Amazon-Web-Services

Exam Questions DOP-C02

AWS Certified DevOps Engineer - Professional

NEW QUESTION 1
A company is using an organization in AWS Organizations to manage multiple AWS accounts. The company's development team wants to use AWS Lambda functions to meet resiliency requirements and is rewriting all applications to work with Lambda functions that are deployed in a VPC. The development team is using Amazon Elastic Pile System (Amazon EFS) as shared storage in Account A in the organization.
The company wants to continue to use Amazon EPS with Lambda Company policy requires all serverless projects to be deployed in Account B.
A DevOps engineer needs to reconfigure an existing EFS file system to allow Lambda functions to access the data through an existing EPS access point.
Which combination of steps should the DevOps engineer take to meet these requirements? (Select THREE.)

A. Update the EFS file system policy to provide Account B with access to mount and write to the EFS file system in Account A.
B. Create SCPs to set permission guardrails with fine-grained control for Amazon EFS.
C. Create a new EFS file system in Account B Use AWS Database Migration Service (AWS DMS) to keep data from Account A and Account B synchronized.
D. Update the Lambda execution roles with permission to access the VPC and the EFS file system.
E. Create a VPC peering connection to connect Account A to Account B.
F. Configure the Lambda functions in Account B to assume an existing IAM role in Account A.

Answer: AEF

Explanation:
A Lambda function in one account can mount a file system in a different account. For this scenario, you configure VPC peering between the function VPC and the file system VPC. https://docs.aws.amazon.com/lambda/latest/dg/services-efs.html
https://aws.amazon.com/ru/blogs/storage/mount-amazon-efs-file-systems-cross-account-from-amazon-eks/
* 1. Need to update the file system policy on EFS to allow mounting the file system into Account B.

```
## File System Policy
$ cat file-system-policy.json
{
"Statement": [
{
"Effect": "Allow", "Action": [
"elasticfilesystem:ClientMount", "elasticfilesystem:ClientWrite"
],
"Principal": {
"AWS": "arn:aws:iam::<aws-account-id-A>:root" # Replace with AWS account ID of EKS cluster
}
}
]
}
```

* 2. Need VPC peering between Account A and Account B as the pre-requisite
* 3. Need to assume cross-account IAM role to describe the mounts so that a specific mount can be chosen.

NEW QUESTION 2
A company uses a single AWS account lo test applications on Amazon EC2 instances. The company has turned on AWS Config in the AWS account and has activated the restricted-ssh AWS Config managed rule.
The company needs an automated monitoring solution that will provide a customized notification in real time if any security group in the account is not compliant with the restricted-ssh rule. The customized notification must contain the name and ID of the noncompliant security group.
A DevOps engineer creates an Amazon Simple Notification Service (Amazon SNS) topic in the account and subscribes the appropriate personnel to the topic.
What should me DevOps engineer do next to meet these requirements?

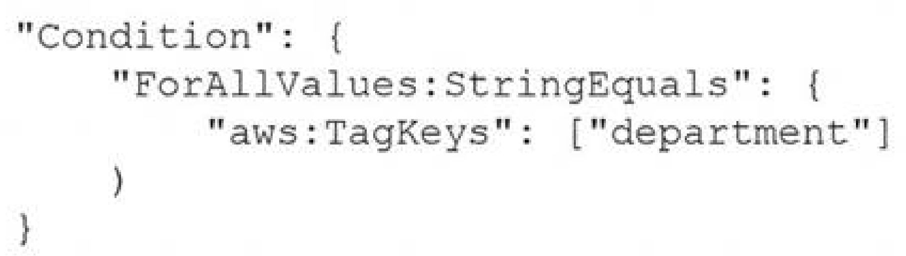
A. Create an Amazon EventBridge rule that matches an AWS Config evaluation result of NON_COMPLIANT tor the restricted-ssh rul
B. Configure an input transformer for the EventBridge rule Configure the EventBridge rule to publish a notification to the SNS topic.
C. Configure AWS Config to send all evaluation results for the restricted-ssh rule to the SNS topic.Configure a filter policy on the SNS topic to send only notifications that contain the text of NON_COMPLIANT in the notification to subscribers.
D. Create an Amazon EventBridge rule that matches an AWS Config evaluation result of NON_COMPLIANT for the restricted-ssh rule Configure the EventBridge rule to invoke AWS Systems Manager Run Command on the SNS topic to customize a notification and to publish the notification to the SNS topic
E. Create an Amazon EventBridge rule that matches all AWS Config evaluation results of NON_COMPLIANT Configure an input transformer for the restricted-ssh rule Configure the EventBridge rule to publish a notification to the SNS topic.

Answer: A

Explanation:
Create an Amazon EventBridge (Amazon CloudWatch Events) rule that matches an AWS Config evaluation result of NON_COMPLIANT for the restricted-ssh rule. Configure an input transformer for the EventBridge (CloudWatch Events) rule. Configure the EventBridge (CloudWatch Events) rule to publish a notification to the SNS topic. This approach uses Amazon EventBridge (previously known as Amazon CloudWatch Events) to filter AWS Config evaluation results based on the restricted-ssh rule and its compliance status (NON_COMPLIANT). An input transformer can be used to customize the information contained in the notification, such as the name and ID of the noncompliant security group. The EventBridge (CloudWatch Events) rule can then be configured to publish a notification to the SNS topic, which will notify the appropriate personnel in real-time.

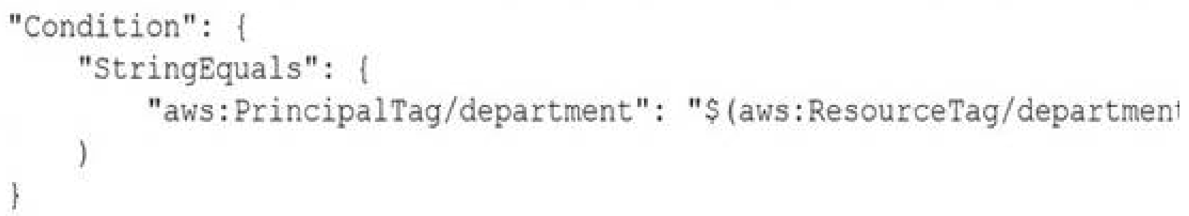
NEW QUESTION 3
A company has multiple AWS accounts. The company uses AWS IAM Identity Center (AWS Single Sign-On) that is integrated with AWS Toolkit for Microsoft Azure DevOps. The attributes for access control feature is enabled in IAM Identity Center.
The attribute mapping list contains two entries. The department key is mapped to ${path:enterprise.department}. The costCenter key is mapped to ${path:enterprise.costCenter}.
All existing Amazon EC2 instances have a department tag that corresponds to three company departments (d1, d2, d3). A DevOps engineer must create policies based on the matching attributes. The policies must minimize administrative effort and must grant each Azure AD user access to only the EC2 instances that are tagged with the user’s respective department name.
Which condition key should the DevOps engineer include in the custom permissions policies to meet these requirements?

A.



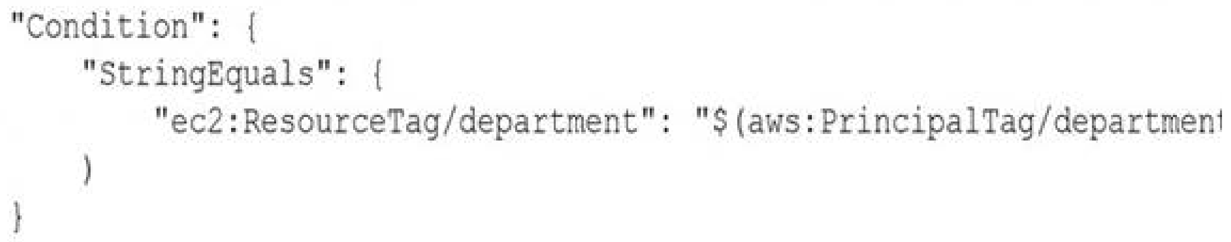
```
"Condition": {
    "ForAllValues:StringEquals": {
        "aws:TagKeys": ["department"]
    )
}
```

B.



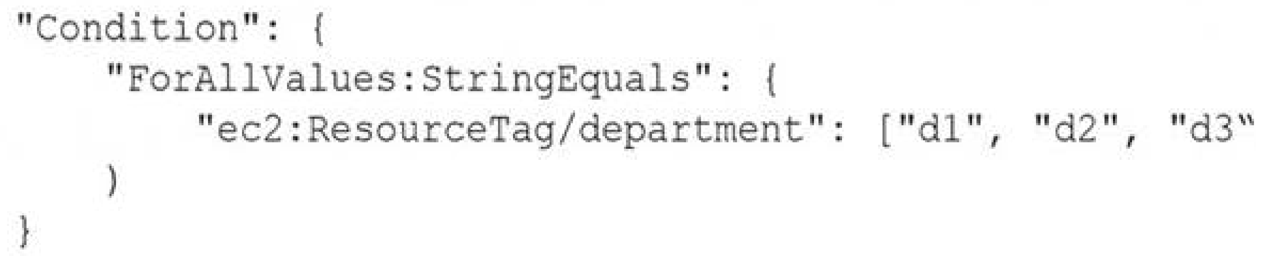
```
"Condition": {
    "StringEquals": {
        "aws:PrincipalTag/department": "$(aws:ResourceTag/departmen
    )
}
```

C.



```
"Condition": {
    "StringEquals": {
        "ec2:ResourceTag/department": "$(aws:PrincipalTag/departmen
    )
}
```

D.



```
"Condition": {
    "ForAllValues:StringEquals": {
        "ec2:ResourceTag/department": ["d1", "d2", "d3"
    )
}
```

Answer: C

Explanation:
https://docs.aws.amazon.com/singlesignon/latest/userguide/configure-abac.html

NEW QUESTION 4
A company is performing vulnerability scanning for all Amazon EC2 instances across many accounts. The accounts are in an organization in AWS Organizations. Each account's VPCs are attached to a shared transit gateway. The VPCs send traffic to the internet through a central egress VPC. The company has enabled Amazon Inspector in a delegated administrator account and has enabled scanning for all member accounts.
A DevOps engineer discovers that some EC2 instances are listed in the "not scanning" tab in Amazon
Inspector.
Which combination of actions should the DevOps engineer take to resolve this issue? (Choose three.)

A. Verify that AWS Systems Manager Agent is installed and is running on the EC2 instances that Amazon Inspector is not scanning.
B. Associate the target EC2 instances with security groups that allow outbound communication on port 443 to the AWS Systems Manager service endpoint.
C. Grant inspector:StartAssessmentRun permissions to the IAM role that the DevOps engineer is using.
D. Configure EC2 Instance Connect for the EC2 instances that Amazon Inspector is not scanning.
E. Associate the target EC2 instances with instance profiles that grant permissions to communicate with AWS Systems Manager.
F. Create a managed-instance activatio
G. Use the Activation Code and the Activation ID to register the EC2 instances.

Answer: ABE

Explanation:
https://docs.aws.amazon.com/inspector/latest/user/scanning-ec2.html

NEW QUESTION 5
A company has an application that is using a MySQL-compatible Amazon Aurora Multi-AZ DB cluster as the database. A cross-Region read replica has been created for disaster recovery purposes. A DevOps engineer wants to automate the promotion of the replica so it becomes the primary database instance in the event of a failure.
Which solution will accomplish this?

