Testpassport考試指南

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Exam :   **SAP-C02**

Title :   AWS Certified Solutions
Architect - Professional

Version :   DEMO

1.A company wants to change its internal cloud billing strategy for each of its business units. Currently, the cloud governance team shares reports for overall cloud spending with the head of each business unit. The company uses AWS Organizations lo manage the separate AWS accounts for each business unit. The existing tagging standard in Organizations includes the application, environment, and owner. The cloud governance team wants a centralized solution so each business unit receives monthly reports on its cloud spending. The solution should also send notifications for any cloud spending that exceeds a set threshold.

Which solution is the MOST cost-effective way to meet these requirements?

A. Configure AWS Budgets in each account and configure budget alerts that are grouped by application, environment, and owner. Add each business unit to an Amazon SNS topic for each alert. Use Cost Explorer in each account to create monthly reports for each business unit.

B. Configure AWS Budgets in the organization's master account and configure budget alerts that are grouped by application, environment, and owner. Add each business unit to an Amazon SNS topic for each alert. Use Cost Explorer in the organization's master account to create monthly reports for each business unit.

C. Configure AWS Budgets in each account and configure budget alerts lhat are grouped by application, environment, and owner. Add each business unit to an Amazon SNS topic for each alert. Use the AWS Billing and Cost Management dashboard in each account to create monthly reports for each business unit.

D. Enable AWS Cost and Usage Reports in the organization's master account and configure reports grouped by application, environment, and owner. Create an AWS Lambda function that processes AWS Cost and Usage Reports, sends budget alerts, and sends monthly reports to each business unit's email list.

Answer: B

Explanation:

Configure AWS Budgets in the organization€™s master account and configure budget alerts that are grouped by application, environment, and owner. Add each business unit to an Amazon SNS topic for each alert. Use Cost Explorer in the organization€™s master account to create monthly reports for each business unit. https://aws.amazon.com/about-aws/whats-new/2019/07/introducing-aws-budgets-reports/#:~:text=AWS%20Budgets%20gives%20you%20the,below%20the%20threshold%2 0you%20define.

2.A solutions architect is evaluating the reliability of a recently migrated application running on AWS. The front end is hosted on Amazon S3 and accelerated by Amazon CloudFront. The application layer is running in a stateless Docker container on an Amazon EC2 On-Demand Instance with an Elastic IP address. The storage layer is a MongoDB database running on an EC2 Reserved Instance in the same Availability Zone as the application layer.

Which combination of steps should the solutions architect take to eliminate single points of failure with minimal application code changes? (Select TWO.)

A. Create a REST API in Amazon API Gateway and use AWS Lambda functions as the application layer.

B. Create an Application Load Balancer and migrate the Docker container to AWS Fargate.

C. Migrate the storage layer to Amazon DynamoD8.

D. Migrate the storage layer to Amazon DocumentD8 (with MongoDB compatibility).

E. Create an Application Load Balancer and move the storage layer to an EC2 Auto Scaling group.

Answer: B,D

Explanation:

https://aws.amazon.com/documentdb/?nc1=h_ls

https://aws.amazon.com/blogs/containers/using-alb-ingress-controller-with-amazon-eks-on-fargate/

3.A solutions architect needs to advise a company on how to migrate its on-premises data processing application to the AWS Cloud. Currently, users upload input files through a web portal. The web server then stores the uploaded files on NAS and messages the processing server over a message queue. Each media file can take up to 1 hour to process. The company has determined that the number of media files awaiting processing is significantly higher during business hours, with the number of files rapidly declining after business hours.

What is the MOST cost-effective migration recommendation?

A. Create a queue using Amazon SQS. Configure the existing web server to publish to the new queue. When there are messages in the queue, invoke an AWS Lambda function to pull requests from the queue and process the files. Store the processed files in an Amazon S3 bucket.

