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.

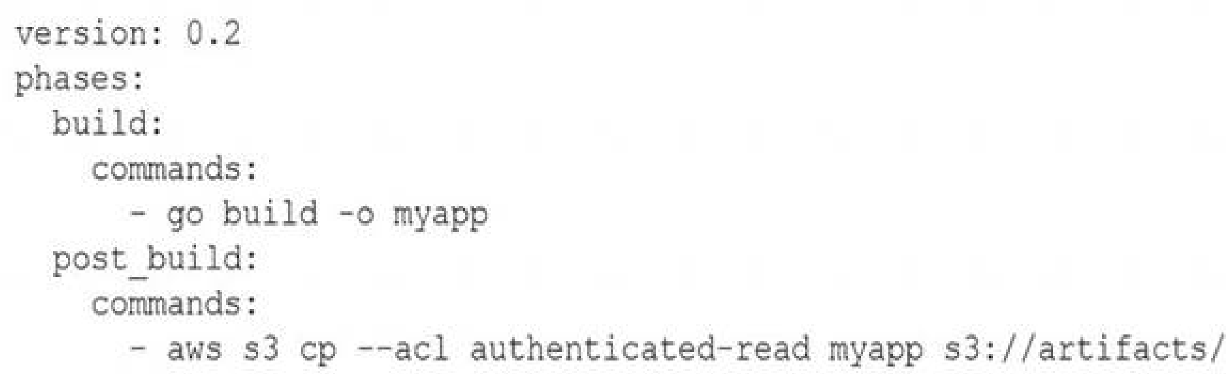
NEW QUESTION 2
A company has a legacy application A DevOps engineer needs to automate the process of building the deployable artifact for the legacy application. The solution must store the deployable artifact in an existing Amazon S3 bucket for future deployments to reference
Which solution will meet these requirements in the MOST operationally efficient way?

A. Create a custom Docker image that contains all the dependencies tor the legacy application Store the custom Docker image in a new Amazon Elastic Container Registry (Amazon ECR) repository Configure a new AWS CodeBuild project to use the custom Docker image to build the deployable artifact and to save the artifact to the S3 bucket.
B. Launch a new Amazon EC2 instance Install all the dependencies (or the legacy application on the EC2 instance Use the EC2 instance to build the deployable artifact and to save the artifact to the S3 bucket.
C. Create a custom EC2 Image Builder image Install all the dependencies for the legacy application on the image Launch a new Amazon EC2 instance from the image Use the new EC2 instance to build the deployable artifact and to save the artifact to the S3 bucket.
D. Create an Amazon Elastic Kubernetes Service (Amazon EKS) cluster with an AWS Fargate profile that runs in multiple Availability Zones Create a custom Docker image that contains all the dependencies for the legacy application Store the custom Docker image in a new Amazon Elastic Container Registry (Amazon ECR) repository Use the custom Docker image inside the EKS cluster to build the deployable artifact and to save the artifact to the S3 bucket.

Answer: A

Explanation:
This approach is the most operationally efficient because it leverages the benefits of containerization, such as isolation and reproducibility, as well as AWS managed services. AWS CodeBuild is a fully managed build service that can compile your source code, run tests, and produce deployable software packages. By using a custom Docker image that includes all dependencies, you can ensure that the environment in which your code is built is consistent. Using Amazon ECR to store Docker images lets you easily deploy the images to any environment. Also, you can directly upload the build artifacts to Amazon S3 from AWS CodeBuild, which is beneficial for version control and archival purposes.

NEW QUESTION 3
A company is using an AWS CodeBuild project to build and package an application. The packages are copied to a shared Amazon S3 bucket before being deployed across multiple AWS accounts.
The buildspec.yml file contains the following:



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

The DevOps engineer has noticed that anybody with an AWS account is able to download the artifacts. What steps should the DevOps engineer take to stop this?

