Gopal G.

contact@devoperations.engineer | +1-812-370-0840 | www.devoperations.engineer

SUMMARY

Around eight years of experience comprising Linux Administrator and Software Configurations Management with Expertise in the areas of Build and Release management, taking care of CI/CD pipeline, cloud solutions, and containerization.

- Expertise designing architecture and working on **AWS** and **Azure** for various domains
- Strong experience in integrating DevOps tools, building **CI/CD** pipelines, and working in **DevOps/Agisle** operations processes
- Good experience in Software Product Development, Process Automation, Build and Deployment Automation, Release Management, Packaging Quality Control, Source Code repository & Environment management
- Good experience in building/maintaining **Docker** images and containers & orchestrating container clusters using **Kubernetes.**
- Expertise in working with AWS Creating **EC2** instances, adding **EBS** volumes, and knowledge with **VPC, Route53, RDS, S3, IAM, SNS, SQS, SWF, SES, Autoscaling, Storage gateway, Elastic Beanstalk, CloudFormation** and **CloudWatch**
- Worked with containerization tools, can implement transition to **Docker** and develop distributed cloud systems using **Kubernetes** and **Helm package** manager for kubernetes.
- Experience in implementing **Azure** Application Insights and **OMS** for monitoring applications and servers. Solution development for OMS Alerting and Remediation.
- Improved application performance using **Azure** Search and Internet of Things (IoT) optimization and Implemented Azure Application Insights to store user activities and error logging.
- Extensive experience with **Jenkins** building end-to-end pipelines
- Good Experience in using version control systems such as **GIT, SVN**, and used Source code management client tools like **GitBash, GitHub, Git Lab**. Good knowledge of **Teamcity, Subversion, Git (Bitbucket/GitLab),** and **Artfactory** or in similar applications
- Deep knowledge in branching, tagging, and maintaining the version across the environments using SCM tools like **Git, GitLab, GitHub**, and **Subversion (SVN)** on Linux and Windows platforms.
- Good experienced in configuring, patching, and administrating Linux (**RHEL, CentOS, Ubuntu, Solaris, SUSE**) and **Windows**
- Experienced in writing IaC scripts with **Terraform** from scratch for development, staging, production and disaster recovery.
- Knowledge in **Ansible** and **RedHat Ansible Tower** for provisioning, configuration management, automation, deploying apps
- Extensively worked with Scheduling, deploying, managing container replicas onto a node using **Kubernetes** and experienced in creating Kubernetes clusters work with Helm charts running on the same cluster resources.
- Good experience in writing **Helm Charts**, **Kubernetes YAML** files to deploy microservices into Kubernetes clusters
- Good knowledge and worked on several **Azure**, **Google Cloud Platform** and **IaaS**, **PaaS**, and **SaaS** tools.
- Expert in version controlling with **Git** and **SVN** and writing with **Maven, Ant,** and **Gradle** Scripts to automate the build process
- Experienced with configuring and using **Sonatype Nexus** and **Artifactory** Repository Managers for **Maven** and **ANT** builds
- Worked on **Java** and **.NET** apps by automating builds from end-to-end using tools like **SonarQube, VisualStudio** using Jenkins
- Worked in all the phases of the **SDLC** with a focus on the build-and-release of quality software in **Waterfall, Agile, & Scrum.**
- Experience in using **Tomcat, JBOSS, WebLogic**, and **WebSphere** Application servers for deployment and worked with multiple databases like **MongoDB, Cassandra, MySQL, PostgreSQL, ORACLE**
- Skilled in monitoring servers using **Nagios, Datadog, Splunk, CloudWatch, Prometheus** and **Grafana**, and using **ELK Stack ElasticSearch Logstash**
- Experienced in installing, configuring, supporting, and troubleshooting Unix/Linux Networking services and protocols like **NIS, NIS+, LDAP, DNS, TCP/IP, NFS, DHCP, NAS, FTP, SSH** and **SAMBA**.
- working knowledge of **Python** programming
- Written **Shell** and **PowerShell** scripts to perform deployments to **Jboss** and **Tomcat** Web servers.
- Experience **supporting 24x7** production computing environments. Experience providing **on-call** and weekend support.

