

Amazon-Web-Services

Exam Questions SOA-C02

AWS Certified SysOps Administrator - Associate (SOA-C02)



NEW QUESTION 1

- (Exam Topic 1)

A company has an application that is running on Amazon EC2 instances in a VPC. The application needs access to download software updates from the internet. The VPC has public subnets and private signets. The company's security policy requires all ECS instances to be deployed in private subnets. What should a SysOps administrator do to meet those requirements?

- A. Add an internet gateway to the VPC. In the route table for the private subnets, add a route to the internet gateway.
- B. Add a NAT gateway to a private subnet.
- C. In the route table for the private subnets, add a route to the NAT gateway.
- D. Add a NAT gateway to a public subnet. In the route table for the private subnets, add a route to the NAT gateway.
- E. Add two internet gateways to the VPC.
- F. In the route table for the private subnets and public subnets, add a route to each internet gateway.

Answer: C

NEW QUESTION 2

- (Exam Topic 1)

A company creates a new member account by using AWS Organizations. A SysOps administrator needs to add AWS Business Support to the new account. Which combination of steps must the SysOps administrator take to meet this requirement? (Select TWO.)

- A. Sign in to the new account by using 1AM credential.
- B. Change the support plan.
- C. Sign in to the new account by using root user credential.
- D. Change the support plan.
- E. Use the AWS Support API to change the support plan.
- F. Reset the password of the account root user.
- G. Create an IAM user that has administrator privileges in the new account.

Answer: BE

Explanation:

The best combination of steps to meet this requirement is to sign in to the new account by using root user credentials and change the support plan, and to create an IAM user that has administrator privileges in the new account.

Signing in to the new account by using root user credentials will allow the SysOps administrator to access the account and change the support plan to AWS Business Support. Additionally, creating an IAM user that has administrator privileges in the new account will ensure that the SysOps administrator has the necessary access to manage the account and make changes to the support plan if necessary.

Reference:

[1] https://docs.aws.amazon.com/organizations/latest/userguide/orgs_manage_accounts_access.html#orgs_ma

NEW QUESTION 3

- (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 4

- (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 5

- (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 6

- (Exam Topic 1)

A company wants to track its AWS costs in all member accounts that are part of an organization in AWS Organizations. Managers of the member accounts want to receive a notification when the estimated costs exceed a predetermined amount each month. The managers are unable to configure a billing alarm. The IAM permissions for all users are correct. What could be the cause of this issue?

- A. The management/payer account does not have billing alerts turned on.
- B. The company has not configured AWS Resource Access Manager (AWS RAM) to share billing information between the member accounts and the management/payer account.
- C. Amazon GuardDuty is turned on for all the accounts.
- D. The company has not configured an AWS Config rule to monitor billing.

Answer: B

NEW QUESTION 7

- (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 8

- (Exam Topic 1)

A company has deployed AWS Security Hub and AWS Config in a newly implemented organization in AWS Organizations. A SysOps administrator must implement a solution to restrict all member accounts in the organization from deploying Amazon EC2 resources in the ap-southeast-2 Region. The solution must be implemented from a single point and must govern all current and future accounts. The use of root credentials also must be restricted in member accounts. Which AWS feature should the SysOps administrator use to meet these requirements?

- A. AWS Config aggregator
- B. IAM user permissions boundaries
- C. AWS Organizations service control policies (SCPs)
- D. AWS Security Hub conformance packs

Answer: C

NEW QUESTION 9

- (Exam Topic 1)

A SysOps administrator recently configured Amazon S3 Cross-Region Replication on an S3 bucket. Which of the following does this feature replicate to the destination S3 bucket by default?

- A. Objects in the source S3 bucket for which the bucket owner does not have permissions
- B. Objects that are stored in S3 Glacier
- C. Objects that existed before replication was configured
- D. Object metadata

Answer: B

NEW QUESTION 10

- (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 10

- (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 12

- (Exam Topic 1)

A SysOps administrator is reviewing AWS Trusted Advisor recommendations. The SysOps administrator notices that all the application servers for a finance application are listed in the Low Utilization Amazon EC2 Instances check. The application runs on three instances across three Availability Zones. The SysOps administrator must reduce the cost of running the application without affecting the application's availability or design.

Which solution will meet these requirements?

- A. Reduce the number of application servers.
- B. Apply rightsizing recommendations from AWS Cost Explorer to reduce the instance size.
- C. Provision an Application Load Balancer in front of the instances.
- D. Scale up the instance size of the application servers.

Answer: C

NEW QUESTION 16

- (Exam Topic 1)

A company has an existing web application that runs on two Amazon EC2 instances behind an Application Load Balancer (ALB) across two Availability Zones. The application uses an Amazon RDS Multi-AZ DB Instance. Amazon Route 53 record sets route requests for dynamic content to the load balancer and requests for static content to an Amazon S3 bucket. Site visitors are reporting extremely long loading times.

Which actions should be taken to improve the performance of the website? (Select TWO.)

- A. Add Amazon CloudFront caching for static content
- B. Change the load balancer listener from HTTPS to TCP
- C. Enable Amazon Route 53 latency-based routing
- D. Implement Amazon EC2 Auto Scaling for the web servers

E. Move the static content from Amazon S3 to the web servers

Answer: AD

NEW QUESTION 17

- (Exam Topic 1)

A company wants to create an automated solution for all accounts managed by AWS Organizations to detect any security groups that use 0.0.0.0/0 as the source address for inbound traffic. The company also wants to automatically remediate any noncompliant security groups by restricting access to a specific CIDR block that corresponds with the company's intranet.

- A. Create an AWS Config rule to detect noncompliant security group
- B. Set up automatic remediation to change the 0.0.0.0/0 source address to the approved CIDR block.
- C. Create an IAM policy to deny the creation of security groups that have 0.0.0.0/0 as the source address. Attach this IAM policy to every user in the company.
- D. Create an AWS Lambda function to inspect new and existing security groups, check for a noncompliant 0.0.0.0/0 source address, and change the source address to the approved CIDR block.
- E. Create a service control policy (SCP) for the organizational unit (OU) to deny the creation of security groups that have the 0.0.0.0/0 source address.
- F. Set up automatic remediation to change the 0.0.0.0/0 source address to the approved CIDR block.

Answer: A

NEW QUESTION 21

- (Exam Topic 1)

A company is running an application on premises and wants to use AWS for data backup. All of the data must be available locally. The backup application can write only to block-based storage that is compatible with the Portable Operating System Interface (POSIX).

Which backup solution will meet these requirements?

- A. Configure the backup software to use Amazon S3 as the target for the data backups.
- B. Configure the backup software to use Amazon S3 Glacier as the target for the data backups.
- C. Use AWS Storage Gateway, and configure it to use gateway-cached volumes.
- D. Use AWS Storage Gateway, and configure it to use gateway-stored volumes.

Answer: D

Explanation:

<https://docs.aws.amazon.com/storagegateway/latest/userguide/StorageGatewayConcepts.html>

NEW QUESTION 26

- (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 account.
- F. Disable RI discount sharing in the management account.
- G. Purchase RIs in the management account.
- 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 28

- (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 Organizations and export the recommendations from AWS CloudTrail Insights.
- D. Run AWS Trusted Advisor and export the Lambda function recommendations.

