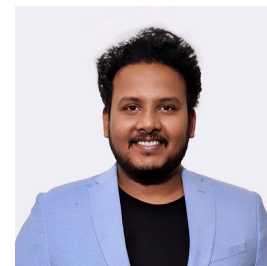


**Akarsh Sodagudi** - Sr. Devops Engineer

Email: [asodagudi@gmail.com](mailto:asodagudi@gmail.com)

Phone: (802)-559-0789

LinkedIn: <https://www.linkedin.com/in/akarsh-sodagudi-3469a9221>



## PROFESSIONAL SUMMARY

- Over 8+ years of experience in the IT industry as a **Cloud/DevOps Engineer** with a major focus in the areas of Cloud Infrastructure Providers, Data Center Migration, Containerization Technologies, Configuration Management, CI/CD Pipeline, Virtualization technologies using different tools and cloud services like **AWS, Azure** and **GCP**
- Experience in **Amazon Web services - Cloud IaaS** platform being part of team configuring and managing various services including **EC2, VPC, ELB, EKS, Auto-Scaling, SecurityGroups, Route53, IAM, EBS, AMI, RDS, S3, SNS, SQS, CloudFormation** and **CloudFront**
- Experience in **Azure IaaS**, provisioning Virtual server instances, deploying **Web Apps**, Creating **Web-Jobs, Virtual Hard disks** and **Virtual Networks** and managing Cloud infrastructure in **Azure services** with **Compute, azure roles, Azure SQL, NoSQL, Storage**, and **Network services** along with Azure **Active Directory**, API Management, Azure **Autoscaling**, Azure search, Azure **DNS, gateway** of Azure **VPN**
- Working experience with **cloud infrastructure of GCP (Google Cloud Platform)** in creating AMI virtual machines on **Compute Engine, Cloud Storage, Cloud Armor, Cloud DNS, Cloud NAT, VPC**
- Working knowledge in **Kubernetes** through **GKE** for implementing Docker and **Container Orchestration**
- Worked on several **Docker** component like **Docker Engine, creating Docker images, Compose. Docker Registry** and handling multiple images primarily for **middleware installations** and **domain configuration**
- Proficient in developing CI/CD Pipelines using **Jenkins** and to automate most of the **build related tasks**
- Experience in **IaC (Infrastructure as Code)** architecture being part of implementing **Terraform** for infrastructure provision automation
- Experience in writing **playbooks** in ansible and used **Ansible tower** and **Ansible Vault** for securing the deployments
- Managed multiple configuration requirements by configuring tools like **Ansible, Chef** and **Puppet** to create custom playbooks, recipes as per project stage needs
- Developed **micro service onboarding** tools leveraging **Python** and **Jenkins** allowing for easy creation and maintenance of build jobs and Kubernetes **deploy** and services
- Maintained multiple version of Code inside various repositories based on **GitHub** along with BitBucket
- Worked with the **ELK** (Elastic Search, Logstash and Kibana) **stack** to analyze log data obtained from Microsoft Business Intelligence tools
- Expertise in Installing, Configuring, Managing the monitoring tools such as **Splunk, New Relic** and **Nagios** for Resource Monitoring/Network Monitoring/ Log Trace Monitoring.
- Automated **Datadog** Dashboards with the stack through Terraform Scripts and used Datadog for monitoring infra resources and application log monitoring
- Experience in using **Prometheus** as monitoring tool for one of the major sub-applications in the project and configured Grafana tool for Data analysis & visualization based on client requirements
- Hands-on experience with **JIRA** tool as tracking defects and have configured multiple workflows, customizations and plugins for **JIRA** bug/issue tracker
- Hands-on experience migrating **Oracle, mySQL** Server instances to AWS RDS (Oracle to Oracle migration, Oracle to Postgres migration, Oracle to MySQL)
- Worked on Linux server virtualization by creating **Linux VMs** for server consolidations. Configuration and administration of VMware ESXI, vCenter, vSphere Client and **Linux / Windows** clients.
- Involved in all phases of **Software Development Lifecycle** and handled change management process for application development and configuration changes

