

**Aws (Amazon web services):**EC2, VPC, IAM, S3, CLOUD FRONT, CLOUD WATCH, CLOUD FORMATION, GLACIER, RDS CONFIG, ROUTE 53, SNS, SQS, BASIC CONCEPT OF ELASTIC CACHE

Technical Skills :- **Cloud Technologies** : AWS (Amazon web services):EC2, VPC, IAM, S3, CLOUD FRONT, CLOUD WATCH, CLOUD FORMATION, GLACIER, RDS CONFIG, ROUTE 53, SNS, SQS, BASIC CONCEPT OF ELASTIC CACHE

### **AWS (Amazon Web Services) Knowledge:**

Infrastructure Services:

**Computing Tools:** EC2, Auto Scaling & Elastic Load Balancing (ELB)

**Storage & Content Delivery Tools:** S3, CDN (Cloud-Front), Elastic Block Store (EBS), Glacier (Archive Storage)

**Database Tools:** Relational Database (RDS), NoSQL (Dynamo-DB), Data-Warehouse (Redshift)

**Networking Tools:** Virtual Private Cloud (VPC), Route 53 (DNS) Platform Services:

**Management Tools:** AWS Cloud-Watch (Log & Alarm Management)

**Security & Identity Tools:** AWS IAM (Identity & Access Management)

**Application Services Tools:** AWS SQS, SNS, SWF and SES

MAINLY CONCENTRATED IN: EC2 (ELASTIC LOADBALANCE, AUTO SCALING, AND EBS), VPC, S3, IAM

- Utilized Cloud Watch to monitor resources such as EC2, CPU memory, Amazon RDS DB services, Dynamo DB tables, EBS volumes to set alarms for notification or automated actions and to monitor logs for a better understanding and operation of the system.
- Document system configurations, Instance, OS, and AMI build practices, backup procedures, troubleshooting guides, and keep infrastructure and architecture drawings current with changes.
- Expertise in Amazon AWS Cloud Administration which includes services like EC2, S3, EBS, VPC, ELB, AMI,
- SNS, RDS, IAM, Route 53, Auto scaling, Cloud Front, Cloud Watch, Cloud Trail, Cloud Formation, OPS Work,
- Security Groups.
- Experience in architecting and managing AWS cloud infrastructure.
- Developed python modules to automate processes in AWS (AWS cloud formations/ Ec2, botoAPI).
- Provisioning of AWS resources like EC2, VPC, EBS, AMI, S3 buckets, creation of subnets and all other operational tasks.

- Design roles and groups for users and resources using AWS Identity Access Management (IAM) and also managed network security using Security Groups, and IAM.
- Deployed in a way that Components, baselines and change sets can flow between a Repository
- Experience with ETL tools such as snap logic, Using S3 Data pipeline to move data to AWS Redshift
- Designed, developed, implemented, and maintained custom Ant tasks in Java and Groovy. Using Jenkins Amazon Web Services (AWS) Code Deploy plugin to deploy to AWS.
- Configured Elastic Load Balancers with EC2 Auto scaling groups.
- Implemented AWS solutions using E2C, S3, RDS, EBS, Elastic Load Balancer, Auto scaling groups.
- Deployed restful web services and micro services to Docker.
- Utilized Cloud watch to monitor resources such as EC2, CPU memory, Amazon to design high availability applications on AWS across availability zones.
- Utilize Amazon Glacier for archiving data.
- Configure VPC with subnets, security groups and NAT instances manually as well as with the VPC creator
- Strong Experience automated build platforms/continuous integration using DevOps architecture.
- Good exposure on Provisioning Systems. For The Continuous Integration and Deployment
- Virtual private cloud and Aws direct connect
- Application migration plans to Aws and Network connectivity options
- DNS and load balancing.

#### **Cloud Engineer Roles & Responsibilities:**

- Worked exclusively on making applications more scalable and highly available system in AWS (load balancing) with full automation. ☐
- Worked as a part of AWS build team. Merging all developer workings copies with shared mainline server for Continuous Integration.
- Build and release Ec2 instances Amazon Linux, Redhat and Windows for POC, Development and Production environment.
- Setup and attached EBS volumes to Ec2 instances ☐ Setup and conf
- Setup and managed security groups, VPC' specific to environment.
- After built the code use Beanstalk for deployment
- Setup and managed backup and recovery using snapshot
- Created AMI images of critical ec2 instances as backup using AWS CLI and GUI.
- Monitored and worked on alerts send by zabbix on various issues related to server availability, disk issues, CPU, memory, processes, etc.
- Managed and created user accounts, shared folders, Printing Services, Providing day to day user support, Log management, reporting, applying Group policy restrictions, etc.
- Provided antivirus protection for Server and Desktop clients.
- Troubleshooting network problems.
- Created AWS Cloud formation templates on creating IAM Roles & total architecture deployment end to end (Creation of EC2 instances & its infrastructure).