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

Answer: D

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

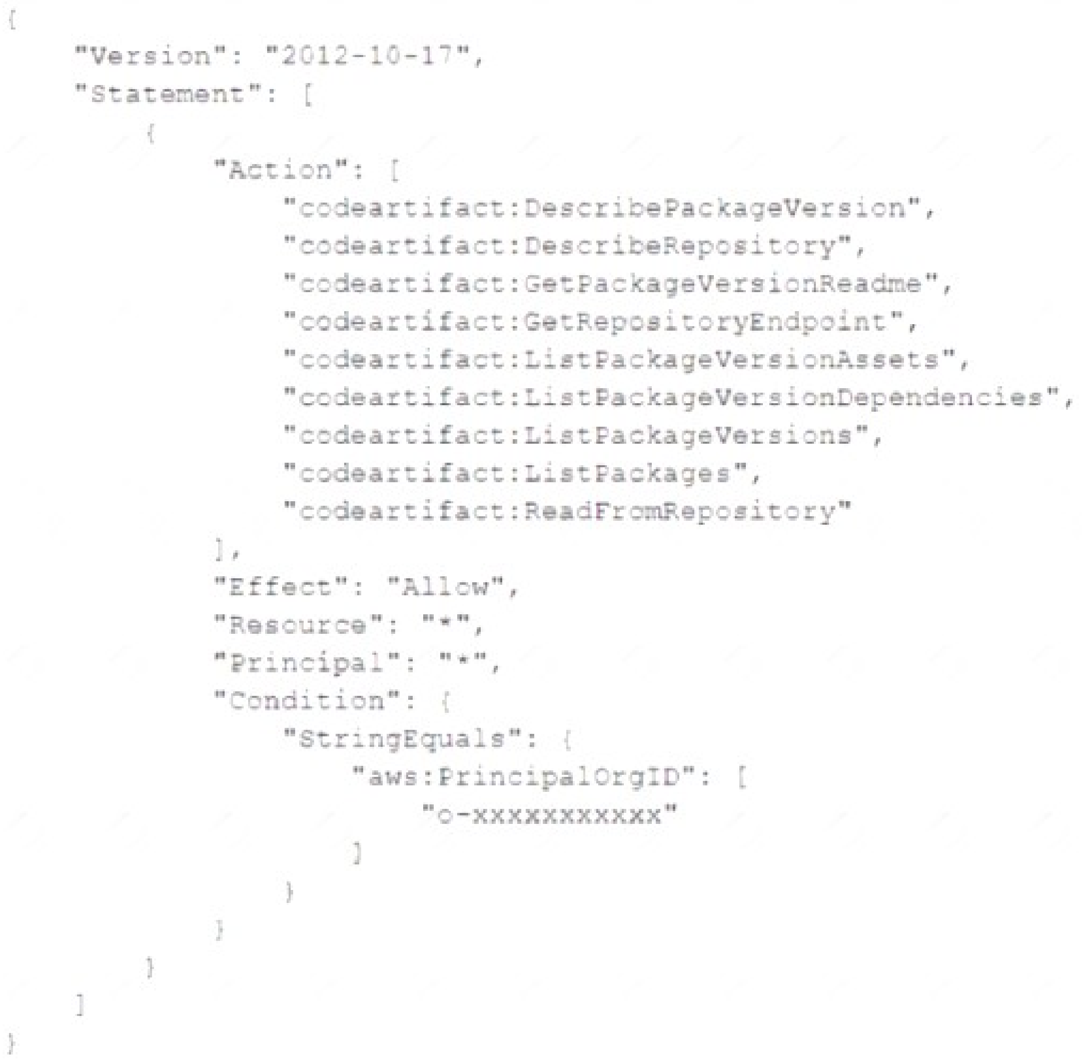
NEW QUESTION 4
A company has an application that is using a MySQL-compatible Amazon Aurora Multi-AZ DB cluster as the database. A cross-Region read replica has been created for disaster recovery purposes. A DevOps engineer wants to automate the promotion of the replica so it becomes the primary database 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 5
A company uses AWS CodeArtifact to centrally store Python packages. The CodeArtifact repository is configured with the following repository policy.



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

A development team is building a new project in an account that is in an organization in AWS Organizations. The development team wants to use a Python library that has already been stored in the CodeArtifact repository in the organization. The development team uses AWS CodePipeline and AWS CodeBuild to build the new application. The CodeBuild job that the development team uses to build the application is configured to run in a VPC Because of compliance requirements the VPC has no internet connectivity.

The development team creates the VPC endpoints for CodeArtifact and updates the CodeBuild buildspec yaml file. However, the development team cannot download the Python library from the repository.

Which combination of steps should a DevOps engineer take so that the development team can use Code Artifact? (Select TWO.)

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

Answer: AD

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

NEW QUESTION 6
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 7
A DevOps engineer has automated a web service deployment by using AWS CodePipeline with the following steps:
1) An AWS CodeBuild project compiles the deployment artifact and runs unit tests.
2) An AWS CodeDeploy deployment group deploys the web service to Amazon EC2 instances in the staging environment.
3) A CodeDeploy deployment group deploys the web service to EC2 instances in the production environment. The quality assurance (QA) team requests permission to inspect the build artifact before the deployment to the
production environment occurs. The QA team wants to run an internal penetration testing tool to conduct
manual tests. The tool will be invoked by a REST API call.
Which combination of actions should the DevOps engineer take to fulfill this request? (Choose two.)

