Sandeep Chowdary Kotapati

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**Professional Summary:**

* Having 9+ years of experience working in the IT sector, with a strong background in **Unix/Linux** System Administration, and experience implementing the DevOps life cycle using tools like **GIT**, **Bitbucket**, **Jenkins** for **Continuous Integration**, **Chef**, and **Ansible** in cloud environments.
* Extensive experience in provisioning and managing infrastructure resources in Azure using services like **Azure Resource Manager** (ARM) **templates**, and **Azure PowerShell**. Proficient in defining **infrastructure as code** and **automating** the deployment of Azure resources in a declarative and scalable manner.
* Strong expertise in utilizing Azure DevOps Services for end-to-end DevOps workflows. Skilled in managing **source code repositories**, configuring **CI/CD pipelines**, and automating the release and deployment of applications to Azure.
* Demonstrated proficiency in deploying and managing containerized applications on **Azure** **AKS**. Experienced in creating **AKS** **clusters**, **deploying Docker** **containers**, and utilizing **Kubernetes** features for scaling, monitoring, and managing application workloads.
* Extensive experience in provisioning and managing infrastructure resources in AWS using services like AWS CloudFormation, and **AWS** **Management** **Console**. Proficient in defining infrastructure as code and automating the deployment of AWS resources in a scalable and repeatable manner.
* Strong expertise in utilizing AWS DevOps tools such as **AWS Code Pipeline**, **AWS Code Build**, and AWS **Code Deploy** for end-to-end **CI/CD** workflows. Skilled in managing source code repositories, configuring pipelines, and automating application deployments to AWS.
* Demonstrated proficiency in deploying and managing **EC2** instances in AWS. Experienced in configuring EC2 instances, managing auto-scaling groups, and utilizing EC2 features for **load balancing**, **high availability**, and **cost optimization**.
* Extensive experience in using **Terraform** to define and manage infrastructure resources as code. Proficient in writing **Terraform configuration** files in **Hashi Corp Configuration Language** (HCL) or **JSON** to provision and manage cloud resources in a declarative and version-controlled manner.
* Strong expertise in utilizing Terraform multi-cloud and multi-provider capabilities. Skilled in provisioning and managing resources across various cloud providers like **AWS**, and **Azure**, enabling consistent infrastructure deployment and management across multiple environments.
* Extensive experience in using **Chef** for infrastructure automation, enabling the provisioning and configuration of servers and resources in a consistent and repeatable manner. Proficient in writing Chef recipes and cookbooks to define and manage **infrastructure as code**.
* Strong expertise in utilizing **Ansible** for configuration management, ensuring that server configurations are consistent and compliant across the **infrastructure**. Skilled in defining and **managing configurations**, **enforcing the desired state**, and **automating configuration updates**.
* Extensive utilizing **Docker** for containerization, enabling the deployment and management of applications in lightweight, isolated containers. Proficient in creating **Docker images**, defining **container configurations**, and orchestrating **container deployments**.
* Extensive experience in utilizing **Kubernetes** for container orchestration, enabling the deployment, scaling, and management of containerized applications across clusters of hosts. Proficient in defining and managing Kubernetes resources like **pods**, **deployments**, **services**, and **ingress**.
* Experience in implementing **CI/CD pipelines** using **Jenkins** for automated build, test, and deployment processes. Proficient in configuring Jenkins jobs, defining pipelines as code, and integrating with version control systems for seamless CI/CD workflows.
* Utilized **Git** as the primary version control system for managing source code and other project artifacts. Proficient in creating **repositories**, **branching**, **merging**, and **resolving** **conflicts** to ensure efficient collaboration and version management.
* Extensive experience in utilizing **Maven** as a build automation tool for Java projects in the Cloud DevOps environment. Proficient in configuring and managing **Maven projects**, defining **build lifecycles**, and specifying dependencies.
* Proficient in writing **Python scripts** to provision and manage cloud resources, **automate deployment** tasks, and configure **infrastructure as code**.
* Management and design of integrated build pipelines using continuous integration workflows such as **Jira, Git, Stash, Bamboo, Jenkins, Docker, Kubernetes, and Terraform**.

