|  |  |
| --- | --- |
| **Santosh k**  **AWS/Devops Engineer**  [santoshk.dev3@gmail.com](mailto:santoshk.dev3@gmail.com)  Ph :(214)-838-1333 |  |

**Summary:**

* Over 8+ years of experience on **Devops Engineer/AWS Cloud Engineer, Linux system administrator**.
* Experience in **AWS** Resources such as **EC2, S3, EMR, VPC, EBS,** dynamo DB(DDB), Code Build, Code Deploy, Code Commit, Elastic Beanstalk, **AMI,SNS**, **RDS**, **Cloud Watch**, **Route53**, **SQS, IOT**, **Cloud Front(CDN),Auto scaling, Security Groups**, and **Cloud Formation**.
* Understanding of cloud offerings in the marketing and ability to discuss cloud architectures; familiarity/Strength with AWS and related **AWS** services.
* Experienced in migrating on premise Database Servers(Homogeneous and Heterogeneous) and Application Servers to **AWS.**
* Implemented rapid-provisioning and life-cycle management for Ubuntu Linux using **Amazon EC2, Chef**, and custom **Bash scripts**.
* Experience with Agile development and methodologies and **SaaS** .
* Involved in designing the dimensional model like **Snowflake Schema** based on the requirement.
* Experienced in Migrating Multi-tier Environments using **AWS Server Migration Service**.
* Knowledge of setting up Continues Golden AMI Vulnerability Assessment with **Amazon Inspector**.
* Excellent knowledge with **Amazon AWS** technologies, with a focus on highly scalable cloud-native architectural patterns, especially **EMR (Elastic Map Reduce), Kinesis**, and **Redshift**.
* Worked with Apache Ecosystem; Hadoop File Distribution System and **Hive** for aggregation and analytics of big data, MongoDB, **Apache Spark**, Kafka**, Pig**.
* Experience in Configuring the **Kubernetes cluster** and supported it running on the top of the CoreOS.
* Experience in managing infrastructure/applications built on Big Data technologies (e.g. **Hadoop, EMR, Spark**,) and web-based services.
* Worked in implementing entire CI/CD using Groovy scripting.
* Expertise in working with Aws environment, Linux servers for running business applications, Configuration Management Tools, Build, Deploy, Release Management and other tools.
* Highly skilled in the employment of ITIL Best Practices with proven leadership in the Incident, Problem, Change, Availability, and Service Delivery as well as in Process Building.
* Experience on **Jenkins/Hudson, Subversion (SVN), TFS, Git, GitHub, Bitbucket, Eclipse, Red Hat (RHEL), Shell script, UNIX, Linux**, and **Windows Server**.
* Extensively worked with Scheduling, deploying and managing container replicas onto a node cluster using **Kubernetes** and worked with building **Kubernetes** run time environment of the CI/CD system to build, test and deploy in an open source platform.
* Involved in process planning, change management and release management for the application, working in a standards based ITIL environment.
* Working exposure in **Build Release** management, **shell scripting**, **Unix System** administration**, Linux** Administration.
* Designed and implemented Software configuration management (SCM) and change management (CM) solution using **Ansible, Jira** and **Jenkins** ,Configured **SonarQube** for code coverage.
* Experience in installing, maintaining, and troubleshooting **WebLogic, Apache Tomcat** and security software’s in **Linux.**
* Experience with onboarding partners and customers in a **SOA environment**.
* Experience in working on Configuration Management Tools like **Ansible, Puppet** and **Chef**.
* Exposure in managing and setting up **Continuous Integration** using tools like **Jenkins, Docker.**
* Strong knowledge on source controller concepts like **Branches, Merges** and **Tags**.
* Experience working with **Java, Python**, scripting languages (such as **BASH & PowerShell**) and complementary programming languages, operating systems and supporting software.
* Ability in development and execution of **XML** and **Shell Scripts.**
* 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.
* Performed Server health monitoring and system tuning as per vendor recommendations.
* Built and maintained **Elastic Search**, **Log Stash, Kibana** stack to centrally collect logs that are used to monitor applications.
* Profound Knowledge in understanding **of ELK stack, Prometheus**.
* Good knowledge of **networking (TCP/IP)**& web (http/https) protocols.
* Quick analyzing and identifying ability of operational issues including good understanding of backups, deployment and load balancing techniques.
* Good exposure of **ANT**&**MAVEN** build tools.

