



**AWS SYSOPS & SOLUTION ARCHITECT - ASSOCIATE  
2023**

# GREENS TECHNOLOGYS

- ❖ Greens Technologys is the name that signifies the best training institute with placement in the field of software testing and programming in the IT sector. We are recognized as the best institute for software and languages course with the most advanced and high-quality trainers. We are always being a channel for many students as well as IT professionals where we take them to the next level and as a result, they get placed in good MNC companies. Apart from the regular learning and training courses we offer language training by good experts to make you as a good masterpiece.
- ❖ Our core competency lies with the advanced and real time experience we have with the current real time experience we have with the current trends in the IT industry. We not only train, but also transform you into a perfect sculpture with our IT development courses for delivering a world class best proven technical solution for various companies.
- ❖ Greens Technologys is One – Stop – Solution for all those who are looking for training and learning programs of all types with placements.



# ABOUT THE COURSE

- ❖ Greens Technologys is offering the comprehensive AWS certification training created by industry experts. The entire AWS training course is in line with the AWS Certified Solutions Architect . You will learn various aspects of AWS like Elastic Cloud Compute, Simple Storage Service, Virtual Private Cloud, Aurora database service, Load Balancing, Auto Scaling and more by working on hands-on projects and case studies. You will implement AWS best practices in this training.



# WHY AMAZON WEB SERVICES

- ❖ AWS has over 1 million customers from 190 countries –Amazon.com
- ❖ AWS is as big as its next four competitors combined – businessinsider.com
- ❖ An AWS Certified Solutions Architect can earn \$125,000 –indeed.com
- ❖ Today, cloud computing is no longer optional but critical to the success of some of the biggest enterprises on earth. Hence, getting the AWS training and certification means that you can open the doors to virtually unlimited job opportunities that are offering highly competitive salaries. Greens Technologys AWS course is completely oriented towards the practical applications, and hence it gives you a clear advantage.



# COURSE OBJECTIVES

- ❖ To design Cloud Architecture.
- ❖ To crack AWS Certification.
- ❖ Additional Weightage to your CV.
- ❖ AWS is available in Accenture, Cognizant, Wipro, TCS, HCL, Infosys, etc...
- ❖ From Fresher's to all Experiences candidates.



# INTRODUCTION TO CLOUD COMPUTING

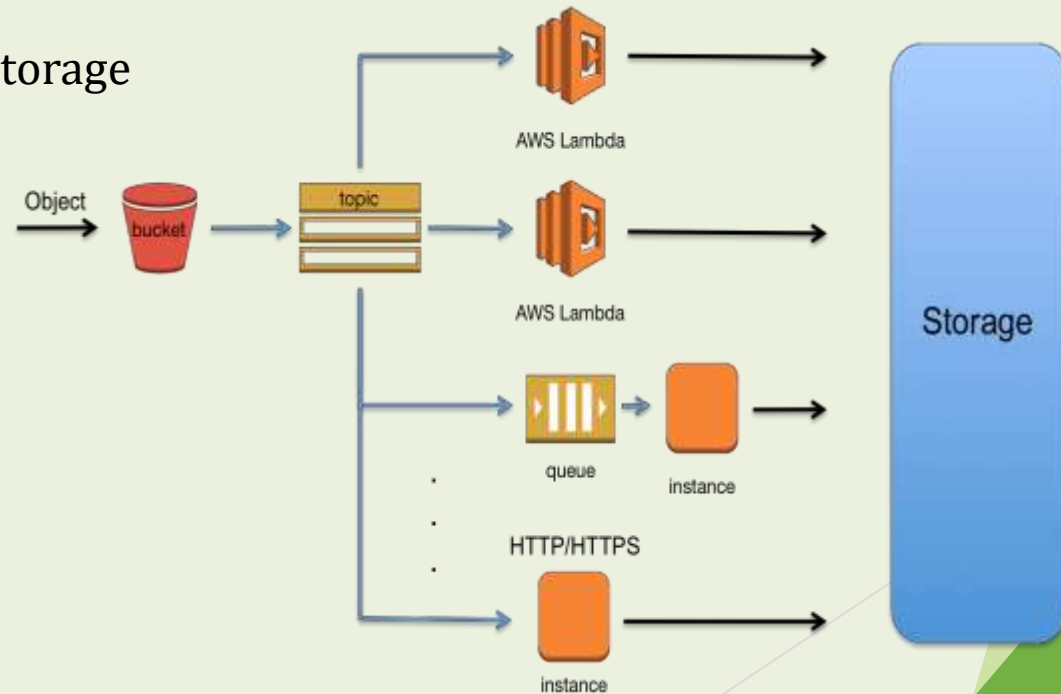
- ❖ Introduction to Cloud and AWS services
- ❖ AWS History
- ❖ Private vs Public
- ❖ IaaS vs SaaS vs PaaS
- ❖ Scope for AWS
- ❖ Features in AWS





