**Sr. DevOps/Cloud Engineer**

**Sekhar E**

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**PROFESSIONAL SUMMARY**

* A highly skilled **Cloud DevOps Engineer** with over 8+ years of experience in designing, deploying, and maintaining **AWS & Azure**-based cloud solutions. Proficient in implementing continuous integration and delivery **(CI/CD) pipelines**, automating infrastructure, and scaling applications.
* Team player with excellent interpersonal skills, self-motivated, dedicated and understanding the demands of 24/7 system maintenance and has good customer support experience.
* Experience in Amazon Cloud Services **(AWS) and its features (AWS EC2, VPC, EBS, AMI, APIs, Route 53, snapshots, Autoscaling, Cloud Formation, Lambda, SES, SQS, SNS, RDS, ELB, EBS, CloudWatch, S3 etc.).**
* Experience in process automation from system administration tasks to Continuous integration and Continuous Deployment **(CI/CD) with Jenkins/Bamboo build** tools.
* Have experience with a variety of databases including relational databases like Oracle, **MySQL, MS-SQL and No-SQL databases** like Cassandra and knowledge on **Big Data and Data Analytics** using **Hadoop**.
* Strong knowledge and experience managing the following **IAM activities: ID administration**, provisioning, governance/auditing, **IAM tool** operations.
* Dealing with Windows Azure IaaS - Virtual Machines, Cloud Services, Resource Groups, Virtual Networks, Express Route, VPN, Load Balancing, Application Gateways, Auto-Scaling, and Traffic Manager.
* Assigning the Azure services on locations specific to integrate with web apps and key-vaults.
* Experience in managing Private Cloud and Hybrid cloud configurations, patterns, and practices in Windows Azure and SQL Azure and in Azure Web and Database deployments.
* Deployed the whole solution using **Azure DevOps pipelines.**
* Expertise in improving build & deployment tools in DevOps through automation using scripting languages such as JavaScript, **Shell, Bash, Perl, JSON, Ruby, Groovy and Python** etc.
* Experience in using bug-tracking systems like **JIRA, Remedy, Bugzilla, ClearQuest, Find Bugs and HP Quality Center.**
* Implemented **AWS Redshift** to manage data warehouse and running **SQL queries**.
* Expertise in Agile tools like **Atlassian, Jira, Scrum** and Continuous delivery tools like **Nexus, Nexus Pro, Run deck, Mesos**, Marathon. Custom dashboards, reports and Information points creation for **AppDynamics.**
* Health rules, Policies and Actions configurations for Alerts notifications on **AppDynamics.**
* Automated the deployment process using Jenkins, Git, and Chef
* Experience in process automation from system administration tasks to Continuous integration and Continuous Deployment **(CI/CD)** with **Jenkins/Bamboo** build tools.
* Implemented a continuous delivery process to ensure faster and more reliable releases.
* Architected and implemented the **AKS Kubernetes cluster from scratch**.
* Automated the creation of several environments using Infrastructure as Code/IAC(Terraform).
* Deployed the whole solution using **AWS DevOps pipelines.**
* Handled large volumes of container clusters with **Docker swarm, Kubernetes**, Mesos and Marathon.
* Experience in working with container-based deployments using **Docker, Docker images, Docker file, Docker Hub, Docker Compose and Docker registries.**
* Used Docker containers to maintain the gap between development & operations for security purposes.
* Used Docker to showcase the build micro services to modularize design and isolate the development of containers.
* Worked on the Deployment, Configuration, Monitoring and Maintenance of **OpenShift Container** Platform.
* Created a test framework for the **CI/CD pipeline** integrated with **Jenkins & Selenium** that increased testing cycles.