Answer: B

NEW QUESTION 30

- (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 31

- (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 34

- (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 `StatusCheckFailedInstance` 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 37

- (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 40

- (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 42

- (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 47

- (Exam Topic 1)

A software company runs a workload on Amazon EC2 instances behind an Application Load Balancer (ALB). A SysOps administrator needs to define a custom health check for the EC2 instances. What is the MOST operationally efficient solution?

- A. Set up each EC2 Instance so that it writes its healthy/unhealthy status into a shared Amazon S3 bucket for the ALB to read.
- B. Configure the health check on the ALB and ensure that the HealthCheckPath setting is correct.
- C. Set up Amazon ElasticCache to track the EC2 instances as they scale in and out.
- D. Configure an Amazon API Gateway health check to ensure custom checks on each of the EC2 instances.

Answer: B

NEW QUESTION 52

- (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 57

- (Exam Topic 1)

A company has an AWS CloudFormation template that creates an Amazon S3 bucket. A user authenticates to the corporate AWS account with their Active Directory credentials and attempts to deploy the CloudFormation template. However, the stack creation fails.

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

- A. The user's IAM policy does not allow the cloudformation:CreateStack action.
- B. The user's IAM policy does not allow the cloudformation:CreateStackSet action.
- C. The user's IAM policy does not allow the s3:CreateBucket action.
- D. The user's IAM policy explicitly denies the s3:ListBucket action.
- E. The user's IAM policy explicitly denies the s3:PutObject action.

Answer: AC

NEW QUESTION 61

- (Exam Topic 1)

A SysOps administrator is responsible for a legacy, CPU-heavy application. The application can only be scaled vertically. Currently, the application is deployed on a single t2 large Amazon EC2 instance. The system is showing 90% CPU usage and significant performance latency after a few minutes.

What change should be made to alleviate the performance problem?

- A. Change the Amazon EBS volume to Provisioned IOPs
- B. Upgrade to a compute-optimized instance
- C. Add additional 12 large instances to the application
- D. Purchase Reserved Instances

Answer: B

NEW QUESTION 65

- (Exam Topic 1)

A company has a stateless application that is hosted on a fleet of 10 Amazon EC2 On-Demand Instances in an Auto Scaling group. A minimum of 6 instances are needed to meet service requirements.

Which action will maintain uptime for the application MOST cost-effectively?

- A. Use a Spot Fleet with an On-Demand capacity of 6 instances.
- B. Update the Auto Scaling group with a minimum of 6 On-Demand Instances and a maximum of 10 On-Demand Instances.
- C. Update the Auto Scaling group with a minimum of 1 On-Demand Instance and a maximum of 6 On-Demand Instances.
- D. Use a Spot Fleet with a target capacity of 6 instances.

Answer: A

NEW QUESTION 68

- (Exam Topic 1)

A SysOps administrator is troubleshooting an AWS CloudFormation template whereby multiple Amazon EC2 instances are being created. The template is working in us-east-1, but it is failing in us-west-2 with the error code:

```
AMI [ami-12345678] does not exist
```

How should the administrator ensure that the AWS CloudFormation template is working in every region?

- A. Copy the source region's Amazon Machine Image (AMI) to the destination region and assign it the same ID.
- B. Edit the AWS CloudFormation template to specify the region code as part of the fully qualified AMI ID.
- C. Edit the AWS CloudFormation template to offer a drop-down list of all AMIs to the user by using the `aws::EC2::Image::ImageId` control.
- D. Modify the AWS CloudFormation template by including the AMI IDs in the "Mappings" section.
- E. Refer to the proper mapping within the template for the proper AMI ID.

Answer: A

NEW QUESTION 72

- (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 activity.
- 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#AddingStopAction>

NEW QUESTION 74

- (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 metric.
- 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 metric.
- 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 79

- (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 80

- (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 82

- (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 86

- (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 88

- (Exam Topic 1)

A company hosts several write-intensive applications. These applications use a MySQL database that runs on a single Amazon EC2 instance. The company asks a SysOps administrator to implement a highly available database solution that is ideal for multi-tenant workloads. Which solution should the SysOps administrator implement to meet these requirements?

- A. Create a second EC2 instance for MySQL
- B. Configure the second instance to be a read replica.
- C. Migrate the database to an Amazon Aurora DB cluster
- D. Add an Aurora Replica.
- E. Migrate the database to an Amazon Aurora multi-master DB cluster.
- F. Migrate the database to an Amazon RDS for MySQL DB instance.

Answer: C

NEW QUESTION 90

- (Exam Topic 1)

A company's application currently uses an IAM role that allows all access to all AWS services. A SysOps administrator must ensure that the company's IAM policies allow only the permissions that the application requires.

How can the SysOps administrator create a policy to meet this requirement?

- A. Turn on AWS CloudTrail
- B. Generate a policy by using AWS Security Hub.
- C. Turn on Amazon EventBridge (Amazon CloudWatch Events). Generate a policy by using AWS Identity and Access Management Access Analyzer.
- D. Use the AWS CLI to run the get-generated-policy command in AWS Identity and Access Management Access Analyzer.
- E. Turn on AWS CloudTrail
- F. Generate a policy by using AWS Identity and Access Management Access Analyzer.

Answer: D

Explanation:

Generate a policy by using AWS Identity and Access Management Access Analyzer. AWS CloudTrail is a service that records all API calls made on your account. You can use this data to generate a policy with AWS Identity and Access Management Access Analyzer that only allows the permissions that the application requires. This will ensure that the application only has the necessary permissions and will protect the company from any unauthorized access.

<https://docs.aws.amazon.com/IAM/latest/UserGuide/what-is-access-analyzer.html#what-is-access-analyzer-poli>

NEW QUESTION 94

- (Exam Topic 1)

A Sysops administrator has created an Amazon EC2 instance using an AWS CloudFormation template in the us-east-1 Region. The administrator finds that this template has failed to create an EC2 instance in the us-west-2 Region. What is one cause for this failure?

- A. Resource tags defined in the CloudFormation template are specific to the us-east-1 Region.
- B. The Amazon Machine Image (AMI) ID referenced in the CloudFormation template could not be found in the us-west-2 Region.
- C. The cfn-init script did not run during resource provisioning in the us-west-2 Region.
- D. The IAM user was not created in the specified Region.

Answer: B

Explanation:

One possible cause for the failure of the CloudFormation template to create an EC2 instance in the us-west-2 Region is that the Amazon Machine Image (AMI) ID referenced in the template could not be found in the us-west-2 Region. This could be due to the fact that the AMI is not available in that region, or the credentials used to access the AMI were not configured properly. The other options (resource tags defined in the CloudFormation template are specific to the us-east-1 Region, the cfn-init script did not run during resource provisioning in the us-west-2 Region, and the IAM user was not created in the specified Region) are not valid causes for this failure.

