production. The security team wants to prevent the root user and all IAM users in the production accounts from accessing a specific set of unneeded services. How can they control this functionality?

Please select:

- A. Create a Service Control Policy that denies access to the service
- B. Assemble all production accounts in an organizational unit
- C. Apply the policy to that organizational unit.
- D. Create a Service Control Policy that denies access to the service
- E. Apply the policy to the root account.
- F. Create an IAM policy that denies access to the service
- G. Associate the policy with an IAM group and enlist all users and the root users in this group.
- H. Create an IAM policy that denies access to the service
- I. Create a Config Rule that checks that all users have the policy m assigne
- J. Trigger a Lambda function that adds the policy when found missing.

Answer: A

Explanation:

As an administrator of the master account of an organization, you can restrict which AWS services and individual API actions the users and roles in each member account can access. This restriction even overrides the administrators of member accounts in the organization. When AWS Organizations blocks access to a service or API action for a member account a user or role in that account can't access any prohibited service or API action, even if an administrator of a member account explicitly grants such permissions in an IAM policy. Organization permissions overrule account permissions.

Option B is invalid because service policies cannot be assigned to the root account at the account level. Option C and D are invalid because IAM policies alone at the account level would not be able to suffice the requirement

For more information, please visit the below URL id=docs_orgs_console <https://docs.aws.amazon.com/IAM/latest/UserGuide/manage-attach-policy.html>

The correct answer is: Create a Service Control Policy that denies access to the services. Assemble all production accounts in an organizational unit. Apply the policy to that organizational unit

Submit your Feedback/Queries to our Experts

NEW QUESTION 271

- (Exam Topic 3)

A large organization is planning on AWS to host their resources. They have a number of autonomous departments that wish to use AWS. What could be the strategy to adopt for managing the accounts.

Please select:

- A. Use multiple VPCs in the account each VPC for each department
- B. Use multiple IAM groups, each group for each department
- C. Use multiple IAM roles, each group for each department
- D. Use multiple AWS accounts, each account for each department

Answer: D

Explanation:

A recommendation for this is given in the AWS Security best practices C:\Users\wk\Desktop\mudassar\Untitled.jpg

Design your AWS account strategy to maximize security and follow your business and governance requirements. Table 3 discusses possible strategies.

| Business Requirement | Proposed Design | Comments |
|---|-----------------------|---|
| Centralized security management | Single AWS account | Centralize information security management and minimize overhead. |
| Separation of production, development, and testing environments | Three AWS accounts | Create one AWS account for production services, one for development, and one for testing. |
| Multiple autonomous departments | Multiple AWS accounts | Create separate AWS accounts for each autonomous part of the organization. You can assign permissions and policies under each account. |
| Centralized security management with multiple autonomous independent projects | Multiple AWS accounts | Create a single AWS account for common project resources (such as DNS services, Active Directory, CMS etc.). Then create separate AWS accounts per project. You can assign permissions and policies under each project account and grant access to resources across accounts. |

Table 3: AWS Account Strategies

Option A is incorrect since this would be applicable for resources in a VPC Options B and C are incorrect since operationally it would be difficult to manage For more information on AWS Security best practices please refer to the below URL

[https://d1.awsstatic.com/whitepapers/Security/AWS Security Best Practices.pdf](https://d1.awsstatic.com/whitepapers/Security/AWS_Security_Best_Practices.pdf)

The correct answer is: Use multiple AWS accounts, each account for each department Submit your Feedback/Queries to our Experts

NEW QUESTION 273

- (Exam Topic 3)

A customer has an instance hosted in the AWS Public Cloud. The VPC and subnet used to host the Instance have been created with the default settings for the Network Access Control Lists. They need to provide an IT Administrator secure access to the underlying instance. How can this be accomplished.

Please select:

- A. Ensure the Network Access Control Lists allow Inbound SSH traffic from the IT Administrator's Workstation
- B. Ensure the Network Access Control Lists allow Outbound SSH traffic from the IT Administrator's Workstation
- C. Ensure that the security group allows Inbound SSH traffic from the IT Administrator's Workstation
- D. Ensure that the security group allows Outbound SSH traffic from the IT Administrator's Workstation

Answer: C

Explanation:

Options A & B are invalid as default NACL rule will allow all inbound and outbound traffic.

The requirement is that the IT administrator should be able to access this EC2 instance from his workstation. For that we need to enable the Security Group of EC2 instance to allow traffic from the IT administrator's workstation. Hence option C is correct.

Option D is incorrect as we need to enable the Inbound SSH traffic on the EC2 instance Security Group since the traffic originate' , from the IT admin's workstation.