A. Insert a manual approval action between the test actions and deployment actions of the pipeline.
B. Modify the buildspec.yml file for the compilation stage to require manual approval before completion.
C. Update the CodeDeploy deployment groups so that they require manual approval to proceed.
D. Update the pipeline to directly call the REST API for the penetration testing tool.
E. Update the pipeline to invoke an AWS Lambda function that calls the REST API for the penetration testing tool.

Answer: AE

NEW QUESTION 8
A company requires an RPO of 2 hours and an RTO of 10 minutes for its data and application at all times. An application uses a MySQL database and Amazon EC2 web servers. The development team needs a strategy for failover and disaster recovery.
Which combination of deployment strategies will meet these requirements? (Select TWO.)

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

Answer: BD

NEW QUESTION 9
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 10
A company uses AWS CloudFormation stacks to deploy updates to its application. The stacks consist of different resources. The resources include AWS Auto Scaling groups, Amazon EC2 instances, Application Load Balancers (ALBs), and other resources that are necessary to launch and maintain independent stacks. Changes to application resources outside of CloudFormation stack updates are not allowed.
The company recently attempted to update the application stack by using the AWS CLI. The stack failed to update and produced the following error message: "ERROR: both the deployment and the CloudFormation stack rollback failed. The deployment failed because the following resource(s) failed to update: [AutoScalingGroup]."
The stack remains in a status of UPDATE_ROLLBACK_FAILED. * Which solution will resolve this issue?

A. Update the subnet mappings that are configured for the ALB
B. Run the aws cloudformation update-stack-set AWS CLI command.
C. Update the 1AM role by providing the necessary permissions to update the stac
D. Run the aws cloudformation continue-update-rollback AWS CLI command.
E. Submit a request for a quota increase for the number of EC2 instances for the accoun
F. Run the aws cloudformation cancel-update-stack AWS CLI command.
G. Delete the Auto Scaling group resourc
H. Run the aws cloudformation rollback-stack AWS CLI command.

Answer: B

Explanation:
https://repost.aws/knowledge-center/cloudformation-update-rollback-failed If your stack is stuck in the UPDATE_ROLLBACK_FAILED state after a failed update, then the only actions that you can perform on the stack are the ContinueUpdateRollback or DeleteStack operations.

NEW QUESTION 10
A DevOps engineer is architecting a continuous development strategy for a company's software as a service (SaaS) web application running on AWS. For application and security reasons users subscribing to this application are distributed across multiple. Application Load Balancers (ALBs) each of which has a dedicated Auto Scaling group and fleet of Amazon EC2 instances The application does not require a build stage and when it is committed to AWS CodeCommit, the application must trigger a simultaneous deployment to all ALBs Auto Scaling groups and EC2 fleets.
Which architecture will meet these requirements with the LEAST amount of configuration?

A. Create a single AWS CodePipeline pipeline that deploys the application in parallel using unique AWS CodeDeploy applications and deployment groups created for each ALB-Auto Scaling group pair.
B. Create a single AWS CodePipeline pipeline that deploys the application using a single AWSCodeDeploy application and single deployment group.
C. Create a single AWS CodePipeline pipeline that deploys the application in parallel using a single AWS CodeDeploy application and unique deployment group for each ALB-Auto Scaling group pair.
D. Create an AWS CodePipeline pipeline for each ALB-Auto Scaling group pair that deploys the application using an AWS CodeDeploy application and deployment group created for the same ALB-Auto Scaling group pair.

Answer: C

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

NEW QUESTION 11
A company has its AWS accounts in an organization in AWS Organizations. AWS Config is manually configured in each AWS account. The company needs to implement a solution to centrally configure AWS Config for all accounts in the organization The solution also must record resource changes to a central account.
Which combination of actions should a DevOps engineer perform to meet these requirements? (Choose two.)

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

Answer: AE

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

NEW QUESTION 16
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 19
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 23
A company must encrypt all AMIs that the company shares across accounts. A DevOps engineer has access to a source account where an unencrypted custom AMI has been built. The DevOps engineer also has access to a target account where an Amazon EC2 Auto Scaling group will launch EC2 instances from the AMI. The DevOps engineer must share the AMI with the target account.
The company has created an AWS Key Management Service (AWS KMS) key in the source account. Which additional steps should the DevOps engineer perform to meet the requirements? (Choose three.)

