



# Amazon-Web-Services

## Exam Questions SOA-C02

AWS Certified SysOps Administrator - Associate (SOA-C02)

### NEW QUESTION 1

- (Exam Topic 1)

A SysOps administrator receives an alert from Amazon GuardDuty about suspicious network activity on an Amazon EC2 instance. The GuardDuty finding lists a new external IP address as a traffic destination. The SysOps administrator does not recognize the external IP address. The SysOps administrator must block traffic to the external IP address that GuardDuty identified.

Which solution will meet this requirement?

- A. Create a new security group to block traffic to the external IP address
- B. Assign the new security group to the EC2 instance.
- C. Use VPC flow logs with Amazon Athena to block traffic to the external IP address.
- D. Create a network ACL
- E. Add an outbound deny rule for traffic to the external IP address.
- F. Create a new security group to block traffic to the external IP address
- G. Assign the new security group to the entire VPC.

**Answer:** C

#### Explanation:

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

### NEW QUESTION 2

- (Exam Topic 1)

A SysOps administrator needs to secure the credentials for an Amazon RDS database that is created by an AWS CloudFormation template. The solution must encrypt the credentials and must support automatic rotation.

Which solution will meet these requirements?

- A. Create an AWS::SecretsManager::Secret resource in the CloudFormation template
- B. Reference the credentials in the AWS::RDS::DBInstance resource by using the resolve:secretsmanager dynamic reference.
- C. Create an AWS::SecretsManager::Secret resource in the CloudFormation template
- D. Reference the credentials in the AWS::RDS::DBInstance resource by using the resolve:ssm-secure dynamic reference.
- E. Create an AWS::SSM::Parameter resource in the CloudFormation template
- F. Reference the credentials in the AWS::RDS::DBInstance resource by using the resolve:ssm dynamic reference.
- G. Create parameters for the database credentials in the CloudFormation template
- H. Use the Ref intrinsic function to provide the credentials to the AWS::RDS::DBInstance resource.

**Answer:** A

### NEW QUESTION 3

- (Exam Topic 1)

A company applies user-defined tags to resources that are associated with the company's AWS workloads. Twenty days after applying the tags, the company notices that it cannot use the tags to filter views in the AWS Cost Explorer console.

What is the reason for this issue?

- A. It takes at least 30 days to be able to use tags to filter views in Cost Explorer.
- B. The company has not activated the user-defined tags for cost allocation.
- C. The company has not created an AWS Cost and Usage Report
- D. The company has not created a usage budget in AWS Budgets

**Answer:** B

### NEW QUESTION 4

- (Exam Topic 1)

A SysOps administrator applies the following policy to an AWS CloudFormation stack:

```
{
  "Statement": [
    {
      "Effect": "Deny",
      "Action": "Update:*",
      "Principal": "*",
      "Resource": ["LogicalResourceId/Production*"]
    },
    {
      "Effect": "Allow",
      "Action": "Update:*",
      "Principal": "*",
      "Resource": "*"
    }
  ]
}
```

What is the result of this policy?

- A. Users that assume an IAM role with a logical ID that begins with "Production" are prevented from running the update-stack command.
- B. Users can update all resources in the stack except for resources that have a logical ID that begins with "Production".
- C. Users can update all resources in the stack except for resources that have an attribute that begins with "Production".
- D. Users in an IAM group with a logical ID that begins with "Production" are prevented from running the update-stack command.

**Answer: B**

#### NEW QUESTION 5

- (Exam Topic 1)

A SysOps administrator is provisioning an Amazon Elastic File System (Amazon EFS) file system to provide shared storage across multiple Amazon EC2 instances. The instances all exist in the same VPC across multiple Availability Zones. There are two instances in each Availability Zone. The SysOps administrator must make the file system accessible to each instance with the lowest possible latency.

Which solution will meet these requirements?

- A. Create a mount target for the EFS file system in the VPC
- B. Use the mount target to mount the file system on each of the instances
- C. Create a mount target for the EFS file system in one Availability Zone of the VPC
- D. Use the mount target to mount the file system on the instances in that Availability Zone
- E. Share the directory with the other instances.
- F. Create a mount target for each instance
- G. Use each mount target to mount the EFS file system on each respective instance.
- H. Create a mount target in each Availability Zone of the VPC. Use the mount target to mount the EFS file system on the instances in the respective Availability Zone.

**Answer: D**

#### Explanation:

A mount target provides an IP address for an NFSv4 endpoint at which you can mount an Amazon EFS file system. You mount your file system using its Domain Name Service (DNS) name, which resolves to the IP address of the EFS mount target in the same Availability Zone as your EC2 instance. You can create one mount target in each Availability Zone in an AWS Region. If there are multiple subnets in an Availability Zone in your VPC, you create a mount target in one of the subnets. Then all EC2 instances in that Availability Zone share that mount target. <https://docs.aws.amazon.com/efs/latest/ug/how-it-works.html>

#### NEW QUESTION 6

- (Exam Topic 1)

A company is rolling out a new version of its website. Management wants to deploy the new website in a limited rollout to 20% of the company's customers. The company uses Amazon Route 53 for its website's DNS solution.

Which configuration will meet these requirements?

- A. Create a failover routing policy
- B. Within the policy, configure 80% of the website traffic to be sent to the original resource
- C. Configure the remaining 20% of traffic as the failover record that points to the new resource.
- D. Create a multivalue answer routing policy
- E. Within the policy, create 4 records with the name and IP address of the original resource
- F. Configure 1 record with the name and IP address of the new resource.
- G. Create a latency-based routing policy
- H. Within the policy, configure a record pointing to the original resource with a weight of 80. Configure a record pointing to the new resource with a weight of 20.
- I. Create a weighted routing policy
- J. Within the policy, configure a weight of 80 for the record pointing to the original resource
- K. Configure a weight of 20 for the record pointing to the new resource.

**Answer: C**

#### NEW QUESTION 7

- (Exam Topic 1)

A company has created a NAT gateway in a public subnet in a VPC. The VPC also contains a private subnet that includes Amazon EC2 instances. The EC2 instances use the NAT gateway to access the internet to download patches and updates. The company has configured a VPC flow log for the elastic network interface of the NAT gateway. The company is publishing the output to Amazon CloudWatch Logs.

A SysOps administrator must identify the top five internet destinations that the EC2 instances in the private subnet communicate with for downloads.

What should the SysOps administrator do to meet this requirement in the MOST operationally efficient way?

- A. Use AWS CloudTrail Insights events to identify the top five internet destinations.
- B. Use Amazon CloudFront standard logs (access logs) to identify the top five internet destinations.
- C. Use CloudWatch Logs Insights to identify the top five internet destinations.
- D. Change the flow log to publish logs to Amazon S3. Use Amazon Athena to query the log files in Amazon S3.

**Answer: C**

#### NEW QUESTION 8

- (Exam Topic 1)

A company website contains a web tier and a database tier on AWS. The web tier consists of Amazon EC2 instances that run in an Auto Scaling group across two Availability Zones. The database tier runs on an Amazon RDS for MySQL Multi-AZ DB instance. The database subnet network ACLs are restricted to only the web subnets that need access to the database. The web subnets use the default network ACL with the default rules.

The company's operations team has added a third subnet to the Auto Scaling group configuration. After an Auto Scaling event occurs, some users report that they intermittently receive an error message. The error message states that the server cannot connect to the database. The operations team has confirmed that the route tables are correct and that the required ports are open on all security groups.

Which combination of actions should a SysOps administrator take so that the web servers can communicate with the DB instance? (Select TWO.)

- A. On the default ACL
- B. create inbound Allow rules of type TCP with the ephemeral port range and the source as the database subnets.
- C. On the default ACL, create outbound Allow rules of type MySQL/Aurora (3306). Specify the destinations as the database subnets.
- D. On the network ACLs for the database subnets, create an inbound Allow rule of type MySQL/Aurora (3306). Specify the source as the third web subnet.
- E. On the network ACLs for the database subnets, create an outbound Allow rule of type TCP with the ephemeral port range and the destination as the third web subnet.
- F. On the network ACLs for the database subnets, create an outbound Allow rule of type MySQL/Aurora (3306). Specify the destination as the third web subnet.

**Answer:** CD

#### NEW QUESTION 9

- (Exam Topic 1)

A company stores its data in an Amazon S3 bucket. The company is required to classify the data and find any sensitive personal information in its S3 files. Which solution will meet these requirements?

- A. Create an AWS Config rule to discover sensitive personal information in the S3 files and mark them as noncompliant.
- B. Create an S3 event-driven artificial intelligence/machine learning (AI/ML) pipeline to classify sensitive personal information by using Amazon Recognition.
- C. Enable Amazon GuardDut
- D. Configure S3 protection to monitor all data inside Amazon S3.
- E. Enable Amazon Maci
- F. Create a discovery job that uses the managed data identifier.

**Answer:** D

#### Explanation:

Amazon Macie is a security service designed to help organizations find, classify, and protect sensitive data stored in Amazon S3. Amazon Macie uses machine learning to automatically discover, classify, and protect sensitive data in Amazon S3. Creating a discovery job with the managed data identifier will allow Macie to identify sensitive personal information in the S3 files and classify it accordingly. Enabling AWS Config and Amazon GuardDuty will not help with this requirement as they are not designed to automatically classify and protect data.

#### NEW QUESTION 10

- (Exam Topic 1)

A SysOps administrator must create a solution that immediately notifies software developers if an AWS Lambda function experiences an error. Which solution will meet this requirement?

- A. Create an Amazon Simple Notification Service (Amazon SNS) topic with an email subscription for each developer
- B. Create an Amazon CloudWatch alarm by using the Errors metric and the Lambda function name as a dimension
- C. Configure the alarm to send a notification to the SNS topic when the alarm state reaches ALARM.
- D. Create an Amazon Simple Notification Service (Amazon SNS) topic with a mobile subscription for each developer
- E. Create an Amazon EventBridge (Amazon CloudWatch Events) alarm by using LambdaError as the event pattern and the SNS topic name as a resource
- F. Configure the alarm to send a notification to the SNS topic when the alarm state reaches ALARM.
- G. Verify each developer email address in Amazon Simple Email Service (Amazon SES). Create an Amazon CloudWatch rule by using the LambdaError metric and developer email addresses as dimension
- H. Configure the rule to send an email through Amazon SES when the rule state reaches ALARM.
- I. Verify each developer mobile phone in Amazon Simple Email Service (Amazon SES). Create an Amazon EventBridge (Amazon CloudWatch Events) rule by using Errors as the event pattern and the Lambda function name as a resource
- J. Configure the rule to send a push notification through Amazon SES when the rule state reaches ALARM.

**Answer:** A

#### NEW QUESTION 10

- (Exam Topic 1)

A company has multiple AWS Site-to-Site VPN connections between a VPC and its branch offices. The company manages an Amazon Elasticsearch Service (Amazon ES) domain that is configured with public access. The Amazon ES domain has an open domain access policy. A SysOps administrator needs to ensure that Amazon ES can be accessed only from the branch offices while preserving existing data. Which solution will meet these requirements?

- A. Configure an identity-based access policy on Amazon ES
- B. Add an allow statement to the policy that includes the Amazon Resource Name (ARN) for each branch office VPN connection.
- C. Configure an IP-based domain access policy on Amazon ES
- D. Add an allow statement to the policy that includes the private IP CIDR blocks from each branch office network.
- E. Deploy a new Amazon ES domain in private subnets in a VPC, and import a snapshot from the old domain
- F. Create a security group that allows inbound traffic from the branch office CIDR blocks.
- G. Reconfigure the Amazon ES domain in private subnets in a VPC
- H. Create a security group that allows inbound traffic from the branch office CIDR blocks.

**Answer:** B

#### NEW QUESTION 13

- (Exam Topic 1)

A SysOps administrator receives an alert from Amazon GuardDuty about suspicious network activity on an Amazon EC2 instance. The GuardDuty finding lists a new external IP address as a traffic destination. The SysOps administrator does not recognize the external IP address. The SysOps administrator must block traffic to the external IP address that GuardDuty identified. Which solution will meet this requirement?

- A. Create a new security group to block traffic to the external IP address
- B. Assign the new security group to the EC2 instance
- C. Use VPC flow logs with Amazon Athena to block traffic to the external IP address



- D. Create a network ACL Add an outbound deny rule for traffic to the external IP address
- E. Create a new security group to block traffic to the external IP address Assign the new security group to the entire VPC

**Answer:** A

#### NEW QUESTION 17

- (Exam Topic 1)

A company is partnering with an external vendor to provide data processing services. For this integration, the vendor must host the company's data in an Amazon S3 bucket in the vendor's AWS account. The vendor is allowing the company to provide an AWS Key Management Service (AWS KMS) key to encrypt the company's data. The vendor has provided an IAM role Amazon Resource Name (ARN) to the company for this integration. What should a SysOps administrator do to configure this integration?

- A. Create a new KMS key
- B. Add the vendor's IAM role ARN to the KMS key policy
- C. Provide the new KMS key ARN to the vendor.
- D. Create a new KMS key
- E. Create a new IAM user
- F. Add the vendor's IAM role ARN to an inline policy that is attached to the IAM user
- G. Provide the new IAM user ARN to the vendor.
- H. Configure encryption using the KMS managed S3 key
- I. Add the vendor's IAM role ARN to the KMS managed S3 key policy
- J. Provide the KMS managed S3 key ARN to the vendor.
- K. Configure encryption using the KMS managed S3 key
- L. Create an S3 bucket
- M. Add the vendor's IAM role ARN to the S3 bucket policy
- N. Provide the S3 bucket ARN to the vendor.

**Answer:** C

#### NEW QUESTION 19

- (Exam Topic 1)

A company runs a stateless application that is hosted on an Amazon EC2 instance. Users are reporting performance issues. A SysOps administrator reviews the Amazon CloudWatch metrics for the application and notices that the instance's CPU utilization frequently reaches 90% during business hours. What is the MOST operationally efficient solution that will improve the application's responsiveness?

