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| **Santosh Kumar**  **AWS/Devops Engineer** |  |

**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**.
* Experience installing and developing on ELK.
* Experienced in working on **OpenShift** Container Platform.
* Implemented and administered Continuous Integration process using **Jenkins**, **Bamboo**and**TeamCity**.
* Worked in implementing entire CI/CD using Groovy scripting.
* Experience in testing the Builds after implementation using **Postman** test scripts.
* 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.
* Good hands on with container orchestration tools like Kubernetes, experience with RedHat OpenShift

Platform as a Service product.

* Experience with **GCP** services such as Compute Engine, App Engine, Cloud Storage, VPC, **Load Balancing**,

Big Query, Firewalls, Stack Driver and Azure services such as VMs, Networking (VNets, Load Balancers,

App Gateway, Traffic Manager), **Service Fabric**, Containers, Resource Manager, ARM automation, Key

Vault.

* Understanding of cloud platform offerings such as Cloud Foundry, Heroku, **Elastic Beanstalk**, **GKE**, Azure Service Fabric or similar.
* 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.**
* Written automation scripts for creating resources in **OpenStack Cloud using Python and terraform modules.**
* Implemented **automated** local user **provisioning in instances created in OpenStack** cloud through **Ansible Play books**.
* Test **Chef Cookbook** modifications on cloud instances in AWS and using Test Kitchen and Chef Spec.
* Deploying the OpenStack components on **multimode with High availability environment.**
* Experience with onboarding partners and customers in a **SOA environment**.
* Experience in frontend technologies like **Angular 4,Reactjs, nodejs**.
* 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.**
* 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.**
* 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:**

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| **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,VSTS |
| **Continuous Deployment tools** | Puppet, Ansible, Chef&Terraform. |
| **Cloud services** | Amazon Web Services(AWS),Microsoft Azure |
| **Scripting Languages** | Shell scripting, Groovy,Python,Bamboo. |
| **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: Texas CPA, Austin, TX May 2018 – Till Date**

**Title: Cloud 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.
* Infrastructure design for the **ELK** Clusters.
* Partner with product management and product development to drive adoption and massively scale IoT capabilities throughout the enterprise.
* Work with application development team to adopt continuous integration and continuous delivery (CI/CD) tools including GitHub Enterprise, Cloudbees Jenkins, Nexus Repository Manager, SonarQube.
* Enabled **Server side encryption** on **Amazon S3 Buckets**, **Objects** and **files** using **AWS KMS** and managed **Customer Master Keys.**
* Migrated TFS and **Subversion(SVN)** to Bit Bucket Repository with history.
* Managed Active Directory(AD) from **Atlassian Crowd** to control users in BitBucket, Jira and confluence.
* Worked on upgrading jenkins instance and **Tomcat** Servers.
* Used **groovy scripts** for CI/CD pipeline builds and actively involved in entire **Pipeline setups** and **Jenkins** configuration.
* Worked on to setup for the various **Jenkins CICD** pipeline configurations for all the micro services.
* Created build and deployment jobs in **Bamboo** for various components.
* Used **AWS**Bean Stalk for deploying and scaling web applications and services developed with Java, Node.js, Python on familiar servers such as Apache, and IIS.
* Configured **XL Deploy** and **XL Release** Tools From the Scratch to the following applications.
* Containerizing the integration process by gitlab CI within docker
* Wrote **Ansible Playbooks**with **Python, SSH**as the Wrapper to Manage Configurations of **AWS Nodes**and Test Playbooks on AWS instances using **Python**, run Ansible Scripts to provision development servers.
* Configured **Splunk** (**Splunk Enterprise**) to gain real-time Operational Intelligence across **applications** and **services**.
* Complete knowledge of GCP standards and regulations
* Create clusters in Google Cloud and manage the clusters using Kubernetes(k8s).
* Using Jenkins to deploy code to Google Cloud, create new namespaces, creating Docker images and pushing them to container registry of Google Cloud.
* Setup Alerting and monitoring using Stackdriver in GCP.
* Converted existing **Terraform** modules that had version conflicts to utilize **Cloud formationtemplates** 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.
* Developed automation code using Opscode **Chef** and **Python** to build Openstack environments autonomously.
* 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 **Cloud Watch** to achieve **High Availability** and **Fault Tolerance**.
* 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.**
* 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**.
* Designed and configured **Cloud Front** to serve the static and dynamic content to the **Edgelocations** 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.**
* On boarded and mobile **IOS** and **android** applications onto jenkins CI/CD pipeline.
* **Devops** experience with **continuous integration** (CI/CD) and automation tools such as **GIT**, **Jenkins**, **Ansible**.
* Administration of **JBoss** and **Glassfish**, manually and with Puppet.
* 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.

**Environment:** AWS, Jira, Terraform, JBoss, Subversion, Jenkins, VMware, GCP, TFS, CVS, Shell, Perl, Nagios, GIT, GITHUB, Apache tomcat, Chef, ANT, MAVEN, and LINUX.

**Client:CBRE, Dallas - TX Duration: May 2016 – May 2018**

**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.
* Used **Elasticsearch** for powering not only Search but using **ELK** stack for logging and monitoring our systems end to end Using Beats.
* Used AWS Beanstalk 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
* Troubleshooting any build issue with **ELK** and work towards the solution.
* 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**.
* Created functions and assigned roles in AWS **Lambda**to run python scripts.
* Automate provisioning and repetitive tasks using **Terraform**and **Python**, Docker container, Service Orchestration.
* Created AWS EBS volumes for storing application files for use with AWS EC2 instances whenever they are mounted to them and installed **Pivotal Cloud Foundry (PCF)**on EC2 to manage containers created by **PCF.**
* Done configuration and administration of continuous integration tool Jenkins. Experience with **CloudBees** Enterprise Jenkins
* Worked on the ms's logs and sonar dashboard monitor for all the existing **micro services**.
* Worked on **GCP** and **AWS** as a Hybrid Cloud platform for application deployment.
* 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.
* 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.
* Designed and implemented **Chef**, including the internal best practices, cookbooks, automated cookbook CI andCD 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**.
* Created, customized and managed new and existing projects in JIRA 7 (Server), including JIRA Agile and spaces in **Confluence**.

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

**BBVA Compass, Birmingham - Al Duration: Jan 2014 – April 2016**

**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 2012 – 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 2011– Feb 2012**

**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 2010