Amazon-Web-Services

Exam Questions DOP-C02

AWS Certified DevOps Engineer - Professional

NEW QUESTION 1
A company is examining its disaster recovery capability and wants the ability to switch over its daily operations to a secondary AWS Region. The company uses AWS CodeCommit as a source control tool in the primary Region.
A DevOps engineer must provide the capability for the company to develop code in the secondary Region. If the company needs to use the secondary Region, developers can add an additional remote URL to their local Git configuration.
Which solution will meet these requirements?

A. Create a CodeCommit repository in the secondary Regio
B. Create an AWS CodeBuild project to perform a Git mirror operation of the primary Region's CodeCommit repository to the secondary Region's CodeCommit repositor
C. Create an AWS Lambda function that invokes the CodeBuild projec
D. Create an Amazon EventBridge rule that reacts to merge events in the primary Region's CodeCommit repositor
E. Configure the EventBridge rule to invoke the Lambda function.
F. Create an Amazon S3 bucket in the secondary Regio
G. Create an AWS Fargate task to perform a Git mirror operation of the primary Region's CodeCommit repository and copy the result to the S3 bucke
H. Create an AWS Lambda function that initiates the Fargate tas
I. Create an Amazon EventBridge rule that reacts to merge events in the CodeCommitrepositor
J. Configure the EventBridge rule to invoke the Lambda function.
K. Create an AWS CodeArtifact repository in the secondary Regio
L. Create an AWS CodePipeline pipeline that uses the primary Region's CodeCommit repository for the source actio
M. Create a Cross-Region stage in the pipeline that packages the CodeCommit repository contents and stores the contents in the CodeArtifact repository when a pull request is merged into the CodeCommit repository.
N. Create an AWS Cloud9 environment and a CodeCommit repository in the secondary Regio
O. Configure the primary Region's CodeCommit repository as a remote repository in the AWS Cloud9 environmen
P. Connect the secondary Region's CodeCommit repository to the AWS Cloud9 environment.

Answer: A

Explanation:
The best solution to meet the disaster recovery capability and allow developers to switch over to a secondary AWS Region for code development is option A. This involves creating a CodeCommit repository in the secondary Region and setting up an AWS CodeBuild project to perform a Git mirror operation of the primary Region's CodeCommit repository to the secondary Region's repository. An AWS Lambda function is then created to invoke the CodeBuild project. Additionally, an Amazon EventBridge rule is configured to react to merge events in the primary Region's CodeCommit repository and invoke the Lambda function12. This setup ensures that the secondary Region's repository is always up-to-date with the primary repository, allowing for a seamless transition in case of a disaster recovery event1.
References:
? AWS CodeCommit User Guide on resilience and disaster recovery1.
? AWS Documentation on monitoring CodeCommit events in Amazon EventBridge and Amazon CloudWatch Events2.

NEW QUESTION 2
A DevOps engineer needs to apply a core set of security controls to an existing set of AWS accounts. The accounts are in an organization in AWS Organizations. Individual teams will administer individual accounts by using the AdministratorAccess AWS managed policy. For all accounts. AWS CloudTrail and AWS Config must be turned on in all available AWS Regions. Individual account administrators must not be able to edit or delete any of the baseline resources. However, individual account administrators must be able to edit or delete their own CloudTrail trails and AWS Config rules.
Which solution will meet these requirements in the MOST operationally efficient way?

A. Create an AWS CloudFormation template that defines the standard account resource
B. Deploy the template to all accounts from the organization's management account by using CloudFormation StackSet
C. Set the stack policy to deny Update:Delete actions.
D. Enable AWS Control Towe
E. Enroll the existing accounts in AWS Control Towe
F. Grant the individual account administrators access to CloudTrail and AWS Config.
G. Designate an AWS Config management accoun
H. Create AWS Config recorders in all accounts by using AWS CloudFormation StackSet
I. Deploy AWS Config rules to the organization by using the AWS Config management accoun
J. Create a CloudTrail organization trail in the organization’s management accoun
K. Deny modification or deletion of the AWS Config recorders by using an SCP.
L. Create an AWS CloudFormation template that defines the standard account resource
M. Deploy the template to all accounts from the organization's management account by using Cloud Formation StackSets Create an SCP that prevents updates or deletions to CloudTrail resources or AWS Config resources unless the principal is an administrator of the organization's management account.

Answer: D

NEW QUESTION 3
A company requires an RPO of 2 hours and an RTO of 10 minutes for its data and application at all times. An application uses a MySQL database and Amazon EC2 web servers. The development team needs a strategy for failover and disaster recovery.
Which combination of deployment strategies will meet these requirements? (Select TWO.)

A. Create an Amazon Aurora cluster in one Availability Zone across multiple Regions as the data store Use Aurora's automatic recovery capabilities in the event of a disaster
B. Create an Amazon Aurora global database in two Regions as the data stor
C. In the event of a failure promote the secondary Region as the primary for the application.
D. Create an Amazon Aurora multi-master cluster across multiple Regions as the data stor
E. Use a Network Load Balancer to balance the database traffic in different Regions.
F. Set up the application in two Regions and use Amazon Route 53 failover-based routing that points to the Application Load Balancers in both Region
G. Use hearth checks to determine the availability in a given Regio
H. Use Auto Scaling groups in each Region to adjust capacity based on demand.
I. Set up the application m two Regions and use a multi-Region Auto Scaling group behind Application Load Balancers to manage the capacity based on deman
J. In the event of a disaster adjust the Auto Scaling group's desired instance count to increase baseline capacity in the failover Region.

Answer: BD

NEW QUESTION 4
An application runs on Amazon EC2 instances behind an Application Load Balancer (ALB). A DevOps engineer is using AWS CodeDeploy to release a new version. The deployment fails during the AllowTraffic lifecycle event, but a cause for the failure is not indicated in the deployment logs.
What would cause this?

A. The appspe
B. yml file contains an invalid script that runs in the AllowTraffic lifecycle hook.
C. The user who initiated the deployment does not have the necessary permissions tointeract with the ALB.
D. The health checks specified for the ALB target group are misconfigured.
E. The CodeDeploy agent was not installed in the EC2 instances that are pad of the ALB target group.

Answer: C

Explanation:
This failure is typically due to incorrectly configured health checks in Elastic Load Balancing for the Classic Load Balancer, Application Load Balancer, or Network Load Balancer used to manage traffic for the deployment group. To resolve the issue, review and correct any errors in the health check configuration for the load balancer. https://docs.aws.amazon.com/codedeploy/latest/userguide/troubleshooting-deployments.html#troubleshooting-deployments-allowtraffic-no-logs

NEW QUESTION 5
A company deploys a web application on Amazon EC2 instances that are behind an
Application Load Balancer (ALB). The company stores the application code in an AWS CodeCommit repository. When code is merged to the main branch, an AWS Lambda function invokes an AWS CodeBuild project. The CodeBuild project packages the code, stores the packaged code in AWS CodeArtifact, and invokes AWS Systems Manager Run Command to deploy the packaged code to the EC2 instances.
Previous deployments have resulted in defects, EC2 instances that are not running the latest version of the packaged code, and inconsistencies between instances.
Which combination of actions should a DevOps engineer take to implement a more reliable deployment solution? (Select TWO.)

A. Create a pipeline in AWS CodePipeline that uses the CodeCommit repository as a source provide
B. Configure pipeline stages that run the CodeBuild project in parallel to build and test the applicatio
C. In the pipeline, pass the CodeBuild project output artifact to an AWS CodeDeploy action.
D. Create a pipeline in AWS CodePipeline that uses the CodeCommit repository as a source provide
E. Create separate pipeline stages that run a CodeBuild project to build and then test the applicatio
F. In the pipeline, pass the CodeBuild project output artifact to an AWS CodeDeploy action.
G. Create an AWS CodeDeploy application and a deployment group to deploy the packaged code to the EC2 instance
H. Configure the ALB for the deployment group.
I. Create individual Lambda functions that use AWS CodeDeploy instead of Systems Manager to run build, test, and deploy actions.
J. Create an Amazon S3 bucke
K. Modify the CodeBuild project to store the packages in the S3 bucket instead of in CodeArtifac
L. Use deploy actions in CodeDeploy to deploy the artifact to the EC2 instances.

Answer: AC

Explanation:
To implement a more reliable deployment solution, a DevOps engineer should take the following actions:
? Create a pipeline in AWS CodePipeline that uses the CodeCommit repository as a source provider. Configure pipeline stages that run the CodeBuild project in parallel to build and test the application. In the pipeline, pass the CodeBuild project output artifact to an AWS CodeDeploy action. This action will improve the deployment reliability by automating the entire process from code commit to deployment, reducing human errors and inconsistencies. By running the build and test stages in parallel, the pipeline can also speed up the delivery time and provide faster feedback. By using CodeDeploy as the deployment action, the pipeline can leverage the features of CodeDeploy, such as traffic shifting, health checks, rollback, and deployment configuration123
? Create an AWS CodeDeploy application and a deployment group to deploy the packaged code to the EC2 instances. Configure the ALB for the deployment group. This action will improve the deployment reliability by using CodeDeploy to orchestrate the deployment across multiple EC2 instances behind an ALB. CodeDeploy can perform blue/green deployments or in-place deployments with traffic shifting, which can minimize downtime and reduce risks. CodeDeploy can also monitor the health of the instances during and after the deployment, and automatically roll back if any issues are detected. By configuring the ALB for the deployment group, CodeDeploy can register and deregister instances from the load balancer as needed, ensuring that only healthy instances receive traffic45
The other options are not correct because they do not improve the deployment reliability or follow best practices. Creating separate pipeline stages that run a CodeBuild project to build and then test the application is not a good option because it will increase the pipeline execution time and delay the feedback loop. Creating individual Lambda functions that use CodeDeploy instead of Systems Manager to run build, test, and deploy actions is not a valid option because it will add unnecessary complexity and cost to the solution. Lambda functions are not designed for long-running tasks such as building or deploying applications. Creating an Amazon S3 bucket and modifying the CodeBuild project to store the packages in the S3 bucket instead of in CodeArtifact is not a necessary option because it will not affect the deployment reliability. CodeArtifact is a secure, scalable, and cost- effective package management service that can store and share software packages for application development67
References:
? 1: What is AWS CodePipeline? - AWS CodePipeline
? 2: Create a pipeline in AWS CodePipeline - AWS CodePipeline
? 3: Deploy an application with AWS CodeDeploy - AWS CodePipeline
? 4: What is AWS CodeDeploy? - AWS CodeDeploy
? 5: Configure an Application Load Balancer for your blue/green deployments - AWS CodeDeploy
? 6: What is AWS Lambda? - AWS Lambda
? 7: What is AWS CodeArtifact? - AWS CodeArtifact

NEW QUESTION 6
A company has a data ingestion application that runs across multiple AWS accounts. The accounts are in an organization in AWS Organizations. The company needs to monitor the application and consolidate access to the application. Currently the company is running the application on Amazon EC2 instances from several Auto Scaling groups. The EC2 instances have no access to the internet because the data is sensitive Engineers have deployed the necessary VPC endpoints. The EC2 instances run a custom AMI that is built specifically tor the application.
To maintain and troubleshoot the application, system administrators need the ability to log in to the EC2 instances. This access must be automated and controlled centrally. The company's security team must receive a notification whenever the instances are accessed.
Which solution will meet these requirements?

A. Create an Amazon EventBridge rule to send notifications to the security team whenever a user logs in to an EC2 instance Use EC2 Instance Connect to log in to the instance
B. Deploy Auto Scaling groups by using AWS Cloud Formation Use the cfn-init helper script to deploy appropriate VPC routes for external access Rebuild the custom AMI so that the custom AMI includes AWS Systems Manager Agent.
C. Deploy a NAT gateway and a bastion host that has internet access Create a security group that allows incoming traffic on all the EC2 instances from the bastion host Install AWS Systems Manager Agent on all the EC2 instances Use Auto Scaling group lifecycle hooks for monitoring and auditing access Use Systems Manager Session Manager to log into the instances Send logs to a log group m Amazon CloudWatch Log
D. Export data to Amazon S3 for auditing Send notifications to the security team by using S3 event notifications.
E. Use EC2 Image Builder to rebuild the custom AMI Include the most recent version of AWS Systems Manager Agent in the Image Configure the Auto Scaling group to attach the AmazonSSMManagedinstanceCore role to all the EC2 instances Use Systems Manager Session Manager to log in to the instances Enable logging of session details to Amazon S3 Create an S3 event notification for new file uploads to send a message to the security team through an Amazon Simple Notification Service (Amazon SNS) topic.
F. Use AWS Systems Manager Automation to build Systems Manager Agent into the custom AMI Configure AWS Configure to attach an SCP to the root organization account to allow the EC2 instances to connect to Systems Manager Use Systems Manager Session Manager to log in to the instances Enable logging of session details to Amazon S3 Create an S3 event notification for new file uploads to send a message to the security team through an Amazon Simple Notification Service (Amazon SNS) topic.

Answer: C

Explanation:
Even if AmazonSSMManagedInstanceCore is a managed policy and not an IAM role I will go with C because this policy is to be attached to an IAM role for EC2 to access System Manager.

NEW QUESTION 7
A company uses AWS Organizations and AWS Control Tower to manage all the company's AWS accounts. The company uses the Enterprise Support plan.
A DevOps engineer is using Account Factory for Terraform (AFT) to provision new accounts. When new accounts are provisioned, the DevOps engineer notices that the support plan for the new accounts is set to the Basic Support plan. The DevOps engineer needs to implement a solution to provision the new accounts with the Enterprise Support plan.
Which solution will meet these requirements?

A. Use an AWS Config conformance pack to deploy the account-part-of-organizations AWS Config rule and to automatically remediate any noncompliant accounts.
B. Create an AWS Lambda function to create a ticket for AWS Support to add the account to the Enterprise Support pla
C. Grant the Lambda function the support:ResolveCase permission.
D. Add an additional value to the control_tower_parameters input to set the AWSEnterpriseSupport parameter as the organization's management account number.
E. Set the aft_feature_enterprise_support feature flag to True in the AFT deployment input configuratio
F. Redeploy AFT and apply the changes.

