

# Phalguna Goli

## Cloud/DevOps Engineer

[phalgunagoli@gmail.com](mailto:phalgunagoli@gmail.com)

+1 571-283-8248

### PROFESSIONAL SUMMARY:

DevOps Engineer with over 8 years of expertise in cloud technologies, including AWS and Azure. Proficient in the comprehensive software configuration management (SCM) lifecycle, adept at integrating Continuous Integration, Continuous Delivery, and Continuous Deployment (CI/CD) processes, configuration management tools, along with build and release management. Experienced in Linux and system administration.

- Hands-on experience in the DevOps realm, adeptly managing various CI/CD implementations from code compilation to deployment, including environment management and maintenance.
- Specialized in designing AWS infrastructure for application deployment, using services like EC2, RDS, VPC, Route 53, Direct Connect, IAM, Cloud Formation, AWS OpsWorks, Elastic Beanstalk, AWS S3, Amazon Glacier, and CloudWatch for comprehensive solutions in networking, security, operations automation, storage, and monitoring.
- Extensive experience managing GitLab Community Edition (CE) and Premium instances, including user and repository management, and configuring CI/CD pipelines
- Successfully conducted migrations from on-premise GitLab CE and Premium instances to centralized GitLab SaaS, ensuring smooth transitions with minimal downtime.
- Led several migration activities, moving source control repositories and CI/CD pipelines to new environments. I ensured data integrity and continuity throughout the process.
- Developed and maintained CI/CD pipelines using various tools, including Jenkins, Azure DevOps, and CircleCI. This includes integrating automated testing, build, and deployment processes.
- Designed and implemented complex CI/CD workflows, optimizing performance and reliability across different environments.
- Hands-on experience with Groovy, particularly in writing Jenkins pipelines. Additionally, I have rewritten Groovy scripts into other languages like Python and Bash to meet specific project requirements.
- Proficient in YAML and JSON for configuration management and automation scripts.
- Converted existing AWS Infrastructure to serverless architecture using AWS Lambda and Kinesis, deploying via Terraform and AWS Cloud Formation templates.
- Expertise in Terraform for infrastructure as code, including execution plans, resource graphs, change automation, and deploying microservices with Amazon EC2 instance deployment using Auto Scaling and configuration templates.
- Familiar with Azure IaaS, managing Virtual Networks, Virtual Machines, Cloud Services, Resource Groups, Express Routes, VPN, Load Balancing, Application Gateways, Auto Scaling, and Traffic Management.
- Served as a DevOps Engineer, utilizing proprietary and open-source tools like Jenkins, AWS, and JIRA for developing and deploying internal tools.
- Managed container deployments using Kubernetes, including scheduling, deploying, and managing container replicas onto node clusters, and building a Kubernetes runtime environment for CI/CD systems.
- Developed Packer templates to generate AMIs in AWS, integrating Jenkins pipelines with Apache Maven and Node for automated continuous integration and Docker for deployment.
- Adhered to Software Development Lifecycle best practices, using Ansible for automation and integrating Docker, Jenkins, Tomcat, and Maven for CI/CD.
- Expertise in Azure Development worked on **Azure web application, App services, Azure storage, Azure SQL**

**Database, Azure Virtual Machines, Azure AD, Azure search, Azure DNS, Azure VPN Gateway and Notification hub.**

- Crafted Jenkins pipeline code using Groovy for the integration and automation of build and deployment tools, and configured JFrog Artifactory for version-controlled Maven artifacts.
- Automated GitHub to BitBucket code synchronization to ensure code consistency across platforms.
- Implemented CI/CD pipelines using Azure DevOps (VSTS, TFS) with GIT, MD Build, Docker, Maven, and Jenkins plugins.
- Experienced in SCM tools like GIT, GitLab, GitHub, and Subversion (SVN) for branching, tagging, and maintaining version control across different environments.
- Participated in agile development teams to deliver end-to-end CI/CD products in an open-source environment using tools like Jenkins and VSTS.
- Implemented and supported CI processes via Jenkins for Java applications, including pipeline jobs and downstream job configurations. Proficient in managing repository managers like Nexus and JFrog Artifactory for Maven builds.
- Developed a comprehensive understanding of the cloud Computing Stack (SaaS, PaaS, IaaS) and implemented SSH Backup management with PEM keys for AWS VPC setups across DEV, QA, and Production environments.

