**Vamsi**

**Sr. AWS/DevOps Engineer**

**Professional Summary:**

* Demonstrated a robust career spanning over 9 years as a **DevOps** engineer, emphasizing expertise in **DevOps** practices, proficient Build and Release Management, adept **Containerization** skills, deep **AWS** knowledge, and seasoned **Linux** System Administration.
* Proficiently navigated **UNIX** environments, showcasing mastery in diverse flavors of **Linux**, including **Red** **Hat**, **CentOS**, and **Ubuntu** distributions.
* Led the design and deployment of numerous applications, leveraging a comprehensive suite of **AWS** services including **EC2, VPC, Route53, S3, RDS, Dynamo DB, SNS, SQS, IAM, EBS, EKS, S3, Auto-scaling,** and **load-balancing**. Ensured robustness, fault tolerance, and auto-scaling capabilities.
* Possess a profound understanding of Software Configuration Management principles, with a proven track record in aligning with **Agile** Methodologies for efficient software development and delivery.
* Worked with **IAM** service to set up new **users**, **groups**, **roles**, and **policies** using **Terraform** modules. Utilized **Terraform** and **CloudFormation** to simplify infrastructure provisioning.
* Proficient in orchestrating **blue-green** deployments seamlessly, ensuring uninterrupted operations and **zero** downtime in **production** environments.
* Engaged with Microsoft **Azure** elements including **Identity Access Management** (**IAM**), encompassing Active Directory and **Multi-Factor Authentication**, **Azure Virtual Machines**, **Storage** **Blobs**, **File Service**, **Networking**, **BizTalk**, and **Scheduler**.
* Developed comprehensive **cloud** strategies and **roadmaps**, skillfully architecting innovative **cloud** solutions and orchestrating the seamless **migration** of enterprise applications to **cloud** environments.
* Designed, constructed, and managed automated build and release **CI/CD** pipelines utilizing **Jenkins** and **Ansible** for infrastructure, ensuring the reliability, availability, and optimal performance.
* Collaborated with cross-functional teams to integrate **Terraform** into the overall **DevOps** toolchain.
* Managed **Docker** containers and **Kubernetes** clusters within the **OpenShift** platform. Proficient in orchestrating **Kubernetes** **clusters** through **Ansible** **playbooks**, ensuring optimal performance.
* Experience working on several **Docker** Components like **Docker** **Engine**, **Hub**, Machine, creating Docker Images, Docker Registry and handling multiple images. Knowledge on **Mesos**, **marathon**.
* Extensively worked on **Hudson** and **Jenkins** for continuous Integration and End - to-End automation.
* Proficiently authored multiple Automation **Scripts** to streamline manual processes, deploy applications, and manage application build scripts using **shell** and **python**.
* Excellent hands-on experience on configuration management tools like **Chef**, **Ansible**, and **Docker**.
* Experience in Administration of source control such as **Git** **Hub**, **Subversion SVN** and **Bitbucket**.
* Created **Tags** and **Branches**, fixed the merger issues and administered Software Repositories.
* Automated processes with custom built **Python** and **Shell** scripts.
* Experience in using **Splunk**, **AppDynamics**, **Dynatrace**, **Nagios**, **IBM** monitoring tools (**TAM**).
* Written **Chef** **cookbooks** and **recipes** to Provision Several preproduction environments consisting of **Cassandra,** **DB installations** and several middleware installations.
* Established build automation tools like **MAVEN**, **Bamboo**, **Gradle** and **ANT** for the building of deployable artifacts such as **war** and **ear** from source code.
* Involved in configuring and integrating the servers with different environments to automatically provision and creating new machines using **CM**/Provisioning tools like **chef** and **puppet**.
* Utilized **Tomcat** and **Apache** web servers for deployment and for hosting tools.
* Experience on **Open stack, SALT stack**, knowledge in **Dynamite**, **AutoSys** and **Zabbix** monitoring.

