**Vikas Kumar** 

**Senior AWS DevOps Engineer**

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**PROFESSIONAL SUMMARY:**

* Overall **10+ years** of experience in IT professional as a Linux Administrator/ DevOps Engineer working on AWS Cloud/ Azure Cloud and Container technologies.
* Experienced in setting up AWS cloud resources by configuring VPC, Internet Gateway, Route Tables, Subnets, VPC-Peering, EC2, S3, IAM, RDS, ROUTE 53, ECS, ECR, EKS, Cloud Formation templates, ELB, Auto Scaling, LAMBDA, SNS,ELASTIC BEANSTALK, NAT devices.
* Tables, NAT devices, VPC-Peering, Bastion hosts and defining ACL&#39;s for enhanced secured at subnet level.
* Good knowledge on Amazon Web Services (AWS), Amazon Cloud Services like Elastic Compute Cloud (EC2), Simple Storage Service(S3), Amazon SimpleDB, Amazon Cloud Watch, SNS, SQS, LAMBDA and experienced n building highly scalable java applications using various architectures.
* Experienced in Amazon EC2 setting up instances, virtual private cloud (VPCs), and security groups.
* Experienced with event-driven and scheduled AWS Lambda functions to trigger various AWS resources.
* Good Knowledge in writing/Working with the scripts in Python, Ruby and Shell Scripts for managing various enterprise applications.
* Strong use of Shell scripting languages including BASH for Linux and Mac platforms and PowerShell for Windows systems and automation of scripts using Python.
* Experience in working with AWS EC2 and Cloud watch services. CI/CD pipeline management through Jenkins. Automation of manual Tasks using Shell scripting.
* Expertise in Architecting and implementing Azure service offering, such as Azure cloud services, Azure storage, IIS, Azure Active Directory (AD), Azure Resource Manager (ARM), Azure Storage, Azure, Blob storage, Azure VMs, SQL Database, Azure Functions, Azure Service Fabric, Azure Monitor, and Azure Service Bus.
* Exposure to Azure DevOps practices and automation of software testing, delivery and infrastructure changes.
* Experience on using DevOps tools like GitHub, Jenkins and CI/CD pipelines.
* Experience with provisioning configuration management, and containerization solutions such as Terraform, Chef, Puppet, Ansible, Docker or similar technologies.
* Good knowledge and experience in using HPA and Grafana for logging and monitoring.
* Expertise on Monitoring and Observability tools like Splunk, Nagios and NewRelic
* Hands on Experience with best practices of Web services development and Integration (both REST and SOAP).
* Good working experience in implementing Chef Cookbooks for OS component configuration to keep AWS server's template minimal.
* Strong working experience with Ansible playbooks for virtual and physical instance provisioning, configuration management, patching, software deployment on AWS environments through automated tools, Ansible/ custom pipeline.
* Expertise in deploying the code through web/application servers like Apache http Server, WebSphere/WebLogic/ Apache Tomcat/JBOSS.
* Experienced on Linux and Windows Virtual servers on EC2 using chef servers.
* Familiar with Cloud watch, Elastic IP's and managing security groups for EC2 Servers.
* Hands on experience with the AWS CLI and SDKs/API tools.
* Good working experience on Container specific tools like Docker, Kubernetes (K8s), Ansible and Helm for deployments.
* Experienced in building Docker images from Docker file and reusing pulled images from Docker Hub.
* Skilled with Python, Bash/Shell, PowerShell, Ruby, Perl, JSON, YAML, and Groovy.
* Worked on running Docker containers from Docker images with port and network config specifications.
* Experienced in deploying applications or docker images on to Kubernetes clusters by settings parameters via yaml configurations.
* Worked on setting up Kubernetes deployments using helm charts for local configurations.
* Expertise in using build tools like MAVEN and ANT for the building of deployable artifacts such as war & ear from source code.
* Extensively worked on Jenkins, Bit Bucket, Bamboo for continuous integration, Docker and Vagrant for different infrastructure setup and for End-to-End automation.
* Good Knowledge and Experience in Azure Cloud services such as Azure storage, Azure active directory, Azure Service Bus. Also, created and managed Azure AD tenants and configure Application Integration with Azure AD.
* Ability in development and execution of XML, Ruby, Shell Scripts, Perl Scripts.
* Experience in System Administration, System Builds, Server builds, Installs, Upgrades, Patches, Migration.
* Experience in Package management like Install, remove and update and querying packages using RPM tool.
* Experience in Troubleshooting, Security, Backup, Disaster Recovery, Performance Monitoring and Fine-tuning on UNIX Red Hat Linux Systems and on Data Migration Services.
* Installation and upgrade of Packages and Patches configuration management, version control, service pack & reviewing connectivity issue regarding security problem.
* Experience in Installing Firmware Upgrades, kernel patches, systems configuration on Unix/Linux systems.
* Hands on experience on Azure Virtual Machines, which includes the Peering between VNets, Site- to-Site Connectivity between VNets of two different Subscriptions.
* Experience in using Bug tracking tools like JIRA, Remedy, HP Quality Center and Bugzilla.
* Highly result oriented and pro-active, proven abilities to learn new technologies quickly and implementing them successfully in production
* Demonstrated ability to work under tough deadlines/pressure
* Strong analytical, problem solving & programming skills, cohesive team worker with exceptional planning & execution skills.

