**Varsha G**

**DevOps Engineer / AWS / Azure / Kubernetes / Build & Release Management**

**­­­­­­­­­­­­­­­­PROFESSIONAL SUMMARY**

* Experienced and motivated **DevOps Engineer** with over **10** years of expertise in **designing, implementing, and optimizing continuous integration and continuous deployment (CI/CD) pipelines.**
* Proficient in **cloud technologies, infrastructure automation**, and **containerization**, adept at collaborating with **cross-functional teams** to drive efficiency in software development and deployment. Seeking opportunities to leverage DevOps tools and practices to streamline workflows and improve software delivery in a dynamic setting.
* Successfully deployed DevOps solutions for a diverse range of **agile projects**, including **deployments, testing automation, build and release automation, monitoring, service management, incident handling, and change management**.
* Developed solutions for application deployments within **Microsoft Azure** and **Amazon Web Services**.
* Possesses hands-on experience with **Azure services**, including **PAAS, IAAS, VSTS, Azure DevOps Services, Azure Automation, Monitoring, App Service, App Service Environments**, and more.
* Well-versed in various phases of **SDLC**, including requirement gathering, system analysis, functional specifications, business logic design, coding, testing, performance optimization, documentation, implementation, and maintenance.
* Proficient in using a wide array of DevOps tools, including **Puppet, Chef, Ansible, Jenkins, Terraform, GIT**, and **Splunk**.
* Extensively worked with automation tools such as **Jenkins** to implement end-to-end automation processes.
* Automated deployments on **Azure** using **Terraform**, **Azure Repos**, and **AzurePipelines**.
* Knowledge of **log aggregation, indexing, and search technologies**.
* Experienced with various Azure services, including **PAAS, IAAS, Virtual machines, Application Insights, Key Vaults, Azure Data bricks, ASE, App Service, Azure Blob Storage, Azure SQL Database, Visual Studio Code, Azure Pipelines,** and **ARM templates**.
* Proficient in implementing **Azure Build and Release Pipelines** and creating **ARM JSON** templates and **Terraform** files for **infrastructure-as-code deployments**.
* Configured Build/Release agent pools, ensuring all prerequisites including **.NET framework** and **PowerShell AZ module** were in place. Utilized configuration management tools like **Ansible, Chef,** and **Puppet** for deployment and configuration tasks.
* Familiar with monitoring and management tools such as **Application Insights, New Relic, Grafana, SPLUNK,** and **ELK**.
* Skilled in **Docker-based container** deployments, creating isolated environments for development teams and containerizing environment delivery for releases.
* Worked with Container Orchestration Platforms like **Docker and Kubernetes**.
* Experience in working with DevOps tool like **Sonar Qube, Veracode, JFROG Artifactory** and **Jira**.
* Proficient in continuous integration tools like **Jenkins**, setting up build pipelines and ensuring security in the Jenkins environment.
* Managed **Git repositories**, facilitated code merging, and oversaw production deployments.
* Possesses strong expertise in designing, installing, and implementing **VMware ESXi Server, VMware Virtual Center, VMware vSphere, VMware Infrastructure client**, and other virtualization products.
* Developed custom scripts using **Power Shell and Shell (bash)** for job automation.
* Collaborated closely with **Java and Database teams** to **deploy** applications and **troubleshoot** issues.
* Implemented a **'server less' architecture** using **API Gateway, Lambda,** and **Dynamo DB** and **deployed AWS Lambda code** from **Amazon S3 bucket**.
* Results-driven Senior DevOps Engineer with a proven track record of optimizing **CI/CD pipelines**, **reducing deployment times by up to 30%**, and **automating infrastructure using Azure CLI and Power Shell**. Seeking to leverage 9+ years of expertise to drive efficiency and innovation in a dynamic organization, delivering cutting-edge solutions and contributing to its success.