A. Configure a latency-based Amazon Route 53 CNAME with health checks so it points to both the primary and replica endpoint
B. Subscribe an Amazon SNS topic to Amazon RDS failure notifications from AWS CloudTrail and use that topic to invoke an AWS Lambda function that will promote the replica instance as the primary.
C. Create an Aurora custom endpoint to point to the primary database instanc
D. Configure the application to use this endpoin
E. Configure AWS CloudTrail to run an AWS Lambda function to promote the replica instance and modify the custom endpoint to point to the newly promoted instance.
F. Create an AWS Lambda function to modify the application's AWS CloudFormation template to promote the replica, apply the template to update the stack, and point the application to the newly promoted instanc
G. Create an Amazon CloudWatch alarm to invoke this Lambda function after the failure event occurs.
H. Store the Aurora endpoint in AWS Systems Manager Parameter Stor
I. Create an Amazon EventBridge event that detects the database failure and runs an AWS Lambda function to promote the replicainstance and update the endpoint URL stored in AWS Systems Manager Parameter Stor
J. Code the application to reload the endpoint from Parameter Store if a database connection fails.

Answer: D

Explanation:
EventBridge is needed to detect the database failure. Lambda is needed to promote the replica as it's in another Region (manual promotion, otherwise). Storing and updating the endpoint in Parameter store is important in updating the application. Look at High Availability section of Aurora FAQ: https://aws.amazon.com/rds/aurora/faqs/

NEW QUESTION 6
A company deploys updates to its Amazon API Gateway API several times a week by using an AWS
CodePipeline pipeline. As part of the update process the company exports the JavaScript SDK for the API from the API. Gateway console and uploads the SDK to an Amazon S3 bucket
The company has configured an Amazon CloudFront distribution that uses the S3 bucket as an origin Web client then download the SDK by using the CloudFront distribution's endpoint. A DevOps engineer needs to implement a solution to make the new SDK available automatically during new API deployments.
Which solution will meet these requirements?

A. Create a CodePipeline action immediately after the deployment stage of the AP
B. Configure the action to invoke an AWS Lambda functio
C. Configure the Lambda function to download the SDK from API Gateway, upload the SDK to the S3 bucket and create a CloudFront invalidation for the SDK path.
D. Create a CodePipeline action immediately after the deployment stage of the API Configure the action to use the CodePipelme integration with AP
E. Gateway to export the SDK to Amazon S3 Create another action that uses the CodePipeline integration with Amazon S3 to invalidate the cache for the SDK path.
F. Create an Amazon EventBridge rule that reacts to UpdateStage events from aws apigateway Configure the rule to invoke an AWS Lambda function to download the SDK from API Gateway upload the SDK to the S3 bucket and call the CloudFront API to create an invalidation for the SDK path.
G. Create an Amazon EventBridge rule that reacts to Creat
H. Deployment events from aws apigateway.Configure the rule to invoke an AWS Lambda function to download the SDK from AP
I. Gateway upload the SDK to the S3 bucket and call the S3 API to invalidate the cache for the SDK path.

Answer: A

Explanation:
This solution would allow the company to automate the process of updating the SDK and making it available to web clients. By adding a CodePipeline action immediately after the deployment stage of the API, the Lambda function will be invoked automatically each time the API is updated. The Lambda function should be able to download the new SDK from API Gateway, upload it to the S3 bucket and also create a CloudFront invalidation for the SDK path so that the latest version of the SDK is available for the web clients. This is the most straight forward solution and it will meet the requirements.

NEW QUESTION 7
A company has a mobile application that makes HTTP API calls to an Application Load Balancer (ALB). The ALB routes requests to an AWS Lambda function. Many different versions of the application are in use at any given time, including versions that are in testing by a subset of users. The version of the application is defined in the user-agent header that is sent with all requests to the API.
After a series of recent changes to the API, the company has observed issues with the application. The company needs to gather a metric for each API operation by response code for each version of the application that is in use. A DevOps engineer has modified the Lambda function to extract the API operation name, version information from the user-agent header and response code.
Which additional set of actions should the DevOps engineer take to gather the required metrics?

A. Modify the Lambda function to write the API operation name, response code, and version number as a log line to an Amazon CloudWatch Logs log grou
B. Configure a CloudWatch Logs metric filter that increments a metric for each API operation nam
C. Specify response code and application version as dimensions for the metric.
D. Modify the Lambda function to write the API operation name, response code, and version number as a log line to an Amazon CloudWatch Logs log grou
E. Configure a CloudWatch Logs Insights query topopulate CloudWatch metrics from the log line
F. Specify response code and application version as dimensions for the metric.
G. Configure the ALB access logs to write to an Amazon CloudWatch Logs log grou
H. Modify the Lambda function to respond to the ALB with the API operation name, response code, and version number as response metadat
I. Configure a CloudWatch Logs metric filter that increments a metric for each API operation nam
J. Specify response code and application version as dimensions for the metric.
K. Configure AWS X-Ray integration on the Lambda functio
L. Modify the Lambda function to create an X-Ray subsegment with the API operation name, response code, and version numbe
M. Configure X-Ray insights to extract an aggregated metric for each API operation name and to publish the metric to Amazon CloudWatc
N. Specify response code and application version as dimensions for the metric.

Answer: A

Explanation:
"Note that the metric filter is different from a log insights query, where the experience is interactive and provides immediate search results for the user to investigate. No automatic action can be invoked from an insights query. Metric filters, on the other hand, will generate metric data in the form of a time series. This lets you create alarms that integrate into your ITSM processes, execute AWS Lambda functions, or even create anomaly detection models." https://aws.amazon.com/blogs/mt/quantify-custom-application-metrics-with-amazon-cloudwatch-logs-and-metri

NEW QUESTION 8
A company has deployed an application in a production VPC in a single AWS account. The application is popular and is experiencing heavy usage. The company’s security team wants to add additional security, such as AWS WAF, to the application deployment. However, the application's product manager is concerned about cost and does not want to approve the change unless the security team can prove that additional security is necessary.
The security team believes that some of the application's demand might come from users that have IP addresses that are on a deny list. The security team provides the deny list to a DevOps engineer. If any of the IP addresses on the deny list access the application, the security team wants to receive automated notification in near real time so that the security team can document that the application needs additional security. The DevOps engineer creates a VPC flow log for the production VPC.
Which set of additional steps should the DevOps engineer take to meet these requirements MOST cost-effectively?

A. Create a log group in Amazon CloudWatch Log
B. Configure the VPC flow log to capture accepted traffic and to send the data to the log grou

C. Create an Amazon CloudWatch metric filter for IP addresses on the deny lis
D. Create a CloudWatch alarm with the metric filter as inpu
E. Set the period to 5 minutes and the datapoints to alarm to 1. Use an Amazon Simple Notification Service (Amazon SNS) topic to send alarm notices to the security team.
F. Create an Amazon S3 bucket for log file
G. Configure the VPC flow log to capture all traffic and to send the data to the S3 bucke
H. Configure Amazon Athena to return all log files in the S3 bucket for IP addresses on the deny lis
I. Configure Amazon QuickSight to accept data from Athena and to publish the data as a dashboard that the security team can acces
J. Create a threshold alert of 1 for successful acces
K. Configure the alert to automatically notify the security team as frequently as possible when the alert threshold is met.
L. Create an Amazon S3 bucket for log file
M. Configure the VPC flow log to capture accepted traffic and to send the data to the S3 bucke
N. Configure an Amazon OpenSearch Service cluster and domain for the log file
O. Create an AWS Lambda function to retrieve the logs from the S3 bucket, format the logs, and load the logs into the OpenSearch Service cluste
P. Schedule the Lambda function to run every 5 minute
Q. Configure an alert and condition in OpenSearch Service to send alerts to the security team through an Amazon Simple Notification Service (Amazon SNS) topic when access from the IP addresses on the deny list is detected.
R. Create a log group in Amazon CloudWatch Log
S. Create an Amazon S3 bucket to hold query results.Configure the VPC flow log to capture all traffic and to send the data to the log grou
T. Deploy an Amazon Athena CloudWatch connector in AWS Lambd
. Connect the connector to the log grou
. Configure Athena to periodically query for all accepted traffic from the IP addresses on the deny list and to store the results in the S3 bucke
. Configure an S3 event notification to automatically notify the security team through an Amazon Simple Notification Service (Amazon SNS) topic when new objects are added to the S3 bucket.

Answer: A

NEW QUESTION 9
A development team uses AWS CodeCommit for version control for applications. The development team uses AWS CodePipeline, AWS CodeBuild. and AWS CodeDeploy for CI/CD infrastructure. In CodeCommit, the development team recently merged pull requests that did not pass long-running tests in the code base. The development team needed to perform rollbacks to branches in the codebase, resulting in lost time and wasted effort.
A DevOps engineer must automate testing of pull requests in CodeCommit to ensure that reviewers more easily see the results of automated tests as part of the pull request review.
What should the DevOps engineer do to meet this requirement?

A. Create an Amazon EventBridge rule that reacts to the pullRequestStatusChanged even
B. Create an AWS Lambda function that invokes a CodePipeline pipeline with a CodeBuild action that runs the tests for the applicatio
C. Program the Lambda function to post the CodeBuild badge as a comment on the pull request so that developers will see the badge in their code review.
D. Create an Amazon EventBridge rule that reacts to the pullRequestCreated even
E. Create an AWS Lambda function that invokes a CodePipeline pipeline with a CodeBuild action that runs the tests for the applicatio
F. Program the Lambda function to post the CodeBuild test results as a comment on the pull request when the test results are complete.
G. Create an Amazon EventBridge rule that reacts to pullRequestCreated and pullRequestSourceBranchUpdated event
H. Create an AWS Lambda function that invokes a CodePipeline pipeline with a CodeBuild action that runs the tests for the applicatio
I. Program the Lambda function to post the CodeBuild badge as a comment on the pull request so that developers will see the badge in their code review.
J. Create an Amazon EventBridge rule that reacts to the pullRequestStatusChanged even
K. Create an AWS Lambda function that invokes a CodePipeline pipeline with a CodeBuild action that runs the tests for the applicatio
L. Program the Lambda function to post the CodeBuild test results as a comment on the pullrequest when the test results are complete.

Answer: B

Explanation:
https://aws.amazon.com/es/blogs/devops/complete-ci-cd-with-aws-codecommit-aws-codebuild-aws-codedeploy

NEW QUESTION 10
A company has multiple accounts in an organization in AWS Organizations. The company's SecOps team needs to receive an Amazon Simple Notification Service (Amazon SNS) notification if any account in the organization turns off the Block Public Access feature on an Amazon S3 bucket. A DevOps engineer must implement this change without affecting the operation of any AWS accounts. The implementation must ensure that individual member accounts in the organization cannot turn off the notification.
Which solution will meet these requirements?

A. Designate an account to be the delegated Amazon GuardDuty administrator accoun
B. Turn on GuardDuty for all accounts across the organizatio
C. In the GuardDuty administrator account, create an SNS topi
D. Subscribe the SecOps team's email address to the SNS topi
E. In the same account, create an Amazon EventBridge rule that uses an event pattern for GuardDuty findings and a target of the SNS topic.
F. Create an AWS CloudFormation template that creates an SNS topic and subscribes the SecOps team’s email address to the SNS topi
G. In the template, include an Amazon EventBridge rule that uses an event pattern of CloudTrail activity for s3:PutBucketPublicAccessBlock and a target of the SNS topi
H. Deploy the stack to every account in the organization by using CloudFormation StackSets.
I. Turn on AWS Config across the organizatio
J. In the delegated administrator account, create an SNS topi
K. Subscribe the SecOps team's email address to the SNS topi
L. Deploy a conformance pack that uses the s3-bucket-level-public-access-prohibited AWS Config managed rule in each account and uses an AWS Systems Manager document to publish an event to the SNS topic to notify the SecOps team.
M. Turn on Amazon Inspector across the organizatio
N. In the Amazon Inspector delegated administrator account, create an SNS topi
O. Subscribe the SecOps team’s email address to the SNS topi
P. In the same account, create an Amazon EventBridge rule that uses an event pattern for public network exposure of the S3 bucket and publishes an event to the SNS topic to notify the SecOps team.