**Technical Skills:**

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| --- | --- |
| **Operating System** | Linux (RedHat 4/5/6/7, CENTOS), Unix, Solaris 11/10, Ubuntu 12/13/14, Windows NT, Windows 8, 12, 12R2, MacOS. |
| **Cloud Platforms** | AWS, Azure |
| **Web Technologies** | Angular 4, HTML5, CSS3 |
| **Automation/Configuration Management Tools** | Jenkins, Chef, Puppet, Ansible, Kickstart, Jumpstart |
| **Virtualization Technologies** | Windows Hyper-V, VMware ESXi, Virtual Box, vCenter, vSphere, Power VM, Ubuntu |
| **Containerization Tools** | Kubernetes, Docker, OpenShift, Spinnaker |
| **Application/Web Server** | Tomcat, Apache, Application Server, IIS, Oracle WebLogic Server 11g |
| **CI and Build Tools** | ANT, Maven, Hudson, Bamboo |
| **SDLC** | Agile, Scrum |
| **Testing and ticketing tools** | SonarQube, Selenium, JIRA, ServiceNow, Remedy,  ConnectWise, |
| **Monitoring and Logging Tools** | Nagios, Splunk, ELK, Datadog, Dynatrace |
| **Version Control Tools** | GIT, GitHub, Subversion, Bit-Bucket, Clear Case |
| **Scripting** | Python, Shell Scripting, Ruby Scripting, Power Shell, YAML Perl |
| **Database Systems** | Oracle 10g/9i, SQL Server, MySQL, SQL Server, NoSQL, Mongo DB, Cassandra |
| **Networking/Protocol** | DNS, DHCP, Cisco Routers/Switches, NIS, NFS, WAN, SMTP, LAN, FTP/TFTP, TCP/IP. |

**Educational Qualification:**

Master’s in computer science.

Bachelor of Technology in Computer Science and Information Systems.

**Professional Experience:**

**Volkswagen Credit, Libertyville, IL May 2022 - Present**

**Sr. AWS/DevOps Engineer**

**Responsibilities:**

* Implemented **Agile** methodologies to streamline development workflows, ensuring collaboration between development, operations, and deployment teams.
* Developed and implemented comprehensive **cloud migration** and modernization strategies, demonstrating expertise in crafting scalable, flexible, and resilient cloud architectures on **AWS**.
* Designed and deployed multiple applications using a wide range of AWS services (**EC2**, **VPC**, **Route53**, **S3**, **RDS**, **Dynamo** **DB**, **SNS**, **SQS**, **IAM,** **EBS**, **EKS**, **S3**, **Auto-scaling, load-balancing**) ensuring high availability, fault tolerance, and auto-scaling within **AWS** **CloudFormation**.
* Monitored cloud sec by creating the **IAM** roles to prevent cloud infrastructure access to the users.
* Orchestrated AWS infrastructure using **Terraform**, defining resources such as **EC2** instances, **VPC** configurations, **EBS** volumes, **EKS** clusters, and **S3** buckets.
* Utilized **Terraform** for the dynamic provisioning of resources, ensuring consistent and scalable infrastructure for the installation of open-source packages.
* Designed, built, and coordinated an automated build and release **CI/CD** process using **Jenkins** and **Ansible** on the infrastructure to maintain the reliability and performance of **Software Delivery**.
* Leveraged **CloudFormation** in **DevOps** workflows, automating the deployment and scaling of applications. Integrated **CloudFormation** with **CI/CD** pipelines for automated releases and updates.
* Implemented **Jenkins**-**GitHub** integration to enable automated builds triggered by **GitHub** events, ensuring seamless **CI/CD** workflows, and using **Jenkins** **Python Plugin**, involved in writing shell **scripts** in the job configuration **build** steps to automate the build processes.
* Worked closely with **DEV** team, **OPS** team along with Deployment team to automate the process by using python scripts and troubleshooting of Pipeline (**CI/CD**) issues.
* Installing, creating and configuring **Kubernetes** and **troubleshooting** **kube API**, controller, scheduler, **ETCD**, **pods**, Deployments, Replication-controllers, **kubelet** and **kube-proxy**.
* Designed and implemented container orchestration with **Kubernetes** and virtualized the servers for the test and development environments using **Docker** containers.
* Worked on **Kubeflow** installation and testing to validate the machine learning models.
* Worked on making **HA Cluster** of **pods** by using **Kubernetes** to avoid single point of failure.
* **Troubleshooting** the **docker** containers and their flannel network authentication inside a **pod**.
* Optimized **Docker images** (**size** & **security**) & defined **multi-container** applications and their dependencies, simplifying local **development** and **testing** environments.
* Established and configured the **Ansible** control machine or **workstation** using **SSH** protocol, enabling centralized management of configuration for **nodes** within the infrastructure.
* Expertise in setup deployment and management of system provisioning, configuration using **ansible**.
* Created **Ansible** **Playbooks** and **Roles** for deploying applications, managing configurations, and updating servers with custom inventory **files** and **tasks**.
* Creating **shell** scripts for application automation and bug fixing the **bash** code.
* Experienced in building pipelines for distributed stream processing using **Kafka**.
* Utilized **Prometheus** and **Grafana** for comprehensive **metrics** evaluation, providing valuable insights into system performance and resource utilization.
* Experienced in creating and **debugging** **Python** **scripts** for automating complex scenarios in application deployment and a strong understanding of **scripting** best practices for error handling.
* Creating **docker** images, containers with respect to application. Monitor the metrics in **Grafana** and logs in **Kibana**. This facilitated proactive **troubleshooting** through real-time insights.
* Managed complex data within **Oracle** databases, leveraging features like **materialized views** and **partitioning** to optimize **queries** and ensure high-performance applications.
* Worked on the POC of Seldon **core**, **postman** and **REST API** clients. Also worked on testing the data science team workflows.