The correct answer is: Ensure that the security group allows Inbound SSH traffic from the IT Administrator's Workstation Submit your Feedback/Queries to our Experts

NEW QUESTION 274

- (Exam Topic 3)

You have an Amazon VPC that has a private subnet and a public subnet in which you have a NAT instance server. You have created a group of EC2 instances that configure themselves at startup by downloading a bootstrapping script from S3 that deploys an application via GIT.

Which one of the following setups would give us the highest level of security? Choose the correct answer from the options given below.

Please select:

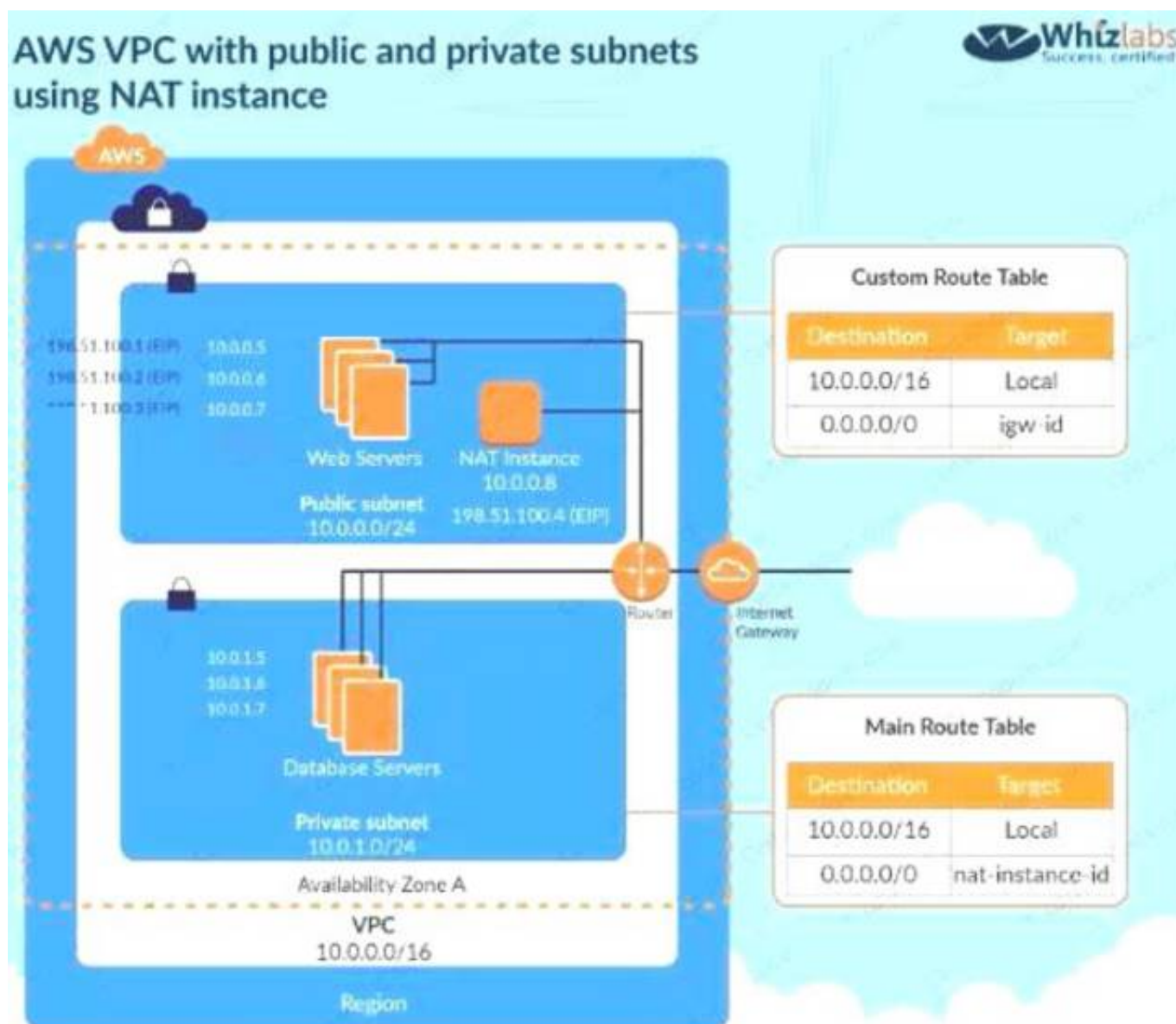
- A. EC2 instances in our public subnet, no EIPs, route outgoing traffic via the IGW
- B. EC2 instances in our public subnet, assigned EIPs, and route outgoing traffic via the NAT
- C. EC2 instance in our private subnet, assigned EIPs, and route our outgoing traffic via our IGW
- D. EC2 instances in our private subnet, no EIPs, route outgoing traffic via the NAT

Answer: D

Explanation:

The below diagram shows how the NAT instance works. To make EC2 instances very secure, they need to be in a private sub such as the database server shown below with no EIP and all traffic routed via the NAT.