Answer: C

Explanation:
Amazon GuardDuty is primarily on threat detection and response, not configuration monitoring A conformance pack is a collection of AWS Config rules and remediation actions that can be easily deployed as a single entity in an account and a Region or across an organization in AWS Organizations.
https://docs.aws.amazon.com/config/latest/developerguide/conformance-packs.html
https://docs.aws.amazon.com/config/latest/developerguide/s3-account-level-public-access-blocks.html

NEW QUESTION 10
A company wants to set up a continuous delivery pipeline. The company stores application code in a private GitHub repository. The company needs to deploy the application components to Amazon Elastic Container Service (Amazon ECS). Amazon EC2, and AWS Lambda. The pipeline must support manual approval actions.
Which solution will meet these requirements?

A. Use AWS CodePipeline with Amazon EC
B. Amazon EC2, and Lambda as deploy providers.
C. Use AWS CodePipeline with AWS CodeDeploy as the deploy provider.
D. Use AWS CodePipeline with AWS Elastic Beanstalk as the deploy provider.
E. Use AWS CodeDeploy with GitHub integration to deploy the application.

Answer: B

Explanation:
https://docs.aws.amazon.com/codedeploy/latest/userguide/deployment-steps.html

NEW QUESTION 11
A company runs an application on one Amazon EC2 instance. Application metadata is stored in Amazon S3 and must be retrieved if the instance is restarted. The instance must restart or relaunch automatically if the instance becomes unresponsive.
Which solution will meet these requirements?

A. Create an Amazon CloudWatch alarm for the StatusCheckFailed metri
B. Use the recover action to stop and start the instanc
C. Use an S3 event notification to push the metadata to the instance when the instance is back up and running.
D. Configure AWS OpsWorks, and use the auto healing feature to stop and start the instanc
E. Use a lifecycle event in OpsWorks to pull the metadata from Amazon S3 and update it on the instance.
F. Use EC2 Auto Recovery to automatically stop and start the instance in case of a failur
G. Use an S3 event notification to push the metadata to the instance when the instance is back up and running.
H. Use AWS CloudFormation to create an EC2 instance that includes the UserData property for the EC2 resourc
I. Add a command in UserData to retrieve the application metadata from Amazon S3.

Answer: B

Explanation:
https://aws.amazon.com/blogs/mt/how-to-set-up-aws-opsworks-stacks-auto-healing-notifications-in-amazon-clo

NEW QUESTION 14
A company is adopting AWS CodeDeploy to automate its application deployments for a Java-Apache Tomcat application with an Apache Webserver. The development team started with a proof of concept, created a deployment group for a developer environment, and performed functional tests within the application. After completion, the team will create additional deployment groups for staging and production.
The current log level is configured within the Apache settings, but the team wants to change this configuration dynamically when the deployment occurs, so that they can set different log level configurations depending on the deployment group without having a different application revision for each group.
How can these requirements be met with the LEAST management overhead and without requiring different script versions for each deployment group?

A. Tag the Amazon EC2 instances depending on the deployment grou
B. Then place a script into the application revision that calls the metadata service and the EC2 API to identify which deployment group the instance is part o
C. Use this information to configure the log level setting
D. Reference the script as part of the AfterInstall lifecycle hook in the appspec.yml file.
E. Create a script that uses the CodeDeploy environment variable DEPLOYMENT_GROUP_ NAME to identify which deployment group the instance is part o
F. Use this information to configure the log level setting
G. Reference this script as part of the BeforeInstall lifecycle hook in the appspec.yml file.
H. Create a CodeDeploy custom environment variable for each environmen
I. Then place a script into the application revision that checks this environment variable to identify which deployment group the instance is part o
J. Use this information to configure the log level setting
K. Reference this script as part of the ValidateService lifecycle hook in the appspec.yml file.
L. Create a script that uses the CodeDeploy environment variable DEPLOYMENT_GROUP_ID to identify which deployment group the instance is part of to configure the log level setting
M. Reference this script as part of the Install lifecycle hook in the appspec.yml file.

Answer: B

Explanation:
The following are the steps that the company can take to change the log level dynamically when the deployment occurs:
- Create a script that uses the CodeDeploy environment variable DEPLOYMENT_GROUP_NAME to identify which deployment group the instance is part of.
- Use this information to configure the log level settings.
- Reference this script as part of the BeforeInstall lifecycle hook in the appspec.yml file.

The DEPLOYMENT_GROUP_NAME environment variable is automatically set by CodeDeploy when the deployment is triggered. This means that the script does not need to call the metadata service or the EC2 API to identify the deployment group.
This solution is the least complex and requires the least management overhead. It also does not require different script versions for each deployment group.
The following are the reasons why the other options are not correct:
- Option A is incorrect because it would require tagging the Amazon EC2 instances, which would be a manual and time-consuming process.
- Option C is incorrect because it would require creating a custom environment variable for each

environment. This would be a complex and error-prone process.
> Option D is incorrect because it would use the DEPLOYMENT_GROUP_ID environment variable.
However, this variable is not automatically set by CodeDeploy, so the script would need to call the metadata service or the EC2 API to get the deployment group ID. This would add complexity and overhead to the solution.

NEW QUESTION 18
A company is divided into teams Each team has an AWS account and all the accounts are in an organization in AWS Organizations. Each team must retain full administrative rights to its AWS account. Each team also must be allowed to access only AWS services that the company approves for use AWS services must gam approval through a request and approval process.
How should a DevOps engineer configure the accounts to meet these requirements?

A. Use AWS CloudFormation StackSets to provision IAM policies in each account to deny access to restricted AWS service
B. In each account configure AWS Config rules that ensure that the policies are attached to IAM principals in the account.
C. Use AWS Control Tower to provision the accounts into OUs within the organization Configure AWS Control Tower to enable AWS IAM identity Center (AWS Single Sign-On). Configure 1AM Identity Center to provide administrative access Include deny policies on user roles for restricted AWS services.
D. Place all the accounts under a new top-level OU within the organization Create an SCP that denies access to restricted AWS services Attach the SCP to the OU.
E. Create an SCP that allows access to only approved AWS service
F. Attach the SCP to the root OU of the organizatio
G. Remove the FullAWSAccess SCP from the root OU of the organization.

Answer: C

Explanation:
https://docs.aws.amazon.com/vpc/latest/userguide/managed-prefix-lists.html A managed prefix list is a set of one or more CIDR blocks. You can use prefix lists to make it easier to configure and maintain your security groups and route tables. https://docs.aws.amazon.com/vpc/latest/userguide/sharing-managed-prefix-lists.html With AWS Resource Access Manager (AWS RAM), the owner of a prefix list can share a prefix list with the following: Specific AWS accounts inside or outside of its organization in AWS Organizations An organizational unit inside its organization in AWS Organizations An entire organization in AWS Organizations

NEW QUESTION 23
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 services.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 25
A DevOps engineer at a company is supporting an AWS environment in which all users use AWS IAM Identity Center (AWS Single Sign-On). The company wants to immediately disable credentials of any new IAM user and wants the security team to receive a notification.
Which combination of steps should the DevOps engineer take to meet these requirements? (Choose three.)

A. Create an Amazon EventBridge rule that reacts to an IAM CreateUser API call in AWS CloudTrail.
B. Create an Amazon EventBridge rule that reacts to an IAM GetLoginProfile API call in AWS CloudTrail.
C. Create an AWS Lambda function that is a target of the EventBridge rul
D. Configure the Lambda function to disable any access keys and delete the login profiles that are associated with the IAM user.
E. Create an AWS Lambda function that is a target of the EventBridge rul
F. Configure the Lambda function to delete the login profiles that are associated with the IAM user.
G. Create an Amazon Simple Notification Service (Amazon SNS) topic that is a target of the EventBridge rul
H. Subscribe the security team's group email address to the topic.
I. Create an Amazon Simple Queue Service (Amazon SQS) queue that is a target of the Lambda function.Subscribe the security team's group email address to the queue.

Answer: ACE

NEW QUESTION 26
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 28
A company wants to ensure that their EC2 instances are secure. They want to be notified if any new vulnerabilities are discovered on their instances and they also want an audit trail of all login activities on the instances.
Which solution will meet these requirements'?

A. Use AWS Systems Manager to detect vulnerabilities on the EC2 instances Install the Amazon Kinesis Agent to capture system logs and deliver them to Amazon S3.
B. Use AWS Systems Manager to detect vulnerabilities on the EC2 instances Install the Systems Manager Agent to capture system logs and view login activity in the CloudTrail console.
C. Configure Amazon CloudWatch to detect vulnerabilities on the EC2 instances Install the AWS Config daemon to capture system logs and view them in the AWS Config console.
D. Configure Amazon Inspector to detect vulnerabilities on the EC2 instances Install the Amazon CloudWatch Agent to capture system logs and record them via Amazon CloudWatch Logs.

Answer: D

Explanation:
This solution will meet the requirements because it will use Amazon Inspector to scan the EC2 instances for any new vulnerabilities and generate findings that can be viewed in the Inspector console or sent as notifications via Amazon Simple Notification Service (SNS). It will also use the Amazon CloudWatch Agent to collect and send system logs from the EC2 instances to Amazon CloudWatch Logs, where they can be
stored, searched, and analyzed. The system logs can provide an audit trail of all login activities on the instances, as well as other useful information such as performance metrics, errors, and events.
https://docs.aws.amazon.com/inspector/latest/user/what-is-inspector.html

NEW QUESTION 30
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 31
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 32
A company has an organization in AWS Organizations. The organization includes workload accounts that contain enterprise applications. The company centrally manages users from an operations account. No users can be created in the workload accounts. The company recently added an operations team and must provide the operations team members with administrator access to each workload account.
Which combination of actions will provide this access? (Choose three.)

A. Create a SysAdmin role in the operations accoun
B. Attach the AdministratorAccess policy to the role.Modify the trust relationship to allow the sts:AssumeRole action from the workload accounts.
C. Create a SysAdmin role in each workload accoun
D. Attach the AdministratorAccess policy to the role.Modify the trust relationship to allow the sts:AssumeRole action from the operations account.
E. Create an Amazon Cognito identity pool in the operations accoun
F. Attach the SysAdmin role as an authenticated role.
G. In the operations account, create an IAM user for each operations team member.
H. In the operations account, create an IAM user group that is named SysAdmin
I. Add an IAM policy that allows the sts:AssumeRole action for the SysAdmin role in each workload accoun
J. Add all operations team members to the group.
K. Create an Amazon Cognito user pool in the operations accoun
L. Create an Amazon Cognito user for each operations team member.

Answer: BDE

Explanation:
https://docs.aws.amazon.com/IAM/latest/UserGuide/tutorial_cross-account-with-roles.html

NEW QUESTION 34
A company that uses electronic health records is running a fleet of Amazon EC2 instances with an Amazon Linux operating system. As part of patient privacy requirements, the company must ensure continuous compliance for patches for operating system and applications running on the EC2 instances.
How can the deployments of the operating system and application patches be automated using a default and custom repository?

A. Use AWS Systems Manager to create a new patch baseline including the custom repositor
B. Run the AWS-RunPatchBaseline document using the run command to verify and install patches.
C. Use AWS Direct Connect to integrate the corporate repository and deploy the patches using Amazon CloudWatch scheduled events, then use the CloudWatch dashboard to create reports.
D. Use yum-config-manager to add the custom repository under /etc/yum.repos.d and run yum-config-manager-enable to activate the repository.
E. Use AWS Systems Manager to create a new patch baseline including the corporate repositor
F. Run the AWS-AmazonLinuxDefaultPatchBaseline document using the run command to verify and install patches.