**TECHNICAL SKILLS**

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| **Cloud Infrastructure** | Microsoft Azure, Amazon Web Services |
| **AWS Tools** | EC2, IAM, S3, Lambda, CloudWatch, Redshift, Dynamo DB, SNS, SQS, SES, EMR, Elastic Bean stalk, VPC, ELB, RDS, EBS, System Manager and Route 53 |
| **MS Azure Services** | Azure storage, IIS, Azure Active Directory (AD), Azure Resource Manager (ARM), Azure Storage, Azure, Blob storage, Azure VMs, SQL Database, Azure Functions, Azure Service Fabric, Azure Monitor, Azure Service Bus. |
| **Build Tools** | Ant, Maven |
| **Version Control Tools** | GIT, GitHub, SVN, Bitbucket |
| **CI/CD Tools** | Jenkins, Bamboo, Team city, Harness |
| **Bug Tracking Tools** | JIRA |
| **Operating Systems** | Windows, Linux & Mac |
| **Programming/ Scripting Languages** | Python, Bash, Shell, Ruby, Java and Bash |
| **Web/Application Servers** | IIS, Nginx, Apache Tomcat, WebLogic |
| **Databases** | MySQL, DynamoDB, MongoDB |
| **Web/ Application Servers** | Tomcat, WebLogic, JBoss and WebSphere |
| **Containerization Tool** | Docker, Kubernetes services, Ansible, Helm, Dynatrace, LinkerD, HPA |
| **Configure Management Tools And IAC** | Chef, Puppet and Ansible. Terraform and Cloudformation. |
| **Monitoring Tools** | Nagios, Splunk, New relic, Grafana, Prometheus, AWS CloudWatch |
| **Virtualization** | VMware Workstation, Oracle Virtual Box, Vagrant |
| **Network Protocols** | TCP/IP, FTP, SSH, DNS, TELENT, HTTP, HTTPS, LOAD BALANCING, VPN, FIREWALL, SUBNETS |

**EDUCATION:**

* Bachelor’s In computer science Kakatiya University, Warangal. Telangana

**CERTIFICATIONS:**

* Certified **AWS Solutions Architect – Associate** (Validation Number: **4P9EZLNB3EREQSGZ**)