**Technical Skills:**

|  |  |
| --- | --- |
| **Build Tools** | Maven, Ant, Eclipse |
| **Bug Tracking** | Jira |
| **Web/Application Servers** | Apache, Apache Tomcat, nginx, Web logic |
| **SCM/Version Control Tools** | GIT, TFS ,Bit bucket and SVN |
| **Automation container+** | Docker, VRA &VRO,Openshift |
| **Continuous Integration Tools** | Jenkins |
| **Continuous Deployment tools** | Puppet, Ansible, Chef&Terraform. |
| **Cloud services** | Amazon Web Services(AWS),Microsoft Azure |
| **Scripting Languages** | Shell scripting, Groovy,Python. |
| **Operating system** | Unix, Linux (Ubuntu, Debian, Red Hat(RHEL), Centos) and Windows |
| **Programming Languages** | Python, C, C++,C#,Swift and Golang. |
| **Databases** | RDBMS, Mysql, MS SQL,Oracle, Amazon DyanamoDB&MongoDB,Postgres,AWS RDS |
| **Web Services** | SOAP,REST,SOA. |
| **Pentest Tools** | Metasploit, NMAP, Wireshark and Kali. |
| **Routing** | OSPF, EIGRP, BGP, RIP-2, PBR, Route Filtering, Redistribution, Summarization, Static Routing. |
| **Firewalls** | Checkpoint, ISA 2004/2006 ,Palo Alto 3000/5000 |
| **Networking** | Conversant in LAN, WAN, Wi-Fi, DNS, WINS, DHCP, TCP/IP, ISCSI, Fiber, Firewalls/IPS/IDS. |
| **Network Protocols** | TCP/IP, UDP, DNS, DHCP, ARP, Telnet, SSH, IPSec, SSL. |