**EDUCATIONAL DETAILS:**

Bachelors in Electronics and communication Engineering – JNTUK May 2016

**TECHNICAL SKILLS:**

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| Build Tools | MAVEN, ANT, Gradle, MS Build. |
| Bug Tracking Tools | JIRA, Fisheye, Cucumber, confluence, IBM ClearQuest**.** |
| Version Control Tools | Automation container GIT, SVN, Team Foundation Server (TFS), Clear Case. |
| DevOps Tools | Jenkins/Hudson, bamboo, Team city, Build Forge, AntHillPro, TFS Visual Studio Build. |
| Continuous Deployment | Puppet, Ansible, Saltstack, and Chef, Git, Terraform, Docker, Kubernetes, marathon and Mesos. |
| Cloud services | Amazon Web Services (AWS), Azure EC2, RDS, VPC, S3, ROUTE53, SNS, SQS, Cloud front, EBS, ELB, Cloud watch, Elastic beanstalk, OpenShift, OpenStack, and Cloud trail |
| Monitoring tools | Nagios, ELK, Splunk, Elasticsearch, SonarQube, cloud watch and Selenium |
| Networking | TCP/IP, NIS, NIS+NFS, DNS, DHCP, WAN, SMTP, LAN, FTP/TFTP, TELNET, Firewalls |
| Database Servers | Oracle 9i, 10g, MySQL 7.0, 6.5, RDBMS Oracle, MongoDB, IAM, Cassandra, SQL Server. |
| Web/Application Servers | WebLogic, WebSphere, JBoss, Apache Server, Apache Tomcat. |
| Languages | C, C++, .NET, Java/J2EE, PH. Golang. |
| Scripting Languages | Bash and Korn Shell scripting, Perl, Ruby, Python, YAML, Groovy |
| SDLC | Agile, Scrum, and Waterfall |
| Operating Systems | RHEL (5.x, 6.x, 7x), SUSE Linux (9,10,11), Sun Solaris (9,10,11), CentOS 5,6, Windows 2003, 2008, VMware ESX (3.5,4.0) |

**PROFESSIONAL EXPERIENCE:**

**Client: Verizon, Irving , TX (Remote). May 2022 - Till Date**

**Role: Sr. Cloud/ DevOps Engineer**

Randolph-Brooks Federal Credit Union is more than just a bank. We are a financial cooperative intent on helping members save time, save money, and earn money. Whether it’s opening a first account, buying a car, building a dream home, or planning for retirement, our team of dedicated professionals are here to help you achieve your goals and build a strong financial future. I was involved in this project by using AWS, MS Cloud, and DevOps tools like Ansible, Jenkins, DevOps, Maven, and Git.