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



Options A and B are invalid because the instances need to be in the private subnet

Option C is invalid because since the instance needs to be in the private subnet, you should not attach an EIP to the instance

For more information on NAT instance, please refer to the below Link: <http://docs.aws.amazon.com/AmazonVPC/latest/UserGuideA/PC Instance.html>!

The correct answer is: EC2 instances in our private subnet no EIPs, route outgoing traffic via the NAT Submit your Feedback/Queries to our Experts

NEW QUESTION 276

- (Exam Topic 3)

A company is running an application in The eu-west-1 Region. The application uses an AWS Key Management Service (AWS KMS) CMK to encrypt sensitive data. The company plans to deploy the application in the eu-north-1 Region.

A security engineer needs to implement a key management solution for the application deployment in the new Region. The security engineer must minimize changes to the application code.

Which change should the security engineer make to the AWS KMS configuration to meet these requirements?

- A. Update the key policies in eu-west-1. Point the application in eu-north-1 to use the same CMK as the application in eu-west-1.
- B. Allocate a new CMK to eu-north-1 to be used by the application that is deployed in that Region.
- C. Allocate a new CMK to eu-north-1. Create the same alias name for both key
- D. Configure the application deployment to use the key alias.
- E. Allocate a new CMK to eu-north-1. Create an alias for eu-'-1. Change the application code to point to the alias for eu-'-1.

Answer: B

NEW QUESTION 280

- (Exam Topic 3)

A security engineer needs to build a solution to turn AWS CloudTrail back on in multiple AWS Regions in case it is ever turned off.

What is the MOST efficient way to implement this solution?

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

Answer: B

NEW QUESTION 284

- (Exam Topic 3)

A security engineer needs to create an AWS Key Management Service (AWS KMS) key that will be used to encrypt all data stored in a company's Amazon S3 Buckets in the us-west-1 Region. The key will use server-side encryption. Usage of the key must be limited to requests coming from Amazon S3 within the company's account.

Which statement in the KMS key policy will meet these requirements?

A)

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

B)

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

C)

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

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

Answer: C

NEW QUESTION 286

- (Exam Topic 3)

Your company has a set of EC2 Instances that are placed behind an ELB. Some of the applications hosted on these instances communicate via a legacy protocol. There is a security mandate that all traffic between the client and the EC2 Instances need to be secure. How would you accomplish this?

Please select:

- A. Use an Application Load balancer and terminate the SSL connection at the ELB
- B. Use a Classic Load balancer and terminate the SSL connection at the ELB
- C. Use an Application Load balancer and terminate the SSL connection at the EC2 Instances
- D. Use a Classic Load balancer and terminate the SSL connection at the EC2 Instances

Answer: D

Explanation:

Since there are applications which work on legacy protocols, you need to ensure that the ELB can be used at the network layer as well and hence you should choose the Classic ELB. Since the traffic needs to be secure till the EC2 Instances, the SSL termination should occur on the EC2 Instances.

Option A and C are invalid because you need to use a Classic Load balancer since this is a legacy application. Option B is incorrect since encryption is required until the EC2 Instance

For more information on HTTPS listeners for classic load balancers, please refer to below URL

<https://docs.aws.amazon.com/elasticloadbalancing/latest/classic/elb-https-load-balancers.html>

The correct answer is: Use a Classic Load balancer and terminate the SSL connection at the EC2 Instances Submit your Feedback/Queries to our Experts

NEW QUESTION 291

- (Exam Topic 3)

You need to ensure that objects in an S3 bucket are available in another region. This is because of the criticality of the data that is hosted in the S3 bucket. How can you achieve this in the easiest way possible?

Please select:

- A. Enable cross region replication for the bucket
- B. Write a script to copy the objects to another bucket in the destination region
- C. Create an S3 snapshot in the destination region
- D. Enable versioning which will copy the objects to the destination region

Answer: A

Explanation:

Option B is partially correct but a big maintenance overhead to create and maintain a script when the functionality is already available in S3

Option C is invalid because snapshots are not available in S3 Option D is invalid because versioning will not replicate objects The AWS Documentation mentions the following

Cross-region replication is a bucket-level configuration that enables automatic, asynchronous copying of objects across buckets in different AWS Regions.

