**Santosh Subedi.**

**DevOps/Build & Release**

Professional Summary:

* More than 8+ years of IT experience which includes detailed technical knowledge and experience of Build Engineering and Configuration Management processes, tools and best practices.
* Experienced as DevOps Engineer, build & release engineer with extensive knowledge of cloud.
* Experienced on Python, Groovy, lambda, Ruby, Java and Shell scripting but am passionate about learning new languages on demand.
* Loves researching and implementing monitoring solutions for challenging architectural problems.
* Played a key role in automating the deployments on AWS using GitHub, Terraform, Puppet, Chef and Jenkins.
* Used Bash and Python, included Boto3 to supplement automation provided by Ansible and Terraform for tasks such as encrypting EBS volumes backing AMIs and scheduling Lambda functions for routine AWS tasks.
* Extensive experience in setting up the CI/CD pipelines using Jenkins, Maven, Nexus, GitHub, CHEF, Terraform and AWS.
* A .Net with DevOps Professional with 8+ years of diverse experience in all phases of SDLC involving Analysis, Design, Development, Deployment, Testing and Implementation of Client/Server applications using Microsoft .NET and Java based applications.
* Experienced with Ubuntu/Linux and DevOps environment.
* Experienced with Application Deployments & Environment configuration using Ansible.
* Deployed and configured Jenkins CI including slave node configurations.
* Experienced on container Orchestration tools such as Docker and Kubernetes.
* Experienced with build automation tools such a Jenkins.
* Used Jira, Confluence as defect management.
* Excellent in configuration management using Ansible, Chef, and Puppet.
* Experienced in working with SQL database such as MySQL, Aurora, Oracle PostgreSQL.
* Experienced in working with Non-SQL database such as AWS DynamoDB.
* Experienced with automating release process using Maven, Jenkins, and Jira as tools in diversified project environment.
* Extensively used build utilities like Maven.
* Experienced with Version Control application such as Git, Gitlab and GitHub, Cassandra TeamCity, Octopus.
* Experience coding in java, Node.JS, Python, and Golang
* Good understanding of **Pivotal cloud foundry**(PCF) Architecture (Diego Architecture), **PCF** components and their functionalities. Experienced in using **Pivotal Cloud Foundry** (PCF) CLI for deploying applications and other CF management activities.
* Experienced using AWS resources such as EC2, S3, EBS, S3, VPC, IAM, Security Groups.
* Experience in working with DevOps, CI/CD using CI tools like Jenkins, Maven, Artifactory, SonarQube, Ansible, JUnit and Fortify.
* Extensive experience with Installation, Configuration, Maintenance, and Troubleshooting in Linux (RHEL 5.x, 6.x, 7.x, CentOS 5.x, 6.x, 7.x, Oracle Linux 5.x, 6.x, 7.x, Ubuntu 12.x,13.x,14.x) and Unix (Solaris 8, 9,10).
* Demonstrated strong proficiency in automating infrastructures deployment and setup, utilizing Kickstart servers for provisioning Red Hat Enterprise Linux 5.x/6.x/7.x and Oracle Linux 5.x/6.x/7.x servers.
* Expertise in troubleshooting the problems generated while building, deploying and also in production support.
* Efficient in User Administration, Group Administration, and Process Monitoring and Management in fast-paced environments.
* Excellent Team Player with ability to think analytically, excellent verbal and written communication skills.
* Analytical, quick, learner, result-oriented Seeking opportunities that will enable me to leverage my skills and knowledge to exceed expectations.

Technical Skills:

Work Environment:SDLC Agile, Scrum, Waterfall

Cloud Services:AWS,PCF

Build Tools:ANT, MAVEN

Continuous Integration/Continuous Delivery: Jenkins

Web/Application Servers: Apache Tomcat, JBOSS, HTTP Server, WebLogic

Bug Reporting Tools: JIRA, and Confluence.