NEW QUESTION 99

- (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 102

- (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 106

- (Exam Topic 1)

A SysOps administrator is maintaining a web application using an Amazon CloudFront web distribution, an Application Load Balancer (ALB), Amazon RDS, and Amazon EC2 in a VPC. All services have logging enabled. The administrator needs to investigate HTTP

Layer 7 status codes from the web application.

Which log sources contain the status codes? (Choose two.)

- A. VPC Flow Logs
- B. AWS CloudTrail logs
- C. ALB access logs
- D. CloudFront access logs
- E. RDS logs

Answer: CD

Explanation:

"C" because Elastic Load Balancing provides access logs that capture detailed information about requests sent to your load balancer

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

"D" because "you can configure CloudFront to create log files that contain detailed information about every user request that CloudFront receives"

<https://docs.aws.amazon.com/AmazonCloudFront/latest/DeveloperGuide/AccessLogs.html>

NEW QUESTION 107

- (Exam Topic 1)

A company stores critical data in Amazon S3 buckets. A SysOps administrator must build a solution to record all S3 API activity. Which action will meet this requirement?

- A. Configure S3 bucket metrics to record object access logs
- B. Create an AWS CloudTrail trail to log data events for all S3 objects
- C. Enable S3 server access logging for each S3 bucket
- D. Use AWS IAM Access Analyzer for Amazon S3 to store object access logs.

Answer: B

NEW QUESTION 109

- (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 110

- (Exam Topic 1)

An application runs on multiple Amazon EC2 instances in an Auto Scaling group. The Auto Scaling group is

configured to use the latest version of a launch template. A SysOps administrator must devise a solution that centrally manages the application logs and retains the logs for no more than 90 days.

Which solution will meet these requirements?

- A. Launch an Amazon Machine Image (AMI) that is preconfigured with the Amazon CloudWatch Logs agent to send logs to an Amazon S3 bucket. Apply a 90-day S3 Lifecycle policy on the S3 bucket to expire the application logs.
- B. Launch an Amazon Machine Image (AMI) that is preconfigured with the Amazon CloudWatch Logs agent to send logs to a log group. Create an Amazon EventBridge (Amazon CloudWatch Events) scheduled rule to perform an instance refresh every 90 days.
- C. Update the launch template user data to install and configure the Amazon CloudWatch Logs agent to send logs to a log group. Configure the retention period on the log group to be 90 days.
- D. Update the launch template user data to install and configure the Amazon CloudWatch Logs agent to send logs to a log group. Set the log rotation configuration of the EC2 instances to 90 days.

Answer: C

NEW QUESTION 112

- (Exam Topic 1)

A SysOps administrator must configure a resilient tier of Amazon EC2 instances for a high performance computing (HPC) application. The HPC application requires minimum latency between nodes.

Which actions should the SysOps administrator take to meet these requirements? (Select TWO.)

- A. Create an Amazon Elastic File System (Amazon EFS) file system. Mount the file system to the EC2 instances by using user data.
- B. Create a Multi-AZ Network Load Balancer in front of the EC2 instances.
- C. Place the EC2 instances in an Auto Scaling group within a single subnet.

- D. Launch the EC2 instances into a cluster placement group
- E. Launch the EC2 instances into a partition placement group

Answer: AD

NEW QUESTION 117

- (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 120

- (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 121

- (Exam Topic 1)

A company is storing media content in an Amazon S3 bucket and uses Amazon CloudFront to distribute the content to its users. Due to licensing terms, the company is not authorized to distribute the content in some countries. A SysOps administrator must restrict access to certain countries. What is the MOST operationally efficient solution that meets these requirements?

- A. Configure the S3 bucket policy to deny the GetObject operation based on the S3:LocationConstraint condition.
- B. Create a secondary origin access identity (OAI). Configure the S3 bucket policy to prevent access from unauthorized countries.
- C. Enable the geo restriction feature in the CloudFront distribution to prevent access from unauthorized countries.
- D. Update the application to generate signed CloudFront URLs only for IP addresses in authorized countries.

Answer: C

NEW QUESTION 124

- (Exam Topic 1)

A company's SysOps administrator regularly checks the AWS Personal Health Dashboard in each of the company's accounts. The accounts are part of an organization in AWS Organizations. The company recently added 10 more accounts to the organization. The SysOps administrator must consolidate the alerts from each account's Personal Health Dashboard.

Which solution will meet this requirement with the LEAST amount of effort?

- A. Enable organizational view in AWS Health.
- B. Configure the Personal Health Dashboard in each account to forward events to a central AWS CloudTrail log.
- C. Create an AWS Lambda function to query the AWS Health API and to write all events to an Amazon DynamoDB table.
- D. Use the AWS Health API to write events to an Amazon DynamoDB table.

Answer: A

Explanation:

Enabling the organizational view in AWS Health will allow the SysOps administrator to consolidate the alerts from each account's Personal Health Dashboard. It will also provide the administrator with a single view of all the accounts in the organization, allowing them to easily monitor the health of all the accounts in the organization.

Reference:

[1] <https://aws.amazon.com/premiumsupport/knowledge-center/organizational-view-health-dashboard/>

NEW QUESTION 127

- (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 131

- (Exam Topic 1)

A SysOps administrator is reviewing AWS Trusted Advisor warnings and encounters a warning for an S3 bucket policy that has open access permissions. While discussing the issue with the bucket owner, the administrator realizes the S3 bucket is an origin for an Amazon CloudFront web distribution.

Which action should the administrator take to ensure that users access objects in Amazon S3 by using only CloudFront URLs?

- A. Encrypt the S3 bucket content with Server-Side Encryption with Amazon S3-Managed Keys (SSE-S3).
- B. Create an origin access identity and grant it permissions to read objects in the S3 bucket.
- C. Assign an IAM user to the CloudFront distribution and grant the user permissions in the S3 bucket policy.
- D. Assign an IAM role to the CloudFront distribution and grant the role permissions in the S3 bucket policy.

Answer: B

Explanation:

<https://docs.aws.amazon.com/AmazonCloudFront/latest/DeveloperGuide/private-content-restricting-access-to-s3>

NEW QUESTION 135

- (Exam Topic 1)

A company is creating a new multi-account architecture. A SysOps administrator must implement a login solution to centrally manage user access and permissions across all AWS accounts. The solution must be integrated with AWS Organizations and must be connected to a third-party Security Assertion Markup Language (SAML) 2.0 identity provider (IdP).

What should the SysOps administrator do to meet these requirements?

- A. Configure an Amazon Cognito user pool
- B. Integrate the user pool with the third-party IdP.
- C. Enable and configure AWS Single Sign-On with the third-party IdP.
- D. Federate the third-party IdP with AWS Identity and Access Management (IAM) for each AWS account in the organization.
- E. Integrate the third-party IdP directly with AWS Organizations.

Answer: A

NEW QUESTION 137

- (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 140

- (Exam Topic 1)

A company is implementing a monitoring solution that is based on machine learning. The monitoring solution consumes Amazon EventBridge (Amazon CloudWatch Events) events that are generated by Amazon EC2 Auto Scaling. The monitoring solution provides detection of anomalous behavior such as unanticipated scaling events and is configured as an EventBridge (CloudWatch Events) API destination.