## TECHNICAL SKILLS

<b>Cloud</b>	AWS, Azure, GCP
<b>SCM Tools</b>	Subversion, GIT, Bitbucket
<b>Build Tools</b>	Ant, Maven, Gradle
<b>CI/CD Tools</b>	Jenkins, Bamboo, TeamCity, Gitlab
<b>Container Tools</b>	Kubernetes, Docker, Docker swarm, OpenShift
<b>Configuration Management Tools</b>	Ansible, Chef, Puppet
<b>Logging/Monitoring Tools</b>	Splunk, Nagios, Cloud Watch, New Relic, Proetheus, Grafana
<b>Languages</b>	Python, Java, Shell script
<b>Bug Tracking Tools</b>	JIRA, Remedy, HP
<b>Web Servers</b>	Apache, JBOSS, Web Sphere
<b>Application Servers</b>	Tomcat, WebLogic, WebSphere
<b>Virtualization</b>	VMware ESX, ESXi, vSphere 4 vSphere 5
<b>Databases</b>	MySQL, Oracle, SQL Server and MongoDB
<b>SDLC</b>	Waterfall, Agile, Scrum
<b>Networking</b>	TCP/IP, DNS, NFS, ICMP, SMTP, DHCP, UDP, NIS, LAN, FTP
<b>Operating Systems</b>	Red Hat Linux 7/6/5/4, Ubuntu 16/14/13/12, Debian, CentOS, Windows, Solaris 11/10 Mac OS, Fedora

**Client: Verizon Communications – Irving, TX**

**Sept 2019 to Till Date**

**Role: Sr. Devops/Cloud Engineer**

- Provisioned and worked with Amazon Web services like **VPC, EC2, Route53, S3, RDS, Dynamo DB, SNS, SQS, Lambda, Redshift, ELB, NLB, Autoscaling, IAM** management console.
- Created **Cloud Formation** Templates for main services like EC2, VPC and S3 for replicating existing environment
- Used **AWS Fargate** in collaboration with **AWS ECS** and **AWS EKS** for container-based application running to provide high security and reliability
- Configured **Azure Virtual Networks, subnets, DHCP address blocks, Azure network settings, DNS settings, security policies and routing**. Deployed **Azure IaaS** virtual machines and Cloud services (**PaaS** role instances) into secure **Virtual Networks and subnets**
- Used **Kubernetes** as open source platform for **automating** deployment, scaling and operations of **applications containers** across **clusters** of hosts, providing container centric infrastructure
- Developing **Docker images** to support Development and Testing Teams and their pipelines; distributed Jenkins, Selenium and JMeter images, and Elasticsearch, Kibana and Logstash (ELK & EFK)
- Implemented a Continuous Integration/ Continuous Delivery (CI/CD) pipeline structure with **Jenkins** integrated with Bitbucket, AWS Lambda and JFROG Artifactory.
- Converted existing **AWS** infrastructure to **Serverless architecture (AWS Lambda, Kinesis)**, deployed via **Terraform scripts**.
- Automated configuration management and deployments using **Ansible playbooks** written in YAML. Created Ansible Playbooks to **provision** Apache Web servers, Tomcat servers, Nginx, Apache Spark and other applications
- Developed and implement **chef cookbooks** for automating binary installations and DB connectivity **configurations**
- Developed views and templates with integrated **Python/Bash** and Django's view **controller** and templating language to create a user-friendly website interface.
- Implemented **JIRA** to track all issues pertaining to the **software development lifecycle** and Integration of JIRA with **Git repositories** to track all code changes.