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

Answer: ADF

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

The first three steps are the same as the steps that I described earlier. The fourth step is required to grant the Auto Scaling group service-linked role permissions to decrypt the AMI in the target account.

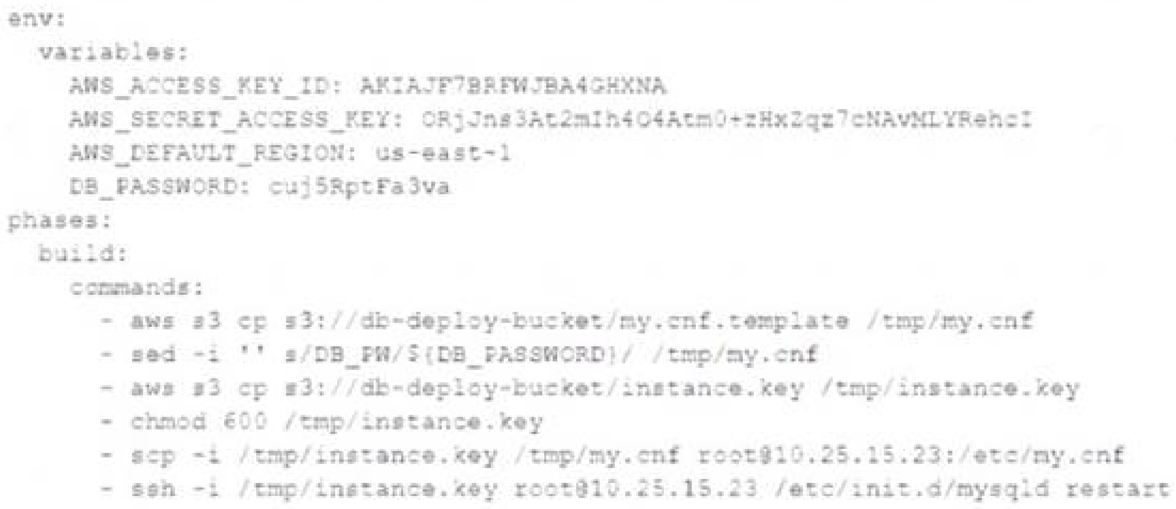
NEW QUESTION 28
A company uses AWS Organizations and AWS Control Tower to manage all the company's AWS accounts. The company uses the Enterprise Support plan.
A DevOps engineer is using Account Factory for Terraform (AFT) to provision new accounts. When new accounts are provisioned, the DevOps engineer notices that the support plan for the new accounts is set to the Basic Support plan. The DevOps engineer needs to implement a solution to provision the new accounts with the Enterprise Support plan.
Which solution will meet these requirements?

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

Answer: D

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

NEW QUESTION 31
A DevOps engineer is working on a project that is hosted on Amazon Linux and has failed a security review. The DevOps manager has been asked to review the company buildspec. yaml die for an AWS CodeBuild project and provide recommendations. The buildspec. yaml file is configured as follows:



```
env:
  variables:
    AWS_ACCESS_KEY_ID: AKIAJF7BRFWJBA4GHXNA
    AWS_SECRET_ACCESS_KEY: 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
    AWS_DEFAULT_REGION: us-east-1
    DB_PASSWORD: cuj5RptFa3va
phases:
  build:
    commands:
      - aws s3 cp s3://db-deploy-bucket/my.cnf.template /tmp/my.cnf
      - sed -i '' s/DB_PW/${DB_PASSWORD}/ /tmp/my.cnf
      - aws s3 cp s3://db-deploy-bucket/instance.key /tmp/instance.key
      - chmod 600 /tmp/instance.key
      - scp -i /tmp/instance.key /tmp/my.cnf root@10.25.15.23:/etc/my.cnf
      - ssh -i /tmp/instance.key root@10.25.15.23 /etc/init.d/mysqld restart
```

What changes should be recommended to comply with AWS security best practices? (Select THREE.)

A. Add a post-build command to remove the temporary files from the container before termination to ensure they cannot be seen by other CodeBuild users.
B. Update the CodeBuild project role with the necessary permissions and then remove the AWS credentials from the environment variable.
C. Store the db_password as a SecureString value in AWS Systems Manager Parameter Store and then remove the db_password from the environment variables.
D. Move the environment variables to the 'db.-deploy-bucket ‘Amazon S3 bucket, add a prebuild stage to download then export the variables.
E. Use AWS Systems Manager run command versus sec and ssh commands directly to the instance.