#### TECHNICAL SKILLS:

|  |   |
|--|---|
| <b>Cloud Technologies</b>  | Amazon Web Services, Microsoft Azure  |
| <b>Container Orchestration Tools</b>   | Docker, EC2 Container Services, Kubernetes, Azure container services, OpenShift   |
| <b>Configuration Management</b>  | Chef, Ansible, Puppet   |
| <b>Version Control Tools</b>   | GitHub, Azure Repos, SVN , Bitbucket, Gitlab  |
| <b>Monitoring Tools</b>  | Splunk, Dynatrace, ELK, Logstash, Kibana, Datadog   |
| <b>Bug Tracking Tools</b>  | JIRA, ServiceNow  |
| <b>Build Tools</b>   | Maven, Gradle, Ant  |
| <b>Continuous Integration</b>  | Jenkins, Azure DevOps, GitHub Actions, CircleCI, SonarQube  |
| <b>Scripting Languages</b>   | Shell, YAML, Python, Json , Groovy  |
| <b>Languages</b>   | C, C++, python  |
| <b>Database</b>  | MySQL, Oracle, DynamoDB, MongoDB  |
| <b>Repository Management</b><br><b>Virtualization</b><br><b>Operating System</b> | Nexus, JFrog, Artifactory<br>VMware ESX/ESXi, Windows Hyper-V, Vagrant, Oracle Virtual box<br>Red Hat, Ubuntu, CentOS, Windows, Unix, Solaris, Mac OS |
| <b>Networking Protocols</b>  | TCP/IP, DNS, NFS, SMTP, DHCP, CIFS, NTP and HTTP  |
| <b>Web and Application Servers</b>   | Apache Tomcat, JBOSS, Web Sphere, Web Logic, Nginx  |

## PROFESSIONAL EXPERIENCE:

Client: State Farm

April 2023 – present

Role: Cloud/DevOps Engineer

### Responsibilities:

- Provisioned AWS infrastructure using infrastructure as code such as Terraform and CloudFormation.
- Made monthly updates to AWS infrastructure (VPC networks, RDS, EC2 Instances, etc) by updating CloudFormation template to support release architecture.
- Managed container deployments using Kubernetes, including scheduling, deploying, and managing container replicas onto node clusters, and building a Kubernetes runtime environment for CI/CD systems.
- Setting up SWARM using **Kubernetes** and deployed containers using **Docker** inside the application.
- Virtualized the servers using the **Docker** for the test environments and dev-environments needs. In addition, configuration automation using **Docker** containers.
- Managed container-based deployments using **Docker**, created images from the Docker containers, and pushed them to the **Docker registry**.
- Created Pods with **Kubernetes** through YML scripts and Deploy to **Docker** containers in various nodes in the environments.
- Have extensive experience managing GitLab Community Edition (CE) and Premium instances, including user and repository management, and configuring CI/CD pipelines.
- Successfully conducted migrations from on-premise GitLab CE and Premium instances to centralized GitLab SaaS, ensuring smooth transitions with minimal downtime.
- Enhanced AWS infrastructure scalability and management by integrating CloudFormation with AWS Auto Scaling Groups, ensuring optimal resource allocation and cost efficiency.
- Implemented sophisticated resource tagging strategies in CloudFormation templates to streamline the categorization, management, and cost tracking of AWS resources.
- Implemented IAM role-based access for Jenkins and GitHub Actions, securing CI/CD pipelines and ensuring that automated processes have minimal and specific permissions needed for deployment tasks.
- Utilized IAM roles with CloudFormation to delegate permissions to AWS resources, enabling secure and automated provisioning without the need for explicit credential management.
- Advanced infrastructure as code practices by incorporating Terraform modules for reusability and maintainability across multiple AWS environments, reducing deployment times and errors.
- Leveraged Terraform workspaces to manage state files securely and efficiently across different environments, facilitating seamless transitions between development, staging, and production.
- Automated the deployment process by setting up Jenkins pipelines that trigger Terraform plan and apply commands, ensuring consistent and error-free deployments through CI/CD integration.
- Established GitOps workflows by integrating GitHub Actions with Terraform, allowing for automated infrastructure updates and application deployments upon git push events, enhancing team collaboration and operational efficiency.
- Optimized AWS resource usage and cost by implementing Terraform-based cost estimation and alerting mechanisms, proactively managing budget constraints.
- Strengthened security posture by automating the deployment of AWS IAM policies and roles using Terraform, ensuring least privilege access and compliance with security best practices.
- Implemented dynamic environment creation using Terraform and Jenkins, enabling on-demand provisioning