- A. Configure CloudWatch logging on the EC2 instance
- B. Configure a CloudWatch alarm for CPU utilization to alert the SysOps administrator when CPU utilization goes above 90%.
- C. Configure an AWS Client VPN connection to allow the application users to connect directly to the EC2 instance private IP address to reduce latency.
- D. Create an Auto Scaling group, and assign it to an Application Load Balance
- E. Configure a target tracking scaling policy that is based on the average CPU utilization of the Auto Scaling group.
- F. Create a CloudWatch alarm that activates when the EC2 instance's CPU utilization goes above 80%. Configure the alarm to invoke an AWS Lambda function that vertically scales the instance.

**Answer:** C

#### NEW QUESTION 21

- (Exam Topic 1)

A company has two VPC networks named VPC A and VPC B. The VPC A CIDR block is 10.0.0.0/16 and the VPC B CIDR block is 172.31.0.0/16. The company wants to establish a VPC peering connection named pcx-12345 between both VPCs.

Which rules should appear in the route table of VPC A after configuration? (Select TWO.)

- A. Destination: 10.0.0.0/16, Target: Local
- B. Destination: 172.31.0.0/16, Target: Local
- C. Destination: 10.0.0.0/16, Target: pcx-12345
- D. Destination: 172.31.0.0/16, Target: pcx-12345
- E. Destination: 10.0.0.0/16, Target: 172.31.0.0/16

**Answer:** AD

#### Explanation:

<https://docs.aws.amazon.com/vpc/latest/peering/vpc-peering-routing.html>

#### NEW QUESTION 22

- (Exam Topic 1)

A global gaming company is preparing to launch a new game on AWS. The game runs in multiple AWS Regions on a fleet of Amazon EC2 instances. The instances are in an Auto Scaling group behind an Application Load Balancer (ALB) in each Region. The company plans to use Amazon Route 53 for DNS services. The DNS configuration must direct users to the Region that is closest to them and must provide automated failover.

Which combination of steps should a SysOps administrator take to configure Route 53 to meet these requirements? (Select TWO.)

- A. Create Amazon CloudWatch alarms that monitor the health of the ALB in each Region Configure Route 53 DNS failover by using a health check that monitors the alarms.
- B. Create Amazon CloudWatch alarms that monitor the health of the EC2 instances in each Region. Configure Route 53 DNS failover by using a health check that monitors the alarms.
- C. Configure Route 53 DNS failover by using a health check that monitors the private address of an EC2 instance in each Region.
- D. Configure Route 53 geoproximity routing Specify the Regions that are used for the infrastructure
- E. Configure Route 53 simple routing Specify the continent, country, and state or province that are used for the infrastructure.

**Answer:** A

#### NEW QUESTION 24

- (Exam Topic 1)

A SysOps administrator wants to manage a web server application with AWS Elastic Beanstalk. The Elastic Beanstalk service must maintain full capacity for new deployments at all times.

Which deployment policies satisfy this requirement? (Select TWO.)

- A. All at once
- B. Immutable
- C. Rebuild
- D. Rolling
- E. Rolling with additional batch

**Answer:** BE

#### Explanation:

<https://docs.aws.amazon.com/elasticbeanstalk/latest/dg/using-features.rolling-version-deploy.html>

#### NEW QUESTION 26

- (Exam Topic 1)

A SysOps administrator has created a VPC that contains a public subnet and a private subnet. Amazon EC2 instances that were launched in the private subnet cannot access the internet. The default network ACL is active on all subnets in the VPC, and all security groups allow all outbound traffic:

Which solution will provide the EC2 instances in the private subnet with access to the internet?

- A. Create a NAT gateway in the public subne
- B. Create a route from the private subnet to the NAT gateway.
- C. Create a NAT gateway in the public subne
- D. Create a route from the public subnet to the NAT gateway.
- E. Create a NAT gateway in the private subne
- F. Create a route from the public subnet to the NAT gateway.
- G. Create a NAT gateway in the private subne
- H. Create a route from the private subnet to the NAT gateway.

**Answer:** A

#### Explanation:

NAT Gateway resides in public subnet, and traffic should be routed from private subnet to NAT Gateway: <https://docs.aws.amazon.com/vpc/latest/userguide/vpc-nat-gateway.html>

#### NEW QUESTION 27

- (Exam Topic 1)

A company wants to build a solution for its business-critical Amazon RDS for MySQL database. The database requires high availability across different geographic locations. A SysOps administrator must build a solution to handle a disaster recovery (DR) scenario with the lowest recovery time objective (RTO) and recovery point objective (RPO).

Which solution meets these requirements?

- A. Create automated snapshots of the database on a schedul
- B. Copy the snapshots to the DR Region.
- C. Create a cross-Region read replica for the database.
- D. Create a Multi-AZ read replica for the database.
- E. Schedule AWS Lambda functions to create snapshots of the source database and to copy the snapshots to a DR Region.

**Answer:** B

#### NEW QUESTION 28

- (Exam Topic 1)

A company uses AWS Organizations to manage multiple AWS accounts with consolidated billing enabled. Organization member account owners want the benefits of Reserved Instances (RIs) but do not want to share RIs with other accounts.

Which solution will meet these requirements?

- A. Purchase RIs in individual member account
- B. Disable RI discount sharing in the management account.
- C. Purchase RIs in individual member account
- D. Disable RI discount sharing in the member accounts.
- E. Purchase RIs in the management accoun
- F. Disable RI discount sharing in the management account.
- G. Purchase RIs in the management accoun
- H. Disable RI discount sharing in the member accounts.

**Answer:** A

#### Explanation:

<https://aws.amazon.com/premiumsupport/knowledge-center/ec2-ri-consolidated-billing/>

RI discounts apply to accounts in an organization's consolidated billing family depending upon whether RI sharing is turned on or off for the accounts. By default, RI sharing for all accounts in an organization is turned on. The management account of an organization can change this setting by turning off RI sharing for an account. The capacity reservation for an RI applies only to the account the RI was purchased on, no matter whether RI sharing is turned on or off.

### NEW QUESTION 30

- (Exam Topic 1)

A company with multiple AWS accounts needs to obtain recommendations for AWS Lambda functions and identify optimal resource configurations for each Lambda function. How should a SysOps administrator provide these recommendations?

- A. Create an AWS Serverless Application Repository and export the Lambda function recommendations.
- B. Enable AWS Compute Optimizer and export the Lambda function recommendations
- C. Enable all features of AWS Organization and export the recommendations from AWS CloudTrail Insights.
- D. Run AWS Trusted Advisor and export the Lambda function recommendations

**Answer:** B

### NEW QUESTION 32

- (Exam Topic 1)

A company's financial department needs to view the cost details of each project in an AWS account. A SysOps administrator must perform the initial configuration that is required to view cost for each project in Cost Explorer. Which solution will meet this requirement?

- A. Activate cost allocation tags. Add a project tag to the appropriate resources.
- B. Configure consolidated billing. Create AWS Cost and Usage Reports.
- C. Use AWS Budgets. Create AWS Budgets reports.
- D. Use cost categories to define custom groups that are based on AWS cost and usage dimensions.

**Answer:** A

### NEW QUESTION 35

- (Exam Topic 1)

A company is hosting applications on Amazon EC2 instances. The company is hosting a database on an Amazon RDS for PostgreSQL DB instance. The company requires all connections to the DB instance to be encrypted. What should a SysOps administrator do to meet this requirement?

- A. Allow SSL connections to the database by using an inbound security group rule.
- B. Encrypt the database by using an AWS Key Management Service (AWS KMS) encryption key.
- C. Enforce SSL connections to the database by using a custom parameter group.
- D. Patch the database with SSL/TLS by using a custom PostgreSQL extension.

**Answer:** C

#### Explanation:

<https://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/PostgreSQL.Concepts.General.SSL.htm> Amazon RDS supports SSL/TLS encryption for connections to the database, and this can be enabled by creating a custom parameter group and setting the `rds.force_ssl` parameter to 1. This will ensure that all connections to the database are encrypted, protecting the data and maintaining compliance with the company's requirements.

### NEW QUESTION 38

- (Exam Topic 1)

A SysOps administrator wants to upload a file that is 1 TB in size from on-premises to an Amazon S3 bucket using multipart uploads. What should the SysOps administrator do to meet this requirement?

- A. Upload the file using the S3 console.
- B. Use the `s3api copy-object` command.
- C. Use the `s3api put-object` command.
- D. Use the `s3 cp` command.

**Answer:** D

#### Explanation:

It's a best practice to use `aws s3` commands (such as `aws s3 cp`) for multipart uploads and downloads, because these `aws s3` commands automatically perform multipart uploading and downloading based on the file size. By comparison, `aws s3api` commands, such as `aws s3api create-multipart-upload`, should be used only when `aws s3` commands don't support a specific upload need, such as when the multipart upload involves multiple servers, a multipart upload is manually stopped and resumed later, or when the `aws s3` command doesn't support a required request parameter.

<https://aws.amazon.com/premiumsupport/knowledge-center/s3-multipart-upload-cli/>

### NEW QUESTION 43

- (Exam Topic 1)

A company needs to upload gigabytes of files every day. The company needs to achieve higher throughput and upload speeds to Amazon S3. Which action should a SysOps administrator take to meet this requirement?

- A. Create an Amazon CloudFront distribution with the GET HTTP method allowed and the S3 bucket as an origin.
- B. Create an Amazon ElastiCache cluster and enable caching for the S3 bucket.
- C. Set up AWS Global Accelerator and configure it with the S3 bucket.
- D. Enable S3 Transfer Acceleration and use the acceleration endpoint when uploading files.

**Answer:** D

#### Explanation:

Enable Amazon S3 Transfer Acceleration. Amazon S3 Transfer Acceleration can provide fast and secure transfers over long distances between your client and Amazon S3. Transfer Acceleration uses Amazon CloudFront's globally distributed edge locations.

<https://aws.amazon.com/premiumsupport/knowledge-center/s3-upload-large-files/>

#### NEW QUESTION 44

- (Exam Topic 1)

A company runs a web application on three Amazon EC2 instances behind an Application Load Balancer (ALB). The company notices that random periods of increased traffic cause a degradation in the application's performance. A SysOps administrator must scale the application to meet the increased traffic. Which solution meets these requirements?

- A. Create an Amazon CloudWatch alarm to monitor application latency and increase the size of each EC2 instance If the desired threshold is reached.
- B. Create an Amazon EventBridge (Amazon CloudWatch Events) rule to monitor application latency and add an EC2 instance to the ALB if the desired threshold is reached.
- C. Deploy the application to an Auto Scaling group of EC2 instances with a target tracking scaling policy. Attach the ALB to the Auto Scaling group.
- D. Deploy the application to an Auto Scaling group of EC2 instances with a scheduled scaling policy. Attach the ALB to the Auto Scaling group.

**Answer:** C

#### Explanation:

[docs.aws.amazon.com/autoscaling/ec2/userguide/as-scaling-target-tracking.html](https://docs.aws.amazon.com/autoscaling/ec2/userguide/as-scaling-target-tracking.html)

#### NEW QUESTION 46

- (Exam Topic 1)

A development team recently deployed a new version of a web application to production After the release, penetration testing revealed a cross-site scripting vulnerability that could expose user data Which AWS service will mitigate this issue?

- A. AWS Shield Standard
- B. AWS WAF
- C. Elastic Load Balancing
- D. Amazon Cognito

**Answer:** B

#### Explanation:

<https://www.imperva.com/learn/application-security/cross-site-scripting-xss-attacks/>

#### NEW QUESTION 49

- (Exam Topic 1)

A SysOps administrator is setting up an automated process to recover an Amazon EC2 instance In the event of an underlying hardware failure. The recovered instance must have the same private IP address and the same Elastic IP address that the original instance had. The SysOps team must receive an email notification when the recovery process is initiated. Which solution will meet these requirements?

- A. Create an Amazon CloudWatch alarm for the EC2 instance, and specify the StatusCheckFailed\_Instance metric
- B. Add an EC2 action to the alarm to recover the instance
- C. Add an alarm notification to publish a message to an Amazon Simple Notification Service (Amazon SNS) topic
- D. Subscribe the SysOps team email address to the SNS topic.
- E. Create an Amazon CloudWatch alarm for the EC2 instance, and specify the StatusCheckFailed\_System metric
- F. Add an EC2 action to the alarm to recover the instance
- G. Add an alarm notification to publish a message to an Amazon Simple Notification Service (Amazon SNS) topic
- H. Subscribe the SysOps team email address to the SNS topic.
- I. Create an Auto Scaling group across three different subnets in the same Availability Zone with a minimum, maximum, and desired size of 1. Configure the Auto Scaling group to use a launch template that specifies the private IP address and the Elastic IP address
- J. Add an activity notification for the Auto Scaling group to send an email message to the SysOps team through Amazon Simple Email Service (Amazon SES).
- K. Create an Auto Scaling group across three Availability Zones with a minimum, maximum, and desired size of 1. Configure the Auto Scaling group to use a launch template that specifies the private IP address and the Elastic IP address
- L. Add an activity notification for the Auto Scaling group to publish a message to an Amazon Simple Notification Service (Amazon SNS) topic
- M. Subscribe the SysOps team email address to the SNS topic.

