**Sindhu Thotakura**

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#### Summary:

* 14+ years of experience as Sr. DevOps Architect and Cloud Development Engineer involving extensive work towards code compilation, automation, packaging, building, debugging, managing, tuning and deploying code across multiple Cloud environments.
* In-depth understanding of the principles and best practices of Software Configuration Management (**SCM**) in **Agile**, **SCRUM**, **Waterfall** methodologies.
* Wrote **Ansible**playbooks to manage configurations and automate installation process.
* Used **Ansible**and **Ansible**Tower as Configuration management tool, to automate repetitive tasks, quickly deploys critical applications, and proactively manages change.
* Managing the configurations of multiple servers using **Ansible** & **Chef.**
* Managed environments DEV, QA, UAT and PROD for various releases and designed instance strategies.
* Good knowledge about **CI/CD**.
* Designed and managed public/private cloud infrastructures using Amazon Web Services (AWS) which include EC2, S3, VPC, Cloud Formation, IAM, Storage Gateway, RDS, EBS, AWS Lambda, EKS, Elastic Beanstalk, CloudTrail, CloudWatch, OpsWorks, CloudFront, Route 53 etc.
* Expertise in building Continuous Integration and Continuous Delivery (CI/CD) on AWS environment using AWS Code Commit, Code Build, Code Deploy and Code Pipeline and experience in using AWS CloudFormation and AWS Lambda in automation and securing the infrastructure on AWS.
* Experienced with deployments, Maintenance and troubleshooting applications on AWS Platform.
* Expertise in Amazon AWS Cloud Services: API Gateway, Lambda, DynamoDB, SNS, SQS, Glue, EMR, Elastic search etc.
* Good experience on Amazon AWS IAM Services in Users, Groups, Policies, Roles, AWS Access Keys and MFA.
* Expert in deploying the code through web application servers like Apache Tomcat/ Web Sphere/Web Logic/ AWS CLOUD.
* Managed **Multi Flavour of Linux** and **Windows** virtual servers with Ansible & Chef using **Git**.
* Extensively worked on **Cloud Bees**, **Jenkins** and **TeamCity** for continuous integration (CI) and for End-to-End automation for all build and deployments.
* Performed Automation and Scaling of applications using **Kubernetes.**
* Experience with **Ansible**Tower to manage Multiple Nodes and Manage Inventory for different Environments.
* Used **Ansible**to orchestrate software updates and verify functionality.
* Terraforming and Cloud formation to code all infrastructures into Azure, AWS and GCP.
* Working on Microsoft Azure Cloud services like cloud compute, Azure DevOps, Azure Pipelines Azure Repos, Azure Test Plans, Azure Monitoring.
* Expertise in designing, implementing &amp; managing infrastructure as code using Terraform. Ansible Created modular &amp; scalable infrastructure templates to automate provisioning &amp; deployment processes.
* Experience integrating **Ansible**&**Terraform** (IAC) with major cloud platforms like AWS &amp; Azure. Leveraged Terraform to provision &amp; manage cloud resources such as virtual machines, storage, networking &amp; security groups.
* Strong experience in writing Terraform tf files in AKS to maintain high availability.
* Writing **Terraform** script to provision **Kubernetes** cluster and Deployed application on AKS cluster using Helm chart.
* Extensively used Terraform to a reliable version and created infrastructure on Azure. Also created resources, using Azure Terraform modules, and automated infrastructure management. Organized different infrastructure resources like physical machines, VMs and even containers using Terraform.
* Worked on **Terraform** to set up the AWS infrastructures such as launching theEC2 instances, S3buckets, VPC, Subnets, and created the module driven AWS Infrastructure with Terraform
* Used **GIT**as Version Control System for two applications. Managed development streams and Integration streams.
* Used **AWS**Bean Stalk for deploying and scaling web applications and services developed with Java, Node.js, Python and **Ruby**on familiar servers such as Apache, and IIS.
* Worked on **Docker**container snapshots, attaching to a running container, removing images, managing directory structures and managing containers.
* Experience working on several Docker components like Docker Engine, Hub, Machine, **Compose**and Docker Registry.
* Experience working on **docker hub,**creating docker images and handling multiple images primarily for middleware installations and domain configurations.
* Used **Docker**for configuration management automation
* Setup Elastic Load Balancer for distributing **traffic**among multiple Web Logic servers and involved in deploying the content cloud platform on Amazon Web Services using **EC2, S3**and **EBS.**
* Creating the AWS Security groups to enable firewall.
* Automated **AWS**volumes snapshot backups for enterprise using Lambda.
* Created functions and assigned roles in AWS **Lambda**to run python scripts.
* Installed Kubernetes cluster including Kubernetes(K8) master and nodes. I configured etcd, kube-apiserver, kube- scheduler, kube-controller-manager in K8 Master and as well as configured Docker, kubelet, kube-proxy, flannel inK8 nodes.
* Administration and maintenance of **Docker**runtime environment, Versioning and lifecycle management of **Docker images**, Experienced in Docker orchestration framework.
* Automated Compute Engine and Docker Image Builds with **Jenkins**and **Kubernetes.**
* Having good implementation experience with installation and configuration of **Kubernetes,** clustering them and managed local deployments in **Kubernetes.**
* Created Docker images using a **Docker file**. Worked on Docker container **snapshots**, removing images and managing **Docker volumes** and experienced with Docker container service.
* **Ansible**playbooks to manage configurations and automate installation process.
* Used **Ansible**and **Ansible**Tower as Configuration management tool, to automate repetitive tasks, quickly deploys critical applications, and proactively manages change.
* Managing the configurations of multiple servers using **Ansible.**
* Managed Artifactory repository for the current project created a new repository and provisioned it.
* Shell scripts & Python script to automatically restart the u Deploy agents on LINUX machines
* Designed, Architected and implemented the Platform as a service built for multi-tenant platform within the Hybrid cloud infrastructure within AWS and GCP.
* Used Ticketing & Project Management tools like Jira, Team Foundation Server in DevOps, Service Now, and HPQC.
* Knowledgeable on scripting languages as Python hands on experienced.

