**Charan**

[**csudireddy3@gmail.com**](mailto:csudireddy3@gmail.com)

**+1 470-210-4152**

**Professional Summary:**

* Around 8+ years of IT industry experience in DevOps in Continuous Integration and Continuous Delivery (CI, CD), Linux administration, Build, Automation and Release management, Cloud Infrastructure like Amazon Web Services (AWS) and Microsoft Azure.
* Experience in dealing with Windows Azure IaaS -Virtual Networks, Virtual Machines, Cloud Services, Resource Groups, Express Route, Traffic Manager, VPN, Load Balancing, Application Gateways, Auto-Scaling.
* Created scripts using Azure PowerShell during automation and build process, and good working experience in Azure Logic apps, Service Bus and SQL Database. Deployed Azure IaaS virtual machines (VMs) and Cloud services (PaaS role instances) into secure Vent’s and subnets.
* Automated deployment of packaged applications using python and shell.
* Strong Experience on Administration and Troubleshooting of Azure IAAS Components (VM, Storage, VNET, OMS, NSG, Site to Site VPN, RBAC, Load Balancers, Availability Sets).
* Worked on DevOps essential tools like Terraform, Docker, Kubernetes, Vagrant, Git, TFS, GitHub, SVN, Ant, Maven, Jenkins, Junit, Nunit, Hudson, Chef, Ansible, Puppet, Nagios, Sensu, New Relic, Splunk.
* Experience in core AWS services (EC2, S3, ELB, EBS, Route53, VPC, Auto scaling etc.) and deployment services (OpsWorks and cloud Formation, EKS) and security practices (IAM, cloud watch and cloud trail) and services Lambda, EMR, RedShift, Elastic Bean Stalk, SNS, RDS, Fargate, IAM, SQS and Direct connect.
* Defined AWS Security Groups which acted as virtual firewalls that controlled the traffic allowed to reach one or more AWS EC2 instances.
* Deployed and configured Elastic search, Log stash and Kibana (ELK) for log analytics, full text search, application monitoring in integration with AWS Lambda and CloudWatch. Then store those logs and metric into S3 bucket using Lambda function.
* Configured and maintained user accounts for Dev, QA and Production teams and created roles and policies for EC2, RDS, S3, Cloud Watch, EBS resources to communicate with each other using IAM.
* Creating AWS VPC systems, administration, and security; making subnets, set up peering, ACL’s, CloudFormation, EC2, VPCs and AWS organizing parts and distributed them as groups into various availability zones of the VPC. Plan, architect and migrate applications from bare metal to AWS cloud infrastructure.
* 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, WebLogic and JBoss.
* Configured and Managed Elastic Load Balancing (ELB) to avoid single point of failure of applications, provide high availability, Secured, monitored, alerting and network load balancing.
* Worked with various scripting languages like Shell, Ruby, PHP, Behat, Codeception and Python
* Coordinated with networking teams in configuring AWS Direct Connect to establish dedicated connection to datacenters.
* Experience in building sophisticated and highly automated infrastructure using automation frameworks such as CloudFormation, Terraform, and Ops Works.
* Experienced using Terraform for managing AWS Infrastructure as a code and collaborated in the automation of AWS infrastructure via Terraform and Jenkins.
* Worked on Configuration management tool Ansible for continuous delivery and rewritten recipes for new environments. Wrote playbooks for Ansible and deploying applications using Ansible.
* Experienced in using the container based Virtualized deployments using Docker, working with Docker images, Docker hub and Docker registries and creating docker containers from existing Linux servers and saving it to docker hub.
* Building Docker image with Packer and provisioning with Kubernetes by using Docker Packer Builder.
* Automated deployments, scaling, and operations of application containers across clusters of hosts and provided container-centric infrastructure by Kubernetes.
* Experience in Blue/Green deployment strategy by creating new applications which are identical to the existing production environment using Cloud Formation templates and setting Route53 records to redirect traffic from the old environment to the new environment with DNS.
* Configuration Automation and Centralized Management with Ansible. Implemented Ansible to manage all existing servers and automate the build and configuration of new servers.
* Expertise in Jenkins master/slave administrations, access controls, report generations, parameterized and triggered build setups etc.
* Automated Build by Jenkins pipeline using GIT, Maven/Ant, Jenkins by Writing a Jenkins file to automate build, test and deploy the War, Jar and Ear files.
* Installed, configured, and managed the ELK (Elastic search, Log Stash and Kibana) for log management within EC2/ Elastic load balancer for Elastic search.
* Experience in optimizing indexes, creating dashboards using ELK stack. (Elasticsearch Logstash Kibana)
* Experienced in monitoring tools like Nagios, Sensu , New relic, and ELK Languages/Scripts (Elastic Search, Log stash, Kibana) and Splunk.
* Used Configuration Management Tool Chef, created Chef Cookbooks using recipes to automate system operations. Converting production support scripts to Chef recipes.
* Worked on setting up Splunk to capture and analyze data from various layers Load Balancers, Webservers.
* Installing, configuring and managing the RDBMS and NoSQL tools like MySQL, DB2, and MongoDB.
* Working Knowledge on Virtualization technologies like VMware, Vagrant Configuring and installing Virtual machine, Virtual Center servers and VMware Appliance.
* Implementation of central advancements like DNS, Load Balancing, SSL, TCP/IP, systems administration and security for best practices.
* Ability to build deployment, build scripts and automated solutions using scripting languages such as Bash, shell, PERL, Ruby and Python.