Answer: BCE

Explanation:
* B. Update the CodeBuild project role with the necessary permissions and then remove the AWS credentials from the environment variable. C. Store the DB_PASSWORD as a SecureString value in AWS Systems Manager Parameter Store and then remove the DB_PASSWORD from the environment variables. * E. Use AWS Systems Manager run command versus scp and ssh commands directly to the instance.

NEW QUESTION 35
A company has migrated its container-based applications to Amazon EKS and want to establish automated email notifications. The notifications sent to each email address are for specific activities related to EKS components. The solution will include Amazon SNS topics and an AWS Lambda function to evaluate incoming log events and publish messages to the correct SNS topic.
Which logging solution will support these requirements?

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

Answer: A

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

NEW QUESTION 39
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 44
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 45
A company is implementing an Amazon Elastic Container Service (Amazon ECS) cluster to run its workload. The company architecture will run multiple ECS services on the cluster. The architecture includes an Application Load Balancer on the front end and uses multiple target groups to route traffic.
A DevOps engineer must collect application and access logs. The DevOps engineer then needs to send the logs to an Amazon S3 bucket for near-real-time analysis.
Which combination of steps must the DevOps engineer take to meet these requirements? (Choose three.)

A. Download the Amazon CloudWatch Logs container instance from AW
B. Configure this instance as a tas
C. Update the application service definitions to include the logging task.
D. Install the Amazon CloudWatch Logs agent on the ECS instance
E. Change the logging driver in the ECS task definition to awslogs.
F. Use Amazon EventBridge to schedule an AWS Lambda function that will run every 60 seconds and will run the Amazon CloudWatch Logs create-export-task comman
G. Then point the output to the logging S3 bucket.
H. Activate access logging on the AL
I. Then point the ALB directly to the logging S3 bucket.
J. Activate access logging on the target groups that the ECS services us
K. Then send the logs directly to the logging S3 bucket.
L. Create an Amazon Kinesis Data Firehose delivery stream that has a destination of the logging S3 bucket.Then create an Amazon CloudWatch Logs subscription filter for Kinesis Data Firehose.

Answer: BDF

Explanation:
https://docs.aws.amazon.com/AmazonECS/latest/developerguide/ecs-logging-monitoring.html

NEW QUESTION 48
A company has 20 service learns Each service team is responsible for its own microservice. Each service team uses a separate AWS account for its microservice and a VPC with the 192 168 0 0/22 CIDR block. The company manages the AWS accounts with AWS Organizations.
Each service team hosts its microservice on multiple Amazon EC2 instances behind an Application Load Balancer. The microservices communicate with each other across the public internet. The company's security team has issued a new guideline that all communication between microservices must use HTTPS over private network connections and cannot traverse the public internet.
A DevOps engineer must implement a solution that fulfills these obligations and minimizes the number of changes for each service team
Which solution will meet these requirements?

A. Create a new AWS account in AWS Organizations Create a VPC in this account and use AWS Resource Access Manager to share the private subnets of this VPC with the organization Instruct the service teams to launch a ne
B. Network Load Balancer (NLB) and EC2 instances that use the shared private subnets Use the NLB DNS names for communication between microservices.
C. Create a Network Load Balancer (NLB) in each of the microservice VPCs Use AWS PrivateLink to create VPC endpoints in each AWS account for the NLBs

Create subscriptions to each VPC endpoint in each of the other AWS accounts Use the VPC endpoint DNS names for communication between microservices.
D. Create a Network Load Balancer (NLB) in each of the microservice VPCs Create VPC peering connections between each of the microservice VPCs Update the route tables for each VPC to use the peering links Use the NLB DNS names for communication between microservices.
E. Create a new AWS account in AWS Organizations Create a transit gateway in this account and use AWS Resource Access Manager to share the transit gateway with the organizatio
F. In each of the microservice VPC
G. create a transit gateway attachment to the shared transit gateway Update the route tables of each VPC to use the transit gateway Create a Network Load Balancer (NLB) in each of the microservice VPCs Use the NLB DNS names for communication between microservices.

Answer: B

Explanation:
https://aws.amazon.com/blogs/networking-and-content-delivery/connecting-networks-with-overlapping-ip-range Private link is the best option because Transit Gateway doesn't support overlapping CIDR ranges.

NEW QUESTION 51
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 52
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 53
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 57
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 61
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?