During initial testing, the company discovers that the monitoring solution is not receiving events. However, Amazon CloudWatch is showing that the EventBridge (CloudWatch Events) rule is being invoked. A SysOps administrator must implement a solution to retrieve client error details to help resolve this issue.

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

- A. Create an EventBridge (CloudWatch Events) archive for the event pattern to replay the event
- B. Increase the logging on the monitoring solution
- C. Use replay to invoke the monitoring solution
- D. Examine the error details.

- E. Add an Amazon Simple Queue Service (Amazon SQS) standard queue as a dead-letter queue for the target.
- F. Process the messages in the dead-letter queue to retrieve error details.
- G. Create a second EventBridge (CloudWatch Events) rule for the same event pattern to target an AWS Lambda function.
- H. Configure the Lambda function to invoke the monitoring solution and to record the results to Amazon CloudWatch Log.
- I. Examine the errors in the logs.
- J. Configure the EventBridge (CloudWatch Events) rule to send error messages to an Amazon Simple Notification Service (Amazon SNS) topic.

Answer: A

Explanation:

"In EventBridge, you can create an archive of events so that you can easily replay them at a later time. For example, you might want to replay events to recover from errors or to validate new functionality in your application." <https://docs.aws.amazon.com/eventbridge/latest/userguide/eb-archive.html>

NEW QUESTION 144

- (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 hour.
- B. Purchase a Compute Savings Plan.
- C. Establish the compute expense by the month.
- 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 145

- (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 149

- (Exam Topic 1)

A company is using an AWS KMS customer master key (CMK) with imported key material. The company references the CMK by its alias in the Java application to encrypt data. The CMK must be rotated every 6 months.

What is the process to rotate the key?

- A. Enable automatic key rotation for the CMK and specify a period of 6 months.
- B. Create a new CMK with new imported material, and update the key alias to point to the new CMK.
- C. Delete the current key material, and import new material into the existing CMK.
- D. Import a copy of the existing key material into a new CMK as a backup, and set the rotation schedule for 6 months.

Answer: B

NEW QUESTION 151

- (Exam Topic 1)

A SysOps administrator is investigating why a user has been unable to use RDP to connect over the internet from their home computer to a bastion server running on an Amazon EC2 Windows instance.

Which of the following are possible causes of this issue? (Choose two.)

- A. A network ACL associated with the bastion's subnet is blocking the network traffic.
- B. The instance does not have a private IP address.
- C. The route table associated with the bastion's subnet does not have a route to the internet gateway.
- D. The security group for the instance does not have an inbound rule on port 22.
- E. The security group for the instance does not have an outbound rule on port 3389.

Answer: AC

NEW QUESTION 153

- (Exam Topic 1)

A SysOps administrator is helping a development team deploy an application to AWS. The AWS CloudFormation template includes an Amazon Linux EC2 Instance, an Amazon Aurora DB cluster, and a hard-coded database password that must be rotated every 90 days.

What is the MOST secure way to manage the database password?

- A. Use the AWS SecretsManager Secret resource with the GenerateSecretString property to automatically generate a password. Use the AWS SecretsManager RotationSchedule resource to define a rotation schedule for the password. Configure the application to retrieve the secret from AWS Secrets Manager and access the database.

database

- B. Use the AWS SecretsManager Secret resource with the SecretString property. Accept a password as a CloudFormation parameter. Use the AllowedPattern property of the CloudFormation parameter to require a minimum length, uppercase and lowercase letters and special characters. Configure the application to retrieve the secret from AWS Secrets Manager to access the database.
- C. Use the AWS SSM Parameter resource. Accept input as a CloudFormation parameter to store the parameter as a secure string. Configure the application to retrieve the parameter from AWS Systems Manager Parameter Store to access the database.
- D. Use the AWS SSM Parameter resource. Accept input as a CloudFormation parameter to store the parameter as a string. Configure the application to retrieve the parameter from AWS Systems Manager Parameter Store to access the database.

Answer: A

NEW QUESTION 155

- (Exam Topic 1)

A company is using Amazon Elastic Container Service (Amazon ECS) to run a containerized application on Amazon EC2 instances. A SysOps administrator needs to monitor only traffic flows between the ECS tasks.

Which combination of steps should the SysOps administrator take to meet this requirement? (Select TWO.)

- A. Configure Amazon CloudWatch Logs on the elastic network interface of each task.
- B. Configure VPC Flow Logs on the elastic network interface of each task.
- C. Specify the awsvpc network mode in the task definition.
- D. Specify the bridge network mode in the task definition.
- E. Specify the host network mode in the task definition.

Answer: AE

NEW QUESTION 156

- (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 site.
- B. Validate that the certificate has not expired.
- C. Replace the certificate if necessary.
- D. Examine the hostname on the certificate on the origin site.
- E. Validate that the hostname matches one of the hostnames on the CloudFront distribution.
- F. Replace the certificate if necessary.
- G. Examine the firewall rules that are associated with the origin server.
- H. Validate that port 443 is open for inbound traffic from the internet.
- I. Create an inbound rule if necessary.
- J. Examine the network ACL rules that are associated with the CloudFront distribution.
- K. Validate that port 443 is open for outbound traffic to the origin server.
- 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 158

- (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 161

- (Exam Topic 1)

A company has a web application with a database tier that consists of an Amazon EC2 instance that runs MySQL. A SysOps administrator needs to minimize potential data loss and the time that is required to recover in the event of a database failure.

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

- A. Create an Amazon CloudWatch alarm for the StatusCheckFailed_System metric to invoke an AWS Lambda function that stops and starts the EC2 instance.
- B. Create an Amazon RDS for MySQL Multi-AZ DB instance.

- C. Use a MySQL native backup that is stored in Amazon S3 to restore the data to the new databas
- D. Update the connection string in the web application.
- E. Create an Amazon RDS for MySQL Single-AZ DB instance with a read replic
- F. Use a MySQL native backup that is stored in Amazon S3 to restore the data to the new databas
- G. Update the connection string in the web application.
- H. Use Amazon Data Lifecycle Manager (Amazon DLM) to take a snapshot of the Amazon Elastic Block Store (Amazon EBS) volume every hou
- I. In the event of an EC2 instance failure, restore the EBS volume from a snapshot.

Answer: D

NEW QUESTION 164

- (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 167

- (Exam Topic 1)

A company has a stateless application that runs on four Amazon EC2 instances. The application requires tour instances at all times to support all traffic. A SysOps administrator must design a highly available, fault-tolerant architecture that continually supports all traffic if one Availability Zone becomes unavailable.

Which configuration meets these requirements?

- A. Deploy two Auto Scaling groups in two Availability Zones with a minimum capacity of two instances in each group.
- B. Deploy an Auto Scaling group across two Availability Zones with a minimum capacity of four instances.
- C. Deploy an Auto Scaling group across three Availability Zones with a minimum capacity of four instances.
- D. Deploy an Auto Scaling group across three Availability Zones with a minimum capacity of six instances.

Answer: C

NEW QUESTION 172

- (Exam Topic 1)

A company is storing backups in an Amazon S3 bucket. The backups must not be deleted for at least 3 months after the backups are created.

What should a SysOps administrator do to meet this requirement?