**Responsibilities:**

* Designed, implemented, and maintained **CI/CD pipelines** using **Jenkins, Git, and Docker**, resulting in a 50% reduction in deployment time.
* Implemented backup and disaster recovery solutions using **AWS Backup and S3**, ensuring business continuity in case of failures.
* Created and managed AWS resources using **CloudFormation**, resulting in a 30% reduction in infrastructure costs.
* Involved in development of test environments on **Docker containers** and configured using **Kubernetes**.
* Implemented monitoring and logging solutions using **CloudWatch and CloudTrail**, improving application availability and reliability.
* Created projects, VPC's, Subnetwork's, GKE Clusters for environments QA3, QA9 and prod using Terraform.
* Used **terraform** modules to set up environments and create buckets with encryption, **VPC, GKE clusters**.
* Prototype **CI/CD** system with **GitLab** on GKE utilizing **Kubernetes and Docker** for the runtime environment for the **CI/CD** systems to build and test and deploy.
* Collaborated with cross-functional teams to troubleshoot and resolve production issues.
* Deployed application which is containerized using **Docker** onto a **Kubernetes** cluster which is managed by **Amazon Elastic Container Service** for **Kubernetes (EKS**). Configured ‘**Kubectl**’ to interact with **Kubernetes.**
* infrastructure and **used AWS Cloud Formation Templates (CFT)** to launch a cluster of worker nodes on **Amazon EC2** instances. Use Rancher for monitoring and managing Kubernetes deployments.
* Work on services like compute engine, cloud load balancing, cloud storage, **cloud SQL**, stack driver monitoring and cloud deployment manager.
* Worked on day-to-day administration tasks and resolved tickets using JIRA.
* Experience of installing, configuring, and upgrading/migrating **IBM Security IAM** solution components
* Use Terraform modules for two tier Architecture which includes **AWS resources VPC, subnets, security groups**, **EC2, load balancers, auto scaling group, cloud watch alarms, EC2 clusters, s3 buckets** for logs.
* Intensive planning with follow-up meetings before making any project live with all the stakeholders.
* Rotational roster for handling deployments, monitoring, critical issues and being the SPOC for the management in case of any issues in that duration.
* Setting up monitoring solutions to keep track of failing systems and respond proactively before major downtimes occur.
* Installing new technologies like Prometheus, **Grafana, Rancher**, etc. for monitoring and management of clusters.
* Created, tested, and deployed an End-to-End **CI/CD pipeline** for various applications using Jenkins as the main Integration server for Dev, QA, Staging, UAT and Prod Environments with **Agile methodology**.
* Use of **Docker, Kubernetes** to manage micro services for development of continuous integration and continuous delivery.
* Managed **Kubernetes charts** using **Helm**.
* Created reproducible builds of the Kubernetes applications, managed Kubernetes manifest files and Managed releases of **Helm packages**.
* Worked on **Docker container snapshots**, attaching to a running container, removing images, managing directory’s structure, and managing containers.
* Configured and setup **ELK stack** (**Elasticsearch, Logstash and Kibana**) to collect, search and analyse log files across the servers and monitored the servers using **CloudWatch** and **ELK** for **Network** and **Log Monitoring**

**Environments:** AWS EC2, VPC, EBS, Lambda, AMI, SNS, RDS, EBS, Bamboo, Python, IAM, TFS, JSON, Java, puppet, Selenium web driver, Appium, Linux, Eclipse, Git, Ant, Maven, Subversion, UNIX, SVN, Docker, Jira, Pearl, Ruby, Shell Scripts, Tomcat, Jenkins, Splunk, groovy, Apache

**Client: Marsh McLennan** May 2018 – April 2022

**Role: Senior System Engineer (DevOps Engineer)**

**Responsibilities:**

* Set-up databases using RDS, storage using google storage bucket and configuring instance backups to google storage bucket.
* Worked with orchestration tools like **Terraform, Chef and leverage** modern tools like **Vault, Consul, Kubernetes, Docker, Kafka**, etc.
* Automated Installation and Configuration of **API** Management products (Google Apigee components with 38 node cluster and Enterprise Kong Gateway).
* Supported existing Stream sets architecture in AWS environment and work on migrating the architecture to cloud**.**
* Use Terraform to set up infrastructure like **VPC, subnets, storage buckets, Secret manager, GKE**, etc.
* Work with orchestration tools like Terraform, Chef and leverage modern tools like Vault, Consul, Kubernetes, Docker, Kafka, etc.
* Implemented Azure ARM templates for IAC and created many ephemeral environments.
* Hybrid Environment between **VMware/Azure/Google Cloud Platform**.
* Secured components in a multi-team cloud environment. Automated deployments with **bash and Jenkins.**
* Created **S3 buckets** and secure them using **IAM and Bucket Policies**.
* Managed Lifecycle Policies to move objects to different **S3 tiers and Glacier.**
* Write bash wrapper scripts to enable developers to deploy and destroy terraform managed mini environments with one click.
* Set up monitors and dashboards using **Data Dog**.
* Implemented monitoring using Monitor and prepared the solution for **SOC 2** audit compliance.
* Managed **AWS Services EC2, Lambda, S3, ELB, Route53, EFS and IAM.**
* Set up Alarms in **CloudWatch** for monitoring **EC2 and RDS performance**.
* Created and maintained **Docker** files for **Python Flask Applications**.
* Used Jira to track effort and manage sprints.
* Created and advocated branching strategy and best practices for GitHub based collaboration with Developers.
* Utilized **Route53** to manage DNS records and CNAMEs.
* ​​Implemented and secured PostgreSQL and integrated the same with application code through environment variables using Ad Ops.
* Implemented and developed many Functions in **Python, Logic Apps**, and built the whole ecosystem.
* Created custom **AMI**s for faster boot time and efficient **Auto Scaling.**
* Created Infrastructure and Code Deployments using the established Change Management Process.