SKILLS

Cloud Technologies	AWS, Azure
Operating systems	RHEL, CentOS, Ubuntu, SUSE, Sun Solaris, Windows, Unix
Containerization	Docker, Kubernetes
IaC	Terraform, CloudFormation
Virtualization	Vmware, ESX, ESXi, vSphere (4 & 5) , Citrix
Source Control	Git, Gitlab, Bitbucket, GitHub Enterprise, SVN
Continuous Integration Tools	Jenkins, Bamboo, Team City, Bitbucket Pipelines, Gitlab CI
Build Tools	Maven, Gradel, Ant
Continuous Management	Ansible, Chef, Puppet
Scripting	Shell, Bash, Python, PowerShell
Monitoring / Logging	Nagios, Splunk, ELK, Kibana, Grafana, New Relic
Databases	Postgres SQL, MySQL, Oracle, MongoDB, Redis
Bug Tracking	Jira
Change Management	Jira, Service Now

EDUCATION

Cleveland State University, Cleveland, OH
Master of Information Systems / Security Assurance
Awarded Monte Ahuja Scholarship based on academic performance

Cleveland State University, Cleveland, OH
Bachelor of Computer Science

EXPERIENCE

CUNA Mutual Group 📍 **Madison, WI**   **Feb 2021 – Present**
Cloud Automation / Devops Engineer

❙ Roles and Responsibilities:

- Involved in designing and deploying a multitude of applications utilizing almost all the AWS stack including **EC2, Route53, S3, RDS, DynamoDB, SNS, SQS, LAMBDA, REDSHIFT**, focusing on high-availability, fault tolerance, and auto-scaling
- Used **AWS IAM** service to provide fine-grained access to respective users. Managed IAM roles and permissions of users to AWS account through IAM.
- Used **CloudWatch** to monitor AWS resources to set up alarms for notification, automated actions, operation of the system, and respond to system-wide performance changes.
- Used **AWS Beanstalk** for deploying and scaling web applications and services developed with Java, Node.ps, Python on servers like Apache, Nginx, Tomcat.
- Configure and manage **AWS Glacier**, to move old data to archives based on retention policy of database applications (AWS Glacier Vaults).
- Writing **Terraform** scripts from scratch for managing AWS resources such as EC2, S3, IAM Policies, EMR, EFS, EBS, RDS, VPC, Security Groups, NACLS, Route Tables, etc.
- Automating cloud infrastructure setup via **Terraform** and, AWS **CodeDeploy**
- Wrote **Terraform** scripts from scratch for building Dev, Staging, and Prod and DR environments
- Built complete Configuration Management for the Microservices using Kubernetes, Docker, and Ansible.
- Involved in writing various custom **Ansible playbooks** for deployment orchestration and developed Ansible Playbooks to simplify and automate tasks. Used **Ansible Vault** to protect encrypted data needed for tasks.
- Used **Ansible Tower** for scheduling playbooks and used GIT repository to store our playbooks.
- Implemented **Ansible** to manage all existing servers and automate the **build/configuration** of new servers. All server types were defined in Ansible such that a newly built server can be up and ready for production within minutes of OS installation.
- Implemented a **Continuous Delivery** pipeline with **Docker, Jenkins, GitHub,** and **AWS AMI**'s such that whenever a new GitHub branch gets started, Jenkins automatically attempts to build a new Docker container from it
- Worked on **Docker engine** and Docker Machine environments to deploy the micro services-oriented environments for scalable multi-container applications.
- Utilized **Kubernetes** and **Docker** for the runtime environment for the **CI/CD** system to build, test, and deploy.
- Created **Jenkins** jobs to deploy applications to **Kubernetes** Cluster.
- Configured **Kubernetes** to deploy scale, load balance, scale, and manage Docker containers with multiple name space versions
- Managed **Kubernetes** charts using **Helm**, created reproducible builds of the Kubernetes applications, managed Kubernetes deployment and service files, and managed releases of **Helm packages**.
- Developed and Implemented **Kubernetes manifests**, **Hielm charts** for the deployment of microservices into k8s clusters
- Used **Jenkins** and pipelines to drive all microservices builds out to the Docker registry and then deployed it to Kubernetes. Created Pods and managed them using Kubernetes.
- Using **Jenkins** AWS **CodeDeploy** plugin to deploy to AWS.
- Deployed **.NET** applications to servers in an **Agile, continuous integration** environment and automated the whole process.
- Strong experience utilizing **Jenkins** for enterprise-scale infrastructure configuration and application deployments & checking out the code from **GIT**, and using **Ant/Maven** to build **Jar, war, tar,** and **ear** artifacts. Provisioning Web Servers in AWS and **DNS Route53** records.
- Responsible for design and maintenance of the **Git repositories**, views, and access control strategies and Managed Git repositories for branching, merging, and tagging.
- Managed the **Maven** Repository using the **Sonatype Nexus** to automate the builds process and used the same for the snapshots and releases of internal projects
- Maintained settinvgs.xml in **Maven** for permissions to users and deploying the artifacts directly to Nexus Repository