Answer: D

Explanation:
AWS Organizations is a service that helps to manage multiple AWS accounts. AWS Control Tower is a service that makes it easy to set up and govern secure, compliant multi-account AWS environments. Account Factory for Terraform (AFT) is an AWS Control Tower feature that provisions new accounts using Terraform templates. To provision new accounts with the Enterprise Support plan, the DevOps engineer can set the aft_feature_enterprise_support feature flag to True in the AFT deployment input configuration. This flag enables the Enterprise Support plan for newly provisioned
accounts.
https://docs.aws.amazon.com/controltower/latest/userguide/aft-feature-options.html

NEW QUESTION 8
A company runs a workload on Amazon EC2 instances. The company needs a control that requires the use of Instance Metadata Service Version 2 (IMDSv2) on all EC2 instances in the AWS account. If an EC2 instance does not prevent the use of Instance Metadata Service Version 1 (IMDSv1), the EC2 instance must be terminated.
Which solution will meet these requirements?

A. Set up AWS Config in the accoun
B. Use a managed rule to check EC2 instance
C. Configure the rule to remediate the findings by using AWS Systems Manager Automation to terminate the instance.
D. Create a permissions boundary that prevents the ec2:RunInstance action if the ec2:MetadataHttpTokens condition key is not set to a value of require
E. Attach the permissions boundary to the IAM role that was used to launch the instance.
F. Set up Amazon Inspector in the accoun
G. Configure Amazon Inspector to activate deep inspection for EC2 instance
H. Create an Amazon EventBridge rule for an Inspector2 findin
I. Set an AWS Lambda function as the target to terminate the instance.
J. Create an Amazon EventBridge rule for the EC2 instance launch successful even
K. Send the event to an AWS Lambda function to inspect the EC2 metadata and to terminate the instance.

Answer: B

Explanation:
To implement a control that requires the use of IMDSv2 on all EC2 instances in the account, the DevOps engineer can use a permissions boundary. A permissions boundary is a policy that defines the maximum permissions that an IAM entity can have. The DevOps engineer can create a permissions boundary that prevents the ec2:RunInstance action if the ec2:MetadataHttpTokens condition key is not set to a value of required. This condition key enforces the use of IMDSv2 on EC2 instances. The DevOps engineer can attach the permissions boundary to the IAM role that was used to launch the instance. This way, any attempt to launch an EC2 instance without using IMDSv2 will be denied by the permissions boundary.

NEW QUESTION 9
A company's developers use Amazon EC2 instances as remote workstations. The company is concerned that users can create or modify EC2 security groups to allow unrestricted inbound access.
A DevOps engineer needs to develop a solution to detect when users create unrestricted security group rules. The solution must detect changes to security group rules in near real time, remove unrestricted rules, and send email notifications to the security team. The DevOps engineer has created an AWS Lambda function

that checks for security group ID from input, removes rules that grant unrestricted access, and sends notifications through Amazon Simple Notification Service (Amazon SNS).
What should the DevOps engineer do next to meet the requirements?

A. Configure the Lambda function to be invoked by the SNS topi
B. Create an AWS CloudTrail subscription for the SNS topi
C. Configure a subscription filter for security group modification events.
D. Create an Amazon EventBridge scheduled rule to invoke the Lambda functio
E. Define a schedule pattern that runs the Lambda function every hour.
F. Create an Amazon EventBridge event rule that has the default event bus as the sourc
G. Define the rule's event pattern to match EC2 security group creation and modification event
H. Configure the rule to invoke the Lambda function.
I. Create an Amazon EventBridge custom event bus that subscribes to events from all AWS service
J. Configure the Lambda function to be invoked by the custom event bus.

Answer: C

Explanation:
To meet the requirements, the DevOps engineer should create an Amazon EventBridge event rule that has the default event bus as the source. The rule's event pattern should match EC2 security group creation and modification events, and it should be configured to invoke the Lambda function. This solution will allow for near real-time detection of security group rule changes and will trigger the Lambda function to remove any unrestricted rules and send email notifications to the security team. https://repost.aws/knowledge-center/monitor-security-group-changes-ec2

NEW QUESTION 10
A DevOps engineer has developed an AWS Lambda function The Lambda function starts an AWS CloudFormation drift detection operation on all supported resources for a specific CloudFormation stack The Lambda function then exits Its invocation The DevOps engineer has created an Amazon EventBrdge scheduled rule that Invokes the Lambda function every hour. An Amazon Simple Notification Service (Amazon SNS) topic already exists In the AWS account. The DevOps engineer has subscribed to the SNS topic to receive notifications
The DevOps engineer needs to receive a notification as soon as possible when drift is detected in this specific stack configuration.
Which solution Will meet these requirements?

A. Configure the existing EventBridge rule to also target the SNS topic Configure an SNS subscription filter policy to match the Cloud Formation stac
B. Attach the subscription filter policy to the SNS tomc
C. Create a second Lambda function to query the CloudFormation API for the drift detection results for the stack Configure the second Lambda function to publish a message to the SNS topic If drift ts detected Adjust the existing EventBridge rule to also target the second Lambda function
D. Configure Amazon GuardDuty in the account with drift detection for all CloudFormation stack
E. Create a second EventBndge rule that reacts to the GuardDuty drift detection event finding for the specific CloudFormation stac
F. Configure the SNS topic as a target of the second EventBridge rule.
G. Configure AWS Config in the accoun
H. Use the cloudformation-stack-drift-detection- check managed rul
I. Create a second EventBndge rule that reacts to a compliance change event for the CloudFormaUon stac
J. Configure the SNS topc as a target of the second EventBridge rule.

Answer: D

Explanation:
A comprehensive and detailed explanation is:
? Option A is incorrect because EventBridge rules cannot filter events based on the message body or attributes of the target service. Therefore, configuring an SNS subscription filter policy to match the CloudFormation stack will not work. The SNS topic will receive all events from the EventBridge rule, regardless of the stack name or drift status.
? Option B is incorrect because it introduces unnecessary complexity and cost.
Creating a second Lambda function to query the CloudFormation API for the drift detection results is redundant, since CloudFormation already publishes drift detection events to EventBridge. Moreover, invoking two Lambda functions every hour will incur more charges than invoking one.
? Option C is incorrect because GuardDuty does not provide drift detection for CloudFormation stacks. GuardDuty is a threat detection service that monitors for malicious activity and unauthorized behavior in AWS accounts and workloads. It does not monitor or report on configuration changes or drifts in CloudFormation stacks.
? Option D is correct because it leverages AWS Config and its managed rule for drift detection. AWS Config is a service that enables you to assess, audit, and evaluate the configurations of your AWS resources. It can detect configuration changes and drifts in CloudFormation stacks using the cloudformation-stack-drift-detection- check managed rule. This rule triggers an AWS Config event when a stack drifts from its expected template configuration. By creating a second EventBridge rule that reacts to this event for the specific stack, the DevOps engineer can configure the SNS topic as a target and receive a notification as soon as possible when drift is detected.
References:
? AWS Config
? Amazon SNS subscription filter policies
? Amazon EventBridge rules

NEW QUESTION 10
A DevOps engineer is creating an AWS CloudFormation template to deploy a web service. The web service will run on Amazon EC2 instances in a private subnet behind an Application Load Balancer (ALB). The DevOps engineer must ensure that the service can accept requests from clients that have IPv6 addresses.
What should the DevOps engineer do with the CloudFormation template so that IPv6 clients can access the web service?

A. Add an IPv6 CIDR block to the VPC and the private subnet for the EC2 instance
B. Create route table entries for the IPv6 network, use EC2 instance types that support IPv6, and assign IPv6 addresses to each EC2 instance.
C. Assign each EC2 instance an IPv6 Elastic IP addres
D. Create a target group, and add the EC2 instances as target
E. Create a listener on port 443 of the ALB, and associate the target group with the ALB.
F. Replace the ALB with a Network Load Balancer (NLB). Add an IPv6 CIDR block to the VPC and subnets for the NLB, and assign the NLB an IPv6 Elastic IP address.
G. Add an IPv6 CIDR block to the VPC and subnets for the AL
H. Create a listener on port 443. and specify the dualstack IP address type on the AL
I. Create a target group, and add the EC2 instances as target

J. Associate the target group with the ALB.

Answer: D

Explanation:
it involves adding an IPv6 CIDR block to the VPC and subnets for the ALB and specifying the dualstack IP address type on the ALB listener. This allows the ALB to listen on both IPv4 and IPv6 addresses, and forward requests to the EC2 instances that are added as targets to the target group associated with the ALB.

NEW QUESTION 11
A company's application is currently deployed to a single AWS Region. Recently, the company opened a new office on a different continent. The users in the new office are experiencing high latency. The company's application runs on Amazon EC2 instances behind an Application Load Balancer (ALB) and uses Amazon DynamoDB as the database layer. The instances run in an EC2 Auto Scaling group across multiple Availability Zones. A DevOps engineer is tasked with minimizing application response times and improving availability for users in both Regions.
Which combination of actions should be taken to address the latency issues? (Choose three.)

A. Create a new DynamoDB table in the new Region with cross-Region replication enabled.
B. Create new ALB and Auto Scaling group global resources and configure the new ALB to direct traffic to the new Auto Scaling group.
C. Create new ALB and Auto Scaling group resources in the new Region and configure the new ALB to direct traffic to the new Auto Scaling group.
D. Create Amazon Route 53 records, health checks, and latency-based routing policies to route to the ALB.
E. Create Amazon Route 53 aliases, health checks, and failover routing policies to route to the ALB.
F. Convert the DynamoDB table to a global table.

Answer: CDF

Explanation:
C. Create new ALB and Auto Scaling group resources in the new Region and configure the new ALB to direct traffic to the new Auto Scaling group. This will allow users in the new Region to access the application with lower latency by reducing the network hops between the user and the application servers.
* D. Create Amazon Route 53 records, health checks, and latency-based routing policies to route to the ALB. This will enable Route 53 to route user traffic to the nearest healthy ALB, based on the latency between the user and the ALBs.
* F. Convert the DynamoDB table to a global table. This will enable reads and writes to the table in both Regions with low latency, improving the overall response time of the application

NEW QUESTION 12
A video-sharing company stores its videos in Amazon S3. The company has observed a sudden increase in video access requests, but the company does not know which videos are most popular. The company needs to identify the general access pattern for the video files. This pattern includes the number of users who access a certain file on a given day, as well as the numb A DevOps engineer manages a large commercial website that runs on Amazon EC2 The website uses Amazon Kinesis Data Streams to collect and process web togs The DevOps engineer manages the Kinesis consumer application, which also runs on Amazon EC2 Sudden increases of data cause the Kinesis consumer application to (all behind and the Kinesis data streams drop records before the records can be processed The DevOps engineer must implement a solution to improve stream handling
Which solution meets these requirements with the MOST operational efficiency'' er of pull requests for certain files.
How can the company meet these requirements with the LEAST amount of effort?

A. Activate S3 server access loggin
B. Import the access logs into an Amazon Aurora databas
C. Use an Aurora SQL query to analyze the access patterns.
D. Activate S3 server access loggin
E. Use Amazon Athena to create an external table with the log file
F. Use Athena to create a SQL query to analyze the access patterns.
G. Invoke an AWS Lambda function for every S3 object access even
H. Configure the Lambda function to write the file access information, such as use
I. S3 bucket, and file key, to an Amazon Aurora databas
J. Use an Aurora SQL query to analyze the access patterns.
K. Record an Amazon CloudWatch Logs log message for every S3 object access even
L. Configure a CloudWatch Logs log stream to write the file access information, such as user, S3 bucket, and file key, to an Amazon Kinesis Data Analytics for SQL applicatio
M. Perform a sliding window analysis.

Answer: B

Explanation:
Activating S3 server access logging and using Amazon Athena to create an external table with the log files is the easiest and most cost-effective way to analyze access patterns. This option requires minimal setup and allows for quick analysis of the access
patterns with SQL queries. Additionally, Amazon Athena scales automatically to match the query load, so there is no need for additional infrastructure provisioning or management.

NEW QUESTION 13
A company has deployed a critical application in two AWS Regions. The application uses an Application Load Balancer (ALB) in both Regions. The company has Amazon Route 53 alias DNS records for both ALBs.
The company uses Amazon Route 53 Application Recovery Controller to ensure that the application can fail over between the two Regions. The Route 53 ARC configuration includes a routing control for both Regions. The company uses Route 53 ARC to perform quarterly disaster recovery (DR) tests.
During the most recent DR test, a DevOps engineer accidentally turned off both routing controls. The company needs to ensure that at least one routing control is turned on at all times.
Which solution will meet these requirements?

A. In Route 53 AR
B. create a new assertion safety rul
C. Apply the assertion safety rule to the two routing control
D. Configure the rule with the ATLEAST type with a threshold of 1.
E. In Route 53 ARC, create a new gating safety rul
F. Apply the assertion safety rule to the two routing control

G. Configure the rule with the OR type with a threshold of 1.
H. In Route 53 ARC, create a new resource se
I. Configure the resource set with an AWS: Route53: HealthCheck resource typ
J. Specify the ARNs of the two routing controls as the target resourc
K. Create a new readiness check for the resource set.
L. In Route 53 ARC, create a new resource se
M. Configure the resource set with an AWS: Route53RecoveryReadiness: DNSTargetResource resource typ
N. Add the domain names of the two Route 53 alias DNS records as the target resourc
O. Create a new readiness check for the resource set.