of review environments for testing, significantly reducing the feedback loop for development teams.

- Integrated CloudFormation with AWS Lambda and API Gateway to automate the setup of serverless applications, facilitating rapid development and deployment cycles.
- Enhanced monitoring and observability by configuring CloudWatch alarms and dashboards through CloudFormation templates, ensuring high availability and performance of cloud resources.
- Utilized GitHub Actions to automate CloudFormation template linting and validation processes, improving code quality and infrastructure reliability.
- Developed custom Jenkins plugins to integrate with AWS services, streamlining the build, test, and deployment processes for cloud-native applications.
- Automated the management and rotation of secrets in AWS using Terraform and Ansible, enhancing the security of application deployments.

TCS India

June 2019 – Nov2022

Role: DevOps Engineer

### Responsibilities:

- Developed and maintained CI/CD pipelines using various tools, including Jenkins, Azure DevOps, and CircleCI. This includes integrating automated testing, build, and deployment processes.
- Oversaw Azure infrastructure management, including Azure Web/Worker Roles, SQL Azure, Azure Storage, AD Licenses, and Office365, leveraging Azure PowerShell and Portal for VM backup and recovery.
- Utilized OpenStack for network services deployment like LBaaS, FWaaS, and VPNaaS, enhancing network capabilities.
- Deployed applications on WebLogic, WebSphere, IIS, and Apache Tomcat Server, ensuring efficient application functionality.
- Automated web server log rotation and developed web applications using Python scripts and Django ORM Libraries.
- Managed user and group permissions on Solaris Linux servers, addressing user issues and troubleshooting Linux Systems for hardware, software, and networking problems.
- Authored Chef Cookbooks and Ansible playbooks for middleware installations and pre-production environment provisioning, including Cassandra databases.
- Automated workflows with Chef and Ansible Tower, streamlining deployment processes and ensuring rigorous change management.
- Managed Docker network configurations and mentored on Kubernetes cluster design and application deployment.
- Developed Azure automation scripts, including PowerShell runbooks, and configured Azure AD connect for ADFS installations.
- Specialized in Private and Hybrid cloud configurations, deploying Azure Cloud services and IaaS VMs with enhanced security measures.
- Created Azure Functions with HTTP Triggers for application load testing and monitoring, facilitating on-premises to cloud migrations.
- Build, deploy and migrate infrastructure to Azure utilizing ARM templates and Terraform. Work with **Azure DevOps** to create an all-inclusive CI/CD process.
- Set up Azure VMs for security functions, orchestrated Cassandra clusters with Chef, and managed ELK stack for server log analysis and monitoring with New Relic.
- Deployed and configured **Git** repositories with branching, forks, tagging, and notifications. Experienced and proficient in deploying and administering **GitHub**.
- Experience in alert handling, standard availability, and performance report generation. Experience in root

cause analysis of post-production performance related issues through Splunk tool.