**PROFESSIONAL EXPERIENCE:**

**United Airlines, Wills Tower, Chicago May 2023 to Till Date**

**Role: AWS DevOps Engineer**

**Responsibilities:**

* Designed, implemented, and managed AWS infrastructure, leveraging services such as EC2, S3, RDS, Lambda, and VPCs.
* Orchestrated and maintained AWS resources using Infrastructure as Code (IaC) Cloud formation.
* Established CI/CD pipelines for automated code deployment and testing using tools like Team city and Harness.
* Orchestrated and managed Docker containers in production environments using Amazon EKS.
* Implemented containerization strategies to improve scalability, portability, and resource utilization.
* Set up monitoring solutions in AWS CloudWatch, for real-time system performance and error tracking.
* Implemented log management strategies to analyze and troubleshoot issues efficiently.
* Implemented security best practices and compliance policies in AWS environments. Conducted regular security audits and vulnerability assessments to ensure a secure infrastructure.
* Collaborated with cross-functional teams to gather requirements and ensure alignment between development and operations. Communicated effectively with stakeholders to convey technical information and project updates.
* Wrote and maintained infrastructure code using Cloud formation. Implemented version control for infrastructure code to track changes and facilitate collaboration.
* Implemented cost-effective solutions by optimizing resource allocation, leveraging reserved instances, and using auto-scaling efficiently. Conducted cost analysis and provided recommendations for optimizing cloud expenditure. Performed automated installations of Operating System using kickstart for Red Hat Enterprise Linux.
* Used Nagios as the monitoring tool for monitoring the servers.
* Automated, configured and deployed applications using Ansible by writing playbooks and storing the code in GIT.
* Create, extend, reduce and administer Logical Volume Manager (LVM) in the RHEL environment.
* Assisted with development and implementation of common operations model for Azure networking systems operations.
* RPM and YUM package installations, patch and other server management.
* Involved in Unit Testing and Integration testing.
* Involved in Code reviews to check for efficiency and coding standards.
* Provided technical support to developers with configuration issues. Defined and implemented issues, tasks, defects and change management processes using JIRA Ticketing System.
* Designed and implemented disaster recovery plans to ensure business continuity in case of system failures.
* Implemented high-availability architectures for critical applications to minimize downtime.

**Environment*:*** AWS, S3, RDS, Team city, Harness, Github, Git, SonarQube, WIZ, Veracode, Azure Devops Board, Redis, Splunk, Kubernetes, Cloud formation, Docker, Python, Dotnet, Jfrog, Datadog, Groovy, EC2, S3, ECS,ELB, EKS, Cloud Watch, IAM, Kms, VPC, RDS and Lambda.