Answer: A

Explanation:
The correct solution is to create a new assertion safety rule in Route 53 ARC and apply it to the two routing controls. An assertion safety rule is a type of safety rule that ensures that a minimum number of routing controls are always enabled. The ATLEAST type of assertion safety rule specifies the minimum number of routing controls that must be enabled for the rule to evaluate as healthy. By setting the threshold to 1, the rule ensures that at least one routing control is always turned on. This prevents the scenario where both routing controls are accidentally turned off and the application becomes unavailable in both Regions.
The other solutions are incorrect because they do not use safety rules to prevent both routing controls from being turned off. A gating safety rule is a type of safety rule that prevents routing control state changes that violate the rule logic. The OR type of gating safety rule specifies that one or more routing controls must be enabled for the rule to evaluate as healthy. However, this rule does not prevent a user from turning off both routing controls manually. A resource set is a collection of resources that are tested for readiness by Route 53 ARC. A readiness check is a test that verifies that all the resources in a resource set are operational. However, these concepts are not related to routing control states or safety rules. Therefore, creating a new resource set and a new readiness check will not ensure that at least one routing control is turned on at all times. References:
? Routing control in Amazon Route 53 Application Recovery Controller
? Viewing and updating routing control states in Route 53 ARC
? Creating a control panel in Route 53 ARC
? Creating safety rules in Route 53 ARC

NEW QUESTION 18
A DevOps team manages an API running on-premises that serves as a backend for an Amazon API Gateway endpoint. Customers have been complaining about high response latencies, which the development team has verified using the API Gateway latency metrics in Amazon CloudWatch. To identify the cause, the team needs to collect relevant data without introducing additional latency.
Which actions should be taken to accomplish this? (Choose two.)

A. Install the CloudWatch agent server side and configure the agent to upload relevant logs to CloudWatch.
B. Enable AWS X-Ray tracing in API Gateway, modify the application to capture request segments, and upload those segments to X-Ray during each request.
C. Enable AWS X-Ray tracing in API Gateway, modify the application to capture request segments, and use the X-Ray daemon to upload segments to X-Ray.
D. Modify the on-premises application to send log information back to API Gateway with each request.
E. Modify the on-premises application to calculate and upload statistical data relevant to the API service requests to CloudWatch metrics.

Answer: AC

Explanation:
https://docs.aws.amazon.com/AmazonCloudWatch/latest/monitoring/install-CloudWatch-Agent-on-premise.html
https://docs.aws.amazon.com/xray/latest/devguide/xray-api-sendingdata.html

NEW QUESTION 22
A company has migrated its container-based applications to Amazon EKS and want to establish automated email notifications. The notifications sent to each email address are for specific activities related to EKS components. The solution will include Amazon SNS topics and an AWS Lambda function to evaluate incoming log events and publish messages to the correct SNS topic.
Which logging solution will support these requirements?

A. Enable Amazon CloudWatch Logs to log the EKS component
B. Create a CloudWatch subscription filter for each component with Lambda as the subscription feed destination.
C. Enable Amazon CloudWatch Logs to log the EKS component
D. Create CloudWatch Logs Insights queries linked to Amazon EventBridge events that invoke Lambda.
E. Enable Amazon S3 logging for the EKS component
F. Configure an Amazon CloudWatch subscription filter for each component with Lambda as the subscription feed destination.
G. Enable Amazon S3 logging for the EKS component
H. Configure S3 PUT Object event notifications with AWS Lambda as the destination.

Answer: A

Explanation:
https://docs.aws.amazon.com/AmazonCloudWatch/latest/logs/SubscriptionFilters.html#La mbdaFunctionExample
https://docs.aws.amazon.com/AmazonCloudWatch/latest/logs/SubscriptionFilters.html

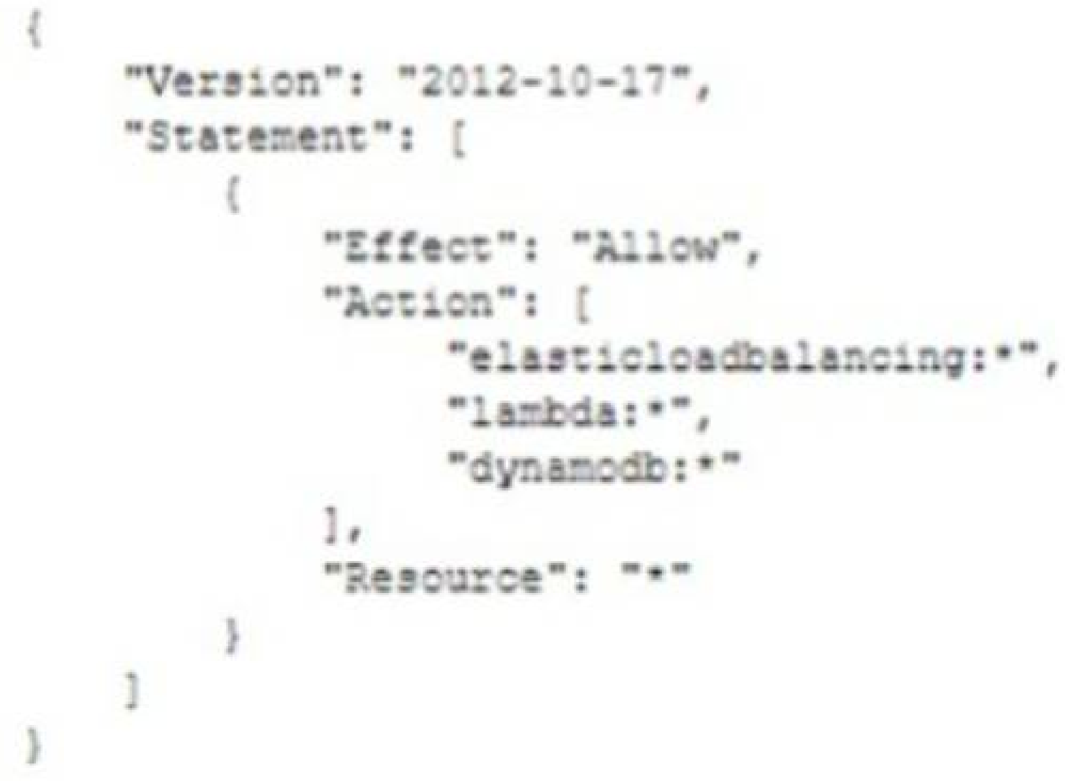
NEW QUESTION 25
A company recently migrated its legacy application from on-premises to AWS. The application is hosted on Amazon EC2 instances behind an Application Load Balancer which is behind Amazon API Gateway. The company wants to ensure users experience minimal disruptions during any deployment of a new version of the application. The company also wants to ensure it can quickly roll back updates if there is an issue.
Which solution will meet these requirements with MINIMAL changes to the application?

A. Introduce changes as a separate environment parallel to the existing one Configure API Gateway to use a canary release deployment to send a small subset of user traffic to the new environment.
B. Introduce changes as a separate environment parallel to the existing one Update the application's DNS alias records to point to the new environment.
C. Introduce changes as a separate target group behind the existing Application Load Balancer Configure API Gateway to route user traffic to the new target group in steps.
D. Introduce changes as a separate target group behind the existing Application Load Balancer Configure API Gateway to route all traffic to the Application Load Balancer which then sends the traffic to the new target group.

Answer: A

Explanation:
API Gateway supports canary deployment on a deployment stage before you direct all traffic to that stage. A parallel environment means we will create a new ALB and a target group that will target a new set of EC2 instances on which the newer version of the app will be deployed. So the canary setting associated to the new version of the API will connect with the new ALB instance which in turn will direct the traffic to the new EC2 instances on which the newer version of the application is deployed.

NEW QUESTION 30
A company's development team uses AVMS Cloud Formation to deploy its application resources The team must use for an changes to the environment The team cannot use AWS Management Console or the AWS CLI to make manual changes directly.
The team uses a developer IAM role to access the environment The role is configured with the Admnistratoraccess managed policy. The company has created a new Cloudformationdeployment IAM role that has the following policy.



```
{
    "Version": "2012-10-17",
    "Statement": [
        {
            "Effect": "Allow",
            "Action": [
                "elasticloadbalancing:*",
                "lambda:*",
                "dynamodb:*"
            ],
            "Resource": "*"
        }
    ]
}
```

The company wants ensure that only CloudFormation can use the new role. The development team cannot make any manual changes to the deployed resources.
Which combination of steps meet these requirements? (Select THREE.)

A. Remove the AdministratorAccess polic
B. Assign the ReadOnlyAccess managed IAM policy to the developer rol
C. Instruct the developers to use the CloudFormationDeployment role as a CloudFormation service role when the developers deploy new stacks.
D. Update the trust of CloudFormationDeployment role to allow the developer IAM role to assume the CloudFormationDepoyment role.
E. Configure the IAM to be to get and pass the CloudFormationDeployment role if cloudformation actions for resources,
F. Update the trust Of the CloudFormationDepoyment role to anow the cloudformation.amazonaws.com AWS principal to perform the iam:AssumeR01e action
G. Remove me Administratoraccess polic
H. Assign the ReadOnly/Access managed IAM policy to the developer role Instruct the developers to assume the CloudFormatondeployment role when the developers new stacks
I. Add an IAM policy to CloudFormationDeplyment to allow cloudformation * on an Add a policy that allows the iam.PassR01e action for ARN of if iam PassedT0Service equal cloudformation.amazonaws.com

Answer: ADF

Explanation:
A comprehensive and detailed explanation is:
? Option A is correct because removing the AdministratorAccess policy and assigning the ReadOnlyAccess managed IAM policy to the developer role is a valid way to prevent the developers from making any manual changes to the deployed resources. The AdministratorAccess policy grants full access to all AWS resources and actions, which is not necessary for the developers. The ReadOnlyAccess policy grants read-only access to most AWS resources and actions, which is sufficient for the developers to view the status of their stacks. Instructing the developers to use the CloudFormationDeployment role as a CloudFormation service role when they deploy new stacks is also a valid way to ensure that only CloudFormation can use the new role. A CloudFormation service role is an IAM role that allows CloudFormation to make calls to resources in a stack on behalf of the user1. The user can specify a service role when they create or update a stack, and CloudFormation will use that role's credentials for all operations that are performed on that stack1.
? Option B is incorrect because updating the trust of CloudFormationDeployment role to allow the developer IAM role to assume the CloudFormationDeployment role is not a valid solution. This would allow the developers to manually assume the CloudFormationDeployment role and perform actions on the deployed resources, which is not what the company wants. The trust of CloudFormationDeployment role should only allow the cloudformation.amazonaws.com AWS principal to assume the role, as in option D.
? Option C is incorrect because configuring the IAM user to be able to get and pass the CloudFormationDeployment role if cloudformation actions for resources is not a valid solution. This would allow the developers to manually pass the CloudFormationDeployment role to other services or resources, which is not what the company wants. The IAM user should only be able to pass the CloudFormationDeployment role as a service role when they create or update a stack with CloudFormation, as in option A.
? Option D is correct because updating the trust of CloudFormationDeployment role
to allow the cloudformation.amazonaws.com AWS principal to perform the iam:AssumeRole action is a valid solution. This allows CloudFormation to assume the CloudFormationDeployment role and access resources in other services on behalf of the user2. The trust policy of an IAM role defines which entities can assume the role2. By specifying cloudformation.amazonaws.com as the principal, you grant permission only to CloudFormation to assume this role.
? Option E is incorrect because instructing the developers to assume the
CloudFormationDeployment role when they deploy new stacks is not a valid solution. This would allow the developers to manually assume the CloudFormationDeployment role and perform actions on the deployed resources, which is not what the company wants. The developers should only use the CloudFormationDeployment role as a service role when they deploy new stacks with CloudFormation, as in option A.
? Option F is correct because adding an IAM policy to CloudFormationDeployment
that allows cloudformation:* on all resources and adding a policy that allows the iam:PassRole action for ARN of CloudFormationDeployment if iam:PassedToService equals cloudformation.amazonaws.com are valid solutions. The first policy grants permission for CloudFormationDeployment to perform any

action with any resource using cloudformation.amazonaws.com as a service principal3. The second policy grants permission for passing this role only if it is passed by cloudformation.amazonaws.com as a service principal4. This ensures that only CloudFormation can use this role.
References:
? 1: AWS CloudFormation service roles
? 2: How to use trust policies with IAM roles
? 3: AWS::IAM::Policy
? 4: IAM: Pass an IAM role to a specific AWS service

NEW QUESTION 31
A company needs to implement failover for its application. The application includes an Amazon CloudFront distribution and a public Application Load Balancer (ALB) in an AWS Region. The company has configured the ALB as the default origin for the distribution.
After some recent application outages, the company wants a zero-second RTO. The company deploys the application to a secondary Region in a warm standby configuration. A DevOps engineer needs to automate the failover of the application to the secondary Region so that HTTP GET requests meet the desired R TO.
Which solution will meet these requirements?

A. Create a second CloudFront distribution that has the secondary ALB as the default origi
B. Create Amazon Route 53 alias records that have a failover policy and Evaluate Target Health set to Yes for both CloudFront distribution
C. Update the application to use the new record set.
D. Create a new origin on the distribution for the secondary AL
E. Create a new origin grou
F. Set the original ALB as the primary origi
G. Configure the origin group to fail over for HTTP 5xx status code
H. Update the default behavior to use the origin group.
I. Create Amazon Route 53 alias records that have a failover policy and Evaluate Target Health set to Yes for both ALB
J. Set the TTL of both records to
K. Update the distribution's origin to use the new record set.
L. Create a CloudFront function that detects HTTP 5xx status code
M. Configure the function to return a 307 Temporary Redirect error response to the secondary ALB if the function detects 5xx status code
N. Update the distribution's default behavior to send origin responses to the function.