Answer: A

Explanation:
https://docs.aws.amazon.com/systems-manager/latest/userguide/patch-manager-how-it-works-alt-source-reposit

NEW QUESTION 37
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 38
A company uses AWS Organizations to manage multiple accounts. Information security policies require that all unencrypted Amazon EBS volumes be marked as non-compliant. A DevOps engineer needs to automatically deploy the solution and ensure that this compliance check is always present.
Which solution will accomplish this?

A. Create an AWS CloudFormation template that defines an AWS Inspector rule to check whether EBS encryption is enable
B. Save the template to an Amazon S3 bucket that has been shared with all accounts within the compan
C. Update the account creation script pointing to the CloudFormation template in Amazon S3.
D. Create an AWS Config organizational rule to check whether EBS encryption is enabled and deploy the rule using the AWS CL
E. Create and apply an SCP to prohibit stopping and deleting AWS Config across the organization.
F. Create an SCP in Organization
G. Set the policy to prevent the launch of Amazon EC2 instances without encryption on the EBS volumes using a conditional expressio
H. Apply the SCP to all AWS accounts.Use Amazon Athena to analyze the AWS CloudTrail output, looking for events that deny an ec2:RunInstances action.
I. Deploy an IAM role to all accounts from a single trusted accoun
J. Build a pipeline with AWS CodePipeline with a stage in AWS Lambda to assume the IAM role, and list all EBS volumes in the accoun
K. Publish a report to Amazon S3.

Answer: B

Explanation:
https://docs.aws.amazon.com/config/latest/developerguide/ec2-ebs-encryption-by-default.html

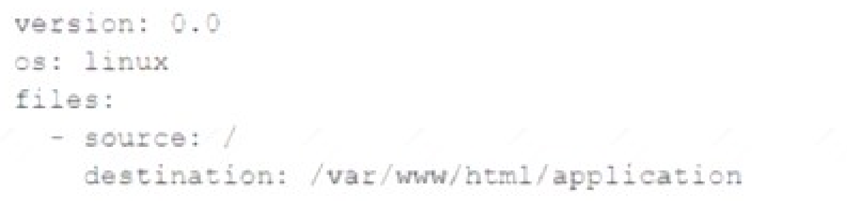
NEW QUESTION 41
A company is deploying a new application that uses Amazon EC2 instances. The company needs a solution to query application logs and AWS account API activity Which solution will meet these requirements?

A. Use the Amazon CloudWatch agent to send logs from the EC2 instances to Amazon CloudWatch Logs Configure AWS CloudTrail to deliver the API logs to Amazon S3 Use CloudWatch to query both sets of logs.
B. Use the Amazon CloudWatch agent to send logs from the EC2 instances to Amazon CloudWatch Logs Configure AWS CloudTrail to deliver the API logs to CloudWatch Logs Use CloudWatch Logs Insights to query both sets of logs.
C. Use the Amazon CloudWatch agent to send logs from the EC2 instances to Amazon Kinesis Configure AWS CloudTrail to deliver the API logs to Kinesis Use Kinesis to load the data into Amazon Redshift Use Amazon Redshift to query both sets of logs.
D. Use the Amazon CloudWatch agent to send logs from the EC2 instances to Amazon S3 Use AWS CloudTrail to deliver the API togs to Amazon S3 Use Amazon Athena to query both sets of logs in Amazon S3.

Answer: D

Explanation:
This solution will meet the requirements because it will use Amazon S3 as a common data lake for both the application logs and the API logs. Amazon S3 is a service that provides scalable, durable, and secure object storage for any type of data. You can use the Amazon CloudWatch agent to send logs from your EC2 instances to S3 buckets, and use AWS CloudTrail to deliver the API logs to S3 buckets as well. You can also use Amazon Athena to query both sets of logs in S3 using standard SQL, without loading or transforming them. Athena is a serverless interactive query service that allows you to analyze data in S3 using a variety of data formats, such as JSON, CSV, Parquet, and ORC.

NEW QUESTION 45
A company's production environment uses an AWS CodeDeploy blue/green deployment to deploy an application. The deployment incudes Amazon EC2 Auto Scaling groups that launch instances that run Amazon Linux 2.
A working appspec. ymi file exists in the code repository and contains the following text.



```
version: 0.0
os: linux
files:
  - source: /
    destination: /var/www/html/application
```

A DevOps engineer needs to ensure that a script downloads and installs a license file onto the instances before the replacement instances start to handle request traffic. The DevOps engineer adds a hooks section to the appspec. yml file.
Which hook should the DevOps engineer use to run the script that downloads and installs the license file?

A. AfterBlockTraffic
B. BeforeBlockTraffic
C. BeforeInstall
D. Down load Bundle

Answer: C

Explanation:
This hook runs before the new application version is installed on the replacement instances. This is the best place to run the script because it ensures that the

license file is downloaded and installed before the replacement instances start to handle request traffic. If you use any other hook, you may encounter errors or inconsistencies in your application.

NEW QUESTION 47
A DevOps engineer has implemented a Cl/CO pipeline to deploy an AWS Cloud Format ion template that provisions a web application. The web application consists of an Application Load Balancer (ALB) a target group, a launch template that uses an Amazon Linux 2 AMI an Auto Scaling group of Amazon EC2 instances, a security group and an Amazon RDS for MySQL database The launch template includes user data that specifies a script to install and start the application.
The initial deployment of the application was successful. The DevOps engineer made changes to update the version of the application with the user data. The CI/CD pipeline has deployed a new version of the template However, the health checks on the ALB are now failing The health checks have marked all targets as unhealthy.
During investigation the DevOps engineer notices that the Cloud Formation stack has a status of UPDATE_COMPLETE. However, when the DevOps engineer connects to one of the EC2 instances and checks /varar/log messages, the DevOps engineer notices that the Apache web server failed to start successfully because of a configuration error
How can the DevOps engineer ensure that the CloudFormation deployment will fail if the user data fails to successfully finish running?

A. Use the cfn-signal helper script to signal success or failure to CloudFormation Use the WaitOnResourceSignals update policy within the CloudFormation template Set an appropriate timeout for the update policy.
B. Create an Amazon CloudWatch alarm for the UnhealthyHostCount metri
C. Include an appropriate alarm threshold for the target group Create an Amazon Simple Notification Service (Amazon SNS) topic as the target to signal success or failure to CloudFormation
D. Create a lifecycle hook on the Auto Scaling group by using the AWS AutoScaling LifecycleHook resource Create an Amazon Simple Notification Service (Amazon SNS) topic as the target to signal success or failure to CloudFormation Set an appropriate timeout on the lifecycle hook.
E. Use the Amazon CloudWatch agent to stream the cloud-init logs Create a subscription filter that includes an AWS Lambda function with an appropriate invocation timeout Configure the Lambda function to use the SignalResource API operation to signal success or failure to CloudFormation.

Answer: A

Explanation:
https://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/aws-attribute-updatepolicy.html

NEW QUESTION 48
An application running on a set of Amazon EC2 instances in an Auto Scaling group requires a configuration file to operate. The instances are created and maintained with AWS CloudFormation. A DevOps engineer wants the instances to have the latest configuration file when launched and wants changes to the configuration file to be reflected on all the instances with a minimal delay when the CloudFormation template is updated. Company policy requires that application configuration files be maintained along with AWS infrastructure configuration files m source control.
Which solution will accomplish this?

A. In the CloudFormaiion template add an AWS Config rul
B. Place the configuration file content in the rule's InputParameters property and set the Scope property to the EC2 Auto Scaling grou
C. Add an AWS Systems Manager Resource Data Sync resource to the template to poll for updates to the configuration.
D. In the CloudFormation template add an EC2 launch template resourc
E. Place the configuration file content in the launch templat
F. Configure the cfn-mit script to run when the instance is launched and configure the cfn-hup script to poll for updates to the configuration.
G. In the CloudFormation template add an EC2 launch template resourc
H. Place the configuration file content in the launch templat
I. Add an AWS Systems Manager Resource Data Sync resource to the template to poll for updates to the configuration.
J. In the CloudFormation template add CloudFormation imt metadat
K. Place the configuration file content m the metadat
L. Configure the cfn-init script to run when the instance is launched and configure thecfn-hup script to poll for updates to the configuration.

Answer: D

Explanation:
Use the AWS::CloudFormation::Init type to include metadata on an Amazon EC2 instance for the cfn-init helper script. If your template calls the cfn-init script, the script looks for resource metadata rooted in the AWS::CloudFormation::Init metadata key. Reference:
https://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/aws-resource-init.html

NEW QUESTION 51
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 byusing 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 in to 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 54
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 ConfigureAPI 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 58
A company manages AWS accounts for application teams in AWS Control Tower. Individual application teams are responsible for securing their respective AWS accounts.
A DevOps engineer needs to enable Amazon GuardDuty for all AWS accounts in which the application teams have not already enabled GuardDuty. The DevOps engineer is using AWS CloudFormation StackSets from the AWS Control Tower management account.
How should the DevOps engineer configure the CloudFormation template to prevent failure during the StackSets deployment?

A. Create a CloudFormation custom resource that invokes an AWS Lambda functio
B. Configure the Lambda function to conditionally enable GuardDuty if GuardDuty is not already enabled in the accounts.
C. Use the Conditions section of the CloudFormation template to enable GuardDuty in accounts where GuardDuty is not already enabled.
D. Use the CloudFormation F
E. GetAtt intrinsic function to check whether GuardDuty is already enabled If GuardDuty is not already enabled use the Resources section of the CloudFormation template to enable GuardDuty.
F. Manually discover the list of AWS account IDs where GuardDuty is not enabled Use the CloudFormation Fn: ImportValue intrinsic function to import the list of account IDs into the CloudFormation template to skip deployment for the listed AWS accounts.

Answer: A

Explanation:
This solution will meet the requirements because it will use a CloudFormation custom resource to execute custom logic during the stack set operation. A custom resource is a resource that you define in your template and that is associated with an AWS Lambda function. The Lambda function runs whenever the custom resource is created, updated, or deleted, and can perform any actions that are supported by the AWS SDK. In this case, the Lambda function can use the GuardDuty API to check whether GuardDuty is already enabled in each target account, and if not, enable it. This way, the DevOps engineer can avoid deploying the stack set to accounts that already have GuardDuty enabled, and prevent failure during the deployment.

NEW QUESTION 61
A company's DevOps engineer is creating an AWS Lambda function to process notifications from an Amazon Simple Notification Service (Amazon SNS) topic. The Lambda function will process the notification messages and will write the contents of the notification messages to an Amazon RDS Multi-AZ DB instance.
During testing a database administrator accidentally shut down the DB instance. While the database was down the company lost several of the SNS notification messages that were delivered during that time.
The DevOps engineer needs to prevent the loss of notification messages in the future Which solutions will meet this requirement? (Select TWO.)

A. Replace the RDS Multi-AZ DB instance with an Amazon DynamoDB table.
B. Configure an Amazon Simple Queue Service (Amazon SQS) queue as a destination of the Lambda function.
C. Configure an Amazon Simple Queue Service (Amazon SQS> dead-letter queue for the SNS topic.
D. Subscribe an Amazon Simple Queue Service (Amazon SQS) queue to the SNS topic Configure the Lambda function to process messages from the SQS queue.
E. Replace the SNS topic with an Amazon EventBridge event bus Configure an EventBridge rule on the new event bus to invoke the Lambda function for each event.