**Answer:** B

#### Explanation:

You can create an Amazon CloudWatch alarm that monitors an Amazon EC2 instance and automatically recovers the instance if it becomes impaired due to an underlying hardware failure or a problem that requires AWS involvement to repair. Terminated instances cannot be recovered. A recovered instance is identical to the original instance, including the instance ID, private IP addresses, Elastic IP addresses, and all instance metadata. If the impaired instance has a public IPv4 address, the instance retains the public IPv4 address after recovery. If the impaired instance is in a placement group, the recovered instance runs in the placement group. When the StatusCheckFailed\_System alarm is triggered, and the recover action is initiated, you will be notified by the Amazon SNS topic that you selected when you created the alarm and associated the recover action. <https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/ec2-instance-recover.html>

#### NEW QUESTION 50

- (Exam Topic 1)

A company is attempting to manage its costs in the AWS Cloud. A SysOps administrator needs specific company-defined tags that are assigned to resources to appear on the billing report. What should the SysOps administrator do to meet this requirement?

- A. Activate the tags as AWS generated cost allocation tags.
- B. Activate the tags as user-defined cost allocation tags.
- C. Create a new cost category
- D. Select the account billing dimension.
- E. Create a new AWS Cost and Usage Report



F. Include the resource IDs.

**Answer:** B

**Explanation:**

<https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/custom-tags.html> "User-defined tags are tags that you define, create, and apply to resources. After you have created and applied the user-defined tags, you can activate by using the Billing and Cost Management console for cost allocation tracking. "

To meet this requirement, the SysOps administrator should activate the company-defined tags as user-defined cost allocation tags. This will ensure that the tags appear on the billing report and that the resources can be tracked with the specific tags. The other options (activating the tags as AWS generated cost allocation tags, creating a new cost category and selecting the account billing dimension, and creating a new AWS Cost and Usage Report and including the resource IDs) will not meet the requirements and are not the correct solutions for this issue.

**NEW QUESTION 55**

- (Exam Topic 1)

A company's web application is available through an Amazon CloudFront distribution and directly through an internet-facing Application Load Balancer (ALB) A SysOps administrator must make the application accessible only through the CloudFront distribution and not directly through the ALB. The SysOps administrator must make this change without changing the application code

Which solution will meet these requirements?

- A. Modify the ALB type to internal Set the distribution's origin to the internal ALB domain name
- B. Create a Lambda@Edge function Configure the function to compare a custom header value in the request with a stored password and to forward the request to the origin in case of a match Associate the function with the distribution.
- C. Replace the ALB with a new internal ALB Set the distribution's origin to the internal ALB domain name Add a custom HTTP header to the origin settings for the distribution In the ALB listener add a rule to forward requests that contain the matching custom header and the header's value Add a default rule to return a fixed response code of 403.
- D. Add a custom HTTP header to the origin settings for the distribution in the ALB listener add a rule to forward requests that contain the matching custom header and the header's value Add a default rule to return a fixed response code of 403.

**Answer:** D

**Explanation:**

To make the application accessible only through the CloudFront distribution and not directly through the Application Load Balancer (ALB), you can add a custom HTTP header to the origin settings for the CloudFront distribution. You can then create a rule in the ALB listener to forward requests that contain the matching custom header and its value to the origin. You can also add a default rule to the ALB listener to return a fixed response code of 403 for requests that do not contain the matching custom header. This will allow you to redirect all requests to the CloudFront distribution and block direct access to the application through the ALB.

<https://docs.aws.amazon.com/AmazonCloudFront/latest/DeveloperGuide/restrict-access-to-load-balancer.html>

**NEW QUESTION 59**

- (Exam Topic 1)

A SysOps administrator notices a scale-up event for an Amazon EC2 Auto Scaling group Amazon CloudWatch shows a spike in the RequestCount metric for the associated Application Load Balancer The administrator would like to know the IP addresses for the source of the requests

Where can the administrator find this information?

- A. Auto Scaling logs
- B. AWS CloudTrail logs
- C. EC2 instance logs
- D. Elastic Load Balancer access logs

**Answer:** D

**Explanation:**

Elastic Load Balancing provides access logs that capture detailed information about requests sent to your load balancer. Each log contains information such as the time the request was received, the client's IP address, latencies, request paths, and server responses. You can use these access logs to analyze traffic patterns and troubleshoot issues.

<https://docs.aws.amazon.com/elasticloadbalancing/latest/application/load-balancer-access-logs.html>

**NEW QUESTION 64**

- (Exam Topic 1)

A SysOps administrator created an Amazon VPC with an IPv6 CIDR block, which requires access to the internet. However, access from the internet towards the VPC is prohibited. After adding and configuring the required components to the VPC. the administrator is unable to connect to any of the domains that reside on the internet.

What additional route destination rule should the administrator add to the route tables?

- A. Route `::/0` traffic to a NAT gateway
- B. Route `::/0` traffic to an internet gateway
- C. Route `0.0.0.0/0` traffic to an egress-only internet gateway
- D. Route `::/0` traffic to an egress-only internet gateway

**Answer:** D

**Explanation:**

<https://docs.aws.amazon.com/vpc/latest/userguide/egress-only-internet-gateway.html>

**NEW QUESTION 65**

- (Exam Topic 1)

While setting up an AWS managed VPN connection, a SysOps administrator creates a customer gateway resource in AWS. The customer gateway device resides in a data center with a NAT gateway in front of it.

What address should be used to create the customer gateway resource?

- A. The private IP address of the customer gateway device
- B. The MAC address of the NAT device in front of the customer gateway device
- C. The public IP address of the customer gateway device
- D. The public IP address of the NAT device in front of the customer gateway device

**Answer:** D

#### NEW QUESTION 66

- (Exam Topic 1)

A SysOps administrator launches an Amazon EC2 Linux instance in a public subnet. When the instance is running, the SysOps administrator obtains the public IP address and attempts to remotely connect to the instance multiple times. However, the SysOps administrator always receives a timeout error. Which action will allow the SysOps administrator to remotely connect to the instance?

- A. Add a route table entry in the public subnet for the SysOps administrator's IP address.
- B. Add an outbound network ACL rule to allow TCP port 22 for the SysOps administrator's IP address.
- C. Modify the instance security group to allow inbound SSH traffic from the SysOps administrator's IP address.
- D. Modify the instance security group to allow outbound SSH traffic to the SysOps administrator's IP address.

**Answer:** C

#### NEW QUESTION 71

- (Exam Topic 1)

An organization created an Amazon Elastic File System (Amazon EFS) volume with a file system ID of fs-85ba4Kc. and it is actively used by 10 Amazon EC2 hosts. The organization has become concerned that the file system is not encrypted. How can this be resolved?

- A. Enable encryption on each host's connection to the Amazon EFS volume. Each connection must be recreated for encryption to take effect.
- B. Enable encryption on the existing EFS volume by using the AWS Command Line Interface.
- C. Enable encryption on each host's local drive. Restart each host to encrypt the drive.
- D. Enable encryption on a newly created volume and copy all data from the original volume. Reconnect each host to the new volume.

**Answer:** D

#### Explanation:

<https://docs.aws.amazon.com/efs/latest/ug/encryption.html>

Amazon EFS supports two forms of encryption for file systems, encryption of data in transit and encryption at rest. You can enable encryption of data at rest when creating an Amazon EFS file system. You can enable encryption of data in transit when you mount the file system.

#### NEW QUESTION 76

- (Exam Topic 1)

A SysOps administrator is unable to authenticate an AWS CLI call to an AWS service. Which of the following is the cause of this issue?

- A. The IAM password is incorrect.
- B. The server certificate is missing.
- C. The SSH key pair is incorrect.
- D. There is no access key.

**Answer:** C

#### NEW QUESTION 77

- (Exam Topic 1)

A SysOps administrator has successfully deployed a VPC with an AWS CloudFormation template. The SysOps administrator wants to deploy the same template across multiple accounts that are managed through AWS Organizations. Which solution will meet this requirement with the LEAST operational overhead?

- A. Assume the OrganizationAccountAccessRole IAM role from the management account.
- B. Deploy the template in each of the accounts.
- C. Create an AWS Lambda function to assume a role in each account. Deploy the template by using the AWS CloudFormation CreateStack API call.
- D. Create an AWS Lambda function to query for a list of accounts. Deploy the template by using the AWS CloudFormation CreateStack API call.
- E. Use AWS CloudFormation StackSets from the management account to deploy the template in each of the accounts.

**Answer:** D

#### Explanation:

AWS CloudFormation StackSets extends the capability of stacks by enabling you to create, update, or delete stacks across multiple accounts and AWS Regions.

#### NEW QUESTION 79

- (Exam Topic 1)

A SysOps administrator is unable to launch Amazon EC2 instances into a VPC because there are no available private IPv4 addresses in the VPC. Which combination of actions must the SysOps administrator take to launch the instances? (Select TWO.)

- A. Associate a secondary IPv4 CIDR block with the VPC.
- B. Associate a primary IPv6 CIDR block with the VPC.
- C. Create a new subnet for the VPC.
- D. Modify the CIDR block of the VPC.
- E. Modify the CIDR block of the subnet that is associated with the instances.

**Answer:** AD

#### NEW QUESTION 84

- (Exam Topic 1)

A company must ensure that any objects uploaded to an S3 bucket are encrypted. Which of the following actions will meet this requirement? (Choose two.)

- A. Implement AWS Shield to protect against unencrypted objects stored in S3 buckets.
- B. Implement Object access control list (ACL) to deny unencrypted objects from being uploaded to the S3 bucket.
- C. Implement Amazon S3 default encryption to make sure that any object being uploaded is encrypted before it is stored.
- D. Implement Amazon Inspector to inspect objects uploaded to the S3 bucket to make sure that they are encrypted.
- E. Implement S3 bucket policies to deny unencrypted objects from being uploaded to the buckets.

**Answer:** CE

#### Explanation:

<https://docs.aws.amazon.com/AmazonS3/latest/userguide/default-bucket-encryption.html>

You can set the default encryption behavior on an Amazon S3 bucket so that all objects are encrypted when they are stored in the bucket. The objects are encrypted using server-side encryption with either Amazon S3-managed keys (SSE-S3) or AWS Key Management Service (AWS KMS) customer master keys (CMKs).

<https://aws.amazon.com/blogs/security/how-to-prevent-uploads-of-unencrypted-objects-to-amazon-s3/> How to Prevent Uploads of Unencrypted Objects to Amazon S3#

By using an S3 bucket policy, you can enforce the encryption requirement when users upload objects, instead of assigning a restrictive IAM policy to all users.

#### NEW QUESTION 87

- (Exam Topic 1)

A SysOps administrator is creating an Amazon EC2 Auto Scaling group in a new AWS account. After adding some instances, the SysOps administrator notices that the group has not reached the minimum number of instances. The SysOps administrator receives the following error message:

```
Launching a new EC2 instance. Status Reason: Your quota allows for 0 more running instance(s).  
You requested at least 1. Launching EC2 instance failed.
```

Which action will resolve this issue?

- A. Adjust the account spending limits for Amazon EC2 on the AWS Billing and Cost Management console
- B. Modify the EC2 quota for that AWS Region in the EC2 Settings section of the EC2 console.
- C. Request a quota Increase for the Instance type family by using Service Quotas on the AWS Management Console.
- D. Use the Rebalance action In the Auto Scaling group on the AWS Management Console.

**Answer:** C

#### NEW QUESTION 91

- (Exam Topic 1)

A company has multiple Amazon EC2 instances that run a resource-intensive application in a development environment. A SysOps administrator is implementing a solution to stop these EC2 instances when they are not in use.

Which solution will meet this requirement?

- A. Assess AWS CloudTrail logs to verify that there is no EC2 API activit
- B. Invoke an AWS Lambda function to stop the EC2 instances.
- C. Create an Amazon CloudWatch alarm to stop the EC2 instances when the average CPU utilization is lower than 5% for a 30-minute period.
- D. Create an Amazon CloudWatch metric to stop the EC2 instances when the VolumeReadBytes metric is lower than 500 for a 30-minute period.
- E. Use AWS Config to invoke an AWS Lambda function to stop the EC2 instances based on resource configuration changes.

**Answer:** B

#### Explanation:

<https://docs.aws.amazon.com/AmazonCloudWatch/latest/monitoring/UsingAlarmActions.html#AddingStopActi>

#### NEW QUESTION 95

- (Exam Topic 1)

A company creates custom AMI images by launching new Amazon EC2 instances from an AWS CloudFormation template it installs and configure necessary software through AWS OpsWorks and takes images of each EC2 instance. The process of installing and configuring software can take between 2 to 3 hours but at times the process stalls due to installation errors.

The SysOps administrator must modify the CloudFormation template so if the process stalls, the entire stack will fail and roll back.

Based on these requirements what should be added to the template?

- A. Conditions with a timeout set to 4 hours.
- B. CreationPolicy with timeout set to 4 hours.
- C. DependsOn a timeout set to 4 hours.
- D. Metadata with a timeout set to 4 hours

**Answer:** B

#### NEW QUESTION 96

- (Exam Topic 1)

A company runs several workloads on AWS. The company identifies five AWS Trusted Advisor service quota metrics to monitor in a specific AWS Region. The company wants to receive email notification each time resource usage exceeds 60% of one of the service quotas.

Which solution will meet these requirements?

- A. Create five Amazon CloudWatch alarms, one for each Trusted Advisor service quota metri
- B. Configure an Amazon Simple Notification Service (Amazon SNS) topic for email notification each time that usage exceeds 60% of one of the service quotas.

- C. Create five Amazon CloudWatch alarms, one for each Trusted Advisor service quota metri
- D. Configure an Amazon Simple Queue Service (Amazon SQS) queue for email notification each time that usage exceeds 60% of one of the service quotas.
- E. Use the AWS Service Health Dashboard to monitor each Trusted Advisor service quota metric. Configure an Amazon Simple Queue Service (Amazon SQS) queue for email notification each time that usage exceeds 60% of one of the service quotas.
- F. Use the AWS Service Health Dashboard to monitor each Trusted Advisor service quota metric. Configure an Amazon Simple Notification Service (Amazon SNS) topic for email notification each time that usage exceeds 60% of one of the service quotas.

