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**Seshi Reddy Dhodda**

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**Sr Site Reliability Engineer | DEVOPS Lead | IT AUTOMATION EXPERT**

**Offering 12 years of verified success in IT and Business industry**

SUMMARY

* DevOps/SRE Lead with 12+ years of IT experience.
* Hands-on experience in implementing Infrastructure-as-code with tools like Terraform and Cloud Formation
* Developed CICD pipelines in Jenkins to build (Maven), dockerize and deploy microservices to Redhat Openshift service AWS and GKE
* Hands-on experience with building CD pipelines using Helm.
* Hands-on experience with Groovy scripting in Jenkins.
* Experienced with setting up performance monitoring and alerting of java microservice applications using tools like AppDynamics, Prometheus.
* Sound expertise in Cloud Operations encompassing a multitude of AWS Services -EC2, S3, EKS, RDS, VPC, Route53, IAM, API Gateway, Lambda, Step Functions, Code Pipeline, CloudWatch.
* Vast encounter in defining branching and merging strategies while driving Cloud adoption for Agile Engineering and DevOps; learning best-in-class skills in GIT and GITLAB, Jenkins to enhance the process.
* Extensive experience with Continuous Integration Tools, created and maintained fully automated CI/CD pipelines using Jenkins, GitHub, Argo Cd, Ant, Maven.
* Coordinated with teams to plan, deploy, and maintain critical business applications; acquire skills in Docker and Kubernetes to improve & optimize KPI metrics.
* Experience working in an Agile delivery environment.
* Strong expertise in determining technical/business requirements, managing roles, estimating resources, meeting training needs, defining requisite project deliverables, providing customer satisfaction, and ensuring the quality of projects.
* Design strategies to build a shared service model to enable our operations over anticipated production volumes.
* Generate monthly service level management reports to measure adherence to service levels. Apply analytics tools to generate monthly reports/insights into incidents, problem hotspots, and trends.
* Design DevOps solution to monitor customers' applications hosted in VMs/Containers availability and performances by setting monitoring tools (AppDynamics, Datadog, Dynatrace, Grafana, Prometheus) and log analytics (Splunk, ELK).
* Design and build monitoring solutions to support different types of monitoring like application performance, system health, synthetic, anomaly detection.
* Create dashboards and reports for operational teams and management in APM tools and build events-based dashboards in Grafana.
* Execute Root Cause Analysis using the dashboards for an unplanned application outage to improve production stability.
* Analyze the historical performance metrics and trends of customers' applications over time, which allows to measure the performance impact of new code releases, bug fixes, and performance tuning.
* Build Service Level Management (SLM) reports describing the statuses of SLA for the customers.
* Automates to make PagerDuty calls & SMS to the management team for high severity issues.
* Build automation assets and accelerators to reduce manual dependencies, provide proactive monitoring support, auto-healing, and routing of tickets or incidents to appropriate issue-resolving teams resulting in effective monitoring, problem handling, and resolution.
* Automated runbook-based remediation of commonly occurring incidents. Troubleshooting the issues using Log Analytics, Incident Analytics, and feeding incident analytics data back to runbook automation.
* Experienced with event-driven and worked on AWS Lambda functions to trigger various AWS resources.
* Experienced in creating metrics, alarms, dashboards using AWS Cloud Watch, Grafana and Splunk.
* Used Azure DevOps services such as Azure Repos, Azure Boards, and Azure Test Plans to plan work and collaborate on code development, built and deployed application.
* Experienced with installing and troubleshooting Istio service mesh and Anthos service mesh in a microservices based GKE environment.
* Hands-on experience in setting up CloudSQL db with read replica in GCP
* Hands-on experience with creating dashboards and alarms using AWS CloudWatch
* Experienced in building docker images for microservice applications.
* Migrated on-prem applications to GCP, AWS.
* Experienced with working with version control systems like GIT.
* Experienced with configuring/supporting spring boot based microservices.
* Hands on experience building end-to-end observability for applications running on cloud platforms like GCP and AWS using tools like Grafana
* Experienced with GCP and AWS CLIs.
* Excellent understanding of IAM in GCP
* Expert level troubleshooting experience in java application issues such as hung threads and memory issues.
* Experienced in using Splunk queries for monitoring/troubleshooting.
* Experience with web service testing tools such as SoapUI, CURL.
* Experience with Web Services (WSDL, SOAP, XML, XSD, XSLT).
* Strong background in security concepts like SSL, keystores, certificates, keytool, openssl.
* Experienced in J2EE application support and best practices.
* Strong scripting skills; developed shell scripts for various administrative tasks.
* Well versed with Java, Networking and TCP/IP.
* A proven record in identifying operational problems and providing innovative solutions. Excellent communications skills, both oral and written. Committed team player with strong interpersonal skills.