Answer: CD

Explanation:
These solutions will meet the requirement because they will prevent the loss of notification messages in the future. An Amazon SQS queue is a service that provides a reliable, scalable, and secure message queue for asynchronous communication between distributed components. You can use an SQS queue to buffer messages from an SNS topic and ensure that they are delivered and processed by a Lambda function, even if the function or the database is temporarily unavailable.
Option C will configure an SQS dead-letter queue for the SNS topic. A dead-letter queue is a queue that receives messages that could not be delivered to any

subscriber after a specified number of retries. You can use a dead-letter queue to store and analyze failed messages, or to reprocess them later. This way, you can avoid losing messages that could not be delivered to the Lambda function due to network errors, throttling, or other issues.
Option D will subscribe an SQS queue to the SNS topic and configure the Lambda function to process messages from the SQS queue. This will decouple the SNS topic from the Lambda function and provide more flexibility and control over the message delivery and processing. You can use an SQS queue to store messages from the SNS topic until they are ready to be processed by the Lambda function, and also to retry processing in case of failures. This way, you can avoid losing messages that could not be processed by the Lambda function due to database errors, timeouts, or other issues.

NEW QUESTION 65
A company has containerized all of its in-house quality control applications. The company is running Jenkins on Amazon EC2 instances, which require patching and upgrading. The compliance officer has requested a DevOps engineer begin encrypting build artifacts since they contain company intellectual property. What should the DevOps engineer do to accomplish this in the MOST maintainable manner?

A. Automate patching and upgrading using AWS Systems Manager on EC2 instances and encrypt Amazon EBS volumes by default.
B. Deploy Jenkins to an Amazon ECS cluster and copy build artifacts to an Amazon S3 bucket with default encryption enabled.
C. Leverage AWS CodePipeline with a build action and encrypt the artifacts using AWS Secrets Manager.
D. Use AWS CodeBuild with artifact encryption to replace the Jenkins instance running on EC2 instances.

Answer: D

Explanation:
The following are the steps involved in accomplishing this in the most maintainable manner:
> Configure CodeBuild to encrypt the build artifacts using AWS Secrets Manager.
> Deploy the containerized quality control applications to CodeBuild.
This approach is the most maintainable because it eliminates the need to manage Jenkins on EC2 instances. CodeBuild is a managed service, so the DevOps engineer does not need to worry about patching or upgrading the service.
https://docs.aws.amazon.com/codebuild/latest/userguide/security-encryption.html Build artifact encryption - CodeBuild requires access to an AWS KMS CMK in order to encrypt its build output artifacts. By default, CodeBuild uses an AWS Key Management Service CMK for Amazon S3 in your AWS account. If you do not want to use this CMK, you must create and configure a customer-managed CMK. For more information Creating keys.

NEW QUESTION 66
A company wants to use a grid system for a proprietary enterprise m-memory data store on top of AWS. This system can run in multiple server nodes in any Linux-based distribution. The system must be able to reconfigure the entire cluster every time a node is added or removed. When adding or removing nodes an /etc./cluster/nodes config file must be updated listing the IP addresses of the current node members of that cluster.
The company wants to automate the task of adding new nodes to a cluster. What can a DevOps engineer do to meet these requirements?

A. Use AWS OpsWorks Stacks to layer the server nodes of that cluste
B. Create a Chef recipe that populates the content of the 'etc./cluster/nodes config file and restarts the service by using the current members of the laye
C. Assign that recipe to the Configure lifecycle event.
D. Put the file nodes config in version contro
E. Create an AWS CodeDeploy deployment configuration and deployment group based on an Amazon EC2 tag value for thecluster node
F. When adding a new node to the cluster update the file with all tagged instances and make a commit in version contro
G. Deploy the new file and restart the services.
H. Create an Amazon S3 bucket and upload a version of the /etc./cluster/nodes config file Create a crontab script that will poll for that S3 file and download it frequentl
I. Use a process manager such as Monit or system, to restart the cluster services when it detects that the new file was modifie
J. When adding a node to the cluster edit the file's most recent members Upload the new file to the S3 bucket.
K. Create a user data script that lists all members of the current security group of the cluster and automatically updates the /etc/cluster/. nodes confi
L. Tile whenever a new instance is added to the cluster.

Answer: A

Explanation:
You can run custom recipes manually, but the best approach is usually to have AWS OpsWorks Stacks run them automatically. Every layer has a set of built-in recipes assigned each of five lifecycle events—Setup, Configure, Deploy, Undeploy, and Shutdown. Each time an event occurs for an instance, AWS OpsWorks Stacks runs the associated recipes for each of the instance's layers, which handle the corresponding tasks. For example, when an instance finishes booting, AWS OpsWorks Stacks triggers a Setup event. This event runs the associated layer's Setup recipes, which typically handle tasks such as installing and configuring packages

NEW QUESTION 71
A company has chosen AWS to host a new application. The company needs to implement a multi-account strategy. A DevOps engineer creates a new AWS account and an organization in AWS Organizations. The DevOps engineer also creates the OU structure for the organization and sets up a landing zone by using AWS Control Tower.
The DevOps engineer must implement a solution that automatically deploys resources for new accounts that users create through AWS Control Tower Account Factory. When a user creates a new account, the solution must apply AWS CloudFormation templates and SCPs that are customized for the OU or the account to automatically deploy all the resources that are attached to the account. All the OUs are enrolled in AWS Control Tower.
Which solution will meet these requirements in the MOST automated way?

A. Use AWS Service Catalog with AWS Control Towe
B. Create portfolios and products in AWS ServiceCatalo
C. Grant granular permissions to provision these resource
D. Deploy SCPs by using the AWS CLI and JSON documents.
E. Deploy CloudFormation stack sets by using the required template
F. Enable automatic deployment.Deploy stack instances to the required account
G. Deploy a CloudFormation stack set to the organization’s management account to deploy SCPs.
H. Create an Amazon EventBridge rule to detect the CreateManagedAccount even
I. Configure AWS Service Catalog as the target to deploy resources to any new account
J. Deploy SCPs by using the AWS CLI and JSON documents.
K. Deploy the Customizations for AWS Control Tower (CfCT) solutio
L. Use an AWS CodeCommit repository as the sourc

M. In the repository, create a custom package that includes the CloudFormation templates and the SCP JSON documents.

Answer: D

Explanation:
The CfCT solution is designed for the exact purpose stated in the question. It extends the capabilities of AWS Control Tower by providing you with a way to automate resource provisioning and apply custom configurations across all AWS accounts created in the Control Tower environment. This enables the company to implement additional account customizations when new accounts are provisioned via the Control Tower Account Factory. The CloudFormation templates and SCPs can be added to a CodeCommit repository and will be automatically deployed to new accounts when they are created. This provides a highly automated solution that does not require manual intervention to deploy resources and SCPs to new accounts.

NEW QUESTION 75
A company's DevOps engineer uses AWS Systems Manager to perform maintenance tasks during maintenance windows. The company has a few Amazon EC2 instances that require a restart after notifications from AWS Health. The DevOps engineer needs to implement an automated solution to remediate these notifications. The DevOps engineer creates an Amazon EventBridge rule.
How should the DevOps engineer configure the EventBridge rule to meet these requirements?

A. Configure an event source of AWS Health, a service of EC2. and an event type that indicates instance maintenanc
B. Target a Systems Manager document to restart the EC2 instance.
C. Configure an event source of Systems Manager and an event type that indicates a maintenance window.Target a Systems Manager document to restart the EC2 instance.
D. Configure an event source of AWS Health, a service of EC2, and an event type that indicates instance maintenanc
E. Target a newly created AWS Lambda function that registers an automation task to restart the EC2 instance during a maintenance window.
F. Configure an event source of EC2 and an event type that indicates instance maintenanc
G. Target a newly created AWS Lambda function that registers an automation task to restart the EC2 instance during a maintenance window.

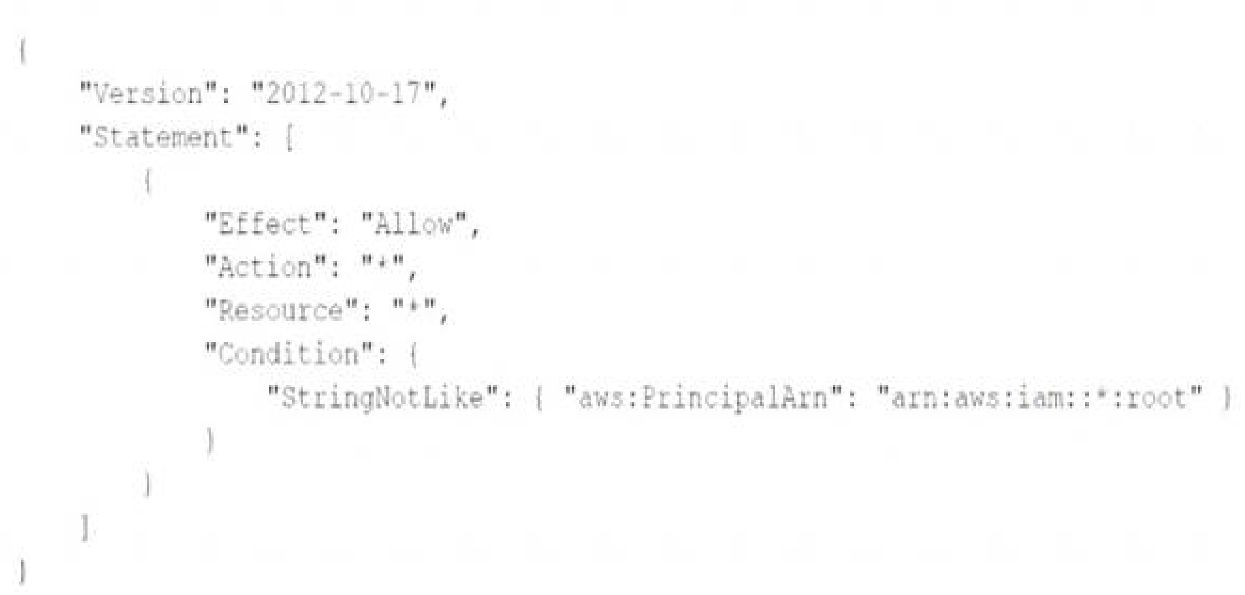
Answer: C

Explanation:
AWS Health provides real-time events and information related to your AWS infrastructure. It can be integrated with Amazon EventBridge to act upon the health events automatically. If the maintenance notification from AWS Health indicates that an EC2 instance requires a restart, you can set up an EventBridge rule to respond to such events. In this case, the target of this rule would be a Lambda function that would trigger a Systems Manager automation to restart the EC2 instance during a maintenance window. Remember, AWS Health is the source of the events (not EC2 or Systems Manager), and AWS Lambda can be used to execute complex remediation tasks, such as scheduling maintenance tasks via Systems Manager.
The following are the steps involved in configuring the EventBridge rule to meet these requirements:

- Configure an event source of AWS Health, a service of EC2, and an event type that indicates instance maintenance.
- Target a newly created AWS Lambda function that registers an automation task to restart the EC2 instance during a maintenance window.