**Answer:** A

**Explanation:**

CloudWatch alarms allow you to monitor AWS resources, and you can configure an SNS topic to send an email notification each time one of the alarms is triggered. This will ensure that the company receives email notifications each time one of the service quotas is exceeded, allowing the company to take action as needed.

**NEW QUESTION 97**

- (Exam Topic 1)

A SysOps administrator receives notification that an application that is running on Amazon EC2 instances has failed to authenticate to an Amazon RDS database. To troubleshoot, the SysOps administrator needs to investigate AWS Secrets Manager password rotation. Which Amazon CloudWatch log will provide insight into the password rotation?

- A. AWS CloudTrail logs
- B. EC2 instance application logs
- C. AWS Lambda function logs
- D. RDS database logs

**Answer:** B

**NEW QUESTION 101**

- (Exam Topic 1)

A company recently acquired another corporation and all of that corporation's AWS accounts. A financial analyst needs the cost data from these accounts. A SysOps administrator uses Cost Explorer to generate cost and usage reports. The SysOps administrator notices that "No Tagkey" represents 20% of the monthly cost. What should the SysOps administrator do to tag the "No Tagkey" resources?

- A. Add the accounts to AWS Organization
- B. Use a service control policy (SCP) to tag all the untagged resources.
- C. Use an AWS Config rule to find the untagged resource
- D. Set the remediation action to terminate the resources.
- E. Use Cost Explorer to find and tag all the untagged resources.
- F. Use Tag Editor to find and tag all the untagged resources.

**Answer:** D

**Explanation:**

"You can add tags to resources when you create the resource. You can use the resource's service console or API to add, change, or remove those tags one resource at a time. To add tags to—or edit or delete tags of—multiple resources at once, use Tag Editor. With Tag Editor, you search for the resources that you want to tag, and then manage tags for the resources in your search results." <https://docs.aws.amazon.com/ARG/latest/userguide/tag-editor.html>

**NEW QUESTION 104**

- (Exam Topic 1)

A company has an Amazon RDS DB instance. The company wants to implement a caching service while maintaining high availability. Which combination of actions will meet these requirements? (Choose two.)

- A. Add Auto Discovery to the data store.
- B. Create an Amazon ElastiCache for Memcached data store.
- C. Create an Amazon ElastiCache for Redis data store.
- D. Enable Multi-AZ for the data store.
- E. Enable Multi-threading for the data store.

**Answer:** CD

**Explanation:**

<https://aws.amazon.com/elasticache/memcached/> <https://aws.amazon.com/elasticache/redis/>

**NEW QUESTION 107**

- (Exam Topic 1)

A user working in the Amazon EC2 console increased the size of an Amazon Elastic Block Store (Amazon EBS) volume attached to an Amazon EC2 Windows instance. The change is not reflected in the file system. What should a SysOps administrator do to resolve this issue?

- A. Extend the file system with operating system-level tools to use the new storage capacity.
- B. Reattach the EBS volume to the EC2 instance.
- C. Reboot the EC2 instance that is attached to the EBS volume.
- D. Take a snapshot of the EBS volume
- E. Replace the original volume with a volume that is created from the snapshot.

**Answer:** B



#### NEW QUESTION 112

- (Exam Topic 1)

An organization is running multiple applications for their customers. Each application is deployed by running a base AWS CloudFormation template that configures a new VPC. All applications are run in the same AWS account and AWS Region. A SysOps administrator has noticed that when trying to deploy the same AWS CloudFormation stack, it fails to deploy. What is likely to be the problem?

- A. The Amazon Machine image used is not available in that region.
- B. The AWS CloudFormation template needs to be updated to the latest version.
- C. The VPC configuration parameters have changed and must be updated in the template.
- D. The account has reached the default limit for VPCs allowed.

**Answer:** D

#### NEW QUESTION 116

- (Exam Topic 1)

An ecommerce company uses an Amazon ElastiCache for Memcached cluster for in-memory caching of popular product queries on the shopping site. When viewing recent Amazon CloudWatch metrics data for the ElastiCache cluster, the SysOps administrator notices a large number of evictions. Which of the following actions will reduce these evictions? (Choose two.)

- A. Add an additional node to the ElastiCache cluster.
- B. Increase the ElastiCache time to live (TTL).
- C. Increase the individual node size inside the ElastiCache cluster.
- D. Put an Elastic Load Balancer in front of the ElastiCache cluster.
- E. Use Amazon Simple Queue Service (Amazon SQS) to decouple the ElastiCache cluster.

**Answer:** AC

#### Explanation:

<https://d1.awsstatic.com/training-and-certification/docs-sysops-associate/AWS-Certified-SysOps-Administrator>

#### NEW QUESTION 119

- (Exam Topic 1)

A company has mandated the use of multi-factor authentication (MFA) for all IAM users, and requires users to make all API calls using the CLI. However, users are not prompted to enter MFA tokens, and are able to run CLI commands without MFA. In an attempt to enforce MFA, the company attached an IAM policy to all users that denies API calls that have not been authenticated with MFA.

What additional step must be taken to ensure that API calls are authenticated using MFA?

- A. Enable MFA on IAM roles, and require IAM users to use role credentials to sign API calls.
- B. Ask the IAM users to log into the AWS Management Console with MFA before making API calls using the CLI.
- C. Restrict the IAM users to use of the console, as MFA is not supported for CLI use.
- D. Require users to use temporary credentials from the get-session token command to sign API calls.

**Answer:** D

#### NEW QUESTION 122

- (Exam Topic 1)

A company manages an application that uses Amazon ElastiCache for Redis with two extra-large nodes spread across two different Availability Zones. The company's IT team discovers that the ElastiCache for Redis cluster has 75% freeable memory. The application must maintain high availability.

What is the MOST cost-effective way to resize the cluster?

- A. Decrease the number of nodes in the ElastiCache for Redis cluster from 2 to 1.
- B. Deploy a new ElastiCache for Redis cluster that uses large node type
- C. Migrate the data from the original cluster to the new cluster
- D. After the process is complete, shut down the original cluster.
- E. Deploy a new ElastiCache for Redis cluster that uses large node type
- F. Take a backup from the original cluster, and restore the backup in the new cluster
- G. After the process is complete, shut down the original cluster.
- H. Perform an online resizing for the ElastiCache for Redis cluster
- I. Change the node types from extra-large nodes to large nodes.

**Answer:** D

#### Explanation:

<https://docs.aws.amazon.com/AmazonElastiCache/latest/red-ug/scaling-redis-cluster-mode-enabled.html> As demand on your clusters changes, you might decide to improve performance or reduce costs by changing the number of shards in your Redis (cluster mode enabled) cluster. We recommend using online horizontal scaling to do so, because it allows your cluster to continue serving requests during the scaling process.

<https://docs.aws.amazon.com/AmazonElastiCache/latest/red-ug/redis-cluster-vertical-scaling-scaling-down.html>

#### NEW QUESTION 124

- (Exam Topic 1)

A company has a critical serverless application that uses multiple AWS Lambda functions. Each Lambda function generates 1 GB of log data daily in its own Amazon CloudWatch Logs log group. The company's security team asks for a count of application errors, grouped by type, across all of the log groups.

What should a SysOps administrator do to meet this requirement?

- A. Perform a CloudWatch Logs Insights query that uses the stats command and count function.
- B. Perform a CloudWatch Logs search that uses the groupby keyword and count function.
- C. Perform an Amazon Athena query that uses the SELECT and GROUP BY keywords.
- D. Perform an Amazon RDS query that uses the SELECT and GROUP BY keywords.

**Answer:** A

#### NEW QUESTION 125

- (Exam Topic 1)

A company hosts a web application on an Amazon EC2 instance. The web server logs are published to Amazon CloudWatch Logs. The log events have the same structure and include the HTTP response codes that are associated with the user requests. The company needs to monitor the number of times that the web server returns an HTTP 404 response.

What is the MOST operationally efficient solution that meets these requirements?

- A. Create a CloudWatch Logs metric filter that counts the number of times that the web server returns an HTTP 404 response.
- B. Create a CloudWatch Logs subscription filter that counts the number of times that the web server returns an HTTP 404 response.
- C. Create an AWS Lambda function that runs a CloudWatch Logs Insights query that counts the number of 404 codes in the log events during the past hour.
- D. Create a script that runs a CloudWatch Logs Insights query that counts the number of 404 codes in the log events during the past hour.

**Answer:** A

#### Explanation:

This is the most operationally efficient solution that meets the requirements, as it will allow the company to monitor the number of times that the web server returns an HTTP 404 response in real-time. The other solutions (creating a CloudWatch Logs subscription filter, an AWS Lambda function, or a script) will require additional steps and resources to monitor the number of times that the web server returns an HTTP 404 response.

A metric filter allows you to search for specific terms, phrases, or values in your log events, and then to create a metric based on the number of occurrences of those search terms. This allows you to create a CloudWatch Metric that can be used to create alarms and dashboards, which can be used to monitor the number of HTTP 404 responses returned by the web server.

#### NEW QUESTION 126

- (Exam Topic 1)

A company stores files on 50 Amazon S3 buckets in the same AWS Region. The company wants to connect to the S3 buckets securely over a private connection from its Amazon EC2 instances. The company needs a solution that produces no additional cost.

Which solution will meet these requirements?

- A. Create a gateway VPC endpoint for each S3 bucket. Attach the gateway VPC endpoints to each subnet inside the VPC.
- B. Create an interface VPC endpoint for each S3 bucket. Attach the interface VPC endpoints to each subnet inside the VPC.
- C. Create one gateway VPC endpoint for all the S3 buckets. Add the gateway VPC endpoint to the VPC route table.
- D. Create one interface VPC endpoint for all the S3 buckets. Add the interface VPC endpoint to the VPC route table.

**Answer:** C

#### NEW QUESTION 129

- (Exam Topic 1)

A development team recently deployed a new version of a web application to production. After the release, penetration testing revealed a cross-site scripting vulnerability that could expose user data.

Which AWS service will mitigate this issue?

- A. AWS Shield Standard
- B. AWS WAF
- C. Elastic Load Balancing
- D. Amazon Cognito

**Answer:** B

#### NEW QUESTION 133

- (Exam Topic 1)

A company is migrating its production file server to AWS. All data that is stored on the file server must remain accessible if an Availability Zone becomes unavailable or when system maintenance is performed. Users must be able to interact with the file server through the SMB protocol. Users also must have the ability to manage file permissions by using Windows ACLs.

Which solution will meet these requirements?

- A. Create a single AWS Storage Gateway file gateway.
- B. Create an Amazon FSx for Windows File Server Multi-AZ file system.
- C. Deploy two AWS Storage Gateway file gateways across two Availability Zones.
- D. Configure an Application Load Balancer in front of the file gateways.
- E. Deploy two Amazon FSx for Windows File Server Single-AZ file systems.
- F. Configure Microsoft Distributed File System Replication (DFSR).

**Answer:** B

#### Explanation:

<https://aws.amazon.com/fsx/windows/>

#### NEW QUESTION 137

- (Exam Topic 1)

A company wants to use only IPv6 for all its Amazon EC2 instances. The EC2 instances must not be accessible from the internet, but the EC2 instances must be able to access the internet. The company creates a dual-stack VPC and IPv6-only subnets.

How should a SysOps administrator configure the VPC to meet these requirements?

- A. Create and attach a NAT gateway.
- B. Create a custom route table that includes an entry to point all IPv6 traffic to the NAT gateway.
- C. Attach the custom route table to the IPv6-only subnets.

- D. Create and attach an internet gatewa
- E. Create a custom route table that includes an entry to point all IPv6 traffic to the internet gatewa
- F. Attach the custom route table to the IPv6-only subnets.
- G. Create and attach an egress-only internet gatewa
- H. Create a custom route table that includes an entry to point all IPv6 traffic to the egress-only internet gatewa
- I. Attach the custom route table to the IPv6-only subnets.
- J. Create and attach an internet gateway and a NAT gatewa
- K. Create a custom route table that includes an entry to point all IPv6 traffic to the internet gateway and all IPv4 traffic to the NAT gatewa
- L. Attach the custom route table to the IPv6-only subnets.

**Answer:** C

#### NEW QUESTION 138

- (Exam Topic 1)

A company is using an Amazon DynamoDB table for data. A SysOps administrator must configure replication of the table to another AWS Region for disaster recovery.

What should the SysOps administrator do to meet this requirement?

- A. Enable DynamoDB Accelerator (DAX).
- B. Enable DynamoDB Streams, and add a global secondary index (GSI).
- C. Enable DynamoDB Streams, and add a global table Region.
- D. Enable point-in-time recovery.

**Answer:** C

#### NEW QUESTION 141

- (Exam Topic 1)

A company's IT department noticed an increase in the spend of their developer AWS account. There are over 50 developers using the account, and the finance team wants to determine the service costs incurred by each developer.

What should a SysOps administrator do to collect this information? (Select TWO.)

- A. Activate the createdBy tag in the account.
- B. Analyze the usage with Amazon CloudWatch dashboards.
- C. Analyze the usage with Cost Explorer.
- D. Configure AWS Trusted Advisor to track resource usage.
- E. Create a billing alarm in AWS Budgets.

**Answer:** AC

#### NEW QUESTION 146

- (Exam Topic 1)

A company needs to deploy a new workload on AWS. The company must encrypt all data at rest and must rotate the encryption keys once each year. The workload uses an Amazon RDS for MySQL Multi-AZ database for data storage.

Which configuration approach will meet these requirements?

- A. Enable Transparent Data Encryption (TDE) in the MySQL configuration file
- B. Manually rotate the key every 12 months.
- C. Enable RDS encryption on the database at creation time by using the AWS managed key for Amazon RDS.
- D. Create a new AWS Key Management Service (AWS KMS) customer managed key
- E. Enable automatic key rotation
- F. Enable RDS encryption on the database at creation time by using the KMS key.
- G. Create a new AWS Key Management Service (AWS KMS) customer managed key
- H. Enable automatic key rotation
- I. Enable encryption on the Amazon Elastic Block Store (Amazon EBS) volumes that are attached to the RDS DB instance.