**Environments:** AWS EC2, S3, Azure, RDS, AMI, IAM, Redshift, Lambda, VPC, Chef, Java, Git, Jenkins, Terraform, Python, Linux, Bash, Groovy, Subversion, Rest API, Ant, Maven, Nexus, U-deploy, SQL, Cloud Formation, Golang, OpenShift, Cassandra, Subversion, Selenium, UNIX, SVN, Docker, Jira, Python, Ruby, Shell Scripts, Tomcat, Ansible, Splunk

**Client:** Hospital Contribution fund of AustraliaMay 2016 – April 2018

**Role: System Engineer (Linux Build and Release Engineer)**

**Responsibilities:**

* Worked on gathering requirements from users and packaging Nodejs packages and libraries and setting up **CICD pipeline** to deploy code server with Nodejs extensions onto **Kubernetes clusters.**
* Daily scrum to know what other team members are doing and what can be done to speed it up.
* Automated manual work to allow time for other productive work and new technologies.
* Integrated AppDynamics with tools like Splunk.
* Used technologies such as docker on existing cloud solutions and **Kubernetes** to further increase management efficiency and reduce cost and downtime of various solutions.
* Deployed application which is containerized using Docker onto a Kubernetes cluster which is managed by Amazon Elastic Container Service for **Kubernetes (EKS).**
* Configured ‘**Kubectl**’ to interact with **Kubernetes infrastructure** and used **AWS Cloud Formation Templates (CFT)** to launch a cluster of worker nodes on **Amazon EC2 instances.**
* Debugging Linux based systems for problems and providing quick solutions to fix the root cause of those problems.
* Maintained **Gitlab pipelines** for **Kubernetes** based automation.
* Expertise in writing Ansible Playbooks from scratch using **YAML** functions and utilizing setup and automate the **CI/CD** **pipeline** and deploy **microservices**.
* Provisioned load balancer, auto-scaling group and launch configuration for **microservices** using **Ansible**.
* Experienced in working with Ansible Tower to manage multiple nodes and inventory for different environments and automated the cloud deployments using **Ansible, and AWS Cloud Formation Templates**.
* Maintained various cluster-based apps on **Zookeeper** and **SOLR**.
* Design pipelines, monitoring, infra and security policies as code for the **Kubernetes** environments.
* Monitoring **New Relic** and **Grafana** for alerts for services and designing permanent fixes for errors.
* Preventing infra/configuration drift via terraform to provide 99.99% uptime of services.
* Automated of a release process, writing scripts on **bash, Golang**
* Provided automated access and automated removal to various services.
* Maintained a private **Wiki** (Confluence) for every activity/project that goes live.
* Completed end to end code sanity before merging, building and deploying the production builds.
* **Lambda** functions inside the system to revert to any public ports to prevent getting hacked.
* Weekly meetings to find RCA of critical downtimes and how we can prevent it and improve these in the future.

**Environments:** AWS EC2, VPC, EBS, Lambda, AMI, SNS, RDS, EBS, Bamboo, Python, TFS, JSON, Java, puppet, Selenium web driver, Appium, Linux, Eclipse, Git, Ant, Maven, Subversion, UNIX, SVN, Docker, Jira, Pearl, Ruby, Shell Scripts, Tomcat, Jenkins, Splunk, groovy, Apache