Answer: B

Explanation:
To implement failover for the application to the secondary Region so that HTTP GET requests meet the desired RTO, the DevOps engineer should use the following solution:
? Create a new origin on the distribution for the secondary ALB. A CloudFront origin
is the source of the content that CloudFront delivers to viewers. By creating a new origin for the secondary ALB, the DevOps engineer can configure CloudFront to route traffic to the secondary Region when the primary Region is unavailable1
? Create a new origin group. Set the original ALB as the primary origin. Configure
the origin group to fail over for HTTP 5xx status codes. An origin group is a logical grouping of two origins: a primary origin and a secondary origin. By creating an origin group, the DevOps engineer can specify which origin CloudFront should use as a fallback when the primary origin fails. The DevOps engineer can also define which HTTP status codes should trigger a failover from the primary origin to the secondary origin. By setting the original ALB as the primary origin and configuring the origin group to fail over for HTTP 5xx status codes, the DevOps engineer can ensure that CloudFront will switch to the secondary ALB when the primary ALB returns server errors2
? Update the default behavior to use the origin group. A behavior is a set of rules
that CloudFront applies when it receives requests for specific URLs or file types. The default behavior applies to all requests that do not match any other behaviors. By updating the default behavior to use the origin group, the DevOps engineer can enable failover routing for all requests that are sent to the distribution3
This solution will meet the requirements because it will automate the failover of the
application to the secondary Region with zero-second RTO. When CloudFront receives an HTTP GET request, it will first try to route it to the primary ALB in the primary Region. If the primary ALB is healthy and returns a successful response, CloudFront will deliver it to the viewer. If the primary ALB is unhealthy or returns an HTTP 5xx status code, CloudFront will automatically route the request to the secondary ALB in the secondary Region and deliver its response to the viewer.
The other options are not correct because they either do not provide zero-second RTO or do not work as expected. Creating a second CloudFront distribution that has the secondary ALB as the default origin and creating Amazon Route 53 alias records that have a failover policy is not a good option because it will introduce additional latency and complexity to the solution. Route 53 health checks and DNS propagation can take several minutes or longer, which means that viewers might experience delays or errors when accessing the application during a failover event. Creating Amazon Route 53 alias records that have a failover policy and Evaluate Target Health set to Yes for both ALBs and setting the TTL of both records to O is not a valid option because it will not work with CloudFront distributions. Route 53 does not support health checks for alias records that point to CloudFront distributions, so it cannot detect if an ALB behind a distribution is healthy or not. Creating a CloudFront function that detects HTTP 5xx status codes and returns a 307 Temporary Redirect error response to the secondary ALB is not a valid option because it will not provide zero-second RTO. A 307 Temporary Redirect error response tells viewers to retry their requests with a different URL, which means that viewers will have to make an additional request and wait for another response from CloudFront before reaching the secondary ALB.
References:
? 1: Adding, Editing, and Deleting Origins - Amazon CloudFront
? 2: Configuring Origin Failover - Amazon CloudFront
? 3: Creating or Updating a Cache Behavior - Amazon CloudFront

NEW QUESTION 35
A media company has several thousand Amazon EC2 instances in an AWS account. The company is using Slack and a shared email inbox for team communications and important updates. A DevOps engineer needs to send all AWS-scheduled EC2 maintenance notifications to the Slack channel and the shared inbox. The solution must include the instances' Name and Owner tags.
Which solution will meet these requirements?

A. Integrate AWS Trusted Advisor with AWS Config Configure a custom AWS Config rule to invoke an AWS Lambda function to publish notifications to an Amazon Simple Notification Service (Amazon SNS) topic Subscribe a Slack channel endpoint and the shared inbox to the topic.
B. Use Amazon EventBridge to monitor for AWS Health Events Configure the maintenance events to target an Amazon Simple Notification Service (Amazon SNS) topic Subscribe an AWS Lambda function to the SNS topic to send notifications to the Slack channel and the shared inbox.
C. Create an AWS Lambda function that sends EC2 maintenance notifications to the Slack channel and the shared inbox Monitor EC2 health events by using Amazon CloudWatch metrics Configure a CloudWatch alarm that invokes the Lambda function when a maintenance notification is received.
D. Configure AWS Support integration with AWS CloudTrail Create a CloudTrail lookup event to invoke an AWS Lambda function to pass EC2 maintenance notifications to Amazon Simple Notification Service (Amazon SNS) Configure Amazon SNS to target the Slack channel and the shared inbox.

Answer: B

Explanation:
https://docs.aws.amazon.com/health/latest/ug/cloudwatch-events-health.html

NEW QUESTION 39
A company requires its developers to tag all Amazon Elastic Block Store (Amazon EBS) volumes in an account to indicate a desired backup frequency. This requirement Includes EBS volumes that do not require backups. The company uses custom tags named Backup_Frequency that have values of none, dally, or weekly that correspond to the desired backup frequency. An audit finds that developers are occasionally not tagging the EBS volumes.
A DevOps engineer needs to ensure that all EBS volumes always have the Backup_Frequency tag so that the company can perform backups at least weekly unless a different value is specified.
Which solution will meet these requirements?

A. Set up AWS Config in the accoun
B. Create a custom rule that returns a compliance failure for all Amazon EC2 resources that do not have a Backup Frequency tag applied.Configure a remediation action that uses a custom AWS Systems Manager Automation runbook to apply the Backup_Frequency tag with a value of weekly.
C. Set up AWS Config in the accoun
D. Use a managed rule that returns a compliance failure for EC2::Volume resources that do not have a Backup Frequency tag applie
E. Configure a remediation action that uses a custom AWS Systems Manager Automation runbook to apply the Backup_Frequency tag with a value of weekly.
F. Turn on AWS CloudTrail in the accoun
G. Create an Amazon EventBridge rule that reacts to EBS CreateVolume event
H. Configure a custom AWS Systems Manager Automation runbook to apply the Backup_Frequency tag with a value of weekl
I. Specify the runbook as the target of the rule.
J. Turn on AWS CloudTrail in the accoun
K. Create an Amazon EventBridge rule that reacts to EBS CreateVolume events or EBS ModifyVolume event
L. Configure a custom AWS Systems Manager Automation runbook to apply the Backup_Frequency tag with a value of weekl
M. Specify the runbook as the target of the rule.

Answer: B

Explanation:
The following are the steps that the DevOps engineer should take to ensure that all EBS volumes always have the Backup_Frequency tag so that the company can perform backups at least weekly unless a different value is specified:
? Set up AWS Config in the account.
? Use a managed rule that returns a compliance failure for EC2::Volume resources that do not have a Backup Frequency tag applied.
? Configure a remediation action that uses a custom AWS Systems Manager Automation runbook to apply the Backup_Frequency tag with a value of weekly.
The managed rule AWS::Config::EBSVolumesWithoutBackupTag will return a compliance failure for any EBS volume that does not have the Backup_Frequency tag applied. The remediation action will then use the Systems Manager Automation runbook to apply the Backup_Frequency tag with a value of weekly to the EBS volume.

NEW QUESTION 41
An IT team has built an AWS CloudFormation template so others in the company can quickly and reliably deploy and terminate an application. The template creates an Amazon EC2 instance with a user data script to install the application and an Amazon S3 bucket that the application uses to serve static webpages while it is running.
All resources should be removed when the CloudFormation stack is deleted. However, the team observes that CloudFormation reports an error during stack deletion, and the S3 bucket created by the stack is not deleted.
How can the team resolve the error in the MOST efficient manner to ensure that all resources are deleted without errors?

A. Add a DelelionPolicy attribute to the S3 bucket resource, with the value Delete forcing the bucket to be removed when the stack is deleted.
B. Add a custom resource with an AWS Lambda function with the DependsOn attribute specifying the S3 bucket, and an IAM rol
C. Write the Lambda function to delete all objects from the bucket when RequestType is Delete.
D. Identify the resource that was not delete
E. Manually empty the S3 bucket and then delete it.
F. Replace the EC2 and S3 bucket resources with a single AWS OpsWorks Stacks resourc
G. Define a custom recipe for the stack to create and delete the EC2 instance and the S3 bucket.

Answer: B

Explanation:
https://aws.amazon.com/premiumsupport/knowledge-center/cloudformation-s3-custom-resources/

NEW QUESTION 43
A company uses AWS Organizations to manage its AWS accounts. The company has a root OU that has a child OU. The root OU has an SCP that allows all actions on all resources. The child OU has an SCP that allows all actions for Amazon DynamoDB and AWS Lambda, and denies all other actions.
The company has an AWS account that is named vendor-data in the child OU. A DevOps engineer has an 1AM user that is attached to the AdministratorAccess 1AM policy in the vendor-data account. The DevOps engineer attempts to launch an Amazon EC2 instance in the vendor-data account but receives an access denied error.
Which change should the DevOps engineer make to launch the EC2 instance in the vendor-data account?

A. Attach the AmazonEC2FullAccess 1AM policy to the 1AM user.
B. Create a new SCP that allows all actions for Amazon EC2. Attach the SCP to the vendor-data account.
C. Update the SCP in the child OU to allow all actions for Amazon EC2.
D. Create a new SCP that allows all actions for Amazon EC2. Attach the SCP to the root OU.

Answer: C

Explanation:
The correct answer is C. Updating the SCP in the child OU to allow all actions for Amazon EC2 will enable the DevOps engineer to launch the EC2 instance in the vendor-data account. SCPs are applied to OUs and accounts in a hierarchical manner, meaning that the SCPs attached to the parent OU are inherited by the child OU and accounts. Therefore, the SCP in the child OU overrides the SCP in the root OU and denies all actions except for DynamoDB and Lambda. By adding EC2

to the allowed actions in the child OU's SCP, the DevOps engineer can access EC2 resources in the vendor-data account.
Option A is incorrect because attaching the AmazonEC2FullAccess IAM policy to the IAM user will not grant the user access to EC2 resources. IAM policies are evaluated after SCPs, so even if the IAM policy allows EC2 actions, the SCP will still deny them.
Option B is incorrect because creating a new SCP that allows all actions for EC2 and attaching it to the vendor-data account will not work. SCPs are not cumulative, meaning that only one SCP is applied to an account at a time. The SCP attached to the account will be the SCP attached to the OU that contains the account. Therefore, option B will not change the SCP that is applied to the vendor-data account.
Option D is incorrect because creating a new SCP that allows all actions for EC2 and attaching it to the root OU will not work. As explained earlier, the SCP in the child OU overrides the SCP in the root OU and denies all actions except for DynamoDB and Lambda. Therefore, option D will not affect the SCP that is applied to the vendor-data account.

NEW QUESTION 45
A company hosts applications in its AWS account Each application logs to an individual Amazon CloudWatch log group. The company's CloudWatch costs for ingestion are increasing
A DevOps engineer needs to Identify which applications are the source of the increased logging costs.
Which solution Will meet these requirements?

A. Use CloudWatch metrics to create a custom expression that Identifies the CloudWatch log groups that have the most data being written to them.
B. Use CloudWatch Logs Insights to create a set of queries for the application log groups to Identify the number of logs written for a period of time
C. Use AWS Cost Explorer to generate a cost report that details the cost for CloudWatch usage
D. Use AWS CloudTrail to filter for CreateLogStream events for each application

Answer: C

Explanation:
The correct answer is C.
A comprehensive and detailed explanation is:
? Option A is incorrect because using CloudWatch metrics to create a custom expression that identifies the CloudWatch log groups that have the most data being written to them is not a valid solution. CloudWatch metrics do not provide information about the size or volume of data being ingested by CloudWatch logs. CloudWatch metrics only provide information about the number of events, bytes, and errors that occur within a log group or stream. Moreover, creating a custom expression with CloudWatch metrics would require using the search_web tool, which is not necessary for this use case.
? Option B is incorrect because using CloudWatch Logs Insights to create a set of queries for the application log groups to identify the number of logs written for a period of time is not a valid solution. CloudWatch Logs Insights can help analyze and filter log events based on patterns and expressions, but it does not provide information about the cost or billing of CloudWatch logs. CloudWatch Logs Insights also charges based on the amount of data scanned by each query, which could increase the logging costs further.
? Option C is correct because using AWS Cost Explorer to generate a cost report that details the cost for CloudWatch usage is a valid solution. AWS Cost Explorer is a tool that helps visualize, understand, and manage AWS costs and usage over time. AWS Cost Explorer can generate custom reports that show the breakdown of costs by service, region, account, tag, or any other dimension. AWS Cost Explorer can also filter and group costs by usage type, which can help identify the specific CloudWatch log groups that are the source of the increased logging costs.
? Option D is incorrect because using AWS CloudTrail to filter for CreateLogStream events for each application is not a valid solution. AWS CloudTrail is a service that records API calls and account activity for AWS services, including CloudWatch logs. However, AWS CloudTrail does not provide information about the cost or billing of CloudWatch logs. Filtering for CreateLogStream events would only show when a new log stream was created within a log group, but not how much data was ingested or stored by that log stream.
References:
? CloudWatch Metrics
? CloudWatch Logs Insights
? AWS Cost Explorer
? AWS CloudTrail

NEW QUESTION 46
A company has its AWS accounts in an organization in AWS Organizations. AWS Config is manually configured in each AWS account. The company needs to implement a solution to centrally configure AWS Config for all accounts in the organization The solution also must record resource changes to a central account.
Which combination of actions should a DevOps engineer perform to meet these requirements? (Choose two.)

A. Configure a delegated administrator account for AWS Confi
B. Enable trusted access for AWS Config in the organization.
C. Configure a delegated administrator account for AWS Confi
D. Create a service-linked role for AWS Config in the organization's management account.
E. Create an AWS CloudFormation template to create an AWS Config aggregato
F. Configure a CloudFormation stack set to deploy the template to all accounts in the organization.
G. Create an AWS Config organization aggregator in the organization's management accoun
H. Configure data collection from all AWS accounts in the organization and from all AWS Regions.
I. Create an AWS Config organization aggregator in the delegated administrator accoun
J. Configure data collection from all AWS accounts in the organization and from all AWS Regions.

Answer: AE

Explanation:
https://aws.amazon.com/blogs/mt/org-aggregator-delegated-admin/ https://docs.aws.amazon.com/organizations/latest/userguide/services-that-can-integrate-config.html

NEW QUESTION 49
A company needs to ensure that flow logs remain configured for all existing and new VPCs in its AWS account. The company uses an AWS CloudFormation stack to manage its VPCs. The company needs a solution that will work for any VPCs that any IAM user creates.
Which solution will meet these requirements?

A. Add the resource to the CloudFormation stack that creates the VPCs.
B. Create an organization in AWS Organization
C. Add the company's AWS account to the organizatio
D. Create an SCP to prevent users from modifying VPC flow logs.
E. Turn on AWS Confi

F. Create an AWS Config rule to check whether VPC flow logs are turned o
G. Configure automatic remediation to turn on VPC flow logs.
H. Create an IAM policy to deny the use of API calls for VPC flow log
I. Attach the IAM policy to all IAM users.

