

[Home](https://www.whizlabs.com/learn) (<https://www.whizlabs.com/learn>) > [My Courses](https://www.whizlabs.com/learn/my-courses) (<https://www.whizlabs.com/learn/my-courses>)> [AWS Certified Solutions Architect Associate](https://www.whizlabs.com/learn/course/aws-csaa-practice-tests#section-1) (<https://www.whizlabs.com/learn/course/aws-csaa-practice-tests#section-1>)> Objective : Autoscaling (<https://www.whizlabs.com/learn/course/aws-csaa-practice-tests/quiz/14569>)

> Report

OBJECTIVE : AUTOSCALING

Attempt 1

Marks Obtained 0 / 10

Your score is 0.0%

Completed on Monday , 28 January 2019 , 07:05 PM

Time Taken 00 H 01 M 22 S

Result Fail

Domains / Topics wise Quiz Performance Report

S.No.	Topic	Total Questions	Correct	Incorrect	Unattempted
1	Other	10	0	2	8

10 Questions	0 Correct	2 Incorrect	8 Unattempted
------------------------	---------------------	-----------------------	-------------------------

Show Answers

All	▼
-----	---

QUESTION 1 INCORRECT

Topic - Designing highly available, cost-efficient, fault-tolerant, scalable

systems

Your company has a set of EC2 instances in the AWS VPC. These instances are launched via Autoscaling and put behind an ELB. As an architect, you have been requested to provide advice on how the Auto Scaling process can be designed to enable new instances to be tested before any traffic is sent to them, while still keeping them within the Auto Scaling group?

- ☒ A. You would advise to use the “Suspend the process AZRebalance” trigger in Autoscaling ✕
- ☐ B. You would advise to use the “Suspend the process HealthCheck” trigger in Autoscaling
- ☐ C. You would advise to use the “Suspend the process ReplaceUnhealthy” trigger in Autoscaling
- ☐ D. You would advise to use the “Suspend the process AddToLoadBalancer” trigger in Autoscaling ✓

Explanation :

Answer – D

If you suspend AddToLoadBalancer, Auto Scaling launches the instances but does not add them to the load balancer or target group. If you resume the AddToLoadBalancer process, Auto Scaling resumes adding instances to the load balancer or target group when they are launched. However, Auto Scaling does not add the instances that were launched while this process was suspended. You must register those instances manually.

Option A is invalid because this just balances the number of EC2 instances in the group across the Availability Zones in the region

Option B is invalid because this just checks the health of the instances. Auto Scaling marks an instance as unhealthy if Amazon EC2 or Elastic Load Balancing tells Auto Scaling that the instance is unhealthy.

Option C is invalid because this process just terminates instances that are marked as unhealthy and later creates new instances to replace them.

For more information on process suspension , please refer to the below document link from AWS



- <http://docs.aws.amazon.com/autoscaling/latest/userguide/as-suspend-resume-processes.html> (<http://docs.aws.amazon.com/autoscaling/latest/userguide/as-suspend-resume-processes.html>)

Ask our Experts



QUESTION 2 INCORRECT

Topic – Deployment and Implementation

You have an Auto Scaling group with 2 AZs. One AZ has 4 EC2 instances and the other has 3 EC2 instances. None of the instances are protected from scale in. Based on the default Auto Scaling termination policy what will happen?

- ☒ A. Auto Scaling selects an instance to terminate randomly ✕
- ☐ B. Auto Scaling will terminate unprotected instances in the Availability Zone with the oldest launch configuration.
- ☐ C. Auto Scaling terminates which unprotected instances are closest to the next billing hour.
- ☐ D. Auto Scaling will select the AZ with 4 EC2 instances and terminate an instance. ✓

Explanation :

Answer - D

The default termination policy is designed to help ensure that your network architecture spans Availability Zones evenly. When using the default termination policy, Auto Scaling selects an instance to terminate as follows:



Auto Scaling determines whether there are instances in multiple Availability Zones. If so, it selects the Availability Zone with the most instances and at least one instance that is not protected from scale in. If there is more than one Availability Zone with this number of instances, Auto Scaling selects the Availability Zone with the instances that use the oldest launch configuration.

For more information on Autoscaling instance termination please refer to the below link:

- <http://docs.aws.amazon.com/autoscaling/latest/userguide/as-instance-termination.html> (<http://docs.aws.amazon.com/autoscaling/latest/userguide/as-instance-termination.html>)

Ask our Experts



QUESTION 3 UNATTEMPTED

Topic – Deployment and Implementation

Your company has a set of EC2 Instances launched via Autoscaling. The instances are placed behind the ELB. Your IT admin team decide to suspend the Auto Scaling AddToLoadBalancer for a short period of time. As an architect what do you will happen to the instances launched during the suspension period?