**Technical Skills:**

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| **Version Control Tools** | Git, SVN, TFS, GitHub. |
| **Build Tools** | Maven, Ant, MS Build, Code Build. |
| **Continuous Integration** | Hudson, Jenkins, GitLab |
| **Scripting** | Shell, Python, Ruby, PowerShell, JSON |
| **Configuration Management** | Chef, Ansible, Puppet |
| **Languages** | C, C++, PL/SQL, Java/J2ee, Python, HTML, JSON |
| **Databases** | MYSQL, MS SQL, NOSQL, Mongo DB, PostgreSQL |
| **Application Servers** | Apache Tomcat, WebLogic, WebSphere, JBoss |
| **Monitoring Tools** | Splunk, Nagios, AppDynamics, ELK, Dynatrace, Datadog, Prometheus, Grafana, Cloud Watch. |
| **Cloud** | AWS, Microsoft Azure, |
| **Operating systems** | Windows, Linux, HP-Unix, and Solaris |
| **Containerization Tool** | Docker, Kubernetes. |
| **Bug Tracking Tools** | JIRA, Remedy, HP Quality Center |
| **Testing Tools** | Junit, Selenium. |

**WORK EXPERIENCE:**

**Exxon Mobil - Irving, TX Jul 2022 – Till date**

**Sr Cloud Engineer / DevOps**

**Responsibilities:**

* Configured Azure Virtual Networks, subnets, DHCP address blocks, Azure network settings, DNS settings, security policies and routing. Also, deployed Azure IaaS virtual machines and Cloud services (PaaS role instances) into secure Virtual Networks and subnets.
* Managed Azure Infrastructure Azure Web Roles, Worker Roles, SQL Azure, Azure Storage, Azure AD Licenses, Office365. Virtual Machine Backup and Recover from a Recovery Services Vault using Azure PowerShell and Portal.
* Used Azure Terraform to deploy the infrastructure necessary to create development, test, and production environments for a software development project.
* Azure IaaS virtual machines (VMs) and Cloud services (PaaS role instances) into secure VNets and subnets, designed VNets and subscriptions to conform to Azure Network Limits.
* Set up of Lab infrastructure on Windows OS for MS environments (INT, PPE and PROD) by using Azure, AD, DNS, DHCP, SCVMM, WDS, SCOM, Hyper-V, TS Gateway, VLAN, kickstart and Switches updates for managing the network on servers.
* Configure continuous integration from source control, setting up build definition within Visual Studio Team Services (VSTS) and configure continuous delivery to automate the deployment of ASP.NET MVC applications to Azure web apps.
* Implemented Micro-services using Pivotal Cloud Foundry (PCF) platform build upon Spring Boot Services and created workflows on TeamCity for setting up automated pipelines for CI/CD with PCF.
* Application Deployment on PCF using CF push and Urban code deploy. Also, PCF backup for all the environments and set-up Jenkins maven build automation with uploads to Pivotal Cloud Foundry (PCF).
* Used Ansible Tower, which provides an easy-to-use dashboard and role-based access control, so that it's easier to allow individual teams access to use Ansible for their deployments.
* Designed and developed continuous deployment pipeline, integrating Jenkins and Chef across geographically separated hosting zones in Azure.
* Designed strategies for optimizing all aspect of the continuous integration, release and deployment processes using container and virtualization techniques like Docker and Kubernetes.
* Built docker containers using microservices project and deploy to Dev, iTest, Scale, UAT (SIT), PROD.
