**Sudheer Kumar**

**Sr. Azure DevOps Engineer**

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**Summary:**

* Around 10 years of experience working as DevOps Engineer with Build & Configuration, Build & Release management and Cloud Infrastructure & Automation.
* Extensive experience includes Branching, Merging, Tagging, and maintaining versions across environments using SCM tools like Subversion (SVN), GIT (GitHub, GitLab) and Bitbucket.
* Experience in Ant, Maven and Gradle as a build tool for the development of build artifacts like WAR, JAR, EAR on the source code.
* Extensive experience with Continuous Integration and automated build platforms using Jenkins Tool.
* Extensively worked with automation tools like Jenkins to implement the End-to-End Automation.
* Experience in using Nexus and Jfrog Artifactory repository Managers for java builds.
* Experience in Configuration Management tools like Ansible and Chef in configuring & maintaining different environments.
* Good experience in code quality analysis tool Sonarqube for continuous inspection.
* Docker has been core to this experience, along with Kubernetes. Virtualized the servers using the Docker, created the Docker files and version controlled them. Building/Maintaining Docker container clusters managed by Kubernetes.
* Deployed and orchestrated the applications with Kubernetes deploying microservices base applications using Helm release management, including versioning, rollback, and release.
* Configured and managed Ingress controllers in Kubernetes to route external traffic to services within the cluster, enabling seamless access to applications and APIs.
* Configured networking within Docker containers and Kubernetes pods, implementing solutions for service discovery, load balancing, and inter-container communication.
* Experience in integrating Blackduck in CICD pipeline for to automatically scan container images along with SAST and DAST scans as part of the build and deployment process.
* Implemented SSL/TLS encryption for securing communication between services, configuring certificates and managing certificate using cert manager.
* Experience in implementing security best practices for Kubernetes clusters, including RBAC (Role-Based Access Control) and network policies, to enhance system security and compliance.
* Experienced in AWS Cloud platform and its features which includes Amazon services like EC2, S3,VPC, ELB, AMI, IAM, SNS, Route 53, Auto scaling, Security Groups, Cloud watch.
* Experience in writing Ansible playbooks for configuration management, automating infrastructure provisioning and system configuration tasks across multiple environments.
* Experience in Implementing continuous integration and continuous deployment (CI/CD) pipelines using Azure Pipelines to automate application deployments.
* Experience in application performance and health using Azure Application Insights, diagnosing and resolving issues to minimize downtime and improve user experience.
* Expert in security best practices for Azure App Services, including role-based access control (RBAC), network security groups (NSGs), and SSL/TLS encryption.
* Build Complete Infrastructure using Terraform script. Created Terraform scripts to move existing on-premises applications to cloud, used Terraform templates along with Ansible modules to configure EC2 instances.
* Written ARM Templates for AWS infrastructure as a code using Terraform to build staging and production environments.
* Experience in using Terraform and Crossplane together, Terraform for provisioning the foundational infrastructure components such as VPC, IAM, and EKS, and use Crossplane solely to manage the infrastructure resources your microservices.
* Installation, Configuration and Management of RDBMS and No-SQL tools such as MySQL, MariaDB, PostgreSQL, MongoDB, and Cassandra. .
* Experienced in deployment of applications on Apache Webserver, Nginx, and Application Servers such as Tomcat, JBoss
* Experience in Azure devops , deploying application in Azure Kubernetes Service (AKS) and Azure Iaas- Virtual machines, VM Scale Sets, Load Balancer, Traffic Manager, Virtual Networks,
* Resource Groups and Cloud Service
* Expertise in writing Shell scripts for Environment Builds and Automating Deployment on WebSphere Application Servers and WebLogic Application Servers.
* Implemented centralized logging infrastructure with Fluentd and ELK stack for log aggregation, analysis, and visualization.
* Proficient in using Datadog and AWS Cloudwatch to ensure optimal performance, reliability, and scalability of applications. Proven track record in implementing robust monitoring solutions and optimizing system performance.
* Strong experience as a LINUX/UNIX System Administrator and Production Support of various applications on SUN Solaris, Red Hat Linux and Windows environment
* Deployed Prometheus and Grafana for monitoring Kubernetes clusters, applications, and infrastructure components, configuring custom dashboards and alerts to ensure proactive monitoring and issue detection.
* Good knowledge on networking concepts like routers, switches, DHCP, DNS, OSI layers, TCP/IP protocols.
* Ability to communicate requirements effectively to team members and manage applications.
* Experience in working like Red Hat, Centos, OEL & Solaris and Ubuntu environments.
* Experience in supporting 24/7 production computing environments.