**TECHNICAL SKILLS**

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| **Programming Languages** | Java, Python, .NET, PHP |
| **Build Tools** | Maven, Ant, Nexus |
| **Continuous Integration** | Hudson, Jenkins, Jira, API, Postgres |
| **Ticketing tools** | Jira, ServiceNow, Postgres |
| **Configuration Management** | Chef, Ansible, Puppet, Terraform |
| **Version Control Tools** | Subversion, TFS, GIT, GIT HUB, SVN, Bitbucket |
| **Databases** | MySQL, MySQL, Oracle, MySQL, Mongo DB, PostgreSQL, RDS, Elastic ache |
| **Monitoring Tools** | Dynatrace, Grafana, Nagios, Splunk, AWS cloud watch, ELK, Azure Monitor |
| **Application Servers** | Apache Tomcat, WebSphere, JBoss |
| **Scripting** | Ruby, Python, Golang, groovy, Unix Shell scripting, Node JS, XML, HTML, JAVA, JEE,  JavaScript, Angular JS, Power Shell, JSON, YAML, AWS Lambda. |
| **Testing Tools** | Junit, Selenium, Bamboo, Saltstack |
| **Containerization Tool** | Docker, Kubernetes, Postgres |
| **Operating systems** | Red Hat Linux, CentOS 6 &amp; 7, Ubuntu12.x, 13.x, 14.x, Windows 98, Vista,  Windows Server 2003, 2008, 2012, VMware ESX and Mac OS. |

**PROFESSIONAL EXPERIENCE**

**Sr. DevOps Engineer**

**Comcast Cable Communications LLC – Denver, CO Sep 2021 – Till date**

**Responsibilities:**

* Designing user roles and groups via **AWS** Identity and Access Management (**IAM**) and establishing network management using Security Groups and Network Access Control Lists in conjunction with IAM services.
* Employing AWS Beanstalk for the deployment and scaling of web applications and services developed in **Java, PHP, Node.js, Python, Ruby, and Docker** on well-known servers such as **Apache and IIS.**
* Monitored the **Azure Resources** using Azure Monitor and Web Apps for **Application Insights** and used the **Grafana** Monitor Tool to troubleshoot services, root cause analysis, and security solutions.
* Crafting and creating new environments through Infrastructure as Code **Pipeline** in **Terraform**.
* Utilizing **Ansible** and **Terraform** for the automation of Cassandra-related tasks, including new installations, configurations, and basic server-level checks.
* Implemented to automate the infrastructure using**Azure CLI** and was involved in accessing subscriptions using **PowerShell** and monitoring and troubleshootingAzure resources I have used **Azure app insights**.
* Orchestrating deployment structures via **Kubernetes** files on UrbanCode-deploy and UrbanCode-release.
* Initiating **Amazon EC2 cloud instances** using Amazon instances, including **Linux** and **Ubuntu**, and tailoring launched instances to accommodate specific applications.
* Configured and implemented the **Azure Data Factory** Triggers and scheduled the Pipelines; monitored the scheduled Azure Data Factory pipelines and configured the alerts to get notification of failure pipelines.
* Generating **automation and deployment templates** for both relational and NoSQL databases, encompassing MySQL, Cassandra, and MongoDB, within AWS.
* Exposure to**Azure Data Factory activities** such as Lookups, Stored procedures, if condition, for each, Set Variable, Append Variable, Get Metadata, Filter, and Wait.
* Moderated and contributed to the support forums (**Azure Networking, Azure VMs, Azure Active Directory, Azure Storage**) for Microsoft Developers Network inclusive of Partners and **MVPs**
* Automating the deployment of application and MySQL containers in **Docker** using Python.
* Developing Cloud Formation Templates **(CFT)** in **JSON and YAML** formats to construct AWS services with a focus on the Infrastructure as a Code (IaaS) paradigm.
* Establishing Continuous Integration by configuring Build and test automation (ATDD) Jobs in **Jenkins**, connecting them to **Orchestration** and **UI layer** Repositories in **GitHub/Subversion**.
* Created recommendations on how to duplicate a subset of on-premises machines to the Azure Infrastructure as a Service (IAAS) offering which will be used for disaster recovery. This analysis included the specifics to synchronize on-premises data with SQL Server and SharePoint instances hosted in **VMs**.
* Implementing multiple **Tomcat** Instances via the **Docker engine** to run several Containerized App Servers.
* Creating Python scripts for WebSphere deployments.
* Automating **Kubernetes clusters** with **Ansible** andcomposing playbooks for this purpose.
* Collaborating with **cloud** providers and **APIs**, including Amazon (AWS) **EC2, S3**, and **VPC**, as well as **Cloud Sigma** (EU) and **GFS storage**.
* Establishing and configuring numerous jobs in **Jenkins** to facilitate **CI/CD pipelines**, incorporating various plugins such as **DSL plugin**, **parameterized Trigger plugin, pipeline view plugin, Extended email plugin**, etc.
* Developing scripts using **Ant** and **Maven** build tools in **Jenkins** and **Sonar** to facilitate the transition between different environments.
* Building and implementing a complete CI stack to migrate from a Puppet stack in a colocation data center to **Terraform** with Chef on **AWS**.
* Constructing a **CI/CD pipeline** employing **Jenkins** jobs to create **AWS** infrastructure based on **Terraform code** stored in **GitHub** Repositories and developing new **plugins** to extend Terraform functionality.
* Employing **Dockerfiles** for the construction of Docker images from Java jar files.
* Engaging in **MongoDB** database design and indexing strategies, possessing a strong grasp of MongoDB write concern majority.
* Deploying and configuring Prometheus for monitoring **Kubernetes** nodes with node-exporter, as well as monitoring Kubernetes API and resources with Kube-state-metrics.