**Education:**

* Masters: Software Engineering Kansas State University, 2010-2012, Manhattan, KS
* Bachelors: Information Technology-JNTU 2006-2010, Hyderabad, INDIA

**Technical Skills:**

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| --- | --- |
| Version Control Systems | Git, SVN |
| Cloud Platforms | AWS, Azure, GCP |
| CI/CD & IAC | Jenkins, Gitlab, Terraform, CFT |
| Configuration Management | Ansible, Chef |
| Containerization | Docker, Kubernetes, Nomad, Consul, Fabio |
| Languages | GO, Shell, Python, Groovy, Java, SQL, XML, HTML, CSS |
| Build Tools | Maven, Gradle |
| Artifact Repositories | Nexus, Artifactory |
| Monitoring & Logging | Splunk, Prometheus, Grafana, AppDynamics, Datadog |
| Security Scan | Twistlock, Ox Security |
| Collaboration Tools | Jira, Confluence, Slack, Service Now |
| Operating Systems | Linux, UNIX, Windows XP/NT/2000, Mac. |

**Professional summary:**

**Client: FOX, Dallas, TX**

**Role: Sr DevOps ManagerAug19 – Current**

**Responsibilities:**

* Deploying infrastructure on **AWS** utilizing services such as **EC2, RDS, VPC** and Managed Network and Security, Route 53, Direct Connect, IAM, Cloud Formation, AWS Ops Works (Automate operations), Elastic Beanstalk, AWS S3, Glacier, (Storage in the cloud) and Cloud Watch Monitoring Management.
* Managed **Docker** orchestration and **Docker** containerization using **Kubernetes**.
* Used AKS from GitHub to **Azure** using GitHub actions yaml deployment with Docker container worked in Azure.
* Experience in **Kubernetes** to deploy scale, load balance, and manage Docker containers with multiple names spaced versions using **Helm** charts
* Used **Kubernetes** to orchestrate the deployment, scaling, and management of Docker Containers Extensively worked with **Azure** Devops.
* Deploying **CI/CD** system using Azure DevOps on **Kubernetes** container environment, and for the runtime environment of CI/CD system to build, test and Deployment we have utilized Kubernetes and Docker Designed and automated AZURE Infrastructure as a Service (IaaS) and Platform as a Service (PaaS), SaaS capabilities which includes virtual Machine, container services, virtual network and cloud services.
* Deploying Prometheus and **Grafana** as a pod on Kubernetes by creating resources Deployment, Replicaset, Pods, and service.
* Created **PV, PVC**, and deployment for both Grafana and Prometheus deployment and also exposing it to port.
* Structured cluster Auto Scaler for Azure Kubernetes Service (**AKS**) by using **Terraform** templates and worked with scheduling, deploying, and managing pods and replicas in AKS.
* Managing the Azure Kubernetes Services( **AKS**) policies, providing access to different resources and developing and improving the workflows that govern access.
* Developed tools that allowed developers to easily deploy their applications on **Kubernetes**.
* Writing **Terraform** script to provision **Kubernetes** cluster and Deployed application on **AKS** cluster using Helm chart.
* Used Docker and Kubernetes to manage micro services deployment.
* Used Kubernetes to create Pods, Config Maps and deployments into the cluster.
* Hands on experience on Kubernetes to automate the deployment, scaling and operations of application containers across clusters of hosts.
* Maintaining and developing Docker images for a tech stack including Cassandra, Kafka, Apache and several in house written in both **OpenStack** and AWS cloud on Kubernetes.
* Experienced in creating AWS IAM and Security Group in Public and Private Subnets in VPC. Created AWS Route53 to route traffic between different regions.
* Launched **AWS** and Open Stack instances (SUSE/Ubuntu/CentOS) and Configured launched instances with respect to specific applications.
* Implementing **VPC**, Auto Scaling, S3, EBS, ELB, Cloud Formation templates and CloudWatch services from AWS.
* Implementing **AWS Lambda** functions to run scripts in response to event in Amazon Dynamo DB table, S3 buckets, HTTP requests using Amazon API Gateway.
* Involved in creating, configuring AWS VPC services, installed EC2 instances for the new development team, and used AWS Route 53 to maintain the traffic and to create the DNS name.
* Automated the AWS cloud infrastructure provisioning using **CloudFormation**&**Terraform** Templates.
* Managed **AWS**, **Jenkins**, and Chef Accounts to more effectively control access to resources and increase security.
* Configured AWS ECS clusters for deploying and orchestrating containers by defining tasks and Services.
* Expertise in writing AWS CloudFormation templates in **YAML** to use them as blueprints for building &amp; deploying multiple AWS resources.
* Worked on AWS services EC2, IAM, S3, Lambda, CloudWatch, Redshift, Dynamo DB, SNS, SQS, EKS, ECR, EMR, Elastic Bean stalk, VPC, ELB, RDS, EBS and Route 53.
* Troubleshooting the AWS and On-prem Jira Queue/support tickets that in turn helps the end clients to resolve the issues they experience.