**Duration: November 2021 to April 2023**

**Client: Anthem, Carelon global solutions. Ohio.**

**Role: DevOps Engineer (AWS/Azure)**

**Responsibilities:**

* Design roles and groups for users and resources using AWS Identity Access Management (IAM).
* Implemented AWS solutions using EC2, S3, RDS, EBS, Elastic Load Balancer, Auto scaling groups, optimized volumes and EC2 instances.
* Used MySQL, DynamoDB and Elastic-cache to perform basic database administration.
* Developed Ansible Playbook for Automatic Deployment and Configuration of OpenShift in multiple environments.
* Setup and support automated Continuous Integration utilizing tools like Jenkins, Shell Scripts, and AWS CLI/API.
* Deployed Azure infrastructure as code via Terraform Azure RM provider, Azure Repos and Azure Pipelines within Azure DevOps.
* Developed build and deployment scripts using Apache Maven as build tool in Jenkins to move from one environment to other environments and automated builds using Maven for creation of build artifacts like war or jar files.
* Implemented Docker to containerize custom web applications and deploy them on to the instances using Kubernetes clusters and automated the application deployment using Jenkins.
* Used lambda function for Infrastructure automation.
* Automated deployments, scaling, and operations of application containers across clusters of hosts, provided container-centric infrastructure by Kubernetes.
* wrote Ansible Playbooks to launch AWS services like Instances, web applications and mounting points and packages.
* Experienced with Continuous Integration and Delivery via TeamCity and Octopus.
* Automatically installed packages from the repository, changing the configuration of those remotely accessed machines. This process is done by creating the Ansible Playbooks. worked on developing Ansible playbooks to install and configure Apache Tomcat, Jenkins.
* Built and deployed Docker containers to break up monolithic app into micro services, improving developer workflow, increasing scalability, and optimizing speed.
* Utilize Cloud Watch to monitor resources such as AWS EC2, CPU memory, Amazon RDS DB services, Dynamodb tables, and EBS volumes.
* Managed servers on the Amazon Web Services (AWS) platform instances using DevOps CI/CD tools like Jenkins, Ansible Configuration management.
* Deployed Angular application that was developed as a Docker image (built via Docker file) on Kubernetes environment.
* Successfully setup Azure DevOps builds transformations and deployment configurations for each environment.
* Converted existing Terraform modules that had version conflicts to utilize cloud formation during Terraform deployments to enable more control or missing capabilities
* Implemented and designed AWS virtual servers by Ansible roles to ensure deployment of web applications.
* Implemented a Continuous Delivery pipeline with Dockers, Jenkins and GitHub. Whenever a new GitHub branch gets started, Jenkins automatically builds a new Dockers container from it.
* Used Ingress to route the traffic to DNS enabled sources from configurations on Kubernetes clusters using Helm charts.
* Worked with the UI team to design the appropriate icon and display for the screens.
* Configure the solution to use your Azure SQL database when it runs in Azure.
* Created end-to-end pipelines using GIT, Jenkins for CI/CD, Ansible for Configuration management and monitoring using Nagios.
* Developing REST API/Java API for Amazon Lambda to manage some of the AWS services.
* Installation, Maintenance, Administration and troubleshooting of Red Hat Enterprise Linux (RHEL7) and Solaris systems.

**Environment**: Windows, Ansible, Maven, GitHub, GIT, Jenkins, AWS, Docker, Kubernetes, Helm, DNS, CI/CD, Azure, RHEL, RPM, YUM, Selinux, EC2, IAM, S3, Lambda, CloudWatch, Redshift, Dynamo DB, SNS, SQS, SES, EMR, Elastic Bean stalk, VPC, ELB, RDS, EBS, System Manager, Route 53, NFS Shell, Ruby Script, Ansible, Networking, DNS, FTP, TCP/IP, HTTP, Jira, VMware, REST API/ Java API, Nagios, LVM, DevOps, MySQL, Dynamo DB, Elastic-cache