Virtualization/Containerization Platforms: Virtual Box, Vagrant, Docker

Version Control: Git, Gitlab, Subversion

Logging & Monitoring: CloudTrail, CloudWatch, Splunk, Logstash, Nagios

Configuration Management: Ansible, Chef, Puppet, Kubernetes

Operating Systems: Linux, Windows, UNIX

Infrastructure as Code (IaC): CloudFormation, Terraform,Golang

Database & Storage Management: RDS (MySQL, Aurora, Oracle PostgreSQL), DynamoDB, S3, Glacier, Redshift, EBS, EFS.

Licenses & Certifications:

AWS Certified Solutions Architect-Associate

Issued By: Amazon Web Services (AWS) Issued On: March 10, 2020

Credential ID: 2RRBWVK2MM1EQYW4 Credential URL: http://aws.amazon.com/verification

Work Experience

**Role : AWS DevOps Engineer / Build & Release Engineer**

**Client : Conduent-Austin, TX**

**Oct 2019 – Till date**

Responsibilities:

* Planned, deployed, monitored, and maintained AWS cloud infrastructure consisting of multiple EC2 Instances as required in Dev, Test, Non-production, and Production Environments.
* Created CloudFormation templates to provision various AWS resources like EC2, ELB, ASG, ENI, S3, SNS, Security Groups etc.
* Created security groups, network ACLs, Internet Gateways, Route tables and Elastic Network Interface (ENI) to ensure a secure zone for organizations in AWS public cloud.
* Created users, roles and groups using Identity Access Management (IAM) and attached the required policies
* Created monitors, alarms, and notifications for EC2 hosts using Cloud Watch.
* Worked on Multiple AWS instances, set the security groups, Elastic Load Balancer and AMIs, Auto scaling to design cost effective, fault tolerant and highly available systems.
* Created S3 buckets and managed policies for S3 buckets and utilized S3 bucket and Glacier for archival storage and backup on AWS.
* Involved in supporting cloud instances running Linux and Windows on AWS, experience with Elastic IP, Security Groups and Virtual Private Cloud in AWS.
* Utilized AWS CLI to automate backups of ephemeral data-stores to S3 buckets, EBS and create nightly AMIs for mission critical production servers as backups.
* Cloud technologies like Cloudfoundry, VMware, Openstack, Cloud solutions like AWS, Azure, Google, Oracle
* Migrated jobs from all standalone Jenkins servers to Cloudbees Jenkins in Kubernetes and created custom Docker images for using as agents/slaves
* Knowledge to provision a Databricks workspace, an Azure storage account, and a Spark cluster. And then execute and manage a Spark Job.
* Experience in Python programming for deployment of Java applications and implementation and automation of Shell scripts for build and release automation.
* 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.
* Implemented Jenkins Code Deploy plugin to deploy to AWS and used to automate the build process and deploy the application to Tomcat server.
* Automated deployment of builds to different environments using Jenkins and Ansible Playbooks.
* Administered and managed a Splunk server to monitor both Windows and Linux physical and virtual environments.
* Automation/Simplification of Digital Guarding Process through SPLUNK.
* Managed Ansible Playbooks with Ansible roles.
* Extensive exposure to Configuration Management policies and practices with regards to SDLC; along with automation of scripting using BASH/Shell.
* Monitoring of Linux servers and applications via CloudWatch.
* Setting up SSL certificates in different environments for Java Spring boot Microservices.
* Maintained Fortify Scan and Black Duck scan reports and ensured the application code packages were not subject to vulnerability.
* Implemented AWS PaaS/FaaS services, Serverless ECS, Lambda, API Gateway, Containerization and Microservices, Lightweight architectures including JavaScript frameworks.
* Configured Logstash, Log4j and Kafka to send application Logs to Splunk.
* Wrote Ansible playbooks to manage configurations and install packages on AWS instances using Jenkins.
* Implemented Micro-services using **PCF** platform build upon Spring Boot Services. Managed the lifecycle of containers and processes running using **Diego** cell rep. Worked on **PCF Dev** to push and scale apps for debugging applications locally on a **PCF** deployment.
* Worked in implementing entire CI/CD using Groovy Scripting by writing Jenkins file.
* Implemented Continuous Integration and Continuous Delivery using Jenkins and Git, GitLab frog Artifactory, Ansible Playbooks, AWS EC2.
* Ensured successful architecture and deployment of enterprise-grade **PaaS** solutions using **Pivotal Cloud Foundry** ( **PCF** ) as well as proper operation during initial application migration and set new development.
* Performed Branching, Tagging, Release Activities on Version Control Tool GITLAB.