* Implement microservices architecture on **AWS** using services like AWS ECS/EKS, AWS Fargate, or AWS Lambda combined with Docker and Kubernetes, facilitating modular and scalable application development.
* Designed and developed AWS Systems Manager (SSM) Automation Documents to automate routine operational tasks and infrastructure management processes.
* Responsible for Installing, administering, repository management, User management in Nexus.
* Involved in checking the quality of the code by using SonarQube.
* Create a custom image of an **Azure** VM with Azure PowerShell and create a VM scale set and deploy a high available app on Windows with Azure PowerShell.
* Experience in load balance Windows VM in Azure to create high available application with Azure PowerShell and manage Azure Virtual Network for Windows VM with Azure PowerShell.
* Experience in Backup and restore files for Windows VM in **Azure cloud**.
* Handling and maintaining **Azure DevOps** Pipeline with ADO and Terraform.
* Created and maintained infrastructure using **Terraform**, resulting in a more streamlined and efficient deployment process.
* Provisioned Azure resources including AKS clusters, virtual networks, public IP addresses, and storage accounts through Azure Portal, Azure CLI, or Infrastructure as Code (IaC) tools like Terraform or ARM templates.
* Implemented Disaster Recovery solutions using **TerraformIaC** tools to automate deployment across regions.
* Utilized **Terraform** to provision and manage Vault infrastructure, such as clusters, storage, and networking components.
* Implemented **Terraform** practices for Rancher to automate cluster provisioning and configuration and Established version-controlled repositories for Rancher configurations to ensure consistency and reproducibility.
* Maintaining **Terraform** for Infrastructure as Code for **Azure** and **GCP**.
* Implementing **Azure Services** such as Azure Active Directory (AAD), Azure Storage, Azure Cloud Services, AzureResource Manager (ARM),Azure Blob Storage, Azure VM, Azure Functions, Azure Application Insights, and AzureService Bus.
* Working knowledge in deploying **CI/CD** system using Azure DevOps on Kubernetes container environment, and for the runtime environment of CI/CD system to build, test and Deployment we have utilized Kubernetes and Docker Designed and automated AZURE Infrastructure as a Service (IaaS) and Platform as a Service (PaaS), SaaS capabilities which includes virtual Machine, container services, virtual network and cloud services.
* Developed, maintained and provided the team with Various Azure DevOps related tools like deployment tools, staged virtual environments, and provisioning scripts Used Shared Image Gallery to store the created images and built Azure pipelines in Azure DevOps to implement all these services in Azure
* Developed Web Services Automation suite for Functional, Regression, Smoke tests using **Python** for REST based API’s
* Developed and maintained Continuous Integration (CI) using tools in Azure DevOps (VSTS) spanning multiple environments, enabling teams to safely deploy code in Azure Kubernetes Services (**AKS**) using YAML scripts.
* Managing the Azure Kubernetes Services( **AKS**) policies, providing access to different resources and developing and improving the workflows that govern access.
* Experience with version control tools such as GIT and Bitbucket. Comprehensive knowledge of source controller concepts including branches, tags, and merges.
* Worked with Azure Monitoring tools such as Azure Log Analytics, Azure Network Watcher, and Azure Service Health to diagnose and minimize service degradation.
* Experience in using the monitoring tools like Azure monitoring , Dynatrace to setup the desired alerts to avoid disruption.
* Created ARM Template for deploying the resources into Azure using the PowerShell and continuous integration by VSTS.
* Deployed Azure IaaS virtual machines (VMs) and Cloud services (PaaS role instances) into secure VNets and subnets using PowerShell
* Worked with containerization tool Docker and running containers and services and utilizing docker swarm.
* Creating Chef Cookbooks and Recipes to maintain and automate various parts of infrastructure.
* Continuous Integration using **Maven**, **Jenkins**, Hudson.
* Involved in migration of **Artifactory**&**GIT** server.
* Customized the log monitoring for a better and convenient reading of the logs by creating the indices and passing them on to the **Elasticsearch** which provides a URL for **Kibana** access.
* Responsible for designing & deploying new ELK clusters (Elasticsearch, Logstash, Kibana, beats, Kafka, zookeeper.
* Responsible for merging, tagging and conflict resolution in **GIT** and administered version control systems to create daily backups and checkpoint files.
* Established communication between VPCs using VPC Peering and Transit Gateway.
* Configured lifecycle configuration rules on S3 buckets to move data between storage classes for easy accessibility, archiving and or cost optimization.