Answer: C

Explanation:
To meet the requirements of ensuring that flow logs remain configured for all existing and new VPCs in the AWS account, the company should use AWS Config and automatic remediation. AWS Config is a service that enables customers to assess, audit, and evaluate the configurations of their AWS resources. AWS Config continuously monitors and records the configuration changes of the AWS resources and evaluates them against desired configurations. Customers can use AWS Config rules to define the desired configuration state of their AWS resources and trigger actions when a resource configuration violates a rule.
One of the AWS Config rules that customers can use is vpc-flow-logs-enabled, which checks whether VPC flow logs are enabled for all VPCs in an AWS account. Customers can also configure automatic remediation for this rule, which means that AWS Config will automatically enable VPC flow logs for any VPCs that do not have them enabled. Customers can specify the destination (CloudWatch Logs or S3) and the traffic type (all, accept, or reject) for the flow logs as remediation parameters. By using AWS Config and automatic remediation, the company can ensure that flow logs remain configured for all existing and new VPCs in its AWS account, regardless of who creates them or how they are created.
The other options are not correct because they do not meet the requirements or follow best practices. Adding the resource to the CloudFormation stack that creates the VPCs is not a sufficient solution because it will only work for VPCs that are created by using the CloudFormation stack. It will not work for VPCs that are created by using other methods, such as the console or the API. Creating an organization in AWS Organizations and creating an SCP to prevent users from modifying VPC flow logs is not a good solution because it will not ensure that flow logs are enabled for all VPCs in the first place. It will only prevent users from disabling or changing flow logs after they are enabled. Creating an IAM policy to deny the use of API calls for VPC flow logs and attaching it to all IAM users is not a valid solution because it will prevent users from enabling or disabling flow logs at all.
It will also not work for VPCs that are created by using other methods, such as the console or CloudFormation.
References:
? 1: AWS::EC2::FlowLog - AWS CloudFormation
? 2: Amazon VPC Flow Logs extends CloudFormation Support to custom format subscriptions, 1-minute aggregation intervals and tagging
? 3: Logging IP traffic using VPC Flow Logs - Amazon Virtual Private Cloud
? : About AWS Config - AWS Config
? : vpc-flow-logs-enabled - AWS Config
? : Remediate Noncompliant Resources with AWS Config Rules - AWS Config

NEW QUESTION 51
A company has a guideline that every Amazon EC2 instance must be launched from an AMI that the company's security team produces Every month the security team sends an email message with the latest approved AMIs to all the development teams.
The development teams use AWS CloudFormation to deploy their applications. When developers launch a new service they have to search their email for the latest AMIs that the security department sent. A DevOps engineer wants to automate the process that the security team uses to provide the AMI IDs to the development teams.
What is the MOST scalable solution that meets these requirements?

A. Direct the security team to use CloudFormation to create new versions of the AMIs and to list! the AMI ARNs in an encrypted Amazon S3 object as part of the stack's Outputs Section Instruct the developers to use a cross-stack reference to load the encrypted S3 object and obtain the most recent AMI ARNs.
B. Direct the security team to use a CloudFormation stack to create an AWS CodePipeline pipeline that builds new AMIs and places the latest AMI ARNs in an encrypted Amazon S3 object as part of the pipeline output Instruct the developers to use a cross-stack reference within their own CloudFormation template to obtain the S3 object location and the most recent AMI ARNs.
C. Direct the security team to use Amazon EC2 Image Builder to create new AMIs and to place the AMI ARNs as parameters in AWS Systems Manager Parameter Store Instruct the developers to specify a parameter of type SSM in their CloudFormation stack to obtain the most recent AMI ARNs from Parameter Store.
D. Direct the security team to use Amazon EC2 Image Builder to create new AMIs and to create an Amazon Simple Notification Service (Amazon SNS) topic so that every development team can receive notification
E. When the development teams receive a notification instruct them to write an AWS Lambda function that will update their CloudFormation stack with the most recent AMI ARNs.

Answer: C

Explanation:
https://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/dynamic-references.html

NEW QUESTION 55
A DevOps engineer is building a continuous deployment pipeline for a serverless application that uses AWS Lambda functions. The company wants to reduce the customer impact of an unsuccessful deployment. The company also wants to monitor for issues.
Which deploy stage configuration will meet these requirements?

A. Use an AWS Serverless Application Model (AWS SAM) template to define the serverless applicatio
B. Use AWS CodeDeploy to deploy the Lambda functions with the Canary10Percent15Minutes Deployment Preference Typ
C. Use Amazon CloudWatch alarms to monitor the health of the functions.
D. Use AWS CloudFormation to publish a new stack update, and include Amazon CloudWatch alarms on all resource
E. Set up an AWS CodePipeline approval action for a developer to verify and approve the AWS CloudFormation change set.
F. Use AWS CloudFormation to publish a new version on every stack update, and include Amazon CloudWatch alarms on all resource
G. Use the RoutingConfig property of the AWS::Lambda::Alias resource to update the traffic routing during the stack update.
H. Use AWS CodeBuild to add sample event payloads for testing to the Lambda function
I. Publish a new version of the functions, and include Amazon CloudWatch alarm
J. Update the production alias to point to the new versio
K. Configure rollbacks to occur when an alarm is in the ALARM state.

Answer: D

Explanation:
Use routing configuration on an alias to send a portion of traffic to a second function version. For example, you can reduce the risk of deploying a new version by configuring the alias to send most of the traffic to the existing version, and only a small percentage of traffic to the new version.
https://docs.aws.amazon.com/lambda/latest/dg/configuration-aliases.html

The following are the steps involved in the deploy stage configuration that will meet the requirements:
? Use AWS CodeBuild to add sample event payloads for testing to the Lambda
functions.
? Publish a new version of the functions, and include Amazon CloudWatch alarms.
? Update the production alias to point to the new version.
? Configure rollbacks to occur when an alarm is in the ALARM state.
This configuration will help to reduce the customer impact of an unsuccessful deployment
by deploying the new version of the functions to a staging environment first. This will allow the DevOps engineer to test the new version of the functions before deploying it to production.
The configuration will also help to monitor for issues by including Amazon CloudWatch alarms. These alarms will alert the DevOps engineer if there are any problems with the new version of the functions.

NEW QUESTION 57
A company hosts a security auditing application in an AWS account. The auditing application uses an IAM role to access other AWS accounts. All the accounts are in the same organization in AWS Organizations.
A recent security audit revealed that users in the audited AWS accounts could modify or delete the auditing application's IAM role. The company needs to prevent any modification to the auditing application's IAM role by any entity other than a trusted administrator IAM role.
Which solution will meet these requirements?

A. Create an SCP that includes a Deny statement for changes to the auditing application's IAM rol
B. Include a condition that allows the trusted administrator IAM role to make change
C. Attach the SCP to the root of the organization.
D. Create an SCP that includes an Allow statement for changes to the auditing application's IAM role by the trusted administrator IAM rol
E. Include a Deny statement for changes by all other IAM principal
F. Attach the SCP to the IAM service in each AWS account where the auditing application has an IAM role.
G. Create an IAM permissions boundary that includes a Deny statement for changes to the auditing application's IAM rol
H. Include a condition that allows the trusted administrator IAM role to make change
I. Attach the permissions boundary to the audited AWS accounts.
J. Create an IAM permissions boundary that includes a Deny statement for changes to the auditing application’s IAM rol
K. Include a condition that allows the trusted administrator IAM role to make change
L. Attach the permissions boundary to the auditing application's IAM role in the AWS accounts.

Answer: A

Explanation:
https://docs.aws.amazon.com/organizations/latest/userguide/orgs_manage_policies_scps. html?icmpid=docs_orgs_console
SCPs (Service Control Policies) are the best way to restrict permissions at the organizational level, which in this case would be used to restrict modifications to the IAM role used by the auditing application, while still allowing trusted administrators to make changes to it. Options C and D are not as effective because IAM permission boundaries are applied to IAM entities (users, groups, and roles), not the account itself, and must be applied to all IAM entities in the account.

NEW QUESTION 60
A rapidly growing company wants to scale for developer demand for AWS development environments. Development environments are created manually in the AWS Management Console. The networking team uses AWS CloudFormation to manage the networking infrastructure, exporting stack output values for the Amazon VPC and all subnets. The development environments have common standards, such as Application Load Balancers, Amazon EC2 Auto Scaling groups, security groups, and Amazon DynamoDB tables.
To keep up with demand, the DevOps engineer wants to automate the creation of development environments. Because the infrastructure required to support the application is expected to grow, there must be a way to easily update the deployed infrastructure. CloudFormation will be used to create a template for the development environments.
Which approach will meet these requirements and quickly provide consistent AWS environments for developers?

A. Use Fn::ImportValue intrinsic functions in the Resources section of the template to retrieve Virtual Private Cloud (VPC) and subnet value
B. Use CloudFormation StackSets for the development environments, using the Count input parameter to indicate the number of environments neede
C. Use the UpdateStackSet command to update existing development environments.
D. Use nested stacks to define common infrastructure component
E. To access the exported values, use TemplateURL to reference the networking team’s templat
F. To retrieve Virtual Private Cloud (VPC) and subnet values, use Fn::ImportValue intrinsic functions in the Parameters section of the root templat
G. Use the CreateChangeSet and ExecuteChangeSet commands to update existing development environments.
H. Use nested stacks to define common infrastructure component
I. Use Fn::ImportValue intrinsic functions with the resources of the nested stack to retrieve Virtual Private Cloud (VPC) and subnet value
J. Use the CreateChangeSet and ExecuteChangeSet commands to update existing development environments.
K. Use Fn::ImportValue intrinsic functions in the Parameters section of the root template to retrieve Virtual Private Cloud (VPC) and subnet value
L. Define the development resources in the order they need to be created in the CloudFormation nested stack
M. Use the CreateChangeSe
N. and ExecuteChangeSet commands to update existing development environments.

Answer: C

Explanation:
https://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/intrinsic-function- reference-importvalue.html
https://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/intrinsic-function-reference-importvalue.html CF of network exports the VPC, subnet or needed information CF of application imports the above information to its stack and UpdateChangeSet/ ExecuteChangeSet

NEW QUESTION 63
A highly regulated company has a policy that DevOps engineers should not log in to their Amazon EC2 instances except in emergencies. It a DevOps engineer does log in the security team must be notified within 15 minutes of the occurrence.
Which solution will meet these requirements'?

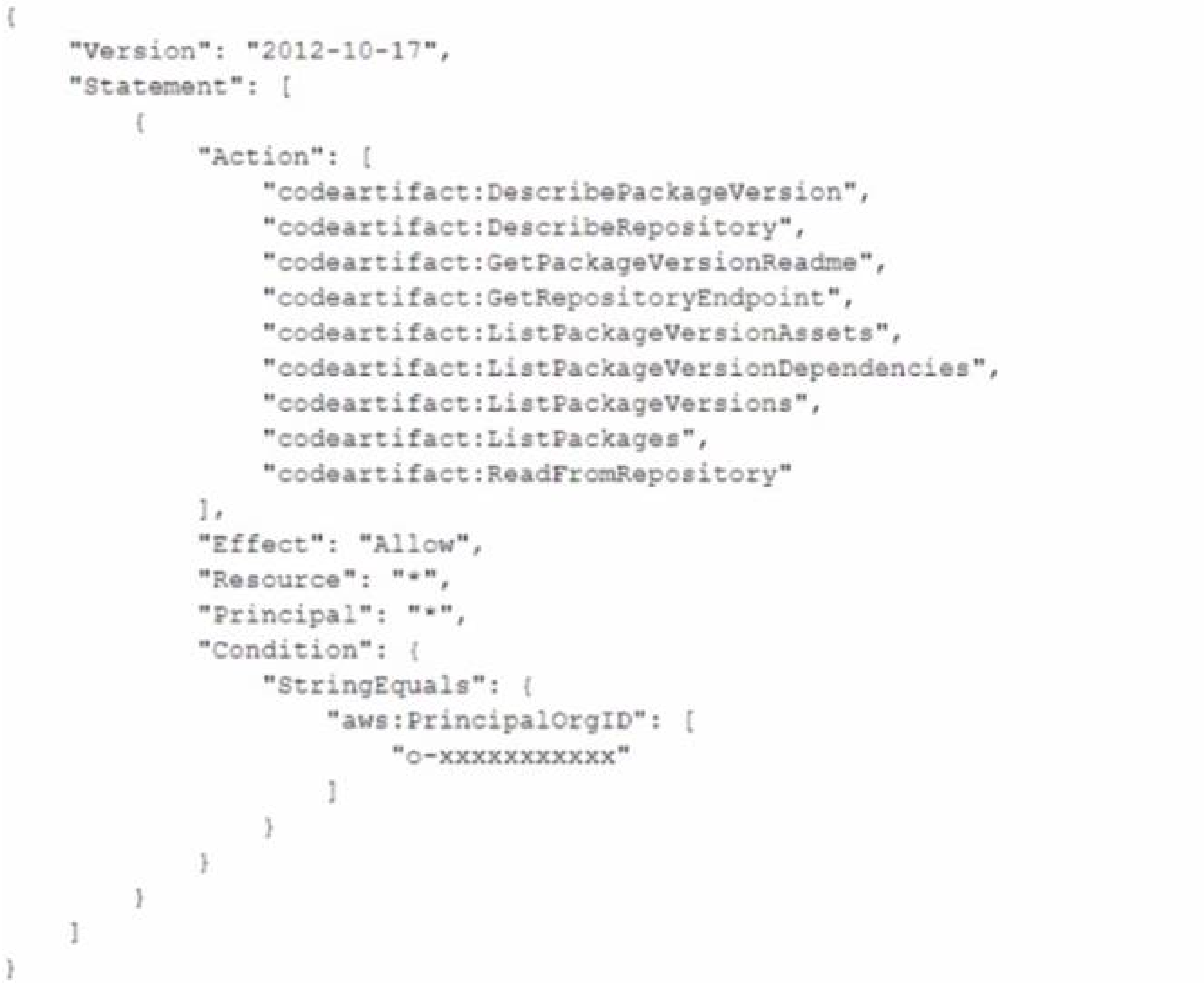
A. Install the Amazon Inspector agent on each EC2 instance Subscribe to Amazon EventBridge notifications Invoke an AWS Lambda function to check if a message is about user logins If it is send a notification to the security team using Amazon SNS.
B. Install the Amazon CloudWatch agent on each EC2 instance Configure the agent to push all logs to Amazon CloudWatch Logs and set up a CloudWatch metric

filter that searches for user login
C. If a login is found send a notification to the security team using Amazon SNS.
D. Set up AWS CloudTrail with Amazon CloudWatch Log
E. Subscribe CloudWatch Logs to Amazon Kinesis Attach AWS Lambda to Kinesis to parse and determine if a log contains a user login If it does, send a notification to the security team using Amazon SNS.
F. Set up a script on each Amazon EC2 instance to push all logs to Amazon S3 Set up an S3 event to invoke an AWS Lambda function which invokes an Amazon Athena query to ru
G. The Athena query checks tor logins and sends the output to the security team using Amazon SNS.