- A. Configure an IAM policy that denies the s3:DeleteObject action for all user
- B. Three months after an object is written, remove the policy.
- C. Enable S3 Object Lock on a new S3 bucket in compliance mod
- D. Place all backups in the new S3 bucket with a retention period of 3 months.
- E. Enable S3 Versioning on the existing S3 bucke
- F. Configure S3 Lifecycle rules to protect the backups.
- G. Enable S3 Object Lock on a new S3 bucket in governance mod
- H. Place all backups in the new S3 bucket with a retention period of 3 months.

Answer: D

Explanation:

To meet the requirements of the workload, a SysOps administrator should enable S3 Object Lock on a new S3 bucket in governance mode and place all backups in the new S3 bucket with a retention period of 3 months.

This will ensure that the backups are not deleted for at least 3 months after they are created. The other solutions (configuring an IAM policy that denies the s3:DeleteObject action for all users, enabling S3 Object Lock on a new S3 bucket in compliance mode, or enabling S3 Versioning on the existing S3 bucket and configuring S3 Lifecycle rules to protect the backups) will not meet the requirements, as they do not provide a way to ensure that the backups are not deleted for at least 3 months after they are created.

NEW QUESTION 176

- (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 181

- (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 186

- (Exam Topic 1)

A large company is using AWS Organizations to manage hundreds of AWS accounts across multiple AWS Regions. The company has turned on AWS Config throughout the organization.

The company requires all Amazon S3 buckets to block public read access. A SysOps administrator must generate a monthly report that shows all the S3 buckets and whether they comply with this requirement.

Which combination of steps should the SysOps administrator take to collect this data? (Select TWO).

- A. Create an AWS Config aggregator in an aggregator account
- B. Use the organization as the source. Retrieve the compliance data from the aggregator.
- C. Create an AWS Config aggregator in each account
- D. Use an S3 bucket in an aggregator account as the destination
- E. Retrieve the compliance data from the S3 bucket
- F. Edit the AWS Config policy in AWS Organization
- G. Use the organization's management account to turn on the s3-bucket-public-read-prohibited rule for the entire organization.
- H. Use the AWS Config compliance report from the organization's management account
- I. Filter the results by resource, and select Amazon S3.
- J. Use the AWS Config API to apply the s3-bucket-public-read-prohibited rule in all accounts for all available Regions.

Answer: CD

NEW QUESTION 188

- (Exam Topic 1)

A web application runs on Amazon EC2 instances behind an Application Load Balancer (ALB). The instances run in an Auto Scaling group across multiple Availability Zones. A SysOps administrator notices that some of these EC2 instances show up as healthy in the Auto Scaling group but show up as unhealthy in the ALB target group.

What is a possible reason for this issue?

- A. Security groups are not allowing traffic between the ALB and the failing EC2 instances
- B. The Auto Scaling group health check is configured for EC2 status checks
- C. The EC2 instances are failing to launch and failing EC2 status checks.
- D. The target group health check is configured with an incorrect port or path

Answer: D

NEW QUESTION 190

- (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

NEW QUESTION 193

- (Exam Topic 1)

A company uses an Amazon CloudFront distribution to deliver its website. Traffic logs for the website must be centrally stored, and all data must be encrypted at rest.

Which solution will meet these requirements?

- A. Create an Amazon OpenSearch Service (Amazon Elasticsearch Service) domain with internet access and server-side encryption that uses the default AWS managed key
- B. Configure CloudFront to use the Amazon OpenSearch Service (Amazon Elasticsearch Service) domain as a log destination.
- C. Create an Amazon OpenSearch Service (Amazon Elasticsearch Service) domain with VPC access and server-side encryption that uses AES-256. Configure CloudFront to use the Amazon OpenSearch Service (Amazon Elasticsearch Service) domain as a log destination.
- D. Create an Amazon S3 bucket that is configured with default server-side encryption that uses AES-256. Configure CloudFront to use the S3 bucket as a log destination.
- E. Create an Amazon S3 bucket that is configured with no default encryption
- F. Enable encryption in the CloudFront distribution, and use the S3 bucket as a log destination.

Answer: C

NEW QUESTION 196

- (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 198

- (Exam Topic 1)

A new website will run on Amazon EC2 instances behind an Application Load Balancer. Amazon Route 53 will be used to manage DNS records. What type of record should be set in Route 53 to point the website's apex domain name (for example company.com) to the Application Load Balancer?

- A. CNAME
- B. SOA
- C. TXT
- D. ALIAS

Answer: D

NEW QUESTION 200

- (Exam Topic 1)

A SysOps administrator has launched a large general purpose Amazon EC2 instance to regularly process large data files. The instance has an attached 1 TB General Purpose SSD (gp2) Amazon Elastic Block Store (Amazon EBS) volume. The instance also is EBS-optimized. To save costs, the SysOps administrator stops the instance each evening and restarts the instance each morning.

When data processing is active, Amazon CloudWatch metrics on the instance show a consistent 3,000 VolumeReadOps. The SysOps administrator must improve the I/O performance while ensuring data integrity.

Which action will meet these requirements?

- A. Change the instance type to a large, burstable, general purpose instance.
- B. Change the instance type to an extra large general purpose instance.
- C. Increase the EBS volume to a 2 TB General Purpose SSD (gp2) volume.
- D. Move the data that resides on the EBS volume to the instance store.

Answer: C

NEW QUESTION 202

- (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 206

- (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 server
- B. Associate the records with the Route 53 HTTP health check.
- C. Create an A record for each server
- 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 yes
- 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 yes
- H. Associate the records with the Route 53 TCP health check.

Answer: A

NEW QUESTION 207

- (Exam Topic 1)

A compliance team requires all administrator passwords for Amazon RDS DB instances to be changed at least annually. Which solution meets this requirement in the MOST operationally efficient manner?

- A. Store the database credentials in AWS Secrets Manager Configure automate rotation for the secret every 365 days
- B. Store the database credentials as a parameter in the RDS parameter group Create a database trigger to rotate the password every 365 days
- C. Store the database credentials in a private Amazon S3 bucket Schedule an AWS Lambda function to generate a new set of credentials every 365 days
- D. Store the database credentials in AWS Systems Manager Parameter Store as a secure string parameter Configure automatic rotation for the parameter every 365 days

Answer: A

NEW QUESTION 212

- (Exam Topic 1)

A company hosts its website in the us-east-1 Region. The company is preparing to deploy its website into the eu-central-1 Region. Website visitors who are located in Europe should access the website that is hosted in eu-central-1. All other visitors access the website that is hosted in us-east-1. The company uses Amazon Route 53 to manage the website's DNS records.

Which routing policy should a SysOps administrator apply to the Route 53 record set to meet these requirements?

- A. Geolocation routing policy
- B. Geoproximity routing policy
- C. Latency routing policy
- D. Multivalue answer routing policy

Answer: A

Explanation:

geolocation "Geolocation routing lets you choose the resources that serve your traffic based on the geographic location of your users, meaning the location that DNS queries originate from. For example, you might want all queries from Europe to be routed to an ELB load balancer in the Frankfurt region."