**TECHNICAL SUMMARY:**

Operating Systems: UNIX, IBM AIX (Including HACMP), Sun Solaris (Including VERITAS), HP-

UX, Linux, CentOS, Windows

Continuous Integration tools: Jenkins, Azure DevOps, AWS CodePipeline,ROSA Tekton Pipelines

Version Control Systems: GIT

Infrastructure as code: Terraform, Cloud Formation

Public cloud platforms: AWS, Azure, GCP

Scripting Languages: Shell, Groovy, Python

Application Servers: Apache Tomcat, WebSphere suite, IBM HTTP Server 8.0, Apache webserver, WebSphere MQ

Languages: JAVA, PL/SQL, HTML, XML, XSLT, XPATH, XSD, JACL, YAML

Databases: Oracle, Postgres,MySQL, CloudSQL

Java Technologies: J2EE, Servlets, JSP, JDBC, JMS, JNDI, Web Services, Springboot microservices

Monitoring Services App Dynamics, Moogsoft Enterprise, CloudWatch, Dynatrace, Autosys,

Datadog, Splunk, Grafana, Prometheus, ELK

**CERTIFICATIONS:**

* PRINCE2 Certified -AXELOS Global best Practices.
* SPLUNK Certified DevOps Engineer – Professional User
* RedHat OpenShift Service On AWS(DS120) Certified - RedHat
* Oracle Web Logic Server Administration Essentials 11g Ed2 - Oracle Corporation
* AWS Certified Solutions Architect-Associate

❑ **EDUCATIONAL CREDENTIALS**

* **Master Of Computer Applications (M.C.A),** Osmania University, India, **2009**
* **Bachelor of Science (B.Sc.),** Osmania University, India **2006**

❑ **WORK EXPERIENCE**

**Client:** NLB Services **- Delta Airlines** |

**Role:** **Sr** **Site Reliability Engineer/Sr DevOps** |

**Tenure:** July 2022 – Present

Delta Air Lines is one of the major airlines of the United States and a legacy carrier. One of the world's oldest airlines in operation, Delta is headquartered in Atlanta, Georgia. Delta Air Lines deploys **Flight Family Communication** application for employees.

**Environment**: AWS Services, Cloud Formation, Docker, Kubernetes, Grafana, Prometheus, Dynatrace, Datadog, Nagios, Splunk, Jenkins, OpenShift, Python, GitLab, Shell, JSON, XML, Linux