**Work Details**

**Client: CBRE, Dallas - TX March 2017 – Till Date**

**Title: Sr. AWS/Devops Engineer**

**Roles and Responsibilities**

* Designed and configured **VPC– IGW, EMR Public and Private subnet's, Security groups, NACL's, Route Tables, direct connect and VPN.**
* Created and Configured **VPC Peering Connections** and Resolved the issues of overlapping **CIDR’s.**
* Managed **S3 buckets** and **Object policies** using **IAM** and **S3 bucket Policies** and Created **MFA** for Accidental Deletion.
* Develops and configures cloud infrastructure for **SAAS applications** in AWS or other cloud environments.
* Optimizing the **EMRFS** for Hadoop to directly read and write in parallel to AWS **S3** performantly.
* Setting up continuous integration/deployment of spark jobs to **EMR (Elastic Map Reduce) clusters**.
* Good understanding of scalable distributed computing systems, software architecture, data structures and algorithms using Hadoop, **Apache Spark**, **Apache Storm** etc.
* Experience with Hadoop File Distribution System and **Hive** for aggregation and analytics of big data, MongoDB, **Apache Spark**, Kafka**, Pig**.
* Implemented Continuous Integration and Continuous Delivery (CI & CD) Process stack using AWS, GITHUB/GIT, Docker, Jenkins, Artifactory and Ansible.
* Experience with installing, configuring, administering, implementing and performance tuning **clustered SOA environments .**
* Enabled **Server side encryption** on **Amazon S3 Buckets**, **Objects** and **files** using **AWS KMS** and managed **Customer Master Keys.**
* Used **groovy scripts** for CI/CD pipeline builds and actively involved in entire **Pipeline setups** and **Jenkins** configuration.
* Managing storage requirements using **Amazon S3** service and Creating **S3 Buckets** and configuring Versioning and Life Cycle Management.
* Completed **POC** in cloud computing platform including AWS and **Snowflake**, migrate data to **S3 bucket** on AWS and use **Snowflake** for BI Ad-Hoc reporting.
* Taking **periodical snapshots** of **EBS Volumes** for **Backup and Disaster recovery** to meet **RTO** and **RPO**
* Created and implemented **complex Routing Strategies** using **Route53** with **latency** and **weighted** routing policies for **high availability** and **fault tolerance.**
* Configured **Splunk** (**Splunk Enterprise**) to gain real-time Operational Intelligence across **applications** and **services**. Integrated **Splunk** with **AWS** to analyses data from over 15 AWS data sources including (AWS **CloudTrail**, **AWS** Config, Amazon Virtual Private Cloud Flow Logs, AWS Billing and Cost Management) to deliver security, operational and cost management insights via pre-built **dashboards**, **reports** and **alerts**.
* Converted existing **Terraform** modules that had version conflicts to utilize **Cloud formation** **templates** during **deployments**, experienced with **Terraform** to create stacks in AWS, and Enhanced the **Terraform** scripts based on the requirement on regular basis.
* Work with **Chef automation** to create infrastructure and deploy application code changes autonomously.
* Worked with **AWS Lambda** workflow implementation and created functions to assign roles using **python scripts** to interact with application.
* Test **Chef Cookbook** modifications on cloud instances in AWS and using Test Kitchen and **Chef Spec**.
* Created and Maintained **Launch Configuration**, **Auto Scaling Groups** with the combination of **SQS** and **CloudWatch** to achieve **High Availability** and **Fault Tolerance**.
* Perform various functions, like storing and accessing data on cloud by using **REST API**, also skilled in deploying, managing and building the applications.
* Installed **TFS 2015/2013** and setup different **TFS** user groups for the project team.
* Configured **ELK** (**Elastic Search, Log stash, Kibana**) stack with **Jenkins** for deep search and **data analytics,** **centralized** **logging, and parsing** which are obtained from **Jenkins logs and sys’logs.**
* **Migrating** on premise **Database Servers** to **AWS** Cloud using **AWS DMS**.
* Created **AWS Config stack** in **Cloud Formation** that will monitor everything going in on **AWS** account.
* Created **Cloud Formation** Templates of current **AWS** Environment using **Cloud Former** and **Cloud formation Designer.**
* Experienced in authoring pom.xml files, performing releases with the **Maven release plugin**, and managing artifacts **in Sonartype NEXUS repository**.
* Configured **SonarQube** for **code coverage and sonar metrics** in the pipeline for quality of unit test cases by using **Coverage plugins** and generated build using **Maven**.
* Extensively worked with Scheduling, deploying and managing container replicas onto a node cluster using **Kubernetes** and worked with building **Kubernetes** run time environment of the CI/CD system to build, test and deploy in an open source platform.
* Administer and Maintain Source Code Repositories including **GIT**, Subversion and **TFS**.
* Installed and setup **ELK (Elasticsearch, Logstash and Kibana**) on a different operating system such as Linux and Unix -based Systems. Worked with Integration of **ELK** with **Docker**.
* Involved in **migrating** of Application Servers Static files to **AWS S3**.
* Designed and configured **Cloud Front** to serve the static and dynamic content to the **Edge locations** for End Users.
* Configuring alarms in **cloud watch**.
* Creating and Managing **Users, Groups** in **IAM** and created **policies** and Assigned **Roles** to **AWS** Resources.
* Monitored **AWS** Environment with the combination of **Cloud trial**, **Cloud watch** and **SNS.**
* Automating Infrastructure using **AWS Cloud formation** templates and updating the **Stacks** with the help of **Cloud Formation.**
* Customized **Alarms**. Managed **Billing** across several **AWS accounts** and reduced costs by effectively utilizing the resources.
* **Devops** experience with **continuous integration** (CI/CD) and automation tools such as **GIT**, **Jenkins**, **Ansible** and **Puppet**.
* Used AWS Beanstalk for deploying and scaling web applications and services developed with **Java** and **Docker** on familiar servers such as **Apache**, and **IIS.**
* Used **ANT and MAVEN** as a build tools on **java** projects for the development of build artifacts on the source code.
* Configuring and automate packaging using **Chef** and **Puppet.**
* Created **AMI’s**of EC2 instances for backup using **AWS CLI** and **IAM** security best practices
* Designing and deploying highly scalable infrastructure using **ELB**, **OpsWork** and **Auto scaling** services
* Created and Managed **DNS** entries using **Route53** to route traffic between different regions
* Created **SNS** notifications and assigned **ARN** to **S3** for object loss notifications.
* Configured & managed automation of windows patching using **EC2 systems manager.**