Could be confused with geoproximity - "Geoproximity routing lets Amazon Route 53 route traffic to your resources based on the geographic location of your users and your resources. You can also optionally choose to route more traffic or less to a given resource by specifying a value, known as a bias. A bias expands or shrinks the size of the geographic region from which traffic is routed to a resource" the use case is not needed as per question.

<https://docs.aws.amazon.com/Route53/latest/DeveloperGuide/routing-policy.html>

NEW QUESTION 216

- (Exam Topic 1)

A company monitors its account activity using AWS CloudTrail. and is concerned that some log files are being tampered with after the logs have been delivered to the account's Amazon S3 bucket.

Moving forward, how can the SysOps administrator confirm that the log files have not been modified after being delivered to the S3 bucket?

- A. Stream the CloudTrail logs to Amazon CloudWatch Logs to store logs at a secondary location.
- B. Enable log file integrity validation and use digest files to verify the hash value of the log file.
- C. Replicate the S3 log bucket across regions, and encrypt log files with S3 managed keys.
- D. Enable S3 server access logging to track requests made to the log bucket for security audits.

Answer: B

Explanation:

When you enable log file integrity validation, CloudTrail creates a hash for every log file that it delivers. Every hour, CloudTrail also creates and delivers a file that references the log files for the last hour and contains a hash of each. This file is called a digest file. CloudTrail signs each digest file using the private key of a public and private key pair. After delivery, you can use the public key to validate the digest file. CloudTrail uses different key pairs for each AWS region

<https://docs.aws.amazon.com/awscloudtrail/latest/userguide/cloudtrail-log-file-validation-intro.html>

NEW QUESTION 220

- (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 225

- (Exam Topic 1)

A team of On-call engineers frequently needs to connect to Amazon EC2 Instances In a private subnet to troubleshoot and run commands. The Instances use either the latest AWS-provided Windows Amazon Machine Images (AMIs) or Amazon Linux AMIs.

The team has an existing IAM role for authorization. A SysOps administrator must provide the team with access to the Instances by granting IAM permissions to this Which solution will meet this requirement?

- A. Add a statement to the IAM role policy to allow the ssm:StartSession action on the instance
- B. Instruct the team to use AWS Systems Manager Session Manager to connect to the Instances by using the assumed IAM role.
- C. Associate an Elastic IP address and a security group with each instanc
- D. Add the engineers' IP addresses to the security group inbound rule
- E. Add a statement to the IAM role policy to allow the ec2:AuthorizeSecurityGroupIngress action so that the team can connect to the Instances.
- F. Create a bastion host with an EC2 Instance, and associate the bastion host with the VP
- G. Add a statement to the IAM role policy to allow the ec2:CreateVpnConnection action on the bastion hos
- H. Instruct the team to use the bastion host endpoint to connect to the instances.D Create an internet-facing Network Load Balance
- I. Use two listener
- J. Forward port 22 to a target group of Linux instance

- K. Forward port 3389 to a target group of Windows Instance
- L. Add a statement to the IAM role policy to allow the ec2:CreateRoute action so that the team can connect to the Instances.

Answer: A

NEW QUESTION 226

- (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 227

- (Exam Topic 1)

A SysOps administrator created an AWS CloudFormation template that provisions Amazon EC2 instances, an Elastic Load Balancer (ELB), and an Amazon RDS DB instance. During stack creation, the creation of the EC2 instances and the creation of the ELB are successful. However, the creation of the DB instance fails. What is the default behavior of CloudFormation in this scenario?

- A. CloudFormation will roll back the stack and delete the stack.
- B. CloudFormation will roll back the stack but will not delete the stack.
- C. CloudFormation will prompt the user to roll back the stack or continue.
- D. CloudFormation will successfully complete the stack but will report a failed status for the DB instance.

Answer: C

NEW QUESTION 231

- (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 235

- (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

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 236

- (Exam Topic 1)

A company is running a serverless application on AWS Lambda. The application stores data in an Amazon RDS for MySQL DB instance. Usage has steadily increased and recently there have been numerous "too many connections" errors when the Lambda function attempts to connect to the database. The company already has configured the database to use the maximum max_connections value that is possible.

What should a SysOps administrator do to resolve these errors'?

- A. Create a read replica of the database Use Amazon Route 53 to create a weighted DNS record that contains both databases
- B. Use Amazon RDS Proxy to create a proxy Update the connection string in the Lambda function
- C. Increase the value in the max_connect_errors parameter in the parameter group that the database uses
- D. Update the Lambda function's reserved concurrency to a higher value

Answer: B

Explanation:

<https://aws.amazon.com/blogs/compute/using-amazon-rds-proxy-with-aws-lambda/>

RDS Proxy acts as an intermediary between your application and an RDS database. RDS Proxy establishes and manages the necessary connection pools to your database so that your application creates fewer database connections. Your Lambda functions interact with RDS Proxy instead of your database instance. It handles the connection pooling necessary for scaling many simultaneous connections created by concurrent Lambda functions. This allows your Lambda applications to reuse existing connections, rather than creating new connections for every function invocation.

Check "Database proxy for Amazon RDS" section in the link to see how RDS proxy help Lambda handle huge connections to RDS MySQL

<https://aws.amazon.com/blogs/compute/using-amazon-rds-proxy-with-aws-lambda/>

NEW QUESTION 238

- (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 PasswordRotat
- 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 require
- 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 databas
- H. Create a Secrets Manager secret, and select the database so that Secrets Manager will use a Lambda function to update the database password automaticall
- I. Specify an automatic rotation schedule of 30 day
- 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 databas
- L. Create a new Lambda function called PasswordRotat
- 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 Stor
- 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 242

- (Exam Topic 1)

A company's SysOps administrator deploys a public Network Load Balancer (NLB) in front of the company's web application. The web application does not use any Elastic IP addresses. Users must access the web application by using the company's domain name. The SysOps administrator needs to configure Amazon Route 53 to route traffic to the NLB.

Which solution will meet these requirements MOST cost-effectively?

- A. Create a Route 53 AAAA record for the NLB.
- B. Create a Route 53 alias record for the NLB.
- C. Create a Route 53 CAA record for the NLB.
- D. Create a Route 53 CNAME record for the NLB.

Answer: B

NEW QUESTION 245

- (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 247

- (Exam Topic 1)

A company has a new requirement stating that all resources in AWS must be tagged according to a set policy. Which AWS service should be used to enforce and continually identify all resources that are not in compliance with the policy?

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

Answer: C

NEW QUESTION 251

- (Exam Topic 1)

A company needs to view a list of security groups that are open to the internet on port 3389. What should a SysOps administrator do to meet this requirement?

- A. Configure Amazon GuardDuty to scan security groups and report unrestricted access on port 3389.
- B. Configure a service control policy (SCP) to identify security groups that allow unrestricted access on port 3389.
- C. Use AWS Identity and Access Management Access Analyzer to find any instances that have unrestricted access on port 3389.
- D. Use AWS Trusted Advisor to find security groups that allow unrestricted access on port 3389

Answer: D

NEW QUESTION 256

- (Exam Topic 1)

A company has a new requirement stating that all resources in AWS must be tagged according to a set policy. Which AWS service should be used to enforce and continually identify all resources that are not in compliance with the policy?