A. Modify the Kinesis consumer application to store the logs durably in Amazon S3 Use Amazon EMR to process the data directly on Amazon S3 to derive customer insights Store the results in Amazon S3.
B. Horizontally scale the Kinesis consumer application by adding more EC2 instances based on the Amazon CloudWatch GetRecords IteratorAgeMilliseconds metric Increase the retention period of the Kinesis data streams.
C. Convert the Kinesis consumer application to run as an AWS Lambda functio
D. Configure the Kinesis data streams as the event source for the Lambda function to process the data streams
E. Increase the number of shards in the Kinesis data streams to increase the overall throughput so that the consumer application processes the data faster.

Answer: B

Explanation:
https://docs.aws.amazon.com/streams/latest/dev/monitoring-with-cloudwatch.html GetRecords.IteratorAgeMilliseconds - The age of the last record in all GetRecords calls made against a
Kinesis stream, measured over the specified time period. Age is the difference between the current time and when the last record of the GetRecords call was written to the stream. The Minimum and Maximum statistics can be used to track the progress of Kinesis consumer applications. A value of zero indicates that the records being read are completely caught up.

NEW QUESTION 65
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 66
An AWS CodePipeline pipeline has implemented a code release process. The pipeline is integrated with AWS CodeDeploy to deploy versions of an application to multiple Amazon EC2 instances for each CodePipeline stage.
During a recent deployment the pipeline failed due to a CodeDeploy issue. The DevOps team wants to improve monitoring and notifications during deployment to decrease resolution times.
What should the DevOps engineer do to create notifications. When issues are discovered?

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

Answer: B

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

NEW QUESTION 69
An IT team has built an AWS CloudFormation template so others in the company can quickly and reliably deploy and terminate an application. The template creates an Amazon EC2 instance with a user data script to install the application and an Amazon S3 bucket that the application uses to serve static webpages while it is running.
All resources should be removed when the CloudFormation stack is deleted. However, the team observes that CloudFormation reports an error during stack deletion, and the S3 bucket created by the stack is not deleted.
How can the team resolve the error in the MOST efficient manner to ensure that all resources are deleted without errors?

A. Add a DelelionPolicy attribute to the S3 bucket resource, with the value Delete forcing the bucket to be removed when the stack is deleted.
B. Add a custom resource with an AWS Lambda function with the DependsOn attribute specifying the S3bucket, and an IAM rol
C. Write the Lambda function to delete all objects from the bucket when RequestType is Delete.
D. Identify the resource that was not delete
E. Manually empty the S3 bucket and then delete it.
F. Replace the EC2 and S3 bucket resources with a single AWS OpsWorks Stacks resourc
G. Define a custom recipe for the stack to create and delete the EC2 instance and the S3 bucket.

Answer: B

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

NEW QUESTION 72
A DevOps engineer is working on a data archival project that requires the migration of on-premises data to an Amazon S3 bucket. The DevOps engineer develops a script that incrementally archives on-premises data that is older than 1 month to Amazon S3. Data that is transferred to Amazon S3 is deleted from the on-premises location The script uses the S3 PutObject operation.
During a code review the DevOps engineer notices that the script does not verity whether the data was successfully copied to Amazon S3. The DevOps engineer must update the script to ensure that data is not corrupted during transmission. The script must use MD5 checksums to verify data integrity before the on-premises data is deleted.
Which solutions for the script will meet these requirements'? (Select TWO.)

A. Check the returned response for the Versioned Compare the returned Versioned against the MD5 checksum.
B. Include the MD5 checksum within the Content-MD5 paramete
C. Check the operation call's return status to find out if an error was returned.
D. Include the checksum digest within the tagging parameter as a URL query parameter.
E. Check the returned response for the ETa
F. Compare the returned ETag against the MD5 checksum.
G. Include the checksum digest within the Metadata parameter as a name-value pair After upload use the S3 HeadObject operation to retrieve metadata from the object.

Answer: BD

Explanation:
https://docs.aws.amazon.com/AmazonS3/latest/userguide/checking-object-integrity.html

NEW QUESTION 73
A global company manages multiple AWS accounts by using AWS Control Tower. The company hosts internal applications and public applications.
Each application team in the company has its own AWS account for application hosting. The accounts are consolidated in an organization in AWS Organizations.
One of the AWS Control Tower member accounts serves as a centralized DevOps account with CI/CD pipelines that application teams use to deploy applications to their respective target AWS accounts. An 1AM role for deployment exists in the centralized DevOps account.