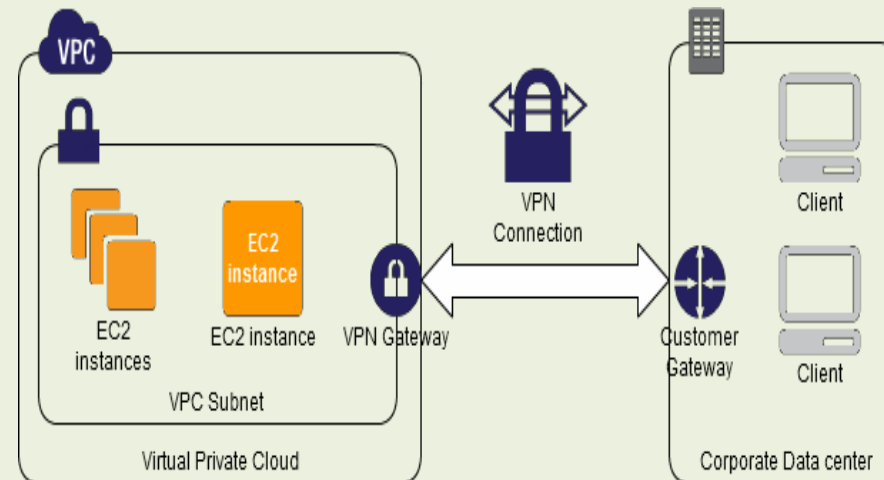
# SIMPLE STORAGE SERVICES (S3)

- ❖ Creating and deleting buckets
- ❖ Adding objects to buckets
- ❖ Getting objects
- ❖ Deleting objects
- ❖ Creation of a static website using S3 storage
- ❖ Uses of S3 storage
- ❖ Working with Permissions of S3.
- ❖ Discussing lifecycles in s3
- ❖ Accessing S3 storage via Tools
- ❖ Understanding Elastic File System



# ELASTIC COMPUTE CLOUD (EC2)

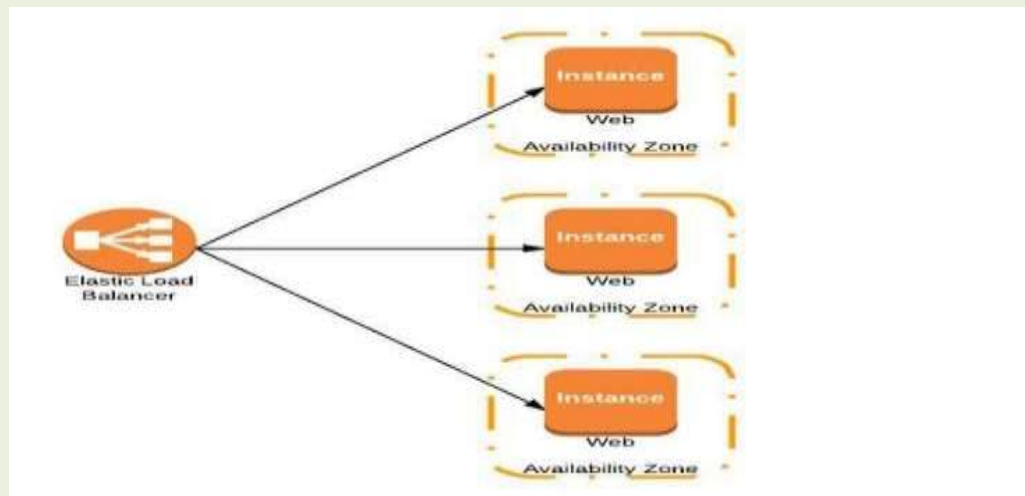
- ❖ Introduction to EC2
- ❖ Launching EC2 Server
- ❖ Hosting Web Application
- ❖ Elastic Block Store [EBS] use cases
- ❖ Elastic IP creation
- ❖ Amazon Machine Image [AMI]
- ❖ Snapshots creation from Volume