**Key Responsibilities:**

* Working as an DevOps lead at Delta Airlines leading a group of seven engineers.
* Responsible for leading initiatives, designing scalable services, providing technical leadership and finding creative solutions to complex issues.
* Lead SRE efforts in my team for on-prem to AWS migration of java applications.
* Maintain services hosted in AWS managing EC2 instances, RDS, Auto Scaling groups, EBS, ELB, S3, Route 53, IAM, API Gateway, lambda, Step Functions, ALB account management and AWS code deploy.
* Red Hat OpenShift Service on AWS (ROSA) Infrastructure Implementation done for Airport Slot Management (ASM), Airport Advisory (AAD), Web Care, Same Day Travel, Bags Applications in ROSA container using **tekton CI/CD pipelines**.
* Used Kubernetes to orchestrate the deployment, scaling, and management of Docker Containers
* Implemented Continuous Integration (CI) and Continuous Deployment (CD) automation done using **AWS Code pipeline**.
* Created **CICD pipeline in Jenkins to build** microservice based application using Maven and pushing the artifacts to Nexus repository
* Involved in Database migration service (DMS) Validations and AWS Migration activity from On-premises Services.
* Build a toolchain to enable proactive monitoring, operational analytics, runbook automation, alerting, and incident management.
* Design DevOps solution to monitor customers' applications hosted in VMs/Containers availability and performances by setting monitoring tools (AppDynamics, Dynatrace, Grafana, Prometheus) and log analytics (Splunk).
* Design and build monitoring solutions to support different types of monitoring like application performance, system health, synthetic, anomaly detection.
* Create dashboards and reports for operational teams and management in APM tools and build events-based dashboards in Grafana.
* Build automation assets and accelerators to reduce manual dependencies, provide proactive monitoring support, auto-healing, and routing of tickets or incidents to appropriate issue-resolving teams resulting in effective monitoring, problem handling, and resolution.
* Implemented and Created AWS Migration Operations Readiness documentation and Tested Failover in Development environments for Disaster Recovery (DR) and Successfully tested HA (High Availability).
* Experienced with event-driven and worked on AWS Lambda functions to trigger various AWS resources.
* Experience in Setting up Jenkins server and build jobs to provide Continuous Automated Build’s based on polling the Git source control system during the day & periodic scheduled builds overnight to support development needs using Jenkins.
* Work with the technical teams (architects, developers, PMOs, and C-level experts) for customer POCs and pilots and improvise solutions on customer feedback.
* Monitoring RDS Database using PostgreSQL through PGAdmin
* Setup alert Monitoring Configuration for AWS resources using Cloud Watch Dashboards
* Create and Monitor dashboards using Grafana for all Container services deployed in Red Hat OpenShift AWS.
* Application Incidents and Change and Problem management through Service now Ticketing tool.
* Flight Family Communication Azure Cloud Applications monitoring and Incident resolution.
* Delta Enterprise Certificate Validations and Certificate renew done through Venafi Certification Folder
* Created CICD pipelines in Jenkins to build springboot microservices, dockerize them and deploy them to GKE(Kubernetes) clusters.
* Created Terraform modules for provisioning infrastructure such as GKE clusters and other services such as GCS buckets, CloudSQL instances, etc.
* Created Jenkins pipeline for Istio service mesh installation.Created Istio components such as ingress gateways, virtual services for routing external traffic to applications
* Used Helm extensively as part of CD pipeline to deploy applications to GKE clusters
* Worked on setting up workload identity for applications running on GKE to access other GCP services
* Implemented monitoring tools such as AppDynamics, Apica, Prometheus for performance monitoring and alerting
* Implemented CI pipeline with Maven, Nexus, SonarQube, Fortify
* Automated Fortify scanning process using Fortify on-demand Jenkins plugin
* Worked with development team to identify critical vulnerabilities in java dependency artifacts
* Used configmaps in Kubernetes to manage environment specific java arguments
* Configured startup, liveness and readiness probes for Kubernetes deployments
* Implemented a multiregion environment for CockroachDB distributed database using Kubernetes Statefulsets
* Created pub/sub topics, subscriptions in GCP to publish billing events received from customers
* Worked with Google support to troubleshoot issues in GKE environments.
* Managed 24x7 oncall schedule and provided technical support when needed for production issues

Environment: GKE(Kubernetes), Istio Service Mesh, Anthos service mesh, Docker, Terraform, Maven, Nexus, Helm, CloudSQL, CockroachDB, AppDynamics, Prometheus, Grafana Jenkins, GIT.

**Client: Capgemini – Royal Sundaram and Alliance Insurance** |

**Role:** **Site Reliability Engineer/ DevOps Manager**  | **Tenure:** Sep’ 2021 – June 2022

**Description:** Royal & Sun Alliance **Insurance plc, UK**, one of the oldest general insurers in the UK. Sundaram Finance acquired the 26% equity holding from Royal & Sun Alliance Insurance plc. Royal Sundaram provides assorted health insurance plans to fulfill the different healthcare needs of various individuals. Both individual and family floater plans are provided to cater to the complete medical care needs of different individuals.

