

# AWS EMEA Solutions Architect Hiring Assignment

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## Introduction

Thank you for applying for a Solutions Architect role at AWS! As part of the process, we ask that you complete the assignment described below. This exercise is designed to assess your architecting, technical and business writing skills. It is a representation of just a part of what AWS solutions architects do on a daily basis.

We will evaluate the document that you send us against [Cloud Architecture best practices](#) and the [Amazon Leadership Principles](#). We estimate that this assignment should not take more than 5 hours of your time, but this can vary depending on your current level of AWS knowledge. Good luck!

## Context

In the exercise scenario, you play the role of a freelancer. Your (imagined) customer has not used AWS before, and is encountering issues when trying to launch a web application as a proof of concept.

So far your customer has launched an AWS Elastic Load Balancer (ELB) and an Amazon Elastic Compute Cloud (EC2) instance acting as the web server. Both are deployed in a Virtual Private Cloud (VPC) on AWS. While your customer's initial deployment aims to present a static web page to its users (**demo.html** located in the document root of the web server), the end solution should continue to be suitable for generating dynamic responses (your customer is currently developing the application). The customer is not sure about their future direction or requirements and are looking to you to provide expert guidance despite the ambiguity.

You are contacted and asked to:

- a) Troubleshoot the implementation by doing the minimum amount of work required to make the web site operational. Your customer expects detailed written troubleshooting instructions or scripts for the in-house team.
- b) Propose short term changes you could help them implement to improve the availability, security, reliability, cost and performance before the project goes into production. Your customer expects you to explain the business and technical benefits of your proposals, with artifacts such as a design or architecture document and diagrams.
- c) Optionally, propose high level alternative solution(s) for the longer term as their web application becomes more successful.

You have been provided with an [AWS CloudFormation](#) template so that you can recreate the customer's current implementation. If you are new to AWS CloudFormation there is no need for you to learn its syntax, you simply need to [create a stack](#) by [uploading the provided template via the AWS console](#).



## Instructions

1) Redeem your AWS promotional credit via the following URL: <https://aws.amazon.com/awscredits/>

Please note that if you don't have a personal AWS account you will be required to sign up. We recommend you set up a [billing alarm](#) to alert you when you have consumed all your credits.

2) Launch the provided CloudFormation template in the **eu-west-1 (Ireland)** region. Once the environment is launched, identify why the content of the web site is not being displayed through the load balancer's hostname. The DNS name of the Elastic Load Balancer will appear in the [CloudFormation Outputs tab](#). Please note that you will **not** be required to log on to the web server to resolve the issues.

3) Prepare a short and concise document (not presentation slides) describing your solutions to problems a), b) and c). Feel free to add architecture diagrams, screenshots or other artifacts in addition to your document. Please describe your solution(s) and respective deployment steps as you would to a real customer.

4) Email your document back to the Recruitment Coordinator you received it from, with your Recruiter in CC. Please **do not** share any credentials of your own AWS account with us.

5) Your assignment is complete. We will review your document prior to the interview.

6) Important: in order to avoid incurring unnecessary charges to your AWS account you should [delete the CloudFormation stack](#) and terminate any other resources launched in relation to this exercise. Feel free to do that as soon as you have submitted your document and before your interview.

## Next steps

During the process, please be prepared to discuss your experience and answer questions regarding the provided document and your approach to complete this project. We look forward to discussing this in more detail with you!

