**Name: Madhavi A**

**Email Id: madhavi.s18@outlook.com**

**Ph. No:** **3152156394**

**AWS Cloud Engineer**

**PROFESSIONAL SUMMARY:**

* Around 9+ years of IT Industry Experience in AWS (Amazon Web Services) Linux Administration, Configuration, Management, Continuous Integration, Continuous Deployment and Cloud Implementations.
* Experienced in configure and managing Amazon AWS Cloud Services, EC2, S3, EBS, ELB, Elastic IP, RDS, SNS, SQS, Glacier, IAM, VPC, Cloud Formation, Lambda, Cloud Front, Route53, Cloud Watch, AWS Code Commit, AWS Code Deploy, Serverless Deployment.
* Managed Linux and Windows virtual servers on AWS EC2 using Chef Server. Configured and monitored distributed and multi-platform servers using chef, defining Chef Server and workstation to manage and configure nodes. Developed Chef Cookbooks to manage systems configuration.
* Experienced in Creating and designed the AWS Cloud Formation Templates in different environments according to the given requirement.
* Experience with Configuration Management tools (Puppet, Chef and Ansible).
* Expertise in AWS Elastic Block Storage (EBS), different volume types and use of various types of EBS volumes based on requirement.
* Experience with container-based deployments using Docker, working with Docker images, Docker Hub and Docker registries and Kubernetes.
* Experience in Amazon EC2 setting up instances, VPCs, and security groups.
* Experience in Cloud Infrastructure Consulting, lead the design and installation of complex infrastructure solutions.
* Implemented Spring boot microservices to process the messages into the Kafka cluster setup.
* Setting up databases in AWS using RDS, storage using S3 buckets and configuring instance backups to S3 bucket.
* Experienced in working with web application servers, web sphere, Apache Tomcat and JBoss.
* Experienced in networking concepts. Experience in designing Amazon Virtual Network, Implementing Site-to-Site VPN and Network Security Groups (NSG).
* Experienced on Object Oriented Analysis and design Object Oriented Programming using various methods and structures.
* Integrated AWS Dynamo DB using AWS Lambda to store the values the items and backup the Dynamo DB streams.
* Automate Operations Process using Lambda, CloudWatch Events, Schedules.
* Experienced working on Docker hub, creating Docker images and handling multiple images primarily for middleware installations and domain configuration.
* Developed security granted and configured user access and limits using AWS Identity and Access Management (IAM) by creating new profiles and policies for user management in JSON.
* Managed Datacenter migration to Amazon Web Services (AWS) infrastructure and provided support to Applications and Database teams.
* Configured AWS Multi Factor Authentication in IAM to implement 2 step authentication of user’s access using Google Authenticator and AWS Virtual MFA.
* Expertized in principles and best practices of software configuration management processes, such as compiling, implementing, deploying and application configurations.
* Experienced in tools such as ANT, Maven, Putty, SQL, and JIRA (Defect tracking Tool).
* Experienced in System Administration, System Builds, Server builds, Installs, Upgrades, Patches, Migration, Trouble shooting, Security, Backup, Disaster Recovery, Performance Monitoring and Fine-tuning on UNIX (SUN Red Hat.
* experience in Linux administrator with RedHat RHEL 7 and 8.
* Operating System installations.
* Expertise in different phases of Software Development Life Cycle (SDLC) including analysis, design, implementation and testing.
* Day to day administration of the Development environment, Production and Test environment systems. 24x7 on-call support. Strong desire to learn the new technologies with positive attitude.
* Responsible for building out and improving the reliability and performance of cloud applications and cloud infrastructure deployed on Amazon Web Services.
* Worked with in-depth level of understanding in the strategy and practical implementation of AWS cloud-specific technologies including Elastic Compute Cloud (EC2), Simple Storage Services (S3), Route 53, CloudFormation, Elastic IPs, Virtual Private Cloud (VPC), RDS and Cloud Watch.
* Experienced in managing GIT and SVN which includes creating new users and writing some pre commit and post commit script
* Deployed and managed many servers utilizing both traditional and cloud-oriented providers (AWS) with the Chef Platform configuration system.
* Deployed application updates using Jenkins. Installed, configured, and managed Jenkins. Experience in building applications of various architecture styles like Micro-services architecture consisting of Restful web services and Docker container-based deployments.
* Monitored system activities and fine-tuned system parameters and configurations to optimize performance and ensure security of systems.
* Good experience in Master Data Management implementing master functionalities and analysis for existing process and maintaining detailed documentation of process flow diagrams and operational support, reviewing existing requests.
* Exposed to all aspects of software development life cycle (SDLC) such as Analysis, Planning, Developing, Testing and Implementing and Post-production analysis of the projects.
* Experienced in Deployment, Provisioning cloud resources and manage implementation automation through Amazon Ops Works.