B. Create a queue using Amazon MO. Configure the existing web server to publish to the new queue. When there are messages in the queue, create a new Amazon EC2 instance to pull requests from the queue and process the files. Store the processed files in Amazon EFS. Shut down the EC2 instance after the task is complete.

C. Create a queue using Amazon MO. Configure the existing web server to publish to the new queue. When there are messages in the queue, invoke an AWS Lambda function to pull requests from the queue and process the files. Store the processed files in Amazon EFS.

D. Create a queue using Amazon SOS. Configure the existing web server to publish to the new queue. Use Amazon EC2 instances in an EC2 Auto Scaling group to pull requests from the queue and process the files. Scale the EC2 instances based on the SOS queue length. Store the processed files in an Amazon S3 bucket.

Answer: D

Explanation:

https://aws.amazon.com/blogs/compute/operating-lambda-performance-optimization-part-1/

4.A company is building a hybrid solution between its existing on-premises systems and a new backend in AWS. The company has a management application to monitor the state of its current IT infrastructure and automate responses to issues. The company wants to incorporate the status of its consumed AWS services into the application. The application uses an HTTPS endpoint to receive updates.

Which approach meets these requirements with the LEAST amount of operational overhead?

A. Configure AWS Systems Manager OpsCenter to ingest operational events from the on-premises systems Retire the on-premises management application and adopt OpsCenter as the hub

B. Configure Amazon EventBridge (Amazon CloudWatch Events) to detect and react to changes for AWS Health events from the AWS Personal Health Dashboard Configure the EventBridge (CloudWatch Events) event to publish a message to an Amazon Simple Notification Service (Amazon SNS) topic and subscribe the topic to the HTTPS endpoint of the management application

C. Modify the on-premises management application to call the AWS Health API to poll for status events of AWS services.

D. Configure Amazon EventBridge (Amazon CloudWatch Events) to detect and react to changes for

AWS Health events from the AWS Service Health Dashboard Configure the EventBridge (CloudWatch Events) event to publish a message to an Amazon Simple

Notification Service (Amazon SNS) topic and subscribe the topic to an HTTPS endpoint for the management application with a topic filter corresponding to the services being used

Answer: B

Explanation:

This approach satisfies the requirements with minimal operational overhead, as it directly leverages AWS's services to monitor the status of AWS resources and push updates to existing HTTPS endpoints via SNS topics. This allows companies to seamlessly integrate their AWS service status into existing management applications without the need to make large-scale changes to existing infrastructure or adopt new management tools such as OpsCenter, which can introduce more learning curves and operational burdens.

Option A requires retiring existing management applications and adopting OpsCenter, which increases operational overhead and detriments the continuity of existing monitoring processes. Option C requires modifying the existing management application to poll the AWS Health API, which increases development effort and possible latency. Option D is similar to B, but mentions the AWS Service Health Panel more specifically, while in reality, the Personal Health Panel provides more customized health event information that is better suited for this use case.

5.A company is deploying a new cluster for big data analytics on AWS. The cluster will run across many Linux Amazon EC2 instances that are spread across multiple Availability Zones.

All of the nodes in the cluster must have read and write access to common underlying file storage. The file storage must be highly available, must be resilient, must be compatible with the Portable Operating System Interface (POSIX), and must accommodate high levels of throughput.

Which storage solution will meet these requirements?

A. Provision an AWS Storage Gateway file gateway NFS file share that is attached to an Amazon S3 bucket. Mount the NFS file share on each EC2 instance In the cluster.

B. Provision a new Amazon Elastic File System (Amazon EFS) file system that uses General Purpose performance mode. Mount the EFS file system on each EC2 instance in the cluster.

C. Provision a new Amazon Elastic Block Store (Amazon EBS) volume that uses the lo2 volume type. Attach the EBS volume to all of the EC2 instances in the cluster.

D. Provision a new Amazon Elastic File System (Amazon EFS) file system that uses Max I/O performance mode. Mount the EFS file system on each EC2 instance in the cluster.

Answer: D