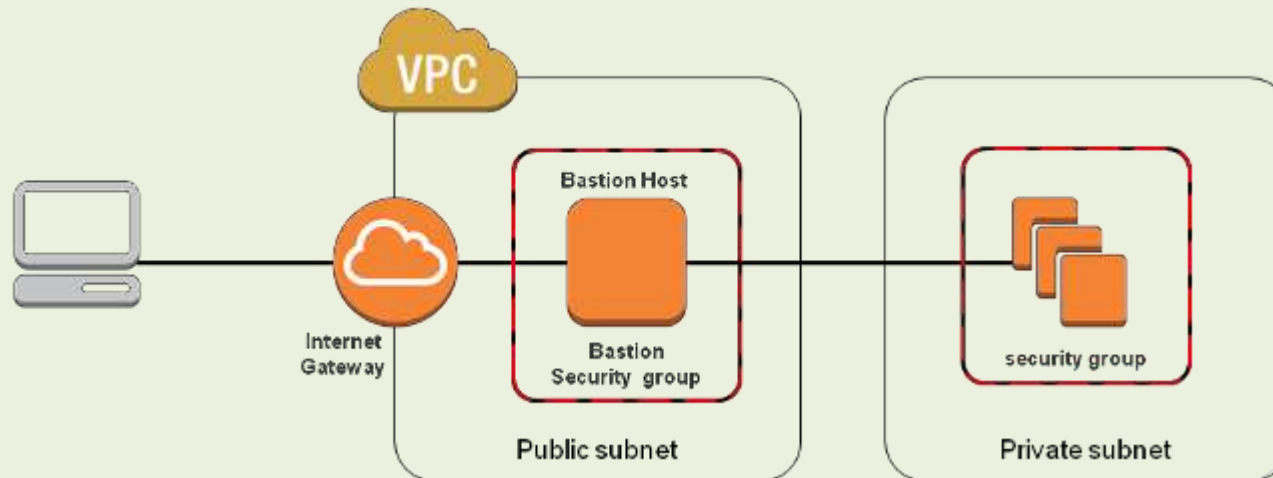
# ELB & AUTO SCALING

- ❖ What is auto scaling?
- ❖ Autoscaling components
- ❖ Benefits of Autoscaling
- ❖ Creation of launch configuration
- ❖ Configuration of Autoscaling policies based on the Load on EC2 instances.
- ❖ Advantages of using Auto scaling with Elastic Load balancer (ELB).



