## AWS Engineer Roles and Responsibilities

* Architecting, Deploying, automating, maintaining and managing AWS cloud based production system, to ensure the availability, performance, scalability and security of productions systems.
* Responsible for architecting, designing, implementing and supporting of AWS cloud based infrastructure and its solutions.
* Designing and deploying dynamically scalable, available, fault-tolerant, and reliable applications on the Cloud
* Experience in designing and building web application environments on AWS, including services such as EC2, S3, ELB, RDS, Route53, Autoscaling, etc.
* Identifying and using appropriate cloud services to support applications on the cloud
* Migrating on premise applications of the organization to the cloud
* Maintaining the usage of cloud services and implementing cost-saving strategies
* Build, release and configuration management of production systems.(Devops)
* Pre-production Acceptance Testing to help assure the quality of our products / services.
* System troubleshooting and problem solving across platform and application domains.
* Suggesting architecture improvements, recommending process improvements.
* Evaluate new technology options and vendor products.
* Ensuring critical system security through the use of best in class cloud security solutions.
* Experience with Linux and Windows Server system administration.
* Experience with installing and configuring application servers such as WebLogic, JBoss and Tomcat.
* Knowledge of networking concepts (e.g., DNS, TCP/IP, and firewalls)
* Design, Deploy and maintain enterprise class security, network and systems management applications within an AWS environment
* Implementing cost-control strategies.
* Provisioning and de-provisioning AWS accounts for internal customers
* Work alongside systems and development teams to support transition and operation of client web sites / applications in and out of AWS.
* Deploying, managing, and operating AWS environments
* Identifying appropriate use of AWS operational best practices
* Estimating AWS costs and identifying operational cost control mechanisms
* Keep technical documentation up to date
* Proactively keep up to date on AWS services and developments
* Create (where appropriate) automation, in order to streamline provisioning and de-provisioning processes
* Lead certain data/service migration projects.

## Daily Activities:

# Compute:

* Create the Instances as per requirement by using Manual or Automated method
* Modify the resources of instances like CPU, RAM or Disk as per user requirement or Monthly resources Trend report.
* Installation of Software as per Teams requirements
* Assist Security Team for Antivirus software installation on all instances and in case of security incidents.
* Schedule backup of Instances or its volumes as per requirement.
* Configure the instance and other data backup as per client Backup Policy.
* Monitor the Backup and prepare the report as per organization requirement or implement the automation to get alerts.
* Monitor the instances and other resources/Services in Cloud.
* Troubleshoot the OS related issues.
* Setting and configuring applications on Elastic Beanstalks.
* Configuring Applications with Load Balancing and Autoscaling.

# Network

* Create the Subnets inside Cloud Network as per Network Design.
* Maintain the Security group/List, Firewall rules of the subnets.
* Maintain the Routing tables.
* Maintain the documentation of Security List and Routing Tables.
* Create the Load Balancers and maintain its inventory. Also manages its SSL certificates.
* Monitor the connectivity link between On Premise and Cloud Tenancy.
* Troubleshoot the Network related issues on AWS
* Monitor the audits logs.
* Experience in setting up VPN, Endpoints and peering.

# Databases

* Experience in setting up RDS, DynamoDB, ElastiCache
* Creating and Managing RDS database instances
* Responsible for daily backups and restoration based on the requirement
* Creating Replicas and DR if necessary
* Securing RDS based on policies and roles.

# Storage

* Create the Block Volumes or File Storage as per user requirement.
* Extend the Volume if needed.
* Monitor the usage of Storage in Tenancy.
* Check backup of volumes and fulfill the restore request.
* Creating and configuring S3 buckets as per customers requirement
* Setting up Static Website Hosting
* Experience with Storage classes and migrating using LCM.
* Experience in setting up cross region replication on S3 and versioning.

# IAM

* Create User/groups and integrate Cloud services with Existing Identity Services.
* Create Policies and give access to user on the resources.
* Check server access logs if needed.
* Creating IAM roles as per the requirement.
* Creating and managing IAM Groups

# Others

* Prepare the Documentation of existing Cloud setup and regularly update it
* Review and implement the DR plan
* Maintain the overall Security of Cloud Tenancy
* Monitor resources usage and optimize its cost
* Manage the overall Cloud Services.
* Manage the Patches on all Servers for Operating Systems as per Organization Policies.
* Make sure HA of Critical Services are working fine.
* Optimize the compute related billing by tracking its usage.