**Technical Skills:**

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| Version Control | SVN, Git, Gitlab,  |
| Build Tools | Maven, Ant, Gradle |
| Configuration Management  | Ansible, Chef, Saltstack |
| CI/CD Tools  | Jenkins, Bamboo, Concourse |
| Static code Anaylsis  | Sonarqube |
| Artifactory |  JForg, Sonatype Nexus |
| Database | SQL Server, MySQL, MariaDB, Cassandra |
| Container Tool | Docker, Docker Compose |
| Orchestration | Docker Swarm, Kubernetes |
| Cloud Technologies  | AWS & AZURE |
| Atlassian Tools | Jira, Bitbucket, Confluence |
| Scripting Languages | Shell Scripting, Ruby, Yaml |
| Provisioning Tools  | Terraform, CloudFormation, Crossplane |
| Web/Application server | Ngnix, Apache Tomcat, IBM Websphere, Weblogic |
| Monitoring & Logging  | Fluentd, Prometheus & Grafana, Datadog, ELK & Nagios & splunk |
| Networking/Protocol  | FTP/SFTP, SMTP, TCP/IP, HTTP/HTTPS, DHCP, NFS |
| Operating systems | RHEL, Centos, OEL, Solaris, Ubuntu, Debian, Windows |

**Certifications:** AWS Certified Solutions Architect – Associate

**Education:** Bachelor’s in Electrical and Electronics Engineering from JNTUK (India) in 2013

**Professional Experience:**

**Hitachi Vantara, (Remote) Jun’23 – Till date**

**Senior DevOps Engineer**

**Responsibilities:**

* Coordinate developers with establishing and applying appropriate branching, merging conventions using GIT source control.
* Involved in to Build Activities using different build tools like Maven.
* Created end to end CI/CD Pipeline in QA, Staging and Production Environment from build to deployment of the application using Maven, Docker, Kubernetes
* Deployed various server-side applications in QA, Staging and Production environment using K8's, and Docker.
* Deployed microservices applications in kubernetes, expertise in creating deployments, configmaps and ingress and services.
* Created Azure Pipelines for build and release and used Azure Boards for support planning and tracking work,
* code defects, and issues using Kanban and Scrum method by using other Azure DevOps Services.
* Deployed micro service applications on Azure Kubernetes by using Azure Kubernetes service (AKS),
* Kubernetes Cluster, which are responsible for cluster management, Virtual Network to deploy agent nodes,
* Ingress API Gateway in the cluster.
* Managed Azure Container Registry to store private Docker images, which are deployed and Azure pipelines to
* build, test, and deployments.
* Hands on Experience Designing, Planning and implementation for existing on-premises application to Azure cloud (ARM), Configured and deployed Azure Automation scripts utilizing Azure services and utilities focusing on Automation.
* Experience in desiging & deploying and managing multi-tier web applications on Azure App Services, ensuring high availability, scalability, and performance.
* Configured and optimized Azure App Service plans, including scaling settings, auto-scaling rules, and deployment slots to meet application demand.
* Implemented security best practices for Kubernetes clusters, including RBAC (Role-Based Access Control) and network policies, to enhance system security and compliance.
* Responsible for implementing monitoring solutions in Ansible, Docker, and Jenkins
* Written Dockerfile for various applications for creation of image.
* Created Terraform templates for provisioning virtual networks, VM Scale sets, Load balancers and NAT rules and used Terraform graphs to visualize execution plans using the graph command.
* Used Terraform to deploy the infrastructure necessary to create development, test, and prod environments.
* Created custom Docker Images and worked on building Docker Image from base image using Dockerfile.
* Worked on all major components of Docker like Docker Daemon, Hub, Images, Registry, and Docker Swarm.
* Developed Ansible playbooks, inventories and custom playbooks in YAML, and encrypted the data using Ansible Vault and managed Ansible to run tasks in a sequence which can work on different servers.
* Implemented and managed monitoring and alerting systems using Datadog , resulting in reduction in downtime.
* Developed custom dashboards in Datadog to monitor application performance, latency, and error rates, leading to improvement in response times.
* Configured Alarms to automatically trigger scaling policies, ensuring high availability and performance during peak usage periods.
* Automated log aggregation and analysis using Datadog Log Management, reducing mean time to resolution (MTTR).
* Conducted training sessions for team members on best practices for monitoring and incident response using Datadog.