**Answer:** C

#### Explanation:

This configuration approach will meet the requirement of encrypting all data at rest and rotating the encryption keys once each year. By creating a new AWS KMS customer managed key and enabling automatic key rotation, the encryption keys will be rotated automatically every year. By enabling RDS encryption on the database at creation time using the KMS key, all data stored in the RDS for MySQL Multi-AZ database will be encrypted at rest. This approach provides more control over key management and rotation and provides additional security benefits.

#### NEW QUESTION 148

- (Exam Topic 1)

A SysOps administrator is building a process for sharing Amazon RDS database snapshots between different accounts associated with different business units within the same company. All data must be encrypted at rest.

How should the administrator implement this process?

- A. Write a script to download the encrypted snapshot, decrypt it using the AWS KMS encryption key used to encrypt the snapshot, then create a new volume in each account.
- B. Update the key policy to grant permission to the AWS KMS encryption key used to encrypt the snapshot with all relevant accounts, then share the snapshot with those accounts.
- C. Create an Amazon EC2 instance based on the snapshot, then save the instance's Amazon EBS volume as a snapshot and share it with the other account
- D. Require each account owner to create a new volume from that snapshot and encrypt it.
- E. Create a new unencrypted RDS instance from the encrypted snapshot, connect to the instance using SSH/RDP
- F. export the database contents into a file, then share this file with the other accounts.

**Answer:** B

#### NEW QUESTION 153

- (Exam Topic 1)

A company has a mobile app that uses Amazon S3 to store images. The images are popular for a week, and then the number of access requests decreases over time. The images must be highly available and must be immediately accessible upon request. A SysOps administrator must reduce S3 storage costs for the company. Which solution will meet these requirements MOST cost-effectively?

- A. Create an S3 Lifecycle policy to transition the images to S3 Glacier after 7 days.
- B. Create an S3 Lifecycle policy to transition the images to S3 One Zone-Infrequent Access (S3 One Zone-IA) after 7 days.
- C. Create an S3 Lifecycle policy to transition the images to S3 Standard after 7 days.
- D. Create an S3 Lifecycle policy to transition the images to S3 Standard-Infrequent Access (S3 Standard-IA) after 7 days.

**Answer: D**

#### NEW QUESTION 157

- (Exam Topic 1)

A company hosts a database on an Amazon RDS Multi-AZ DB instance. The database is not encrypted. The company's new security policy requires all AWS resources to be encrypted at rest and in transit.

What should a SysOps administrator do to encrypt the database?

- A. Configure encryption on the existing DB instance.
- B. Take a snapshot of the DB instance.
- C. Encrypt the snapshot.
- D. Restore the snapshot to the same DB instance.
- E. Encrypt the standby replica in a secondary Availability Zone.
- F. Promote the standby replica to the primary DB instance.
- G. Take a snapshot of the DB instance.
- H. Copy and encrypt the snapshot.
- I. Create a new DB instance by restoring the encrypted copy.

**Answer: B**

#### NEW QUESTION 160

- (Exam Topic 1)

A SysOps administrator needs to configure a solution that will deliver digital content to a set of authorized users through Amazon CloudFront. Unauthorized users must be restricted from access. Which solution will meet these requirements?

- A. Store the digital content in an Amazon S3 bucket that does not have public access blocked.
- B. Use signed URLs to access the S3 bucket through CloudFront.
- C. Store the digital content in an Amazon S3 bucket that has public access blocked.
- D. Use an origin access identity (OAI) to deliver the content through CloudFront.
- E. Restrict S3 bucket access with signed URLs in CloudFront.
- F. Store the digital content in an Amazon S3 bucket that has public access blocked.
- G. Use an origin access identity (OAI) to deliver the content through CloudFront.
- H. Enable field-level encryption.
- I. Store the digital content in an Amazon S3 bucket that does not have public access blocked.
- J. Use signed cookies for restricted delivery of the content through CloudFront.

**Answer: B**

#### NEW QUESTION 164

- (Exam Topic 1)

A company has a public website that recently experienced problems. Some links led to missing webpages, and other links rendered incorrect webpages. The application infrastructure was running properly, and all the provisioned resources were healthy. Application logs and dashboards did not show any errors, and no monitoring alarms were raised. Systems administrators were not aware of any problems until end users reported the issues.

The company needs to proactively monitor the website for such issues in the future and must implement a solution as soon as possible.

Which solution will meet these requirements with the LEAST operational overhead?

- A. Rewrite the application to surface a custom error to the application log when issues occur. Automatically parse logs for error.
- B. Create an Amazon CloudWatch alarm to provide alerts when issues are detected.
- C. Create an AWS Lambda function to test the website.
- D. Configure the Lambda function to emit an Amazon CloudWatch custom metric when errors are detected.
- E. Configure a CloudWatch alarm to provide alerts when issues are detected.
- F. Create an Amazon CloudWatch Synthetic canary.
- G. Use the CloudWatch Synthetic Recorder plugin to generate the script for the canary run.
- H. Configure the canary in line with requirement.
- I. Create an alarm to provide alerts when issues are detected.

**Answer: A**

#### NEW QUESTION 165

- (Exam Topic 1)

A company's public website is hosted in an Amazon S3 bucket in the us-east-1 Region behind an Amazon CloudFront distribution. The company wants to ensure that the website is protected from DDoS attacks. A SysOps administrator needs to deploy a solution that gives the company the ability to maintain control over the rate limit at which DDoS protections are applied.

Which solution will meet these requirements?

- A. Deploy a global-scoped AWS WAF web ACL with an allow default action.
- B. Configure an AWS WAF rate-based rule to block matching traffic.



- C. Associate the web ACL with the CloudFront distribution.
- D. Deploy an AWS WAF web ACL with an allow default action in us-east-1. Configure an AWS WAF rate-based rule to block matching traffic.
- E. Associate the web ACL with the S3 bucket.
- F. Deploy a global-scoped AWS WAF web ACL with a block default action.
- G. Configure an AWS WAF rate-based rule to allow matching traffic.
- H. Associate the web ACL with the CloudFront distribution.
- I. Deploy an AWS WAF web ACL with a block default action in us-east-1. Configure an AWS WAF rate-based rule to allow matching traffic.
- J. Associate the web ACL with the S3 bucket.

**Answer: B**

#### NEW QUESTION 167

- (Exam Topic 1)

A company runs its Infrastructure on Amazon EC2 Instances that run in an Auto Scaling group. Recently, the company promoted faulty code to the entire EC2 fleet. This faulty code caused the Auto Scaling group to scale the instances before any of the application logs could be retrieved.

What should a SysOps administrator do to retain the application logs after instances are terminated?

- A. Configure an Auto Scaling lifecycle hook to create a snapshot of the ephemeral storage upon termination of the instances.
- B. Create a new Amazon Machine Image (AMI) that has the Amazon CloudWatch agent installed and configured to send logs to Amazon CloudWatch Log.
- C. Update the launch template to use the new AMI.
- D. Create a new Amazon Machine Image (AMI) that has a custom script configured to send logs to AWS CloudTrail.
- E. Update the launch template to use the new AMI.
- F. Install the Amazon CloudWatch agent on the Amazon Machine Image (AMI) that is defined in the launch template.
- G. Configure the CloudWatch agent to back up the logs to ephemeral storage.

**Answer: B**

#### NEW QUESTION 169

- (Exam Topic 1)

A company is trying to connect two applications. One application runs in an on-premises data center that has a hostname of `host1.onprem.private`. The other application runs on an Amazon EC2 instance that has a hostname of `host1.awscloud.private`. An AWS Site-to-Site VPN connection is in place between the on-premises network and AWS.

The application that runs in the data center tries to connect to the application that runs on the EC2 instance, but DNS resolution fails. A SysOps administrator must implement DNS resolution between on-premises and AWS resources.

Which solution allows the on-premises application to resolve the EC2 instance hostname?

- A. Set up an Amazon Route 53 inbound resolver endpoint with a forwarding rule for the `onprem.private` hosted zone.
- B. Associate the resolver with the VPC of the EC2 instance.
- C. Configure the on-premises DNS resolver to forward `onprem.private` DNS queries to the inbound resolver endpoint.
- D. Set up an Amazon Route 53 inbound resolver endpoint.
- E. Associate the resolver with the VPC of the EC2 instance.
- F. Configure the on-premises DNS resolver to forward `awscloud.private` DNS queries to the inbound resolver endpoint.
- G. Set up an Amazon Route 53 outbound resolver endpoint with a forwarding rule for the `onprem.private` hosted zone.
- H. Associate the resolver with the AWS Region of the EC2 instance.
- I. Configure the on-premises DNS resolver to forward `onprem.private` DNS queries to the outbound resolver endpoint.
- J. Set up an Amazon Route 53 outbound resolver endpoint.
- K. Associate the resolver with the AWS Region of the EC2 instance.
- L. Configure the on-premises DNS resolver to forward `awscloud.private` DNS queries to the outbound resolver endpoint.

**Answer: C**

#### NEW QUESTION 172

- (Exam Topic 1)

A SysOps administrator is creating two AWS CloudFormation templates. The first template will create a VPC with associated resources, such as subnets, route tables, and an internet gateway. The second template will deploy application resources within the VPC that was created by the first template. The second template should refer to the resources created by the first template.

How can this be accomplished with the LEAST amount of administrative effort?

- A. Add an export field to the outputs of the first template and import the values in the second template.
- B. Create a custom resource that queries the stack created by the first template and retrieves the required values.
- C. Create a mapping in the first template that is referenced by the second template.
- D. Input the names of resources in the first template and refer to those names in the second template as a parameter.

**Answer: A**

#### Explanation:

<https://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/using-cfn-stack-exports.html>

#### NEW QUESTION 176

- (Exam Topic 1)

A company wants to archive sensitive data on Amazon S3 Glacier. The company's regulatory and compliance requirements do not allow any modifications to the data by any account.

Which solution meets these requirements?

- A. Attach a vault lock policy to an S3 Glacier vault that contains the archived data.
- B. Use the lock ID to validate the vault lock policy after 24 hours.
- C. Attach a vault lock policy to an S3 Glacier vault that contains the archived data.
- D. Use the lock ID to validate the vault lock policy within 24 hours.
- E. Configure S3 Object Lock in governance mode.

- F. Upload all files after 24 hours.
- G. Configure S3 Object Lock in governance mod
- H. Upload all files within 24 hours.

**Answer: B**

#### NEW QUESTION 179

- (Exam Topic 1)

A SysOps administrator is setting up a fleet of Amazon EC2 instances in an Auto Scaling group for an application. The fleet should have 50% CPU available at that times to accommodate bursts of traffic. The load will increase significantly between the hours of 09:00 and 17:00, 7 days a week  
How should the SysOps administrator configure the scaling of the EC2 instances to meet these requirements?

- A. Create a target tracking scaling policy that runs when the CPU utilization is higher than 90%
- B. Create a target tracking scaling policy that runs when the CPU utilization is higher than 50%. Create a scheduled scaling policy that ensures that the fleet is available at 09:00 Create a second scheduled scaling policy that scales in the fleet at 17:00
- C. Set the Auto Scaling group to start with 2 instances by setting the desired instances maximum instances, and minimum instances to 2 Create a scheduled scaling policy that ensures that the fleet is available at 09:00
- D. Create a scheduled scaling policy that ensures that the fleet is available at 09.00. Create a second scheduled scaling policy that scales in the fleet at 17:00

**Answer: B**

#### NEW QUESTION 183

- (Exam Topic 1)

A SysOps Administrator runs a web application that is using a microservices approach whereby different responsibilities of the application have been divided in a separate microservice running on a different Amazon EC2 instance. The administrator has been tasked with reconfiguring the infrastructure to support this approach.

How can the administrator accomplish this with the LEAST administrative overhead?

- A. Use Amazon CloudFront to log the URL and forward the request.
- B. Use Amazon CloudFront to rewrite the header based on the microservice and forward the request.
- C. Use an Application Load Balancer (ALB) and do path-based routing.
- D. Use a Network Load Balancer (NLB) and do path-based routing.

**Answer: C**

#### Explanation:

<https://aws.amazon.com/premiumsupport/knowledge-center/elb-achieve-path-based-routing-alb/>

#### NEW QUESTION 188

- (Exam Topic 1)

A recent audit found that most resources belonging to the development team were in violation of patch compliance standards The resources were properly tagged  
Which service should be used to quickly remediate the issue and bring the resources back into compliance?

- A. AWS Config
- B. Amazon Inspector
- C. AWS Trusted Advisor
- D. AWS Systems Manager

**Answer: D**

#### NEW QUESTION 192

- (Exam Topic 1)

A large multinational company has a core application that runs 24 hours a day, 7 days a week on Amazon EC2 and AWS Lambda. The company uses a combination of operating systems across different AWS Regions. The company wants to achieve cost savings and wants to use a pricing model that provides the most flexibility.

What should the company do to MAXIMIZE cost savings while meeting these requirements?

- A. Establish the compute expense by the hou
- B. Purchase a Compute Savings Plan.
- C. Establish the compute expense by the hou
- D. Purchase an EC2 Instance Savings Plan.
- E. Purchase a Reserved Instance for the instance types, operating systems, Region, and tenancy.
- F. Use EC2 Spot Instances to match the instances that run in each Region.

**Answer: D**

#### NEW QUESTION 196

- (Exam Topic 1)

A company hosts its website on Amazon EC2 instances behind an Application Load Balancer. The company manages its DNS with Amazon Route 53. and wants to point its domain's zone apex to the website.

Which type of record should be used to meet these requirements?

