

AWS SAA

Exam Prep

WEEK 17

Quick Facts

Category	Associate
Exam duration	90 minutes
Exam format	65 questions; either multiple choice or multiple response
Delivery Method	In person at a Pearson VUE testing center or online proctored exam.
Languages offered	English, Japanese, Korean, Simplified Chinese, Traditional Chinese, Bahasa (Indonesian), Spanish (Spain), Spanish (Latin America), French (France), German, Italian, and Portuguese (Brazil)

Content / Domain	% of Exam
Design Secure Architectures	30%
Design Resilient Architectures	26%
Design High-Performing Architectures	24%
Design Cost-Optimized Architectures	20%
TOTAL	100%

The 6 Pillars Of AWS Well Architected Framework

1. Operational Excellence:
2. Cost Optimization
3. Reliability
4. Performance Efficiency
5. Security
6. Sustainability

The 6 Pillars Of AWS Well Architected Framework

1. Operational Excellence

- Perform operations as code
- Make frequent, small, reversible changes
- Refine operations procedures frequently
- Anticipate failure
- Learn from all operational failures

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2. Cost Optimization

- Implement cloud financial management
- Adopt a consumption model
- Measure overall efficiency
- Stop spending money on undifferentiated heavy lifting
- Analyze and attribute expenditure

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3. Reliability

- Automatically recover from failure
- Test recovery procedures
- Scale horizontally to increase aggregate workload availability
- Stop guessing capacity
- Manage change in automation

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4. Performance Efficiency

- Democratize advanced technologies
- Go global in minutes
- Use serverless architectures
- Experiment more often
- Consider mechanical sympathy

The 6 Pillars Of AWS Well Architected Framework

5. Security

- Implement a strong identity foundation
- Enable traceability
- Apply security at all layers
- Automate security best practices
- Protect data in transit and at rest
- Keep people away from data
- Prepare for security events

The 6 Pillars Of AWS Well Architected Framework

6. Sustainability

- Understand your impact
- Establish sustainability goals
- Maximize utilization
- Anticipate and adopt new, more efficient hardware and software offerings
- Use managed services
- Reduce the downstream impact of your cloud workloads

Practice Questions

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Category: CSAA – Design Secure Architectures

A startup has multiple AWS accounts that are assigned to its development teams. Since the company is projected to grow rapidly, the management wants to consolidate all of its AWS accounts into a multi-account setup. To simplify the login process on the AWS accounts, the management wants to utilize its existing directory service for user authentication.

Which combination of actions should a solutions architect recommend to meet these requirements? (Select TWO.)

- A. Configure AWS IAM Identity Center (AWS Single Sign-On) for the organization and integrate it with the company's directory service using the Active Directory Connector
- B. On the master account, use AWS Organizations to create a new organization with all features turned on. Enable the organization's external authentication and point it to use the company's directory service.
- C. Create Service Control Policies (SCP) in the organization to manage the child accounts. Configure AWS IAM Identity Center (AWS Single Sign-On) to use AWS Directory Service.
- D. Create an identity pool on Amazon Cognito and configure it to use the company's directory service. Configure AWS IAM Identity Center (AWS Single Sign-On) to accept Cognito authentication.
- E. On the master account, use AWS Organizations to create a new organization with all features turned on. Invite the child accounts to this new organization.

Category: CSAA – Design Secure Architectures

An online events registration system is hosted in AWS and uses ECS to host its front-end tier and an RDS configured with Multi-AZ for its database tier. What are the events that will make Amazon RDS automatically perform a failover to the standby replica? (Select TWO.)

- A. Compute unit failure on secondary DB instance
- B. In the event of Read Replica failure
- C. Storage failure on secondary DB instance
- D. Storage failure on primary
- E. Loss of availability in primary Availability Zone

Category: CSAA – Design Cost-Optimized Architectures

A solutions architect is designing a cost-efficient, highly available storage solution for company data. One of the requirements is to ensure that the previous state of a file is preserved and retrievable if a modified version of it is uploaded. Also, to meet regulatory compliance, data over 3 years must be retained in an archive and will only be accessible once a year.

How should the solutions architect build the solution?