**TECHNICAL SKILLS:**

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| --- | --- |
| Data Protection | AWS Certificate Manager, AWS KMS, AWS Cloud HSM, SSL Certificate lifecycle management, Snapshot Lifecycle Manager. |
| AWS Security | AWS Security Hub, AWS Guard Duty, AWS Shield, AWS Firewall Manager, AWS Inspector, MFA, access key rotation, security groups and NACLs, data encryption using KMS, S3 bucket policies, mitigating DDOS attacks. |
| Frameworks | Spring, Eclipse, NetBeans |
| Database | SQL Server 2008, PL-SQL, Aurora, MongoDB, Dynamo DB, MySQL, Couch, Consul, SQL Developer, PostgreSQL and DB2. |
| Application Delivery (CI/CD) | Bitbucket, AWS Code Pipeline, AWS Code Commit, AWS Cloud9 |
| Container Management tool | Docker Swarm, Kubernetes and Aws ECS |
| AWS Platform | AWS CloudFormation, AWS Lambda, AWS Systems Manager, S3, VPC, EC2, ELB, SNS, SQS, SES, Route53, CloudFront, Service Catalog, AWS Auto Scaling, Trusted Advisor, CloudWatch etc. |
| Operating systems | UNIX, LINUX, Mac OS and Windows Variants, Cosmo |
| Hardware/Platforms | Windows Server Platforms, RedHat Linux Platforms AND z/OS |
| Cloud Technologies | AWS (Amazon web services) -EC2, S3, Elastic Beanstalk EBS, Elastic Load Balancing ELB, API- Gateway |

**Professional Experience:**

**Abbott Labs – Chicago, IL**

**Jan -2020 – Present**

**AWS Cloud Engineer.**

**Responsibilities:**

* Creating and configure a virtual data center in the Amazon Web Services cloud to support Enterprise Data Warehouse hosting including Virtual Private Cloud (VPC), Public and Private Subnets, Security Groups, Route Tables, Elastic Load Balancer.
* Migrated multiple applications and automated the infrastructure creation using CloudFormation for new applications.
* Running the terraform scripts to spin up AKS/EKS Kubernetes clusters and installing tools like Prisma, logic monitor after post creation of cluster.
* Implements Continuous Integration and Continuous Delivery pipelines for the deployment of application and infrastructure stacks.
* Integrate shell scripts in Jenkins pipeline and automate the JVM’s (Java virtual machine), fetching logs and applications.
* Automation of various windows applications using Docker Swarm and deploy to Kubernetes.
* Focused on high-availability, fault tolerance, and auto scaling using AWS Cloud Formation, Configured and managed various AWS Services including EC2, RDS, VPC, S3, Glacier, Cloud Watch, Cloud Front, and Route 53 etc.
* Integrate the python scripts with the Jenkins, to deploy the Jenkin jobs.
* Set up the Docker engine in the cloud EC2 instances, a and create Docker containers to build, ship and run the images to deploy the applications.
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* Code Maintenance for the projects using GitLab, GitHub (Source, Document the process).
* Modernize Java Application Server environments and applications.
* Updated and containerized java application using Kubernetes, deploy them to run on Docker containers.
* Used AWS Bean Stalk for deploying and scaling web applications and services developed with Java, PHP, Node.js, Python, Ruby, and Docker on familiar servers such as Apache, and IIS.
* Designed AWS Cloud Formation templates to create custom sized VPC, subnets, NAT to ensure successful deployment of Web applications and database templates.
* Maintaining the user accounts (IAM), RDS, Route 53, VPC, RDB, Dynamo DB, SES, SQS and SNS services in AWS cloud.
* Good understanding and experience in working with User Controls, Custom Controls, HTML Controls and Web Server Controls using C#.Net.
* Managed deployments in EKS managed Kubernetes, setup multi nodes cluster and deployed containerized applications.
* Designed and implemented scalable, secure cloud architecture based on Amazon Web Services.
* Developed Automated BVT regressions for Payment, Risk, Transaction Services and MBA.
* Automated Gradle/ Groovy to test 18 Jenkins Master\Slaves and a Selenium Hub with 9 Node servers running 12 browsers across 2 platforms for Java and .Net.
* Good experience in Amazon Web Services (AWS) environment and good knowledge of AWS services like Elastic Compute Cloud (EC2), Elastic Load-balancers, Elastic Container Service (Docker Containers), S3, Elastic Beanstalk, CloudFront, Elastic Filesystem, RDS, DMS, VPC, Route53, CloudWatch, CloudTrail, CloudFormation, IAM.
* Automate Datadog Dashboards with the stack through Terraform Scripts.
* Experienced in developing Web Forms and Web Services in ASP.NET, C#.NET.
* Migrated applications to the AWS cloud.
* Working as Kubernetes Administrator, involved in configuration for web apps, Azure App services, Azure Application insights, Azure Application gateway, Azure DNS, Azure traffic manager, App services.
* Created Python scripts to totally automate AWS services which includes web servers, ELB, Cloud front distribution, database, EC2 and database security groups, S3 bucket and application configuration, this script creates stacks, single servers, or joins web servers to stacks.
* Planned release schedules with agile methodology & coordinated releases with engineering & SQA furtively delivery.
* Experience in configuring RDS instances, EC2 instances, Bastion hosts using Cloud formations and Terraform.
* Successfully created Kubernetes pipeline of deployment & operation activities where all code is written in java, python & stored into bitbucket, for staging & testing purpose
* Experience in using ASP.NET Web API for RESTful Web API service.
* Setting up Database infrastructure (RDS, REDSHIFT and DYNAMO DB)
* Used Jenkins to manage Build and release.
* Created several Terraform scripts to build AWS infrastructure and configured it using Ansible.
* Troubleshoot the automation of Installing and configuring applications in the test environments.
* Expertise in Amazon IAM to grant fine-grained access to AWS resources to users. Also managed roles and permissions of users to AWS account through IAM.
* Expertise in Elastic Load balancer (ELB) including high availability of ELB using various subnets in various availability zones, configured security settings and health check for application.
* Tested and configured AWS Workspaces (Windows virtual desktop solution) for custom application requirement.
* Utilizing GIT as Version Control System for two applications. Managed development streams and Integration streams.
* Provided 24 x7 on-call supports in debugging and fixing issues related to Linux in Cloud Environment using Amazon Web Services (AWS).
* Maintained Infrastructure using the virtualization tools like VMware and Cloud Computing Service like AWS in all environments