- Responsible for Troubleshoot various systems problems such as core dump analysis, network problems and hardware related problems
- Provide highly durable and available data by using S3 data store.
- Utilize Amazon Glacier for archiving data.
- Infra-structure development on AWS using various services like EC2, S3, RDS, Route 53, Cloud Front, Cloud Watch, IAM, VPC etc.
- EC2 instances, Auto Scaling, Elastic Load Balance and AMIs.
- Utilize EBS to store persistent data and mitigate failure by using snapshots.
- Attaching or Detaching EBS volume to AWS EC2 instance.
- Exclusively worked on windows & Linux AMI for hardening.
- Handled cloud administration tools and management frameworks.
- Configured Cloud watch alerts.
- Worked on tickets assigned by the helpdesk.
- Deployed and monitor scalable infrastructure on Amazon web services (AWS) & configuration management
- Launching and configuring of Amazon EC2 (AWS) Cloud Servers using AMI's (Linux/Ubuntu) and configuring the servers for specified applications.
- Make sure that the Score points for our EC2 instances is more than 90%.
- Setup and launch Amazon Linux and RHEL and Windows ec2 instances, network interface with Elastic IP's.
- Configured and managing security groups and VPC.
- Configured and managing ELBs.
- Configured and managing S3 storage.
- Created AMI images of the critical ec2 instance as backup using aws CLI and GUI.
- Created RDS database.
- Configured and managed NFS, Samba, FTP
- Cloud Front setup for Low latency for fast loading website/web contents experience.
- Hands on experience on VPC, Subnets, and Route tables etc.
- Workspace Setup and troubleshooting.
- Code Commit Setup and configuration for Windows as well as Linux systems.
- 4☐ Configuring Cloud Watch for monitoring Instance, RDS, ELB's etc.
- Configuring Elastic Beanstalk for fast and east
- Effective Cost Calculation using AWS Calculator.
- Conducting Cost Optimization Audit for Clients AWS account.
- Managing Backups of Instances and EBS storage using scripts.
- Create and configure S3 bucket with restricted policies.
- Designing and Deploying Highly scalable infrastructure using ELB and Auto Scaling services.
- Migrating and Managing DNS entries in Route 53 and various DNS providers.
- Hands on experience on VPC, Subnets, and Route tables etc.
- Environment: - AWS Services: VPC, EC2, S3&IAM, EBS.

- Setup and configuring the EC2 instances with ELB and Auto Scaling Services and associate EIP.
- Create and configure S3 bucket with required policy.
- Utilize amazon Glacier for archiving the data through lifecycle management.
- Create & Manage Database instances.
- Create & Manage the AMI/Snapshots/Volumes.
- Configure VPC Subnet, NAT gateway, Route Tables, ACL and Security groups.
- Configure and Manage IAM and Roles.
- Utilized Cloud Watch to monitor resources such as EC2, ELB, EFS and Workspaces Services.
- Configure Route53 (Amazon DNS) with different routing.
- Configure single EFS to the multiple Instances for storage.
- Effective cost calculating using AWS Calculator.
- Build deployment package on Jenkins Tool.
- High level knowledge on overall AWS Services.
- Hands on experience in Linux flavors like Centos, Ubuntu, Amazon Linux.
- Create, Add & Reduce LVM Partitions.
- Configuring the File Permissions & the Disk Partition.
- Creating User Account and Group.
- Installing, Configure the Apache, Tomcat Server.
- Basic Knowledge in Bash scripting.
- Troubleshoot Booting Problems and Network Configuration.
- On Call support for 24/7 Production environments.
- As a team member my responsibilities are for the designing solutions and consultation on Implementation & deployment of ANZ's Platform solutions across public & private clouds.
- Consultation on cloud Solutions & interacting directly with partners, Technical teams and other Infrastructure teams, Environment Apps teams.
- Interacting with the Enterprise Architects, Customers and Business relationship team to gather the requirements and pre-requisites as per the standards of the BRD document.
- Based on the BRD documents co-ordinating with the multiple teams like Project management team, Application, BI team, Database team, Network team, DevOps team & vendors to design the solution design /architect documents.
- Develop strong relationships with customers, DevOps team, Engineering & Production teams to drive the solution improvements.
- Interacting with various teams in BAU activities, consultation, POC, Testing and production implementation process.
- The below additional technical activities are also performed.
- Deploying AWS stack through Cloud Formation templates -involves task such as deploying databases on RDS in existing VPC.
- Managing the versioning for the important codes with respect to the project automation tools till it goes to the production.
- Customizing Community AMIs, Register New AMIs & De-register AMIs, Bundle Instances - EBS & Instance store based, Snapshot of EBS, Deploying instances behind Elastic Load Balancer, configuring Autoscaling, Monitoring EC2 using Cloudwatch Alarms, creating custom memory metrics and integrating it with Cloudwatch

