**Avash Rimal**

**AWS DevOps/Cloud Engineer**

**AWS Certified Solution Architect**

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 **Summary**

* **7+ Years Experienced AWS/DevOps engineer with bachelor’s degree in Computer Science and Extensive experience in AWS, DevOps, Build/Release Management, Configuration Management tools, GIT and Containerization SKILLS**
* Experience in assigning infrastructure to an Auto Scaling group to scale-up and scale-down instances during heavy and low traffic and creating IAM roles (Identity Access management) and setting up policies.
* Experience in creating a very secure infrastructure in AWS by configuring VPC (virtual private network), IG (internet Gateway), Routing tables, ELB (Elastic Load Balancer), NACL (Network Access Control List), and Subnets (Public and Private subnets).
* Configured and maintained Jenkins to implement the CI process and integrated the tool with Ant and Maven to schedule the builds.
* Worked in all areas of Jenkins setting up CI for new branches, build automation, plugin management and securing Jenkins and setting up master/slave configurations.
* Expertise in SCM, AWS, Azure, SDLC, CI/CD, Cloud Computing and Build/Release Management and Agile Methodologies.
* Experienced in configuring Cloud platform such as Virtual Networks Multi-site, Cross-site, VMs, Azure AD, Load Balancers, Azure SQL, Cloud Services, etc.
* Experience in setting up the Chef Workstation, Chef Repo as well as Chef Nodes from the scratch.
* Developed Chef Recipes to configure, deploy and maintain software components of the existing infrastructure.
* Expert in maintaining and using Ansible server and workstation to manage and configure nodes.
* Created Ansible playbooks which are the entry point for Ansible provisioning, where the automation is defined through tasks using YAML format and also run Ansible Scripts to depending on provision to Dev servers. Converted a slow and manual procedure to dynamic API generated procedures in Ansible.
* Experienced in working on several Docker components like Docker Engine, Hub, Machine, creating Docker images, Compose, Docker Registry and handling multiple images primarily for middleware installations and domain configurations.
* Worked on Docker container snapshots, attaching to a running container, removing images, managing Directory structures and managing containers.
* Extensively involved in infrastructure as code, execution plans, resource graph and change automation using Terraform. Managed AWS infrastructure as code using Terraform.
* Expertise in writing new plugins to support new functionality in Terraform
* Hands on experience with Kubernetes, Rancher and Docker Swarm.
* Setting up SWARM using Kubernetes and deployed containers using Docker inside the application. Used Kubernetes to manage containerized applications using its nodes, Config Maps, selector, Services, and deployed application containers as Pods.
* Experience in working on version control systems like Subversion, and GIT and used Source code management client tools like Git-Bash, Git-Hub, Git GUI, Visual SVN, Tortoise SVN, Stash, Source Tree, other command line applications etc.
* Build, design and implement scalable cloud-based web applications with GCP.
* Experience in Bug Tracking, Project Management tools like JIRA, ClearQuest and HP Quality Center.
* Developed scripts using PERL and BATCH files for Automation of Activities and builds, multiple Scripting languages like Bash, Python, Ruby, Shell, PowerShell.

**Education**

* Bachelor’s in Information Systems from University of Texas at Arlington. (UTA)

**Certifications**

* **AWS Certified Solution Architect Associate**

**Technical Skills**

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| **Cloud Computing**  | EC2, ELB, VPC, RDS, IAM, Cloud formation, S3, Cloud Watch, Cloud Trial, SNS, SQS, SWF, EBS, EMR, Dynamo DB, , Elastic Beanstalk, Route53, Aurora. |
| **Azure** | Azure key vault, App Services, ARM Templates, Storage Blobs, VSTS,VPN gateway. |
| **Monitoring Tools** | Nagios, Splunk and AWS CloudWatch. |
| **Configuration Management tools** | Chef and Ansible. |
| **CI/CD Tools** | Jenkins and Hudson. |
| **Scripting** | Java, JavaScript, NodeJS, Power shell, Python, Bash |
| **Containerization** | Docker, Docker Swarm, Rancher |
| **Version Control Tools** | GIT, SVN and Bit-Buckets |
| **Databases** | Oracle, MS SQL Server, MySQL, NoSQL, PostgreSQL. |
| **Build tools** | Ant, Maven, Gradle. |
| **Virtualization** | Oracle Virtual Box, VMware, Vagrant. |