**Technical Skills:**

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| --- | --- |
| **DevOps Tools** | **GIT, Docker, Jenkins, Terraform, Kubernetes** |
| **Source Code Management** | **Git, Bitbucket, GitHub** |
| **Cloud Platforms** | **Azure, AWS and On-Prime** |
| **Middleware /Application servers** | **WebSphere Application Server 6.x, 7.0, 8.0, Tomcat** |
| **Build tool** | **Maven, Jenkins, Gradle** |
| **Protocols** | **TCP/IP, HTTP/HTTPS, LDAP** |
| **Operating Systems** | **Windows and Linux** |
| **Infrastructure as code** | **Terraform** |
| **Monitoring tools** | **Check\_Mk,** **Splunk, CloudWatch** |
| **Repositories** | **Nexus Repository, Harbor Registry,Jfrog** |
| **Ticketing Tools** | **HPSM, JIRA, AZURE BOARDS** |

**PROFESSIONAL EXPERIENCE:**

**Best Buy | Richfield, Minnesota USA Aug 2022 – Present**

**AWS DevOps Engineer**

**Responsibilities:**

* Provide system administration functions for mixed Microsoft / Linux & Azure environments
* Worked on installation and configuration of CentOS & Ubuntu
* Migration of EC2 instances from one region to another and configured site- to- site vpn and open vpn for Linux EC2 instance.
* Performed all Linux operating system, disk management and patch management configurations on Linux instances in AWS.
* Upgraded Storage Account from standard to premium plan for existing Virtual Machine in Azure.
* Managing AWS Infra and automation with CLI, API.
* Installing and hosting was automated with AWS cloud formation and power shell scripts.
* Wrote Ansible Playbook scripts using Python, SSH into AWS Nodes to manage configurations and test playbooks on AWS instances.
* Managed deployments and build results using workflows in Udeploy.
* Introduced new solutions to engineering workflow including Kubernetes, EKS, and Lambda.
* Created fully automated CI/CD pipelines for code deployment using AWS Lambda and Jenkins, SonarQube.
* Implemented AWS Code Pipeline and created Cloud formation JSON templates in Terraform for infrastructure as code.
* Automate provisioning and repetitive tasks using Terraform and Python, Docker container, Service Orchestration.
* Provided a consistent environment using Kubernetes to add scaling and load balancing ability to the application by easing the code development and deployment pipeline using Docker containerization.
* Created Docker images using a Docker file. Worked on Docker container snapshots, removing images and managing docker volumes and experienced with Docker container service.
* Building/Maintaining Docker container clusters managed by Kubernetes, Linux, Bash, GIT, Docker. Utilized Kubernetes and Docker for the runtime environment of the CI/CD system to build, test and deploy.
* Using Kubernetes, I have automated application deployments and updates and orchestrated deployment
* Writing JSON templates for cloud formation and Ansible playbooks for automation and contributing to our repository on Aws code commit.
* Involved in designing and deploying a multitude of applications by utilizing almost all the AWS stacks includingEC2, Route53, S3, RDS, DynamoDB, SNS, SQS, IAM focusing on high-availability, Fault tolerance, and Auto-Scaling in AWS Cloud formation.
* DevOps role converting existing AWS infrastructure to Server-less architecture (AWS Lambda, Kinesis) deployed via Terraform.
* Automated the creation of S3 buckets and policies and IAM role-based policies through Python Boto3 SDK.
* Worked on PythonBoto3 Scripts to Automate AWS services, including web servers VPC, ELB, RDS, EC2, IAM, S3 bucket, Cloud Front Distribution, and application configuration. Experience with application containerization (Docker) and infrastructure as code solutions.
* Implemented RabbitMQ for better user interactions with applications
* Creating scripts in DSL Groovy which integrate with Jenkins for Automation to create jobs.
* Integrate Splunk with AWS deployment to collect data from all EC2 systems into Splunk
* Maintained build related scripts developed in shell for Maven builds. Created and modified build configuration files including pom.xml.
* Setting up Prometheus and Grafana monitoring tools for monitoring the Kubernetes cluster.
* Good experience in converting build.xml into pom.xml to build the applications using MAVEN
* Using agile/scrum software development lifecycle methodology.