**Environment:**Terraform, AWS,S3, EBS, Elastic Load balancer (ELB), Auto Scaling groups, VPC,IAM, Cloud Watch, Glacier, DynamoDB, OpenStack, shell/Python scripts, GIT, Jenkins, Maven, Nexus, Ansible, Docker, Kubernetes, JIRA, Splunk, Nagios, Python, Nginx, Tomcat, Windows and Linux environment, VMware ESX/ESXI Server and Workstation.

**Client: Capital One, Richmond, VA October 13 – August 19**

# Role: Manager

**Responsibilities:**

* Designed AWS Cloud Formation templates to create custom sized VPC, subnets, NAT to ensure successful deployment of Web applications and database templates.
* Setup and build **AWS**infrastructure various resources, **VPC EC2, S3, IAM, EBS,**Security Group, Auto Scaling, and RDS in Cloud Formation **JSON**templates.
* Working in implementation team to **build**and engineer servers for **Linux**& **AIX**operating systems.
* Working on AWS cloud to provision new instances. S3 Storage Services. AWS EC2 & **Cloud watch**services. **CI/CD**pipeline management through Jenkins.
* Automated Compute Engine and Docker Image Builds with **Jenkins**and **Kubernetes.**
* Having good implementation experience with installation and configuration of **Kubernetes,** clustering them and managed local deployments in Kuber**netes.**
* Provided consistent environment using **Kubernetes**for deployment scaling and load balancing to the application from development through production, easing the code development and deployment **pipeline**by implementing **Docker**containerization.
* Focused on **containerization**and immutable infrastructure. Docker has been core to this experience, along with **AWS ECS** and **Kubernetes.**
* Integrated **Kubernetes**with network, storage, and security to provide comprehensive infrastructure and orchestrated container across multiple hosts.
* Created Docker images using a **Docker file**. Worked on Docker container **snapshots**, removing images and managing **Docker volumes** and experienced with Docker container service.
* Wrote **Ansible**playbooks to manage configurations and automate installation process.
* Used **Ansible**and **Ansible**Tower as Configuration management tool, to automate repetitive tasks, quickly deploys critical applications, and proactively manages change.
* Managing the configurations of multiple servers using **Ansible.**
* Managed Artifactory repository for the current project created a new repository and provisioned it.
* Wrote PowerShell scripts to automatically restart the uDeploy agents on LINUX machines
* Performed Automation and Scaling of applications using **Kubernetes.**
* Experience with **Ansible**Tower to manage Multiple Nodes and Manage Inventory for different Environments.
* Used **Ansible**to orchestrate software updates and verify functionality.
* Used **Ansible**to document all infrastructures into version control.
* Used **GIT**as Version Control System for two applications. Managed development streams and Integration streams.
* Used **AWS**Bean Stalk for deploying and scaling web applications and services developed with Java, Node.js, Python and **Ruby**on familiar servers such as Apache, and IIS.
* Worked on **Docker**container snapshots, attaching to a running container, removing images, managing directory structures and managing containers.