An application team is attempting to deploy its application to an Amazon Elastic Kubernetes Service (Amazon EKS) cluster in an application AWS account. An 1AM role for deployment exists in the application AWS account. The deployment is through an AWS CodeBuild project that is set up in the centralized DevOps account. The CodeBuild project uses an 1AM service role for CodeBuild. The deployment is failing with an Unauthorized error during attempts to connect to the cross-account EKS cluster from CodeBuild.
Which solution will resolve this error?

A. Configure the application account's deployment 1AM role to have a trust relationship with the centralized DevOps accoun
B. Configure the trust relationship to allow the sts:AssumeRole actio
C. Configure the application account's deployment 1AM role to have the required access to the EKS cluste
D. Configure the EKS cluster aws-auth ConfigMap to map the role to the appropriate system permissions.
E. Configure the centralized DevOps account's deployment I AM role to have a trust relationship with the application accoun
F. Configure the trust relationship to allow the sts:AssumeRole actio
G. Configure the centralized DevOps account's deployment 1AM role to allow the required access to CodeBuild.
H. Configure the centralized DevOps account's deployment 1AM role to have a trust relationship with the application accoun
I. Configure the trust relationship to allow the sts:AssumeRoleWithSAML actio
J. Configure the centralized DevOps account's deployment 1AM role to allow the required access to CodeBuild.
K. Configure the application account's deployment 1AM role to have a trust relationship with the AWS Control Tower management accoun
L. Configure the trust relationship to allow the sts:AssumeRole actio
M. Configure the application account's deployment 1AM role to have the required access to the EKS cluste
N. Configure the EKS cluster aws-auth ConfigMap to map the role to the appropriate system permissions.

Answer: A

Explanation:
In the source AWS account, the IAM role used by the CI/CD pipeline should have permissions to access the source code repository, build artifacts, and any other resources required for the build process. In the destination AWS accounts, the IAM role used for deployment should have permissions to access the AWS resources required for deploying the application, such as EC2 instances, RDS databases, S3 buckets, etc. The exact permissions required will depend on the specific resources being used by the application. the IAM role used for deployment in the destination accounts should also have permissions to assume the IAM role for deployment in the centralized DevOps account. This is typically done using an IAM role trust policy that allows the destination account to assume the DevOps account role.

NEW QUESTION 76
A company has a single AWS account that runs hundreds of Amazon EC2 instances in a single AWS Region. New EC2 instances are launched and terminated each hour in the account. The account also includes existing EC2 instances that have been running for longer than a week.
The company's security policy requires all running EC2 instances to use an EC2 instance profile. If an EC2 instance does not have an instance profile attached, the EC2 instance must use a default instance profile that has no IAM permissions assigned.
A DevOps engineer reviews the account and discovers EC2 instances that are running without an instance
profile. During the review, the DevOps engineer also observes that new EC2 instances are being launched without an instance profile.
Which solution will ensure that an instance profile is attached to all existing and future EC2 instances in the Region?

A. Configure an Amazon EventBridge rule that reacts to EC2 RunInstances API call
B. Configure the rule to invoke an AWS Lambda function to attach the default instance profile to the EC2 instances.
C. Configure the ec2-instance-profile-attached AWS Config managed rule with a trigger type of configuration change
D. Configure an automatic remediation action that invokes an AWS Systems Manager Automation runbook to attach the default instance profile to the EC2 instances.
E. Configure an Amazon EventBridge rule that reacts to EC2 StartInstances API call
F. Configure the rule to invoke an AWS Systems Manager Automation runbook to attach the default instance profile to the EC2 instances.
G. Configure the iam-role-managed-policy-check AWS Config managed rule with a trigger type of configuration change
H. Configure an automatic remediation action that invokes an AWS Lambda function to attach the default instance profile to the EC2 instances.

Answer: B

Explanation:
https://docs.aws.amazon.com/config/latest/developerguide/ec2-instance-profile-attached.html

NEW QUESTION 81
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 84
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 87
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 89
A company's application development team uses Linux-based Amazon EC2 instances as bastion hosts. Inbound SSH access to the bastion hosts is restricted to specific IP addresses, as defined in the associated security groups. The company's security team wants to receive a notification if the security group rules are modified to allow SSH access from any IP address.
What should a DevOps engineer do to meet this requirement?