**ENVIRONMENT**: AWS (EC2, S3, RDS, EBS, and Elastic Load Balancer, Auto scaling groups, and optimized volumes, EC2 instances), Jenkins, Docker, Docker containers, Git, Kubernetes, Ansible, YAML SRE, App Insight, Azure Data factory, Networking in Azure, scripting, Python Scripts, MongoDB, Chef, Maven, Azure VMs Puppet, Cassandra, Apache, Ant, Java, SonarCube, Jira.

**Sr. DevOps Engineer**

**Humana Health - Chicago, IL June 2020 – Aug 2021**

**Responsibilities:**

* Demonstrated practical knowledge of Azure Services, encompassing Azure storage, Azure Active Directory (AD), Azure VMs, Azure Functions, Azure Service Fabric, Azure Monitor, and Azure Service Bus.
* Responsible for devising and executing the blueprint for transferring data from on-premises infrastructure to the Azure cloud. Additionally, accountable for the development of Azure Pipelines through Azure DevOps.
* Constructed CI/CD Pipelines within Azure DevOps environments, configuring their dependencies and tasks. Proficient in implementing and supervising continuous delivery systems and methodologies on Azure.
* Executed containerized applications on Azure Kubernetes, utilizing Azure Kubernetes Service (AKS) and Kubernetes Clusters for cluster management.
* Established Azure Kubernetes clusters across distinct environments such as Development, Production, and Sandbox, configuring the network settings accordingly.
* Crafted YAML files to define multiple Docker application services and employed Docker Compose for launching these services in various environments.
* Implemented email alert notifications within Azure Monitor, Prometheus, and Grafana. Accomplished this by composing query statements, setting up alert rules, and establishing action groups as dictated by project needs.
* Successfully deployed microservices, developed using Java and Python, into Kubernetes pods.
* Deployed Azure Infrastructure as a Service (IaaS) virtual machines (VMs) and Cloud services within secure VNets, incorporating Azure Internal Load Balancer and subnets.
* Architected and implemented the entire network infrastructure within the Azure cloud, including the creation of Virtual Networks (VNets), Subnets, and Network Security Groups (NSGs).
* Designed a Virtual Network to host agent nodes, Ingress API Gateway, MySQL Databases, and Cosmos DB for stateless storage of external data. Additionally, orchestrated the setup of a reverse proxy Nginx within the cluster.
* Generated comprehensive documentation and architectural designs to ensure transparency and effective communication.
* Recreated existing application logic and functionality within the Azure Data Lake, Data Factory, SQL Database, and SQL Data Warehouse environments.
* Proficiently utilized the Log Analytics workspace and demonstrated a strong grasp of the Kusto Query Language (KQL) to analyze logs originating from various regions and gather valuable data from these logs.
* Established Virtual Networks and subnets to create a well-organized and secure network environment.
* Evaluated workloads and prioritized support issues for the Unix Operations Team to ensure proper management and progression.