**Duration: May 2020 to November 2021**

**Client: Client:** **Hitachi Vantara, Singapore**

**Role: AWS/DevOps Engineer**

**Responsibilities:**

* Designing the workflow documents and allocates the objects to automation developers.
* Involved in AWS using EC2, Dynamo DB, RDS, S3, VPC and IAM services.
* Installed and configured Infrastructure Automation Tool Puppet. Created and updated Puppet manifests and modules, files, and packages.
* Configured AWS Identity Access Management (IAM) Group and users for improved login authentication.
* Performed S3 buckets creation, policies and on the IAM role based polices and customizing the JSON template.
* Worked with Docker and Kubernetes on multiple cloud providers, from helping developers build and containerize their application (CI/CD) to deploying either on public or private cloud.
* Created Python scripts to automate AWS services, which include web servers, ELB, Cloud front distribution, database, EC2 and database security groups, S3 bucket and application configuration.
* Developed the Jenkins Pipeline for automatic creation of projects, Code Promotion across environments, Image deployments in OpenShift Platform.
* Used Maven as build tool on Java projects for the development of build Arti-facts on the source code.
* Used Terraform scripts to automate the deployments and to spin the EC2 servers and ECS clusters.
* Developed automation scripting in Python (core) using Puppet to deploy and manage Java applications across Linux servers.
* Implemented and managed Puppet configuration spanning several Dev, QA, Staging environments in AWS cloud.
* Experienced in S3 Versioning and lifecycle policies, backup files, and archive files in Glacier.
* Configured AWS IAM and Security Group in Public and Private Subnets in VPC.
* Used Jenkins pipelines to drive all micro services builds out to the Docker registry and then deployed to Kubernetes, Created Pods and managed using Kubernetes.
* Integration of Lambda with ticketing tools to take automated actions.
* Utilize Puppet for configuration management of hosted Instances within AWS. Configuring and Networking of Virtual Private Cloud (VPC). Utilize S3 bucket and Glacier for storage and backup on AWS.
* Built Docker images from scratch using Docker file and pushed them to Docker Registry to reuse.
* Deployed Docker images on workstations as local containers to check the processes.
* Responsible for creating and maintaining Git branches and tagging activities.
* Managed Ubuntu Linux and Windows virtual servers on AWS EC2 using Puppet and wrote puppet manifests for apache installation and configuration as well as for various deployments.
* Manage all CM tools (Maven, Jenkins, Git, GitHub) and their usage process ensuring traceability, repeatability, quality, and support.
* Responsible for using AWS Console and CLI for deploying and operating AWS services.
* Configuring the Docker containers, creating Docker files for various environments, and worked on Kubernetes environment.
* Used AWS SDK for connection to Amazon S3 buckets as the object storage service to store and retrieve the media files related to the application.
* Extensively involved in a Docker deployment pipeline for custom application images in the private cloud using Jenkins.
* Work with Docker for convenient environment setup for development and testing.
* Integrated JIRA in with SVN and dealing with its administration in change management process.

**Environment:** Puppet, Linux, AWS, Docker, Ubuntu, Networking, DNS, FTP, TCP/IP, HTTP, VMware, EC2, IAM, S3, Lambda, CloudWatch, Redshift, Dynamo DB, SNS, SQS, SES, EMR, Elastic Bean stalk, VPC, ELB, RDS, EBS, System Manager and Route 53, Jenkins, Maven, Git, Jira, Glacier, Docker, Kubernetes, Microservices, Java, .Net,

**Duration: Jan 2019 to April 2020**

**Client: UST Global Inc, India**

**Role: DevOps Platform Engineer (AWS)**

**Responsibilities:**

* Worked on setting up pipeline automated CI build and deployment infrastructure and processes for Maven, NPM and Angular applications
* Worked closely with Architecture, Development, Test, Security and IT Services teams
* Automated the cloud deployments using Chef, python and AWS Cloud Formation Templates.
* Developing scripts for build, deployment, maintenance and related tasks using Jenkins, Maven, Python and Bash
* Installing, configuring and maintaining Continuous Integration, Automation and Configuration Management tools
* Implementing and developing solutions enabling Development and Operations teams to build, deploy, monitor and test applications and environments
* Created reference Architecture and built Minimum Viable product (MVP) for containerization platform using Docker and Kubernetes.
* Installed and configured Chef/run-deck for Automating Deployments and providing a complete automation solution.
* Used Chef for application automatic deployment and provisioning to different environments.
* Implementing monitoring tools Dynatrace and Splunk and reporting solutions across a range of environments and platforms
* Adding and implementing Continuous Integration principles and practices for the Billing Development Team using Jenkins, IBM Bluemix, Bitbucket, Docker and Atlassian JIRA
* Working closely with offshore colleagues and providing support and advice on best practices for SCM and build automation for Apache Maven
* Designed and implemented solution for on premise Docker Registry and automated its creation using AWS cloud formation.