- ☐ A. The instances will be registered with ELB once the process has resumed
- ☐ B. Auto Scaling will not launch the instances during this period because of the suspension
- ☐ C. The instances will not be registered with ELB. You must manually register when the process is resumed ✓
- ☐ D. It is not possible to suspend the AddToLoadBalancer process

Explanation :

Answer - C



If you suspend AddToLoadBalancer, Auto Scaling launches the instances but does not add them to the load balancer or target group. If you resume the AddToLoadBalancer process, Auto Scaling resumes adding instances to the load balancer or target group when they are launched. However, Auto Scaling does not add the instances that were launched while this process was suspended. You must register those instances manually.

For more information on the Suspension and Resumption process, please visit the below URL:

- <http://docs.aws.amazon.com/autoscaling/latest/userguide/as-suspend-resume-processes.html> (<http://docs.aws.amazon.com/autoscaling/latest/userguide/as-suspend-resume-processes.html>)

Ask our Experts



QUESTION 4 UNATTEMPTED

Topic – Deployment and Implementation

One of the instances in an Auto Scaling group health check returns the status of Impaired to Auto Scaling. The IT admin has asked you as the architect, what will happen in this case. What will Auto Scaling do in this case.

- ☒ A. Terminate the instance and launch a new instance ✓
- ☐ B. Send an SNS notification
- ☐ C. Perform a health check until cool down before declaring that the instance has failed
- ☐ D. Wait for the instance to become healthy before sending traffic

Explanation :

Answer – A



Auto Scaling periodically performs health checks on the instances in your Auto Scaling group and identifies any instances that are unhealthy. You can configure Auto Scaling to determine the health status of an instance using Amazon EC2 status checks, Elastic Load Balancing health checks, or custom health checks

By default, Auto Scaling health checks use the results of the EC2 status checks to determine the health status of an instance. Auto Scaling marks an instance as unhealthy if its instance fails one or more of the status checks.

For more information monitoring in Autoscaling , please visit the below URL:

- <http://docs.aws.amazon.com/autoscaling/latest/userguide/as-monitoring-features.html> (<http://docs.aws.amazon.com/autoscaling/latest/userguide/as-monitoring-features.html>)

Ask our Experts



QUESTION 5 UNATTEMPTED


Topic – Deployment and Implementation

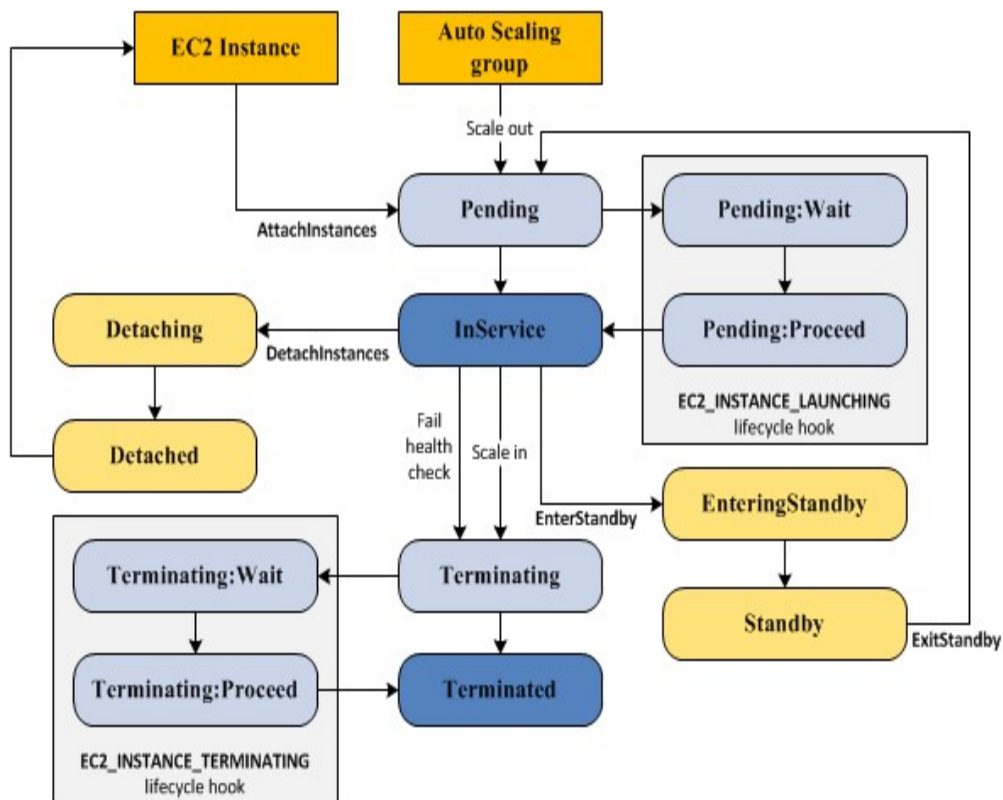
For AWS Auto Scaling, what is the first transition state an instance enters after leaving InService state when scaling in due to health check failure or decreased load?