- Creating Reserved DB instances, Deploying reliable (HA) DB using Multi-AZs, Scalable Database using PIOPS and Read Replicas, Automated Backup and restore.
- Involving, Implementing & consulting the databases migration activities into the cloud infrastructure.
- Setting up VPC and troubleshoot in case of any issue, Experience in building complex solutions with Amazon Virtual Private Cloud (VPC) to Create VPC, Create Public and Private Subnets, Create Route Table, Create Internet Gateways, Create Elastic IPs, Security Groups and Network ACLs.
- Troubleshooting backup and restore problems and constant monitoring of system performance if escalated to design team from the DevOps team.
- Calculating resource effort and preparing cost for the infrastructure
- Developing complete cloud solutions taking into account sizing, infrastructure, data protection, disaster recovery, and application requirements and hybrid access to premises based enterprise systems.
- Prepared transition document which has infrastructure inventory and given handover sessions to the Infra support team.
- Customizing Community AMIs, Register New AMIs & De-register AMIs, Bundle Instances - EBS & Instance store based, Snapshot of EBS, Deploying instances behind Elastic Load Balancer, configuring Auto scaling, Monitoring EC2 using Cloudwatch Alarms, creating custom memory metrics and integrating it with Cloudwatch
- High level design document using the prescribed Architectural templates and standards, Best Practices
- Understanding network configurations (switches, routers, firewalls) and a good understanding of routing and switching, firewalls, VPN tunnels.
- Provide Milestone Reports, presentations and Business Analysis to report status on project deliverable measured against SLA as well as any corrective actions or associated risks in order to provide key stakeholders and upper management with a status for each project.
- Requirement gathering and performing functional and detailed design analysis, and responsible for developing guidelines, standards and implementations
- Drive architectural road-maps for influencing upcoming standards, tools, and technologies.
- Defining Architectural Vision and analyzing gaps between Base Architecture and Target Architecture.
- Over 3 years of solid hands-on experience on designing AWS cloud architecture and over 4 Years of experience on designing the frameworks for Automation tests.
- Over 3 years of solid hands-on experience in provisioning EC2, EBS, S3, Elastic Load Balancer, Auto Scaling, ECS, CloudWatch., Cloud formation, Virtual Private Cloud (VPC), IAM, RDS, KMS, Lambda, Elasticsearch etc. based on architecture
- Experience with Glacier, DynamoDB, Elastic BeansTalk, CloudFront, Route53, Redshift, CloudFormation managing and working with configuration management tools (Chef, Ansible) and Experience in VMware ESXi, vCenter, vSphere Client.
- Solid Hands-on experience in designing and creation of complete CloudFormation Templates (Json/YML Template) to implement whole AWS infrastructure through scripting.
- Requirement analysis to find feasibility to migrate On-prem apps into AWS Cloud in terms of Cost, Security and availability.

- Designed highly scalable and fault tolerant, highly available and secured, distributed infrastructure (IAAS) using EC2 instances, EBS, S3, RDS, ELB, Auto Scaling, Lambda, Redshift, DynamoDB etc. in AWS Cloud
  - Defined logical workflow and designed network diagram for AWS cloud.
  - Provided Migration plan and strategy for cloud, and strategy to migrate infrastructure and data from On-prem data center to AWS Cloud
  - Designed and provided TAD for AWS which resembles on-prem network with minor changes to get more secure and cost effective design.
  - Involved in Project specific POC like Lambda, Elastic Search etc.
  - Involved in designing and evaluated several cloud formation templates to implement whole AWS infrastructure
  - Designed robust solution for data retention and staging policies using lambda and S3 along with scheduler
  - Defined Access policies and access groups among internal and also customers.
  - Designed Robust Environment for connectivity between On-Prem and Cloud for existing on-prem Apps
  - Implemented monitoring process of cloud environment and notification system using cloud watch and SNS.
  - Designed Successful Data Migration approach and policy for infrastructure migration to Cloud environment
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- Interacting with clients to capture requirements.
  - Gathered user requirement and performing functional and detailed design analysis.
  - Did Gap analysis between base and targeted architecture and Cost analysis and Sizing of infrastructure.
  - Designed and created AWS Network Diagram.
  - Designed Cloud Formation Templates to implement whole cloud infrastructures.
  - Solid hands-on experience in creation of whole cloud infrastructure through Json, and yaml scripting.
  - Defined migration plan and strategy for migration of complete infrastructure/application from on-prem data center to cloud.
  - Complete responsibility for developing guidelines, standards and implementations.
  - Responsible for creation and implementation of AWS security guidelines and storage mechanism.
  - Creating and presenting MS Power point presentation for Technical and non-Technical management team.
  - Designing and creating highly scalable, highly available, fault tolerant, highly secured, distributed infrastructure (IAAS) using AWS EC2 instances, EBS Snapshot, S3, Elastic Load Balancer, Auto Scaling, Cloud Watch, Cloud Formation, RDS, KMS, Lambda, Redshift, SNS etc.
  - Creating and Designing highly secured Virtual Private Cloud (VPC)
  - Implemented monitoring process of cloud environment and notification system using cloudwatch and SNS.