**Duration: march 2017 to Dec 2018**

**Client: PGRX, India**

**Role: Software Engineer -/Devops**

**Responsibilities:**

* Build, Install and upgrade packages and patches on RHEL, CentOS and Ubuntu servers using RPM, YUM, APT and third-party software applications.
* Conducted pre-consolidation tasks, which included Health Checks, validations and data collection of the servers.
* Installed and upgraded packages and patches on RHEL servers using RPM, YUM and third-party software applications.
* Installation of Database servers and user’s management such as Oracle, MYSQL, SQL Server.
* Implementation and maintenance of DHCP, NFS, NIS, DNS Mailing List, Send mail, FTP and Apache SMTP.
* Application installation and troubleshooting for Solaris, Red Hat Linux and CentOS.
* Hands on experience in creating Volumes, LUNS for Unix machines.
* Installed RHEL 5.x using Kick-start server on standalone servers and VMware environments.
* Provided solutions to the client about Disk mirroring and RAID implementation using Solstice Disk Suite and VERITAS volume manager and cluster.
* Responsible for patching Linux servers.
* Setup and managed environment using confidential configuration management tools.
* Used the version control system GIT to access the repositories and used in coordinating with CI tools.
* Integrated maven with GIT to manage and deploy project related tags.
* Installed and configured GIT and communicating with the repositories in Confidential.
* Developed build and deployment scripts using ANT and MAVEN as build tools in Jenkins to move from one environment to other environments.
* Developed Perl and shell scripts for automation of the build and release process.
* Involved in editing the existing ANT/MAVEN files in case of errors or changes in the project requirements.
* Installed/Configured/Managed Jenkins CI Automation.
* Worked on authoring pom.xml files, performing releases with the Maven release plugin, and managing artifacts in maven internal repository.
* Installed/Configured and Managed Nexus Repository Manager and all the Repositories.
* Responsible for the development and maintenance of processes and associated scripts/tools for automated build, testing and deployment of the products to various developments.
* Responsible for the Plugin Management, User Management, Build/Deploy Pipeline Setup and End-End Job Setup of all the projects.
* Managed Maven project dependencies by creating parent-child relationships between projects.
* Written make, Maven and Ant build tools for application layer modules.
* Built and Deployed Java/J2EE to a web application server in an Agile continuous integration environment and also automated the whole process.
* Perform periodic system audits on all environments to ensure that only controlled versions of software reside all environments.
* JIRA is used as ticket tracking, change management and Agile/SCRUM tool.

**Environment:** UNIX, Maven, Ant, Maven, Java, J2ee, MySQL, SQL Server, HTML, CSS, Agile, Java, Nexus Repository, Git, Veritas Volume, Linux, Windows, RHEL, CentOS, Ubuntu, RPM, YUM, APT, DHCP, NFS, NIS, DNS Mailing List, Send mail, FTP and Apache SMTP, Jira.

**Duration: Mar 2013 to Jun 2017**

**Client: Artia convergience technology, India**

**Title: Linux Admin**

**Responsibilities:**

* User creation, Group creation & Administered user accounts
* Folder creation and folder permissions as per the project
* Create permissions to users for appropriate groups, as per the service request.
* Copy/move application related files or folders to desired location, as per the change requests.
* Installed and managed different RPM Linux repositories configured YUM Installs.
* As per daily/weekly checks performed ‘cron’ job tasks.
* Installation and configuration on Red Hat Linux 6/7
* Troubleshooting user logins using various remote login utilities.
* Performed administration and monitored job processes using associated commands.
* Creating users, groups assigning passwords, modifying User Attributes, locking & unlocking a user accounts, changing password parameters and deleting users and giving permission and ownership to users, groups.
* Remote shell access using SSH, password less login using SSH key and remote file transfer with SCP & RSYNC. Backup and restore by using tar & gzip
* Strong experience on working with Amazon Cloud Web services and giving access to the users
* Good knowledge on creating and writing Confluence pages
* Remote shell access using SSH, password less login using SSH key and remote file transfer with SCP
* Enhanced user security with SUDO command and worked on automation by using Cron jobs.
* Managed installed services by using service commands.