**Environment: Jenkins, EKS, GitHub, Python, Terraform,** RedHat Linux, Chef, CloudWatch, Node JS, PostgreSQL.

**CIGNA-NY (Remote) March 2020 – July 2022**

**DevOps Engineer**

**Responsibilities:**

* **Experience with CI/CD tools and DevOps processes for AWS utilizing Jenkins, Ansible and CloudFormation to build automated pipelines for application deployment.**
* 24\*7 on-call rotation support for mission critical applications, requires occasionally working after normal business hours and weekends to support releases, application issues and outages
* Responsible for gathering information and designing the Outage and Situational Information System (OASIS) to migrate into **Unified Outage Notification (UON)** application by working with development and production support teams using associated DevOps and Agile process
* **As part of the application migration to AWS, responsible for architecting the AWS services, creating the Jenkins pipelines for automating the build of the environment, create Ansible deployment playbooks, create custom AMIs, manage snapshots, configure logging and monitoring, manage ELB and certificates, manage KMS policies and keys, manage custom security groups, AMI rehydration, etc.**
* Responsible for creating templates to create servers, loading of middleware as applicable, developing flow documentation for the UON application, deployment of new software and support
* Creating the Jenkins pipeline for automating the build of the environment.
* Logging and monitoring setup, maintaining health checks for all the applications responsible for production support.
* Day to day application support, monitoring and system administration of applications running on Linux and other platforms
* **Responsible for Continuous Integration (CI) and Continuous Delivery (CD) process implementation using Jenkins along with Shell scripts to automate routine jobs.**
* Transitioned from Bitbucket/Stash version control to **Gitlab source code versioning**.
* Docker ized applications by creating Docker images from Docker files, collaborated with the development support team to set up a continuous deployment environment using Docker.
* **Built and deployed Docker containers to break up monolithic apps into microservices, improving developer workflow, increasing scalability, and optimizing speed.**
* Automated the process of configuration of different servers using Ansible, wrote Ansible playbooks to automatically update system components while provisioning and patching the servers regularly, saving 20% admin time
* **Developed Splunk queries and dashboards targeted at understanding application performance and capacity analysis across multiple teams and sectors.**
* Analyzed the SQL scripts and designed the solution to implement using New Relic.
* Wrote shell scripts for automated installations to extract logs and compressing and rotating the logs, also involved in Shell scripting for Batch Jobs.
* Good experience in RHEL Patching & upgrades while performing regular function checks on all RHEL 6,7 Linux Servers in both environments (Production/Non-Production and/or Production/Development).
* Started working on Kubernetes and exploring AWS EKS.
* **Created Shell & python scripts for various Systems Administration tasks to automate repeated processes.**
* Successfully maintaining all the servers (DEV, QA) with the required code with help of Jenkins in a timely manner for regression testing and smoke and UAT.
* Developed build and deployed scripts using Maven as build tools in Jenkins to move from one environment to another environment.
* Installing, configuring and administering Jenkins CI tool on different kind of instances.
* Worked on licensed NAGIOS (IPM-Integrated Project Management) services for network/server monitoring.
* Handled **DCR (defect Change Request), MR (Maintenance Request)** and created deployment tickets using Jira for build deployment in Production.
* Worked on User administration setup, maintaining account, monitor system performance using Nagios.