- A. AWS CloudTrail
- B. Amazon Inspector
- C. AWSConfig
- D. AWS Systems Manager

Answer: C

NEW QUESTION 258

- (Exam Topic 1)

A SysOps administrator has used AWS CloudFormation to deploy a serverless application into a production VPC. The application consists of an AWS Lambda function, an Amazon DynamoDB table, and an Amazon API Gateway API. The SysOps administrator must delete the AWS CloudFormation stack without deleting the DynamoDB table.

Which action should the SysOps administrator take before deleting the AWS CloudFormation stack?

- A. Add a Retain deletion policy to the DynamoDB resource in the AWS CloudFormation stack
- B. Add a Snapshot deletion policy to the DynamoDB resource in the AWS CloudFormation stack.
- C. Enable termination protection on the AWS CloudFormation stack.
- D. Update the application's IAM policy with a Deny statement for the dynamodb:DeleteTable action.

Answer: A

NEW QUESTION 260

- (Exam Topic 1)

A software development company has multiple developers who work on the same product. Each developer must have their own development environment, and these development environments must be identical. Each development environment consists of Amazon EC2 instances and an Amazon RDS DB instance. The development environments should be created only when necessary, and they must be terminated each night to minimize costs.

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

- A. Provide developers with access to the same AWS CloudFormation template so that they can provision their development environment when necessary
- B. Schedule a nightly cron job on each development instance to stop all running processes to reduce CPU utilization to nearly zero.
- C. Provide developers with access to the same AWS CloudFormation template so that they can provision their development environment when necessary
- D. Schedule a nightly Amazon EventBridge (Amazon CloudWatch Events) rule to invoke an AWS Lambda function to delete the AWS CloudFormation stacks.
- E. Provide developers with CLI commands so that they can provision their own development environment when necessary
- F. Schedule a nightly Amazon EventBridge (Amazon CloudWatch Events) rule to invoke an AWS Lambda function to terminate all EC2 instances and the DB instance.
- G. Provide developers with CLI commands so that they can provision their own development environment when necessary
- H. Schedule a nightly Amazon EventBridge (Amazon CloudWatch Events) rule to cause AWS CloudFormation to delete all of the development environment resources.

Answer: B

NEW QUESTION 265

- (Exam Topic 1)

A company hosts a web portal on Amazon EC2 instances. The web portal uses an Elastic Load Balancer (ELB) and Amazon Route 53 for its public DNS service. The ELB and the EC2 instances are deployed by way of a single AWS CloudFormation stack in the us-east-1 Region. The web portal must be highly available across multiple Regions.

Which configuration will meet these requirements?

- A. Deploy a copy of the stack in the us-west-2 Region
- B. Create a single start of authority (SOA) record in Route 53 that includes the IP address from each EL
- C. Configure the SOA record with health check
- D. Use the ELB in us-east-1 as the primary record and the ELB in us-west-2 as the secondary record.
- E. Deploy a copy of the stack in the us-west-2 Region
- F. Create an additional A record in Route 53 that includes the ELB in us-west-2 as an alias target
- G. Configure the A records with a failover routing policy and health check
- H. Use the ELB in us-east-1 as the primary record and the ELB in us-west-2 as the secondary record.
- I. Deploy a new group of EC2 instances in the us-west-2 Region
- J. Associate the new EC2 instances with the existing ELB, and configure load balancer health checks on all EC2 instance
- K. Configure the ELB to update Route 53 when EC2 instances in us-west-2 fail health checks.
- L. Deploy a new group of EC2 instances in the us-west-2 Region
- M. Configure EC2 health checks on all EC2 instances in each Region
- N. Configure a peering connection between the VPC
- O. Use the VPC in us-east-1 as the primary record and the VPC in us-west-2 as the secondary record.

Answer: B

Explanation:

When you create a hosted zone, Route 53 automatically creates a name server (NS) record and a start of authority (SOA) record for the zone.

<https://docs.aws.amazon.com/Route53/latest/DeveloperGuide/migrate-dns-domain-in-use.html#migrate-dns-crea>

https://en.wikipedia.org/wiki/SOA_record

NEW QUESTION 267

- (Exam Topic 1)

A company has a VPC with public and private subnets. An Amazon EC2 based application resides in the private subnets and needs to process raw .csv files stored in an Amazon S3 bucket. A SysOps administrator has set up the correct IAM role with the required permissions for the application to access the S3 bucket, but the application is unable to communicate with the S3 bucket.

Which action will solve this problem while adhering to least privilege access?

- A. Add a bucket policy to the S3 bucket permitting access from the IAM role.
- B. Attach an S3 gateway endpoint to the VP
- C. Configure the route table for the private subnet.
- D. Configure the route table to allow the instances on the private subnet access through the internet gateway.
- E. Create a NAT gateway in a private subnet and configure the route table for the private subnets.

Answer: B

Explanation:

Technology to use is a VPC endpoint - "A VPC endpoint enables private connections between your VPC and supported AWS services and VPC endpoint services powered by AWS PrivateLink. AWS PrivateLink is a technology that enables you to privately access services by using private IP addresses. Traffic between your VPC and the other service does not leave the Amazon network." S3 is an example of a gateway endpoint. We want to see services in AWS while not leaving the VPC.

NEW QUESTION 268

- (Exam Topic 1)

A company is testing Amazon Elasticsearch Service (Amazon ES) as a solution for analyzing system logs from a fleet of Amazon EC2 instances. During the test phase, the domain operates on a single-node cluster. A SysOps administrator needs to transition the test domain into a highly available production-grade deployment.

Which Amazon ES configuration should the SysOps administrator use to meet this requirement?

- A. Use a cluster of four data nodes across two AWS Region
- B. Deploy four dedicated master nodes in each Region.
- C. Use a cluster of six data nodes across three Availability Zone
- D. Use three dedicated master nodes.
- E. Use a cluster of six data nodes across three Availability Zone
- F. Use six dedicated master nodes.
- G. Use a cluster of eight data nodes across two Availability Zone
- H. Deploy four master nodes in a failover AWS Region.

Answer: B

NEW QUESTION 272

- (Exam Topic 1)

A company's AWS Lambda function is experiencing performance issues. The Lambda function performs many CPU-intensive operations. The Lambda function is not running fast enough and is creating bottlenecks in the system.

What should a SysOps administrator do to resolve this issue?

- A. In the CPU launch options for the Lambda function, activate hyperthreading.
- B. Turn off the AWS managed encryption.
- C. Increase the amount of memory for the Lambda function.
- D. Load the required code into a custom layer.

Answer: C

Explanation:

Increasing the amount of memory for the Lambda function will help to improve the performance of the function. This is because the Lambda function is CPU-intensive and increasing the memory will give it access to more CPU resources and help it run faster. The other options (activating hyperthreading in the CPU launch options for the Lambda function, turning off the AWS managed encryption, and loading the required code into a custom layer) will not help to improve the performance of the Lambda function and are not the correct solutions for this issue.