* Configured applications that run multi-container Docker applications by utilizing the Docker-Compose tool which uses a file configured in YAML format. Used Kubernetes to manage containerized applications using its nodes, Config-Maps, selector, Services and deployed application containers as Pods.
* Setting up Kubernetes (k8s) Clusters for running microservices and Pushed microservices into production with Kubernetes backed Infrastructure. Development of automation of Kubernetes clusters via playbooks in Ansible.
* Use Ansible, Chef, Jenkins, Git, for implementing Continuous Integration from scratch and optimize the Continuous Integration using Jenkins and troubleshoot the deployment build issues using the triggered logs.
* Build tool, Maven used it on Java projects for the development of build artifacts on the source code.
* Defined and managed release planning and branching strategy of GIT servers. Also, helped educate engineering community on the appropriate use of GIT. As well as Implemented auto environment creation using ansible and Azure.
* Work with MAVEN for building the application, has written maven scripts and shell scripts to automate the build process. Daily maintenance of GIT source repositories and builds.
* Planned and implemented Disaster Recovery solutions, data archiving, backup/recovery strategies, Data/Table partitioning, online Indexing, rebuild/reorg indexes, Performance Analysis and optimization of SQL server.
* Using Ruby, PowerShell and Python scripting, ARM templates developed automation and deployment utilities.
* Creating, versioning and testing of scripts (Bash, PowerShell), Chef, Nagios, Maven, Git, Jenkins, Python and Ruby to achieve high-level of automation.
* Installation, Configuring, Deploying, Troubleshooting, Administration and maintenance of IIS. Analyzing the IIS logs to collect information about server events, server performance, and user activity.
* Work on Nagios and ELK for server monitoring, also used Net Scalar and monitoring tools like Nagios for Load Balancing and Controlling Flow of Traffic.
* End to end cloud infrastructure monitoring which included monitoring and deployment of core components like Fabric, Storage, RDFE, MDS, SLB, Portal, and Billing etc.
* Involved in defect tracking using JIRA and prepared root cause analysis for defects.
* Build Data Sync job on Windows Azure to synchronize data from SQL 2012 databases to SQL Azure as well as in installation, configuration & administration of Microsoft Windows 2012 R2 Servers and Microsoft Visual Studio, used TFS for source control, data collection, reporting and project tracking.
* Identifying opportunities to improve infrastructure that effectively and efficiently utilizes Office 365 and the Microsoft Azure Windows server 2008/2012/R2, Microsoft SQL Server, Microsoft Visual Studio, Windows PowerShell, Cloud infrastructure.
* Analyze, troubleshooting, and resolve RedHat Linux and Server HW, Network problems in a Production Server environment.

**Environment:** Azure, PCF, Docker, Kubernetes, Jenkins, Ansible, Chef, Git, Vagrant, SVN, Maven, JIRA, IIS, AD, VLAN, DNS, DHCP, MSDNAA, Hypervisor, PowerShell Windows Servers, Visual Studio, SQL server, RHEL 6.9/7.4, Nagios, ELK, Terraform, ARM, Perl, Python, Ruby.

