Cloud Architect, Cloud Administrator

Compute, Administrator

This week's lab challenge from the Whizlabs Challenge League is AWS-based and is about Migration in cloud. Migration is an important part of the cloud concepts which is regularly used for many different real time scenarios. You will face a real time EC2 Migration challenge in which you have to completely migrate EC2 from one region to another region. This challenge will test your knowledge on EC2 in depth. All the best!

**####################**

**Prerequisites**

1. Good knowledge of AWS services
   * Amazon EC2
2. Laptop/Desktop
3. Internet Browser
4. Internet connection
5. Windows Users :
   * Download putty and puttygen from this link :[**Download Link**](https://www.chiark.greenend.org.uk/~sgtatham/putty/releases/0.74.html)

**Challenge Instructions**

1. **Region** : Make sure to use use **us-east-1** and **ap-south-1** region to create all the resources.
2. You will be provided with the requirements of the challenge. If you are new to AWS Cloud, we recommend you go through our hands-on Labs before taking this challenge.
3. **Challenge Duration**: **60 minutes**

**How to submit the challenge**

1. After building the infrastructure, click on**** button, to validate if you have built the required infrastructure and completed the challenge successfully.
2. Validation status
   * **Success** - You have completed the challenge successfully.
   * **Failed** - You have failed to complete the challenge.
3. Once you have successfully validated the challenge, click on  button.

**Launching Challenge Environment**

1. To launch the challenge environment, Click on the  button.
2. Please wait until the cloud environment is provisioned. It will take less than a minute to provision.
3. Once the challenge is started, you will be provided with **IAM user name**, **Password**, **Access** **Key**, and **Secret** **Access** **Key**.

**Note** : You can only start one challenge at any given time

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# Sign in to AWS Management Console

1. Click on the  button, and you will get redirected to AWS Console in a new browser tab.
2. On the AWS sign-in page,

* Leave the Account ID as default. Never edit/remove the 12 digit Account ID present in the AWS Console. otherwise, you cannot proceed with the challenge.
* Now copy your **User Name** and **Password** in the Whizlabs Console to the **IAM Username and Password** in AWS Console and click on the **Sign in** button.

1. Once Signed In to the AWS Management Console, Make the default AWS Region as **US East (N. Virginia) us-east-1.**

# Cloud Challenge Details

Your company has started using AWS for one of their clients, and the primary condition is having a copy of the complete project setup available in an emergency.  For this requirement, you create a snapshot of the primary system and copy it to another region.

In this challenge, you will use the AWS Management Console to complete the tasks that result in provisioning infrastructure to fulfill your company's requirements.

Follow the instructions given below to work on the challenge.

1. Create an Amazon EC2 Instance in **N.Virginia** region.
2. Select Amazon Linux 2 AMI and t2.micro instance type.
3. SSH into the EC2 Instance and host a HTML file named **test.html** in the EC2 root folder with exact text shown below
   * **Whizlabs Test Page**
4. To Perform SSH operation
   * Windows Users use **Putty Software**.
   * Linux/Mac Users use **Terminal**.
5. Migrate the **N.Virginia** EC2 Instance to **Mumbai** region using EC2 snapshot.
6. Launch an EC2 Instance in **Mumbai** region by creating a Custom AMI from the snapshot with default configurations.
7. Test the HTML file hosted in **Mumbai** EC2 Instance.

## **End Challenge**

1. Sign out of the AWS Account
2. You have successfully completed the challenge.
3. Click on  button from Whizlabs Challenge console and wait till the process gets completed.

#!/bin/bash

sudo su

yum update -y

yum install httpd -y

touch /var/www/html/test.html

nano /var/www/html/test.html

systemctl start httpd

systemctl enable httpd

lab validation status

status - failed

lab user info

1 - You have created 0 EC2 instance in North Virginia Region in this lab.

2 - You have created 1 snapshot in North Virginia Region in this lab.

3 - You have created 1 EC2 instance in Mumbai Region in this lab.

4 - You have created 1 snapshot in Mumbai Region in this lab.

5 - You have created 0 AMI Image in Mumbai Region in this lab.

lab task status

EC2 North Virginia

ec2

Create Amazon EC2 instance in N.Virginia status - failed

Select Amazon Linux 2 AMI status - failed

Assign public IP for EC2 instance status - failed

Enable HTTP port in security group status - failed

Enable SSH port in security group status - failed

Create keypair for EC2 status - failed

SSH status to you EC2 instance - failed

Install Apache webserver status - failed

Add HTML page in server status - failed

EBS North Virginia

EC2 Mumbai

ec2:1

Create Amazon EC2 instance in Mumbai Region status - success

Select Custom Snapshot AMI status - failed

Assign public IP for EC2 instance status - success

Enable HTTP port in security group status - failed

Access Web page in server status - failed

EBS Mumbai

snapshot:1

Copy N.Virginia Snapshot to Mumbai Region status - success

Create Image from Mumbai Snapshot status - failed

Select 64bit x86 Architecture status - failed

Select HVM as virtualization type status - failed

lab usertask complete details

EC2 North Virginia

ec2 - You have not created any EC2 instances in North Virginia Region.

EBS North Virginia

EC2 Mumbai

ec2:1

1 - You have created EC2 Instance with id i-087a25a3a5ba21700.

2 - You have selected ami-079b5e5b3971bd10d AMI Id and t2.micro architecture.

3 - Your Instance state is running.

4 - You have created a security group sg-031b00afbd2da3a7b.

5

6 - You have not enabled HTTP port for this instance.

7 - You have not created a Keypair for this EC2 instance.

8 - Your IPv4 Public IP of EC2 instance is 65.0.107.23.

9 - You have not able to access test.html Web page.

EBS Mumbai

snapshot:1

1 - You have created an EBS Snapshot in Mumbai Region with id snap-026cc9ce2add5458d.

2 - This Snapshot is a copy of another EBS Snapshot.

3

1 - No Snapshot Image found for Snapshot snap-026cc9ce2add5458d.

touch /var/www/html/test.html

echo Whizlabs Test Page > /test.html

echo <html><h1>WhizLabs Test Page</h1><html> > /var/www/html/test.html