**Professional Experience**

**First American Financial Corporation, Santa Ana, California
AWS DevOps/Cloud Engineer - Jan 2021- Current
Responsibilities:**

* Supported AWS cloud instance such as management & configuration of various AWS products.
* Performed all the Linux operating system management, patch management, configuration management on the Linux instances in AWS
* Worked on AWS cloud computing platforms and its versatile scalability such as VPC, EC2, ELB, IAM, S3, auto scaling, code deploy, RDS, Lambda, custom monitoring with cloud watch.
* Worked on AWS in creation of Autoscaling Group and lunch configuration
* Configured an AWS Virtual Private Cloud (VPC) and Database Subnet Group for isolation of resources within the Amazon RDS Aurora DB cluster.
* Work in Core Java, Messaging (JMS), XML, XSLT or JAXB, Web API.
* Work with databases such as SQL, MS SQL, MySQL, NoSQL.
* working Agile environment with incremental code deployments (Agile, Jira, WorkFront, Scrum/Kanban/SAFe, etc.)
* Orchestrated and migrated CI/CD processes using Cloud Formation, terraform templates, and Containerized the infrastructure using Docker setup in AWS and Amazon VPCs.
* Wrote the Terraform scripts to install the Kubernetes cluster and its dashboard on to the AWS.
* Managed all existing servers and automated the build/configurations of new servers by integrating Ansible to manage and integrated Ansible with Jenkins, GitHub, and Maven.
* Wrote scripts on Python, shell and bash and modified existing scripts on automations.
* Wrote deploy hooks/scripts for code deploy to deploy code from Git using Jenkins to AWS EC2 instances and also have written multiple Jenkins jobs in bash
* Created and hardened an Amazon Machine Image (AMI) and installed google authenticator.
* Designed, configured and deployed Amazon Web Services for a multitude of applications utilizing the Amazon Web Services focusing on high-availability, fault tolerance and auto-scaling.
* Wrote Docker files and created images out of it as well as pulling and pushing Docker images to various environments from Docker Hub Registry.
* Deployed Dockerized Applications in Kubernetes cluster using Helm Charts.
* Worked on setting-up continuous deployment pipelines using Jenkins across multiple Kubernetes clusters to stress the clusters with new infrastructure tools for Kubernetes in development environments. Automated these pipelines through Jenkins using pipeline script.
* Installed Jenkins on AWS EC2 instance and configured to run all the application cron jobs to run through Jenkins server.
* Worked with GIT to store the code and integrated it into Ansible Tower to deploy the playbooks.
* Worked on the concept of GIT cloning to create GIT repository.
* Developed AWS Cloud Formation templates to create custom sized VPC, subnets, NAT, EC2 instances, ELB, Security Groups.
* Used Ansible for central management of Linux configuration files and software package management.
* Managed Amazon Web Services (AWS) infrastructure with automation and configuration management tools Ansible.
* Configured Jenkins pipeline jobs workflows to improve reusability for building pipelines.
* Configured and managed Apache Web Server on Linux for web based applications using REST/SOAP, Apache and WebLogic.