- Maintained and administered **GIT** source code tool, Created Branches, Labels, and performed **merges** in Stash and GIT Bash
- Experience in installing and developing on **ELK**. Used Elasticsearch for powering not only Search but using ELK stack for logging and monitoring our systems end to end Using Beats.
- Configured apps in **Splunk** to deploy configurations in applications to monitor logs from applications **Service Now** and **VMWare**. Creating dashboard alerts in **Splunk** to monitor error logs from applications based on thresholds.
- Implemented **New Relic** application monitoring tool to be useful in maintaining performance metrics in real time, to detect and diagnose application problems automatically.
- Identified and fixed performance issues Confidential instant of time by **dynamic monitoring** through catch point & new relic tools in production environment.
- Configured **Datadog** tool to monitor real-time granular metrics of all the AWS Services and individual **dashboards** setup for each resource **agents** installed on whole infrastructure
- Configured **AWS Cloud Trail** to provide logs to **Prometheus tool** for monitoring and set **alarms** with certain thresholds for each resource
- Configured **Grafana** for creating Business Intelligence reports and visualizing the data stored in S3 storage
- Managed **Oracle DB** instances for Linux instances and MS **SQL server** for Azure cloud instances to serve user requests based on predefined queries deployed along with binary setup

**Client: Albertsons – Chicago, IL**

**May 2017 to Aug 2019**

**Role: Sr. Devops/Cloud Engineer**

Worked with **AWS** services using **S3, RDS, EBS, Elastic Load Balancer**, and **Auto-scaling groups, EC2** instances with optimized volumes and achieved **cloud automation** and deployments using **ansible, python**, and **Terraform templates**

- Worked with **AWS CLI** and **AWS SDK** to manage resources on **AWS** and created **python** script using **API** Calls to manage all resources deployed on **AWS**.
- Designed the data models to use in **AWS Lambda** applications which are aimed to do complex analysis creating analytical reports for end-to-end traceability and definition of Key Business elements from **Aurora**.
- Developed Cloud Formation templates (CFT) to automate EC2 instances
- Used Google Cloud Platform services like Compute Engine, Cloud Functions, Cloud DNS, Cloud Storage, GCP Firewalls, CDN and SaaS, PaaS and IaaS concepts of Cloud computing architecture and implementation using GCP cloud tools
- Configured **Kubernetes** provider with Terraform, which is used to interact with resources supported by Kubernetes to create several services such as Config Map, Namespace, Volume, Auto scaler, etc.
- Worked on application containers using **docker** using custom **docker files** and **orchestrating** using docker swarm and **Kubernetes** on both on-premises and cloud
- Wrote **docker-compose** files to launch apps with various microservices.
- Configured and maintained **Jenkins** to implement the CI/CD process and integrated the tool with **Git, Maven, Nexus, Docker, Nagios** and Jira for end-to-end automation and took the sole responsibility to maintain the CI/CD Jenkins server
- Responsible for writing reusable **Infrastructure as a Code (IaC)** Modules by using **Terraform** for **IaaS, PaaS and SaaS** AWS cloud resources and mentoring the peers to write consumable code to automate the infrastructure provisioning for cloud applications
- Built, implemented and maintained the Infrastructure as code using **ARM templates** and used it to create infrastructure in **Azure** and maintained using **Ansible** and implemented **Terraform** modules for deployment of applications across multiple cloud providers
- Developed **Python** and **Shell Bash** scripts for automating Continuous Integration and Deployment process for the application development
- Installed and configured **GIT** to implement branching strategy which is suitable for agile development also provided continuous support and maintenance of software builds
- Deployed and configured **Elasticsearch**, Logstash, and Kibana (**ELK**) for log analytics, full-text search, application

monitoring in integration with AWS Lambda and CloudWatch. Then store that logs and metrics into an S3 bucket using Lambda function

- Installed **Splunk** in production servers for logging purpose. Configured alerts for operational purpose, working knowledge on objects like dashboards, workflow actions using Splunk Power design
- Created a Splunk Search Processing Language (**SPL**) queries, reports and dashboards
- Hands on experience in initial setup and configuring **New Relic** Tool and improved monitoring experience and performance of application in new relic
- Exposure in creation of custom **Datadog** plugins for reporting additional information on multiple services to provide actionable insights
- Created additional Docker Slave Nodes for Jenkins using custom Docker Images and pulled them to **ECR** and monitored using **Prometheus** and being visualized onto **Grafana** tool for better analysis and export
- Installed **MongoDB** on physical machines, Virtual machines as well as **AWS**. Backup & Recovery, Database optimization and Security maintenance and experienced in Installing, Configuring and troubleshooting of **Red Hat** and **VMware ESX** environment
- Good understanding of ELB's, general networking principles, firewalls, routing technologies and DNS (Route 53).