**Environment:**

* AWS (EC2, VPC, ELB, S3, RDS, Cloud Trail and Route 53), VDI, Linux, Git version Control, VPC, AWS EC2, S3, Route53, EBS, IAM, ELB, Groovy, Kafka, Cloud watch, Cloud Formation, AWS CLI, AWS Auto Scaling, Maven, Subversion, Unix/Linux, Shell scripting.

**Novartis,** **East Hanover NJ Aug 2017- Dec 2019**

**AWS Cloud Engineer**

**Responsibilities:**

* Designing and implementing AWS Solutions using EC2, S3, EBS, Elastic Load balancer (ELB), VPC, Amazon RDS, CloudFormation, Amazon SQS, and other services of the AWS infrastructure.
* Launching Amazon EC2 Cloud Instances using Amazon Web Services (Linux/ Ubuntu) and configuring launched instances with respect to specific applications.
* Involved in defining, developing, and maintaining an Application Release Road map over different environments to facilitate an agile development process which is automated and repeatable enabling teams to safely deploy code many times a day while ensuring operational best practices are supported.
* Extensively worked on Jenkins CI/CD pipeline jobs for end-to-end automation to build, test and deliver artifacts and troubleshoot the build issue during the Jenkins build process.
* Managed Amazon Web Services (AWS) infrastructure with automation and configuration management tools such as Ansible.
* Utilized Kubernetes and Docker for the runtime environment of the CI/CD system to build, test and deploy.
* Support designing and dev. groups with onboarding/sending cloud, virtualized administrations/or potentially empowering automation.
* Used Jenkins to automate most of the build related tasks.
* Created stack using Cloud Formation Template to launch multiple Instances.
* Installed application on AWSEC2 instances and also configured the storage on S3 buckets.
* Deployed EC2 Instance, adding (EBS) block level storage volume to increase the availability of the website.
* Using Simple storage services (S3) for snapshot and Configured S3 lifecycle of Applications & Databases log including deleting old logs, archiving logs based on retention policy of apps and databases.
* Managed hosted Zone and domain name service using Route 53.
* Monitoring & Metrics - Using Amazon Cloud watch, monitor infrastructure and applications such as EBS, EC2, ELB, S3.
* Responsible for implementing monitoring solutions in Ansible, Terraform, Docker, and Jenkins.
* Worked with networking teams in configuring AWS Direct Connect to establish dedicated connection to datacenters.
* Analysis of Automated Weekly Instance usage reports and choose the right instance type for applications based on the Network I/O, CPU utilization and RAM.
* Design roles and groups for users and resources using AWS Identity Access Management (IAM)
* Auto scaling of Web Application instances based on the Cloud watch alarms during sudden increase in network traffic.
* Managing AWS EC2 instances utilizing Auto Scaling, Elastic Load Balancing and Glacier for our QA environments as well as infrastructure servers for GIT and Chef.
* Created and Maintained Chef Recipes and Cookbooks to simplify and expedite deployment of applications and mitigate user error.
* Performed database SQL queries to address connectivity and integration activities.
* Created alarms in CloudWatch service for monitoring the server’s performance, CPU Utilization, disk usage etc.
* Designing and developing automation test scripts using Python and Bash. Configured alarms in CloudWatch for monitoring the server's performance, health, CPU utilization, Memory and disk usage of AWS resources using AWS CloudWatch
* Developing AWS CloudFormation templates to create custom sized VPC, subnets, EC2 instances, ELB and security groups.