**Environments**: Linux (RHEL 4.x/5.x/6.x/7) Teradata, Cassandra, Puppet, Terraform, Ansible, Jenkins, Chef, Docker, Kubernetes, Nagios, WebLogic, WebSphere, Salt stack, Apache web servers, Kafka, FlexPLM, Splunk, Tomcat, servers, MySQL, Shell Scripting,Python, Git/Bitbucket, Jira, API, SRE, Postgres, DynamoDB, SQLDB.

**AWS/DevOps Engineer**

**Juniper Networks -** Farmington Hills, Michigan **Mar 2018 – June 2020**

**Responsibilities:**

* Established an automated build and deployment pipeline for applications, optimizing the setup for improved user experiences and spearheading the development of a comprehensive continuous integration system for all products.
  + - Implemented swift provisioning and lifecycle management for Ubuntu Linux instances utilizing Amazon EC2, Chef, and custom Ruby/Bash scripts.
    - Managed the Private Cloud Environment effectively with Chef.
    - Introduced a DevOps environment, leveraging Puppet for system configuration consistency across various environments.
    - Engineered an automation framework for deploying applications to cloud environments.
    - Oversaw and enhanced Continuous Delivery tools like Jenkins, handling installation, configuration, and administration of Hudson/Jenkins Continuous Integration Tool.
    - Developed Python scripts to automate infrastructure and operational processes.
    - Crafted build and deployment scripts using ANT and MAVEN as build tools within Jenkins, streamlining transitions between different environments.
    - Implemented AWS solutions using services such as EC2, S3, RDS, EBS, Elastic Load Balancer, and Auto Scaling groups.
    - Created custom scripts for monitoring repositories and server storage.
    - Contributed as a key member of the Technical Design team, particularly within the Build and Release Module for new product development.
    - Automated cloud deployments using Chef, Python (utilizing libraries like boto and fabric), and AWS Cloud Formation Templates.
    - Automated build deployment to different environments through Jenkins.
    - Orchestrated deployments on the CAE-OpenShift container platform, creating and deploying Docker Images with snapshot-based images.
    - Utilized Puppet to facilitate ELK (Elasticsearch, Logstash, Kibana) deployment, automating continuous deployment (CD) processes and configuring Slave Nodes with deployment failure reporting.
    - Played a pivotal role in projects transitioning to production, fostering collaboration between Data Center, Development, Quality Assurance, and Management teams to ensure transparent communication and approval of all production changes.
    - Managed version control repositories by creating branches, labels, and conducting merges in tools like Stash and GitHub.
    - Developed Agile processes using Groovy and JUnit for seamless integration into continuous integration tools.
    - Automated the end-to-end build and deployment of Java/J2EE applications in an Agile continuous integration environment.
    - Designed and maintained Shell/Perl deployment scripts for TC Server/Tomcat web application servers.
    - Administered the METACASE client-server architecture domain-specific modeling software effectively.
    - Utilized Maven as a build tool for Java projects, facilitating the development of build artifacts from source code.

**Environments**: Git, Maven, Docker, AWS, Chef, Jenkins, Apache Webserver, Apache JMETER, Python, Shell, PowerShell, SRE.