**ArcherDX, Boulder, CO
AWS DevOps/Cloud Engineer - Jul 2019- Dec 2020
Responsibilities:**

* Migration to Amazon Web Services & cloud technologies from their current datacenter and virtual environments.
* Worked on core AWS services such as setting up EC2 instances in AWS, configuring security groups, and setting up Elastic 1P's and Configured Elastic Load Balancers (ELB) with EC2 Auto scaling groups.
* Created branching and tagging strategies to maintain the source code in the Bitbucket repository and coordinate with developers with establishing and applying appropriate branching, naming conventions using GIT source control for Nodejs applications.
* Configured and automated the Jenkins Build jobs for Continuous Integration and Continuous Deployment (Cl/CD).
* Created Docker images using a Docker file, worked on Docker container snapshots, removing images and managing Docker volumes and used Kubernetes for orchestration.
* Worked with Scheduling, deploying, and managing container replicas onto a node cluster using Kubernetes.
* Maintained the user accounts (1AM), RDS, Route 53, VPC, RDB, Dynamo DB, Lambda, SES, SOS and SNS services in AWS cloud.
* Migrated the application which is hosted on EC2 to a serverless framework using AWS lambda & API gateway.
* Used Helm charts to deploy an application and used GO to write helm templates
* Extensively used Kubernetes Charts Repository to provide CI for pull services. Used Helm tools to install the Helm charts and packages are created in the form of Helm charts.
* Managed central repositories &amp; implemented with GIT to host GIT central repositories for source
* code across products, facilitate code reviews &amp; login audits for Security Compliance.
* Worked on AWS Elastic load balancing (ELB) for deploying applications in high availability and AWS Auto
* Scaling for providing high availability of applications and EC2 instances based on the load of applications.
* Designed AWS Cloud Formation templates to create custom sized VPC, subnets, NAT to ensure successful deployment of Web applications and database templates.
* Setup and build AWS infrastructure various resources, VPC EC2. S3, 1AM, EBS, Security Group, Auto Scaling, and RDS in Cloud Formation.
* Installed, configured, and maintained DNS, FTP, TCP/IP and Samba on Red Hat Linux
* Implemented Continuous Delivery framework using Jenkins, Maven and Ansible in Linux! UNIX environment.
* Knowledge in Terraform as infrastructure providers, build images using Packer.
* Developed Python scripting for automaton purpose and built artifacts (war and ear) from Sonatype Nexus Artifactory are deployed into a Apache Tomcat app server using Shell Scripts.
* Build out server automation with Continuous Integration - Continuous Deployment (C1/CD) tools like Jenkins/Maven/ANT/Nexus for deployment and build management system for Nodeis applications. Installing, configuring, and administering Jenkins Continuous Integration and Continuous
* Deployment (Cl/CD) tool on Linux machines along with adding/updating plugins such as Git, Maven, ANT, Sonatype Nexus, Bitbucket and Ansible.
* Involved in Python Script to automate Cron jobs and system maintenance.

**Environment:** AWS, Ansible, Jenkins, Confluence, Maven, Microservices, ANT, Docker, Bitbucket, Groovy, GIT, Unix, Terraform, Cloud Formation, Bash, Kubernetes, Python, Linux, Shell Scripts, Chef, Bash.

**Bayer Health care, Pittsburgh, PA****AWS DevOps/Cloud Engineer - June 2018- July 2019
Responsibilities:**

* Designing, configuring, maintaining and managing the entire AWS private infrastructures which includes EC2, Auto-Scaling groups, Application Load Balancer, S3, Lambda, CloudWatch, RDS, VPC, SNS, SQS, CloudFront, CloudTrail, IAM for large scale mission critical applications.
* Acted as a full stack engineer by maintaining Database, servers, automation, deployment, security in the project.
* Built the entire cloud infrastructure required for an application from scratch in AWS Cloud.
* Deployed entire infrastructure and implemented complete CICD pipeline in AWS Cloud Production for the business-critical applications and provided support 24/7.
* Building/Maintaining Docker container clusters managed by Kubernetes, Linux, Bash, GIT, Docker, on GCP (Google Cloud Platform). Utilized Kubernetes and Docker for the runtime environment of the CI/CD system to build, test deploys
* Developed Infrastructure as code by writing CloudFormation templates in JSON to build the whole infrastructure and deployed them using CloudFormation stack in AWS utilizing Jenkins and integrated ansible plugins.
* Involved in the provisioning of Azure infrastructure and versatile with Azure IaaS & PaaS -Resource Groups, Web Roles, Worker Roles, SQL Databases, Virtual Networks, Subnet's, Storage Accounts, CDN, Security Groups, Load Balancers, App Gateways, App Services, AD Licenses, Office365.
* Assisting teams by developing ansible playbooks in YAML and used them in the process of automating the deployment of applications and establishing a complete CICD (Continuous Integration and Continuous Deployment) Jenkins pipeline written in Groovy.
* Developing entire automated process to provide 1 click deployment for multiple applications in AWS.
* The Jenkins CICD pipeline includes building, testing the code and generating the artifact and pushing the artifact to JFrog artifactory and deployment in Cloud servers.
* Scripting in Python to establish Lambda server less computing and associate it to Cloud Watch rule to stop and start EC2 instances on nightly basis for cost efficiency.
* Creating Jenkins pipelines by coding pipeline as code in Groovy.
* Generating groovy scripts in such a way to alert teams in case of any pipeline failure.
* Developing stages in Jenkins pipelines by writing groovy scripts in very fault tolerant way such that if any failure happens making it to retry the stage on its own.
* Scripting dependent stages in groovy which proceeds depending on the pipeline status.
* Containerizing Spring Boot applications using Docker and deploying them onto the servers.
* Used Jenkins and pipelines to drive all micro services builds out to the Docker registry and then deployed to Kubernetes