**Verizon Communications - New York City, NY Jan 2021 – Jun 2022**

**Sr. Cloud Engineer/ DevOps**

**Responsibilities:**

* Involved technology stakeholders in Release/Environment meetings to identify and reduce potential risks related to the releases.
* Significant configuration work was done for Amazon EC2, EKS, IAM, S3, RDS, Lambda, ELB, EBS, SNS, Route53, Glacier, and other AWS administrations.
* Developed AWS cloud formation templates to automate AWS image generation
* Terraform-based written infrastructure. Terraform modules used to manage AWS resources including EC2, S3, VPC, Route53, EKS, and IAM.
* Developed one-click GitLab CICD pipelines for platform deployment that take care of Terraform, Kubernetes, and Helm application deployment as well as infrastructure building.
* Developed Ansible playbooks for configuring and installing middleware components.
* A Continuous Delivery Pipeline was put up using Ansible Playbooks. Utilized Ansible Playbooks to deploy micro services to AWS environments.
* Extensively used Ansible as Configuration management tool, to automate repetitive tasks, quickly deploys critical applications, and proactively manages change.
* Worked on creating Kubernetes cluster for automating deployment, scaling, management of containerized applications using Terraform Modules
* Written Yaml manifests for creating pods, Deployments, Services, Config Maps, Stateful sets & Daemon sets in Kubernetes.
* Written groovy scripts to use multi branch pipeline projects in Jenkins to configure it as per client’s requirements
* Increased the efficiency by writing and reusing Terraform modules to create a full custom cloud infrastructure.
* Created Docker Containers leveraging existing Linux Containers and AMI's in addition to creating Docker Containers from scratch.
* Written Ansible playbooks to configure and install middleware components
* Developed Ansible Playbooks to setup Continuous Delivery Pipeline. Deployed micro services, to AWS environments using Ansible Playbooks.
* Written Docker files for Java Spring Boot, Node JS, Python & .Net applications.
* Migrated Application deployment pipelines from Jenkins to Gitlab pipelines.
* Written Jenkins Shared Libraries for CI/CD pipelines for Java and Node JS applications using Groovy Scripting.
* Work with IT security and ensure a common security framework is established and operated as part of the SDLC lifecycle.
* Integrated different tools like GitHub, Maven, Npm , Artifactory, Kubernetes with Jenkins.
* Installed and administered Artifactory repository to deploy the artifacts generated by Maven and to store the dependent jars which are used during the build.
* Implemented Continuous Integration/Continuous Delivery pipelines for micro-services architecture.
* Worked on the connectivity and Firewall issues for the installation and connectivity of the tools for security. Involved in the troubleshooting the servers.
* Designed GIT branching strategies, merging per the needs of release frequency by implementing GIT flow workflow on GitHub.

**Environment:**  GitHub, Jenkins, Java, Apache Tomcat, Ansible, Windows, ELK, SonarQube, Terraform, JIRA, VMware, Docker, Kubernetes, EKS, AWS EC2, Route 53, S3, VPC, SQS, Auto scaling, ELB, Shell Scripts, Unix/ Linux Environment, Groovy, chef.

**Starbucks- San Francisco, CA Nov 2019 – Dec 2020**

**AWS/DevOps Engineer**

**Responsibilities:**

* Implemented AWS solutions using EC2, S3, RDS, IAM, Redshift, Lambda, Security Groups, EBS, Elastic Load Balancer, Auto scaling groups, SNS, Optimized volumes and Cloud Formation templates.
* Configured and deployed AWS Lambda service to run the code in response to events and automatically manage resources.
* Implemented Amazon RDS multi-AZ for automatic failover and high availability at the database tier and optimized the configuration of Amazon Redshift clusters, data distribution, and data processing.
* Involved in building Amazon redshift and other AWS services. Used standard Redshift SQL to load data from S3 and then load into final Reporting tables.
* Automated OpenStack and AWS deployment using Cloud Formation, Heat, Ansible and Terraform, also deployed and administered Open stack services i.e. Nova, Neutron, Swift etc. and developing Open stack through Python.
* Involved in using Terraform migrate legacy and monolithic systems to Amazon Web Services and provisioned the highly available EC2 Instances using Terraform and cloud formation and wrote new plugins to support new functionality in Terraform.
* Worked on Docker to containerize the Application and all its dependencies by writing Docker file, Docker-Compose files, Docker container snapshots, managing Docker volumes, and deployed Docker Swarm using Ansible.
* Created additional Docker Slave Nodes for Jenkins using custom Docker Images and pulled them to Cloud. Worked on all major components of Docker like, Docker Daemon, Hub, Images, Registry, etc.
* Wrote Playbooks and implemented various roles for applications using Ansible to ensure deployment of Applications/Services on the client hosts replacing the dependency on Chef Cookbooks and Chef Recipes to automate infrastructure as a code.
* Created customized modules, using existing modules in Ansible that can control Package System Resources and integrated Ansible to manage all existing servers and automate the build/configurations of new servers.
* Integrated Docker container-based test infrastructure to Jenkins CI and set up build environment integrating with Git and Jira to trigger builds using Web Hooks on Slave Machines.
* Created Master-Slave configuration using existing Linux machines and EC2 Instances to implement multiple parallel threads through a build farm, expertise in troubleshooting build and release job failures
* Used XL Deploy for release automation to deploy complex releases and speed up deployment time while greatly reducing errors and failed deployments.
* Maintained ELK (Elastic Search, Log stash, Kibana) Stack for Searching, routing and visualizing Logged Data.
* Converted numerous existing Java projects to a single deployment method using ECS Container Service Docker Containers.
* Setting up of resources which invokes/triggers Lambda Function to run background tasks with response to the events created from Amazon S3 bucket resource.
* Integrated projects with Data dog for logging and monitoring of Docker Containers and Clusters.
* Configured Jira as defect tracking system and configured various workflows, customizations and plug-ins for the Jira bug/issue tracker.
* Automated setting up server infrastructure using Ruby, Shell, Python scripts. Developed python career path through professional development while working on python projects.
* Troubleshooting the network issues involving TCP/IP, LAN/WAN networking, DNS, DHCP, SMTP, SNMP, netstat and monitored the servers and Linux scripts regularly and performed troubleshooting.