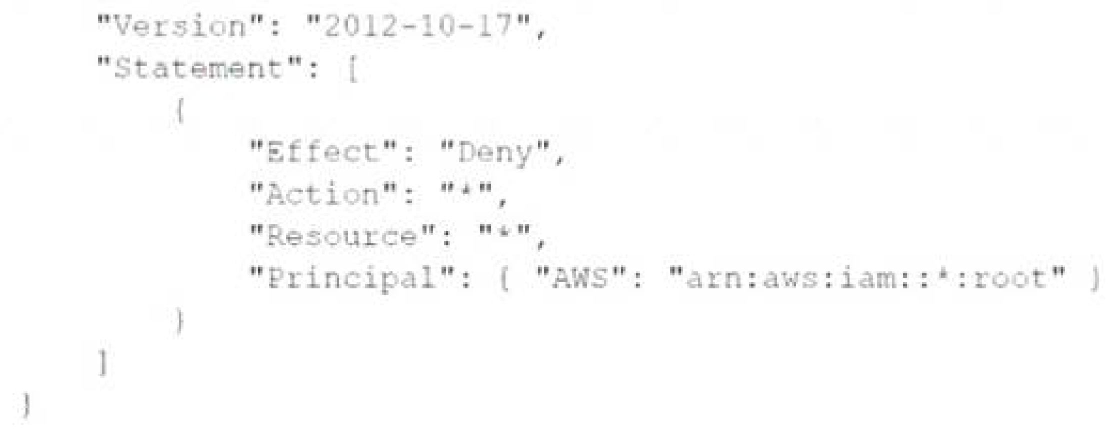
The AWS Lambda function will be triggered by the event from AWS Health. The function will then register an automation task to restart the EC2 instance during the next maintenance window.

NEW QUESTION 80
A company manages multiple AWS accounts in AWS Organizations. The company's security policy states that AWS account root user credentials for member accounts must not be used. The company monitors access to the root user credentials.
A recent alert shows that the root user in a member account launched an Amazon EC2 instance. A DevOps engineer must create an SCP at the organization's root level that will prevent the root user in member accounts from making any AWS service API calls.
Which SCP will meet these requirements?
A)



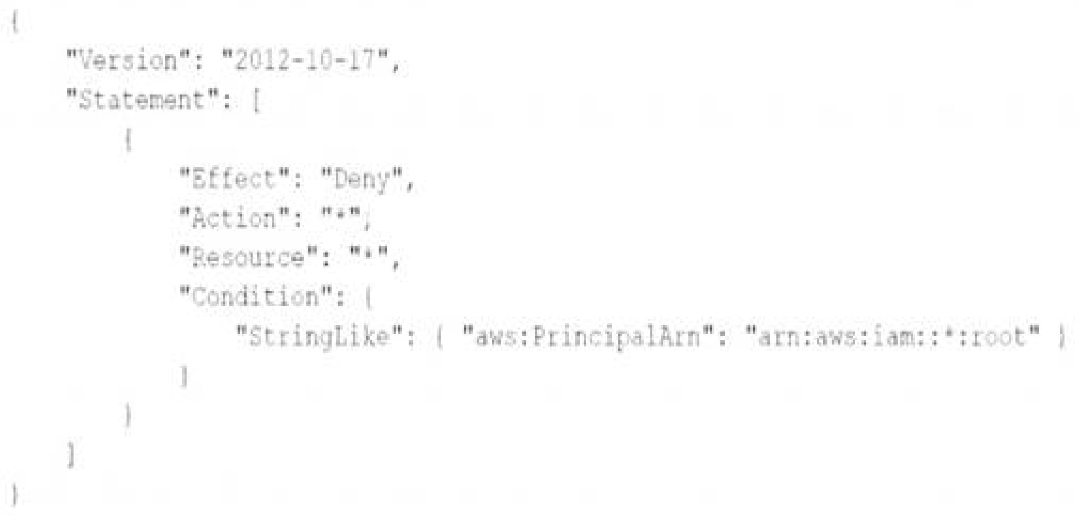
```
{
    "Version": "2012-10-17",
    "Statement": [
        {
            "Effect": "Allow",
            "Action": "*",
            "Resource": "*",
            "Condition": {
                "StringNotLike": { "aws:PrincipalArn": "arn:aws:iam::*:root" }
            }
        }
    ]
}
```

B)



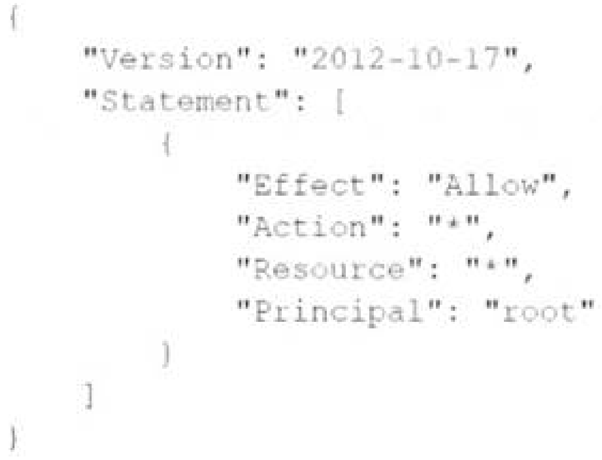
```
    "Version": "2012-10-17",
    "Statement": [
        {
            "Effect": "Deny",
            "Action": "*",
            "Resource": "*",
            "Principal": { "AWS": "arn:aws:iam::*:root" }
        }
    ]
}
```

C)



```
{
    "Version": "2012-10-17",
    "Statement": [
        {
            "Effect": "Deny",
            "Action": "*",
            "Resource": "*",
            "Condition": {
                "StringLike": { "aws:PrincipalArn": "arn:aws:iam::*:root" }
            }
        }
    ]
}
```

D)



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

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

Answer: D

NEW QUESTION 81
A production account has a requirement that any Amazon EC2 instance that has been logged in to manually must be terminated within 24 hours. All applications in the production account are using Auto Scaling groups with the Amazon CloudWatch Logs agent configured.
How can this process be automated?

A. Create a CloudWatch Logs subscription to an AWS Step Functions applicatio
B. Configure an AWS Lambda function to add a tag to the EC2 instance that produced the login event and mark the instance to be decommissione
C. Create an Amazon EventBridge rule to invoke a second Lambda function once a day that will terminate all instances with this tag.
D. Create an Amazon CloudWatch alarm that will be invoked by the login even
E. Send the notification to an Amazon Simple Notification Service (Amazon SNS) topic that the operations team is subscribed to, and have them terminate the EC2 instance within 24 hours.
F. Create an Amazon CloudWatch alarm that will be invoked by the login even
G. Configure the alarm to send to an Amazon Simple Queue Service (Amazon SQS) queu
H. Use a group of worker instances to process messages from the queue, which then schedules an Amazon EventBridge rule to be invoked.
I. Create a CloudWatch Logs subscription to an AWS Lambda functio
J. Configure the function to add a tag to the EC2 instance that produced the login event and mark the instance to be decommissioned.Create an Amazon EventBridge rule to invoke a daily Lambda function that terminates all instances with this tag.

Answer: D

Explanation:
"You can use subscriptions to get access to a real-time feed of log events from CloudWatch Logs and have it delivered to other services such as an Amazon Kinesis stream, an Amazon Kinesis Data Firehose stream, or AWS Lambda for custom processing, analysis, or loading to other systems. When log events are sent to the receiving service, they are Base64 encoded and compressed with the gzip format." See https://docs.aws.amazon.com/AmazonCloudWatch/latest/logs/Subscriptions.html

NEW QUESTION 86
A company is hosting a static website from an Amazon S3 bucket. The website is available to customers at example.com. The company uses an Amazon Route 53 weighted routing policy with a TTL of 1 day. The company has decided to replace the existing static website with a dynamic web application. The dynamic web application uses an Application Load Balancer (ALB) in front of a fleet of Amazon EC2 instances.
On the day of production launch to customers, the company creates an additional Route 53 weighted DNS record entry that points to the ALB with a weight of 255 and a TTL of 1 hour. Two days later, a DevOps engineer notices that the previous static website is displayed sometimes when customers navigate to example.com.
How can the DevOps engineer ensure that the company serves only dynamic content for example.com?

A. Delete all objects, including previous versions, from the S3 bucket that contains the static website content.
B. Update the weighted DNS record entry that points to the S3 bucke
C. Apply a weight of 0. Specify the domain reset option to propagate changes immediately.
D. Configure webpage redirect requests on the S3 bucket with a hostname that redirects to the ALB.
E. Remove the weighted DNS record entry that points to the S3 bucket from the example.com hosted zone.Wait for DNS propagation to become complete.

Answer: D

NEW QUESTION 87
A company is testing a web application that runs on Amazon EC2 instances behind an Application Load Balancer. The instances run in an Auto Scaling group across multiple Availability Zones. The company uses a blue green deployment process with immutable instances when deploying new software.
During testing users are being automatically logged out of the application at random times. Testers also report that when a new version of the application is deployed all users are logged out. The development team needs a solution to ensure users remain logged m across scaling events and application deployments.
What is the MOST operationally efficient way to ensure users remain logged in?

A. Enable smart sessions on the load balancer and modify the application to check tor an existing session.
B. Enable session sharing on the toad balancer and modify the application to read from the session store.
C. Store user session information in an Amazon S3 bucket and modify the application to read session information from the bucket.
D. Modify the application to store user session information in an Amazon ElastiCache cluster.

Answer: D

Explanation:
https://aws.amazon.com/caching/session-management/

NEW QUESTION 89
An ecommerce company has chosen AWS to host its new platform. The company's DevOps team has started building an AWS Control Tower landing zone. The DevOps team has set the identity store within AWS IAM Identity Center (AWS Single Sign-On) to external identity provider (IdP) and has configured SAML 2.0.
The DevOps team wants a robust permission model that applies the principle of least privilege. The model must allow the team to build and manage only the team's own resources.
Which combination of steps will meet these requirements? (Choose three.)

A. Create IAM policies that include the required permission
B. Include the aws:PrincipalTag condition key.
C. Create permission set
D. Attach an inline policy that includes the required permissions and uses the aws:PrincipalTag condition key to scope the permissions.
E. Create a group in the Id
F. Place users in the grou
G. Assign the group to accounts and the permission sets in IAM Identity Center.
H. Create a group in the Id
I. Place users in the grou
J. Assign the group to OUs and IAM policies.
K. Enable attributes for access control in IAM Identity Cente
L. Apply tags to user
M. Map the tags as key-value pairs.
N. Enable attributes for access control in IAM Identity Cente
O. Map attributes from the IdP as key-value pairs.

Answer: BCF

Explanation:
Using the principalTag in the Permission Set inline policy a logged in user belonging to a specific AD group in the IDP can be permitted access to perform operations on certain resources if their group matches the group used in the PrincipleTag. Basically you are narrowing the scope of privileges assigned via Permission policies conditionally based on whether the logged in user belongs to a specific AD Group in IDP. The mapping of the AD group to the request attributes can be done using SSO attributes where we can pass other attributes like the SAML token as well.
https://docs.aws.amazon.com/singlesignon/latest/userguide/abac.html

NEW QUESTION 93
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 94
A company has multiple member accounts that are part of an organization in AWS Organizations. The security team needs to review every Amazon EC2 security

group and their inbound and outbound rules. The security team wants to programmatically retrieve this information from the member accounts using an AWS Lambda function in the management account of the organization.
Which combination of access changes will meet these requirements? (Choose three.)

A. Create a trust relationship that allows users in the member accounts to assume the management account IAM role.
B. Create a trust relationship that allows users in the management account to assume the IAM roles of the member accounts.
C. Create an IAM role in each member account that has access to the AmazonEC2ReadOnlyAccess managed policy.
D. Create an I AM role in each member account to allow the sts:AssumeRole action against the management account IAM role's ARN.
E. Create an I AM role in the management account that allows the sts:AssumeRole action against the member account IAM role's ARN.
F. Create an IAM role in the management account that has access to the AmazonEC2ReadOnlyAccess managed policy.

Answer: BCE

Explanation:
https://aws.amazon.com/premiumsupport/knowledge-center/lambda-function-assume-iam-role/ https://kreuzwerker.de/post/aws-multi-account-setups-reloaded

NEW QUESTION 98
A DevOps engineer is researching the least expensive way to implement an image batch processing cluster on AWS. The application cannot run in Docker containers and must run on Amazon EC2. The batch job stores checkpoint data on an NFS volume and can tolerate interruptions. Configuring the cluster software from a generic EC2 Linux image takes 30 minutes.
What is the MOST cost-effective solution?