- A. Create an S3 Standard bucket with object-level versioning enabled and configure a lifecycle rule that transfers files to Amazon S3 Glacier Deep Archive after 3 years.
- B. Create an S3 Standard bucket and enable S3 Object Lock in governance mode.
- C. Create an S3 Standard bucket with S3 Object Lock in compliance mode enabled then configure a lifecycle rule that transfers files to Amazon S3 Glacier Deep Archive after 3 years.
- D. Create a One-Zone-IA bucket with object-level versioning enabled and configure a lifecycle rule that transfers files to Amazon S3 Glacier Deep Archive after 3 years.

Category: CSAA – Design Resilient Architectures

A start-up company has an EC2 instance that is hosting a web application. The volume of users is expected to grow in the coming months and hence, you need to add more elasticity and scalability in your AWS architecture to cope with the demand.

Which of the following options can satisfy the above requirement for the given scenario? (Select TWO.)

- A. Set up an S3 Cache in front of the EC2 instance.
- B. Set up two EC2 instances and use Route 53 to route traffic based on a Weighted Routing Policy.
- C. Set up two EC2 instances and then put them behind an Elastic Load balancer (ELB).
- D. Set up an AWS WAF behind your EC2 Instance.
- E. Set up two EC2 instances deployed using Launch Templates and integrated with AWS Glue.

ANSWER: B, C

Category: CSAA – Design Resilient Architectures

A company has an enterprise web application hosted on Amazon ECS Docker containers that use an Amazon FSx for Lustre filesystem for its high-performance computing workloads. A warm standby environment is running in another AWS region for disaster recovery. A Solutions Architect was assigned to design a system that will automatically route the live traffic to the disaster recovery (DR) environment only in the event that the primary application stack experiences an outage. What should the Architect do to satisfy this requirement?

- A. Set up a failover routing policy configuration in Route 53 by adding a health check on the primary service endpoint. Configure Route 53 to direct the DNS queries to the secondary record when the primary resource is unhealthy. Configure the network access control list and the route table to allow Route 53 to send requests to the endpoints specified in the health checks. Enable the Evaluate Target Health option by setting it to Yes. (Correct)
- B. Set up a CloudWatch Events rule to monitor the primary Route 53 DNS endpoint and create a custom Lambda function. Execute the ChangeResourceRecordSets API call using the function to initiate the failover to the secondary DNS record.
- C. Set up a Weighted routing policy configuration in Route 53 by adding health checks on both the primary stack and the DR environment. Configure the network access control list and the route table to allow Route 53 to send requests to the endpoints specified in the health checks. Enable the Evaluate Target Health option by setting it to Yes.
- D. Set up a CloudWatch Alarm to monitor the primary Route 53 DNS endpoint and create a custom Lambda function. Execute the ChangeResourceRecordSets API call using the function to initiate the failover to the secondary DNS record.

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You are looking at ways to improve some existing infrastructure as it seems a lot of engineering resources are being taken up with basic management and monitoring tasks and the costs seem to be excessive.

You are thinking of deploying Amazon ElastiCache to help. Which of the following statements is true in regards to ElastiCache?

A. You can improve load and response times to user actions and queries however the cost associated with scaling web applications will be more.

B. You can't improve load and response times to user actions and queries but you can reduce the cost associated with scaling web applications.

C. You can improve load and response times to user actions and queries however the cost associated with scaling web applications will remain the same.

D. You can improve load and response times to user actions and queries and also reduce the cost associated with scaling web applications.

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In an experiment, if the minimum size for an Auto Scaling group is 1 instance, which of the following statements holds true when you terminate the running

instance?

- A. Auto Scaling must launch a new instance to replace it.
- B. Auto Scaling will raise an alarm and send a notification to the user for action.
- C. Auto Scaling must configure the schedule activity that terminates the instance after 5 days.
- D. Auto Scaling will terminate the experiment

Category: CSAA – Design Resilient Architectures

A company has a static corporate website hosted in a standard S3 bucket and a new web domain name that was registered using Route 53. You are instructed by your manager to integrate these two services in order to successfully launch their corporate website.

What are the prerequisites when routing traffic using Amazon Route 53 to a website that is hosted in an Amazon S3 Bucket? (Select TWO.)

- A. The Cross-Origin Resource Sharing (CORS) option should be enabled in the S3 bucket
- B. The S3 bucket name must be the same as the domain name
- C. The S3 bucket must be in the same region as the hosted zone
- D. A registered domain name
- E. The record set must be of type "MX"



DON'T FORGET TO
DO HARD THINGS