For more information on Cross region replication in the Simple Storage Service, please visit the below URL:

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

The correct answer is: Enable cross region replication for the bucket Submit your Feedback/Queries to our Experts

NEW QUESTION 295

- (Exam Topic 3)

A company uses Amazon RDS for MySQL as a database engine for its applications. A recent security audit revealed an RDS instance that is not compliant with company policy for encrypting data at rest. A security engineer at the company needs to ensure that all existing RDS databases are encrypted using server-side encryption and that any future deviations from the policy are detected.

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

- A. Create an AWS Config rule to detect the creation of unencrypted RDS database
- B. Create an Amazon EventBridge (Amazon CloudWatch Events) rule to trigger on the AWS Config rules compliance state change and use Amazon Simple Notification Service (Amazon SNS) to notify the security operations team.
- C. Use AWS System Manager State Manager to detect RDS database encryption configuration drift
- D. Create an Amazon EventBridge (Amazon CloudWatch Events) rule to track state changes and use Amazon Simple Notification Service (Amazon SNS) to notify the security operations team.
- E. Create a read replica for the existing unencrypted RDS database and enable replica encryption in the process
- F. Once the replica becomes active, promote it into a standalone database instance and terminate the unencrypted database instance.
- G. Take a snapshot of the unencrypted RDS database
- H. Copy the snapshot and enable snapshot encryption in the process
- I. Restore the database instance from the newly created encrypted snapshot
- J. Terminate the unencrypted database instance.
- K. Enable encryption for the identified unencrypted RDS instance by changing the configurations of the existing database

Answer: AD

NEW QUESTION 300

- (Exam Topic 3)

An organization has launched 5 instances: 2 for production and 3 for testing. The organization wants that one particular group of IAM users should only access the test instances and not the production ones. How can the organization set that as a part of the policy?

Please select:

- A. Launch the test and production instances in separate regions and allow region wise access to the group
- B. Define the IAM policy which allows access based on the instance ID
- C. Create an IAM policy with a condition which allows access to only small instances
- D. Define the tags on the test and production servers and add a condition to the IAM policy which allows access to specification tags

Answer: D

Explanation:

Tags enable you to categorize your AWS resources in different ways, for example, by purpose, owner, or environment. This is useful when you have many resources of the same type — you can quickly identify a specific resource based on the tags you've assigned to it

Option A is invalid because this is not a recommended practice

Option B is invalid because this is an overhead to maintain this in policies Option C is invalid because the instance type will not resolve the requirement For information on resource tagging, please visit the below URL: http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/Using_Tags.html

The correct answer is: Define the tags on the test and production servers and add a condition to the IAM policy which allows access to specific tags
Submit your Feedback/Queries to our Experts

NEW QUESTION 301

- (Exam Topic 3)

An organization must establish the ability to delete an AWS KMS Customer Master Key (CMK) within a 24- hour timeframe to keep it from being used for encrypt or decrypt operations Which of the following actions will address this requirement?

- A. Manually rotate a key within KMS to create a new CMK immediately
- B. Use the KMS import key functionality to execute a delete key operation
- C. Use the schedule key deletion function within KMS to specify the minimum wait period for deletion
- D. Change the KMS CMK alias to immediately prevent any services from using the CMK.

Answer: C

NEW QUESTION 302

- (Exam Topic 3)

An application running on EC2 instances in a VPC must access sensitive data in the data center. The access must be encrypted in transit and have consistent low latency. Which hybrid architecture will meet these requirements?
Please select:

- A. Expose the data with a public HTTPS endpoint.
- B. A VPN between the VPC and the data center over a Direct Connect connection
- C. A VPN between the VPC and the data center.
- D. A Direct Connect connection between the VPC and data center

Answer: B

Explanation:

Since this is required over a consistency low latency connection, you should use Direct Connect. For encryption, you can make use of a VPN
Option A is invalid because exposing an HTTPS endpoint will not help all traffic to flow between a VPC and the data center.
Option C is invalid because low latency is a key requirement Option D is invalid because only Direct Connect will not suffice
For more information on the connection options please see the below Link: <https://aws.amazon.com/answers/networking/aws-multiple-vpc-vpn-connection-sharint>
The correct answer is: A VPN between the VPC and the data center over a Direct Connect connection Submit your Feedback/Queries to our Experts

NEW QUESTION 305

- (Exam Topic 3)

A company's on-premises networks are connected to VPCs using an AWS Direct Connect gateway. The company's on-premises application needs to stream data using an existing Amazon Kinesis Data Firehose delivery stream. The company's security policy requires that data be encrypted in transit using a private network. How should the company meet these requirements?