- Experience in using **SPLUNK** for log analyzing and improving the performance of servers
- Automate the Build and deploy of all internal Java & .Net environments using various continuous integration tools and scripting languages(**Python, Shell, Powershell**)
- Built application and database servers using AWS EC2 and used **RDS** for **OracleDB**.

ENVIRONMENT: AWS, Terraform, Ansible, Docker, Kubernetes, Jenkins, Git, Maven, Nexus, Splunk, Powershell

---

Humana Inc. 📍**Louisville, KY**   **Aug 2019 – Jan 2021**
DevOps / SRE Engineer

❚ Roles and Responsibilities:
- Developed and implemented Sofftware Release Management strategies for various applications according to the agile process.
- Extensively involved in Managing **Linux**, and **Windows** virtual servers on AWS **EC2** instance
- Provide highly durable and available data by using **S3** data store, **versioning, lifecycle** policies, and create **AMI**s for mission-critical production servers for backup, and RDS, Route 53, VPC, RDS, DynamoDB, SES, SQS, and SNS services in AWS cloud
- Worked on building a data center with **AWS**. Built Pre-prod environments AWS services like **EC2, S3, VPC, EBS, ELB, Auto-Scaling, Cloud Watch, Cloud Trail, IAM, SNS, SQS, RDS, DynamoDB, Cloud front, etc.**
- Managed servers on the Amazon Web Services (AWS) platform instances using **Puppet, Chef** Configuration Management.
- Used **AWS Beanstalk** for deploying and scaling web applications and services developed with Java, Node.ps, Python on servers like **Apache, Nginx, Tomcat**.
- Created, maintained, and handled different operations like maintaining and troubleshooting **EC2** instances, **S3**, **VPC,** and **ELB.**
- Build, manage, and continuously improve the build infrastructure for the software development engineering teams, including **implementing build scripts, continuous integration** infrastructure, and deployment tools.
- Expertise in writing new **plugins** to support new functionality in **Terraform**.
- Worked on administration, maintenance, and support of **Red Hat Enterprise Linux** servers.
- Experience in writing **Ansible** scripts and heavy **Shell, Perl, Python,** and **JSON** scripting
- Hands-on experience in container-based deployments using Docker, working with Docker images, automated builds using Docker Hub and Docker registries, **Kubernetes, Docker**.
- Worked on installing Docker using **Docker toolbox**; created Docker containers and Docker consoles for application life cycle.
- Worked on **Docker container** snapshots, attaching to a running container, removing images, managing directory structures, and managing containers.
- Using **Jenkins** AWS CodeDeploy plugin to deploy to AWS.
- Used Jenkins for automating Builds and Automating Deployments.
- Worked on developing **CI/CD** system with **Jenkins** on **Kubernetes** environment, Utilized **Kubernetes** and **Docker** for the runtime environment to build, test, and deploy, and troubleshot pods through **SSH** and logs, wrote and modified Buildconfigs, templates, Imagestreams, etc.
- Create, maintain, and administrating **GitHub** and **Subversion** repositories as source code management.
- Integrated **GIT** into **Jenkins** to automate the code check-out process.
- Create a **Jenkins** job to build the artifacts using **Maven**, deploy the **Terraform** templates to create the stack.
- Built **CloudFormation** and **Terraform** template using JSON.
- Python scripting for cloud infrastructure.
- Refined automation components with scripting and configuration management (**Ansible**).
- Designed **Ansible** playbooks using **YAML** to Provision several pre-mode environments.
- Extensively used **Maven** and **Ant** for building applications.
- Developed build and deployment scripts using **Maven** as the build tool, and integrated **Selenium** in **Jenkins**, to perform the automated integration test.
- Designed **Ant** and **Maven** scripts to automate the build process for **Java** projects in building artifacts for the source code.
- Set up /maintained Logging and Monitoring subsystems using Elasticsearch, Fluentd, Kibana, Prometheus, Grafana, and Alertmanager.
- Established infrastructure and service monitoring using **Prometheus** and **Grafana**.
- Configured monitoring of AWS Instances regularly using ops view and **New Relic** tools. Also, used **New Relic** for monitoring.
- Created scripts in **Python**, which integrated with **Amazon API** to control instance operations.