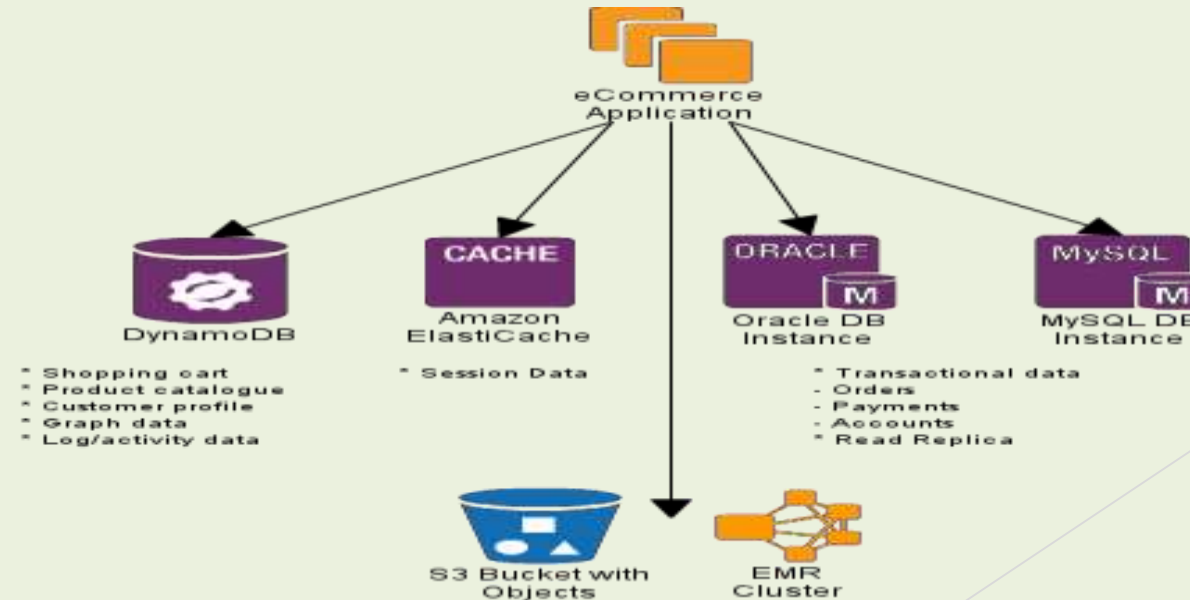
# VIRTUAL PRIVATE CLOUD (VPC)

- ❖ Different types of networks that can be setup in AWS
- ❖ Understanding Public vs Private
- ❖ Creating a new VPC
- ❖ Setting up Routing Table, & Security Groups
- ❖ Creation of Internet Gateway
- ❖ Connecting to instances in the gateway
- ❖ Usage of NAT gateway



# RELATIONAL DB SERVICE(RDS)

- ❖ Selecting the Engine
- ❖ Configuring the Database Engine
- ❖ Creating your Database
- ❖ Setting up automatic backups
- ❖ Authorizing access to the DB via DB Security Groups



# IDENTITY & ACCESS MANAGEMENT(IAM)

- ❖ Creation of user accounts in AWS
- ❖ Setting up multi factor Authentication (MFA)
- ❖ Roles in IAM
- ❖ Groups in IAM
- ❖ Delegation of permissions for users
- ❖ Creation of custom policiesfor delegation
- ❖ Account settings



# CLOUD FORMATION

- ❖ Building AWS infrastructure as a code
- ❖ Utilization of Sample templates
- ❖ Creating an environment using Cloud Formation.
- ❖ Introduction to JSON



# AWS MONITORING SERVICES

## Cloud watch

- ❖ Debugging cloud related issues
- ❖ Monitoring the AWS Service Health Dashboard
- ❖ Monitoring with Cloud watch
- ❖ Getting statistics for a specific EC2 instance
- ❖ Setting up notifications



**Amazon CloudWatch**

## Cloud Trail

- ❖ Introduction to Audit logs
- ❖ Implementing Cloud Trail in AWS with use cases

# APPLICATION INTEGRATION

## Simple Notification Services (SNS)

- ❖ Creation of a topic
- ❖ Subscribing to topic via Email
- ❖ Setting notification for EC2 instance changes

## Simple Queue Service (SQS)

- ❖ Creation of a queue
- ❖ Sending messages to the queue
- ❖ Setting SNS to SQS
- ❖ Retrieving messages from SQS





# ELASTIC BEANSTALK

- ❖ Creation of WebApp using Elastic Beanstalk
- ❖ Building a sample application using Beanstalk
- ❖ Modifying the properties of the deployment.