- ☒ A. Terminating ✓
- ☐ B. Detaching
- ☐ C. Terminating:Wait
- ☐ D. EnteringStandby

Explanation :

Answer – A

The below diagram shows the Lifecycle policy. When the scale-in happens, the first action is the Terminating action. 



For more information on Autoscaling Lifecycle , please refer to the below link:

- <http://docs.aws.amazon.com/autoscaling/latest/userguide/AutoScalingGroupLifecycle.html>
(<http://docs.aws.amazon.com/autoscaling/latest/userguide/AutoScalingGroupLifecycle.html>)

Ask our Experts



QUESTION 6 UNATTEMPTED

Topic – Deployment and Implementation

As an AWS Solution Architect , what is the first step in the default termination policy used when Autoscaling of EC2 Instances occurs

- ☐ A. It deletes the ones which have the oldest configuration first
- ☒ B. It checks to see which AZ has the greater number of instances ✓



- ☐ C. It checks which Instances have the oldest AMI attached to them
- ☐ D. It checks which Instances have the newest AMI attached to them

Explanation :

Answer – B

The default termination policy is designed to help ensure that your network architecture spans Availability Zones evenly. When using the default termination policy, Auto Scaling selects an instance to terminate as follows:

1. Auto Scaling determines whether there are instances in multiple Availability Zones. If so, it selects the Availability Zone with the most instances and at least one instance that is not protected from scale in. If there is more than one Availability Zone with this number of instances, Auto Scaling selects the Availability Zone with the instances that use the oldest launch configuration.

For more information on instance termination , please refer to the below URL:

- <http://docs.aws.amazon.com/autoscaling/latest/userguide/as-instance-termination.html> (<http://docs.aws.amazon.com/autoscaling/latest/userguide/as-instance-termination.html>)

Ask our Experts



QUESTION 7 UNATTEMPTED

Topic – Deployment and Implementation

Which of the following is incorrect for an Autoscaling Group which has a lifecycle hook attached which triggers when launching new instances?

- ☐ A. The instance is put into Pending:Wait state
- ☐ B. In the Pending:Wait state , no scaling policies take effect
- ☐ C. During the Pending:Wait state, the cooldown period starts ✓



- ☐ **D. When the cooldown period is completed , any suspended scaling actions resume**

Explanation :

Answer - C

Consider an Auto Scaling group with a lifecycle hook that supports a custom action at instance launch. When the application experiences an increase in demand, Auto Scaling launches instances to add capacity. Because there is a lifecycle hook, the instance is put into the Pending:Wait state, which means that it is not available to handle traffic yet. When the instance enters the wait state, scaling actions due to simple scaling policies are suspended. When the instance enter the InService state, the cooldown period starts. When the cooldown period expires, any suspended scaling actions resume. For more information on instance termination , please refer to the below URL:

- <http://docs.aws.amazon.com/autoscaling/latest/userguide/lifecycle-hooks.html>
(<http://docs.aws.amazon.com/autoscaling/latest/userguide/lifecycle-hooks.html>)


Ask our Experts



QUESTION 8 UNATTEMPTED

Topic - Designing highly available, cost-efficient, fault-tolerant, scalable systems

Your IT admin has created an Autoscaling Group which launches instances which will be placed behind an ELB. The Autoscaling Group currently has one subnet as part of its configuration. As a solution architect , what recommendation would you give to the IT administrator

- ☐ **A. Use a launch configuration which uses Linux AMI's as this can save on cost**
- ☐ **B. Use the classic load balancer instead of the Application Load balancer** 

- ☐ C. Attach more AZ's to the Autoscaling Group ✓
- ☐ D. Attach more regions to the Autoscaling Group

Explanation :

Answer – C

You can take advantage of the safety and reliability of geographic redundancy by spanning your Auto Scaling group across multiple Availability Zones within a region and then attaching a load balancer to distribute incoming traffic across those Availability Zones. Incoming traffic is distributed equally across all Availability Zones enabled for your load balancer.