ENVIRONMENT: AWS, Terraform, Ansible, Docker, Kubernetes, Jenkins, Git, Ant, Maven, Nexus, EFK, Grafana, Powershell, New Relic, Python, Prometheus

Sherwin-Williams Cleveland, OH   Jan 2017 – Jul 2019
Build & Release Engineer

▌Roles and Responsibilities:
• Creation of **Build and Release** Plan, collection, analysis & presentation of Project Metrics weekly.
• Developed and supported the **Software Release Management** and procedures
• Setup and build **AWS infrastructure** with various resources, VPC EC2, S3, IAM, EBS, Security Group, Auto Scaling, and RDS in **CloudFormation** JSON templates.
• Used **AWS Beanstalk** for deploying and scaling web applications and services developed with Java, PHP, Node.js, Python, Ruby, and Docker on familiar servers such as Apache and IIS.
• Designed **AWS Cloud Formation** templates to create custom-sized VPC, subnets, NAT to ensure successful deployment of Web applications and database templates.
• Worked in Amazon AWS costing, provisioning, administration, monitoring, and troubleshooting.
• Designed, configured, and deployed Microsoft **Azure** for many applications utilizing the Azure stack, including Compute, Web & Mobile, Blobs, ADF, Resource Groups, Azure SQL DW, Cloud Services, and ARM focusing on high-availability, Disaster Recovery, fault tolerance, and Auto-scaling.
• Worked on **Azure** cloud services, storage, active directory, and Service Bus. Created and managed Azure AD tenants and configured the application integration with Azure AD. Integrate on-premises Windows AD with Azure AD and integrating on-premises identity with Azure AD.
• Handled the **migration** of the on-premises application to **AZURE** and provided the resources to enable them. Used all sorts of **AZURE** tools and auto-scaling policies for scalability, elasticity, and availability.
• Worked on solving the issues with **Databases migration to Azure** Cloud by assessing databases for compatibility using the latest version of the **Data Migration Assistant (DMA)**, preparing necessary fixes as **Transact SQL** scripts, and optimized the data transfer performance during migration.
• Used **CloudFormation** template to ensure repeatable deployments and automating the AMI image deployment.
• Designed AWS **CloudFormation** templates to create custom-sized VPC, subnets, NAT to ensure successful deployment of Web applications and database templates.
• Worked on a **POC** to improve cloud deployment reviewing CloudFormation, Chef.
• Worked on Managing the Private Cloud Environment using **Chef**.
• Setting up continuous integration and formal builds using **Bamboo** with **Artifactory** repository.
• Implemented Continuous Integration and deployment using various CI Tools like **Jenkins, Hudson, Bamboo, Chef, Puppet,** and **Sonatype Nexus**.
• Migration of the Source Code from **Apache Subversion (SVN)** to **BitBucket**.
• Documented process documents for Jenkins, **Bit bucket**, CD Pipeline, and Code deployment guide for Developers, Testers, and Production Management.
• Worked on build tasks using **Maven, Gradle,** and **GNU** Make files and worked with the development team to migrate **Ant** scripts to **Maven**.
• Migrated **ANT** projects into **Maven** projects and written maven POM files from scratch for multi-module projects.
• Used **Maven** to perform daily and weekly Software Builds.
• Managed and monitored the server and network infrastructure using **NAGIOS**.
• Automating backups by the **shell** for Linux and **PowerShell** scripts for windows to transfer data in the S3 bucket.
• Employed automation, utilizing **PowerShell** and batch scripting best practices.
• Worked on deploying WAR, JAR, and EAR files in Apache Tomcat, **WebLogic, WebSphere, JBoss** application servers in **Linux/Unix/Windows** environment.
• Scripting in multiple languages on **LINUX** and Windows using **Batch, Shell** and **PowerShell**
ENVIRONMENT: AWS, Azure, CloudFormation, Chef, Docker, Kubernetes, Bamboo, Bit bucket, Ant, Maven, Artifactory, Shell,, Nagios