**Environment**: GIT, Maven, SonarQube, Azuredevops, Docker Kubernetes Java/J2EE, Jfrog ,artifactory Shell Scripts, Terraform, Docker, XML, RHEL, OEL,

**Volkswagen Group Technology Solutions, India Aug’21 - Jun’23**

**Senior DevOps Engineer**

**Responsibilities:**

* Worked on the GIT branching for applications by creating Release branches, Development branches thus ensuring the integrity of applications.
* Created end to end CI/CD Pipeline in QA, Staging and Production Environment from build to deployment of the application using Jenkins, Maven, Docker, Bash and Openshift.
* Deployed various server side applications in QA, Staging and Production environment using Openshift , Jenkins and Docker.
* Created Pods, Routes, Services, Build Configs and Deployment Configs in Openshift for different Applications.
* Defined branching, merging and tagging strategies for all applications in Git.
* Working with Sonar/SonarQube a code quality control tool for continuous inspection
* Installed and configured Docker environment including Docker registry hub for managing different Docker images and
* Installed and configured Kubernetes and performed docker container orchestration using Kubernetes nodes.
* Administered and Engineered Jenkins for managing weekly Build, Test and Deploy chain, GIT with Dev/Test/Prod
* Worked in building and installing servers through Azure Resource Manager Templates or Azure Portal.
* Migrating an On-premises virtual machine to Azure Resource Manager Subscription with Azure Site Recovery
* and deployed to Azure and customized build process using PowerShell.
* Worked in configuring Cloud platform such as Virtual Networks Multi-site, Cross-site, VMs, Azure Active
* Directory, Load Balancers, Azure SQL, Cloud Services etc.
* Created Azure Backup vault and protecting required VMs to take the VM level backups in Azure.
* Worked on Helm charts for managing Kubernetes environment and created reproducible builds of the
* Kubernetes applications, managed Kubernetes manifest files and managed releases of Helm packages and
* used Kubernetes and Docker for the runtime environment for the CI/CD system to build, test, and deploy.
* Written Ansible playbooks for deployment of WAR, JAR, and EAR files across all the environments and for restarting applications.
* Orchestrated containerized applications using Azure Kubernetes Service (AKS) or Azure Container Instances (ACI), managing clusters, pods, and deployments.
* Developed Docker container images for applications and services, optimizing image size and dependencies for efficient deployment and resource utilization.
* Implemented advanced networking features for Azure Kubernetes Service (AKS), such as virtual network peering, network policies, and ingress controllers, to secure and isolate container traffic.
* Automated container lifecycle management tasks using Azure Policy, Azure Functions, or Azure Automation, including image scanning, vulnerability patching, and resource cleanup.
* Led architecture design and implementation projects for microservices-based applications on Azure Container Services, following best practices for service discovery, load balancing.
* Reporting defects for the failed test cases and tracking the status on the daily basis.
* Written ARM Templates for Azure infrastructure using Terraform to build staging and production environments.
* Deployed and managed a monitoring stack using Prometheus and Grafana, covering multiple environments and ensuring high availability.
* Created Grafana dashboards for monitoring application performance, database health, and infrastructure metrics, enhancing visibility for the development and operations teams.
* Automated the collection of metrics using Prometheus exporters, ensuring comprehensive coverage of system components.
* Utilized Prometheus queries to generate actionable insights and reports, helping to proactively address performance bottlenecks.
* Participated in on-call rotations, using Grafana dashboards to quickly diagnose and resolve incidents, improving system reliability.

**Environment:** Azure, Maven, Concourse, Tomcat, Ansible, Nexus, Shell, Python, Perl, Nexus, JIRA, Docker, Kubernetes, Ubuntu, Promethus & Grafana

**Publicis Sapient, India Jul’19 – Aug’21**

**DevOps Engineer**

**Responsibilities:**

* Created and managed several environments comprised of hundreds of servers based on Linux, Solaris and Debian
* Integrated Maven with GIT to manage and deploy project related tags.
* Worked on Nexus installation, integration and artifact management.
* Maintaining Nexus as a Mirror repository for Maven created Builds.
* Developing CI/CD Pipeline to automate and enforce all the teams and applications using CI/CD concepts to reduce manual efforts.
* Working with Docker, Kubernetes, Terraform, Jenkins, tools to develop infrastructure monitoring and deployment pipelines.
* Automated containerized applications deployment process using Azure services and Azure DevOps Processes.
* Designed and implemented Terraform for Infrastructure as Code, automating the provisioning of virtual networks, VMs, and storage resources.
* Implemented SRE principles to bring stability, reliability to the systems, automated to eliminate the

manual toil.