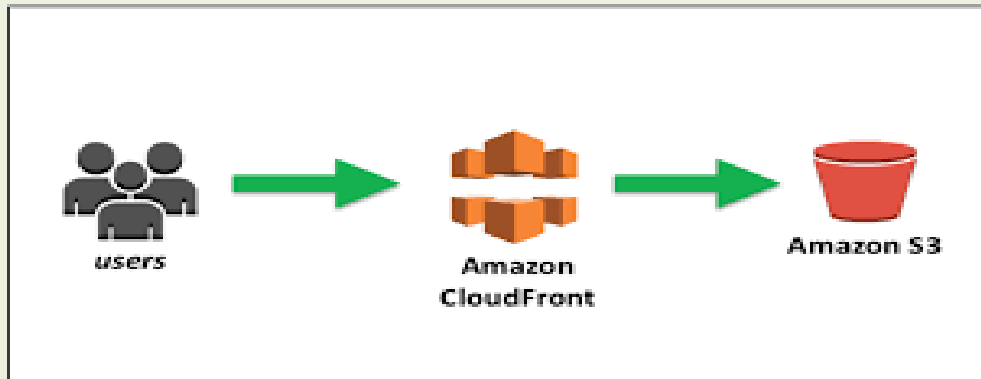
# ROUTE 53

- ❖ Describe Hosted zones and Domain Name understanding
- ❖ How to create Hosted zones
- ❖ Hosting a website with custom domain name
- ❖ Understanding routing policies



# CLOUD FRONT

- ❖ Describe Cloud Front
- ❖ Creating a cloud front distribution
- ❖ Accessing S3 from cloud front
- ❖ Implementing global restrictions



# MIGRATION

- ❖ Introduction to Cloud Migration
- ❖ Migration Strategies : 6 R's
- ❖ Migrating the virtual machine using VMIE services
- ❖ Overview of Snowball
- ❖ Introduction to cloud architecture tool & Hands-on



# DYNAMODB

- ❖ Creating a Dynamo DB
- ❖ Adding data manually
- ❖ Learn about strong and eventual consistency
- ❖ Calculating Read Write consistency
- ❖ Configuring Alarms



# RED SHIFT

- ❖ What is RedShift?
- ❖ Creation of RedShift Cluster
- ❖ Connecting RedShift cluster with SQL Workbench
- ❖ Real – time Use case for Redshift with Live Scenario



# AWS COMMAND LINE INTERFACE

- ❖ Installation of AWS CLI
- ❖ AWS CLI Configuration
- ❖ Creation of VPC Components
  - ❑ VPC
  - ❑ Subnets
  - ❑ Routing Table
  - ❑ Internet Gateway
  - ❑ NAT Gateway
- ❖ Creation of EC2
- ❖ Connecting EC2 with s3





# ECS ECR KMS

## ECS: Elastic Container Service:

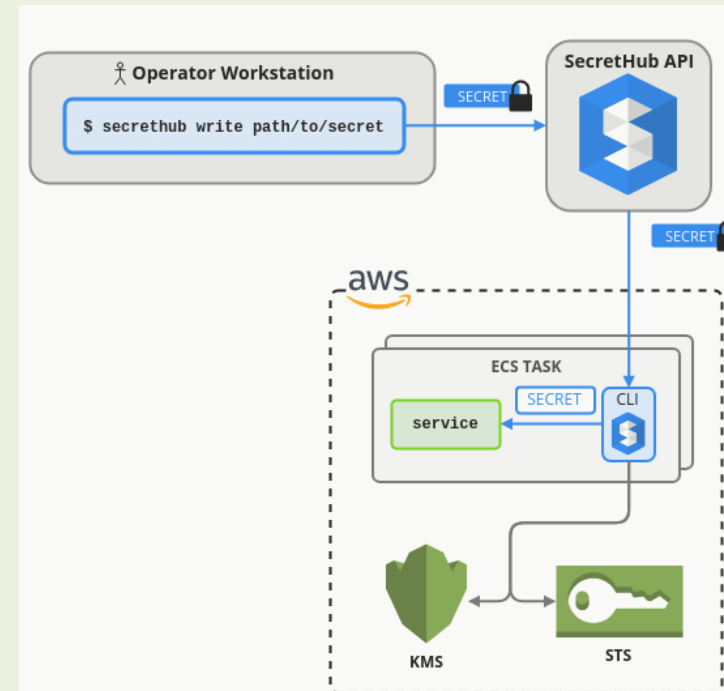
- ❖ Overview about AWS - AMAZON WEB SERVICES
- ❖ Define ECS
- ❖ Docker - Containerization
- ❖ ECS Hands-on