**Environment**: Microsoft Azure, Ansible, Splunk, Grafana, Kubernetes, OpenShift, Terraform, Chef, Azure DevOps, Docker, Cassandra, Grafana, Kafka, GitHub

**Key Responsibilities:**

* Worked as a DevOps Manager with focus on automating(building/deploying) java microservice applications on AWS.
* Worked on setting up VPCs, private subnets, route tables, Security Groups in AWS as part of cloud onboarding
* Created AWS EC2 instances and migrated applications to cloud infrastructure.
* Created Terraform modules to automate provisioning of EC2 instances and autoscaling groups using Jenkins
* Created Jenkins pipelines for provisioning ECS, EKS clusters on AWS using Terraform
* Worked on provisioning AWS resources such as security groups, ELBs, Lambda etc. using Cloud Formation and Terraform
* Worked on migrating applications to AWS ECS
* Automated deployments using helm.
* Worked with AWS services such as S3, IAM, EBS.
* Worked with AWS Route 53 and ALB services to route traffic to applications
* Implemented monitoring and alerting of springboot based microservices using AWS CloudWatch
* Worked on setting up ELK stack(Elasticsearch, Logstash and Kibana) for container log aggregation and analysis
* Created Jenkins jobs for production deployments and handed over to offshore unit.
* Configured spring boot based microservices with Zuul gateway and Eureka.
* Responsible for creating new infrastructure in lower environments for all new projects and ensure smooth transition to production.
* Responsible for 24x7 oncall support of application infrastructure.

Environment: AWS, Jenkins, Terraform, GIT, CloudWatch, Microservices, ELK stack

**Client: Vodafone – Digital X** |

**Role:** **Site Reliability Engineer / DevOps Deputy Manager** |

**Tenure:**  Feb’ 2017 – Aug’ 2021

**Description:** \_VOIS (Vodafone Intelligent Solutions) is a strategic arm of Vodafone Group Plc, creating value and enhancing quality and efficiency across 28 countries, and operating from 6 locations: Albania, Egypt, Hungary, India, Romania, and the **UK**, over 26,000 highly skilled individuals are dedicated to being Vodafone Group’s partner of choice for talent, technology, and transformation.

**Environment:** Linux, AWS, Azure DevOps, Jenkins, Docker, Kubernetes, Maven, SonarQube, GITLab, Ansible, Terraform, RDS, Kafka, Cloud Watch, Splunk, Jira, ELK, Python, YAML Script, Power shell, Bash, Tomcat, Web Logic, Groovy, VMware