* Azure DevOps Includes Deploying, Managing and Monitoring Azure Cloud Applications. DevOps cycles to reduces implementation time life cycles with benefits of increase ROI and performance Azure Portal, VSTS, GIT and DevOps project service continuous integration and continuous delivery CI/CD.
* implemented a CI/CD pipeline using Azure Devops (VSTS, TFS) in both cloud and On-Prems with GIT, MS Build, Docker, Maven along with Jenkins plugins.
* Provisioned the highly available Instances using Terraform and cloud formation and wrote new plugins to support new functionality in Terraform.
* Virtualized the servers using the Docker for the test and dev-environments needs, configuration automation using Docker containers.
* Used Docker for setting Azure Container Registry and actively involved in deployments on docker using Kubernetes.
* Created deployment and service YAML files to deploy applications to AKS.
* Worked on all major components of Docker like, Docker Daemon, Hub, Images, Registry, Swarm.
* Created Jenkins jobs to deploy applications to Kubernetes Cluster.
* Focused on containerization and immutable infrastructure, Docker has been cored to this experience,
* Worked on setting up the Chef repo, Chef workstations and Chef nodes. Developed Chef recipes through Knife command-line tool to create Chef cookbooks to manage systems configuration.
* Involved in chef-infra maintenance including backup/monitoring/security fix and on Chef Server.
* Azure Monitor to collect metrics and logs. Configured Monitor to track performance and maintain security, and used Grafana tool to collect metrics, queries.
* Installed, configured, and managed the ELK (Elastic Search, Log stash, and Kibana) for Log management and application metrics where more api level metrics are tracked .

**Environment**: Git, Azure, Java, Ant, Bamboo, Maven, Chef, Nexus, Websphere Application Server, bitbucket

Solaris, Docker, AzureDevops ELK, Terraform RHEL, Centos, Ubuntu

**IDEMIA, India May’18 – Jun’19**

**DevOps Engineer**

**Responsibilities:**

* Deployed M2M solutions on Staging & Productions environments of clients using various components of Kubernetes, Jenkins, Maven and Docker.
* Written pods. Services and deployment files for different M2M Components i.e. SMDP, SMSR, GP2B, SOTAC and SMPP.
* Upgraded M2M solutions from one version to another.
* Added various maven stages in Jenkins file to build various projects.
* Maintained all the secrets and deployments files using Git and Bitbucket.
* Creation of Docker files & images for Docker containers and uploaded to JFrog. Artifactory.
* Deployment of multiple microservices using yaml file in Kubernetes.
* Experience in working on MariaDB and Casaandra DB
* Deployed and orchestrated applications with Docker & Kubernetes.
* Dockerizing applications by creating Docker images from Docker file.
* Used Jenkins and pipelines to drive microservices builds out to the Docker registry and then   deployed to Kubernetes, Created Pods and managed using Kubernetes.
* Created security groups, network ACLs, Internet Gateways, NAT instances and Route tables to ensure a secure zone for organizations in AWS.
* Creating snapshots and amazon machine images (AMIs) of the instances for backup and creating clone instances.
* Installed Chef Server Enterprise on premise, with workstation and bootstrapped the nodes using knife and automated by testing Chef recipes and cookbooks
* Deployed and maintained comprehensive monitoring solutions using AWS Cloudwatch, covering infrastructure, applications, and services across multiple environments.
* Utilized Cloudwatch Logs Insights to create queries and generate insights for troubleshooting and performance tuning, enhancing system reliability.
* Created and maintained Datadog integrations with various AWS services, including EC2, RDS, and Lambda, ensuring end-to-end visibility and alerting.
* Participated in on-call rotations, using Cloudwatch to proactively identify and resolve issues before they impacted users.

**Environment:** Git, Maven, Java, Docker, Kubernetes, AWS, Tomcat, Jenkins, Chef, MariaDB, Cassandra, Shell, YAML, Nagios**,** Centos, RHEL, Solaris

**Sonata Software, India Nov’13 - May’18**

**Build & Release Engineer**

**Responsibilities:**

* Build manage, and continuously improved the build infrastructure for software development engineering teams including implementation of build scripts, continuous integration infrastructure and deployment.
* Maintained and coordinated environment configuration, controls, code integrity, and code conflict resolution.
* Maintained all the configuration files of Project using Git and Bitbucket
* Interacting with developers to sort out issues related to Build Automation.
* Created and continuously enhanced CI/CD pipelines for effective and smooth code build and deployment using Jenkins and Bamboo for code written on multiple languages.
* Implemented minor clustered solutions for projects, e.g. Sonarqube and Artifactory, along with their integration to the build and deployment pipelines.
* Automated most of manual processes and enhanced their performance as my own initiative.
* Have a good hand on of working on unix with Shell Scripts.
* Providing support to Dev team members to find and debug the root cause of failures.
* Designed and implemented shell scripts in Linux to automate critical tasks.
* Worked on CI and CD automation setup from development to production environments.
* Worked with developers to ensure new environments both met their requirements and confirmed industry-standard best practices.
* Have written batch scripts and shell scripts for automating Jobs and deployments.
* Find root cause analysis of failures and documenting bugs and fixes.
* Monitor Production Server Health of different parameters (System Load, Physical Memory, Swap Memory, Hard disk, Apache requests, Mailq), using Nagios.
* Server and application monitoring using Nagios and Splunk.

**Environment:** GIT, Maven, Sonarqube, Angularjs, Java/J2EE, Shell Scripts, XML, RHEl, Centos Linux, Jenkins, Naigos