**Client: Cyient – Hyderabad, TG**

**May 2013 to April 2017**

**Role: DevOps/Cloud Engineer**

- Hands-on experience working based on various Linux platforms (**Ubuntu, Red hat**) in performing OS Installation, configuring and maintenance of applications on this environment
- Configured subnets, DHCP, DNS, private cloud methodologies and also managed a network of Linux and Windows servers inside cluster environment and maintained High availability in reducing downtime
- Expertise in using build tools like **Maven** and **Ant** for the building of deployable **artifacts** such as **war & jar** from source code. Application Deployments & Environment configuration using **Chef, Puppet**
- Implemented continuous deployment **pipeline** with **Jenkins** and **Jenkins workflow** on **Kubernetes**
- Debug and resolve Pre-Post OpenStack deployment failures
- Expertise in marathon in binding volumes to applications and running databases like MySQL and PostgreSQL
- Used **Kubernetes** to **orchestrate** the deployment, **scaling** and management of **Docker Containers**.
- Had done POC on implementation of continuous deployment **pipeline** with **Jenkins** and **Jenkins workflow** on **Kubernetes**.
- Involved in writing and organizing **Shell scripting** for building complex software systems.
- Implemented the **Chef** Software setup and configuration on VM's from the scratch and deployed the run-list into chef-server and **bootstrapped** the chef clients remotely.
- Performed **Linux** administration tasks in test and production environments with Installing, configuring and **troubleshooting** the client applications on the Linux servers.
- Created and modified **HTML, PHP, jQuery, JavaScript, web pages**, also Writing restful APIs and Http Server in Node.js
- Installing, upgrading, and configuring **RHEL** using Kickstart and **RedHat** Satellite server.
- Used Build Forge to automate and accelerate the Build Release Process. This includes repetitive tasks in productivity development life cycles.
- Involved in backing up repository, creating folder and granting user access privileges.

**Client: Global Infotech – Hyderabad, TG**

**June 2011 to Apr 2013**

**Role: Devops Engineer**

- General Red Hat Linux System administration, OS upgrades, security patching, troubleshooting and ensuring maximum performance and availability.
- Diagnosed and resolved problems associated with **DNS, DHCP, VPN, NFS, and Apache**.
- Performed both interactive and automated (Kickstart) installations of Red Hat Enterprise Linux. Plan and

execute RPM and YUM packages and update **installations** necessary for optimal system performance.

- **Troubleshooting** boot related problems. **Administrating** software package like adding, deleting of software packages in Linux and Solaris.
- Managed and Performed **SCM** related work for company's website. The project involved working on multiple environments for QA and Production.
- Implemented Network Communications between Servers with password-less SSH connectivity
- Debug and resolve Pre-Post OpenStack deployment failures.
- Assist our Client in the **centralized Build Farm** which has responsibility of creating and maintaining **build scripts** required by the applications.
- Setting up chef repo's (local & remote) working with both hosted and standalone server versions
- Enabling IP, Designing **Firewall** rules for new servers to enable communication with application, **Oracle 10g** servers.
- Viewing and controlling the Processes running on the system and automating repetitive tasks. User **Administration** by creating, maintaining User's accounts and groups, setting up User environments.
- Scripted **PowerShell** reports to check for user account audit compliance.
- Used ANT and MAVEN as a **build tools** on java projects for the development of build artifacts on the source code.
- **Policy management** and applying network file systems for sharing resources across the network.
- Performed weekly and **on-call deployments** of application codes to production environments.

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## Education

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Bachelor's in computer science

Graduated - 2011

JNTUH – Hyderabad, Telangana, India