**Environment: AWS (EC2, VPC, Route53, S3, RDS, Dynamo DB, SNS, SQS, IAM, EBS, EKS, S3, Auto-scaling, load-balancing) Docker, Terraform, Kubernetes, Ansible, Jenkins, Vcmts, Docsis, Kafka, bash, shell, CI/CD, Promethius, Grafana, Elasticsearch, Kibana, Git, Linux, python 2.7, Oracle, Maven, Postman, Rest.**

**CGFNS International INC, Philadelphia, PA Aug 2020 - Apr 2022**

**AWS/DevOps Engineer**

**Responsibilities:**

* At **CGFNS**, actively participated in the entire **lifecycle** of application development. Collaborated with **stakeholders** to translate their concepts and requirements into secure, operational solutions.ensuring applications streamlined **CGFNS's** international healthcare processes.
* Monitoring applications, working on configuration support and Critical defect fixing. Involve in developing web-based applications using **Angular 4, CANJS, jQuery, AJAX, HTML and CSS.**
* Designed, developed, and deployed **Microservices** architecture on **AWS** **cloud** infrastructure, leveraging services such as **ECS** (**Elastic Container Service**) and **EKS** (**Elastic Kubernetes Service**) to **orchestrate** containerized applications.
* Automated **cloud** infrastructure provisioning using **Terraforms** **IaC** approach. Built reusable **modules** for configurations and services, simplifying deployments for **web servers** and **AWS** instances.
* Implemented a robust **CI/CD** pipeline using **Maven**, **Jenkins**, and **Git** to automate software builds, testing, and deployments for application. This accelerated development speed and **code quality**.
* Leveraged **Blue-Green** deployments to minimize risk during **software** updates. This allowed for seamless **rollbacks** in case of issues, ensuring minimal disruption to critical **healthcare** services.
* Responsible for tagging and maintaining code on version control **GIT**.
* Automated the creation and management of **JAR** and **WAR** files using **Gradle**. **Jenkins** pipelines were utilized to manage versioning and deployment of **artifacts** to **Nexus** **repository**.
* Automated Static Code Analysis tool **PMD** to the build process to validate the code against the coding Guidelines with **SonarQube** and published the reports.
* Performing a POC to drive **Chef** as the core deployment framework for all the in-house as well as to cloud-based deployments to **Amazon EC2**.
* Perform Build activities using **Gradle** and **Jenkins** tool by creating the build **Gradle** script.
* Automate the build Process Using **Jenkins** jobs and creating the **Jenkisfile** for the build process for all branches and pull requests.
* Working on the **Jenkins** tool to configure Nightly Builds to check the sanity of our **java** source code and health check to the **cloud** services.
* Experience managing **Docker** containers and **Kubernetes** clusters on the **OpenShift** platform by utilizing **Ansible** **playbooks** to create **Kubernetes** clusters.
* Used Spot **instances** for **Kubernetes** **worker** **nodes** as a further cost cutting measure to decrease cluster costs by approximately **60**%. Making sure the product working in **EKS**.
* **Troubleshooting** application related issues and extracting the error logs from **Splunk** and **Kibana** for **debugging** the **log** verification.
* Evaluated third-party tools for **build/deployment** automation purposes including **Docker**.
* Designed and Showcased **CI/CD** automation in a containerized environment using **docker.**
* I've extensively used **CloudWatch** Alarms to proactively monitor thresholds and trigger notifications or automated actions when predefined limits are breached.
* Conducted rigorous smoke and sanity tests for deployed applications, by utilizing **Selenium** and **JUnit** to ensure robust functionality.
* Writing **Shell** scripts for doing Deployment, health check status of **web app** servers, uplifting the testing and production environments and take the **Git** repository backups.
* Client Interaction with high Risk and Doing **smoke testing** for same and fixed the related Issue Immediately.
* Created and maintained documentation related to **SCM** activities.