- A. A CNAME record for the domain's zone apex
- B. An A record for the domain's zone apex
- C. An AAAA record for the domain's zone apex
- D. An alias record for the domain's zone apex

**Answer: D**

**Explanation:**

<https://docs.aws.amazon.com/Route53/latest/DeveloperGuide/resource-record-sets-choosing-alias-non-alias.htm>  
<https://docs.aws.amazon.com/Route53/latest/DeveloperGuide/routing-to-elb-load-balancer.html>

**NEW QUESTION 198**

- (Exam Topic 1)

A company is using Amazon CloudFront to serve static content for its web application to its users. The CloudFront distribution uses an existing on-premises website as a custom origin.

The company requires the use of TLS between CloudFront and the origin server. This configuration has worked as expected for several months. However, users are now experiencing HTTP 502 (Bad Gateway) errors when they view webpages that include content from the CloudFront distribution.

What should a SysOps administrator do to resolve this problem?

- A. Examine the expiration date on the certificate on the origin sit
- B. Validate that the certificate has not expire
- C. Replace the certificate if necessary.
- D. Examine the hostname on the certificate on the origin sit
- E. Validate that the hostname matches one of the hostnames on the CloudFront distributio
- F. Replace the certificate if necessary.
- G. Examine the firewall rules that are associated with the origin serve
- H. Validate that port 443 is open for inbound traffic from the interne
- I. Create an inbound rule if necessary.
- J. Examine the network ACL rules that are associated with the CloudFront distributio
- K. Validate that port 443 is open for outbound traffic to the origin serve
- L. Create an outbound rule if necessary.

**Answer:** A

**Explanation:**

HTTP 502 errors from CloudFront can occur because of the following reasons:

There's an SSL negotiation failure because the origin is using SSL/TLS protocols and ciphers that aren't supported by CloudFront.

There's an SSL negotiation failure because the SSL certificate on the origin is expired or invalid, or because the certificate chain is invalid.

There's a host header mismatch in the SSL negotiation between your CloudFront distribution and the custom origin.

The custom origin isn't responding on the ports specified in the origin settings of the CloudFront distribution. The custom origin is ending the connection to CloudFront too quickly.

<https://aws.amazon.com/premiumsupport/knowledge-center/resolve-cloudfront-connection-error/>

**NEW QUESTION 202**

- (Exam Topic 1)

A large company is using AWS Organizations to manage its multi-account AWS environment. According to company policy, all users should have read-level access to a particular Amazon S3 bucket in a central account. The S3 bucket data should not be available outside the organization. A SysOps administrator must set up the permissions and add a bucket policy to the S3 bucket.

Which parameters should be specified to accomplish this in the MOST efficient manner?

- A. Specify '\*' as the principal and PrincipalOrgId as a condition.
- B. Specify all account numbers as the principal.
- C. Specify PrincipalOrgId as the principal.
- D. Specify the organization's management account as the principal.

**Answer:** C

**NEW QUESTION 207**

- (Exam Topic 1)

A company uses AWS Cloud Formation templates to deploy cloud infrastructure. An analysis of all the company's templates shows that the company has declared the same components in multiple templates. A SysOps administrator needs to create dedicated templates that have their own parameters and conditions for these common components.

Which solution will meet this requirement?

- A. Develop a CloudFormaiion change set.
- B. Develop CloudFormation macros.
- C. Develop CloudFormation nested stacks.
- D. Develop CloudFormation stack sets.

**Answer:** C

**NEW QUESTION 210**

- (Exam Topic 1)

A global company handles a large amount of personally identifiable information (PII) through an internal web portal. The company's application runs in a corporate data center that is connected to AWS through an AWS Direct Connect connection. The application stores the PII in Amazon S3. According to a compliance requirement, traffic from the web portal to Amazon S3 must not travel across the internet.

What should a SysOps administrator do to meet the compliance requirement?

- A. Provision an interface VPC endpoint for Amazon S3. Modify the application to use the interface endpoint.
- B. Configure AWS Network Firewall to redirect traffic to the internal S3 address.
- C. Modify the application to use the S3 path-style endpoint.
- D. Set up a range of VPC network ACLs to redirect traffic to the Internal S3 address.

**Answer:** B

#### NEW QUESTION 212

- (Exam Topic 1)

Application A runs on Amazon EC2 instances behind a Network Load Balancer (NLB). The EC2 instances are in an Auto Scaling group and are in the same subnet that is associated with the NLB. Other applications from an on-premises environment cannot communicate with Application A on port 8080. To troubleshoot the issue, a SysOps administrator analyzes the flow logs. The flow logs include the following records:

```
2 123456789010 eni-1235b8ca123456789 192.168.0.13 172.31.16.139 59003 8080 1 4 336 1432917027 1432917142 ACCEPT OK
2 123456789010 eni-1235b8ca123456789 172.31.16.139 192.168.0.13 8080 59003 1 4 336 1432917094 1432917142 REJECT OK
```

What is the reason for the rejected traffic?

- A. The security group of the EC2 instances has no Allow rule for the traffic from the NLB.
- B. The security group of the NLB has no Allow rule for the traffic from the on-premises environment.
- C. The ACL of the on-premises environment does not allow traffic to the AWS environment.
- D. The network ACL that is associated with the subnet does not allow outbound traffic for the ephemeral port range.

**Answer: A**

#### NEW QUESTION 215

- (Exam Topic 1)

A company is releasing a new static website hosted on Amazon S3. The static website hosting feature was enabled on the bucket and content was uploaded: however, upon navigating to the site, the following error message is received:

403 Forbidden - Access Denied

What change should be made to fix this error?

- A. Add a bucket policy that grants everyone read access to the bucket.
- B. Add a bucket policy that grants everyone read access to the bucket objects.
- C. Remove the default bucket policy that denies read access to the bucket.
- D. Configure cross-origin resource sharing (CORS) on the bucket.

**Answer: B**

#### NEW QUESTION 218

- (Exam Topic 1)

A company is using Amazon Elastic File System (Amazon EFS) to share a file system among several Amazon EC2 instances. As usage increases, users report that file retrieval from the EFS file system is slower than normal.

Which action should a SysOps administrator take to improve the performance of the file system?

- A. Configure the file system for Provisioned Throughput.
- B. Enable encryption in transit on the file system.
- C. Identify any unused files in the file system, and remove the unused files.
- D. Resize the Amazon Elastic Block Store (Amazon EBS) volume of each of the EC2 instances.

**Answer: A**

#### NEW QUESTION 221

- (Exam Topic 1)

A company runs its entire suite of applications on Amazon EC2 instances. The company plans to move the applications to containers and AWS Fargate. Within 6 months, the company plans to retire its EC2 instances and use only Fargate. The company has been able to estimate its future Fargate costs.

A SysOps administrator needs to choose a purchasing option to help the company minimize costs. The SysOps administrator must maximize any discounts that are available and must ensure that there are no unused reservations.

Which purchasing option will meet these requirements?

- A. Compute Savings Plans for 1 year with the No Upfront payment option
- B. Compute Savings Plans for 1 year with the Partial Upfront payment option
- C. EC2 Instance Savings Plans for 1 year with the All Upfront payment option
- D. EC2 Reserved Instances for 1 year with the Partial Upfront payment option

**Answer: C**

#### NEW QUESTION 225

- (Exam Topic 1)

A SysOps administrator is configuring an application on Amazon EC2 instances for a company Teams in other countries will use the application over the internet. The company requires the application endpoint to have a static public IP address.

How should the SysOps administrator deploy the application to meet this requirement?

- A. Behind an Amazon API Gateway API
- B. Behind an Application Load Balancer
- C. Behind an internet-facing Network Load Balancer
- D. In an Amazon CloudFront distribution

**Answer: C**

#### NEW QUESTION 230

- (Exam Topic 1)

A SysOps administrator has Nocked public access to all company Amazon S3 buckets. The SysOps administrator wants to be notified when an S3 bucket becomes publicly readable in the future.

What is the MOST operationally efficient way to meet this requirement?



- A. Create an AWS Lambda function that periodically checks the public access settings for each S3 bucket. Set up Amazon Simple Notification Service (Amazon SNS) to send notifications.
- B. Create a cron script that uses the S3 API to check the public access settings for each S3 bucket.
- C. Set up Amazon Simple Notification Service (Amazon SNS) to send notifications.
- D. Enable S3 Event notifications for each S3 bucket.
- E. Subscribe S3 Event Notifications to an Amazon Simple Notification Service (Amazon SNS) topic.
- F. Enable the s3-bucket-public-read-prohibited managed rule in AWS Config.
- G. Subscribe the AWS Config rule to an Amazon Simple Notification Service (Amazon SNS) topic.

**Answer:** D

#### NEW QUESTION 235

- (Exam Topic 1)

A company has an Amazon CloudFront distribution that uses an Amazon S3 bucket as its origin. During a review of the access logs, the company determines that some requests are going directly to the S3 bucket by using the website hosting endpoint. A SysOps administrator must secure the S3 bucket to allow requests only from CloudFront.

What should the SysOps administrator do to meet this requirement?

- A. Create an origin access identity (OAI) in CloudFront.
- B. Associate the OAI with the distribution.
- C. Remove access to and from other principals in the S3 bucket policy.
- D. Update the S3 bucket policy to allow access only from the OAI.
- E. Create an origin access identity (OAI) in CloudFront.
- F. Associate the OAI with the distribution.
- G. Update the S3 bucket policy to allow access only from the OAI.
- H. Create a new origin, and specify the S3 bucket as the new origin.
- I. Update the distribution behavior to use the new origin.
- J. Remove the existing origin.
- K. Create an origin access identity (OAI) in CloudFront.
- L. Associate the OAI with the distribution.
- M. Update the S3 bucket policy to allow access only from the OAI.
- N. Disable website hosting.
- O. Create a new origin, and specify the S3 bucket as the new origin.
- P. Update the distribution behavior to use the new origin.
- Q. Remove the existing origin.
- R. Update the S3 bucket policy to allow access only from the CloudFront distribution.
- S. Remove access to and from other principals in the S3 bucket policy.
- T. Disable website hosting.
- . Create a new origin, and specify the S3 bucket as the new origin.
- . Update the distribution behavior to use the new origin.
- . Remove the existing origin.

**Answer:** A

#### NEW QUESTION 237

- (Exam Topic 1)

A SysOps administrator needs to track the costs of data transfer between AWS Regions. The SysOps administrator must implement a solution to send alerts to an email distribution list when transfer costs reach 75% of a specific threshold.

What should the SysOps administrator do to meet these requirements?

- A. Create an AWS Cost and Usage Report.
- B. Analyze the results in Amazon Athena.
- C. Configure an alarm to publish a message to an Amazon Simple Notification Service (Amazon SNS) topic when costs reach 75% of the threshold.
- D. Subscribe the email distribution list to the topic.
- E. Create an Amazon CloudWatch billing alarm to detect when costs reach 75% of the threshold. Configure the alarm to publish a message to an Amazon Simple Notification Service (Amazon SNS) topic.
- F. Subscribe the email distribution list to the topic.
- G. Use AWS Budgets to create a cost budget for data transfer cost.
- H. Set an alert at 75% of the budgeted amount.
- I. Configure the budget to send a notification to the email distribution list when costs reach 75% of the threshold.
- J. Set up a VPC flow log.
- K. Set up a subscription filter to an AWS Lambda function to analyze data transfer. Configure the Lambda function to send a notification to the email distribution list when costs reach 75% of the threshold.

**Answer:** B

#### Explanation:

The reason is that it uses the Amazon CloudWatch billing alarm which is a built-in service specifically designed to monitor and alert on cost usage of your AWS account, which makes it a more suitable solution for this use case. The alarm can be configured to detect when costs reach 75% of the threshold and when it is triggered, it can publish a message to an Amazon Simple Notification Service (Amazon SNS) topic. The email distribution list can be subscribed to the topic, so that they will receive the alerts when costs reach 75% of the threshold.

AWS Budgets allows you to track and manage your costs, but it doesn't specifically focus on data transfer costs between regions, and it might not provide as much granularity as CloudWatch Alarms.

#### NEW QUESTION 238

- (Exam Topic 1)

A company's customers are reporting increased latency while accessing static web content from Amazon S3. A SysOps administrator observed a very high rate of read operations on a particular S3 bucket.

What will minimize latency by reducing load on the S3 bucket?

- A. Migrate the S3 bucket to a region that is closer to end users' geographic locations
- B. Use cross-region replication to replicate all of the data to another region
- C. Create an Amazon CloudFront distribution with the S3 bucket as the origin.
- D. Use Amazon ElastiCache to cache data being served from Amazon S3

**Answer:** C

#### NEW QUESTION 241

- (Exam Topic 1)

A company's SysOps administrator deploys four new Amazon EC2 instances by using the standard Amazon Linux 2 Amazon Machine Image (AMI). The company needs to be able to use AWS Systems Manager to manage the instances. The SysOps administrator notices that the instances do not appear in the Systems Manager console.

What must the SysOps administrator do to resolve this issue?

- A. Connect to each instance by using SSH. Install Systems Manager Agent on each instance. Configure Systems Manager Agent to start automatically when the instances start up.
- B. Use AWS Certificate Manager (ACM) to create a TLS certificate. Import the certificate into each instance. Configure Systems Manager Agent to use the TLS certificate for secure communications.
- C. Connect to each instance by using SSH. Create an ssm-user account. Add the ssm-user account to the /etc/sudoers.d directory.
- D. Attach an IAM instance profile to the instances. Ensure that the instance profile contains the AmazonSSMManagedInstanceCore policy.

**Answer:** D

#### NEW QUESTION 243

- (Exam Topic 1)

A company has a high-performance Windows workload. The workload requires a storage volume that provides consistent performance of 10,000 KDPS. The company does not want to pay for additional unneeded capacity to achieve this performance.

Which solution will meet these requirements with the LEAST cost?