Environment: AWS (EC2, PCF,ELB, ASG, SNS, ENI, S3, CloudWatch, CloudFormation), IaaS, PaaS, IaC, Jenkins, GitLab, Jira, Unix/Linux, Shell Scripting, Groovy.

**Role : DevOps / Build & Release Engineer**

**Client : GreenDot- Lajolla, CA**

**September 2017 - July 2019**

Responsibilities:

* Planning, deploying, monitoring, and maintaining Amazon AWS cloud infrastructure consisting of multiple EC2 nodes and VMware VM's as required in the environment.
* Created CloudFormation and Terraform templates to provision various AWS resources like EC2, ELB, ASG, ENI, S3, SNS, Security Groups etc.
* Integrated with Azure Active Directory to run complete Azure-based solutions using Azure Databricks.
* Used security groups, network ACLs, Internet Gateways, NAT instances and Route tables to ensure a secure zone for organizations in AWS public cloud.
* On boarded and migrated test and staging use cases for applications to AWS cloud with public and private IP ranges to increase development productivity by reducing test-run times.
* Involved in building own PaaS with Docker; deployed various applications through Dockers containers.
* Dockized applications by creating Docker images from Docker file.
* Created monitors, alarms and notifications for EC2 hosts using Cloud Watch.
* Implemented and maintained Chef Configuration management spanning several environments in VMware and the AWS cloud.
* Working on Multiple AWS instances, set the security groups, Elastic Load Balancer and AMIs, Auto scaling to design cost effective, fault tolerant and highly available systems.
* Creating S3 buckets and managing policies for S3 buckets and Utilized S3 bucket and Glacier for Archival storage and backup on AWS.
* Worked on integrating GIT into the continuous Integration (CI) environment along with Anthill-Pro, Jenkins
* Developed automation scripting in Python (core) using Puppet to deploy and manage Java applications across Linux servers. Conducting meetings with developers and managers to resolve merge issues during build and release.
* Virtualized the servers using the Docker for the test environments and dev-environments needs. And configuration automation using Docker containers.
* Wrote Ansible playbooks with Python SSH as a wrapper to manage configurations and the test playbooks on AWS instances using Python.
* Used coding of java, Python, specializing in Golang
* Used Splunk as a logging and monitoring tool to identify and resolve infrastructure problems before they affect critical processes and worked on Nagios Event handlers in case of automatic restart of failed applications and services.
* Well Versed with Configuring Access for inbound and outbound traffic RDS DB services, DynamoDB tables, MongoDB, EBS volumes to set alarms for notifications or automated actions.
* Expert Knowledge in Bash Shell Scripting, Automation of CRON Jobs.
* Implemented a GIT mirror for SVN repository, which enables users to use both GIT and SVN.
* Implemented Continuous Integration using Jenkins and GIT.
* Used Groovy scripts for CI/CD pipeline builds, and activity involved in the entire pipeline setup and Jenkins configurations.
* Developed build and deployment scripts using ANT and MAVEN as build tools in Jenkins to move from one environment to other environments.
* Configure and ensure connection to RDS database running on MySQL engines.

Environment: AWS (EC2, VPC, ELB, S3, RDS, Cloud Trail), GIT, EBS, Cloud watch, CloudFormation, Terraform, Docker, Jira, AWS CLI, AWS Auto Scaling, Unix/Linux, Groovy, Shell scripting, Cassandra.