**Environment**: **Git, Angular 4, CANJS, jQuery, AJAX, HTML, CSS (Application Development & Testing) Gradle, Maven, Selenium, Junit, PMD, SonarQube, Terraform AWS ECS, EKS, Chef Docker, Kubernetes, OpenShift, Ansible, Splunk, Kibana, CloudWatch, Jenkins (CI/CD Pipeline) Nexus, Shell Scripting**

**Symantec, Mount view, CA Mar 2018 - Jul 2020**

**AWS Engineer**

**Responsibilities:**

* Maintain and improve automation in support of self-service **DevOps** pipelines for both **backend** and **frontend** development teams ensuring **secure** and **efficient** deployments.
* Implemented Continuous Integration and Continuous Delivery process using **SVN**, **Jenkins**, **Maven**, and **Ansible** to secure delivery of code, minimizing **human** **error** and potential vulnerabilities.
* Written deployment scripts in **Shell** and **Ruby**.
* Automate Build and Deployments on **Apache** and **CQ5** servers using **Jenkins** and **ansible**.
* Released and maintained secure **Amazon Machine Images** (**AMIs**) on a quarterly basis.
* Also familiar with writing **YAML** files with the help of predefined templates which can configure, place and provision applications.
* Written **Ansible** Playbooks to install required packages on cloud machines.
* Worked on Build and Release process for various servers like **AEM** and **Apache**.
* Written **Ansible** playbooks and **ruby** scripts to automate **stop**, **start**, **restart**, delete bundles, and deploy packages in the **CQ5** server.
* Responsible for writing **Bash**, **Shell**, **Perl**, **Python** scripts to ping servers and adding users to the boxes and proficient in scripting languages to automate daily activities.
* Experience in building and deploying **Java** & **SOA** applications and **troubleshooting** failures.
* Evaluating code quality by reviewing selected issues through the web interface on **SonarQube**.
* Built end to end **CI/CD** Pipelines in **Jenkins** to retrieve code, compile applications, perform tests and push build artifacts to **Nexus** using **Nexus artifactory plugin**.
* Deployed multiple databases and applications utilizing **Kubernetes** **cluster** management, including services such as **Redis** and **Nginx** for optimized resource utilization.
* Maintained the **Kubernetes** environment to oversee **containerized** applications.
* Regularly merged code from development branches to the **release** branch, facilitating integration and testing before deployment. created tags for releases.
* Setup pre-commit **hooks** to remove check in access to developers in the **'tags'** folder.
* Rolled back **buggy** code from production release.
* Creation of **RPM** packages required for deployment into **DEV**, **QA**, **REG** and **Production** environments.
* Established automated continuous build pipelines in **Jenkins**, ensuring **code** is consistently **built** and **tested** upon every **commit** to **SVN**. facilitated rapid feedback and minimized the risk of regressions.
* Setup shell script in **Jenkins** jobs to do pre- and post-build operations.
* Implemented automated **email** notifications for build status in **Jenkins** using Email **Extension Plugin.**
* Created Maven **POM** files to build **Java** projects based on their project structure.
* Launched **Docker** containers and used them as **Jenkins** agents for regular builds.
* Staged all the packages on a shared server for **SIT**, pre-production, and production environments.

**Environment:** **Ansible, Ruby, Shell, Python, YAML, SOA, Apache, CQ5, CI/CD, AWS, Jenkins, Maven, Docker, Kubernetes, SonarQube, Nexus, Java, SVN, SIT, RPM, Redis, Ngnix, Windows and LINUX.**

