



AWS Fundamentals – Assignment #1

OBJECTIVE

At the end of this assignment you will have created a web site using the following Amazon Web Services: EC2, EBS, ELB and S3.

Stage 1: Building the EC2 web server and Elastic Load Balancer.

Launch an EC2 instance, based on Linux or Windows, to meet the following objectives:

- 📦 the instance should be of type t1.micro.
- 📦 the instance should reside within region ap-southeast-1 within availability zone ap-southeast-1a.
- 📦 the instance should use a 1 GiB attached EBS volume and contain a valid partition table with one partition. The partition should contain a valid file system.
- 📦 the file system residing on the EBS volume should be mounted automatically upon reboot of the EC2 instance.
- 📦 the instance should serve web pages via an appropriate service such as Apache or IIS. This service should start automatically upon boot.
- 📦 the instance should serve a web page "index.html" containing well-formed HTML displaying the text "Hello AWS World" and display the screen shots created below in Stage 3 (they will be hosted separately). The HTML file should reside on the file system within the previously created EBS volume and be served as the default document from the web server root.
- 📦 the instance should use Security Groups effectively to allow administration and serve HTTP.

Stage 2: Configuring the Elastic Load Balancer:



Create an Elastic Load Balancer (ELB) with the following specification:

- 📦 the ELB should be created in the Singapore region.
 - 📦 the ELB should accept HTTP on port 80.
 - 📦 the Healthy Threshold for the ELB to be set to 2
 - 📦 deliver traffic to the EC2 instance created in Stage 1.
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Stage 3: Configuring S3

Create a Simple Storage Service (S3) bucket with the following specification:

-  the bucket should be created in the Singapore region.
-  the bucket should be publicly readable.



Place in the S3 bucket screen shots, in png format, clearly showing the following:

1. The mounted EBS volume e.g. using Windows Explorer or run "df" from the console on a Linux host. This screen shot should be named as screen-shot1.
2. The index.html file resides within EBS e.g. using windows explorer or run "pwd; ls -l" from the terminal on a Linux host. This screen shot should be named as screen-shot2.png.
3. The web server has been configured to serve index.html from the EBS volume as the default document e.g. the relevant section of the Apache configuration file or IIS Manager. This screen shot should be named as screen-shot3.png.

Remember to use the S3 URLs in the index.html file hosted on EC2 (see Stage 1). **Optional:** if you choose to extend the solution with CloudFront then use CloudFront URLs.

DELIVERABLES

Please provide to aws-apac-sa-candidate@amazon.com the following information :

-  the public DNS entry for the EC2 instance
-  the public URL to the web page via the ELB

Please Note: Ensure that you leave your solution up and running and available in order for it to be evaluated. This should occur within two business days of submitting your assignment. Upon receiving feedback from the Recruitment Team, you should terminate and delete all resources you used for the assignment so as to avoid any unnecessary charges.