## ECR - Elastic Container Registry:

- ❖ Build Docker Image
- ❖ Create Registry in ECR
- ❖ Push Docker Image to ECR

## KMS : Key Management Service:

- ❖ Define: KMS
- ❖ Define: Cryptography
- ❖ Symmetric Vs Asymmetric
- ❖ KMS Hands-on



# AWS DEVOPS TOOLS

- ❖ Overview of DevOps – Lifecycle, Stages in DevOps
- ❖ Code Deploy
- ❖ Code Pipeline
- ❖ Implementation of AWS Code Deploy and Code Pipeline
- ❖ Updating the webserver
- ❖ Deploying the application via automation



# REVIEWS BY PLACED CANDIDATES

- ❖ Hi, I am Rahul where I studied AWS course at greens Technologys under the guidance of Karthik Raja and Damodaran , who helped me a lot and made me understand all the concepts and all the sessions where of practical sessions and also they offered me placement training and also attended interview and got an AWS Developer job at Amazon, and I thank Greens Technologys for providing me a good job.
- ❖ Thank you Greens Technologys, this achievement would not be achieved without you, where you people guided me with a good course with a good experienced trainer and the class where taken so well where each and every concept where explained clearly and practical sessions where awesome, and after completion of course you people provided me with good placement and finally I can tell myself as a proud DevOps Engineer.



# INTERVIEW QUESTIONS

- ❖ What is Amazon RDS ?
- ❖ What is EC2, S3, EBS ?
- ❖ What is VPC & why we require to create VPC ?
- ❖ Is possible to scale an Ec2 Instance vertically ?
- ❖ How is Amazon RDS, Redshift & DynamoDB different ?
- ❖ How is a spot Instance different from an On-demand Instance ?
- ❖ How Infrastructure As Code processed & executes in AWS ?
- ❖ If your Linux-build server getting slow down, what will you do to check ?
- ❖ Types of EBS storage ?
- ❖ How to backup a running instance ?



# INTERVIEW QUESTIONS

- ❖ How to secure s3 bucket ?
- ❖ What are the security available for users to access S3 ?
- ❖ How to create AMI ?
- ❖ What are the main components of Cloud Formation ?
- ❖ What is mapping in Cloud formation template ?
- ❖ How is YAML different from JSON ?
- ❖ Different types of ELB ?
- ❖ What is Autoscaling group ?
- ❖ Which type of ELB is good for application load ?
- ❖ What is difference between application LB & classic LB ?



# INTERVIEW QUESTIONS

- ❖ Is it possible to recover your lost private key ?
- ❖ How can you connect your EC2 Instance if you lost your key ?
- ❖ While connecting to your EC2 instances, what are the possible connection issues one might face ?
- ❖ What is Subnet & how many subnets are there in a VPC ?
- ❖ Why do we make subnets ?
- ❖ What is routing table ?
- ❖ How you can connect a private subnet with a public subnet ?
- ❖ Can VPC peering possible in two different region ?
- ❖ What is metrics in Cloud Watch ?



# AWS CERTIFICATIONS

## Associate Level Certification

- ❖ AWS Certified Solution Architect - Associate
- ❖ AWS Certified Developer - Associate
- ❖ AWS Certified SysOps Administrator – Associate

## Professional Level Certification

- ❖ AWS Certified Solutions Architect - Professional
- ❖ AWS Certified DevOps Engineer – Professional



Solutions Architect - Associate