**Carelon Healthcare, Fairfax VA Jul 2016 – Feb 2018**

**DevOps Engineer**

**Responsibilities:**

* Utilized **Agile** methodology as a comprehensive framework for managing requirements and optimizing application performance through iterative development processes.
* Implemented configuration and setup of **virtual** and **cloud** development environments using **Azure**, ensuring optimal workflow **efficiency** and **productivity**.
* Orchestrated the design and execution of **Azure** **Site** **Recovery**, facilitating seamless transitions both in disaster recovery scenarios and during the migration of workloads from On-Premises to **Azure**.
* Managed the migration of data from on-premises **SQL** Database servers to **Azure** **SQL** Database **servers** by orchestrating **Azure Data Factory Pipelines**, leveraging the **Azure Data Factory copy tool**, and utilizing **Self-Hosted** Runtimes effectively and efficiently.
* Customized existing **Yaml** files for creating deployments and volumes (pvc) In **open shift** platform.
* Worked on **groovy scripts** in Jenkins to execute jobs for a continuous integration pipeline where **Groovy** **Jenkins** Plugin and **Groovy** Post Build Plug-in are used as a build step and post build actions.
* Implemented **master-slave** architecture configuration to enhance **Jenkins** performance, while also constructing comprehensive **CI/CD** **Pipelines** within **Jenkins** to **fetch code**, compile applications, conduct testing, and deploy build **artifacts** to **Nexus** utilizing the **Nexus Artifactory plugin**.
* Created **Docker** files, that include **Containerized** environment to automate system operations.
* Automated the Applications and **MySQL** container deployment in **Docker** using **Python** and monitoring of these containers using **Nagios**.
* Developed **Microservices** on boarding tools leveraging **Python** and **Jenkins** allowing for easy creation and maintenance of build jobs and **Kubernetes** deploy and services.
* Created nightly builds with integration to code quality tools such as **SonarQube**.
* Worked on systems and supported **DEV**, **TEST** and **QA** team in all product suite validations.
* Involved in configuring and managing **Chef** **Master** Server, updating and creating modules and pushing them to **Chef** Clients and make the implementations reusable.
* **Chef** Recipes to automate our **build**/**deployment** process and do an overall process improvement s..
* Worked on **Chef** Configuration management spanning several environments in **VMware** and Azure **cloud**. Created Chef Cookbooks using recipes to automate system operations.
* Written **Chef** **Cookbooks** and recipes in **Ruby** to Provision several pre-prod environments consisting of **Cassandra** **DB** installations, **Web logic** domain creations and **middleware** installations.
* Worked on **Create**/**Enhance**/**automate** build and deployment process as **DevOps** **engineer** for each release and backup, restore and upgrade.
* Written, maintained, reviewed, and documented modules, manifests, **Hiera** configurations and **Git** repositories for **Chef** Enterprise on **RHEL** and **SLES** platforms.
* Set up and configured **Splunk** to oversee deployed applications on the application server, analyzing both application and server log files by setting up diverse **dashboards**, **reports**, **alerts** within **Splunk**.
* Developed build and deployment scripts using **MAVEN** as build tools in **Jenkins** to move from one environment to other environments.

**Environment:** **Agile, Microsoft Azure(Site Recovery, Data Factory, Data Factory Copy Tool, SQL Database)OpenShift, Jenkins, Groovy, Docker, Chef, Chef Server, Chef Clients, Hiera, Splunk, YAML, Groovy, Python, Ruby, Maven, Nexus (Artifact Repository), SonarQube, Nagios, VMware.**

**Lone Star Financing - Austin, TX Sep 2014 – Jun 2016**

# Build/Release Engineer

**Responsibilities:**

* In-depth knowledge on **Jenkins** to set up all the stages of **CI/CD** Pipeline such as version control, build, unit test, deploy, auto test, and deployment to production.
* Experience in **AWS**, **Tomcat**, **MySQL**, **Oracle**, and maintained code quality and code security using **SonarQube**, **Selenium**.
* Experience in containerized technology like **Docker**, **Kubernetes**. Integrated **Docker** container orchestration framework using **Kubernetes** by creating **pods**, **config** **Maps** using **Jenkins**.
* Building **Docker** images and fetch/promote and deploy to Production. Setup and maintain a **Docker** repository, **nexus** **repo**, **Linux** package manager.
* Expertise in Infrastructure as Code using **Ansible**, writing **YAML** scripts to automate processes.
* Knowledge in writing scripting languages like **Python**, **Shell** Scripting, and **PowerShell**. Responds constructively and quickly to shifting goalposts or changing requirements.
* Team Player & organizational and leadership skills.
* Maintained **Git** repositories for **DevOps** environment: Version control and build automation integration git into Jenkins.
* Worked as a **Subversion** and **TFS** Admin and handled multiple repository backup. Worked and Configure **CI/CD** tools like **Hudson** to automate the build process.
* Hands on Experience with **Iac** like **Terraform** and **Ansible**.
* Worked on AWS services like **EC2**, **Lambda**, **S3**. Worked and managed dashboard **Jira**, and **Confluence**.
* **Troubleshooting** Network, memory CPU, swap and file system issues, **TCP/IP**, **DNS** and **SMTP** in Linux servers. Experience in using **Nagios** monitoring system.

**Environment:** **Ansible, YAML, SonarQube, Selenium, Python, Nexus Repo, TCP/IP, DNS, SMTP Shell Scripting, PowerShell, Tomcat**, **MySQL**, **Oracle.**