<https://docs.aws.amazon.com/lambda/latest/dg/configuration-function-common.html#configuration-memory-con>

NEW QUESTION 277

- (Exam Topic 1)

A SysOps administrator is notified that an Amazon EC2 instance has stopped responding. The AWS Management Console indicates that the system status checks are failing. What should the administrator do first to resolve this issue?

- A. Reboot the EC2 instance so it can be launched on a new host
- B. Stop and then start the EC2 instance so that it can be launched on a new host
- C. Terminate the EC2 instance and relaunch it
- D. View the AWS CloudTrail log to investigate what changed on the EC2 instance

Answer: B

Explanation:

<https://aws.amazon.com/premiumsupport/knowledge-center/ec2-windows-system-status-check-fail/>

NEW QUESTION 282

- (Exam Topic 1)

A SysOps administrator uses AWS Systems Manager Session Manager to connect to instances. After the SysOps administrator launches a new Amazon EC2 instance, the EC2 instance does not appear in the Session Manager list of systems that are available for connection. The SysOps administrator verifies that Systems Manager Agent is installed, updated, and running on the EC2 instance. What is the reason for this issue?

- A. The SysOps administrator does not have access to the key pair that is required for connection.
- B. The SysOps administrator has not attached a security group to the EC2 instance to allow SSH on port 22.
- C. The EC2 instance does not have an attached IAM role that allows Session Manager to connect to the EC2 instance.
- D. The EC2 instance ID has not been entered into the Session Manager configuration.

Answer: C

NEW QUESTION 283

- (Exam Topic 1)

A company has an organization in AWS Organizations. The company uses shared VPCs to provide networking resources across accounts. A SysOps administrator has been able to successfully launch and manage Amazon EC2 instances in a participant account. However, the SysOps administrator is now receiving an InstanceLimitExceeded error when the SysOps administrator tries to launch a new EC2 instance. What should the SysOps administrator do to resolve this error?

- A. Request an instance quota increase from the account that owns the VPC.
- B. Launch additional EC2 instances in a different AWS Region.
- C. Request an instance quota increase from the participant account.
- D. Launch additional EC2 instances by using a different Amazon Machine image (AMI).

Answer: A

NEW QUESTION 284

- (Exam Topic 1)

An errant process is known to use an entire processor and run at 100%. A SysOps administrator wants to automate restarting the instance once the problem occurs for more than 2 minutes. How can this be accomplished?

- A. Create an Amazon CloudWatch alarm for the Amazon EC2 instance with basic monitoring.
- B. Enable an action to restart the instance.
- C. Create a CloudWatch alarm for the EC2 instance with detailed monitoring.
- D. Enable an action to restart the instance.
- E. Create an AWS Lambda function to restart the EC2 instance, triggered on a scheduled basis every 2 minutes.
- F. Create a Lambda function to restart the EC2 instance, triggered by EC2 health checks.

Answer: B

NEW QUESTION 285

- (Exam Topic 1)

A company plans to run a public web application on Amazon EC2 instances behind an Elastic Load Balancer (ELB). The company's security team wants to protect the website by using AWS Certificate Manager (ACM) certificates. The ELB must automatically redirect any HTTP requests to HTTPS. Which solution will meet these requirements?

- A. Create an Application Load Balancer that has one HTTPS listener on port 80. Attach an SSL/TLS certificate to listener port 80. Create a rule to redirect requests from HTTP to HTTPS.
- B. Create an Application Load Balancer that has one HTTP listener on port 80 and one HTTPS protocol listener on port 443. Attach an SSL/TLS certificate to listener port 443. Create a rule to redirect requests from port 80 to port 443.
- C. Create an Application Load Balancer that has two TCP listeners on port 80 and port 443. Attach an SSL/TLS certificate to listener port 443. Create a rule to redirect requests from port 80 to port 443.
- D. Create a Network Load Balancer that has two TCP listeners on port 80 and port 443. Attach an SSL/TLS certificate to listener port 443. Create a rule to redirect

requests from port 80 to port 443

Answer: B

NEW QUESTION 288

- (Exam Topic 1)

A company has a memory-intensive application that runs on a fleet of Amazon EC2 instances behind an Elastic Load Balancer (ELB). The instances run in an Auto Scaling group. A Sysops administrator must ensure that the application can scale based on the number of users that connect to the application. Which solution will meet these requirements?

- A. Create a scaling policy that will scale the application based on the ActiveConnectionCount Amazon CloudWatch metric that is generated from the ELB.
- B. Create a scaling policy that will scale the application based on the mem used Amazon CloudWatch metric that is generated from the ELB.
- C. Create a scheduled scaling policy to increase the number of EC2 instances in the Auto Scaling group to support additional connections.
- D. Create and deploy a script on the ELB to expose the number of connected users as a custom Amazon CloudWatch metri
- E. Create a scaling policy that uses the metric.

Answer: D

Explanation:

This solution will allow the application to scale based on the number of users that connect to the application. The other solutions (creating a scaling policy that uses the ActiveConnectionCount Amazon CloudWatch metric generated from the ELB, creating a scaling policy that uses the mem used Amazon CloudWatch metric generated from the ELB, or creating a scheduled scaling policy to increase the number of EC2 instances in the Auto Scaling group to support additional connections) will not meet the requirements, as they do not allow the application to scale based on the number of users that connect to the application.

NEW QUESTION 291

- (Exam Topic 1)

A company has an Auto Scaling group of Amazon EC2 instances that scale based on average CPU utilization. The Auto Scaling group events log indicates an InsufficientInstanceCapacity error.

Which actions should a SysOps administrator take to remediate this issue? (Select TWO.

- A. Change the instance type that the company is using.
- B. Configure the Auto Scaling group in different Availability Zones.
- C. Configure the Auto Scaling group to use different Amazon Elastic Block Store (Amazon EBS) volume sizes.
- D. Increase the maximum size of the Auto Scaling group.
- E. Request an increase in the instance service quota.

Answer: AB

NEW QUESTION 296

- (Exam Topic 1)

A SysOps administrator is deploying an application on 10 Amazon EC2 instances. The application must be highly available. The instances must be placed on distinct underlying hardware.

What should the SysOps administrator do to meet these requirements?

- A. Launch the instances into a cluster placement group in a single AWS Region.
- B. Launch the instances into a partition placement group in multiple AWS Regions.
- C. Launch the instances into a spread placement group in multiple AWS Regions.
- D. Launch the instances into a spread placement group in single AWS Region

Answer: D

Explanation:

<https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/placement-groups.html>

NEW QUESTION 301

- (Exam Topic 1)

A SysOps administrator is using Amazon EC2 instances to host an application. The SysOps administrator needs to grant permissions for the application to access an Amazon DynamoDB table.

Which solution will meet this requirement?

- A. Create access keys to access the DynamoDB tabl
- B. Assign the access keys to the EC2 instance profile.
- C. Create an EC2 key pair to access the DynamoDB tabl
- D. Assign the key pair to the EC2 instance profile.
- E. Create an IAM user to access the DynamoDB tabl
- F. Assign the IAM user to the EC2 instance profile.
- G. Create an IAM role to access the DynamoDB tabl
- H. Assign the IAM role to the EC2 instance profile.

Answer: D

NEW QUESTION 302

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