**Environment: Docker, Ansible, Splunk, Python, Shell, RHEL, Ubuntu, Jenkins, GIT, JIRA, Nagios, Maven, PostgreSQL**, **Kubernetes, AWS.**

**Atlantic Casualty Insurance Company, Goldsboro, NC Aug 2018 – Feb 2020 Senior DevOps Engineer**

**Responsibilities**

* Experience in Software Deployment & software configuration management which includes Build & Release process setup, Build Automation, Cloud Deployments, Continuous Integration, SCM process improvements.
* Responsible for managing DevOps admin activities such as Adding and removing users and assigning respective permissions.
* Experience in creating pipelines in Azure DevOps for build and artifact management.
* Setting up integration between **Azure DevOps** and Octopus Deploy for deploying build artifacts.
* Creating Ansible playbooks for applying patch updates for multiple servers.
* Configure and maintain Reporting Services SQL Server 2016.
* Source code management and creation of **Branching Strategy** for smoother release process and maintenance of codes.
* Worked on **end-to-end for migration of TFS 2017 to Azure DevOps 2020 Server**.
* Experience in setting up Application Tier and setting up Analysis server for Azure DevOps.
* Troubleshoot Window server issues and resolve issues on day-to-day basis.
* Experience in writing terraform scripts to create, manage and delete resources in Azure such as Azure VM’s, Azure web apps and creation of AKS, Network Security Groups.
* Monitoring of AWS resources in Opsview and resolve the issues whenever an alert in triggered.
* Writing Dockerfile for .Net applications, build and push docker images to Azure container registry.
* Installation and configuring Open Distro for ELK stack and use it for the microservices log analysis.
* Setting up of Jenkins jobs for the deployment of the war files to the Linux servers.
* Experience of setting up Master-Slave nodes in Jenkins to distribute jobs equally to balance the load.
* Experience in integrating Jenkins with docker registry using SSH keys which allows for password less authentication to push and deploy images to servers.
* Responsible for configuring Portainer and list all the servers which has spring boot application running as containers.
* Have installed TLS certificate for the docker daemon to safely expose through API to configure in Portainer.
* Developed Shell scripts to build the docker images and use them in Pipeline scripts to deploy to the Linux servers.
* Setup and manage docker swarm through Portainer which provides greater UI experience to know the status of the containers.
* Writing Python scripts for automation of monitoring resources such as CPU utilization and memory management.
* Have setup CI/CD pipelines for Angular Applications in Azure DevOps and deployed in Servers.

**Environment**: Centos Linux, Docker, Jenkins, Shell Scripting, AWS EC2, AWS, VPC, AWS Security Groups, Docker Private Registry, Swarm, Portainer, Git, Octopus Deploy, SonarQube, RedHat Linux, Windows 2012, 2016/2019 Server, Azure DevOps, Octopus Deploy, ServiceNow, SolarWinds, PowerShell, Shell Scripting, Git, Docker, Azure Web Apps, Azure Kubernetes Service, Azure Container Registry, Terraform, Ansible, SonarQube, IIS, Prometheus, Grafana, Datadog.