**Role : DevOps / Build & Release Engineer**

**Client : DXC Technologies-Tyson’s, VA**

**August 2014 - August 2017**

Responsibilities:

* Experience in Software Integration, Configuration, building, automating, managing and releasing code from one environment to another environment and deploying to servers
* Involved in supporting cloud instances running Linux and Windows on AWS, experience with Elastic IP, Security Groups and Virtual Private Cloud in AWS.
* Configured a CloudWatch logs and Alarms.
* Implementing Structured Streaming with Azure Databricks
* Various components of k8s cluster on AWS cloud using ubuntu 18.04 linux images.
* Setting up AWS cloud environment manually.
* Deployed and configured the DNS (Domain Name Server) manifest using CoreDNS.
* Installation and setting up kubernetes cluster on AWS manually.
* Extensive experience on configuring Amazon EC2, Amazon S3, Amazon Elastic Load Balancing IAM and Security Groups in Public and Private Subnets in VPC and other services in the AWS.
* Managed network security using Load balancer, Auto-scaling, Security groups and NACL.
* 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.
* Implemented Jenkins Code Deploy plugin to deploy to AWS and used to automate the build process and deploy the application to Tomcat server.
* Used Cloud Front to deliver content from AWS edge locations to users, allowing for further reduction of load on front- end servers.
* Developed a Terraform plugins using Golang to manage infrastructure which improved the usability of our storefront service.
* Created Docker images using a Docker file, worked on Docker container snapshots, removing images and managing Docker volumes.
* Configured Docker container for branching purposes and Implemented Docker automation solution for Continuous Integration / Continuous Delivery model.
* Created and implemented chef cookbooks for deployment and used Chef Recipes to create a Deployment directly into Amazon EC2 instances.
* Developed Chef Cookbooks to manage system configuration and for Tomcat, MySQL, Windows applications and versioned them on GIT repositories and Chef Server.
* Implemented Kafka Security Features using SSL and without Kerberos. Further with more grain-fines Security I set up Kerberos to have users and groups this will enable more advanced security features.
* Installed RedHat Linux using kick-start and applying security polices for hardening the server based on company's policies.
* Created users, roles and groups using Identity Access Management (IAM) and attached the required policies.
* Performed Branching, Tagging, Release Activities on Version Control Tool GIT (GitHub).

Environment:AWS Cloud, AWS Lambda, EC2, Cassandra, PCF,Puppet, GitLab CI, GitHub, RedHat Linux 5.x/6.x, Windows 2008/2012, SVN, GitHub/BitBucket, Azure, Maven, Ruby, Shell scripts, Ant, Terraform, Splunk, Nagios, Sonar, Agile, IaaS, PaaS, SaaS, PowerShell, WebLogic, Apache Tomcat, JBOSS.

**Role : Build & Release Engineer**

**Client : F1 Soft International- Kathmandu, Nepal**

**July 2012 - Apr 2014**

Responsibilities :

* Involved in End to End environment setup. Software installation server installation and tools installation etc.
* Managed the release process, from initial scheduling to actual release coordination through post-release support.
* Implemented Infrastructure automation through Puppet, for auto-provisioning, code deployments, software installation, and configuration updates.
* Administered and Engineered Jenkins for managing weekly Build, Test and Deploy chain, SVN/GIT with Development/Test/Production Branching Model for weekly releases.
* Automated Weekly releases with ANT/Maven scripting for Compiling Java Code, Debugging and Placing Builds into Maven Repository.
* Responsible for Set-up, administrate and maintain GitHub, Jenkins.
* Used GIT to manage all the build release source code and Jenkins for automatically build and deploy.
* Administer and configured Change and Release Management tool suite including Perforce source code, Jenkins build, Maven artifact, and perform Release to customer systems daily.
* Implemented Infrastructure automation through Puppet, for auto-provisioning, code deployments, software installation, and configuration updates.
* Coordinated with developers, Business analyst, and Managers to make sure that code is deployed in the production environment.
* Created Kubernetes deployment, statefulsets, Network policy etc
* Created Kubernetes dashboard, Network policies.
* Created metrics and monitoring reports using Prometheus and Grafana dashboards

Environment : Deploy chain, SVN/GIT, Jenkins, Maven, ANT, Deploy chain.

Education Details:

Bachelors Degree in Business Studies(BBS), Tribhuvan University, Kathmandu, Nepal, 2012.