- A. Create a VPC endpoint tor Kinesis Data Firehos
- B. Configure the application to connect to the VPC endpoint.
- C. Configure an 1AM policy to restrict access to Kinesis Data Firehose using a source IP condition.Configure the application to connect to the existing Firehose delivery stream.
- D. Create a new TLS certificate in AWS Certificate Manager (ACM). Create a public-facing Network Load Balancer (NLB) and select the newly created TLS certificat
- E. Configure the NLB to forward all traffic to Kinesis Data Firehos
- F. Configure the application to connect to the NLB.
- G. Peer the on-premises network with the Kinesis Data Firehose VPC using Direct Connec
- H. Configure the application to connect to the existing Firehose delivery stream.

Answer: A

NEW QUESTION 310

- (Exam Topic 3)

Your company has a set of 1000 EC2 Instances defined in an AWS Account. They want to effectively automate several administrative tasks on these instances. Which of the following would be an effective way to achieve this?
Please select:

- A. Use the AWS Systems Manager Parameter Store
- B. Use the AWS Systems Manager Run Command
- C. Use the AWS Inspector
- D. Use AWS Config

Answer: B

Explanation:

The AWS Documentation mentions the following
AWS Systems Manager Run Command lets you remotely and securely manage the configuration of your managed instances. A managed instance is any Amazon EC2 instance or on-premises machine in your hybrid environment that has been configured for Systems Manager. Run Command enables you to automate common administrative tasks and perform ad hoc configuration changes at scale. You can use Run Command from the AWS console, the AWS Command Line Interface, AWS Tools for Windows PowerShell, or the AWS SDKs. Run Command is offered at no additional cost.
Option A is invalid because this service is used to store parameter Option C is invalid because this service is used to scan vulnerabilities in an EC2 Instance.
Option D is invalid because this service is used to check for configuration changes For more information on executing remote commands, please visit the below U <https://docs.aws.amazon.com/systems-manageEer/latest/usereuide/execute-remote-commands.html> (
The correct answer is: Use the AWS Systems Manager Run Command Submit your Feedback/Queries to our Experts

NEW QUESTION 314

- (Exam Topic 3)

A company has multiple Amazon S3 buckets encrypted with customer-managed CMKs. Due to regulatory requirements, the keys must be rotated every year. The company's Security Engineer has enabled automatic key rotation for the CMKs; however, the company wants to verify that the rotation has occurred. What should the Security Engineer do to accomplish this?

- A. Filter AWS CloudTrail logs for KeyRotation events
- B. Monitor Amazon CloudWatch Events for any AWS KMS CMK rotation events
- C. Using the AWS CLI
- D. run the aws kms get-key-rotation-status operation with the --key-id parameter to check the CMK rotation date
- E. Use Amazon Athena to query AWS CloudTrail logs saved in an S3 bucket to filter Generate New Key events

Answer: C

NEW QUESTION 317

- (Exam Topic 3)

Company policy requires that all insecure server protocols, such as FTP, Telnet, HTTP, etc, be disabled on all servers. The security team would like to regularly check all servers to ensure compliance with this requirement by using a scheduled CloudWatch event to trigger a review of the current infrastructure. What process will check compliance of the company's EC2 instances?

Please select:

- A. Trigger an AWS Config Rules evaluation of the restricted-common-ports rule against every EC2 instance.
- B. Query the Trusted Advisor API for all best practice security checks and check for "action recommended" status.
- C. Enable a GuardDuty threat detection analysis targeting the port configuration on every EC2 instance.
- D. Run an Amazon Inspector assessment using the Runtime Behavior Analysis rules package against every EC2 instance.

Answer: D

Explanation:

Option B is incorrect because querying Trusted Advisor API's are not possible

Option C is incorrect because GuardDuty should be used to detect threats and not check the compliance of security protocols.

Option D states that Run Amazon Inspector using runtime behavior analysis rules which will analyze the behavior of your instances during an assessment run, and provide guidance about how to make your EC2 instances more secure.

Insecure Server Protocols

This rule helps determine whether your EC2 instances allow support for insecure and unencrypted ports/services such as FTP, Telnet, HTTP, IMAP, POP version 3, SMTP, SNMP versions 1 and 2, rsh, and rlogin.

For more information, please refer to below URL: https://docs.aws.amazon.com/mspector/latest/userguide/inspector_runtime-behavior-analysis.html#insecure-protocols

The correct answer is: Run an Amazon Inspector assessment using the Runtime Behavior Analysis rules package against every EC2 instance.

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NEW QUESTION 321

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- * SCS-C01 Practice Test Questions in Multiple Choice Formats and Updatesfor 1 Year