**Environment:** AWS (EC2, EMR, Lambda, S3, ELB, ,,Elastic Filesystem, RDS, DMS, VPC, Route53, Security Groups, CloudWatch, AWS Guard Duty, CloudTrail, IAM Rules, SNS ,Ansible, SQS,VPN,VPG,CGW), GitHub, Jenkins, Apache Tomcat 7.0, Python. Firewalls (Palo Alto,Checkpoint), Splunk.

**Client:AAA, Walnut Creek - CA Duration: May 2015 – Feb 2017**

**Title: Aws/Devops Engineer**

**Roles and Responsibilities:**

* Configured with **AWS** resources such as **EC2**, **VPC**, **Route53**, ELB, S3, **EMR**, supporting networking and management/monitoring services.
* Created and maintained **Highly Available** and **Fault Tolerant** infrastructure in **Amazon VPC** using **EC2** with **Elastic loadbalancing** and **Auto scaling** groups in **AWS** cloud.
* Monitored **AWS** resources such as Amazon **EC2** instances**, Amazon DyanamoDB** tables, and **Amazon RDS DB** instances, as well as custom metrics generated by applications and services, and any log files generate applications using CloudWatch.
* Own the software development process end-to-end, including: working with engineers and product managers to develop requirements; designing, architecting, planning, implementing, and testing new systems and features; deploying, and operating the production **EMR(Elastic Map Reduce)** systems.
* Developing and designing **POCs** in spark using **scala** to compare the performance of **spark**.
* Monitored Network,File systems and process activity by installing **AWS Inspector** Software Agents on **EC2** instances that are included in Assessments.
* Gathered and processed raw data at scale (including writing scripts with **Scala**, write **SQL queries**, etc.).
* Analyze and processed  **VPC** Flow Logs, **AWS CloudTrail** event logs, and **DNS** logs using **Amazon Guard Duty**
* Created **AWS Route53** to route traffic between different regions.
* Support current **migration** of data center to **AWS** Cloud.
* Created user and group accounts and allowing access using **IAM** and setting up own **VPC** networks and security groups.
* Configuring the **VPC** inbound and outbound networks using public and private **Subnets** according to the requirements.
* Created **S3 buckets** in the **AWS** environment to store files, sometimes which are required to serve static content for a web application.
* Built and deployed a **Chef Server** in AWS for infrastructure automation.
* Configuring **Virtual Private Network** (VPN) between **AWS** Regions As well as from cloud to On premise through **Virtual Private Gateway (VPG)** and **Customer Gateway (CGW).**
* Refactored messaging and storage implementation in loan originator service to use **AWS SQS**and **S3**.
* Knowledge of common technologies e.g web, mobile, database, API, **authentication & authorization**, Cloud & server computing, connected **IoT devices**, embedded software.
* Responsible for identifying, deploying, and supporting critical **IoT solutions.**
* Evaluate various infrastructure requirements and options for cloud based **IoT platforms.**
* Extensively working on **Continuous Integration (CI)** and Continuous Deployement (CD) process by automating build on time basis using **Jenkins.**
* Scheduled Jenkins jobs by integrating **GITHUB, Maven and Nexus** for the automated builds using **Shell**scripts..
* Designed and Developed  **Java**  Objects based on  Java  Patterns and UML Specifications.
* Using **Docker** in the process of implementing high level API which provide light weight containers to run the applications, As well as for building and pushing the **images** in various environments.
* Responsible for writing custom chef cookbooks to install packages and running services over the environment having numerous servers.
* Designed and implemented **Chef**, including the internal best practices, cookbooks, automated cookbook CI and CD system and made use of **Jenkins/TeamCity** for **Chef CI**.
* Developed custom automation build system using Hudson and **TFS** Build on **Team Foundation Server**
* Configured **Puppet** for configuration management for VMWare vSphere on premise Infrastructure and taken control of **Jenkins, GitHub, Artificatory** and all **internal build systems** for development team on an enterprise-level Java-based cloud orchestration/automation tool.
* Experience in running our own internal **kubernetes** cluster for DevOps tools such as Jenkins, and service like Elasticsearch, **Kibana, Prometheus**.
* Responsible for creation **Chef** recipes files to install Tomcat instances and to manage configuration files for multiple applications.
* Done Continuous Deployment and Configuration Mgmt capabilities with Ansible and Openshift.
* Rapid-Provisioning and Configuration Management for Linux, Windows using **Chef** and **Cloud Formation** Templates on **Amazon Web Services**.
* Configured and integrated the servers for different environments to automatically provision and configuration.
* Automation of infrastructure using **CloudFormation** and **Terraform.**
* Installed **Chef-Server** Enterprise On-Premise/WorkStation/ Bootstrapped the **Nodes** using **Knife**.
* Deployment of binary code in the form of **JAR**, **WAR** and **EAR** files to **JBoss** and **Apache Tomcat** server from the **Nexus Repository**.