**Environment:** Amazon Web Services (AWS), OpenStack, Docker, Jenkins, Git, Maven, Tomcat, Ansible, ELK, JBOSS, Shell, Nexus, XL Deploy, WebLogic, Nagios, Data dog, Splunk, Python, Shell, Linux.

**Aspire Systems India Pvt. Ltd., Chennai, IN Jun 2016 – Sep 2019**

**Linux Administrator**

**Responsibilities:**

* Installed, configured, troubleshoot, secured and supported RedHat 4/5/6, AIX, CentOS 3/4/5 and Linux9/10 servers and production servers. Tuning the kernel parameters based on the application/database requirement.
* Installation of patches and packages, Installation & configuration of Jumpstart/Flash archive, Ignite and kick start servers.
* Installed and configured Apache / Tomcat web server.
* Perform and execute Veritas Volume Manager (VRTS VxVM ), Veritas File System (VRTS VxFS) and Veritas NetBackup.
* Diagnose and resolve problems associated with DHCP, DNS, VPN, NFS, Tomcat and Apache.
* Worked with Version Control tools such as GIT and Subversion.
* Responsible for maintenance of development tools and utilities and to maintain shell, Perl automation scripts.
* Remote system administration using tools like SSH, Telnet, and Rlogin.
* Setup Squid Proxy Server for internet sharing and to block the unwanted sites and Clustering for Linux servers.
* Maintained Samba File Server for user authentication, Syslog domain, and file sharing.
* Worked with development and QA groups for installation, configuration and testing of software products such as Oracle, WebLogic, WebSphere, Tomcat, Apache, Subversion, ClearCase, Java, Eclipse.
* Worked on installing and configuring VMware/ESX Servers for virtualizations.
* Configured and maintained Network Multipathing in Solaris and Linux.
* Worked on the scripting for automation and monitoring using Shell, PHP, Python and Perl scripts.

**Environment:** Red Hat Linux 5.x, 6.x, Autosys, CentOS, VMware vSphere 4.0, VMware ESX 3.5.0, Subversion, Web logic, Shell Scripting, MySQL, Tomcat, Nagios.

**iGATE Global Solutions Ltd., HYD IN May 2014– Sep2016**

**Build and Release Engineer.**

**Responsibilities:**

* Responsible for versioning the source code, releasing binary files, creating and applying labels on source files and release files.
* Build and deployment of Java to a variety of environments executing continuous improvement of builds with Maven plugins and Maintained development infrastructure including Artifactory repository, Jenkins CI server, JIRA and Confluence for maintaining docs and calendars.
* Managed GIT repositories for branching, merging, and tagging.
* Enhanced build scripts using Ant, Maven and MS Build.
* Implemented integrated Unit Tests and Code Quality Analysis Tools like MS Test, JUnit, Selenium, find bugs and check style.
* Designed and Implemented CI (Continuous Integration) system, configuring Jenkins servers, Jenkins nodes, creating required scripts (Perl, Python).
* Setting up Jenkins master, adding the necessary Plugins and adding more slaves to support scalability and agility.
* Designed the project workflows/pipelines using Jenkins for Continuous Integration and deployment into different Web/Application Servers.
* Administered and Engineered Jenkins for managing weekly Build, Test and Deploy chain, SVN/GIT with Develop/Test/Prod Branching Model for weekly releases.
* Administered and deployed applications on Apache Webserver and Application Servers such as Tomcat, JBoss, WebSphere.
* Worked closely with Project Managers to understand a code/configuration release scope and how to confirm a release was successful.
* Developed and implemented Software Release Management strategies for various applications according to the agile process.
* Involved in periodic archiving and storage of the source code for disaster recovery.

**Environment:** Git, Ant, Maven, Nexus, Junit, selenium, MS test Jenkins, Chef, Apache–tomcat, JBoss, WebSphere, Python, Nagios, Shell Scripting, Linux, Unix, Windows.