A. Use Amazon EFS (or checkpoint dat
B. To complete the job, use an EC2 Auto Scaling group and an On-Demand pricing model to provision EC2 instances temporally.
C. Use GlusterFS on EC2 instances for checkpoint dat
D. To run the batch job configure EC2 instances manually When the job completes shut down the instances manually.
E. Use Amazon EFS for checkpoint data Use EC2 Fleet to launch EC2 Spot Instances and utilize user data to configure the EC2 Linux instance on startup.
F. Use Amazon EFS for checkpoint data Use EC2 Fleet to launch EC2 Spot Instances Create a customAMI for the cluster and use the latest AMI when creating instances.

Answer: D

NEW QUESTION 99
A DevOps engineer needs to back up sensitive Amazon S3 objects that are stored within an S3 bucket with a private bucket policy using S3 cross-Region replication functionality. The objects need to be copied to a target bucket in a different AWS Region and account.
Which combination of actions should be performed to enable this replication? (Choose three.)

A. Create a replication IAM role in the source account
B. Create a replication I AM role in the target account.
C. Add statements to the source bucket policy allowing the replication IAM role to replicate objects.
D. Add statements to the target bucket policy allowing the replication IAM role to replicate objects.
E. Create a replication rule in the source bucket to enable the replication.
F. Create a replication rule in the target bucket to enable the replication.

Answer: ADE

Explanation:
S3 cross-Region replication (CRR) automatically replicates data between buckets across different AWS Regions. To enable CRR, you need to add a replication configuration to your source bucket that specifies the destination bucket, the IAM role, and the encryption type (optional). You also need to grant permissions to the IAM role to perform replication actions on both the source and destination buckets. Additionally, you can choose the destination storage class and enable additional replication options such as S3 Replication Time Control (S3 RTC) or S3 Batch Replication.
https://medium.com/cloud-techies/s3-same-region-replication-srr-and-cross-region-replication-crr-34d446806ba https://aws.amazon.com/getting-started/hands-on/replicate-data-using-amazon-s3-replication/ https://docs.aws.amazon.com/AmazonS3/latest/userguide/replication.html

NEW QUESTION 102
A company's security team requires that all external Application Load Balancers (ALBs) and Amazon API Gateway APIs are associated with AWS WAF web ACLs. The company has hundreds of AWS accounts, all of which are included in a single organization in AWS Organizations. The company has configured AWS Config for the organization. During an audit, the company finds some externally facing ALBs that are not associated with AWS WAF web ACLs.
Which combination of steps should a DevOps engineer take to prevent future violations? (Choose two.)

A. Delegate AWS Firewall Manager to a security account.
B. Delegate Amazon GuardDuty to a security account.
C. Create an AWS Firewall Manager policy to attach AWS WAF web ACLs to any newly created ALBs and API Gateway APIs.
D. Create an Amazon GuardDuty policy to attach AWS WAF web ACLs to any newly created ALBs and API Gateway APIs.
E. Configure an AWS Config managed rule to attach AWS WAF web ACLs to any newly created ALBs and API Gateway APIs.

Answer: AC

Explanation:
If instead you want to automatically apply the policy to existing in-scope resources, choose Auto remediate any noncompliant resources. This option creates a web ACL in each applicable account within the AWS organization and associates the web ACL with the resources in the accounts. When you choose Auto remediate any noncompliant resources, you can also choose to remove existing web ACL associations from in-scope resources, for the web ACLs that aren't managed by another active Firewall Manager policy. If you choose this option, Firewall Manager first associates the policy's web ACL with the resources, and then removes the prior associations. If a resource has an association with another web ACL that's managed by a different active Firewall Manager policy, this choice doesn't affect that association.

NEW QUESTION 104
A security review has identified that an AWS CodeBuild project is downloading a database population script from an Amazon S3 bucket using an unauthenticated request. The security team does not allow unauthenticated requests to S3 buckets for this project.

How can this issue be corrected in the MOST secure manner?

A. Add the bucket name to the AllowedBuckets section of the CodeBuild project setting
B. Update the build spec to use the AWS CLI to download the database population script.
C. Modify the S3 bucket settings to enable HTTPS basic authentication and specify a toke
D. Update the build spec to use cURL to pass the token and download the database population script.
E. Remove unauthenticated access from the S3 bucket with a bucket polic
F. Modify the service role for the CodeBuild project to include Amazon S3 acces
G. Use the AWS CLI to download the database population script.
H. Remove unauthenticated access from the S3 bucket with a bucket polic
I. Use the AWS CLI todownload the database population script using an IAM access key and a secret access key.

Answer: C

Explanation:
A bucket policy is a resource-based policy that defines who can access a specific S3 bucket and what actions they can perform on it. By removing unauthenticated access from the bucket policy, you can prevent anyone without valid credentials from accessing the bucket. A service role is an IAM role that allows an AWS service, such as CodeBuild, to perform actions on your behalf. By modifying the service role for the CodeBuild project to include Amazon S3 access, you can grant the project permission to read and write objects in the S3 bucket. The AWS CLI is a command-line tool that allows you to interact with AWS services, such as S3, using commands in your terminal. By using the AWS CLI to download the database population script, you can leverage the service role credentials and encryption to secure the data transfer.
For more information, you can refer to these web pages:

- [Using bucket policies and user policies - Amazon Simple Storage Service]
- [Create a service role for CodeBuild - AWS CodeBuild]
- [AWS Command Line Interface]

NEW QUESTION 109
A company runs an application with an Amazon EC2 and on-premises configuration. A DevOps engineer needs to standardize patching across both environments. Company policy dictates that patching only happens during non-business hours.
Which combination of actions will meet these requirements? (Choose three.)

A. Add the physical machines into AWS Systems Manager using Systems Manager Hybrid Activations.
B. Attach an IAM role to the EC2 instances, allowing them to be managed by AWS Systems Manager.
C. Create IAM access keys for the on-premises machines to interact with AWS Systems Manager.
D. Run an AWS Systems Manager Automation document to patch the systems every hour.
E. Use Amazon EventBridge scheduled events to schedule a patch window.
F. Use AWS Systems Manager Maintenance Windows to schedule a patch window.

Answer: ABF

Explanation:
https://docs.aws.amazon.com/systems-manager/latest/userguide/sysman-managed-instance-activation.html

NEW QUESTION 112
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 114
A company wants to use AWS CloudFormation for infrastructure deployment. The company has strict tagging and resource requirements and wants to limit the deployment to two Regions. Developers will need to deploy multiple versions of the same application.
Which solution ensures resources are deployed in accordance with company policy?

A. Create AWS Trusted Advisor checks to find and remediate unapproved CloudFormation StackSets.
B. Create a Cloud Formation drift detection operation to find and remediate unapproved CloudFormation StackSets.
C. Create CloudFormation StackSets with approved CloudFormation templates.
D. Create AWS Service Catalog products with approved CloudFormation templates.

Answer: D

Explanation:
service catalog uses stacksets and can enforce tag and restrict resources AWS Customer case with tag enforcement https://aws.amazon.com/ko/blogs/apn/enforce-centralized-tag-compliance-using-aws-service-catalog-amazon-dy And Youtube video showing how to restrict resources per user with portfolio https://www.youtube.com/watch?v=LzvhTcqqyog

NEW QUESTION 117
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 level.Configure the permissions so that the KMS key can encrypt the Secrets Manager secret.
G. Remove all KMS permissions from the Lambda function's execution role.

Answer: AD

NEW QUESTION 121
A company is implementing a well-architected design for its globally accessible API stack. The design needs to ensure both high reliability and fast response times for users located in North America and Europe.
The API stack contains the following three tiers: Amazon API Gateway
AWS Lambda Amazon DynamoDB
Which solution will meet the requirements?

A. Configure Amazon Route 53 to point to API Gateway APIs in North America and Europe using health check
B. Configure the APIs to forward requests to a Lambda function in that Regio
C. Configure the Lambda functions to retrieve and update the data in a DynamoDB table in the same Region as the Lambda function.
D. Configure Amazon Route 53 to point to API Gateway APIs in North America and Europe using latency-based routing and health check
E. Configure the APIs to forward requests to a Lambda function in that Regio
F. Configure the Lambda functions to retrieve and update the data in a DynamoDB global table.
G. Configure Amazon Route 53 to point to API Gateway in North America, create a disaster recovery API in Europe, and configure both APIs to forward requests to the Lambda functions in that Regio
H. Retrieve the data from a DynamoDB global tabl
I. Deploy a Lambda function to check the North America API health every 5 minute
J. In the event of a failure, update Route 53 to point to the disaster recovery API.
K. Configure Amazon Route 53 to point to API Gateway API in North America using latency-based routin
L. Configure the API to forward requests to the Lambda function in the Region nearest to the use
M. Configure the Lambda function to retrieve and update the data in a DynamoDB table.

Answer: B

NEW QUESTION 122
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 1AM 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 1AM 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 lAM service rol
E. Update thebuildspec.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 1AM service role to have access.
H. Update the buildspec.yml file to use the AWS CLI to assume the 1AM service role for ECR operations.Add an ECR repository policy that allows the 1AM service role to have access.

Answer: A

Explanation:
(A) When Docker communicates with an Amazon Elastic Container Registry (ECR) repository, it requires authentication. You can authenticate your Docker client to the Amazon ECR registry with the help of the AWS CLI (Command Line Interface). Specifically, you can use the "aws ecr get-login-password" command to get an authorization token and then use Docker's "docker login" command with that token to authenticate to the registry. You would need to perform these steps in your buildspec.yml file before attempting to push or pull images from/to the ECR repository.

NEW QUESTION 124
A company updated the AWS Cloud Formation template for a critical business application. The stack update process failed due to an error in the updated template and AWS CloudFormation automatically began the stack rollback process Later a DevOps engineer discovered that the application was still unavailable and that the stack was in the UPDATE_ROLLBACK_FAILED state.
Which combination of actions should the DevOps engineer perform so that the stack rollback can complete successfully? (Select TWO.)

A. Attach the AWSC loud Formation FullAccess IAM policy to the AWS CtoudFormation role.
B. Automatically recover the stack resources by using AWS CloudFormation drift detection.

C. Issue a ContinueUpdateRollback command from the AWS CloudFormation console or the AWS CLI.
D. Manually adjust the resources to match the expectations of the stack.
E. Update the existing AWS CloudFormation stack by using the original template.

Answer: CD

Explanation:
https://docs.aws.amazon.com/cli/latest/reference/cloudformation/continue-update-rollback.html For a specified stack that is in the UPDATE_ROLLBACK_FAILED state, continues rolling it back to the UPDATE_ROLLBACK_COMPLETE state. Depending on the cause of the failure, you can manually fix the error and continue the rollback. By continuing the rollback, you can return your stack to a working state (the UPDATE_ROLLBACK_COMPLETE state), and then try to update the stack again.