**AWS/Azure DevOps/Release Engineer**

**Lexmark-** Lexington, KY **May 2015 – Feb 2018**

**Responsibilities:**

* Acted as the representative of the SRE (Site Reliability Engineering) team in design reviews and operational readiness assessments for both new and existing services.
* Demonstrated expertise in migrating on-premises data centers to AWS cloud, utilizing VM Import/Export and AWS Data Migration Services.
* Configured Jenkins as a robust build engine to facilitate application builds and deployments across various environments, including DEV, QA, UAT, and PROD.
* Engaged in periodic on-call responsibilities as part of the SRE team.
* Proficiently employed Docker and Ansible to establish automation pipelines and enable Continuous Deployment of code using Jenkins. Authored Ansible Playbooks to automate Ansible Servers through YAML scripting.
* Employed a diverse set of tools and technologies including Chef, Puppet, Jenkins for continuous development, and scripting languages such as PowerShell, PHP, Python, C#, Java, JavaScript, and Unix/Linux scripting.
* Skillfully managed Docker service rolling updates to ensure zero downtime deployments in production. Collaborated with Docker Trusted Registry as a repository for Docker images and worked extensively with Docker Swarm.
* Possessed hands-on experience with Chef Enterprise and Chef Open Source, Chef DK, Chef Workstation, Chef Server, and client, managing configuration and deployment tasks effectively using tools like chef (Knife, recipe, cookbook).
* Developed a resilient backup and recovery engine for VMs using VMware vSphere APIs, leveraging the Golang programming language. Contributed source code in Golang to enhance an automation framework.

**Environments**: Azure, Aws, Docker, Swarm, Jenkins, Ansible, Jira, GCP, Confluence chef, Git, Git-Hub, Maven, MySQL, PowerShell Windows, Terraform, SRE, JIRA, Apache Tomcat, Shell Script, Python, Linux, Dynatrace, Splunk.

**Graduate Assistantship at Indiana Tech University - Build & Release Engineer May 2014 – Mar 2015**

**Responsibilities:**

* Collaborated with the university's software development teams to define and implement effective build and release processes.
* Maintained and enhanced the Continuous Integration (CI) and Continuous Deployment (CD) pipelines for various software projects.
* Automated build and deployment procedures to increase efficiency and reduce manual errors, using tools like Jenkins or Travis CI.
* Developed UNIX and Perl scripts for manual code deployment across different environments and implemented email notifications upon build completion.
* Assisted in the configuration and management of version control systems, such as Git, to ensure proper source code management.
* Monitored and resolved build failures and deployment issues promptly to minimize project disruptions.
* Deployed static content to web servers like Tomcat, iPlanet, and IBM HTTP Server.
* Utilized SOAP UI and REST to test the web service functionality, verifying results with assertions.
* Implemented automated build processes using the Jenkins CI tool and Cruise Control.
* Worked closely with developers to troubleshoot and resolve code integration conflicts.
* Implemented best practices for versioning and branching strategies to streamline development workflows.
* Managed and maintained software artifacts and dependencies in a repository manager like Nexus or Artifactory.
* Conducted regular code reviews to ensure adherence to coding standards and proper version control practices.
* Collaborated with QA and testing teams to ensure smooth transitions from development to testing environments.
* Documented build and release procedures and provided training to new team members and developers.
* Assisted in the evaluation and implementation of new build and release tools and technologies to improve efficiency.
* Participated in on-call support rotations to address urgent build and release issues outside of regular hours.

**Environment:**UNIX, Sun Solaris, SVN, ANT, NEXUS, Shell /Perl Scripts, XML, Business Objects, Soap UI, JAVA, J2EE, Jenkins, Maven, Tomcat, TFS, Perforce, Web Logic, Oracle, Windows, Servlets, PL SQL, Apache Application Server, SQL.

**EDUCATION**

MS in Information Technology & Management Indiana Tech University at Indiana, USA Dec 2013 – Mar 2015

Bachelors in computer science engineering Osmania University at Hyderabad, India Sep 2009 – May 2013