A. Create an Amazon EventBridge rule with a source of aws.cloudtrail and the event name AuthorizeSecurityGroupIngres
B. Define an Amazon Simple Notification Service (Amazon SNS) topic as the target.
C. Enable Amazon GuardDuty and check the findings for security groups in AWS Security Hu
D. Configure an Amazon EventBridge rule with a custom pattern that matches GuardDuty events with an output of NON_COMPLIAN
E. Define an Amazon Simple Notification Service (Amazon SNS) topic as the target.
F. Create an AWS Config rule by using the restricted-ssh managed rule to check whether security groups disallow unrestricted incoming SSH traffi
G. Configure automatic remediation to publish a message to an Amazon Simple Notification Service (Amazon SNS) topic.
H. Enable Amazon Inspecto
I. Include the Common Vulnerabilities and Exposures-1.1 rules package to check the security groups that are associated with the bastion host
J. Configure Amazon Inspector to publish a message to an Amazon Simple Notification Service (Amazon SNS) topic.

Answer: A

Explanation:
https://aws.amazon.com/premiumsupport/knowledge-center/monitor-security-group-changes-ec2/

NEW QUESTION 94
A company is using an Amazon Aurora cluster as the data store for its application. The Aurora cluster is configured with a single DB instance. The application performs read and write operations on the database by using the cluster's instance endpoint.
The company has scheduled an update to be applied to the cluster during an upcoming maintenance window. The cluster must remain available with the least possible interruption during the maintenance window.
What should a DevOps engineer do to meet these requirements?

A. Add a reader instance to the Aurora cluste
B. Update the application to use the Aurora cluster endpoint for write operation
C. Update the Aurora cluster's reader endpoint for reads.
D. Add a reader instance to the Aurora cluste
E. Create a custom ANY endpoint for the cluste
F. Update the application to use the Aurora cluster's custom ANY endpoint for read and write operations.

G. Turn on the Multi-AZ option on the Aurora cluste
H. Update the application to use the Aurora cluster endpoint for write operation
I. Update the Aurora cluster’s reader endpoint for reads.
J. Turn on the Multi-AZ option on the Aurora cluste
K. Create a custom ANY endpoint for the cluster.Update the application to use the Aurora cluster's custom ANY endpoint for read and write operations.

Answer: C

Explanation:
To meet the requirements, the DevOps engineer should do the following:

- Turn on the Multi-AZ option on the Aurora cluster.
- Update the application to use the Aurora cluster endpoint for write operations.
- Update the Aurora cluster's reader endpoint for reads.

Turning on the Multi-AZ option will create a replica of the database in a different Availability Zone. This will ensure that the database remains available even if one of the Availability Zones is unavailable.
Updating the application to use the Aurora cluster endpoint for write operations will ensure that all writes are sent to both the primary and replica databases. This will ensure that the data is always consistent.
Updating the Aurora cluster's reader endpoint for reads will allow the application to read data from the replica database. This will improve the performance of the application during the maintenance window.

NEW QUESTION 99
A company uses AWS Key Management Service (AWS KMS) keys and manual key rotation to meet regulatory compliance requirements. The security team wants to be notified when any keys have not been rotated after 90 days.
Which solution will accomplish this?

A. Configure AWS KMS to publish to an Amazon Simple Notification Service (Amazon SNS) topic when keys are more than 90 days old.
B. Configure an Amazon EventBridge event to launch an AWS Lambda function to call the AWS Trusted Advisor API and publish to an Amazon Simple Notification Service (Amazon SNS) topic.
C. Develop an AWS Config custom rule that publishes to an Amazon Simple Notification Service (Amazon SNS) topic when keys are more than 90 days old.
D. Configure AWS Security Hub to publish to an Amazon Simple Notification Service (Amazon SNS) topic when keys are more than 90 days old.

Answer: C

Explanation:
https://aws.amazon.com/blogs/security/how-to-use-aws-config-to-determine-compliance-of-aws-kms-key-polici

NEW QUESTION 101
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 102
A DevOps engineer used an AWS Cloud Formation custom resource to set up AD Connector. The AWS Lambda function ran and created AD Connector, but Cloud Formation is not transitioning from CREATE_IN_PROGRESS to CREATE_COMPLETE.
Which action should the engineer take to resolve this issue?

A. Ensure the Lambda function code has exited successfully.
B. Ensure the Lambda function code returns a response to the pre-signed URL.
C. Ensure the Lambda function IAM role has cloudformation UpdateStack permissions for the stack ARN.
D. Ensure the Lambda function IAM role has ds ConnectDirectory permissions for the AWS account.

Answer: B

NEW QUESTION 107
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