Answer: B

Explanation:
https://aws.amazon.com/blogs/security/how-to-monitor-and-visualize-failed-ssh-access-attempts-to-amazon-ec2-linux-instances/

NEW QUESTION 66
A company uses AWS CodeArtifact to centrally store Python packages. The CodeArtifact repository is configured with the following repository policy.



```
{
    "Version": "2012-10-17",
    "Statement": [
        {
            "Action": [
                "codeartifact:DescribePackageVersion",
                "codeartifact:DescribeRepository",
                "codeartifact:GetPackageVersionReadme",
                "codeartifact:GetRepositoryEndpoint",
                "codeartifact:ListPackageVersionAssets",
                "codeartifact:ListPackageVersionDependencies",
                "codeartifact:ListPackageVersions",
                "codeartifact:ListPackages",
                "codeartifact:ReadFromRepository"
            ],
            "Effect": "Allow",
            "Resource": "*",
            "Principal": "*",
            "Condition": {
                "StringEquals": {
                    "aws:PrincipalOrgID": [
                        "o-xxxxxxxxxxx"
                    ]
                }
            }
        }
    ]
}
```

A development team is building a new project in an account that is in an organization in AWS Organizations. The development team wants to use a Python library that has already been stored in the CodeArtifact repository in the organization. The development team uses AWS CodePipeline and AWS CodeBuild to build the new application. The CodeBuild job that the development team uses to build the application is configured to run in a VPC Because of compliance requirements the VPC has no internet connectivity.
The development team creates the VPC endpoints for CodeArtifact and updates the CodeBuild buildspec yaml file. However, the development team cannot download the Python library from the repository.
Which combination of steps should a DevOps engineer take so that the development team can use Code Artifact? (Select TWO.)

A. Create an Amazon S3 gateway endpoint Update the route tables for the subnets thatare running the CodeBuild job.
B. Update the repository policy's Principal statement to include the ARN of the role that the CodeBuild project uses.
C. Share the CodeArtifact repository with the organization by using AWS Resource Access Manager (AWS RAM).
D. Update the role that the CodeBuild project uses so that the role has sufficient permissions to use the CodeArtifact repository.
E. Specify the account that hosts the repository as the delegated administrator for CodeArtifact in the organization.

Answer: AD

Explanation:
"AWS CodeArtifact operates in multiple Availability Zones and stores artifact data and metadata in Amazon S3 and Amazon DynamoDB. Your encrypted data is redundantly stored across multiple facilities and multiple devices in each facility, making it highly available and highly durable." https://aws.amazon.com/codeartifact/features/ With no internet connectivity, a gateway endpoint becomes necessary to access S3.

NEW QUESTION 70
A company manages an application that stores logs in Amazon CloudWatch Logs. The company wants to archive the logs to an Amazon S3 bucket Logs are rarely accessed after 90 days and must be retained tor 10 years.
Which combination of steps should a DevOps engineer take to meet these requirements? (Select TWO.)

A. Configure a CloudWatch Logs subscription filter to use AWS Glue to transfer all logs to an S3 bucket.
B. Configure a CloudWatch Logs subscription filter to use Amazon Kinesis Data Firehose to stream all logs to an S3 bucket.
C. Configure a CloudWatch Logs subscription fitter to stream all logs to an S3 bucket.
D. Configure the S3 bucket lifecycle policy to transition logs to S3 Glacier after 90 days and to expire logs after 3.650 days.

E. Configure the S3 bucket lifecycle policy to transition logs to Reduced Redundancy after 90 days and to expire logs after 3.650 days.

Answer: BD

Explanation:
https://docs.aws.amazon.com/AmazonCloudWatch/latest/logs/SubscriptionFilters.html

NEW QUESTION 75
A development team wants to use AWS CloudFormation stacks to deploy an application. However, the developer IAM role does not have the required permissions to provision the resources that are specified in the AWS CloudFormation template. A DevOps engineer needs to implement a solution that allows the developers to deploy the stacks. The solution must follow the principle of least privilege.
Which solution will meet these requirements?

A. Create an IAM policy that allows the developers to provision the required resource
B. Attach the policy to the developer IAM role.
C. Create an IAM policy that allows full access to AWS CloudFormatio
D. Attach the policy to the developer IAM role.
E. Create an AWS CloudFormation service role that has the required permission
F. Grant the developer IAM role a cloudformation:* actio
G. Use the new service role during stack deployments.
H. Create an AWS CloudFormation service role that has the required permission
I. Grant the developer IAM role the iam:PassRole permissio
J. Use the new service role during stack deployments.

Answer: D

Explanation:
https://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/using-iam-servicerole.html

NEW QUESTION 80
A company builds a container image in an AWS CodeBuild project by running Docker commands. After the container image is built, the CodeBuild project uploads the container image to an Amazon S3 bucket. The CodeBuild project has an IAM service role that has permissions to access the S3 bucket.
A DevOps engineer needs to replace the S3 bucket with an Amazon Elastic Container Registry (Amazon ECR) repository to store the container images. The DevOps engineer creates an ECR private image repository in the same AWS Region of the CodeBuild project. The DevOps engineer adjusts the IAM service role with the permissions that are necessary to work with the new ECR repository. The DevOps engineer also places
new repository information into the docker build command and the docker push command that are used in the buildspec.yml file.
When the CodeBuild project runs a build job, the job fails when the job tries to access the ECR repository.
Which solution will resolve the issue of failed access to the ECR repository?

A. Update the buildspec.yml file to log in to the ECR repository by using the aws ecr get- login-password AWS CLI command to obtain an authentication toke
B. Update the docker login command to use the authentication token to access the ECR repository.
C. Add an environment variable of type SECRETS_MANAGER to the CodeBuild projec
D. In the environment variable, include the ARN of the CodeBuild project's IAM service rol
E. Update the buildspec.yml file to use the new environment variable to log in with the docker login command to access the ECR repository.
F. Update the ECR repository to be a public image repositor
G. Add an ECR repository policy that allows the IAM service role to have access.
H. Update the buildspec.yml file to use the AWS CLI to assume the IAM service role for ECR operation
I. Add an ECR repository policy that allows the IAM service role to have access.

Answer: A

Explanation:
Update the buildspec.yml file to log in to the ECR repository by using the aws ecr get-login- password AWS CLI command to obtain an authentica-tion token. Update the docker login command to use the authentication token to access the ECR repository.
This is the correct solution. The aws ecr get-login-password AWS CLI command retrieves and displays an authentication token that can be used to log in to an ECR repository. The docker login command can use this token as a password to authenticate with the ECR repository. This way, the CodeBuild project can push and pull images from the ECR repository without any errors. For more information, see Using Amazon ECR with the AWS CLI and get-login-password.

NEW QUESTION 81
AnyCompany is using AWS Organizations to create and manage multiple AWS accounts AnyCompany recently acquired a smaller company, Example Corp. During the acquisition process, Example Corp's single AWS account joined AnyCompany's management account through an Organizations invitation. AnyCompany moved the new member account under an OU that is dedicated to Example Corp.
AnyCompany's DevOps eng•neer has an IAM user that assumes a role that is named OrganizationAccountAccessRole to access member accounts. This role is configured with a full access policy When the DevOps engineer tries to use the AWS Management Console to assume the role in Example Corp's new member account, the DevOps engineer receives the following error message "Invalid information in one or more fields. Check your information or contact your administrator."
Which solution will give the DevOps engineer access to the new member account?

A. In the management account, grant the DevOps engineer's IAM user permission to assume the OrganzatlonAccountAccessR01e IAM role in the new member account.
B. In the management account, create a new SCR In the SCP, grant the DevOps engineer's IAM user full access to all resources in the new member accoun
C. Attach the SCP to the OU that contains the new member account,
D. In the new member account, create a new IAM role that is named OrganizationAccountAccessRol
E. Attach the AdmInistratorAccess AVVS managed policy to the rol
F. In the role's trust policy, grant the management account permission to assume the role.
G. In the new member account edit the trust policy for the Organ zationAccountAccessRole IAM rol
H. Grant the management account permission to assume the role.

Answer: C

Explanation:
The problem is that the DevOps engineer cannot assume the OrganizationAccountAccessRole IAM role in the new member account that joined AnyCompany's management account through an Organizations invitation. The solution is to create a new IAM role with the same name and trust policy in the new member account.
? Option A is incorrect, as it does not address the root cause of the error. The DevOps engineer's IAM user already has permission to assume the OrganizationAccountAccessRole IAM role in any member account, as this is the default role name that AWS Organizations creates when a new account joins an organization. The error occurs because the new member account does not have this role, as it was not created by AWS Organizations.
? Option B is incorrect, as it does not address the root cause of the error. An SCP is a policy that defines the maximum permissions for account members of an organization or organizational unit (OU). An SCP does not grant permissions to IAM users or roles, but rather limits the permissions that identity-based policies or resource-based policies grant to them. An SCP also does not affect how IAM roles are assumed by other principals.
? Option C is correct, as it addresses the root cause of the error. By creating a new IAM role with the same name and trust policy as the OrganizationAccountAccessRole IAM role in the new member account, the DevOps engineer can assume this role and access the account. The new role should have the AdministratorAccess AWS managed policy attached, which grants full access to all AWS resources in the account. The trust policy should allow the management account to assume the role, which can be done by specifying the management account ID as a principal in the policy statement.
? Option D is incorrect, as it assumes that the new member account already has the OrganizationAccountAccessRole IAM role, which is not true. The new member account does not have this role, as it was not created by AWS Organizations. Editing the trust policy of a non-existent role will not solve the problem.

NEW QUESTION 82
A company must encrypt all AMIs that the company shares across accounts. A DevOps engineer has access to a source account where an unencrypted custom AMI has been built. The DevOps engineer also has access to a target account where an Amazon EC2 Auto Scaling group will launch EC2 instances from the AMI. The DevOps engineer must share the AMI with the target account.
The company has created an AWS Key Management Service (AWS KMS) key in the source account.
Which additional steps should the DevOps engineer perform to meet the requirements? (Choose three.)

A. In the source account, copy the unencrypted AMI to an encrypted AM
B. Specify the KMS key in the copy action.
C. In the source account, copy the unencrypted AMI to an encrypted AM
D. Specify the default Amazon Elastic Block Store (Amazon EBS) encryption key in the copy action.
E. In the source account, create a KMS grant that delegates permissions to the Auto Scaling group service-linked role in the target account.
F. In the source account, modify the key policy to give the target account permissions to create a gran
G. In the target account, create a KMS grant that delegates permissions to the Auto Scaling group service-linked role.
H. In the source account, share the unencrypted AMI with the target account.
I. In the source account, share the encrypted AMI with the target account.

Answer: ADF

Explanation:
The Auto Scaling group service-linked role must have a specific grant in the source account in order to decrypt the encrypted AMI. This is because the service-linked role does not have permissions to assume the default IAM role in the source account. The following steps are required to meet the requirements:
? In the source account, copy the unencrypted AMI to an encrypted AMI. Specify the KMS key in the copy action.
? In the source account, create a KMS grant that delegates permissions to the Auto Scaling group service-linked role in the target account.
? In the source account, share the encrypted AMI with the target account.
? In the target account, attach the KMS grant to the Auto Scaling group service- linked role.
The first three steps are the same as the steps that I described earlier. The fourth step is required to grant the Auto Scaling group service-linked role permissions to decrypt the AMI
in the target account.

NEW QUESTION 85
A company uses AWS Secrets Manager to store a set of sensitive API keys that an AWS Lambda function uses. When the Lambda function is invoked, the Lambda function retrieves the API keys and makes an API call to an external service. The Secrets Manager secret is encrypted with the default AWS Key Management Service (AWS KMS) key.
A DevOps engineer needs to update the infrastructure to ensure that only the Lambda function's execution role can access the values in Secrets Manager. The solution must apply the principle of least privilege.
Which combination of steps will meet these requirements? (Select TWO.)

A. Update the default KMS key for Secrets Manager to allow only the Lambda function's execution role to decrypt.
B. Create a KMS customer managed key that trusts Secrets Manager and allows the Lambda function's execution role to decryp
C. Update Secrets Manager to use the new customer managed key.
D. Create a KMS customer managed key that trusts Secrets Manager and allows the account's :root principal to decryp
E. Update Secrets Manager to use the new customer managed key.
F. Ensure that the Lambda function's execution role has the KMS permissions scoped on the resource leve
G. Configure the permissions so that the KMS key can encrypt the Secrets Manager secret.
H. Remove all KMS permissions from the Lambda function's execution role.