- A. Use a Provisioned IOPS SSD (io1) Amazon Elastic Block Store (Amazon EBS) volume that is configured with 10,000 provisioned IOPS.
- B. Use a General Purpose SSD (gp3) Amazon Elastic Block Store (Amazon EBS) volume that is configured with 10,000 provisioned IOPS.
- C. Use an Amazon Elastic File System (Amazon EFS) file system with Max I/O mode.
- D. Use an Amazon FSx for Windows File Server file system that is configured with 10,000 IOPS.

**Answer:** A

#### NEW QUESTION 248

- (Exam Topic 1)

A SysOps administrator configures an Amazon S3 gateway endpoint in a VPC. The private subnets inside the VPC do not have outbound internet access. A user logs in to an Amazon EC2 instance in one of the private subnets and cannot upload a file to an Amazon S3 bucket in the same AWS Region.

Which solution will solve this problem?

- A. Update the EC2 instance role policy to allow s3:PutObject access to the target S3 bucket.
- B. Update the EC2 security group to allow outbound traffic to 0.0.0.0/0 for port 80.
- C. Update the EC2 subnet route table to include the S3 prefix list destination routes to the S3 gateway endpoint.
- D. Update the S3 bucket policy to allow s3:PutObject access from the private subnet CIDR block.

**Answer:** C

#### NEW QUESTION 250

- (Exam Topic 1)

A SysOps administrator must ensure that a company's Amazon EC2 instances auto scale as expected. The SysOps administrator configures an Amazon EC2 Auto Scaling Lifecycle hook to send an event to Amazon EventBridge (Amazon CloudWatch Events), which then invokes an AWS Lambda function to configure the EC2 instances. When the configuration is complete, the Lambda function calls the complete Lifecycle-action event to put the EC2 instances into service. In testing, the SysOps administrator discovers that the Lambda function is not invoked when the EC2 instances auto scale.

What should the SysOps administrator do to resolve this issue?

- A. Add a permission to the Lambda function so that it can be invoked by the EventBridge (CloudWatch Events) rule.
- B. Change the lifecycle hook action to CONTINUE if the lifecycle hook experiences a failure or timeout.
- C. Configure a retry policy in the EventBridge (CloudWatch Events) rule to retry the Lambda function invocation upon failure.
- D. Update the Lambda function execution role so that it has permission to call the complete lifecycle-action event.

**Answer:** D

#### NEW QUESTION 254

- (Exam Topic 1)

A company needs to create a daily Amazon Machine Image (AMI) of an existing Amazon Linux EC2 instance that hosts the operating system, application, and database on multiple attached Amazon Elastic Block Store (Amazon EBS) volumes. File system integrity must be maintained.

Which solution will meet these requirements?

- A. Create an AWS Lambda function to call the CreateImage API operation with the EC2 instance ID and the no-reboot parameter enabled.
- B. Create a daily scheduled Amazon EventBridge (Amazon CloudWatch Events) rule that invokes the function.
- C. Create an AWS Lambda function to call the CreateImage API operation with the EC2 instance ID and the reboot parameter enabled.
- D. Create a daily scheduled Amazon EventBridge (Amazon CloudWatch Events) rule that invokes the function.
- E. Use AWS Backup to create a backup plan with a backup rule that runs daily.
- F. Assign the resource ID of the EC2 instance with the no-reboot parameter enabled.
- G. Use AWS Backup to create a backup plan with a backup rule that runs daily.
- H. Assign the resource ID of the EC2 instance with the reboot parameter enabled.

**Answer:** B

**Explanation:**

[https://docs.aws.amazon.com/AWSEC2/latest/WindowsGuide/Creating\\_EBSbacked\\_WinAMI.html](https://docs.aws.amazon.com/AWSEC2/latest/WindowsGuide/Creating_EBSbacked_WinAMI.html) "NoReboot By default, Amazon EC2 attempts to shut down and reboot the instance before creating the image.

If the No Reboot option is set, Amazon EC2 doesn't shut down the instance before creating the image. When this option is used, file system integrity on the created image can't be guaranteed." Besides, we can use AWS EventBridge to invoke Lambda function

[https://docs.aws.amazon.com/AWSEC2/latest/APIReference/API\\_CreateImage.html](https://docs.aws.amazon.com/AWSEC2/latest/APIReference/API_CreateImage.html)

**NEW QUESTION 259**

- (Exam Topic 1)

A SysOps administrator is evaluating Amazon Route 53 DNS options to address concerns about high availability for an on-premises website. The website consists of two servers: a primary active server and a secondary passive server. Route 53 should route traffic to the primary server if the associated health check returns 2xx or 3xx HTTP codes. All other traffic should be directed to the secondary passive server. The failover record type, set ID, and routing policy have been set appropriately for both primary and secondary servers.

Which next step should be taken to configure Route 53?

- A. Create an A record for each serve
- B. Associate the records with the Route 53 HTTP health check.
- C. Create an A record for each serve
- D. Associate the records with the Route 53 TCP health check.
- E. Create an alias record for each server with evaluate target health set to ye
- F. Associate the records with the Route 53 HTTP health check.
- G. Create an alias record for each server with evaluate target health set to ye
- H. Associate the records with the Route 53 TCP health check.

**Answer:** A

**NEW QUESTION 261**

- (Exam Topic 1)

A company is planning to host its stateful web-based applications on AWS A SysOps administrator is using an Auto Scaling group of Amazon EC2 instances The web applications will run 24 hours a day 7 days a week throughout the year The company must be able to change the instance type within the same instance family later in the year based on the traffic and usage patterns

Which EC2 instance purchasing option will meet these requirements MOST cost-effectively?

- A. Convertible Reserved Instances
- B. On-Demand instances
- C. Spot instances
- D. Standard Reserved instances

**Answer:** A

**Explanation:**

<https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/ri-convertible-exchange.html>

**NEW QUESTION 264**

- (Exam Topic 1)

A company is expanding its use of AWS services across its portfolios The company wants to provision AWS accounts for each team to ensure a separation of business processes for security compliance and billing Account creation and bootstrapping should be completed in a scalable and efficient way so new accounts are created with a defined baseline and governance guardrails in place A SysOps administrator needs to design a provisioning process that saves time and resources

Which action should be taken to meet these requirements?

- A. Automate using AWS Elastic Beanstalk to provision the AWS accounts set up infrastructure and integrate with AWS Organizations
- B. Create bootstrapping scripts in AWS OpsWorks and combine them with AWS CloudFormation templates to provision accounts and infrastructure
- C. Use AWS Config to provision accounts and deploy instances using AWS Service Catalog
- D. Use AWS Control Tower to create a template in Account Factory and use the template to provision new accounts

**Answer:** D

**NEW QUESTION 265**

- (Exam Topic 1)

A company uses an Amazon Simple Queue Service (Amazon SQS) standard queue with its application. The application sends messages to the queue with unique message bodies The company decides to switch to an SQS FIFO queue

What must the company do to migrate to an SQS FIFO queue?

- A. Create a new SQS FIFO queue Turn on content based deduplication on the new FIFO queue Update the application to include a message group ID in the messages
- B. Create a new SQS FIFO queue Update the application to include the DelaySeconds parameter in the messages
- C. Modify the queue type from SQS standard to SQS FIFO Turn off content-based deduplication on the queue Update the application to include a message group ID in the messages
- D. Modify the queue type from SQS standard to SQS FIFO Update the application to send messages with identical message bodies and to include the DelaySeconds parameter in the messages

**Answer:** A

**Explanation:**

FIFO queues don't support per-message delays, only per-queue delays. If your application sets the same value of the DelaySeconds parameter on each message, you must modify your application to remove the

per-message delay and set DelaySeconds on the entire queue instead.

<https://docs.aws.amazon.com/AWSSimpleQueueService/latest/SQSDeveloperGuide/FIFO-queues-moving.html>

#### NEW QUESTION 266

- (Exam Topic 1)

A company wants to collect data from an application to use for analytics. For the first 90 days, the data will be infrequently accessed but must remain highly available. During this time, the company's analytics team requires access to the data in milliseconds. However, after 90 days, the company must retain the data for the long term at a lower cost. The retrieval time after 90 days must be less than 5 hours.

Which solution will meet these requirements MOST cost-effectively?

- A. Store the data in S3 Standard-Infrequent Access (S3 Standard-IA) for the first 90 day
- B. Set up an S3 Lifecycle rule to move the data to S3 Glacier Flexible Retrieval after 90 days.
- C. Store the data in S3 One Zone-Infrequent Access (S3 One Zone-IA) for the first 90 day
- D. Set up an S3 Lifecycle rule to move the data to S3 Glacier Deep Archive after 90 days.
- E. Store the data in S3 Standard for the first 90 day
- F. Set up an S3 Lifecycle rule to move the data to S3 Glacier Flexible Retrieval after 90 days.
- G. Store the data in S3 Standard for the first 90 day
- H. Set up an S3 Lifecycle rule to move the data to S3 Glacier Deep Archive after 90 days.

**Answer:** A

#### Explanation:

Glacier Deep Archive retrieval time more than 5 hours (it's 12 hours), so B&D out. S3 Standard IA is cheaper than S3 Standard.

<https://aws.amazon.com/tw/s3/pricing/>

#### NEW QUESTION 271

- (Exam Topic 1)

A data storage company provides a service that gives users the ability to upload and download files as needed. The files are stored in Amazon S3 Standard and must be immediately retrievable for 1 year. Users access files frequently during the first 30 days after the files are stored. Users rarely access files after 30 days. The company's SysOps administrator must use S3 Lifecycle policies to implement a solution that maintains object availability and minimizes cost.

Which solution will meet these requirements?

- A. Move objects to S3 Glacier after 30 days.
- B. Move objects to S3 One Zone-Infrequent Access (S3 One Zone-IA) after 30 days.
- C. Move objects to S3 Standard-Infrequent Access (S3 Standard-IA) after 30 days.
- D. Move objects to S3 Standard-Infrequent Access (S3 Standard-IA) immediately.

**Answer:** C

#### Explanation:

<https://aws.amazon.com/s3/storage-classes/>

#### NEW QUESTION 273

- (Exam Topic 1)

A SysOps Administrator is managing a web application that runs on Amazon EC2 instances behind an Application Load Balancer (ALB). The instances run in an EC2 Auto Scaling group. The administrator wants to set an alarm for when all target instances associated with the ALB are unhealthy.

Which condition should be used with the alarm?

- A. AWS/ApplicationELB HealthyHostCount <= 0
- B. AWS/ApplicationELB UnhealthyHostCount >= 1
- C. AWS/EC2 StatusCheckFailed <= 0
- D. AWS/EC2 StatusCheckFailed >= 1

**Answer:** A

#### Explanation:

<https://docs.aws.amazon.com/elasticloadbalancing/latest/application/load-balancer-cloudwatch-metrics.html>

#### NEW QUESTION 277

- (Exam Topic 1)

A company has attached the following policy to an IAM user:



```
{
  "Version": "2012-10-17",
  "Statement": [
    {
      "Effect": "Allow",
      "Action": "rds:Describe*",
      "Resource": "*"
    },
    {
      "Effect": "Allow",
      "Action": "ec2:*",
      "Resource": "*",
      "Condition": {
        "StringEquals": {
          "ec2:Region": "us-east-1"
        }
      }
    },
    {
      "Effect": "Deny",
      "NotAction": [
        "ec2:*",
        "s3:GetObject"
      ],
      "Resource": "*"
    }
  ]
}
```

Which of the following actions are allowed for the IAM user?

- A. Amazon RDS DescribeDBInstances action in the us-east-1 Region
- B. Amazon S3 Putobject operation in a bucket named testbucket
- C. Amazon EC2 Describe Instances action in the us-east-1 Region
- D. Amazon EC2 AttachNetworkinterface action in the eu-west-1 Region

**Answer: C**

#### NEW QUESTION 280

- (Exam Topic 1)

An environment consists of 100 Amazon EC2 Windows instances. The Amazon CloudWatch agent is deployed and running on all EC2 instances with a baseline configuration file to capture log files. There is a new requirement to capture the DHCP log files that exist on 50 of the instances.

What is the MOST operational efficient way to meet this new requirement?

- A. Create an additional CloudWatch agent configuration file to capture the DHCP logs. Use the AWS Systems Manager Run Command to restart the CloudWatch agent on each EC2 instance with the append-config option to apply the additional configuration file.
- B. Log in to each EC2 instance with administrator rights. Create a PowerShell script to push the needed baseline log files and DHCP log files to CloudWatch.
- C. Run the CloudWatch agent configuration file wizard on each EC2 instance. Verify that the base log files are included and add the DHCP log files during the wizard creation process.
- D. Run the CloudWatch agent configuration file wizard on each EC2 instance and select the advanced detail level.
- E. This will capture the operating system log files.

**Answer: A**

#### NEW QUESTION 284

- (Exam Topic 1)

A company updates its security policy to clarify cloud hosting arrangements for regulated workloads. Workloads that are identified as sensitive must run on hardware that is not shared with other customers or with other AWS accounts within the company.

Which solution will ensure compliance with this policy?

- A. Deploy workloads only to Dedicated Hosts.
- B. Deploy workloads only to Dedicated Instances.
- C. Deploy workloads only to Reserved Instances.
- D. Place all instances in a dedicated placement group.

**Answer:** A

#### Explanation:

Dedicated Hosts are physical servers that are dedicated to a single customer, ensuring that the customer's workloads are not shared with other customers or with other AWS accounts within the company. This will ensure that the company's security policy is followed and that sensitive workloads are running on hardware that is not shared with other customers or with other AWS accounts within the company.

#### NEW QUESTION 285

- (Exam Topic 1)

A company runs an application on Amazon EC2 instances. The EC2 instances are in an Auto Scaling group and run behind an Application Load Balancer (ALB). The application experiences errors when total requests exceed 100 requests per second. A SysOps administrator must collect information about total requests for a 2-week period to determine when requests exceeded this threshold.