**Environment:** AWS (EC2, EMR, Lambda, S3, ELB, ,,Elastic Filesystem, RDS, DMS, VPC, Route53, Security Groups, CloudWatch, AWS Guard Duty, CloudTrail, IAM Rules, SNS , SQS,VPN,VPG,CGW), GitHub, Jenkins, Apache Tomcat 7.0, Python. Firewalls (Palo Alto,Checkpoint), Splunk.

**BBVA Compass, Birmingham - Al Duration: Jan 2014 – April 2015**

**Title: Aws/ Devops Engineer**

**Roles & Responsibilities:**

* Configured **AWS** Identity Access Management (IAM) Group and users for improved login authentication.
* Launching and configuring of Amazon **EC2** (AWS) Cloud Servers using **AMI'**s (Linux/Ubuntu) and configuring the servers for specified applications.
* Deploying, managing, and operating scalable, **highly available**, and **fault tolerant** systems on **AWS**
* Migrating an existing on-premises application to **AWS**
* Experience with **CodeBuild, CodeCommit**, CodePipeline , **API Gateway**, CLI,Yaml,CloudFormation and **Serverless** Deployment.
* Implementing and controlling the flow of data to and from **AWS**.
* Worked on Build & Release activities for technologies like **Java, Oracle & ETL**.
* Installation, configuration and administration of **Linux** (Ubuntu, Red hat/SUSE, CentOS).
* Install and configuration of **Dockers.**
* Responsible for design and maintenance of the **GIT** Repositories, views, and the access control strategies.
* Worked in setting up the repos to various projects in **GIT.**
* Scripted Linux repository database comparisons using **Python**, **Ruby**, and **Shell**.
* Used **ANT** and **MAVEN** as a build tools on java projects for the development of build artifacts on the source code.
* Created the **ANT** scripts and extension of existing **ANT** scripts for deployment of applications to **HUDSON**.
* Responsible for build and deployment automation using **VM Ware ESX**, **Docker**, **Kubernetes** containers and **Chef**.
* Maintained **CI** (Continuous Integration) and **CD** (Continuous Deployment) methodologies with **Jenkins.**
* Tracking the bugs in project using **Jira**.
* Deployment and Configuration of application server **Tomcat** deploying **Java** and Web Application.
* Automated the front-ends platform into **highly scalable,** consistent, repeatable infrastructure using high degree of automation using **Chef,Ansible**, **Vagrant**, **Jenkins**, and **cloud Formation**.
* Research and implement new tools such as **Kubernetes** with **Docker** to assist with **auto-scaling,continuous integration**, rolling updates with no downtime.
* Setting up Change Management process and standardizing the **policies** for various applications.
* Using Confluence for technical documentation, setting up a knowledge base, setting up an intranet and **Confluence** for software teams.