Answer: BD

Explanation:
The requirement is to update the infrastructure to ensure that only the Lambda function's execution role can access the values in Secrets Manager. The solution must apply the principle of least privilege, which means granting the minimum permissions necessary to perform a task.
To do this, the DevOps engineer needs to use the following steps:
? Create a KMS customer managed key that trusts Secrets Manager and allows the Lambda function's execution role to decrypt. A customer managed key is a symmetric encryption key that is fully managed by the customer. The customer can define the key policy, which specifies who can use and manage the key. By creating a customer managed key, the DevOps engineer can restrict the decryption permission to only the Lambda function's execution role, and prevent other principals from accessing the secret values. The customer managed key also needs to trust Secrets Manager, which means allowing Secrets Manager to use the key to encrypt and decrypt secrets on behalf of the customer.
? Update Secrets Manager to use the new customer managed key. Secrets Manager allows customers to choose which KMS key to use for encrypting each secret. By default, Secrets Manager uses the default KMS key for Secrets Manager, which is a service-managed key that is shared by all customers in the same AWS Region. By updating Secrets Manager to use the new customer managed key, the DevOps engineer can ensure that only the Lambda function's execution role can decrypt the secret values using that key.
? Ensure that the Lambda function's execution role has the KMS permissions scoped on the resource level. The Lambda function's execution role is an IAM role that grants permissions to the Lambda function to access AWS services and resources. The role needs to have KMS permissions to use the customer managed

key for decryption. However, to apply the principle of least privilege, the role should have the permissions scoped on the resource level, which means specifying the ARN of the customer managed key as a condition in the IAM policy statement. This way, the role can only use that specific key and not any other KMS keys in the account.

NEW QUESTION 88
A developer is maintaining a fleet of 50 Amazon EC2 Linux servers. The servers are part of an Amazon EC2 Auto Scaling group, and also use Elastic Load Balancing for load balancing.
Occasionally, some application servers are being terminated after failing ELB HTTP health checks. The developer would like to perform a root cause analysis on the issue, but before being able to access application logs, the server is terminated.
How can log collection be automated?

A. Use Auto Scaling lifecycle hooks to put instances in a Pending:Wait stat
B. Create an Amazon CloudWatch alarm for EC2 Instance Terminate Successful and trigger an AWS Lambda function that invokes an SSM Run Command script to collect logs, push them to Amazon S3, and complete the lifecycle action once logs are collected.
C. Use Auto Scaling lifecycle hooks to put instances in a Terminating:Wait stat
D. Create an AWS Config rule for EC2 Instance-terminate Lifecycle Action and trigger a step function that invokes a script to collect logs, push them to Amazon S3, and complete the lifecycle action once logs are collected.
E. Use Auto Scaling lifecycle hooks to put instances in a Terminating:Wait stat
F. Create an Amazon CloudWatch subscription filter for EC2 Instance Terminate Successful and trigger a CloudWatch agent that invokes a script to collect logs, push them to Amazon S3, and complete the lifecycle action once logs are collected.
G. Use Auto Scaling lifecycle hooks to put instances in a Terminating:Wait stat
H. Create an Amazon EventBridge rule for EC2 Instance-terminate Lifecycle Action and trigger an AWS Lambda function that invokes an SSM Run Command script to collect logs, push them to Amazon S3, and complete the lifecycle action once logs are collected.

Answer: D

Explanation:
https://blog.fourninecloud.com/auto-scaling-lifecycle-hooks-to-export-server-logs-when-instance-terminating-58e06d7c0d6a

NEW QUESTION 89
A DevOps engineer manages a web application that runs on Amazon EC2 instances behind an Application Load Balancer (ALB). The instances run in an EC2 Auto Scaling group across multiple Availability Zones. The engineer needs to implement a deployment strategy that:
Launches a second fleet of instances with the same capacity as the original fleet. Maintains the original fleet unchanged while the second fleet is launched. Transitions traffic to the second fleet when the second fleet is fully deployed. Terminates the original fleet automatically 1 hour after transition.
Which solution will satisfy these requirements?

A. Use an AWS CloudFormation template with a retention policy for the ALB set to 1 hou
B. Update the Amazon Route 53 record to reflect the new ALB.
C. Use two AWS Elastic Beanstalk environments to perform a blue/green deployment from the original environment to the new on
D. Create an application version lifecycle policy to terminate the original environment in 1 hour.
E. Use AWS CodeDeploy with a deployment group configured with a blue/green deployment configuration Select the option Terminate the original instances in the deployment group with a waiting period of 1 hour.
F. Use AWS Elastic Beanstalk with the configuration set to Immutabl
G. Create an.ebextension using the Resources key that sets the deletion policy of the ALB to 1 hour, and deploy the application.

Answer: C

Explanation:
https://docs.aws.amazon.com/codedeploy/latest/APIReference/API_BlueInstanceTerminati onOption.html
The original revision termination settings are configured to wait 1 hour after traffic has been rerouted before terminating the blue task set.
https://docs.aws.amazon.com/AmazonECS/latest/developerguide/deployment-type- bluegreen.html

NEW QUESTION 90
The security team depends on AWS CloudTrail to detect sensitive security issues in the company's AWS account. The DevOps engineer needs a solution to auto-remediate CloudTrail being turned off in an AWS account.
What solution ensures the LEAST amount of downtime for the CloudTrail log deliveries?

A. Create an Amazon EventBridge rule for the CloudTrail StopLogging even
B. Create an AWS Lambda (unction that uses the AWS SDK to call StartLogging on the ARN of the resource in which StopLogging was calle
C. Add the Lambda function ARN as a target to the EventBridge rule.
D. Deploy the AWS-managed CloudTrail-enabled AWS Config rule set with a periodic interval to 1 hou
E. Create an Amazon EventBridge rule tor AWS Config rules compliance chang
F. Create an AWS Lambda function that uses the AWS SDK to call StartLogging on the ARN of the resource in which StopLoggmg was calle
G. Add the Lambda function ARN as a target to the EventBridge rule.
H. Create an Amazon EventBridge rule for a scheduled event every 5 minute
I. Create an AWS Lambda function that uses the AWS SDK to call StartLogging on a CloudTrail trail in the AWS accoun
J. Add the Lambda function ARN as a target to the EventBridge rule.
K. Launch a t2 nano instance with a script running every 5 minutes that uses the AWS SDK to query CloudTrail in the current accoun
L. If the CloudTrail trail is disabled have the script re-enable the trail.

Answer: A

Explanation:
https://aws.amazon.com/blogs/mt/monitor-changes-and-auto-enable-logging-in-aws-cloudtrail/

NEW QUESTION 94
A DevOps engineer is building a multistage pipeline with AWS CodePipeline to build, verify, stage, test, and deploy an application. A manual approval stage is required between the test stage and the deploy stage. The development team uses a custom chat tool with webhook support that requires near-real-time notifications.

How should the DevOps engineer configure status updates for pipeline activity and approval requests to post to the chat tool?

A. Create an Amazon CloudWatch Logs subscription that filters on CodePipeline Pipeline Execution State Chang
B. Publish subscription events to an Amazon Simple Notification Service (Amazon SNS) topi
C. Subscribe the chat webhook URL to the SNS topic, and complete the subscription validation.
D. Create an AWS Lambda function that is invoked by AWS CloudTrail event
E. When a CodePipeline Pipeline Execution State Change event is detected, send the event details to the chat webhook URL.
F. Create an Amazon EventBridge rule that filters on CodePipeline Pipeline Execution State Chang
G. Publish the events to an Amazon Simple Notification Service (Amazon SNS) topi
H. Create an AWS Lambda function that sends event details to the chat webhook UR
I. Subscribe the function to the SNS topic.
J. Modify the pipeline code to send the event details to the chat webhook URL at the end of each stag
K. Parameterize the URL so that each pipeline can send to a different URL based on the pipeline environment.

Answer: C

Explanation:
https://aws.amazon.com/premiumsupport/knowledge-center/sns-lambda-webhooks-chime-slack-teams/

NEW QUESTION 97
A company has developed an AWS Lambda function that handles orders received through an API. The company is using AWS CodeDeploy to deploy the Lambda function as the final stage of a CI/CD pipeline.
A DevOps engineer has noticed there are intermittent failures of the ordering API for a few seconds after deployment. After some investigation the DevOps engineer believes the failures are due to database changes not having fully propagated before the Lambda function is invoked
How should the DevOps engineer overcome this?

A. Add a BeforeAllowTraffic hook to the AppSpec file that tests and waits for any necessary database changes before traffic can flow to the new version of the Lambda function.
B. Add an AfterAllowTraffic hook to the AppSpec file that forces traffic to wait for any pending database changes before allowing the new version of the Lambda function to respond.
C. Add a BeforeAllowTraffic hook to the AppSpec file that tests and waits for any necessary database changes before deploying the new version of the Lambda function.
D. Add a validateService hook to the AppSpec file that inspects incoming traffic and rejects the payload if dependent services such as the database are not yet ready.

Answer: A

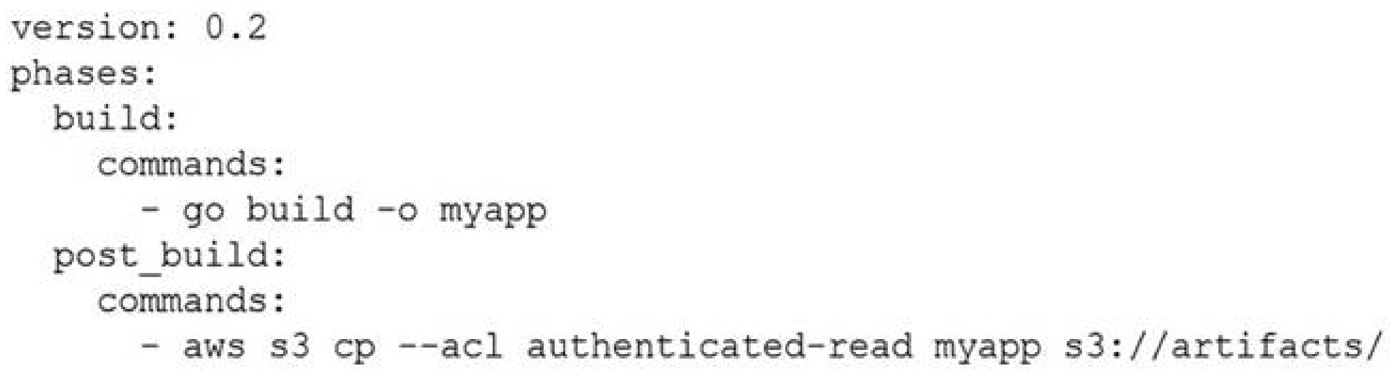
Explanation:
https://docs.aws.amazon.com/codedeploy/latest/userguide/reference-appspec-file-structure-hooks.html#appspec-hooks-lambda

NEW QUESTION 102
A company manages a web application that runs on Amazon EC2 instances behind an Application Load Balancer (ALB). The EC2 instances run in an Auto Scaling group across multiple Availability Zones. The application uses an Amazon RDS for MySQL DB instance to store the data. The company has configured Amazon Route 53 with an alias record that points to the ALB.
A new company guideline requires a geographically isolated disaster recovery (DR> site with an RTO of 4 hours and an RPO of 15 minutes.
Which DR strategy will meet these requirements with the LEAST change to the application stack?

A. Launch a replica environment of everything except Amazon RDS in a different Availability Zone Create an RDS read replica in the new Availability Zone: and configure the new stack to point to the local RDS DB instanc
B. Add the new stack to the Route 53 record set by using a hearth check to configure a failover routing policy.
C. Launch a replica environment of everything except Amazon RDS in a different AW
D. Region Create an RDS read replica in the new Region and configure the new stack to point to the local RDS DB instanc
E. Add the new stack to the Route 53 record set by using a health check to configure a latency routing policy.
F. Launch a replica environment of everything except Amazon RDS ma different AWS Regio
G. In the event of an outage copy and restore the latest RDS snapshot from the primar
H. Region to the DR Region Adjust the Route 53 record set to point to the ALB in the DR Region.
I. Launch a replica environment of everything except Amazon RDS in a different AWS Regio
J. Create an RDS read replica in the new Region and configure the new environment to point to the local RDS DB instanc
K. Add the new stack to the Route 53 record set by using a health check to configure a failover routing polic
L. In the event of an outage promote the read replica to primary.

Answer: D

NEW QUESTION 106
A company is using an AWS CodeBuild project to build and package an application. The packages are copied to a shared Amazon S3 bucket before being deployed across multiple AWS accounts.
The buildspec.yml file contains the following:



```
version: 0.2
phases:
  build:
    commands:
      - go build -o myapp
  post_build:
    commands:
      - aws s3 cp --acl authenticated-read myapp s3://artifacts/
```

The DevOps engineer has noticed that anybody with an AWS account is able to download the artifacts.

What steps should the DevOps engineer take to stop this?

A. Modify the post_build command to use --acl public-read and configure a bucket policy that grants read access to the relevant AWS accounts only.
B. Configure a default ACL for the S3 bucket that defines the set of authenticated users as the relevant AWS accounts only and grants read-only access.
C. Create an S3 bucket policy that grants read access to the relevant AWS accounts and denies read access to the principal “*”.
D. Modify the post_build command to remove --acl authenticated-read and configure a bucket policy that allows read access to the relevant AWS accounts only.

Answer: D

Explanation:
When setting the flag authenticated-read in the command line, the owner gets FULL_CONTROL. The AuthenticatedUsers group (Anyone with an AWS account) gets READ access. Reference: https://docs.aws.amazon.com/AmazonS3/latest/userguide/acl-overview.html

NEW QUESTION 108
A company plans to use Amazon CloudWatch to monitor its Amazon EC2 instances. The company needs to stop EC2 instances when the average of the NetworkPacketsIn metric is less than 5 for at least 3 hours in a 12-hour time window. The company must evaluate the metric every hour. The EC2 instances must continue to run if there is missing data for the NetworkPacketsIn metric during the evaluation period.
A DevOps engineer creates a CloudWatch alarm for the NetworkPacketsIn metric. The DevOps engineer configures a threshold value of 5 and an evaluation period of 1 hour.
Which set of additional actions should the DevOps engineer take to meet these requirements?

A. Configure the Datapoints to Alarm value to be 3 out of 12. Configure the alarm to treat missing data as breaching the threshol
B. Add an AWS Systems Manager action to stop the instance when the alarm enters the ALARM state.
C. Configure the Datapoints to Alarm value to be 3 out of 12. Configure the alarm to treat missing data as not breaching the threshol
D. Add an EC2 action to stop the instance when the alarm enters the ALARM state.
E. Configure the Datapoints to Alarm value to be 9 out of 12. Configure the alarm to treat missing data as breaching the threshol
F. Add an EC2 action to stop the instance when the alarm enters the ALARM state.
G. Configure the Datapoints to Alarm value to be 9 out of 12. Configure the alarm to treat missing data as not breaching the threshol
H. Add an AWS Systems Manager action to stop the instance when the alarm enters the ALARM state.