**Key Responsibilities:**

* Designed and executed on-prem to AWS Cloud migration projects for Vodafone digital transformation.
* Maintain services hosted in AWS managing EC2 instances, Auto Scaling groups, EBS, ELB, S3, Route 53, IAM account management and AWS code deploy.
* Experienced in creating metrics, alarms, dashboards using AWS Cloud Watch, Grafana and Splunk.
* Automated scripts using Ansible, Shell and Python scripting for cloud management tasks and make cluster up and running.
* Design DevOps solution to monitor customers' applications hosted in VMs/Containers availability and performances by setting monitoring tools (AppDynamics, Datadog, Grafana, Prometheus) and log analytics (Splunk).
* Wrote Playbooks in Ansible for Application Deployment Automation and Cloud Infrastructure Automation.
* Provisioned infrastructure for different environment using Ansible; set up infrastructure for Kubernetes and ensured its installation with Docker.
* Created and launched infrastructure in AWS using AMI’s created by Terraform.
* Created Test Automation scripts pertaining to Agile-based Continuous Integration.
* Implemented Continuous Integration (CI) automation using scripts/ custom tools and troubleshoot issues along the CI/CD pipelines.
* Monitored performance and history of infrastructure with tools such as CloudWatch, Datadog
* Deployed full Angular, Java Spring boot Application War files in Kubernetes clusters on a Docker container using Shell scripts.
* Experience in log analytics, Applications Performance Monitoring, infrastructure, and fault monitoring and analysis using Datadog tools.
* Experience in comprehensive monitoring and analytics platform that provides businesses with real-time visibility into their infrastructure, applications, and user experience by using Datadog.
* Experience in Datadog real-time visibility into the health and performance of containerized environments, providing insights into every layer of the clusters.
* With Datadog curated metrics, detected and investigated issues across different layers of containerized environments, enabling proactive monitoring and troubleshooting.
* Leverage auto-scaling functionality to dynamically adjust the resources allocated to Kubernetes applications based on real-time fluctuations in metric values, optimizing performance and resource utilization by using Datadog tool.
* Used Docker, Kubernetes, and OpenShift to manage micro services for development of continuous integration and continuous delivery.
* Experienced in analyzing and monitoring performance bottlenecks and key metrics to optimize software and system performance using Splunk.
* Experienced in creating metrics, alarms, dashboards using AWS Cloud Watch, Grafana and Splunk.
* Installed, configured, and maintained Splunk Add Ons and Apps such as but not limited to: Splunk Add-On for AWS, Splunk Add-On for Windows, and Google Workspace for Splunk.
* Managed and edited various .conf files such as indexes.conf, props.conf, and servers.conf.
* Created and deployed deployment apps from the Deployment Server.
* Managed a clustered environment with multiple indexers and search heads.
* Administered both Splunk Enterprise and Splunk Enterprise Security.
* Worked closely with various Security and Platform Engineering teams to onboard new data to Splunk from various sources.
* Assisted internal users of Splunk in designing and maintaining production quality dashboard, Development of Splunk Queries to generate the reports.
* Onboarded data using file monitoring, HTTP Event Collector, and API Calls.
* Created and presented high level information on the state of Splunk to the C-Suite and senior management.
* Performed Splunk Version and Maintenance upgrades.
* Implement metrics and log forwarding to Datadog. Create monitors and reports from Datadog metrics. Assign alerts to PagerDuty. Created Health reports from AWS Personal Health Dashboard to SNS topics and PagerDuty.
* Used Kubernetes to orchestrate the deployment, scaling, and management of Docker Containers
* Performed Scripting of administration tasks using Command Line (CLI), Shell Scripting, python etc.
* Implemented the automated model for release planning, building, testing, and validation activities.
* Strong experience in troubleshooting Java Run Time (JRE)
* Strong experience in analyzing and tuning of Garbage Collections, Heap Dump, Command Line, Thread Dump
* Familiar with Tools and utilities for GC/Heap/Command lines and Thread and Monitor Dump Analyzer for Java (TMDA) is tool that allows identification of hangs, deadlocks, resource contention and GC Profiler
* Strong experience in managing applications built on various Java versions.
* Strong experience in performance tuning of Java parameters for better application performance
* Designed and implemented the status accounting and auditing model to check the compliance of various configuration items.
* Installation of monitoring tools such as Splunk and on boarding application on to portal and interfacing other applications
* Assisted internal users of Splunk in designing and maintaining production quality dashboard, Development of Splunk Queries to generate the reports.
* containerization, deployment and troubleshooting for monolithic and micro service-based applications; containerized service deployment using Kubernetes on AWS using EKS.
* Used Argo CD to trigger automated builds from GitHub.
* Configured jobs in Jenkins by integrating it with Git and Maven by using Poll SCM and build periodically based on the use case.
* Evaluated scope of various POD networks on Kubernetes and their compatibility level, supported functionality, strengths to manage traffic, number of PODs and security e.g., Calico, Flannel, and Weave Net.
* Updated software packages based on the requirement and managed pre-production and production releases.
* Managed version control tool like Git and maintained repositories, creating branches and tags in Git.
* Created and launched infrastructure in AWS using AMI’s created by Terraform.
* Developed tools to capture and track build metrics on a biweekly/weekly/daily basis, created release notes and installation manuals of different products as well as installed, configured, and administered subversions.
* Integrated the Sonar and Nexus with Jenkins and verified the logs in case of build failure.

**Client:** Tech Mahindra Ltd – GE HealthCare |

**Role:** AWS DevOps Engineer/ DevOps Module Lead |

**Tenure:** Dec ‘2013- Feb ‘2017

**GE Health Care and Digital's** primary focus is to provide industrial software and services in four markets: Manufacturing applications serving discrete and process industries, as well as water utilities and economy-scale digital transformation projects. Electric and Telecommunications Utilities.