Cleveland Clinic Cleveland, OH   Mar 2016 – Dec 2016
System Engineer

▌Roles and Responsibilities:
• Created **Puppet** modules and manifest files from scratch; Edited existing Puppet manifests and automated setup process.

- Experience in the setup of **Puppet** Agents, Puppet Master both in **Puppet Enterprise, Open Source**, and developing Catalogs using Puppet language.
- Developed **Puppet** Modules for installation & auto-healing of various tools like **Jenkins, Nolio agents, MSSQL, Nexus,** etc. these modules were designed to work on both Windows and Linux platforms.
- Implemented **Nagios** and integrated with Ansible for automatic monitoring of servers.
- Worked on the installation and configuration of the monitoring tool **Nagios** and implemented **Nagios core/XI** for monitoring sInfrastructure resources
- Involved in the health check of servers after patching/rebooting and checked all the services
- Linux System Administration on **RHEL 5.x/6.x.** Experienced in **Bash** and **Python** scripting.
- Installation and configuration of **Oracle 8/9i** database on **Sun Solaris** Servers. Integrated Linux/Solaris with Active Directory.
- Experienced in User Management and plugin Management for **Jenkins** using the **LDAP** authentication process
- Administrated CI-CD pipeline using **Jenkins** as integration, Maven as build, and **Git** as Source code management tools.
- Configured **Jenkins** to implement nightly builds daily and generated a change log that includes changes from the last 24 hours.
- Helped with design and maintenance of the **Git** repositories**.**
- Used **ANT** scripts and Shell scripts to automate the build and release process.
- Created the **ANT** scripts and extension of existing ANT scripts for deployment of applications.
ENVIRONMENT: Puppet, Nagios, Jenkins, Linux, Ant, Git

Mistras Group 📍 **Independence, OH**   **Apr 2014 – Feb 2016**
Linux Administrator

▌Roles and Responsibilities:
- Worked on User administration setup, maintaining account, Monitor system performance using **Nagios** and **Tivoli**.
- Experience with **Systems performance monitoring**
- Worked closely with the database administration staff to ensure optimal performance of databases and maintain development applications and databases
- Aided in **TCP/IP** Networking troubleshooting and Linux Network Administration.
- **Installing** operating systems, **patches**, hardware, vendor **software packages**, **system customization**, and documentation of all departmental UNIX, PC-based workstations, and Terminal.
- Installed, Configured, and maintained **Red Hat Linux, CentOS**, servers, DNS, LDAP, NFS
- Implemented and maintained server virtualization using **VMware** and **Oracle Virtual Manager**.
- Maintained file systems, **system security** and performed the **tuning** of the servers. Also maintained partitioning and mounting the file systems
- Worked on account, user and group administration, Permissions policy management, and quota implementation.
- Used **shell** scripting for startups and backups for databases using bash shell scripting.
- Used **bash** script for system maintenance and file management
- **24x7 on-call** rotation for support of production systems.
ENVIRONMENT: Nagios, bash, shell, Linux