Answer: B

Explanation:
To meet the requirements, the DevOps engineer needs to configure the CloudWatch alarm to stop the EC2 instances when the average of the NetworkPacketsIn metric is less than 5 for at least 3 hours in a 12-hour time window. This means that the alarm should trigger when 3 out of 12 datapoints are below the threshold of 5. The alarm should also treat missing data as not breaching the threshold, so that the EC2 instances continue to run if there is no data for the metric during the evaluation period. The DevOps engineer can add an EC2 action to stop the instance when the alarm enters the ALARM state, which is a built-in action type for CloudWatch alarms.

NEW QUESTION 113
An AWS CodePipeline pipeline has implemented a code release process. The pipeline is integrated with AWS CodeDeploy to deploy versions of an application to multiple Amazon EC2 instances for each CodePipeline stage.
During a recent deployment the pipeline failed due to a CodeDeploy issue. The DevOps team wants to improve monitoring and notifications during deployment to decrease resolution times.
What should the DevOps engineer do to create notifications. When issues are discovered?

A. Implement Amazon CloudWatch Logs for CodePipeline and CodeDeploy create an AWS Config rule to evaluate code deployment issues, and create an Amazon Simple Notification Service (Amazon SNS) topic to notify stakeholders of deployment issues.
B. Implement Amazon EventBridge for CodePipeline and CodeDeploy create an AWS Lambda function to evaluate code deployment issues, and create an Amazon Simple Notification Service (Amazon SNS) topic to notify stakeholders of deployment issues.
C. Implement AWS CloudTrail to record CodePipeline and CodeDeploy API call information create an AWS Lambda function to evaluate code deployment issues and create an Amazon Simple Notification Service (Amazon SNS) topic to notify stakeholders of deployment issues.
D. Implement Amazon EventBridge for CodePipeline and CodeDeploy create an Amazo
E. Inspector assessment target to evaluate code deployment issues and create an Amazon Simpl
F. Notification Service (Amazon SNS) topic to notify stakeholders of deployment issues.

Answer: B

Explanation:
AWS CloudWatch Events can be used to monitor events across different AWS resources, and a CloudWatch Event Rule can be created to trigger an AWS Lambda function when a deployment issue is detected in the pipeline. The Lambda function can then evaluate the issue and send a notification to the appropriate stakeholders through an Amazon SNS topic. This approach allows for real-time notifications and faster resolution times.

NEW QUESTION 118
A company has an on-premises application that is written in Go. A DevOps engineer must move the application to AWS. The company's development team wants to enable blue/green deployments and perform A/B testing.
Which solution will meet these requirements?

A. Deploy the application on an Amazon EC2 instance, and create an AMI of the instanc
B. Use the AMI to create an automatic scaling launch configuration that is used in an Auto Scaling grou
C. Use Elastic Load Balancing to distribute traffi
D. When changes are made to the application, a new AMI will be created, which will initiate an EC2 instance refresh.
E. Use Amazon Lightsail to deploy the applicatio
F. Store the application in a zipped format in an Amazon S3 bucke
G. Use this zipped version to deploy new versions of the application to Lightsai
H. Use Lightsail deployment options to manage the deployment.
I. Use AWS CodeArtifact to store the application cod
J. Use AWS CodeDeploy to deploy the application to a fleet of Amazon EC2 instance
K. Use Elastic Load Balancing to distribute the traffic to the EC2 instance
L. When making changes to the application, upload a new version to CodeArtifact and create a new CodeDeploy deployment.

M. Use AWS Elastic Beanstalk to host the applicatio
N. Store a zipped version of the application in Amazon S3. Use that location to deploy new versions of the applicatio
O. Use Elastic Beanstalk to manage the deployment options.

Answer: D

Explanation:
https://aws.amazon.com/quickstart/architecture/blue-green-deployment/

NEW QUESTION 119
A company has developed a serverless web application that is hosted on AWS. The application consists of Amazon S3. Amazon API Gateway, several AWS Lambda functions, and an Amazon RDS for MySQL database. The company is using AWS CodeCommit to store the source code. The source code is a combination of AWS Serverless Application Model (AWS SAM) templates and Python code.
A security audit and penetration test reveal that user names and passwords for authentication to the database are hardcoded within CodeCommit repositories. A DevOps engineer must implement a solution to automatically detect and prevent hardcoded secrets.
What is the MOST secure solution that meets these requirements?

A. Enable Amazon CodeGuru Profile
B. Decorate the handler function with@with_lambda_profiler(). Manually review the recommendation repor
C. Write the secret to AWS Systems Manager Parameter Store as a secure strin
D. Update the SAM templates and the Python code to pull the secret from Parameter Store.
E. Associate the CodeCommit repository with Amazon CodeGuru Reviewe
F. Manually check the code review for any recommendation
G. Choose the option to protect the secre
H. Update the SAM templates and the Python code to pull the secret from AWS Secrets Manager.
I. Enable Amazon CodeGuru Profile
J. Decorate the handler function with@with_lambda_profiler(). Manually review the recommendation repor
K. Choose the option to protect the secre
L. Update the SAM templates and the Python code to pull the secret from AWS Secrets Manager.
M. Associate the CodeCommit repository with Amazon CodeGuru Reviewe
N. Manually check the code review for any recommendation
O. Write the secret to AWS Systems Manager Parameter Store as a strin
P. Update the SAM templates and the Python code to pull the secret from Parameter Store.

Answer: B

Explanation:
https://docs.aws.amazon.com/codecommit/latest/userguide/how-to-amazon-codeguru-reviewer.html

NEW QUESTION 121
A company has multiple development teams in different business units that work in a shared single AWS account All Amazon EC2 resources that are created in the account must include tags that specify who created the resources. The tagging must occur within the first hour of resource creation.
A DevOps engineer needs to add tags to the created resources that Include the user ID that created the resource and the cost center ID The DevOps engineer configures an AWS Lambda function With the cost center mappings to tag the resources. The DevOps engineer also sets up AWS CloudTrail in the AWS account. An Amazon S3 bucket stores the CloudTrail event logs
Which solution will meet the tagging requirements?

A. Create an S3 event notification on the S3 bucket to invoke the Lambda function for s3.ObJectTagging:Put event
B. Enable bucket versioning on the S3 bucket.
C. Enable server access logging on the S3 bucke
D. Create an S3 event notification on the S3 bucket for s3. ObjectTaggIng.• events
E. Create a recurring hourly Amazon EventBridge scheduled rule that invokes the Larnbda functio
F. Modify the Lambda function to read the logs from the S3 bucket
G. Create an Amazon EventBridge rule that uses Amazon EC2 as the event sourc
H. Configure the rule to match events delivered by CloudTrai
I. Configure the rule to target the Lambda function

Answer: D

Explanation:
? Option A is incorrect because S3 event notifications do not support s3.ObjectTagging:Put events. S3 event notifications only support events related to object creation, deletion, replication, and restore. Moreover, enabling bucket versioning on the S3 bucket is not relevant to the tagging requirements, as it only keeps multiple versions of objects in the bucket.
? Option B is incorrect because enabling server access logging on the S3 bucket does not help with tagging the resources. Server access logging only records requests for access to the bucket or its objects. It does not capture the user ID or the cost center ID of the resources. Furthermore, creating an S3 event notification on the S3 bucket for s3.ObjectTagging:Put events is not possible, as explained in option A.
? Option C is incorrect because creating a recurring hourly Amazon EventBridge scheduled rule that invokes the Lambda function is not efficient or timely. The Lambda function would have to read the logs from the S3 bucket every hour and tag the resources accordingly, which could incur unnecessary costs and delays. A better solution would be to trigger the Lambda function as soon as a resource is created, rather than waiting for an hourly schedule.
? Option D is correct because creating an Amazon EventBridge rule that uses Amazon EC2 as the event source and matches events delivered by CloudTrail is a valid way to tag the resources. CloudTrail records all API calls made to AWS services, including EC2, and delivers them as events to EventBridge. The EventBridge rule can filter the events based on the user ID and the resource type, and then target the Lambda function to tag the resources with the cost center ID. This solution meets the tagging requirements in a timely and efficient manner.
References:
? S3 event notifications
? Server access logging
? Amazon EventBridge rules
? AWS CloudTrail

NEW QUESTION 126

A company has configured an Amazon S3 event source on an AWS Lambda function The company needs the Lambda function to run when a new object is created or an existing object IS modified In a particular S3 bucket The Lambda function will use the S3 bucket name and the S3 object key of the incoming event to read the contents of the created or modified S3 object The Lambda function will parse the contents and save the parsed contents to an Amazon DynamoDB table. The Lambda function's execution role has permissions to read from the S3 bucket and to write to the DynamoDB table, During testing, a DevOps engineer discovers that the Lambda
function does not run when objects are added to the S3 bucket or when existing objects are modified.
Which solution will resolve this problem?

A. Increase the memory of the Lambda function to give the function the ability to process large files from the S3 bucket.
B. Create a resource policy on the Lambda function to grant Amazon S3 the permission to invoke the Lambda function for the S3 bucket
C. Configure an Amazon Simple Queue Service (Amazon SQS) queue as an OnFailure destination for the Lambda function
D. Provision space in the /tmp folder of the Lambda function to give the function the ability to process large files from the S3 bucket

Answer: B

Explanation:
? Option A is incorrect because increasing the memory of the Lambda function does not address the root cause of the problem, which is that the Lambda function is not triggered by the S3 event source. Increasing the memory of the Lambda function might improve its performance or reduce its execution time, but it does not affect its invocation. Moreover, increasing the memory of the Lambda function might incur higher costs, as Lambda charges based on the amount of memory allocated to the function.
? Option B is correct because creating a resource policy on the Lambda function to grant Amazon S3 the permission to invoke the Lambda function for the S3 bucket is a necessary step to configure an S3 event source. A resource policy is a JSON document that defines who can access a Lambda resource and under what conditions. By granting Amazon S3 permission to invoke the Lambda function, the company ensures that the Lambda function runs when a new object is created or an existing object is modified in the S3 bucket1.
? Option C is incorrect because configuring an Amazon Simple Queue Service (Amazon SQS) queue as an On-Failure destination for the Lambda function does not help with triggering the Lambda function. An On-Failure destination is a feature that allows Lambda to send events to another service, such as SQS or Amazon Simple Notification Service (Amazon SNS), when a function invocation fails. However, this feature only applies to asynchronous invocations, and S3 event sources use synchronous invocations. Therefore, configuring an SQS queue as an On-Failure destination would have no effect on the problem.
? Option D is incorrect because provisioning space in the /tmp folder of the Lambda function does not address the root cause of the problem, which is that the Lambda function is not triggered by the S3 event source. Provisioning space in the /tmp folder of the Lambda function might help with processing large files from the S3 bucket, as it provides temporary storage for up to 512 MB of data. However, it does not affect the invocation of the Lambda function.
References:
? Using AWS Lambda with Amazon S3
? Lambda resource access permissions
? AWS Lambda destinations
? [AWS Lambda file system]

NEW QUESTION 131
A company's DevOps engineer is working in a multi-account environment. The company uses AWS Transit Gateway to route all outbound traffic through a network operations account. In the network operations account all account traffic passes through a firewall appliance for inspection before the traffic goes to an internet gateway.
The firewall appliance sends logs to Amazon CloudWatch Logs and includes event
seventies of CRITICAL, HIGH, MEDIUM, LOW, and INFO. The security team wants to receive an alert if any CRITICAL events occur.
What should the DevOps engineer do to meet these requirements?

A. Create an Amazon CloudWatch Synthetics canary to monitor the firewall stat
B. If the firewall reaches a CRITICAL state or logs a CRITICAL event use a CloudWatch alarm to publish a notification to an Amazon Simple Notification Service (Amazon SNS) topic Subscribe the security team's email address to the topic.
C. Create an Amazon CloudWatch metric filter by using a search for CRITICAL events Publish a custom metric for the findin
D. Use a CloudWatch alarm based on the custom metric to publish a notification to an Amazon Simple Notification Service (Amazon SNS) topi
E. Subscribe the security team's email address to the topic.
F. Enable Amazon GuardDuty in the network operations accoun
G. Configure GuardDuty to monitor flow logs Create an Amazon EventBridge event rule that is invoked by GuardDuty events that are CRITICAL Define an Amazon Simple Notification Service (Amazon SNS) topic as a target Subscribe the security team's email address to the topic.
H. Use AWS Firewall Manager to apply consistent policies across all account
I. Create an Amazo
J. EventBridge event rule that is invoked by Firewall Manager events that are CRITICAL Define an Amazon Simple Notification Service (Amazon SNS) topic as a target Subscribe the security team's email address to the topic.

Answer: B

Explanation:
"The firewall appliance sends logs to Amazon CloudWatch Logs and includes event severities of CRITICAL, HIGH, MEDIUM, LOW, and INFO"

NEW QUESTION 135
A company requires that its internally facing web application be highly available. The architecture is made up of one Amazon EC2 web server instance and one NAT instance that provides outbound internet access for updates and accessing public data.
Which combination of architecture adjustments should the company implement to achieve high availability? (Choose two.)

A. Add the NAT instance to an EC2 Auto Scaling group that spans multiple Availability Zone
B. Update the route tables.
C. Create additional EC2 instances spanning multiple Availability Zone
D. Add an Application Load Balancer to split the load between them.
E. Configure an Application Load Balancer in front of the EC2 instanc
F. Configure Amazon CloudWatch alarms to recover the EC2 instance upon host failure.
G. Replace the NAT instance with a NAT gateway in each Availability Zon
H. Update the route tables.
I. Replace the NAT instance with a NAT gateway that spans multiple Availability Zone
J. Update the route tables.

Answer: BD

Explanation:
https://docs.aws.amazon.com/vpc/latest/userguide/vpc-nat-gateway.html

NEW QUESTION 137
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