**Environment**: Jenkins, Maven, Nexus, Docker, Tomcat, WAS 8.0, WebSphere DataPower, Apache, F5, Splunk.

**Key Responsibilities:**

* Created Jenkins Pipeline involving several Downstream/Upstream Job Configurations based on dependencies from other applications & based on Release methodologies.
* Worked on a POC for dockerization of microservice based applications
* Installed and configured Nexus repository manager and created hosted repos for to store snapshot and release artifacts
* Created CICD pipeline in Jenkins to build microservice based application using Maven and pushing the artifacts to Nexus repository
* Worked on writing shell scripts to automate deployment of microservice applications
* Used Wily Introscope and DynaTrace to monitor metrics such as heap, http sessions and to configure alerts.
* Used Splunk searches for troubleshooting application issues
* Analyzed JVM logs, thread dumps, heap dumps while triaging and resolving issues. .
* Worked on setting up vservers, ssl profiles, monitors, pools in F5 load balancer.
* Worked on configuring truststores and keystores in WAS for communicating with backend applications over MSSL.
* Used openssl to debug SSL connectivity issues.
* Configured Virtual Hosts, SSL client certs in Apache web server.
* Worked on developing wsadmin scripts for application deployments.
* Worked on SHA1 to SHA2 migration of DataPower SSL certificates as part of companywide migration. Coordinated with various clients for successful rollout to prod.
* Worked on migrating application load balancing from netscaler to F5 load balancer.

**Client:** Accenture -British Telecom |

**Role**: Oracle ERP Applications Database Admin / Sr.SE |

**Tenure:** Jan 2012 – Nov’ 2013

**Key Responsibilities:**

* Upgraded database 11.2.0.4 to 12.1.0.2
* Upgraded ERP 12.2.0 to 12.2.5.
* Clones from production to non-production in R12.2.5
* Work with the Database and Infrastructure teams to manage regularly scheduled clones, all supporting environments.
* Dependent systems such as Data guard replicated instances.
* Oracle database installation and configuration.
* Managing a Production support environment, on-call support, including coordinating and messaging required for maintenance windows.
* Knowledge of underlying Oracle Applications database architectures and concepts.
* Maintenance of physical and logical storage structures, system, and database parameters.
* Experience in Workflow configuration.
* Experience with Patching operations for Oracle Apps including analysis of patches, patching, post patch testing and validations.
* Experience with performance tuning of both Application Tier and Database Tier, process, and query optimization, troubleshooting of locking issues, monitoring of resource contention, analysis of queries, log files, trace files will be highly valued.
* High proficiency working with Solaris/Linux (Red Hat) operating systems.
* Experienced with navigating the Oracle support organization, creating, and working Oracle SR\*s through to resolution, Metal ink.
* Awareness of appropriate roles, responsibilities, and access levels from a security perspective.
* Experience upgrading a production environment from R12.1.1 to R12.1.3
* Installed Discoverer and configured workflow for EBS.
* Experience working on oracle Fusion middleware including Web logic.
* Administration of Web logic managed server and knowledge in installation and configuration of web logic server.

**Client:** Accenture -Alcatel |

**Role:** Oracle Applications Database Admin |

**Tenure:** July ‘2011- Dec ‘2012

**Alcatel Mobile, commonly known as Alcatel**, is a French brand of mobile handsets owned by Finnish consumer electronics company Nokia and used under license by Chinese electronics company TCL Technology.

**Environments:** Linux, VMware, LVM, Volume group, NFS, NTP, RPM, YUM, EBS R12, Web Logic Server, Firewalls, FTP, SAMBA, Cron, Kickstart servers, Oracle Database 11g

**Key Responsibilities:**

* Deploying application using WLST script in SOA environment.
* Complete Shutdown/Start-up of SOA, OBIEE, IDM environments
* Administration and monitoring of Databases and EBS application.
* Creating data Sources in SOA environment
* Upgraded database from 11.2.0.3 to 11.2.0.4 in dev environments.
* Applying WLS security fix patch using BEA Smart Update (BSU)
* Creating SRs and working with oracle support
* Supporting oracle applications R12 production systems of size 1.5 Terabytes.
* Successfully performed Pre-Patch Analysis and Applied for different patches in Applications and Database.
* Performed Pre-Patch Analysis using Patch wizard for Mini Pack patches.
* Applying latest releases of the RDBMS patches from Oracle releases to the instance to resolve few.
* Using IQ Track ticketing tool resolving High priority tickets within SLA.
* Scheduling purge concurrent jobs on a daily, weekly, and monthly basis.
* Patching on test, development, and production environments.
* Cloning Oracle Apps HA environment to from production to test and development environments.
* Wrote various shell scripts to automate Build and Release process.
* Perform Recovery of corrupted data block using RMAN, Recommending the solution to Oracle support to get that resolve.