When one Availability Zone becomes unhealthy or unavailable, Auto Scaling launches new instances in an unaffected Availability Zone. When the unhealthy Availability Zone returns to a healthy state, Auto Scaling automatically redistributes the application instances evenly across all of the Availability Zones for your Auto Scaling group

Option A is incorrect because the choice of the AMI to be used in the launch configuration depends on the specific requirement of the application

Option B is incorrect because there is requirement which specifies which ELB will be better in this case

Option D is invalid because you can add AZ' and not Regions

For more information on using Autoscaling with Multi-AZ's , please refer to the below URL:

- <http://docs.aws.amazon.com/autoscaling/latest/userguide/as-add-availability-zone.html> (<http://docs.aws.amazon.com/autoscaling/latest/userguide/as-add-availability-zone.html>)

Ask our Experts



QUESTION 9 UNATTEMPTED

Topic – Deployment and Implementation

You have been given a requirement to ensure that a custom launch script runs whenever an instance is spun up in an Autoscaling group. Which of the following actions would help in this regards

- ☐ A. Create an EBS Volumes , store the script , and add another script to run this script on the EBS Volumes
- ☐ B. Use Cloudwatch Events to launch the custom scripts
- ☐ C. Use Lifecycle hooks to launch the custom scripts ✓
- ☐ D. Use Scheduled scaling to schedule the script before scheduling the scaling process

Explanation :

Answer – C

Auto Scaling *lifecycle hooks* enable you to perform custom actions as Auto Scaling launches or terminates instances. For example, you could install or configure software on newly launched instances, or download log files from an instance before it terminates. For more information on lifecycle hooks , please refer to the below link:

- <http://docs.aws.amazon.com/autoscaling/latest/userguide/lifecycle-hooks.html>
(<http://docs.aws.amazon.com/autoscaling/latest/userguide/lifecycle-hooks.html>)

Ask our Experts



QUESTION 10

UNATTEMPTED

Topic – Deployment and Implementation

You have an Autoscaling group that attaches instances to multiple ELB's. The Autoscaling Group is using both EC2 and ELB health checks. One of the ELB's has reported an instance as unhealthy. The other ELB's though have reported the instance as healthy. What will Autoscaling do in this case

- ☐ A. Autoscaling will keep the instance
- ☐ B. Autoscaling will replace the instance ✓



- ☐ C. Autoscaling will detach the instance from the ELB that marked it as unhealthy
- ☐ D. Autoscaling will alert the ELB to mark the instance as healthy , since other ELB's are reporting it as a healthy instance

Explanation :

Answer - B

The AWS documentation clearly states an autoscaling group replaces an instance when that auto scaling group uses BOTH ec2 and elb health checks and when ONE of the elbs reports an instance as unhealthy.

The thumb rule is, if any instance reported unhealthy either by Auto scaling health check or any ELB instance check (In case of multiple ELB), Auto scaling will consider worst case scenario and always mark instance unhealthy and remove it.

If you configure your Auto Scaling group to determine health status using both EC2 status checks and Elastic Load Balancing health checks, Auto Scaling considers the instance unhealthy if it fails either the status checks or the health check. Note that if you attach multiple load balancers to an Auto Scaling group, all of them must report that the instance is healthy in order for Auto Scaling to consider the instance healthy. If one load balancer reports an instance as unhealthy, Auto Scaling replaces the instance, even if other load balancers report it as healthy.

For more information on ELB and Autoscaling health checks , please refer to the below link:

- <http://docs.aws.amazon.com/autoscaling/latest/userguide/as-add-elb-healthcheck.html> (<http://docs.aws.amazon.com/autoscaling/latest/userguide/as-add-elb-healthcheck.html>)
- <http://docs.aws.amazon.com/autoscaling/latest/userguide/as-add-elb-healthcheck.html> (<http://docs.aws.amazon.com/autoscaling/latest/userguide/as-add-elb-healthcheck.html>)
- <http://docs.aws.amazon.com/autoscaling/latest/userguide/healthcheck.html> (<http://docs.aws.amazon.com/autoscaling/latest/userguide/healthcheck.html>)

Ask our Experts



Finish Review (<https://www.whizlabs.com/learn/course/aws-csaa-practice-tests/quiz/14569>)

Certification

- ➔ Cloud Certification
(<https://www.whizlabs.com/cloud-certification-training-courses/>)
- ➔ Java Certification
(<https://www.whizlabs.com/oracle-java-certifications/>)
- ➔ PM Certification
(<https://www.whizlabs.com/project-management-certifications/>)
- ➔ Big Data Certification
(<https://www.whizlabs.com/big-data-certifications/>)

Mobile App

 Android Coming Soon

 iOS Coming Soon

Company

- ➔ Support
(<https://help.whizlabs.com/hc/en-us>)
- ➔ Discussions (<http://ask.whizlabs.com/>)
- ➔ Blog (<https://www.whizlabs.com/blog/>)

Follow us



(<https://www.facebook.com/whizlabs.software/>)



(<https://in.linkedin.com/company/whizlabs-software>)



(<https://twitter.com/whizlabs?lang=en>)



(<https://plus.google.com/+WhizlabsSoftware>)