NEW QUESTION 129
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 application.Use AWS CodeDeploy to deploy the Lambda functions with the Canary10Percent15Minutes Deployment Preference Typ
B. Use Amazon CloudWatch alarms to monitor the health of the functions.
C. Use AWS CloudFormation to publish a new stack update, and include Amazon CloudWatch alarms on all resource
D. Set up an AWS CodePipeline approval action for a developer to verify and approve the AWS CloudFormation change set.
E. Use AWS CloudFormation to publish a new version on every stack update, and include Amazon CloudWatch alarms on all resource
F. Use the RoutingConfig property of the AWS::Lambda::Alias resource to update the traffic routing during the stack update.
G. Use AWS CodeBuild to add sample event payloads for testing to the Lambda function
H. Publish a new version of the functions, and include Amazon CloudWatch alarm
I. Update the production alias to point to the new versio
J. 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 133
A company runs applications in AWS accounts that are in an organization in AWS Organizations The applications use Amazon EC2 instances and Amazon S3. The company wants to detect potentially compromised EC2 instances suspicious network activity and unusual API activity in its existing AWS accounts and in any AWS accounts that the company creates in the future When the company detects one to these events the company wants to use an existing Amazon Simple Notification Service (Amazon SNS) topic to send a notification to its operational support team for investigation and remediation.
Which solution will meet these requirements in accordance with AWS best practices?

A. In the organization's management account configure an AWS account as the Amazon GuardDuty administrator accoun
B. In the GuardDuty administrator account add the company's existing AWS accounts to GuardDuty as members In the GuardDuty administrator account create an Amazon EventBridge rule with an event pattern to match GuardDuty events and to forward matching events to the SNS topic.
C. In the organization's management account configure Amazon GuardDuty to add newly created AWS accounts by invitation and to send invitations to the existing AWS accounts Create an AWS Cloud Formation stack set that accepts the GuardDuty invitation and creates an Amazon EventBridge rule Configure the rule with an event pattern to matc
D. GuardDuty events and to forward matching events to the SNS topi
E. Configure the Cloud Formation stack set to deploy into all AWS accounts in the organization.
F. In the organization's management accoun
G. create an AWS CloudTrail organization trail Activate the organization trail in all AWS accounts in the organizatio
H. Create an SCP that enables VPC Flow Logs in each account in the organizatio
I. Configure AWS Security Hub for the organization Create an Amazon EventBridge rule with an even pattern to match Security Hub events and to forward matching events to the SNS topic.
J. In the organization's management account configure an AWS account as the AWS CloudTrail administrator account in the CloudTrail administrator account create a CloudTrail organization trai
K. Add the company's existing AWS accounts to the organization trail Create an SCP that enables VPC Flow Logs in each account in the organizatio
L. Configure AWS Security Hub for the organizatio
M. Create an Amazon EventBridge rule with an event pattern to match Security Hub events and to forward matching events to the SNS topic.

Answer: B

Explanation:
It allows the company to detect potentially compromised EC2 instances, suspicious network activity, and unusual API activity in its existing AWS accounts and in any AWS accounts that the company creates in the future using Amazon GuardDuty. It also provides a solution for automatically adding future AWS accounts to GuardDuty by configuring GuardDuty to add newly created AWS accounts by invitation and to send invitations to the existing AWS accounts.

NEW QUESTION 136

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 139
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

NEW QUESTION 143
An Amazon EC2 instance is running in a VPC and needs to download an object from a restricted Amazon S3 bucket. When the DevOps engineer tries to download the object, an AccessDenied error is received,
What are the possible causes tor this error? (Select TWO,)

A. The 53 bucket default encryption is enabled.
B. There is an error in the S3 bucket policy.
C. The object has been moved to S3 Glacier.
D. There is an error in the IAM role configuration.
E. S3 Versioning is enabled.

Answer: BD

Explanation:
These are the possible causes for the AccessDenied error because they affect the permissions to access the S3 object from the EC2 instance. An S3 bucket policy is a resource-based policy that defines who can access the bucket and its objects, and what actions they can perform. An IAM role is an identity that can be assumed by an EC2 instance to grant it permissions to access AWS services and resources. If there is an error in the S3 bucket policy or the IAM role configuration, such as a missing or incorrect statement, condition, or principal, then the EC2 instance may not have the necessary permissions to download the object from the S3 bucket .
https://docs.aws.amazon.com/AmazonS3/latest/userguide/example-bucket-policies.html https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/iam-roles-for-amazon-ec2.html

NEW QUESTION 147
A company has many AWS accounts. During AWS account creation the company uses automation to create an Amazon CloudWatch Logs log group in every AWS Region that the company operates in. The automaton configures new resources in the accounts to publish logs to the provisioned log groups in their Region. The company has created a logging account to centralize the logging from all the other accounts. A DevOps engineer needs to aggregate the log groups from all the accounts to an existing Amazon S3 bucket in the logging account.
Which solution will meet these requirements in the MOST operationally efficient manner?

A. In the logging account create a CloudWatch Logs destination with a destination polic
B. For each new account subscribe the CloudWatch Logs log groups to th
C. Destination Configure a single Amazon Kinesis data stream and a single Amazon Kinesis Data Firehose delivery stream to deliver the logs from the CloudWatch Logs destination to the S3 bucket.
D. In the logging account create a CloudWatch Logs destination with a destination policy for each Region.For each new account subscribe the CloudWatch Logs log groups to the destinatio
E. Configure a single Amazon Kinesis data stream and a single Amazon Kinesis Data Firehose delivery stream to deliver the logs from all the CloudWatch Logs destinations to the S3 bucket.
F. In the logging account create a CloudWatch Logs destination with a destination policy for each Region.For each new account subscribe the CloudWatch Logs log groups to the destination Configure an Amazon Kinesis data stream and an Amazon Kinesis Data Firehose delivery stream for each Region to deliver the logs from the CloudWatch Logs destinations to the S3 bucket.
G. In the logging account create a CloudWatch Logs destination with a destination polic
H. For each new account subscribe the CloudWatch Logs log groups to the destinatio
I. Configure a single Amazon Kinesis data stream to deliver the logs from the CloudWatch Logs destination to the S3 bucket.

Answer: C

Explanation:
This solution will meet the requirements in the most operationally efficient manner because it will use CloudWatch Logs destination to aggregate the log groups from all the accounts to a single S3 bucket in the logging account. However, unlike option A, this solution will create a CloudWatch Logs destination for each region, instead of a single destination for all regions. This will improve the performance and reliability of the log delivery, as it will avoid cross-region data transfer and latency issues. Moreover, this solution will use an Amazon Kinesis data stream and an Amazon Kinesis Data Firehose delivery stream for each region, instead of a single stream for all regions. This will also improve the scalability and throughput of the log delivery, as it will avoid bottlenecks and throttling issues that may occur with a single stream.

NEW QUESTION 150
A company deploys its corporate infrastructure on AWS across multiple AWS Regions and Availability Zones. The infrastructure is deployed on Amazon EC2 instances and connects with AWS loT Greengrass devices. The company deploys additional resources on on-premises servers that are located in the corporate headquarters.
The company wants to reduce the overhead involved in maintaining and updating its resources. The company's DevOps team plans to use AWS Systems Manager to implement automated management and application of patches. The DevOps team confirms that Systems Manager is available in the Regions that the resources are deployed m Systems Manager also is available in a Region near the corporate headquarters.
Which combination of steps must the DevOps team take to implement automated patch and configuration management across the company's EC2 instances loT devices and on-premises infrastructure? (Select THREE.)

A. Apply tags lo all the EC2 instance
B. AWS loT Greengrass devices, and on-premises server
C. Use Systems Manager Session Manager to push patches to all the tagged devices.
D. Use Systems Manager Run Command to schedule patching for the EC2 instances AWS loT Greengrass devices and on-premises servers.
E. Use Systems Manager Patch Manager to schedule patching loT the EC2 instances AWS loT Greengrass devices and on-premises servers as a Systems Manager maintenance window task.
F. Configure Amazon EventBridge to monitor Systems Manager Patch Manager for updates to patch baseline
G. Associate Systems Manager Run Command with the event lo initiate a patch action for all EC2 instances AWS loT Greengrass devices and on-premises servers.
H. Create an IAM instance profile for Systems Manager Attach the instance profile to all the EC2 instances in the AWS accoun
I. For the AWS loT Greengrass devices and on-premises servers create an IAM service role for Systems Manager.
J. Generate a managed-instance activation Use the Activation Code and Activation ID to install Systems Manager Agent (SSM Agent) on each server in the on-premises environment Update the AWS loT Greengrass IAM token exchange role Use the role to deploy SSM Agent on all the loT devices.

Answer: CEF

Explanation:
https://aws.amazon.com/blogs/mt/how-to-centrally-manage-aws-iot-greengrass-devices-using-aws-systems-man

NEW QUESTION 151
A company has an application that runs on Amazon EC2 instances that are in an Auto Scaling group. When the application starts up. the application needs to process data from an Amazon S3 bucket before the application can start to serve requests.
The size of the data that is stored in the S3 bucket is growing. When the Auto Scaling group adds new instances, the application now takes several minutes to download and process the data before the application can serve requests. The company must reduce the time that elapses before new EC2 instances are ready to serve requests.
Which solution is the MOST cost-effective way to reduce the application startup time?

A. Configure a warm pool for the Auto Scaling group with warmed EC2 instances in the Stopped state.Configure an autoscaling:EC2_INSTANCE_LAUNCHING lifecycle hook on the Auto Scaling grou
B. Modify the application to complete the lifecycle hook when the application is ready to serve requests.
C. Increase the maximum instance count of the Auto Scaling grou
D. Configure an autoscaling:EC2_INSTANCE_LAUNCHING lifecycle hook on the Auto Scaling grou
E. Modify the application to complete the lifecycle hook when the application is ready to serve requests.
F. Configure a warm pool for the Auto Scaling group with warmed EC2 instances in the Running state.Configure an autoscaling:EC2_INSTANCE_LAUNCHING lifecycle hook on the Auto Scaling grou
G. Modify the application to complete the lifecycle hook when the application is ready to serve requests.
H. Increase the maximum instance count of the Auto Scaling grou
I. Configure an autoscaling:EC2_INSTANCE_LAUNCHING lifecycle hook on the Auto Scaling grou
J. Modify the application to complete the lifecycle hook and to place the new instance in the Standby state when the application is ready to serve requests.

Answer: A

Explanation:
Option A is the most cost-effective solution. By configuring a warm pool of EC2 instances in the Stopped state, the company can reduce the time it takes for new instances to be ready to serve requests. When the Auto Scaling group launches a new instance, it can attach the stopped EC2 instance from the warm pool. The instance can then be started up immediately, rather than having to wait for the data to be downloaded and processed. This reduces the overall startup time for the application.

NEW QUESTION 154
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.htm
https://docs.aws.amazon.com/xray/latest/devguide/xray-api-sendingdata.html

NEW QUESTION 158
A DevOps engineer is designing an application that integrates with a legacy REST API. The application has an AWS Lambda function that reads records from an Amazon Kinesis data stream. The Lambda function sends the records to the legacy REST API.
Approximately 10% of the records that the Lambda function sends from the Kinesis data stream have data errors and must be processed manually. The Lambda function event source configuration has an Amazon Simple Queue Service (Amazon SQS) dead-letter queue as an on-failure destination. The DevOps engineer has configured the Lambda function to process records in batches and has implemented retries in case of failure.
During testing the DevOps engineer notices that the dead-letter queue contains many records that have no data errors and that already have been processed by the legacy REST API. The DevOps engineer needs to configure the Lambda function's event source options to reduce the number of errorless records that are sent to the dead-letter queue.
Which solution will meet these requirements?

A. Increase the retry attempts
B. Configure the setting to split the batch when an error occurs
C. Increase the concurrent batches per shard
D. Decrease the maximum age of record

Answer: B

Explanation:
This solution will meet the requirements because it will reduce the number of errorless records that are sent to the dead-letter queue. When you configure the setting to split the batch when an error occurs, Lambda will retry only the records that caused the error, instead of retrying the entire batch. This way, the records that have no data errors and have already been processed by the legacy REST API will not be retried and sent to the dead-letter queue unnecessarily.
https://docs.aws.amazon.com/lambda/latest/dg/with-kinesis.html

NEW QUESTION 161
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