**Apex CoVantage, India June2016– Dec 2017**

**DevSecOps Engineer.**

**Responsibilities**:

* Implemented end-to-end infrastructure automation by creating and managing AWS services **Elastic Beanstalk, RDS Aurora, Lambda, S3, Neptune** using **Terraform** that support **Docker** running application requirements.
* Used **IAM** for creating roles, users, groups and implemented **MFA (Multi Factor Authentication)** to provide additional security to **AWS** account and its resources and Manage the user accounts (IAM- Identity Access Management), RDS, ROUTE 53, VPC, RDB, DynamoDB, SES, SQS and SNS service in AWS cloud.
* Transformed and moved large amounts of data into and out of other **AWS data stores** (**RDS**) and databases, such as Simple Storage Service (**Amazon S3**) and Amazon **DynamoDB** using **EMR**.
* Configured **Route 53 as a Domain Name Service across the enterprise** and configured public and private interfaces for the external clients and internal consumers.
* Implemented **Cloud Formation** for **AWS orchestration** and automated the workflow of AWS Cloud at every layer (such as application, network, storage, and monitoring, etc.) of AWS by writing cloud formation templates.
* Successfully deployed applications on to Ec2 Servers with zero down time by utilizing features of **AWS**autoscaling group with launch templates and make the application release life cycles are immutable with **AMI orchestration**.
* Converted **DevOps** methodologies in to **DevSecOps** model by introducing **security/vulnerability** scans different phases of DevOps like clear text password scan during the build and packaging phase of application and on the other hand responsible for implementing pre provisioning scans and post provisioning scans for **IAC** by adopting tools like terraform enterprise (**sentinel**) and Inspect framework for **AWS** cloud resource validations.
* Brought security standards in data management by applying **KMS** encryption strategy to encrypt the data at rest and implemented SSL encryption layer to encrypt the data during transport and plotted workflow for **DevSecOps** operating model
* Orchestrated and migrated CI/CD processes using Cloud Formation and Terraform templates and containerized the infrastructure using **Docker**, which was setup in Vagrant. Used Ansible to configure the built resources and troubleshoot the build issues with ELK and work towards the solution.
* Managed **Kubernetes charts using Helm**, and built reproducible **Kubernetes** applications builds, managed Kubernetes manifest files and Helm package releases.
* Managed **Docker Containers**, **Kubernetes Clusters**, **Mesos** and implemented a production ready, load balanced, highly available, fault tolerant **Kubernetes** infrastructure and created **Jenkins jobs** to deploy applications to **Kubernetes Cluster**.
* Integrated **Jenkins with Docker container** using CloudBees **Docker** pipeline plugin to drive all microservices builds out to the **Docker Registry**. Integrated Selenium automation regression test suite in **Jenkins** build pipeline to avoid issues in the production.
* Automated **AWS** infrastructure through infrastructure as code by writing various **Terraform** modules, null resource scripts to create AWS **IAM** users, groups, roles, policies, custom policies, AWS Glue, Crawlers, Redshift clusters, snapshots of clusters, EC2, S3 buckets, application deployments.
* Implemented **AWS** web application firewalls to monitor the web requests that are forwarded to **API** Gateways and Application Load balancers to enable the security model
* Troubleshooting of network issues using **DHCP, DIG, DNS, SNMP, SMTP, Ethernet, IOS, netstat, NFS, NIS, nslookup, RIP, OSPF, BGP, TCP/IP, and tcpdump.**

**Environment**: AWS, Azure, Jenkins, Ansible, Terraform, Docker, Kubernetes, AWS Security Hub, AWS Control Tower, Splunk, Redshift, Elastic Beanstalk, Maven, Nexus, Amazon ECS, Cloud Formation, Python, YAML, Bitbucket

**TEAQ TECHNOLOGIES, Hyderabad, India Jun 2013 – May 2016**

**Build & Release Engineer**

**Responsibilities:**

* Creating and maintaining documentation of the Build/Release process.
* Working closely with the development team to integrate new deployment processes and strategies to meet our feature requirements.
* Perform as technical liaison for Engineering and Operations on every aspect associated with final builds and control baseline issues.
* Hands-on experience in EC2, VPC, Subnets, Routing tables, Internet gateways, IAM, Route53, VPC peering, S3, ELB, RDS, Security Groups, Application Security, VSTS, Cloud Watch, SNS.
* Written shell scripts and Perl scripting to take backup oracle databases.
* Experience in working with container-based deployments using Docker, Docker images, Docker file, Docker Hub, Docker Compose and Docker registry.
* Worked on Docker Container snapshots, attaching to a running container, removing images, managing director structures and managing containers.
* Monitoring AWS Instances regularly using ops view and New Relic tools.
* Configuration tool Installed and configured such as chef server / workstation and nodes via CLI tools to AWS nodes.
* Deployed and configured Chef Server and Chef Solo including bootstrapping of chef client nodes for provisioning.
* Created GIT repositories with standard directory layout of trunk, branches, tags and customized directory based on business/project need.
* Installing and configuring Apache Tomcat and supporting them on Linux production servers.
* Wrote Ansible Playbooks with Python SSH as the Wrapper to Manage Configurations of AWS Nodes and Test Playbooks on AWS instances using Python.
* Written scripts in Python to automate log rotation of multiple logs from web servers.
* Written shell scripts for automating logs backup and archiving.

**Environment: Oracle 8/9i database, AWS, Docker, New Relic, Chef, CentOS, GitHub, MYSQL, Tomcat, Python, Bash/Shell.**