**Environment:**

* AWS EC2, S3, Identity Access Management, EBS, Elastic Load Balancers, Route 53, Cloud watch, GIT, Web logic, Tomcat, AWS IAM, AWS S3, AWS cloud watch, cloud formation, Apache HTTPD, Groovy, Kafka, Apache Tomcat, Jason, Bash, Shell

**Trans Union – Chicago, IL**

**Nov 2015 -July 2017**

**Cloud Admin**

**Responsibilities:**

* Experienced in AWS, which included managing application in the cloud and creating instances.
* Developed AWS Cloud unit scripts to automate deployment of new AWS instances for various server types.
* Worked closely with the new DBA to develop automation, scaling and configuration management for MySQL Cluster, as well as standard master/slave MySQL segments.
* Migration of on-premise datacenter to cloud.
* Deploy and monitor scalable infrastructure on Amazon web services (AWS)& configuration management using puppet.
* Worked on installation, configuration and maintenance Red hat, CentOS and Suse Servers at multiple Datacenters.
* Managing Amazon Web Services (AWS) infrastructure with automation and configuration management tools such as Ansible, Puppet, or custom-built. designing cloud-hosted solutions, specific AWS product suite experience.
* Developed automation scripting in Python (core) using Puppet to deploy and manage Java application sacross Linux servers.
* Performed Disk management with the help of LVM (Logical Volume Manager)
* Handled troubleshooting the configuration file, configured the Boot file for the Domain Name Server to boot, configured and updated the Zone database.
* Provided 24/7 on call support on Linux Production Servers. Responsible for maintaining security on Redhat Linux.
* Experienced in setting up the Continuous Integration (CI) and Continuous Deployment (CD) practices. for Release Automation of Java and Oracle Fusion Middleware Applications (Oracle ADF, Oracle SOA, OSB)
* Using Route53 to implement a highly and scalable domain name service (DNS) application.

**Environment:**

* Web logic, Tomcat, Apache, Jason, Bash, Shell, Red-Hat Linux, Solaris, DBA, Bash, NAS, Send mail, MySQL, puppet, CentOS, LVM, KVM, ESX VM's, GIT, Jenkins.

**Merck, NJ**

**May 2013 -Oct 2015**

**Windows admin**

**Responsibilities:**

* Involved in the Migration of Databases from SQL Server 2000 to SQL Server 2005.
* Managed Databases spread across multiple servers in Production, Development, staging & testing environments.
* Responsible for installing and maintaining SQL 2008 R2 Cluster environment and Performed migrations from SQL server 2005 to SQL server 2008R2/2012.
* Experienced in configuring report manager for creating report subscriptions, snapshots, and caching and optimized Performance and Capacity planning of Various Data processes related to Reports.
* Assist in development, improvement and maintenance of imaging, deployment solution.
* Administer multiple disjoint Active Directory Forests, Domains, DHCP, DNS and various other Infrastructure services. Trust relationships setup, dc promo and decommission of AD.
* Updates, patching and software installations via group policies (GPO)
* Configuration of active directory in Windows operating system.
* Network troubleshooting in complex environments, VLAN configurations.
* Maintained Load balancing, High availability, Failover functionality, and Disaster recovery included changing the IP address of the web and app server machines, which caused a change in the virtual host and HTTP transport configurations.
* Involved in designing and deploying a multitude application 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.
* Responsible to create various Cloud Watch alarms that sends an Amazon Simple Notification Service (SNS) message when the alarm triggers. Created SNS notifications using S3 events for object loss notifications.
* Designed and developed automation test scripts using Python and Bash. Configured alarms in CloudWatch for monitoring the server's performance, health, CPU utilization, Memory and disk usage of AWS resources using AWS CloudWatch.
* Created S3 bucket for backups using versioning enable and moved objects to Amazon Glacier for archiving purpose and using Amazon S3 for database backup regularly and save snapshots of data.
* Created AWS Route53 to route traffic between different regions.

**Environment:**

* SQL Server 2000/2005, T-SQL, Excel, Advanced Windows 2003 Server &PVCS Version Control Management, LINUX, Oracle, Windows server, MySQL, Post gre SQL, SQL Server 2005/2008/2008 R2/2012, Groovy, Kafka, Windows 2008 server, Windows Server 2008(x64).