- Developed **PowerShell** scripts to automated web application servers, automation of the build and release process to automate certain processes for the smooth process of build tools.
- Experience in using **JIRA** for **bug tracking**, creating the dashboard for issues, and resolving system issues and inconsistencies in coordination with **quality assurance** and engineering teams.

**Client: Synechron Technologies, India**

**Jan 2019 – June 2019**

**Role: Software Engineer**

**Responsibilities:**

- Demonstrated expertise in troubleshooting, monitoring, evaluating, configuring, installing, and maintaining enterprise servers to ensure peak performance and reliability.
- Applied hardware and software updates, keeping systems secure, current, and operating smoothly.
- Supported the applications team in deploying custom and third-party software, playing a crucial role in network management. This included setting up and managing network devices such as access points, switches, routers, and overseeing DNS and DHCP services.
- Employed helpdesk software to deliver extensive hardware and software support, achieving timely and efficient problem resolution.
- Ensured the continuous operation and maintenance of key applications like Gitlab, Jira, Ansible, AWS Workspace, and ServiceNow, providing uninterrupted service to users.
- Worked closely with Senior Engineers to conduct regular system updates and security patches, maintaining system integrity and compliance.
- Engaged in strategic discussions and planning sessions for application enhancements and updates, aligning initiatives with the organization's goals and technical requirements.
- Involved in setting up accounting systems and performing ongoing system with the administrative tasks. Extensive user and group management through **shell scripting**.

**ZenQ – Hyderabad, India**

**Sep 2017 - Dec 2018**

**Linux Systems Admin**

**Responsibilities:**

- Setup, configure and troubleshoot TCP/IP, DHCP, DNS, NFS, SSH, CIFS, SAMBA on Multiplatform (RHEL/CentOS).
- Performs Monitoring and Log Management on RHEL CentOS servers, including processes, crash dumps and swap management with password recovery and performance tuning.
- Hardening, Patching and upgrades (release) on standalone servers using (single user mode), and on production servers (live upgrade).
- Configured and managed storage volumes such as **LVM and VERITAS on RHEL/CentOS systems**.
- Creating, cloning Linux Virtual Machines, templates using **VMware Virtual Client 3.5 and migrating servers between ESX hosts**.
- Writing Shell scripts for automation of daily tasks, documenting the changes that happen in the environment and in each server, analyzing the error logs, analyzing the User logs, analyzing the /var/log/messages.
- Responsible for writing Bash, Perl, Python scripts to ping the servers and add users to the boxes. Resolved system errors, crashes, disk space problems, huge file sizes, and file system full errors.
- Responsible for configuring and connecting to SSH through SSH clients like Putty and Cyber duck.
- Extensively worked on troubleshooting various problems while working with VM during initialization, replacement, mirroring, encapsulating, and removing disk devices.

**Responsibilities:**

- Worked on design, configuration, installation, implementation, management, maintenance and support for the Corporate Linux servers RHEL 4x, 5.x, CENTOS 5.x.
- Installed and configured SSH, SFTP, NDM, EMC Power path, Veritas Dynamic multipathing, Oracle client, SAMBA utility software.
- Implemented the Jumpstart in Solaris servers and Kickstart in Linux Servers to mechanize the server works for numerous profiles.
- Worked on Linux Logical Volume (LVM), created volume groups, Logical volumes, file systems, and troubleshooting.
- Performed package management using RPM, YUM, Apt-get and dpkg for maintaining stability and security of the servers.
- Created users, manage user permissions, maintain User & File System quota on Red hat Linux.
- Worked on Day to Day Server maintenance task using command ns lookup, ping, top, vmstat, IOStat, tcp dump etc.
- Worked on various UNIX servers (core dump and log file analysis) for configuring and troubleshooting along with analysis of hardware and software failures.

**Education:**

Bachelor's in Electronics and communications Engineering, Vignan University.