What should the SysOps administrator do to collect this data?

- A. Use the ALB's RequestCount metri
- B. Configure a time range of 2 weeks and a period of 1 minute.Examine the chart to determine peak traffic times and volumes.
- C. Use Amazon CloudWatch metric math to generate a sum of request counts for all the EC2 instances over a 2-week perio
- D. Sort by a 1-minute interval.
- E. Create Amazon CloudWatch custom metrics on the EC2 launch configuration templates to create aggregated request metrics across all the EC2 instances.
- F. Create an Amazon EventBridge (Amazon CloudWatch Events) rul
- G. Configure an EC2 event matching pattern that creates a metric that is based on EC2 request
- H. Display the data in a graph.

**Answer:** A

#### Explanation:

Using the ALB's RequestCount metric will allow the SysOps administrator to collect information about total requests for a 2-week period and determine when requests exceeded the threshold of 100 requests per second. Configuring a time range of 2 weeks and a period of 1 minute will ensure that the data can be accurately examined to determine peak traffic times and volumes.

#### NEW QUESTION 287

- (Exam Topic 1)

A recent organizational audit uncovered an existing Amazon RDS database that is not currently configured for high availability. Given the critical nature of this database, it must be configured for high availability as soon as possible.

How can this requirement be met?

- A. Switch to an active/passive database pair using the create-db-instance-read-replica with the--availability-zone flag.
- B. Specify high availability when creating a new RDS instance, and live-migrate the data.
- C. Modify the RDS instance using the console to include the Multi-AZ option.
- D. Use the modify-db-instance command with the --na flag.

**Answer:** C

#### NEW QUESTION 290

- (Exam Topic 1)

A company is managing multiple AWS accounts in AWS Organizations The company is reviewing internal security of Its AWS environment The company's security administrator has their own AWS account and wants to review the VPC configuration of developer AWS accounts

Which solution will meet these requirements in the MOST secure manner?

- A. Create an IAM policy in each developer account that has read-only access related to VPC resources Assign the policy to an IAM user Share the user credentials with the security administrator
- B. Create an IAM policy in each developer account that has administrator access to all Amazon EC2 actions, including VPC actions Assign the policy to an IAM user Share the user credentials with the security administrator
- C. Create an IAM policy in each developer account that has administrator access related to VPC resources Assign the policy to a cross-account IAM role Ask the security administrator to assume the role from their account
- D. Create an IAM policy m each developer account that has read-only access related to VPC resources Assign the policy to a cross-account IAM role Ask the security administrator to assume the role from their account

**Answer:** D

#### NEW QUESTION 293

- (Exam Topic 1)

A SysOps administrator creates two VPCs, VPC1 and VPC2, in a company's AWS account The SysOps administrator deploys a Linux Amazon EC2 instance in VPC1 and deploys an Amazon RDS for MySQL DB instance in VPC2. The DB instance is deployed in a private subnet. An application that runs on the EC2 instance needs to connect to the database.

What should the SysOps administrator do to give the EC2 instance the ability to connect to the database?

- A. Enter the DB instance connection string into the VPC1 route table.

- B. Configure VPC peering between the two VPCs.
- C. Add the same IPv4 CIDR range for both VPCs.
- D. Connect to the DB instance by using the DB instance's public IP address.

**Answer:** B

**Explanation:**

VPC peering allows two VPCs to communicate with each other securely. By configuring VPC peering between the two VPCs, the SysOps administrator will be able to give the EC2 instance in VPC1 the ability to connect to the database in VPC2. Once the VPC peering is configured, the EC2 instance will be able to communicate with the database using the private IP address of the DB instance in the private subnet.

**NEW QUESTION 296**

- (Exam Topic 1)

A company's VPC has connectivity to an on-premises data center through an AWS Site-to-Site VPN. The company needs Amazon EC2 instances in the VPC to send DNS queries for example.com to the DNS servers in the data center.

Which solution will meet these requirements?

- A. Create an Amazon Route 53 Resolver inbound endpoint Create a conditional forwarding rule on the on-premises DNS servers to forward DNS requests for example.com to the inbound endpoints.
- B. Create an Amazon Route 53 Resolver inbound endpoint Create a forwarding rule on the resolver that sends all queries for example.com to the on-premises DNS server
- C. Associate this rule with the VPC.
- D. Create an Amazon Route 53 Resolver outbound endpoint Create a conditional forwarding rule on the on-premises DNS servers to forward DNS requests for example.com to the outbound endpoints
- E. Create an Amazon Route 53 Resolver outbound endpoint
- F. Create a forwarding rule on the resolver that sends all queries for example.com to the on-premises DNS servers Associate this rule with the VPC.

**Answer:** C

**NEW QUESTION 297**

- (Exam Topic 1)

A company using AWS Organizations requires that no Amazon S3 buckets in its production accounts should ever be deleted.

What is the SIMPLEST approach the SysOps administrator can take to ensure S3 buckets in those accounts can never be deleted?

- A. Set up MFA Delete on all the S3 buckets to prevent the buckets from being deleted.
- B. Use service control policies to deny the s3:DeleteBucket action on all buckets in production accounts.
- C. Create an IAM group that has an IAM policy to deny the s3:DeleteBucket action on all buckets in production accounts.
- D. Use AWS Shield to deny the s3:DeleteBucket action on the AWS account instead of all S3 buckets.

**Answer:** B

**Explanation:**

[https://docs.aws.amazon.com/organizations/latest/userguide/orgs\\_manage\\_policies\\_scps.html](https://docs.aws.amazon.com/organizations/latest/userguide/orgs_manage_policies_scps.html)

If you're using AWS Organizations, check the service control policies for any statements that explicitly deny Amazon S3 access. In particular, check the service control policies for statements denying the s3:PutBucketPolicy action.

<https://aws.amazon.com/tw/premiumsupport/knowledge-center/s3-access-denied-bucket-policy/>

**NEW QUESTION 299**

- (Exam Topic 1)

A SysOps administrator is responsible for a company's security groups. The company wants to maintain a documented trail of any changes that are made to the security groups. The SysOps administrator must receive notification whenever the security groups change.

Which solution will meet these requirements?

- A. Set up Amazon Detective to record security group change
- B. Specify an Amazon CloudWatch Logs log group to store configuration history log
- C. Create an Amazon Simple Queue Service (Amazon SQS) queue for notifications about configuration change
- D. Subscribe the SysOps administrator's email address to the SQS queue.
- E. Set up AWS Systems Manager Change Manager to record security group change
- F. Specify an Amazon CloudWatch Logs log group to store configuration history log
- G. Create an Amazon Simple Notification Service (Amazon SNS) topic for notifications about configuration change
- H. Subscribe the SysOps administrator's email address to the SNS topic.
- I. Set up AWS Config to record security group change
- J. Specify an Amazon S3 bucket as the location for configuration snapshots and history file
- K. Create an Amazon Simple Notification Service (Amazon SNS) topic for notifications about configuration change
- L. Subscribe the SysOps administrator's email address to the SNS topic.
- M. Set up Amazon Detective to record security group change
- N. Specify an Amazon S3 bucket as the location for configuration snapshots and history file
- O. Create an Amazon Simple Notification Service (Amazon SNS) topic for notifications about configuration change
- P. Subscribe the SysOps administrator's email address to the SNS topic.

**Answer:** D

**NEW QUESTION 301**

- (Exam Topic 1)

A SysOps administrator is reviewing VPC Flow Logs to troubleshoot connectivity issues in a VPC. While reviewing the logs the SysOps administrator notices that rejected traffic is not listed.

What should the SysOps administrator do to ensure that all traffic is logged?

- A. Create a new flow log that has a filter setting to capture all traffic

- B. Create a new flow log set the log record format to a custom format Select the proper fields to include in the log
- C. Edit the existing flow log Change the filter setting to capture all traffic
- D. Edit the existing flow log
- E. Set the log record format to a custom format Select the proper fields to include in the log

**Answer:** A

#### NEW QUESTION 305

- (Exam Topic 1)

An AWS Lambda function is intermittently failing several times a day A SysOps administrator must find out how often this error has occurred in the last 7 days Which action will meet this requirement in the MOST operationally efficient manner?

- A. Use Amazon Athena to query the Amazon CloudWatch logs that are associated with the Lambda function
- B. Use Amazon Athena to query the AWS CloudTrail logs that are associated with the Lambda function
- C. Use Amazon CloudWatch Logs Insights to query the associated Lambda function logs
- D. Use Amazon Elasticsearch Service (Amazon ES) to stream the Amazon CloudWatch logs for the Lambda function

**Answer:** C

#### NEW QUESTION 307

- (Exam Topic 1)

An Amazon EC2 instance is running an application that uses Amazon Simple Queue Service (Amazon SQS) queues A SysOps administrator must ensure that the application can read, write, and delete messages from the SQS queues Which solution will meet these requirements in the MOST secure manner?

- A. Create an IAM user with an IAM policy that allows the sqs SendMessage permission, the sqs ReceiveMessage permission, and the sqs DeleteMessage permission to the appropriate queues Embed the IAM user's credentials in the application's configuration
- B. Create an IAM user with an IAM policy that allows the sqs SendMessage permission, the sqs ReceiveMessage permission, and the sqs DeleteMessage permission to the appropriate queues Export the IAM user's access key and secret access key as environment variables on the EC2 instance
- C. Create and associate an IAM role that allows EC2 instances to call AWS services Attach an IAM policy to the role that allows sqs." permissions to the appropriate queues
- D. Create and associate an IAM role that allows EC2 instances to call AWS services Attach an IAM policy to the role that allows the sqs SendMessage permission, the sqs ReceiveMessage permission, and the sqs DeleteMessage permission to the appropriate queues

**Answer:** D

#### NEW QUESTION 308

- (Exam Topic 1)

A manufacturing company uses an Amazon RDS DB instance to store inventory of all stock items. The company maintains several AWS Lambda functions that interact with the database to add, update, and delete items. The Lambda functions use hardcoded credentials to connect to the database. A SysOps administrator must ensure that the database credentials are never stored in plaintext and that the password is rotated every 30 days. Which solution will meet these requirements in the MOST operationally efficient manner?

- A. Store the database password as an environment variable for each Lambda function
- B. Create a new Lambda function that is named PasswordRotate
- C. Use Amazon EventBridge (Amazon CloudWatch Events) to schedule the PasswordRotate function every 30 days to change the database password and update the environment variable for each Lambda function.
- D. Use AWS Key Management Service (AWS KMS) to encrypt the database password and to store the encrypted password as an environment variable for each Lambda function
- E. Grant each Lambda function access to the KMS key so that the database password can be decrypted when required
- F. Create a new Lambda function that is named PasswordRotate to change the password every 30 days.
- G. Use AWS Secrets Manager to store credentials for the database
- H. Create a Secrets Manager secret, and select the database so that Secrets Manager will use a Lambda function to update the database password automatically
- I. Specify an automatic rotation schedule of 30 days
- J. Update each Lambda function to access the database password from SecretsManager.
- K. Use AWS Systems Manager Parameter Store to create a secure string to store credentials for the database
- L. Create a new Lambda function called PasswordRotate
- M. Use Amazon EventBridge (Amazon CloudWatch Events) to schedule the PasswordRotate function every 30 days to change the database password and to update the secret within Parameter Store
- N. Update each Lambda function to access the database password from Parameter Store.

**Answer:** C

#### Explanation:

When you choose to enable rotation, Secrets Manager supports the following Amazon Relational Database Service (Amazon RDS) databases with AWS written and tested Lambda rotation function templates, and full configuration of the rotation process:

Amazon Aurora on Amazon RDS MySQL on Amazon RDS PostgreSQL on Amazon RDS Oracle on Amazon RDS MariaDB on Amazon RDS Microsoft SQL Server on Amazon RDS <https://docs.aws.amazon.com/secretsmanager/latest/userguide/intro.html>

#### NEW QUESTION 309

- (Exam Topic 1)

A new application runs on Amazon EC2 instances and accesses data in an Amazon RDS database instance. When fully deployed in production, the application fails. The database can be queried from a console on a bastion host. When looking at the web server logs, the following error is repeated multiple times:

\*\*\* Error Establishing a Database Connection

Which of the following may be causes of the connectivity problems? (Select TWO.)

- A. The security group for the database does not have the appropriate egress rule from the database to the web server.
- B. The certificate used by the web server is not trusted by the RDS instance.
- C. The security group for the database does not have the appropriate ingress rule from the web server to the database.



- D. The port used by the application developer does not match the port specified in the RDS configuration.
- E. The database is still being created and is not available for connectivity.

**Answer:** CD

#### NEW QUESTION 314

- (Exam Topic 1)

A company hosts a web application on an Amazon EC2 instance in a production VPC. Client connections to the application are failing. A SysOps administrator inspects the VPC flow logs and finds the following entry:

```
2 111122223333 eni-####> 192.0.2.15 203.0.113.56 40711 443 6 1 40 1418530010 1418530070 REJECT OK
```

What is a possible cause of these failed connections?

- A. A security group is denying traffic on port 443.
- B. The EC2 instance is shut down.
- C. The network ACL is blocking HTTPS traffic.
- D. The VPC has no internet gateway attached.

**Answer:** A

#### Explanation:

<https://docs.aws.amazon.com/vpc/latest/userguide/flow-logs-records-examples.html#flow-log-example-accepted>

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

Accepted and rejected traffic: In this example, RDP traffic (destination port 3389, TCP protocol) to network interface eni-1235b8ca123456789 in account 123456789010 was rejected. 2 123456789010

```
eni-1235b8ca123456789 172.31.9.69 172.31.9.12 49761 3389 6 20 4249 1418530010 1418530070 REJECT OK
```

#### NEW QUESTION 318

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