- Actively involved in configuration of SSO integration between Local User repository (like LDAP) of local datacenter and AWS IAM using SAML
- Creating and configuring Content Delivery Network (CDN) using Cloud Front.
- Solid experience in designing data retention strategy along with automatic backup plan using SNS and scheduler
- Followed Agile Methodology and scrum for implementation.

- Involved in designing and deploying a multitude applications utilizing almost all of the AWS stack (Including EC2, Route53, S3, RDS, Dynamo DB, SNS, SQS, IAM) focusing on high-availability, fault tolerance, and auto-scaling.
- Migrated the current Linux environment to AWS/RHEL Linux environment and used auto scaling feature.
- Install and configure chef server / workstation and nodes via CLI tools to AWS nodes.
- Increasing EBS backed volume storage capacity when the root volume is full using AWS EBS Volume feature.
- Created AWS Route53 to route traffic between different regions.
- Deployed and supported Memcache-AWS ElastiCache.
- Working with GitHub private repositories.
- Created S3 backups using versioning enable and moved objects to Amazon Glacier for archiving purpose.
- Used Chef for configuration management.
- Used GZIP with AWS Cloudfront to forward compressed files to destination node/instances.
- Created users and groups using IAM and assigned individual policies to each group.
- Created SNS notifications and assigned ARN to S3 for object loss notifications.
- Created load balancers (ELB) and used Route53 with failover and latency options for high availability and fault tolerance.
- Configured Security group for EC2 Window and Linux instances and also for puppet master and puppet agents.
- Experience with monitoring tools such as Cloud Watch.
- Build out server automation with Puppet and used other tools like Jenkins/Maven for deployment and build management system.
- Good understanding of ELB, security groups, NACL, NAT, firewall and Route 53.
- Designed and developed automation test scripts using Python.
- Environment: AWS EC2, VMWare, Windows 2008, JBoss, Tomcat Apache, Oracle, CLOUD WATCH, CLOUDFORMATION, GRUNT, GIT, CHEF, LINUX, Data Center Migration AWS, Jenkins, EC2, Chef, LINUX, Maven, GIT.
- Configured web servers (IIS, nginx) to enable caching, CDN application servers, and load balancers.
- Deployed and supported Memcache-AWS ElasticCache.
- Involved in maintenance and performance of Amazon EC2 instances.
- Established efficient processes and scripts for change management with the aid of Chef.
- Diagnose issues with Java applications running in Tomcat or JBoss.
- Created and maintained Jenkins jobs that execute shell script.
- Involved in designing and developing Amazon EC2, Amazon S3, Amazon SimpleDB, Amazon RDS, Amazon Elastic Load Balancing, Amazon SQS, and other services of the AWS infrastructure.
- Implemented Security groups for Inbound/Outbound access.
- Support JIRA Project Administration involving custom, complex projects, workflows, security schemes, custom fields etc.
- Experience working with Monitoring tools such as CloudWatch.
- Created AWS Multi-Factor Authentication (MFA) for instance RDP/SSH logon, worked with teams to lock down security groups.
- Setup specific IAM profiles per group utilizing newly released APIs for controlling resources within AWS based on group or user.
- AWS data backup (snapshot, AMI creation) techniques, along with data-at-rest security within AWS.
- Environment: AWS EC2, VMWare, Windows 2008, IIS, ASP.net, SQL Server, CLOUD WATCH, CLOUDFORMATION, GRUNT, GIT, PUPPET, LINUX.