**Environment:** AWS EC2, Auto-Scaling groups, Application Load Balancer, S3, Lambda, CloudWatch, RDS, VPC, SNS, SQS, CloudFront, CloudTrail, IAM), Ansible, Jenkins, Kubernetes, Docker.

**Barclays Cards, Wilmington, DE
AWS DevOps/Cloud Engineer - March 2017 – June 2018
Responsibilities:**

* Migration to Amazon Web Services & cloud technologies from their current datacenter and virtual environments.
* Designed and implemented AWS cloud-based instances for use on their current and upcoming projects.
* Worked with Amazon Web Services (AWS), EC2 Storage Managements integration and utilization within the infrastructure and applications.
* Infrastructure deployment, administration, troubleshooting and configuration of virtual and cloud instances on AWS and VMware platforms.
* Implemented AWS solutions using S3, RDS, EBS, Elastic Load Balancer, and Auto scaling groups.
* Responsible for Design of different Release Environments for new projects and monitoring.
* Implementing a Continuous Delivery framework using Jenkins, Chef, and Maven & Nexus in Linux environment.
* Created Azure services such as compute virtual machines, Azure storage, and Azure Active directory, SQL Database, Azure DNS and Azure Application Insights. Created Azure Virtual Networks, subnets, Azure network settings and cloud
* Developed Chef Cookbooks and Recipes to manage systems configuration.
* Implementing Ruby on Rails upgrades and patches and publishing Ruby Gems
* Wrote various interfaces to the management system in Ruby on Rails.
* Managed Chef Cookbooks to automate system operations and involved in deploying the configurations into the remote servers.
* Involved in writing cloud formation templates for spinning up the infrastructure as per the requirement.
* Worked on ECS (Elastic container service) for deploying containers and involved in testing the micro services.
* Performing updates and upgrades on the systems currently on the network for performance and auditing purposes.
* Involved in integrating the DevOps tools with the Jenkins with the help of various plugins and involved in writing Jenkins file for CI/CD.
* Deployed applications into PROD & Pre-Prod environments with various application server technologies like WebLogic, JBoss & Apache Tomcat.
* Working on Deployment procedures using middleware like Apache Tomcat, creating deploy scripts and setting up for the Production Release.

**Environment:** VPC, AWS EC2, S3, Route53, EBS, IAM, ELB, Cloud watch, Cloud Formation, AWS Auto Scaling, Maven, Git, Jenkins, Unix/Linux, Shell scripting.

**Gap Inc., Pleasanton, CA
DevOps Engineer – July 2014- Feb 2017
Responsibilities:**

* Responsible for architecture decisions and tasks for ongoing migration efforts.
* Built and deployed Java source code into application servers in an agile continuous integration environment.
* Managed and optimize the Continuous Delivery tools like Jenkins.
* Involve in installation, configuration and maintenance of Jenkins and Octopus Deploy for compilation and packaging of new code releases.
* Responsible for orchestrating CI/CD processes by responding to GIT triggers, human input, and dependency chains and environment setup.
* Deployed J2EE applications to Application servers in an agile continuous integration environment and also automated the whole process. Build scripts using ANT and MAVEN build tools in Jenkins, Sonar to move from one environment to other environments.
* Provided configuration management to all software development projects and also worked in agile environments.
* Created Docker file for each micro service and changed some of the Tomcat Configuration file which are required to deploy Java based application to the Docker container.
* Experienced in branching, tagging and maintaining the version across the environments using SCM tools like GitHub, Subversion (SVN) on Linux and windows platforms.
* Involved in all projects that move to production and work closely with the Data Center, Development, Quality Assurance and Management teams to ensure cross communication and confirmed approval of all production changes.
* Script, debug and automate Shell scripts to reduce manual administration tasks and cloud deployments

**Environment:** Jenkins, GIT-HUB, Docker, Ansible