**Environment:**AWS(IAM,EC2,ELB,AMI’s,Cloudwatch,Cloudtrial,NACL) Red hat Linux 7.x, AIX and Windows, AWS, Chef, Shell, Python, WebLogic Server 11g, IBM WebSphere MQ 6.0, F5 BIG-IP Load Balancers, Apache Tomcat 7.x, Configured plug-ins for Apache HTTP server 2.4, LDAP, JDK1.7, XML, SVN, GitHub. Firewalls (Palo Alto, checkpoint), McAfee, Nessus.

**Intergraph, India Duration: March 2011 – Dec 2013**  
**Title: Build and Release Engineer**

**Roles & Responsibilities:**

* Responsible for installing and configuring **CentOS** and **Solaris** platforms.
* Worked on logical volume management (LVM) by adding external disks from **SAN** storage.
* Created user accounts, provided pseudo permissions and maintain the user accounts with

automation Bash scripts.

* Responsible for providing Privileged Password Management access to accounts in Solaris 10,
* Linux and windows servers.
* Worked with virtualization using **VMware** Hypervisor, **VMware** workstation, **KVM** for

Solaris/centos servers.

* Installed and configured subversion on both Linux and windows platforms.
* Managed all the subversion repositories for **branching** and **tagging.**
* Worked closely with Project Managers, Developers and QA Analysts to ensure successful software

build and deployment for test, staging and production environment.

* Administered SVN for version control to include branching and merge management, and    
  **JIRA** to track process defects
* Created scripts that automate or improve the builds for all client side platforms – **iOS, Android, Windows**, using Git and Jenkins, among other tools.
* Execution of daily builds and releases using automated **python** scripts.
* Resolved update, merge and password authentication issues in Bamboo and JIRA.
* Used **SCM** tool like Team Foundation Server(TFS) Build Server.
* Implemented build automation using tools like **Jenkins.**
* Troubleshooting issues raised during the build and deployment process.
* Worked on deleting the old deployed code and deploy the newly built code using Web Sphere.

**Environment:** - SVN, Ant, Visual Studio 2013, Jenkins, Maven, Version One, Linux, shell scripting, Oracle, JIRA, Nexus, JBOSS, VMware, Virtualization. McAfee, Juniper, Symantec DLP.

**Wipro Technologies, Hyderabad - IN Duration: June 2010– Feb 2011**

**Title: Jr. Linux System Administrator**

**Roles & Responsibilities:**

* Install and configure **Ubuntu**, **Centos** on remote servers and Desktop servers.
* Installed and configured **Apache/Tomcat** web server.
* Working with developers to load software onto **Linux** Enterprise servers and debugging Scripts.
* Implementing Raid Levels (SDS and VERITAS)
* OS upgrades and installation of third party software, packages and patches as per requirement.
* Maintaining the **Linux** Firewall for network and implement to the network security.
* Resolving TCP/IP network access problems for the clients. Develop, Maintain, update various scripts for services (start, stop, restart, recycle) UNIX based shell.
* Experience installing and configuring SSH (Secure Shell) encryption to access securely on **Ubuntu** and **Red hat Linux.**
* Developed and managing Single Job for **iOS and Android build**, deployment (hockeyapp) and email notification with download link and release notes to all register users.
* Responsible for configuring and connection to SSH through **SSH** clients like **Putty** and **Cyber duck**.
* Regularly manage backup process for server and client data.
* Installing open source application, search, analyze and develop new application for users.
* Environment: RED HAT Linux server, Apache, LDAP, Solaris 9/10, Active Directory, Shell Scripting, Ubuntu.

**Environment:** RHEL 5, 6/ CentOS, Ubuntu, Debian, Shell/Bash Scripts, Ansible.

**Education**

**Bachelors in Information Technology** ,Acharya Nagarjuna University, India