* Experience working on several Docker components like Docker Engine, Hub, Machine, **Compose**and Docker Registry.
* Experience working on **docker hub,**creating docker images and handling multiple images primarily for middleware installations and domain configurations.
* Used **Docker**for configuration management automation
* Setup Elastic Load Balancer for distributing **traffic**among multiple Web Logic servers and involved in deploying the content cloud platform on Amazon Web Services using **EC2, S3**and **EBS.**
* Creating the AWS Security groups to enable firewall.
* Automated **AWS**volumes snapshot backups for enterprise using Lambda.
* Created functions and assigned roles in AWS **Lambda**to run python scripts.
* Administration and maintenance of **Docker**runtime environment, Versioning and lifecycle management of **Docker images**, Experienced in Docker orchestration framework.

**Environment:** Linux(RHEL) Redhat, AWS, Puppet, Chef, Amazon EC2, Apache/ Web Server, WebSphere Application Servers Subversion, Maven, Jenkins, Apache Tomcat, JIRA, MS SharePoint XML, UNIX/LINUX, Windows, Perl Scripts, Shell-Scripts, Java/J2EE, Kubernetes, Docker, HortonWorks, Hadoop.

**Client: Connexions Loyalty Richmond, VA December 12 – October 13**

**Role: Sr Software Engineer**

**Responsibilities:**

* **Operations:** Crafted CICD pipelines, automated deployment scripts with Ansible, employed dynamic inventory in Ansible, and utilized RDeploy for efficient deployment of WebLogic applications.
* **Development:** Contributed to the end-to-end development of reward applications for various clients including GM, Delta, Wells Fargo, and USCAA, implementing Agile Methodology with daily scrums. Played a key role in migrating reward apps to AWS and developed web applications with Hibernate, Spring, and Struts. Specialized in Spring MVC, Groovy, and Selenium. Integrated SOAP services, managed Oracle databases, and used JIRA for issue tracking. Conducted code reviews, employed JUnit for testing, and implemented log4j for logging. Utilized Maven and UrbanCode for building and deploying applications.

**Environment:** Java 1.6, JavaScript, Spring 3.0, Struts 2.0, JSP, HTML, XHTML, XML, JSF, WSDL, SOAP Web Services, Toad, JPA, JDBC, Groovy, Eclipse, MyEclipse, WebLogic Server, Apache, JUnit, Subclipse

**Client: Direct TV Los Angeles, CA December-10 – December 12**

**Role: Junior Software Engineer**

**Responsibilities:**

* **Lifecycle Involvement:** Engaged in the end-to-end software development lifecycle, including requirement analysis, design, development, testing, and deployment. Specialized in writing detailed Low-Level Design documents, managed diverse environments, and developed J2EE applications, including a call center salesCRM application, using Jacada Workspace, JIM, Spring Framework, and Hibernate deployed on Oracle WebLogic Server.
* **Technical Development**: Proficient in Spring framework components and adept at creating rich user interfaces with HTML, CSS, JSP, JavaScript, and EXT JS. Implemented SOAP web services, integrated LDAP for secure authentication, monitored HTTP interactions using Fiddler, and utilized Oracle and cloud databases for data storage. Developed and executed JUnit test cases to ensure code quality.

**Environment**: SVN, Java 1.6, JSP, HTML, CSS, XHTML, XML, JSF JavaScript